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An Analytical Exercise on Social Accounting: Bangladesh Praxis

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Abstract

This paper is an endeavour to show in brief the historical perspectives of Social Accounting. It also presents that the very purpose of development organizations is to achieve their social, economic and community benefit. And the financial sustainability is essential to achieve that benefit. The organization and its stakeholders need to know if its objectives are being met, if it is living up to its values and to ensure that those objectives and values remain relevant and appropriate. The paper has explained the meaning of Social Accounting as well as the need for it. This study emphasizes that Social Accounting enables to improve the accountability dimension of any development organization. The paper has also looked into what happens actually in Bangladesh in this regard. It has referred to Input-Output analysis and Social Accounting Matrix (SAM) while addressing Social Accounting. In the end, it has suggested Expanded Value Added Statement (EVAS) for application in order to take care of Social Accounting in Bangladesh.

Keywords: *Social Accounting, Input-Output Analysis, Social Accounting Matrix, Expanded Value Added Statement (EVAS), and Bangladesh Praxis.*

Introduction and Methodology

The paper seeks to address the following questions relating to Social Accounting:

1. What is Social Accounting?
2. What are its past and present status?
3. Why is Social Accounting needed?
4. What are the problems of its implementation?
5. How to implement it?
6. What is its status in Bangladesh?

The present study is designed to be an exploratory research. It is based partly on literature review and partly on empirical analysis. A questionnaire has been developed on Social Accounting for collection of information from university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (*i.e.*, Chartered Accountants

of Bangladesh and Cost and Management Accountants of Bangladesh). Judgement sampling technique has been used to draw samples. The questionnaire, developed on a 5-point Likert-type scale, contains 22 statements. Respondents have been asked to what extent they agree or disagree or remain undecided with the statements in regard to Social Accounting. Information collected have then been analyzed. The sample size comprises: 28 university teachers of accounting, 25 university teachers of economics, 26 university teachers of finance, and 24 professional accountants. The universities covered under the study are: Independent University, Bangladesh (IUB), Dhaka University, Chittagong University, Dhaka International University, American International University of Bangladesh, North South University, South-East University, ASA University, and East-West University. For testing the hypotheses, Chi-Square test has been applied.

The study has been structured under: (i) Introduction and Methodology, (ii) Historical Developments, (iii) Need for Social Accounting, (iv) Fundamental problems of Social Accounting implementation, (v) Analysis of expert views on Social Accounting, (vi) Environmental Accounting as a subset of Social Accounting, (vii) Social Accounting Matrix as an aid to Social Accounting implementation, (viii) Expanded Value Added Statement, (ix) Status of Social Accounting in Bangladesh: empirical analysis, and (x) Concluding observations.

Historical Developments

Social Accounting is rather of relatively recent origin, although the idea dates back to more than two centuries. The idea was perhaps first given in France in 1758 when De Quency in his *Tableau Economique* described in principle, though very vague what many call Social Accounting now-a-days. In 1791, the famous chemist Lavoisier again referred to the *Principles of Accounting for the Municipality of Paris,* almost in the same way as many think of the accounting for the nation.

Of late, it was first in the U.S.A. and later in the U.K. and other European countries that it made its appearance once again, and is rather making a very steady progress in the last few years. It has grown so much in importance that Prof. Hicks has suggested that it should be taken as the introductory principle in the teaching of economics, and the theories should be taught much later (Hicks, 1942).

Social Accounting is an attempt to describe the entire economic phase of a nation or in other words, the national income and expenditure by means of accounting transactions taking place in the aggregate. Thus, the entire national scope is usually subdivided into several sectors whose economic operations are aggregated and consolidated and the picture is brought forth by means of the accepted principles of double-entry accounting. "This is a practical effort to reconcile the technique of the trained accountant with the conceptions of the economists" (Bray, 1982).

The use of Social Accounting Matrices (SAMs) to record all of the transactions that place in a national economy during one year has a distinguished ancestry. This ancestry can be traced back at least as far as Quesnay's (1759) *tableau economique.* (See Studenski 1958 and Stone's 1986 *Nobel Memorial Lecture for Histories of Social Accounting*). In the twentieth century, Social Accounting has been heavily influenced by the work on national income accounts by Kuznets (1937) and that on input-

output matrices by Leantief (1941). The development of SAMs as they are used today began with the work by Meade and Stone (1941) for the Economic Section of the British Cabinet Office, which developed the first logically compete set of double-entry national income accounts. Subsequent work by Stone (1947) resulted in the conventions for Social Accounting embodied in the United Nations (1953, 1968) System of National Accounts, which are currently used throughout the world.

The development of Social Accounting went hand-in-hand with the development of planning models that used this data. Indeed, Meade and Stone's (1941) original work was meant to provide data to aid in implementing Keynes's (1940) proposals for funding Britain's war effort during the Second World War. Stone's later work on Social Accounting in Britain provided data for the Cambridge Growth Model at the Department of Applied Economics. Indeed, in the hands of some users, SAMs (Social Accounting Matrices) have become economic models in and of themselves, with spread-sheet type relationship between entries. The volume edited by Pyatt and Round (1985) contains a number of illustrative examples of this sort of modeling.

Need for Social Accounting

1. Social Accounting, a largely normative concept, seeks to broaden the scope of accounting in the sense that it should: (i) concern itself with more than only economic events, (ii) not be exclusively expressed in financial terms, (iii) be accountable to a broader group of stakeholders, and (iv) broaden its purpose beyond reporting financial success.
2. Social Accounting which offers an alternative account of significant economic entities has the potential to expose the tension between perusing economic profit and the pursuit of social and environmental objectives.
3. The purpose of Social Accounting can be approached from two different angels – for accountability purposes or for management control purposes. (i) Social Accounting purposes are designed to support and facilitate the pursuit of society's manifold objectives, (ii) In order to make informed choices on these objectives in terms of social and environmental desirability and sustainability, the flow of information in society in general, and in accounting in particular, needs to cater for democratic decision-making. In democratic systems, there must then be flows of information in which those controlling the resources provide accounts to society of their use of those resources: a system of corporate accountability. Thus, society can be seen to profit from implementing a social and environmental approach to accounting in a number of ways: (i) honoring stakeholders' rights of information, (ii) balancing corporate power with responsibility, (iii) increasing transparency of corporate activity, and (iv) identifying social and environmental cost of economic success.
4. Social Accounting for the purpose of management control is designed to support and facilitate the achievement of an organization's own objectives. Organizations seemed are likely to benefit from implementing Social Accounting practices in a number of ways: (i) increased information for decision-making, (ii) more accurate product or service costing, (iii) enhanced image management and public relations, (iv) identification of social responsibilities, (v) identification of market

development opportunities, and (vi) maintaining legitimacy.

Fundamental Problems of Social Accounting Implementation

The fundamental problems of implementing Social Accounting may be enumerated as follows:

(a) Inability to construct National Balance Sheet;

(b) Inability to estimate proper depreciation on the fixed capital; and

(c) Inability to estimate the value of certain services and goods which are produced but are not bought and sold in the market but are consumed by the producer, so many of these imputed transactions are omitted.

Discussion has been made earlier regarding National Balance Sheet. It has been seen how accountants fix up a rough and ready balance sheet under difficult circumstances, and how in course of time such balance sheet approaches a true balance sheet. It is believed that the profession of accountants had undertaken the task of Social Accounting, a fairly accurate National Balance Sheet could have been made out by this time and a good deal of difficulties might have been saved. An example of difficulty and confusion for want of National Balance Sheet may be demonstrated in the following case: supposing a country particularly devotes its activities in the production of capital goods of a type that takes rather a lengthened period of time to complete. During the number of years that the projects are not completed, the work-in-progress would be valued at prime cost and the incidence of overheads would apparently enhance revenue expenses and in consequence the national savings will be underestimated. But later when the project will be completed, a much bigger than usual surplus and saving will be disclosed. If anybody could find out the National Balance Sheet for all these years as a company management is able to see, he/she could easily be convinced that the apparent surplus is nothing but an accumulated one for several years, so that true movement of national income and saving could be seen through. This is not so much apparent with these resting accounts that are being done now.

The problem of depreciation is yet another stumbling block not only for the economists but for the accountant as well. Whether its calculation is to be based on retrospective or historical basis or on prospective or replacement cost basis, is yet another problem that is arousing violent controversies amongst the members of the profession. So long as the price level of fixed assets was more or less stable as in the major part of in the nineteenth century, this trouble did not appear as the historical cost and the replacement costs were more or less even. But even then there was a problem of continuous technical improvements and a company required intermittent capitalizations whenever older assets had to be superseded by newer ones. But even that small difficulty did not affect much and a convention of charging depreciation on historical cost had been firmly established. It is in the twentieth century that the problem took a rather significant role, particularly after the Second World War. When it is believed that the price level is not expected to go down to pre-war level any time, and as such some new technique is required to be put into operation for the purpose of replacement of fixed assets at a much higher money value. As may be quoted from Bray, Social Accounting required the valuations in

terms of current standardized money value, as against the case of private accounting, which sticks to historical costs. For the purpose of depreciation such distinction really makes much differences. But what might come to one's mind is that apart from this distinction arising out of the changes in the purchasing power of money units, there is so much of prediction in the calculation of depreciation that better mathematical methods should be used to measure it, rather than the rule of thumb that has so far been used. What one might think of estimating depreciation of fixed assets is the application of actuarial principles almost in the same way as it is used in evaluating the depreciation of expectation of life for a living person. One might feel that fixed assets are equally subject to two forces in the same way as human life, upon which Makeham's Law had been established. The first is a fixed rate which we may consider as risk of obsolescence or discarding as a result of new inventions. The other is the gradual deterioration on account of wear and tear. So the total force of depreciation may be assumed as ax+bcx where a, b and c are constants and x is the age of the asset. The values of a, b and c may be determined in the same way they do it in case of human life from the data obtained by considering the age and discarding of the various types of fixed assets. One may think that the accountants and applied economists should join hands together and should take amongst them actuaries and technicians to work upon this basis for a better calculation of depreciation, apart from the controversy of historical and replacement costs.

The last problem is rather more complicated and important for the social accountants rather than the private accountants. Some goods and services are being produced and consumed at the same place, and unless and until anybody can value them properly, the total national income and consumption will be underestimated, although the net result of the Appropriation Account will not suffer at all. Thus, with the private accountant it does not matter very much if such imputed transactions are lost sight of unless the production is capitalized and not consumed. An illustration of such imputed capitalized production is undoubtedly the case of "Goodwill," and a student of accounting knows what difficulty he/she has to face with regard to this dubious asset. But when the imputed production is clearly and totally consumed, the net result remains unaltered and so the private accountant does not mind. But the case of the social accountant is really different. The total consumption figure in his/her accounting is the indication of the social welfare, and as such this becomes the most important feature of his whole work, and he/she is not so much interested about national savings as he/she is for the volume of national dividend – that bundle of goods and services that has been produced by the nation during a unit period. So, for the social accountant, an estimation of these imputed goods and services is essential. In some cases as in case of farmers, consumption of their own products etc. may usually be accounted for. But the household services that are being produced by housewives of the SAARC countries and by all members of the conventional joint families in countries like Bangladesh and India are very unfortunately omitted. Such omissions not only distort the true volume of National Dividend but put up a great difficulty in the way of inter-country comparison of national incomes, as had been very well pointed out by the

United National Committee. Although some of the economists might put forward their own arguments against such idea, the present researchers as students of accounting who have worked up with the family services and their money values, cannot accept their thesis that the proportion of such imputed services for the industrial and underdeveloped country is almost the same, so that its commission does not affect comparison. But that is rather not a relevant point here so that they leave that matter for a further discussion by other researchers.

How can these imputed services be valued? The present researchers think that Bray has shown some similar calculations with regard to the value of bank services rendered by the banks in general. He calculates the value of such services to be equivalent to the excess of interest received by the bank less what it spends because, the services rendered by the bank in maintaining the accounts of his customers cannot be measured by only the small incidental charge that it debits from time to time. The valuation of the household services may be worked out in the same way. Here, it is needed to consider how much it would cost to a single person living alone to get similar comfort and ease that he/she gets in his/her household. Multiplying such cost by the number of persons living in a family and deducting the actual expenses of the family therefrom, the cost of the household service produced and consumed may be ascertained and the present writers think that no Social Accounting would be complete unless an imputed transaction of this type is passed in the household sector to show the production and final consumption.

Hicks has called Social Accounting as the anatomy of economics as against the theory of value which he calls it physiology. He says that no perfect knowledge of human body is possible unless one knows how the organs are fixed up and as such a perfect knowledge of such accounting is needful for any economic study of a nation's affairs. How can one understand that an ailment of a body is due to hindered actions of his/her liver, unless he/she knows how the liver is situated and how it is supposed to act. So, he/she emphasized the preparation and study of social accounts as a condition precedent for any sort of economic understanding of a country.

Analysis on Historically Renowned Expert Views on Social Accounting

The calculation of National Income was taken as a very important task of the economists even by Adam Smith and Marshall and later Pigou devoted most considerably towards a means for ascertaining this income. It is only, of late, that economists found that it is accounting which "turns the unit of money into a tool of rational cost-profit calculations" (Schumpeter, 1909). The double entry accounting has really given a practical method of the measurement of income for an individual or a nation alike. Richard Stone finds "An accounting structure provides a definite statement of empirical correlates of the theoretical concepts we find interesting." The difficulties of the method of estimation of national income as had been given out by earlier economists was that it could not be proved and as such wide divergence would arise between the estimates of different authors. By the application of Social Accounting one is likely to get consistent approach to the problem as Stone has rightly suggested that "the essential function of accounting approach is consistency" (Stone, 1966).

It is, therefore, clear that Social Accounting is a framework which allows an organization: (i) to build on existing documentation and reporting in developing a process whereby it can account for its social performance, (ii) to report on that performance, (iii) to understand its impact on the community, and (iv) to be accountable to its key stakeholders. So, Social Accounting engages the stakeholders of an organization, involving them in the process of accountability. In a nutshell, it may be said that Social Accounting is concerned with learning about the effect an organization has on society and about its relationships with entire stakeholders—all those who affect /or are affected by the organization and its activities. More importantly, Social Accounting unites national accounts and a diverse complex of other information into a vast system of interlocking accounting, thereby adding a depth of detail to the necessarily simplified structure of national accounting, for example, production figures are consolidated in a national account. In a social account, however, the process of production is analyzed in all its aspects, and then coordinated with other parts of the economy. Subdivision of the consolidated production account is achieved through the use of input-output tables that organize production data on an industry-by-industry basis. An input-output table can reveal, for example, intermediate products are bought by one producer from another. The 1973 Nobel prize-winner economist, Wassily Leontief, pioneered the construction of input-output tables in his *Input-Output Economics (1986).* Stone explained their use within the specific context of Social Accounting. For more detailed information, one may consult the book by Stone and Giovanna Croft-Murray entitled *Social Accounting* and *Economic Models* (1959). Stone demonstrated how degrees of reduction and elimination of pollution, he spelt out, are typically not counted in the outgoings column of a production account but ought to be if society desires an accurate reckoning of the depletion of its total assets.

An accountant knows how unreliable would be a discrete Receipts and Payments Account, and he is satisfied about the revenue position only when his Income and Expenditure Account is supplemented by a Balance Sheet, duly checked and verified. The older estimate of national dividends more or less of the type of a disjoined and discrete Receipts and Payments Account, which could hardly express the true income or financial state of affairs. It is only when a complete double-entry accounting is worked up, until the accounting for the resting of savings and investments that one gets a rather complete and comprehensive idea of the economic aspect of a country or a nation. "An accounting approach provides a meeting place for economic theory and practical measurement" (Stone, 1986).

Social Accounting follows accounting techniques to measure socio-economic growth of an economy. In the study of the economy of a country or nation, a researcher is to consider the aspects of (i) Production, (ii) Consumption, and (iii) Saving or capital formation. In accounting techniques, there are special accounts for three as (i) Operating Account. (ii) Appropriation Account, and (iii) Resting Account. The last account is rather of recent growth to show how assets have increased as a result of surplus. This is particularly done in cases where the initial capital is not known and yet a reconciliation or proving is needed for the surplus. In Social Accounting, so far as it is progressed now, the initial capital of nation being known, a resting

account in place of Balance Sheet becomes necessary to prove the surplus or asset or formation as shown in the Appropriation Account.

The entire national sphere is usually subdivided into a number of sectors. The business sector would undoubtedly come first, although of late, the government sector or as Stone uses it the Collective Public Providers sector is becoming more and more pronounced. G. Stuvel likes to subdivide the business sector into two, *viz.*, the business proper and collective income recipient sector *viz.*, Insurance, pension fund, etc. Then there is the vast household sector, where the ultimate consumption of goods and services takes place. This has been termed "Personal Sector" by Stuvel, and Stone has brought forward a lending sector further. Last but not least is the rest of the world sector, where international deals are recorded.

Under the principle of double-entry accounting, every transaction that takes place anywhere should have a counterpart somewhere else Thus when the transactions are recorded in Social Accounting scheme, each transaction is to appear in two different places of the whole system and this brings a consistency in the whole system. Any move or transfer of wealth shall have to be shown as to its wherefrom and whereto. This is the basic principle of double-entry system. In Social Accounting this principle is strictly adhered to. So in working out complete Social Accounting, each transaction is to be shown twice either in the same sector or in different sectors. As F. S. Bray has shown in his working scheme in *Cambridge Pamphlet No. 2*, accounts may also be drawn according to the nature of the transactions and here again both the receivable and payable totals would agree.

The transactions that appear in a Social Accounting working are not necessarily the transactions concluded. The accruals on account of transactions are also taken into consideration, exactly in the same way as one might do when one works up an Income and Expenditure Account from the figures of receipts and payments. This technique is rather easy for an accountant to understand but becomes rather difficult to realize when non-accountants are involved. The idea is that if goods are produced or services rendered but payments for these are not made, such goods or services should have to be computed with the production schedule for the period, though the payments involved might not have been made. It is here that older economists made blunders which the present technique of Social Accounting has remedied.

Besides, as F. S. Bray has pointed out, "All transactions which we usually read and epitomize are by nature either real or financial, actual between two entities or imputed in accounting of one entity" (Bray, 1982). Now, these imputed transactions that usually give rise to all sorts of difficulty both in Private Accounting and Social Accounting. An illustration of these two types of transactions may be put as follows; when Ram sells goods to Rahim it is a real or financial transaction as it is to be passed in the books of both Ram and Rahim. But when some party charges depreciation on his fixed assets, the entry is passed in his books alone, and this is called imputed transaction. Any transaction between capital and revenue will become an imputed transaction such as entries for accrued and deferred income or expenditure or for depletion of capital by way of depreciation, etc. In Social Accounting much imputed transactions are to be brought in, in order to give a

clear cut idea of social incomes and expenditures properly wherefrom the exact figure for resting or saving may be deduced. Examples for imputed transactions are the farmer's consumption of his own produce, the banking service generated by the banks, the social service produced by the insurers, etc. Unless all these imputed transactions are brought into calculation, one really underestimates the national dividend by an underestimation of both income and expenditure. Besides, productions are often calculated in gross and it becomes necessary to net them by passing entries for certain imputed transactions. The cost of seeds should be deducted from the aggregate of farm produce in order to estimate the true income of the farm.

After showing the total income sector-by-sector in the operating account, whose balance will indicate national dividend consumption is shown in the Appropriation Account as to how the national income is being consumed sector-by-sector. The excess of income over expenditure determines saving, which is transferred to Resting Account to show how the saving is invested sector-by-sector. It should be noted in this connection that in case of household sector only house properties are taken as capital formation, leaving all others as consumption items. It should be noted that there are varieties of household assets which last for a number of years, such as motor cars, refrigerator, furniture, ornaments, variable apparels like sawls, etc., and in the way one takes all these as consumption expenditure is on one hand to show an overestimation of national consumption, because one, in accounting terminology, creates a sort of secret reserve by treating capital expenditure as revenue, as on the other hand one underestimates household consumption by excluding the value of service, one obtains from these fixed asets (Bareja, 2003). The fact is that when the amount of capital formation in the households is larger than the annual service rendered by such assets already formed, one really overestimates household consumption and underestimates saving while in case the expense on capital goods is lesser than the flow of service received from such goods already acquired, one really underestimates consumption and overestimates capital formation.

But an accountant's conception of income and capital does not end with merely the preparation of the resting account only, and she/he cannot be satisfied unless she/he gets a Balance Sheet properly drawn and duly verified. The authors of Social Accounting cannot take their work that extent, and this Social Accounting never reaches the standard that an accountant desires. No doubt Hicks had conceptually come to this point and has attempted a sort of rough national Balance Sheet of United Kingdom, but he immediately warns his readers that much reliance should not be put to his Balance Sheet because its sources are very uncertain and valuations are not satisfactory. F. S. Bray, who is himself an accountant, has attempted a sector Balance Sheet for the business sector and says "A complete adoption of accounting technique to the point of preparation of an aggregated national Balance Sheet will give a reasonably clear indication of the make up of the national capital" (Bray, 1982). He could consolidate the Balance Sheets of the business sector and work up to do something but could not further proceed in a more satisfactory way. But from the standpoint of an accountant he knows the value of a Balance Sheet in an

accounting system.

It is no doubt, true that any attempt to sketch up a national Balance Sheet would be inaccurate to a very considerable degree because of faulty estimates and improper valuations. But when an accountant is faced with a problem like this, he wants to fix up a Balance Sheet any way, however inaccurate it may be, and will request his/her client to work up on the basis of that balance sheet for a number of years and if this is done with reasonable care she/he expects that the balance sheet will become much more accurate by that time. The reason for that is quite evident. The items in the balance sheet will be assets of fixed and floating type, against liabilities and capital. Now the problem of estimation of the quantity and value of the floating items are not very difficult, as such estimation has to be made for the preparation of the operating account. Liabilities (which in case of a national Balance Sheet will represent only the outstanding of the lendings and borrowings with the rest of the world) is not very difficult to compute. The only trouble will arise in connection with fixed assets. But these fixed assets are really depleting and ordinarily they are exhausted in course of a few years. So, in case, one assumes a rather very low value of these when one first thrashes out a Balance Sheet, it will mean some overestimation of income for a few years only. In the mean time, new fixed assets will be formed which will appear in the Balance Sheet at their cost, so that when the older assets would be completely written off, the revenue will indicate true results and the Balance Sheet will be correct more or less. In case of Social Accounting also, one may suggest that a national Balance Sheet should be worked out in any rough and imaginary way, but even that Balance Sheet if continued for a number of years will become more and more accurate, till one can arrive at a reasonably correct Balance Sheet after two or three decades.

But even the construction of any sort of rough Balance Sheet of a nation will require co-ordination by the accountants. Unfortunately, excepting F. S. Bray, no other accountant seems to have taken any part in the new conceptual development of Social Accounting. It is for this reason that Bray himself has remarked "it may perhaps be wondered that no trained accountant ever seems to have consciously sought Social Accounting approach to national income studies" (Hicks, 1942). The reason for such indifference on the part of accountants is not difficult to find out. Accounting, as it is developed, is always supposed to be an affair of the businessmen and it is always the interest of the individual businessmen, by whom the accountants are employed that has become the supreme objective of the accountants as a whole. Even if one looks to the definitions of book-keeping and accounting in many a standard text book, one finds that its only object is to record business transactions. That accounting may be applied with a social point of view or that accounting may contribute something to social sciences is never conceived of by the accountants in general. The matter has been left entirely in the hands of economists who are studying applied economics, and as such one must not be surprised if one discovers some technical failure in the system devised. It is highly desirable that accountants should at least, in the present economic set up, break up their old conventions generated under a stale pattern of economy and should come forward to take up the new development of accounting not for a particular employer but for the nation

as a whole. Let the economists supply the conceptual aspects and let the accountants take up the technical side, so that they may work up a nice and useful system of Social Accounting, which may act as an aid to the economic development of nations.

The development of Social Accounting so far is entirely left to the economists and as a result, the term "accounting" becomes rather a differentiating phrase, because the systems that are used are rather different as between private and Social Accounting, As F. S. Bray puts it:

"The technique of private accounting is very largely wedded to records and statements in terms of historical costs and other historical revenues, Social Accounting, on the other hand, requires a development of this technique in terms of either a current money measure or a standardized money measure of real things. Many have consistently raised the issue of so-called social accounts, no attempt has been made of any of the accounting presentations put forward here, to carry on any sort of conventions to deal with social costs and social benefits. Later, one may hope to set about this task, but for the moment the expression—Social Accounting is only used in contra-distinction to Private Accounting" (Bray, 1982).

It is regrettable that such peculiar aspect of thing should exist in this way. There should not be any such divergence between two sets of accounting, and attempts should be made to reconcile such divergence. The principle of historical costs, upon which private accounting had so far relied, has already got a considerable shaking in the hands of a set of accountants in the continent of Europe, as an aftermath of inflations, and although the conservative Institute of Chartered Accountants of England and Wales advises its members to stick to the historical cost method, it has still to give way to a degree to the principle of real terms value, which is accepted for Social Accounting.

Besides, the rapid expansion of the public sector in the National Economy of Indo-Pak-Bangladesh Subcontinent is yet another reason why it should now be given very careful consideration of the accountants to the fact that they should no longer stick to the matter of private accounting alone, and time has already arrived that the scope of accountants should be further expanded to the social fields. It is a clear-cut proposition now that in near future the entire economy will be socialized, when the principles of Social Accounting shall take field of private accounting, and amendments to the system should better be attempted from now on. Currently, the prevailing idea that the accountants should come forward and take up the tune of Social Accounting and should utilize their accounting concepts in the further development of the subject. It is natural that the economists would often stumble over problems that seem rather easy for the accountants, and so it is fit and proper that in the U.K. both these sections of people interested in the measurement of income and wealth have joined hands in order that they can supplement each other's work.

The authors have also considered the value of Social Accounting in a planned economy, where 'projections' are required to be made out of the social accounts for the preceding periods. Unless the nation's actual flow of wealth is properly gauged and studied, no effective plan may be possible. Any plan worked out in absence of

proper system of Social Accounting as its background will be like the treatment of a disease without sufficient knowledge of human anatomy or physiology. The whole treatment, as envisaged may do more harm than good. It may create more complications, so that in the end it may be observed that something had been done which, instead of contributing to the national welfare has rather created difficulties. It is perhaps for this reason that a set of social accounts are now presented before the parliaments of the countries like the U.K., the U.S.A. and other continental countries at their budget session so that their projections may be estimated in the future period to which the budget relates.

In Bangladesh where several five year plans have been concluded, the need for Social Accounting is great. Unfortunately, no comprehensive scheme of Social Accounting is yet published, so that all that it has been being done now about this plan frame is something like planning in darkness. With the ultimate objective of socialistic pattern of the nation's economy and continuous expansion of the public sector, the waves of the financial actions and reactions within the community should have been measured in a comprehensive way, before the planners could be in a position to fix up what line of planning would be most suitable for the increase of the national welfare. As it seems a comprehensive Social Accounting is very much needed for this country without which planning is being hampered very considerably. An example may be adduced. The first five year plan had been made without any idea about the socio-economic transactions, and as a result, it was evident with a year that unemployment in the country is increasing. The result was an immediate further allocation of say Rs. 500 crore towards this, without amending the original structure of the plan. As all know by this time, this could not allay unemployment to any satisfactory measure, because how can this patch work affect the reactions in the economic field as a whole? The second plan is also without a good and reliable social account as its basis, although some rough estimate is said to have been made on the line. It is desirable that persons in the field of applied economics and accounting should immediately join hands and make a good start towards the working up of a detailed and reliable set of Social Accounting, so that in future the leaders of the Government may get a proper basis for fixing up of their planning. Unfortunately, there are many points where the construction of Social Accounting may be very much impeded. The business sector, whose accounting seems to be rather the easiest job, because of their maintaining their own individual accounts is neither very frank in allowing these to be seen nor are their accounts reliable because of the evasion of the liabilities on account of tax or bonus to labour. Even though the company accounts are partly published, private accounts rarely see the lights of the outside world at all. But if the accountants come forward and render the very valuable help of suggesting the approximate percentage of such evasion which only they can say from their own experience in practice, we believe that some reasonable data would be available. A compilation of social accounts for a country like Bangladesh will require the services of thousands of field workers, and we do believe that our universities are producing many intelligent graduates who may easily employ themselves in the line. This paper has already emphasized the need for estimating the imputed services in our households and the same should also be calculated for our rural society, where a

good deal of gratuitous service is produced and consumed, and which in the urban sites are usually bought and sold. The importance of these items should not be lost sight of.

One might rather be surprised to observe great ignorance about Social Accounting amongst many of the university students and teachers. They seldom read these topics and usually try to evade any issue regarding this subject. That in Bangladesh people are quite indifferent about the modern progress is something that deserves condemnation. New and newer horizons are appearing in the field of knowledge in all subjects and the nation shall not progress unless the people assimilate and utilize them and try to work up in their own national perspective. No excuse should be laid down for the difficulties and formidableness of a task, because our country may be populous, but our index of unemployment is also high. Bangladesh does not lack in man power and so this country is not unsuited for any big and difficult task.

Environmental Accounting as A Subset of Social Accounting

Environmental Accounting, as a subset of Social Accounting, focuses on the cost structure and environmental performance of a company. It principally described the preparation, presentation, and communication of information related to an organization's interaction with natural environment. Although environmental accounting is most commonly undertaken as voluntary self-reporting by companies, third-party reports by government agencies, NGOs and other bodies posit to pressure for environmental accountability.

Accounting for impacts on the environment may occur within a company's financial statements, relating to liabilities, commitments and contingencies for the remediation of contaminated lands or other financial concerns arising from pollution. Such reporting essentially expresses financial issues arising from environmental legislation. More typically, environmental accounting describes the reporting of quantitative and detailed environmental data within the non-financial sections of the annual report or in separate (including online) environmental reports. Such reports may account for pollution emissions, resources used, or wildlife habitat damaged or re-established.

In their reports, large companies commonly place primary emphasis on eco-efficiently, referring to the reduction of resource and energy use and waste production per unit of product or service. A complete picture which accounts for all inputs, outputs and wastes of the organization, must not necessarily emerge. Whilst companies can often demonstrate great success in eco-efficiently, their ecological footprint, that is an estimate of total environmental impact, may move independently following changes in output.

Legislation for compulsory environmental reporting exist in some form *e.g.* in Denmark, the Netherlands, Australia and Korea. The United Nations has been highly involved in the adoption of environmental accounting practices, most notably in the United Nations Divisions for Sustainable Development publication *Environmental Management Accounting Procedures and Principles* (2002).

Social Accounting Matrix as An AID to Social Accounting

The Social Accounts of a region track the monetary flows between industries and institutions. As a matter of fact, the input-output accounts are a subset of the entire social accounts of a region. The social accounts track all monetary flows both market and non-market. The market flows are those between the producers of goods and services and consumers, both industrial and non-industrial (*i.e.*, households, government, investment and trade). The non-market flows are those between household and government, government and households, capital and households and so on. These flows are often called inter-institutional transfers. There is no perceived value being exchanged in return for the dollars (of course, taxes do pay for government services, but these do not have a market value). So, it is expected that this matrix is most likely to act as an important adjunct of Social Accounting.

Expanded Value Added Statement (EVAS)

Expanded Value Added Statement (EVAS) is an innovative tool to account for economic, social, and environmental factors. The EVAS is a method of Social Accounting which attempts to answer the question, *what difference do our actions make in economic, social and environmental terms?*, in sharp contrast to the question asked by traditional accounting, *how can we maximize profit for our owners?* EVAS builds on traditional corporate accounting concepts to capture the social value that is created by (investment in) social ventures. As well, the EVAS can be used to show how this value is distributed to a variety of stakeholders, including the wider community. The EVAS attempts to quantify and place a value on goods and services that are usually viewed as "free". It integrates financial and social information: financial information from audited financial statements, and social values from calculations of typically non-monetized factors, such as volunteer hours. For instance, the contributions of unpaid volunteer to non-profits, a valuable resource for many organizations, don't get "counted" in traditional accounting statements. The EVAS provides a methodology that can account for some of these important contributions to illustrate the social value created. The EVAS demonstrates the benefits of volunteering for volunteers, non-profits, and society. EVAS case studies are needed to show the secondary benefits that volunteers are likely to derive, such as informal skill development, can be quantified.

Empirical Analysis: Bangladesh Praxis

This section is devoted to making an analysis on the different aspects of Social Accounting in the context of Bangladesh. And this analysis is based on the opinion of university teachers of accounting (UTA), University teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) of Bangladesh. The hypotheses tested over here are twenty-two in number.

H_0-1: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting is a process of communicating the social and environmental effects of an organization's actions."

H_0-2: There is no difference of opinion amongst the university teachers of accounting

(UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting unites national accounts and a diverse complex of other information into a vast system of interlocking accounts for a simplified structure of national accounting."

H_0-3: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting emphasizes the need for corporate accountability by reporting a firm's activities identifying socially relevant behaviour."

H_0-4: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting enables to improve the accountability dimension of a company."

H_0-5: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting makes the company accountable to the people for its social performance."

H_0-6: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting is not found to be reflected in the accounting statements of Bangladesh."

H_0-7: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting is a useful technique of measuring socio-economic growth of an economy."

H_0-8: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "The concerned people of Bangladesh are quite indifferent about the modern developments in the field of Social Accounting."

H_0-9: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting examines the ways to capture and communicate economic, social and environmental value."

H_0-10: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of

finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Input-output analysis that depicts inter-industry relations of an economy is also a valid instrument of Social Accounting."

H_0-11: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting data include input-output analysis, national income statistics as well as household income and expenditure statistics."

H_0-12: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting is important to distinguish the impact of exogenous changes due to public sector activities on functional and institutional disposable income."

H_0-13: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting serves as a data-base for a model of an economy by providing information about its economic and social structure."

H_0-14: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting matrix is a very important statistical tool that provides a framework for microeconomics analysis."

H_0-15: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting matrix is a data-system including both social and economic data for an economy."

H_0-16: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting matrix organizes information about the economic and social structure of a country over a period of time and then provides a statistical basis for presenting a clear image of an economy."

H_0-17: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting matrix is a technique related to national income accounting, providing a conceptual basis for

examining the socio-economic growth of an economy."

H_0-18: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting matrix is a valid working instrument at the economic planning level as well as a very good support for economic policy at any level."

H_0-19: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Social Accounting sheds light on how progressive or regressive tax system should operate."

H_0-20: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "ICAB and ICMAB should come forward to implement Social Accounting is Bangladesh."

H_0-21: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Endeavour from the government level of Bangladesh is desirable for emphasizing the importance of including the need for Social Accounting in five-year plans."

H_0-22: There is no difference of opinion amongst the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect of the extent of their agreement or disagreement with the statement: "Since Expanded Value Added Statement (integrating financial and social information) is an innovative tool to account for economic, social and environmental factors, companies in Bangladesh may start using it as a method of Social Accounting which accounts for social value creation."

The above hypotheses have been statistically tested using Chi-square test of homogeneity. The analysis of the responses of university teachers of accounting (UTA,) university teachers of economics(UTE), university teachers of finance (UTF) and professional accountants (PA) together with Chi-square test results have been presented in a table (in the appendix). The table shows that all the twenty-two null hypotheses based on the twenty-two statements related to Social Accounting have been accepted because the computed values of Chi-square, in all the cases, are less than critical values (*i.e.* table values) at 0.05 level of significance for 6 degrees of freedom. It means that the collected data support the statistical result of no significant difference of opinions amongst university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF) and professional accountants (PA) with respect to each of the statements related to Social Accounting. The table shows that a great majority of the respondents (of each of the four groups)

agree with the need for Social Accounting in Bangladesh. Majority of the respondents are of the view that Social Accounting is of great importance for Bangladesh economy. They opine that the Institute of Charted Accountants of Bangladesh (ICAB) as well as the Institute of Cost and Management Accountants of Bangladesh (CMAB) should come forward to take necessary steps for implementing Social Accounting. Most of the respondents are of the view that:

I. Social Accounting enhances corporate accountability,

II. It is a useful accounting technique of measuring socio-economic growth of an economy,

III. It provides a framework for the organization of information about economic and social structure of a country,

IV. It serves as a data-base for a model of an economy,

V. Social Accounting matrix is a very important statistical tool that provides a framework for macro-economic analysis,

VI. Social Accounting matrix is composed of input-output tables, national income statistics as well as household income and expenditure statistics,

VII. Social Accounting matrix is related to national income accounting,

VIII. Social Accounting provides a conceptual basis for examining socio-economic growth of an economy,

IX. Social Accounting is a valid working instrument at the economic planning level as well as a very good support for economic policy at any level,

X. Social Accounting is important to distinguish the impact of exogenous changes due to public sector activities on functional and institutional disposable income.

Concluding Observations

Summing up all that in the foregoing, one may say that Social Accounting considers the social process and tries to provide a clear picture on social performances of an organization. This is also an endeavour to bring the financial and activity reports closer and make it more comprehensive. Social Accounting is, so to say, about identifying social impacts as well as accounting and reporting of these impacts in a form which can be easily understood. Social Accounting is an empowering process and not a means of control. At the same time, it also needs to be understood that it is not possible to develop a common exclusive framework which will be "Fit all". The evolution of Social Accounting framework needs to be adaptable to realities in various circumstances. Social Accounting examines ways in which economic, social and environmental value can be captured and communicated. Building on traditional accounting principles, the Expanded Value Added Statement (EVAS) is an innovative tool to account for economic, social, and environmental factors. It provides a way to account for traditionally non-monetized factors (such as volunteer hours) to provide a better picture of social value creation. Social Accounting seeks to encompass a broader definition of what is counted and what is excluded. It does this by including traditionally non-monetized inputs and accounting for social and

environmental outputs, by synthesizing financial data with social and environmental data. The Expanded Value Added Statement (EVAS) is one mechanism for understanding the dynamics of an organization and the inter-related Socio-economic-environmental implications of various choices made in day-to-day operations. The end result is a better picture of the social value that the organization contributes to the community, as well as the distribution of those benefits amongst stakeholders.

The results based on the empirical analysis in the context of Bangladesh reveal that according to most the university teachers of accounting (UTA), university teachers of economics (UTE), university teachers of finance (UTF), and professional accountants (PA), Social Accounting is a great need of the hour for Bangladesh economy where a balanced economic growth and development as well as alleviation of poverty are the vital concerns at the nation's economic planning level. In the context of Bangladesh, it may be recommended that Social Accounting should be implemented and for the purpose of implementation the Institute of Chartered Accountants of Bangladesh (ICAB) and the Institute of Cost and Management Accountants of Bangladesh (ICMAB) should play a pioneering role in implementing Social Accounting in Bangladesh. The need for Social Accounting should be included in the five-year plans of Bangladesh, and in this direction, endeavour from the government level is desirable. Expanded Value Added Statement (EVAS) may be recommended for application in order to take care of the implementation phase of Social Accounting in Bangladesh. Social Accounting should also be a course of study for BBA/MBA as well as CA and CMA students.

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Appendix

Table 1: Analysis of the responses of University Teachers of Accounting (UTA), University Teachers of Economics (UTE), University Teachers of Finance (UTF) and Professional Accountants (PA) together with Chi-square test results

Statements regarding Social Accounting	Respondents under Study	Frequency (f), Percentage (%), and total number (N) of responses			Total	Degrees of freedom	Value of Chi-square			Test of Significance
		Disagree	Undecided	Agree	N	d.f. (C-1)×(R-1)	Obtained	Critical		Results
								at 0.01 level	at 0.05 level	
1	2	3	4	5	6	7	8	9	10	11
1. Social Accounting is a process of communicating the social and environmental effects of an organization's economic actions to particular interest groups within society and society at large.	UTA UTE UTF PA	5 (17.86) 5 (20) 6 (23.08) 6 (25)	5 (17.86) 5 (20) 5 (19.03) 7 (29.17)	18 (64.28) 15 (60) 15 (57.89) 11 (45.83)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	2.09	16.8	12.59	No Significant difference (*i.e.* H_0 accepted)
	N	22	22	59	103					
2. Social Accounting unites national accounts and a diverse complex of other information into a vast system of interlocking accounts, thereby adding a depth of details to the necessarily simplified structure of national accounting.	UTA UTE UTF PA	6 (21.43) 6 (24) 6 (23.08) 4 (16.67)	5 (17.86) 6 (24) 6 (23.08) 5 (20.83)	17 (60.71) 13 (52) 14 (53.84) 15 (62.50)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1)=6	0.995	16.8	12.59	No Significant difference (*i.e.* H_0 accepted)
	N	22	22	59	103					

Table 1: Contd.

3. Social Accounting emphasizes the notion of corporate accountability. In this sense, it is an approach to reporting a firm's activities and thus it stresses the need for the identification of socially relevant behavior.	UTA UTE UTF PA	5 (17.86) 7 (28) 5(19.23) 6 (25)	6 (21.43) 5 (20) 6(23.07) 5 (20.84)	17 (60.71) 13 (52) 15(57.70) 13 (54.16)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	1.06	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	23	22	58	103					
4. Social Accounting enables to improve the accountability dimension of a company.	UTA UTE UTF PA	7 (25) 5 (20) 5 (19.23) 6 (25)	5 (17.86) 6 (24) 6 (23.08) 5 (20.84)	16 (57.14) 14 (56) 15 (57.69) 13 (54.16)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.6483	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	23	22	58	103					
5. Social Accounting makes the company accountable to the people for its social performances as well as for the development of appropriate measures and reporting techniques.	UTA UTE UTF PA	7(25) 5(20) 5(19.23) 5(20.84)	6(21.43) 6(24) 5(19.23) 5(20.84)	15(53.57) 14(56) 16(61.54) 14(58.32)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.553	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	22	22	59	103					

Table 1: Contd.

6. Social Accounting is not practised in Bangladesh. In other words, Social Accounting focuses on the inclusion of social and/or environmental objectives but these are not found to be reflected in accounting statements of Bangladesh.	UTA UTE UTF PA	6(21.473) 5(20) 5(19.23) 6(25)	6(21.43) 5(20) 6(23.08) 5(20.84)	16(57.14) 15(60) 15(57.69) 13(54.16)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.358	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	22	22	59	103					
7. Social Accounting can follow accounting techniques to measure socio-economic growth of an economy.	UTA UTE UTF PA	7(25) 5(20) 5(19.23) 5(20.84)	5(17.86) 6(24) 6(23.07) 6(25)	16(57.14) 14(56) 15(57.70) 13(54.16)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.647	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	22	23	58	103					
8. In Bangladesh the concerned people are quite indifferent about the modern developments in the field of Social Accounting.	UTA UTE UTF PA	7(25) 4(16) 6(23.08) 5(20.84)	5(17.86) 5(20) 6(23.08) 6(25)	16(57.14) 16(64) 14(53.84) 13(54.16)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	1.135	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	22	22	59	103					

Table 1: Contd.

9. Social Accounting examines ways in which economic, social and environmental value can be captured and communicated.	UTA UTE UTF PA	6(21.43) 5(20) 5(19.23) 6(25)	6(21.43) 6(24) 6(23.07) 4(16.67)	16(57.14) 14(56) 15(57.70) 14(58.33)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.883	16.8	12.59	No Significant difference (*i.e.* H_0 accepted)
	N	22	22	59	103					
10. Input-Output analysis that depicts inter-industry relations of an economy is also a valid instrument of Social Accounting. It shows how the output of one industry is an input to each other industry. It uses a matrix representation of a nation's (or a region's) economy to predict the effect of changes in one industry on others and by consumers, government and foreign suppliers on the economy.	UTA UTE UTF PA	6(21.43) 6(24) 6(23.07) 6(25)	6(21.43) 5(20) 6(23.07) 5(20.84)	16(57.14) 14(56) 14(53.86) 13(54.16)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.170	16.8	12.59	No Significant difference (*i.e.* H_0 accepted)
	N	24	22	57	103					
11. Social Accounting data include input-output analysis, national income statistics and household	UTA UTE UTF	7(25) 5(20) 6(23.07)	6(21.43) 6(24) 5(19.23)	15(53.57) 14(56) 15(57.70)	28(100) 25(100) 26(100)	(3-1)× (4-1) = 6	0.366	16.8	12.59	No Significant

Table 1: Contd.

income and expenditure statistics.	PA	6(25)	5(20.84)	13(54.16)	24(100)					difference (*i.e.* H_o accepted)
	N	24	22	57	103					
12. Social Accounting is important to distinguish the impact of exogenous changes due to public sector activities on functional and institutional disposable income.	UTA UTE UTF PA	7(25) 7(28) 7(26.92) 6(25)	6(21.43) 6(24) 5(19.23) 5(20.84)	15(53.57) 12(48) 14(53.85) 13(54.16)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.326	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	27	22	54	103					
13. Social Accounting provides a framework for the organization of information about economic and social structure of a country, and serves as a data - base for a model of an economy.	UTA UTE UTF PA	6(21.43) 6(24) 7(26.92) 7(29.16)	6(21.43) 5(20) 6(23.08) 5(20.84)	16(57.14) 14(56) 13(50) 12(50)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.678	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	26	22	55	103					
14. Social Accounting Matrix is a very important statistical tool of Social Accounting as well as a framework for macro-	UTA UTE UTF PA	7(25) 5(20) 7(26.92) 6(25)	6(21.43) 5(20) 6(23.08) 5(20.84)	15(53.57) 15(60) 13(50) 13(54.16)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.063	16.8	12.59	No Significant differ-

Table 1: Contd.

economic analysis.										ence (*i.e.* H_o accepted)
	N	25	22	56	103					
15. Social Accounting Matrix is a data-system, including both social and economic data for an economy. And the data sources for a Social Accounting matrix come from input-output tables, national income statistics, and household income.	UTA UTE UTF PA	6(21.43) 6(24) 6(23.08) 6(25)	6(21.43) 6(24) 5(19.23) 5(20.83)	16(57.14) 13(52) 15(57.69) 13(54.17)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.312	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	24	22	57	103					
16. A Social Accounting Matrix has two main objectives: first, organizing information about the economic and social structure of a country over a period of time and second, providing statistical basis for the creation of a plausible model capable of presenting a static image of the economy along with simulating the effects of policy interventions in the economy.	UTA UTE UTF PA	5(17.86) 5(20) 6(23.08) 6(25)	6(21.43) 6(24) 6(23.08) 5(20.83)	17(60.71) 14(56) 14(53.84) 13(54.17)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.641	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	22	23	58	103					

Table 1: Contd.

17. Social Accounting Matrix is a technique related to national income accounting, providing a conceptual basis for examining both growth and distributional issues within a single analytical framework in an economy.	UTA UTE UTF PA	7(25) 6(24) 6(23.07) 6(25)	6(21.43) 6(24) 6(23.08) 4(16.67)	15(53.57) 13(52) 14(53.85) 14(58.33)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.492	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	25	22	56	103					
18. Social Accounting Matrix is a valid working instrument at the economic planning level as well as a very good support for economic policy at any level.	UTA UTE UTF PA	7(25) 6(24) 6(23.08) 6(25)	5(17.86) 6(24) 7(26.92) 5(20.83)	16(57.14) 13(52) 13(50) 13(54.17)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.721	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	25	23	55	103					
19. Social Accounting may shed light on how progressive or regressive tax-system is.	UTA UTE UTF PA	6(21.43) 6(24) 6(23.08) 5(20.83)	6(21.43) 7(28) 5(19.23) 5(20.83)	16(57.14) 12(48) 15(57.69) 14(58.34)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.468	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	23	23	57	103					

Table 1: Contd.

20. Institute of Chartered Accountants of Bangladesh (ICAB) and Institute of Cost and Management Accountants of Bangladesh (ICMAB) should come forward to take care of Social Accounting. implementation.	UTA UTE UTF PA	6(21.43) 6(24) 6(23.08) 6(25)	6(21.43) 6(24) 5(19.23) 5(20.83)	16(57.14) 13(52) 15(57.69) 13(54.17)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.312	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	24	22	57	103					
21. The need for Social Accounting should be included in our five-year plans. Endeavour from government level is desirable in this direction.	UTA UTE UTF PA	7(25) 6(24) 6(23.08) 6(25)	6(21.43) 6(24) 6(23.08) 4(16.67)	15(53.57) 13(52) 14(53.84) 14(58.33)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.489	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	25	22	56	103					
22. Since Expanded Value Added Statements (which integrate financial and social information) is an innovative tool to account for economic, social and environmental factors, companies in Bangladesh may start using it as a method of Social Accounting which accounts for social value creation.	UTA UTE UTF PA	6(21.43) 6(24) 6(23.08) 6(25)	6(21.43) 6(24) 7(26.92) 5(20.83)	16(57.14) 13(52) 13(50) 13(54.17)	28(100) 25(100) 26(100) 24(100)	(3-1)× (4-1) = 6	0.473	16.8	12.59	No Significant difference (*i.e.* H_o accepted)
	N	24	24	55	103					