# FINANCING GOVERNMENT AGRICULTURAL EXPENDITURE IN ETHIOPIA

*Teshome Mulat*

## I. INTRODUCTION

For a number of poor African countries a central economic management problem today is how to finance agricultural expenditures. On the one hand, there are many sources of finance including taxation, external loans and assistance, price policy and domestic borrowing. Part of the problem stems from the failure to identify, develop and determine the optimal level and configuration of agricultural finance. On the other hand, the problem may be focussed around expenditure management. There is the view, currently in vogue, that government expenditure, regardless of its structure, would "have a deleterious effect on growth performance" [1]. The reasons given are many but centered on the relative inefficiency of government production, i.e. relative to that of the private economy. But this is not an uncontested position. There are those (the "structuralists" in particular) that consider economic development in poor countries an unlikely proposition without government intervention to remove impediments to growth and active participation in the management of economic production and distribution.

The purpose of this short study is to examine the relationship between government finance and expenditure in agriculture in a poor country, Ethiopia.

There are important justifications for focussing on agricultural taxation and expenditure. First, the traditional dominance of agriculture is long established and sustained. Over 60 per cent of the GDP, and almost all the foreign exchange earnings originate in agriculture. Over 70 per cent of the population is rural and depends for its livelihood on agricultural activities. The pervasive stance of agricultural activities in the Ethiopian economy is further underscored by the fact that even the small and fragile manufacturing sector depends for its inputs and finance on agriculture, so that if a broader classification is used, most of the manufacturing output in the economy would be designated agricultural. Since economic surplus of some magnitude obtains only in agriculture, economic strategists have always argued that agriculture should finance not only agricultural expenditures but also economic growth generally [6, 15, 16].

Second, there have also been significant economic resource transfers from the private to the public sector. Until recently, and as a direct and deliberate outcome of government policy, the private sector and the market system had diminished roles in the economy and a condition of heavy reliance on the state for economic growth and development prevailed. During the past two or so decades, the Ethiopian government attempted to draw resources from agriculture by means of a nationalization drive, heavy taxation, reduced grain procurement prices paid to

private farmers/peasants and the establishment of many multi-purpose state institutions and systems [8]. Because of these developments agricultural development in particular and that of the economy generally are made dependent on the level and pattern of government expenditures.

Thirdly, during the late 1970s there have been some drastic revisions of the tax laws including those pertaining to agricultural taxation. These discretionary changes have altered both the rate of taxation and the efficiency of tax collections. An important consideration would be to analyze and measure the relative potency of agricultural taxation as a means of financing government expenditure.

Finally, another important justification for this development had been the failure of traditional agriculture to reform itself. The traditional private and communal agriculture could not sustain production levels in consonance with population growth and the growth needs of the economy. Absence of incentive systems in communal land holdings, abuse of the physical environment and lack of private investment have resulted in land degradation and reduced land and labour productivities in agriculture. Recurring drought, famine and economic stagnation were manifest outcomes of these processes and underscore the need for government action. The destructive wars have also aggravated the problem of agricultural finance and broadened the bases of the economic crisis.

Is the problem one of deficient supply of agricultural finance or the inefficiency in the management of government agricultural expenditure? Both constitute important problems of agricultural expenditure finance in Ethiopia. Limited range of policy options (tax instruments used are few; external loans and foreign assistance are both small and unstable, and other sources including domestic borrowing and pricing policy are not properly developed for the purpose) and low taxable capacity have caused the generation of insufficient finance. On the other hand, government expenditures show allocational inefficiency (imbalances in the sectoral allocations of government expenditures and in the distribution between current and capital expenditures are noted, for example) and are not always cost-effective.

The mode of financing too affects the pattern of agricultural expenditure finance. The evaluation of the agricultural tax laws in terms of their effectiveness and relative contribution to agricultural expenditure finance would have been relatively easy if the taxes were formulated on the basis of the so-called "benefit principle". Only the defunct education and health tax laws (which are paid as one with land taxation) are possible candidates of earmarked taxation [4, 7, 5]. But the tax revenues generated by these sources have been relatively small and the great disparity between revenue and expenditure and the inequity they create among the beneficiaries (for example, agriculturalists pay for the education of urban children under these tax systems) disqualify these taxes from becoming good examples of earmarked taxation. Presently, the overt tax system consists of land use fees (which are fixed and are in the nature of a poll tax) and agricultural income taxation which is designed on the basis of the "ability to pay principle" [12, 14]. Government agricultural expenditure

is financed from general government revenue and not from earmarked sources. However, the failure to develop varied and versatile agricultural tax systems has constricted the yield from this source and forced government agricultural expenditures to rely increasingly on non-tax finance.

## II. AGRICULTURAL TAXATION AND EXPENDITURE

One of the major consequences of government economic policy changes since 1975 (when the Provisional Military Administrative Council, which supplanted the monarchy, gradually transformed itself into the Socialist Government of Ethiopia) has been the dramatic rise in the tax/GDP ratio. This ratio averaged a low 5.2 per cent per year for the period 1950-1960, rose to the average yearly level of 8.5 per cent during the 1960-1975 period and reached the level of 17.6 per cent per annum during the period 1975-1990.

Tax effort indices computed for a number of developing and industrialized countries show that the Ethiopian effort is relatively high, indicating the trend toward "larger government" and improvements in budgetary performance [18]. According to some of these estimates the Ethiopian tax/GDP ratio is much higher than its expected or predicted value by world-wide experience.[1]

Agricultural taxation makes a contribution to this overall tax performance improvement (see Table 1). The revenue yield from this source was steadily increasing over the years partly resulting from a raise in the rate of taxation and partly as a result of improved collections. Agricultural tax revenues increased at the rate of 5.4 per cent per annum during the period 1950-1960, at 10.6 per cent during 1960-1974 and had an average yearly growth rate of nearly 11 per cent during the 1975-1990 period.

Despite this remarkable growth, however, the share of agricultural taxation in the total tax revenue was declining. This share was 33 per cent per year (on the average) for the 1950-1960 period, 23 per cent for the 1960-1974 period and only 19 per cent for the period 1975-1990. Many other tax yields, especially the indirect tax returns, were growing much faster than agricultural taxation, thus accounting for the decline in the relative shares of this tax.

The increase in the rate of agricultural taxation has been justified on grounds of both efficiency and equity considerations [10]. The relative supply inelasticity of agricultural goods and the need to transfer resources to sectors of relatively higher rates of return (in this case from agriculture to industry) favour heavier agricultural taxation and constitute an important efficiency argument for turning the terms of trade against agriculture.

**Table 1: Agricultural Expenditure and Taxation**

| Year | Gov't Agricul. Exp. (million Birr) | Total Gov't Exp. (million Birr) | Agricul. Tax Revenue (million Birr) | Total Tax Revenue (million Birr) | Agr. Tax / Total Tax Revenue (percent) | Agr. Tax / Agr. Exp. | Agr. Exp./ Total Gov't Exp. (percent) | Total Tax Revenue/ GDP (at current factor cost) (percent) |
|---|---|---|---|---|---|---|---|---|
| 1960/61 | 3.7 | 213.1 | 38.9 | 109.4 | 35.6 | 10.5 | 1.7 | 4.7 |
| 1961/62 | 5.0 | 251.1 | 39.6 | 121.9 | 32.5 | 7.9 | 2.0 | 5.0 |
| 1962/63 | 8.9 | 297.3 | 88.7 | 123.2 | 72.0 | 10.0 | 3.0 | 4.9 |
| 1963/64 | 11.1 | 307.6 | 51.4 | 224.9 | 22.8 | 4.6 | 3.6 | 8.2 |
| 1964/65 | 16.4 | 400.8 | 60.0 | 265.5 | 22.6 | 37.0 | 4.1 | 8.9 |
| 1965/66 | 14.6 | 470.5 | 51.9 | 290.0 | 17.9 | 3.6 | 3.1 | 9.1 |
| 1966/67 | 14.9 | 494.0 | 54.3 | 313.5 | 17.3 | 3.6 | 3.0 | 9.2 |
| 1967/68 | 21.4 | 523.2 | 42.8 | 314.8 | 13.6 | 2.0 | 4.1 | 8.7 |
| 1968/69 | 14.5 | 456.0 | 42.2 | 337.1 | 12.5 | 2.9 | 3.2 | 8.8 |
| 1969/70 | 20.2 | 585.0 | 74.3 | 376.9 | 19.7 | 3.7 | 3.5 | 9.0 |
| 1970/71 | 31.5 | 550.8 | 75.9 | 408.4 | 18.6 | 2.4 | 5.7 | 9.2 |
| 1971/72 | 128.5 | 671.5 | 65.9 | 432.0 | 15.3 | 0.5 | 19.1 | 9.7 |
| 1972/73 | 46.6 | 716.2 | 84.0 | 487.3 | 17.2 | 1.8 | 6.5 | 10.5 |
| 1973/74 | 54.2 | 777.7 | 79.0 | 540.3 | 14.6 | 1.5 | 7.0 | 10.5 |
| 1974/75 | 97.6 | 1048.9 | 61.2 | 592.7 | 10.3 | 0.6 | 9.3 | 11.6 |
| 1975/76 | 111.2 | 1200.4 | 109.3 | 615.5 | 17.8 | 1.0 | 9.3 | 11.2 |
| 1976/77 | 146.4 | 1344.5 | 260.3 | 859.5 | 30.2 | 1.8 | 10.9 | 13.9 |
| 1977/78 | 192.0 | 1696.7 | 319.2 | 944.9 | 33.8 | 1.7 | 11.3 | 14.4 |
| 1978/79 | 215.4 | 1844.1 | 324.9 | 1149.6 | 28.3 | 1.5 | 11.7 | 16.1 |
| 1979/80 | 172.8 | 2138.0 | 396.9 | 1302.4 | 30.5 | 2.3 | 8.1 | 16.9 |
| 1980/81 | 146.1 | 2296.5 | 338.1 | 1362.6 | 24.8 | 2.3 | 6.6 | 16.8 |
| 1981/82 | 240.8 | 2649.7 | 290.2 | 1436.3 | 20.2 | 1.2 | 9.1 | 17.3 |
| 1982/83 | 567.5 | 3807.8 | 304.6 | 1558.1 | 19.6 | 0.5 | 14.9 | 17.2 |
| 1983/84 | 352.2 | 3198.1 | 354.5 | 1731.5 | 20.5 | 1.0 | 11.0 | 19.4 |
| 1984/85 | 452.8 | 3924.6 | 256.1 | 1677.4 | 15.3 | 0.6 | 11.5 | 18.8 |
| 1985/86 | 478.5 | 4131.1 | 353.8 | 1876.1 | 18.9 | 0.6 | 14.0 | 19.3 |
| 1986/87 | 479.5 | 4137.2 | 249.4 | 2089.2 | 11.9 | 0.5 | 11.6 | 20.4 |
| 1987/88 | 419.3 | 5058.0 | 251.5 | 2317.8 | 10.9 | 0.6 | 8.3 | 21.9 |
| 1988/89 | 385.6 | 5333.1 | 269.7 | 2362.6 | 11.4 | 0.7 | 7.3 | 21.2 |
| 1989/90 | 413.2 | 5276.3 | 137.7 | 2159.1 | 6.4 | 0.3 | 7.8 | 18.9 |
| Average annual growth rate (per cent) | | | | | Yearly average (per cent) | | | |
| 1950-60 | n.a | 9.2 | 5.4 | 5.1 | 33.4 (3.2) | n.a | n.a | 5.2 (1.1) |
| 1950-74 | n.a | 11.3 | 9.8 | 11.4 | 28.0 (12) | n.a | n.a | 7.1 (2.2) |
| 1960-74 | 50.3 | 14.3 | 10.6 | 15.5 | 22.8 (15) | 6.2 (8.8) | 5.3 (4.2) | 8.5 (2.0) |
| 1975-90 | 20.1 | 13.6 | 10.8 | 9.5 | 19.4 (8) | 1.0 (0.6) | 10.2 (2.3) | 17.6 (2.8) |

Source: Ministry of Finance, *Budgetary Revenue and Expenditures*. (various years)

Note: The figures in parentheses are standard deviations, n.a = not available and 1.00 Birr = US $ 0.48

An important equity argument is that the application of progressive and increased rate of taxation penalizes the rural rich more than it does the poor and so tends to diminish rural income differentials. Furthermore, the contribution of agricultural finance through improved (increased) taxation may have to be gauged to the relative productivity share of agriculture in the economy, an argument already made in the introduction of this essay.

On the other hand, government agricultural expenditure was growing faster than the level of total government expenditure. During the period 1960-1975, the level of government expenditure was growing at the average yearly rate of 14.3 per cent while government agricultural expenditure had an average growth rate of about 50 per cent per annum. During the period 1975-1990, the average yearly growth rates of total government expenditure and agricultural expenditure were, respectively 13.6 per cent and 20.1 per cent.

As a consequence of the high and rapid rate of growth of agricultural expenditure, the share of government agricultural expenditure in the total was also rising. This share, which averaged 5.3 per cent per annum during the 1960-1970 period, rose to the level of 10.2 per cent (almost doubled) during the period 1975-1990.

The dramatic increase in the level and share of government agricultural expenditure after 1975 is easily explained. The new economic policy and programme adopted by the Provisional Military Government of Socialist Ethiopia, and later by the government of the Workers' Party of Ethiopia, led to sweeping nationalization of private property, including all agricultural and urban lands, the expansion of existing agricultural state institutions and the establishment of new ministries ( for example, the Ministry of Coffee and Tea Development and the Ministry of State Farm Development) [8, 11]. In addition, various government-owned production and distribution systems were put in place (including many food and cash crop production corporations, the Fishery Development Corporation, the Agricultural Marketing Corporation, etc.) with large establishment and operational expenditure requirements. The government was also providing fertilizers, improved seeds and pesticides at reduced prices to farmers, was running a massive subsidy programme to the state farm and co-operative sectors and managing massive agricultural extension services and training programmes. These resulted in the dramatic increase of the level and share of government agricultural expenditures.

It is also to be noted that as the level of agricultural expenditure rises steadily over the years, the capacity of agricultural taxation to finance this rising expenditure level diminishes. Indeed, Table 1 (column 7) shows that the agricultural tax to agricultural expenditure ratio was 10.5 in 1960, 1.0 in 1975 and drops to 0.3 in 1990. The implication of this result is pretty obvious. Agricultural taxation can no longer cover the level of agricultural expenditure and resort had to be made to non-agricultural taxes and non-tax resources in order to finance the ever bulging expenditure level.

## III. DETERMINANTS OF GOVERNMENT AGRICULTURAL EXPENDITURE

From the foregoing it may be hypothesized two sets of factors constitute the most important determinants of agricultural expenditure: the structure of government finance and expenditure. Changes in the structure of government expenditure may be measured in a variety of ways, but the most common are the share of agricultural expenditure in the total government expenditure and/or the allocation of this total between "capital" and "recurrent" expenditures. The first ratio looks into the sectoral allocation of government expenditures and the second affects economic productivity and has profound economic "growth" implications. In general, investment resource allocations improve future economic development prospects more than consumption expenditures do.

Government agricultural expenditure levels may rise as a result of deliberate government planned expenditure allocations in favour of agriculture. It is already shown that agricultural expenditure was growing faster than total government expenditure and as a consequence the share of agricultural expenditure in the total is rising. Thus, these changes in the sectoral allocation of government expenditure are reflected in the growth of government agricultural expenditure levels.

**Table 2: The Structure of Agricultural Expenditure**

| The Structure of Expenditure Yearly Averages (per cent) | Period | |
|---|---|---|
| | 1960 - 1974 | 1975 - 1990 |
| 1. Agricultural Expenditure/Total Governmeat Expenditure | 5.26 (4.35) | 10.21 (2.45) |
| 2. Agricultural Capital Expenditure/Total Agricultural Expeaditure | 48.05 (17.94) | 82.35 (5.18) |
| 3. Agricultural Capital Expenditure/Total Capital Expenditure | 13.12 (9.17) | 32.05 (9.58) |

Source: Computed from data obtained in the Ministry of Finance, *Government Budgetary Revenue and Expenditure.* (an annual publication).

Note: The figures in pareatheses are the standard deviations of the observed yearly reveaue figures.

Concurrent with the rapid increase in government expenditures on agriculture has been a rise in the capital/recurrent agricultural expenditure ratio. Capital expenditures were growing faster than recurrent expenditures with the result that today the capital/recurrent expenditure ratio is about seven times its level in the late 1960s.

The level of public investment in agriculture under the monarchy has been small, although growing. The private economy provided much of the required investment which was encouraged by the "commercialization" drive in agriculture and the growth of concessionaire cash crop farming for export and domestic consumption carried out under the auspices of the three (extended) five-year development plans (1957-1962, 1963-1967 and 1968-1974). Under the proclaimed socialist management of the economy by the following government, investment capital was coming mainly from public sources and, whereas both public consumption and investment expenditures were on the increase, capital expenditures were growing faster than recurrent expenditures. Other than requiring relatively higher financial outlays, the rapid increase in the level and share of investment appears to have a "snowball effect" on agricultural as well as general expenditure levels (through many expenditure linkages and associated "multipliers").

Since there is no *a priori* justification to treat the two proposed measures of expenditure structural change as alternatives, both have been examined as independent factors affecting the level of government agricultural expenditure.

Table 3 summarizes the important trend in the structure of government finance and its effect on agricultural expenditure levels. Agricultural tax revenues have been increased to a point where the taxable capacity appears exhausted. Also, agricultural taxes have been growing less rapidly than other taxes, especially the indirect taxes, with the result that the agricultural tax to total tax revenue ratio declines with time.

Whereas all tax revenue sources were improving their yield over time, non-tax sources now contribute more than tax sources toward government expenditure finance. Of these non-tax sources the growth of the level of domestic borrowing (mainly from the banking sources but in later years government enterprises were also contributing) is quite marked. In 1950 domestic borrowing contributed only 0.12 per cent of total government expenditure finance, in 1960 this share was 8.45 per cent, and in 1990 it reached the high level of 27 per cent. The share of domestic borrowing in the total non-tax revenue was, on the other hand, 1.05 per cent in 1950, 1.74 in 1960 and 45 percent in 1990. Tax and other sources of finance began to dry up as we approached 1990 and the government became increasingly dependent on domestic bank loans to finance its ever bulging expenditures.

External assistance and foreign borrowing were also on the increase (see Table 3), but these follow uneven growth and are now reduced to a trickle following the political and military crises in the country, general instability and loss of confidence in the government. While external assistance constituted a mixed bag, in the sense that it financed both investment and consumption expenditures, foreign loans went to finance only capital expenditures and contributed greatly to the growth of the capital/recurrent expenditure ratio in agriculture.

Table 3: The Structure of Government Finance

| Period | Average Yearly Tax Revenue (million Birr) | Average Yearly Non-tax Revenue (million Birr) | | | | Average Yearly Total Expenditure Finance (million Birr) |
|---|---|---|---|---|---|---|
| | | External Loans and Assistance | Domestic (mainly Bank) Borrowing | Other Non-tax Revenue | Total Non-tax Revenue | |
| 1950 - 1959 | 99.873 (26.213) | 6.700 (5.031) | 1.118 (23.132) | 13.182 (2.869) | 21.000 (28.812) | 120.864 (46.985) |
| 1960 - 1974 | 319.643 (115.138) | 108.657 (47.018) | 14.614 (12.605) | 49.250 (18.266) | 172.521 (66.313) | 492.164 (177.387) |
| 1975 - 1990 | 1501.419 (575.184) | 586.613 (335.218) | 406.000 (350.539) | 570.100 (393.031) | 1562.713 (933.410) | 2871.119 (1530.956) |

Source: Computed from data obtained in the Ministry of Finance, *Government Budgetary Revenue and Expenditure.* (various years).

Note: The figures in parentheses are the standard deviations of the annual revenues.

In Table 4 the dependent variable, LAE, is the level of government agricultural expenditure and is measured in real terms to remove the effects of inflation. Due to lack of appropriate deflators use is made of the implicit GDP index which is obtained as the ratio of GDP at current factor cost to the GDP at constant factor cost of 1981 prices. The same indices are also used to deflate the level of government expenditure measure, LGE, and the rest of the variables in the regression are measured as ratios (and hence are assumed to be free of inflationary effects).

The results in Table 4 (which may be taken as tentative) corroborate some of the statements already made regarding the important determinants of agricultural government expenditure. The overall level of government expenditure, LGE, is an important determinant of the level of agricultural expenditure. A rise in the level of overall government expenditure often implies an increase in the level of agricultural expenditure. From the regression results it is further indicated that agricultural expenditure is elastic with respect to changes in the level of general government expenditure.

**Table 4: Determinants of Agricultural Expenditure**

| Regressor | Coefficient | T-Ratio | Elasticity | Elastic region values of variables |
|---|---|---|---|---|
| A | -8.9408 | -6.9006 | | |
| ATTTR | -0.0971 | -0.2975 | -0.0971 ATTTR | ATTTR > \10.2987\ |
| TTRGE | 1.1085 | 4.8154 | 1.1085 TTRGE | TTRGE > 0.9021 |
| DBGE | 0.4533 | 1.7307 | 0.4533 DBGE | DBGE > 2.2060 |
| LGE | 1.2221 | 20.5146 | 1.2221 | |
| ACEGE | 2.3229 | 1.9681 | 2.3229 ACEGE | ACEGE > 2.3229 |
| AEGE | 9.7853 | 10.9158 | 9.7853 AEGE | AEGE > 0.1022 |
| Adj. $R^2$ = 0.9497 F(6,23) = 724.5831 Standard Error of Regression = 0.1057 DW-Statistic = 1.8034 | | | | |

where LAE = the dependent variable is the (natural) logarithm of the level of agricultural expenditures in real terms
A = constant term
ATTTR = agricultural tax to total tax revenue ratio
DBGE = domestic (bank) borrowing to total government expenditure finance ratio
TTRGE = the ratio of total tax revenue to total government finance (=total government expenditure)
LGE = (natural) logarithm of total government expenditure
ACEGE = The ratio of agricultural "capital" expenditure to total government expenditure
AEGE = The ratio of agricultural expenditure to total government expenditure

However, it is not only the level, LAE, but also the share of agricultural expenditure, AEGE, that is on the increase. The rise in this share is also intimately related to the increases in the level of agricultural expenditure. It would appear that the increases in agricultural expenditure, in this case, result from deliberate government planned allocations of its expenditure budget. But the present ratio of agricultural to total government expenditure is far less than the 10 per cent and above which define the elastic range for agricultural expenditure (see the last column of Table 4).

Another important factor explaining the increase in the level of agricultural expenditure is the rise in the (agricultural) capital/total government expenditure ratio. The recurrent and capital expenditure allocation changes with increasing shares going into capital expenditures. This change in the structure of expenditure results in shifts toward heavy expenditure activities which, through links and related multipliers, appear to have a snowball effect on agricultural expenditure levels.

The level of establishment, running and maintenance costs rises in the sectors where capital expenditures are made. Government consumption expenditures also increase in the public system generally following the rapid expansion and growth of the bureaucracy, public sector employment and war expenditures. Increasingly, it becomes difficult to finance the growing recurrent costs of government. This

problem, othewise known as the "recurrent cost problem", characterises fiscal developments in the country and explains the growth of government agricultural expenditures.

However, in recent years agricultural capital expenditures are only about 6 per cent of total government expenditures and agricultural expenditure, LAE, tends to be inelastic at that level. Agricultural expenditures are elastic with respect to changes in the ACEGE ratio only in the value range (for this ratio) of 43 per cent or more -- which expenditure ratio is very difficult to achieve.

The other set of factors determining agricultural expenditures are the changes in the level and structure of finance. The level of agricultural taxation[2] is unrelated to the level of agricultural expenditure, since the latter is financed by general revenue and not by earmarked taxation. The coefficient is also of the right sign, and as explained earlier, the share of agricultural tax in the total tax revenue, ATTTR, is a declining function of time.

But, agricultural expenditure is affected by the tax share in the total government expenditure finance, TTRGE. An increase in this share results in an increase of the level of agricultural expenditure, although such increases are less than proportionate. Agricultural expenditures are elastic with respect to changes in TTRGE in the range where the total tax revenue is equal to or more than the total expenditure finance, GE. In 1990 total tax revenue/total government expenditure (finance) amounted to only 41 per cent, and with the diminishing taxable capacity of the economy almost exhausted, it is very unlikely that tax revenues can be expanded to the level of total finance requirements.

Finally, agricultural expenditure is also affected by the level of domestic bank borrowing.[3] But agricultural expenditure is relatively inelastic with respect to the share of domestic bank borrowing, and according to the results in Table 4, the level of domestic bank borrowing will have to rise to more than twice the total government expenditure level for agricultural expenditures to fall in the elastic range. The government is becoming increasingly dependent on deficit financing to cover its bulging public expenditures, including expenditures on agriculture. With no concomitant increase in the levels of production, the expected inflationary effect of such a programme is already being faced. A recent report on retail prices indicates that (using the "general index") there is a 16 per cent increase in the rate of inflation in 1989 over its 1987 level [9, p.20]. For specific expenditure categories the rate can be much higher. For example, the corresponding rate of inflationary increase for "household items" is 22.2 per cent.

## IV. CONCLUSION

During the course of the past twenty years, the continued rise in the level and relative shares of defense and related expenditures, a rapid expansion of state activity in the production and distribution spheres and a heightened effort at the centralized management of the economy have led to the dramatic growth of the public sector and public expenditures. A contributive factor to this growth of the public sector has also been a rapid increase in the level of agricultural expenditures. Both recurrent and capital agricultural expenditures as well as the relative share of capital expenditure in the total outlay were on the increase.

At the same time recurring drought, gross economic mismanagement and wars exerted additional demand on the public coffers while contributing to a decline in the growth of domestic finance. Economic mismanagement were in evidence in agriculture where many public sector enterprises were operating with loss and were sustained by continued government subsidy.

An important feature of the dramatic expansion of the public economy and the rise in public expenditures had been a strong manifestation of the so-called "recurrent cost problem" -- a condition characterizing fiscal developments in the poorest African countries [3, pp. 101-117]. In Ethiopia investment projects (agricultural projects included) are abandoned for lack of funds, completed projects have extended run-in periods and existing plants are operating with considerable excess capacity. The problem of expenditure finance is fast approaching crisis levels with government revenues failing to cover recurrent budgetary expenditures and with this gap (between total government finance and recurrent budgetary expenditures) ever widening.

Tax revenues, inspite of impressive improvements in tax performance, are declining in their relative importance as sources of government finance. Agricultural taxation too increased considerably, following tax reforms and improved tax administration, but its relative share in the total tax receipt has been declining. Increasingly, the bulging public expenditures (including expenditures in agriculture) are being covered by deficit financing. The principal mode consists of overdraft from the National Bank of Ethiopia (NBE), although treasury bills (mainly from the Commercial Bank) are also used to finance short-term expenditures and bonds from the NBE to finance both short- and long-term expenditures [13]. Unfortunately this mode of financing government expenditures leads to the "monetization of deficits" and the aggravated inflationary state of the economy [1, pp. 39-73].

## NOTES

1. Using Tanzi's results [17], the tax/GDP (at current factor cost) ratio for Ethiopia is estimated at 3 per cent which is far below the 17 per cent actual for 1981.

2. Measured both by the amount of yearly tax collections and as a ratio of total yearly tax receipts. It is the latter measurement that is reported here.

3. Relating LAE to DBGE only, the following relationship is obtained:

$$\underset{(60.1183)}{LAE = 17.4608} + \underset{(4.0694)}{10.9214\ DBGE}$$

$$(Adj.)\ R^2 = 0.3492,\ F\ (1,28) = 16.5600,\ S.E. = 1.0466 \text{ and } DW = 0.6935)$$

where LAE and DBGE are as defined before and where the figures in parentheses are t-ratios.

Note: The coefficient (hence the elasticity value) of DBGE is very different from the results obtained in Table 4, indicating multicollinearity problem.

## REFERENCES


[1] Blinder, Alan S., On the Monetization of Deficits, *Portfolio: International Economic Perspectives, Volume 2, Number 4.* Reprinted from the book, *The Economic Consequences of Government Deficits*, edited by Laurence H. Meyer, Kluwer-Nighoff Publishing, 1983. pp. 39-73.

[2] Diamond, Jack, Government Expenditure and Growth, *Finance and Development.* (A quarterly publication of the International Monetary Fund and the World Bank), December 1990. pp. 34-36.

[3] Gray, Clive and Martens, Andre, The Political Economy of the 'Recurrent Cost Problem' in the West African Sahel, *World Development*, Vol. 11, No. 2, 1983. pp. 101-117.

[4] The Imperial Ethiopian Government, *Proclamation No. 94 of 1947: Proclamation for the Establishment of a Tax for Education.*

[5] _____, *The Health Decree No. 36 of 1959.*

[6] _____, *First Five Year Development Plan, 1957-1962, The Second Five Year Development Plan, 1963-1967* and the extended *Third Five Year Development Plan, 1968-1974.*

[7] _____, *Proclamation 279 of 1970: A Proclamation to Provide for Imposition and Expenditure of Additional Education Taxes.*

[8] National Bank of Ethiopia, *Annual Report 1988/89.* p. 20

[9] Newbery, David, Agricultural Taxation: The Main Issues, in Newbery, David and Stern, Nicholas (editors), *The Theory of Taxation In Developing Countries*. A World Bank Research Publication, Oxford University Press, 2nd. Printing 1988.

[10] Provisional Military Government of Ethiopia, *Programme of the National Democratic Revolution of Ethiopia*. Addis Ababa, 1976.

[11] _____, *Rural Land Use Fee and Agricultural Activities Income Tax Proclamation No. 77/1976.*

[12] _____, *Proclamation No. 99 of 1976: Monetary and Banking Proclamation*

[13] Teshome Mulat, Planning in Ethiopia, in Ndegwa, P., Mureithi, L. P. and Green, R. (eds.), *Development Options for Africa in the 1980s and Beyond*. Nairobi: Oxford University Press, 1985, pp. 85-100.

[14] The Socialist Government of Ethiopia, *Proclamation No. 152 of 1978: The Rural Land Use Fee and Agricultural Activities Income Tax Amendment Proclamation.*

[15] _____, *Annual Plans*. (Six such plans were produced between 1978/1979 and 19883/1984.)

[16] _____, *The Ten-Year Perspective Plan*. Addis Ababa, 1984.

[17] Tanzi, Vito, Quantitative Characteristics of the Tax Systems of Developing Countries, in David Newbery and Nicholas Stern (editors), *op. cit.*

[18] The World Bank, *World Development Report 1988*. Oxford University Press, June 1988. p. 82.