ARTICULATING IMF STABILISATION PROGRAMMES
WITH STRUCTURAL ADJUSTMENT IN SSA AGRICULTURE

By Reginald Herbold Green

It will be a sad day for Africa and for international cooperation if the Fund refuses to seek the necessary flexibility in its operations to permit it to continue playing a major role in sub-Saharan Africa.

- John Williamson, 1986

Introduction

For Sub-Saharan Africa (henceforth SSA) both agriculture and the IMF are clearly important, even if the relationship between the two is not always evident.

In terms of household incomes, employment (including self-employment), inputs into domestic manufacturing and export earnings, agriculture is the largest sector in most Sub-Saharan African economies - the notable exception being mineral/hydrocarbon exporters with respect to export earnings. For about two decades (from the mid-1960s) the overall SSA record has been poor on all of these counts with a handful of fairly satisfactory and a larger minority of truly disastrous results at country level (cf. Green 1985, 1986b, 1987; Rose 1985).

How can the trend rate of growth of per capita food production be raised? How can dependable, rising levels of inputs into domestic manufacturing be achieved? How can earned import capacity (the counterpart and basic purpose of exports) be sustained? How can increases in net farm household incomes
(including self-provisioning or subsistence) be regained? How can malnutrition be reduced? How can these goals be attained in a sustainable way which neither pauperises the rest of society - thereby rending the social fabric and sowing the seeds of its own destruction - nor destroying the ecological context for its own survival? These are crucial questions and in SSA they are probably the most crucial macroeconomic and human questions as well as those which stand out in respect of the agricultural sector.

In one sense, the importance of the IMF is just as clearcut. The Fund is a major source of short term funds to facilitate macroeconomic adjustment by economies suffering from severe external account imbalances. Its presence in SSA is increasingly widespread. In the launching period of some present and past structural adjustment programmes (e.g. Uganda 1982, Sudan 1980s, Zaire from 1960s, Zambia from 1970s, Ghana 1983, Somalia from 1980) it has been a major source of external finance and is now a major creditor and part of the debt service burden.

The problem is fitting these two sets of importances together. Agriculture is primarily micro or sectoral and real, the IMF is primarily macro and monetary; agricultural policy and pay-off are primarily medium to long term; IMF programmes (if perhaps not aims) are (at least in intent) short term. However, three principal reasons can be given for emphasising the importance of IMF programmes for SSA agriculture.

First, IMF interpretation of macro policy measures commonly includes crop prices, subsidies, taxes, credit levels, input prices (including interest rates), the price of foreign exchange and government spending. These measures will all affect agriculture directly.

Second, precisely because the IMF's concentration is on stabilisation and its three key balances are external account, fiscal account and domestic supply/demand account (as evidenced by price stability or instability), a real possibility exists of a mismatch with policies appropriate for the real and micro and/or the medium and long term arises.

Third, without a prior IMF standby arrangement it is in practice not possible for an SSA country to secure substantial concessional finance and
especially not to achieve the World Bank endorsed adjustment programme support through a Consultative Group, let alone a Paris Club debt rescheduling package.

**IMF Programmes: Some General Issues**

Prior to a more detailed examination of the principal features of IMF programmes as they relate to agriculture, it may be useful to outline some of the more general criticisms that have commonly been directed toward standard IMF programmes.

First, whether the IMF is ideological or not, the implicit model is not very well adapted to SSA. SSA markets are notoriously imperfect and the imperfections are multiple. Lack of faith in these markets and fears that removing one intervention of many will result in greater not less imperfection are by no means so unreasonable in many SSA economies as most IMF staff seem to believe.

Second, the global economic system is structured in ways that at least in the 1980s benefit the rich, the financially strong, the creditors and the producers of complex goods and services and damage the poor, the financially weak, the debtors and the producers of primary products. That system and its dynamics have done and are doing immense harm to SSA. The IMF as one of its most visible institutions needs to be seen to be pressing for adjustment cost sharing by the beneficiaries, not just acceptance by the victims. It may well be that the IMF has limited influence, but the problem is a real one and the IMF's is too easily seen as a guardian of the status quo.

Third, external imbalance is normally a consequence of internal imbalance and/or exogenous shocks and as such can be a misleading starting point for analysis as opposed to a problem which must be faced. Certainly - with a few exceptions, e.g. Ghana 1972 and Zimbabwe 1982 - imbalance has been caused primarily by supply contraction with weather and terms of trade changes (plus capital market vagueries) the most common catalytic factors not endogenous overheating of demand. That does not eliminate the need for adjustment but it may alter appropriate policies, sequencing, and time frames - not least if the initial shock has been followed by an extended period of economic decline
(e.g. Madagascar 1960-1980, Ghana 1966-1982, Zambia 1976-1987) or domestic stabilisation which partially succeeded but could not restore a sustainable upward dynamic (e.g. Tanzania 1982-1986 and perhaps Zimbabwe 1982-1987).

Fourth, the macroeconomic significance of agriculture and the impact of macroeconomic policy and performance on agriculture are indisputable. But the attempt to move primarily from macroeconomic to sectoral to micro and to concentrate on monetary indicators and tools without an equally strong micro to sectoral to macro aggregative buildup focusing on real magnitudes, variables and instruments is open to very grave doubts. Furthermore, not only are agricultural results in the short term not easily and significantly influenced by policy, but the attempt to do so may lead to scarce resource misallocations which are inefficient from a long term growth perspective.

Fifth, the emphasis on performance tends to downgrade other targets and the tools/resources devoted to attaining progress toward them. Prices are relevant to agriculture but in a complex way and not always primarily agricultural prices. Furthermore, substantial sustained response to real relative price and/or real net income changes by agricultural producers is usually possible only in the context of other parallel changes some of which (effective access to credit, to transport and to extension now and to research results over time) can be victimised (however unintentionally) by the standard IMF package.

Sixth, the differences in present IMF SSA programmes from classic ones - as with the current greater emphasis on stabilisation with growth - are, in general, welcome. But they do introduce a certain degree of incoherence and/or inconsistency in their present state - not least when there is (as is usual in SSA) a parallel World Bank structural adjustment package deal.

(i) IMF Programmes and Agriculture: A Review of Content

The IMF's analytical model in respect to agriculture does center on prices - notably foreign exchange prices (exchange rates), producer prices, user prices, taxes, input prices and interest rates. It does assume price elasticities significantly different from zero especially in the medium to long term. But it is unfair to typify it - at least conceptually - as a
tunnel vision approach seeking to force output up simply by raising nominal grower prices. Especially in its more extended forms, it does seek to include all of the prices cited as well as the general rate of inflation and to take account of non price variables, e.g. actual availability of credit, inputs, extension, transport.

There are in practice two problems. The overall macro model does not include real variables so that the extended sectoral one cannot easily be integrated into it. Even more crucial, almost none of the variables in the extended (or even the pure price) agricultural sector model can be quantified with any pretense of precision except the nominal prices. Therefore, in practice there is a fairly simplistic dependence on nominal price changes to achieve somewhat arbitrary quantitative goals with a collation of non-price measures - usually liberalising or privatising in nature - tacked on without coherent linkage to the price measures.

Exchange Rate Policies

Moving from overvalued to equilibrium or realistic exchange rates is central to all IMF programmes. Only in principle is the possibility of severe external balance without an overvalued exchange rate acknowledged. In general it is held that in many SSA economies exchange rates have been and some still are overvalued.

The IMF favours large initial devaluations which - in the absence of high domestic inflation - would bring the rate back to a realistic level at one go. 40% and 60% (i.e. 66 2/3% and 150% increases in the domestic currency cost of forex) seem to be favoured rates in cases other than hyperovervaluation. A currently fashionable alternative is an auction.

The problem with large initial cuts and auctions is the danger that - at least in some cases - they may generate hyperinflation (albeit Ghana 1983/4 and Tanzania 1986/7 suggest this is not necessarily so). Auctions in addition can - if not managed (as in Ghana and Nigeria) - easily go into a free fall which expectations then make irreversible (e.g. Zambia 1985/7, Sierra Leone 1986/7). Conceivably a semi-active crawling peg (Zimbabwe, post 1983, Tanzania, post 1986) with swift initial (real) devaluation followed by automatic excess
inflation adjustments and - if the overvaluation has only been reduced - a bit more may reduce the inflation and free fall risks which create patterns of uncertainty doing nothing for agricultural (or other) production.

What is clear is that only real devaluation which is expected to and does hold for at least 18 to 24 months (and preferably much longer) can allow time for the incentive effect to raise agricultural production. If - as is generally agreed - long term elasticities of supply are higher than short, at least 36-60 months anticipated holding (or improving) of the new real rate is likely to be needed for output to benefit from them.

The direct impact of devaluation on the agricultural sector depends on whether the increased (in local currency) border prices are passed on to the producer. For exports this is usually the case, at least in part. Even the IMF has engaged in exercises which divert much of the gains to tax revenue (e.g. in Ghana with its 30% grower, 35% marketing, 35% tax revenue split). For domestic market crops the results are altogether less certain. Non-tariff barriers will usually have prevented or limited official imports (other than food aid) and unofficial imports will have been at parallel market rates. Therefore, the impact on grower prices from devaluation may be small.

While not a sufficient condition, devaluation is likely to be a necessary one for raising agricultural export volume - or at any rate officially recorded volume. With domestic market crops the situation is much less clear. The direct grower price impact may be low and, if so, the negative relative price swing relative to exports may dominate and reduce marketed output. The 1970-79 record of 1.4% overall, 1.8% food and -0.1% export crop annual real growth in SSA owes much to sharp relative price swings to food. If devaluation reversed that shift, the results would not be unambiguously good given the lack of surplus food production in most countries and years.

The timing is a further critical issue. If devaluation raises input prices (tools, fuel, wages, seed, fertiliser, pesticides, etc) long before the higher prices on output are received it can prevent output growth or even force a cutback (cf., e.g. Longhurst, 1988). More generally the net real impact depends on input prices, other domestic costs and the prices of wage goods. The latter are significant for they are, in effect, farm households' main real incentive to raise marketed output levels. These issues are, in practice, not
incorporated into IMF programme dialogues and indeed tend to be ignored.

An additional gap is the failure to consider the impact on smuggling explicitly and with some quantitative estimates. For some export crops in some countries (e.g. cocoa in Ghana) smuggling has accounted for a very large proportion of marketed output (perhaps 33% at its peak in Ghana). Devaluation's main short run impact may be to claw back such exports, not to raise production (perhaps a third of Ghana's increased cocoa output between 1983 and 1986/87 can be attributed to such an effect). To conflate the smuggling and production effects is unsound. This is especially so if smuggled exports have financed smuggled imports so that a reduction of the former leads to an enhanced demand for officially received foreign exchange.

A genuine conundrum arises in the case of agricultural commodities with declining real world prices. Enough (real) devaluation can raise or hold constant their real domestic prices. But this is likely to increase their real world price falls by pushing an increased supply growth against a low global constant price demand growth trend and a low price elasticity of demand. While most SSA producers taken separately would gain (albeit at net export proceeds level this may be false more often than is supposed), for SSA's major export crops SSA as a whole would lose (Godfrey, 1985).

But the other export prospects for SSA are poor and it has been loosing market share (World Bank, 1984b). One argument – apparently endorsed by the Fund – is that SSA economies do have comparative advantages, should push ahead and can expect higher cost export producers in Latin America and South Asia to contract. This is too simplistic a scenario. First, the interim costs before other exporters contracted could be very high. Second, in conditions other than full employment absolute, not comparative, costs tend to dominate. Third, SSA's comparative cost advantage is open to doubt in, for example, cocoa, tea, palm oil. Fourth, if the other exporters choose to fight and have much greater fiscal and foreign exchange resources, African economies are likely to lose. These dilemmas squarely face Ghana with respect to cocoa where Malaysia probably has a comparative advantage and both Malaysia and Brazil have greater financial muscle.
There are no easy or convincing answers to this problem. The main criticism of the Fund is that it does not appear to recognise its existence or, at any rate, to factor it into country programmes.

(ii) Pricing Policies

The IMF's main tool is prices and the main goal of stabilisation policy as defined by it is "getting the prices right". Clearly if agricultural prices have been depressed by state intervention in a way which deters output overall or skews it in favour of crops there is no particular reason to favour, then "getting the prices wrong" has costs. However, severe empirical as well as theoretical doubts surround enshrining price - especially official producer price - as the key operational instrument for agriculture, with the possible exception of export crops and (if domestic to export shifts are desirable) livestock.

Official grower prices deviation from border prices appear to be correlated negatively with output growth for SSA as a whole, even if a number of countries are well off the trend line. However, the correlation only accounts for 10% of the observed deviations. In other words, 90% appears to relate to causal factors other than official prices (Cleaver, 1985). Doubtless getting 10% of the answer is progress but it is hardly an adequate dominant programme plank.

If agricultural output were broken down into export crops, domestic industrial crops, domestic food crops and livestock the picture might alter. The share explained is likely to be significantly higher for export and perhaps domestic industrial crops. For domestic food crops the level of correlation is likely to be insignificant.

The reason lies in the fact that domestic food crops are rarely sold through official channels if the official grower price is significantly below the market clearing price. Enforcement is rarely practical whatever the legal and rhetorical position - some areas in Ethiopia and also Somalia for a few years in the middle 1970's stand out as marked exceptions. A rough estimate for SSA as a whole (country positions would vary widely) is that 75% of domestic food is self provisioning ("subsistence") or traded through very local non-official
channels. Of the remaining 25% about 13 to 15% relates to crops/animals for which there are generally no official prices, another 5% is parallel marketed and at most 7% is directly affected by official prices. Trying to raise output by acting on 7% of output (higher in surplus or good and lower in drought or bad years) is hardly likely to be spectacularly effective.

There are exceptions. If grain is imported heavily enough to allow market clearing at subsidised sales, this will deter local production and/or cause it to be smuggled to parallel markets across the border (e.g. Zambia over most of the past decade). However, given foreign exchange constraints such subsidisation become an increasingly rare case except where food aid sold on the basis of an artificially low exchange rate depresses the domestic price level (e.g. Somalia).

The claim that price elasticities of supply in SSA are positive is - with rare exceptions - correct. For individual annual crops they are frequently quite high because crops planted for sale are selected with a view to expected prices. But aggregate agricultural output price elasticities have usually been estimated at quite low levels - under 0.2 in some cases.

In fact there are doubts as to what meaning can be set on these figures. Output estimates are very bad - and in many cases worsening. In any short series weather may dominate (unlagged grain price/output data tend to show a negative correlation for that reason). In any longer series changes in access to inputs, transport, buyers may co-correlate with real price changes so that only a joint product elasticity can be obtained.

Data over time in some countries certainly raise doubts on any easily calculated, dominant price elasticity effect. Between 1961-67 and 1961-78, Tanzania had an annual agricultural growth rate of about 3.5%. In this period there was not significant currency overvaluation. Domestic terms of trade for agriculture worsened to 1967, improved to 1970, worsened again between 1970-1973, improved dramatically between 1974-75 and then declined gradually. As of 1978 the position was broadly similar to that which held in 1961. However, after 1967 food crop terms of trade improved relative to export crops. The one clear link is to the latter shift. Prior to 1967 food and export crop output each grew at around 3 to 3½% p.a. Thereafter, food crop output growth exceeded 4% and export crop growth was negative. The only other
easy linkage to be observed is with annual average weather conditions (Bank of Tanzania 1984). Between 1978 and 1985 output growth fell sharply. Real price declines relative to wage goods (at official but not parallel market prices as far as food was concerned), improvements relative to wages and poor to bad weather typified much of the period. Output levels did not change when real official food prices rose (with real export crop prices holding constant) but weather remained poor. There is no easy causal relationship to be found with prices.

The domestic terms of trade argument is complex both for SSA as a whole over the period 1970-1985 and in particular countries over particular sub-periods. If the measure is of farmer versus wage earner purchasing power the correct comparison is between grower prices and wages. This is especially true during periods of falling per capita GDP when both grower prices and wages could well fall when deflated by the Cost of Living Index.

On the price/wage comparison export crop growers have on the whole had constant or improving domestic terms of trade since 1970 in most countries. They have, however, with few exceptions had falling ones against a COL index, at least since the late 1970's and usually for longer.

For food crops there is little hard evidence on grower prices. Out of line low grower prices are regularly bypassed and for a majority of marketed crops and animals (which ones varies from country to country) there are no official prices. Parallel or informal market farmgate price data is notable for its limited and fragmentary nature. However, since 1970 and especially since 1979 the food component in the COL index in most SSA countries has risen at least as fast as the overall index when it has been computed on actual (not official) prices. This is true for rural as well as urban and national indices. Year to year movements have been very erratic - or rather very weather related.

Thus the presumption would seem to be that effective grower prices for domestic food have been relatively constant in COL deflated terms and have risen sharply relative to wages. If this presumption is wrong, the most likely reason is a sharp rise in transport costs and/or distributor margins in the final price. While such a rise is likely in the case of transport, even a substantial adjustment would leave domestic food prices rising relative to
export crop prices; export crop prices rising relative to real wages; all prices and wages falling relative to COL. If that is the case, output levels and trends (and international terms of trade) would appear to have played a larger role in weak agricultural performance than domestic wage and price trends.

Other than weather what explains the remaining 90%? Increasingly the short run answer is identified as supplies of inputs, infrastructure (transport and buyers) and, less uniformly, extension and incentive goods (cf Cleaver 1984, Lipton 1986). Without these, farmers cannot raise output much whatever the price elasticities and even if very low marketed surplus levels were augmented Michael Lipton's comment (1986) that any per cent of 0 is 0 remains valid.

In the longer term applied research is needed as well as improved transmission. Despite claims to the contrary, proven innovations now available off the shelf are few and far between (cf Lipton, 1985a, 85b, 87). This implies a need generally for public expenditure outlays on research to rise with, however, output gains unlikely to be substantial until a decade after the research push has begun.

Further problems arise with price changes taken by themselves. Do they get passed through to producers? If Marketing Boards previously had deficits this may not occur. Nor will it happen if uncertainties, transport bottlenecks and high inflation create a speculative, monopsonistic context - e.g. Madagascar in the 1980's. Even if they do, what of input costs, (also targets for increases in many IMF programmes) including transport? And thus net real proceeds?

Market, liberalisation, price flexibility and domestic prices approximating border prices (import parity for imports, export parity for exports, some intermediate level for crops swinging between net imports and exports) appear to be the IMF's medium term preferences. However, these priorities evidently raise a number of problems.

Seasonal price fluctuations are in a sense efficient - they charge carrying costs to the user. In Tanzania in 1986/87 the success of co-op marketing over the first nine months of the crop year was in avoiding the marketing board's carrying costs so that they could pay growers the same prices and - they
believe - still earn a surplus. The problem is in ensuring that there is a buyer who can and does hold stocks for the latter part of the year and for inter-seasonal reserves, a role private and co-op traders with limited financial resources are often unwilling to play.

Border prices - even abstracting from the conundrums associated with swing export or import crops - have one serious disadvantage. They fluctuate widely absolutely and relative to each other from year to year. Thus their use would give farmers no certainty (indeed no rational expectation at all) as to prices at harvest or picking at the time of planting or tending. At least guaranteed base prices known before planting or (for perennials) tending begins are normally viewed (not least by industrial economies) as crucial to providing incentives to plant and a basis for rational farm level resource allocation.

The IMF/World Bank answer to these two dilemmas seems to be emerging as a guaranteed price with a public enterprise buyer - stock holder - seller of last resort. This is, not entirely intentionally, the 1986/87 Tanzanian maize and rice pattern. But it is a formula which guarantees a loss to the public enterprise (unless it profiteers in drought years). Late season selling can be operated on a breakeven basis but this will not work for surplus purchases, export unloadings and interseasonal reserve holding. Much more general and contextual thinking as to optimal prices, reserves and government payments to cover socially and macroeconomically beneficial, but enterprise loss making, functions are needed.

A last tangle of issues concerns uniform farm gate and suitability bonus pricing. Both are Bank rather than Fund concepts - albeit the Bank has turned on the former as sweepingly as it once promoted it. Uniform farm gate pricing with marketing board breakeven on long distance trade, redistributes locational rent from near market to farther away growers and raises transport costs. Its effect on the total cost of a given volume of delivered crop is ambiguous (depending on actual grower supply curves) but it is likely to raise import costs (for transport). Whether it does or does not alter crop mix by area is an empirical question depending on ecology more than econometrics. In practice it tends to become minimum guaranteed pricing, as in the period 1979-84 in Tanzania where official maize purchases were largely in far off areas rather than the more accessible zones in which higher parallel prices prevailed.
Suitability bonus (ie paying more in areas deemed suitable for a crop) pricing - a current World Bank favourite - appears to be absurd. If an area is well suited to a crop, an above average payment is hardly needed as an incentive! The case for an unsuitability penalty (or not buying in the area) may be stronger, but is the opposite of liberalisation. Its logic is that farmers engage in monte carlo practices planting risky, high payoff crops (e.g. maize instead of drought resistent millet and sorghum) beyond the economically rational cutoff point. As the same farmers are usually perceived as risk avoiders or minimisers, the premise is doubtful.

The key issue of when farmers are paid is dealt with in the next section. It is of course a price issue especially when inflation is high. Payment at harvest as opposed to six months later raises the real purchasing power of a constant nominal unit price 100% if inflation is 100% and 33% if it is 50%.

(iii) Credit Policies

The two main instruments of IMF agreement credit policy are credit ceilings and raised interest rates. The aims are to reduce the growth of domestic credit/money supply and thus inflation; to increase real savings (including those held in currency) and to rationalise use of domestic credit/savings including switching it from government to productive sectors. Relatively at least, agriculture should be a beneficiary.

The credit ceiling as a check on inflation is based on the identity MV = PT. As V (velocity of circulation) and T (physical volume of transactions) are not constants, the effectiveness of cutting the growth of M as a means to reducing that of P may not be very high. It may be less efficient than concentrating on - or giving equal emphasis to - raising T. It is not irrelevant to note that what broke inflation in Ghana in 1984 and what held it down (to 30% despite a 360% increase in the cost of foreign exchange) in Tanzania over 1986/87 was primarily a T rise - in these cases spearheaded by food production recovery with good weather. Equally Tanzania is probably right to view achieving a 10/15% growth in manufactured goods production (again a T rise) as the most crucial factor in driving 1988/89 inflation down to a 20/25% range.
The problems with credit ceilings are, first, in calculating what levels are attainable without choking off attainable T recovery and, second, in avoiding their triggering programme collapse in the face of exogenous shocks. Only if the ratio of working capital to output, the rates of increase of cost of the physical components of working capital, the volume of production and the amount of working capital available from sources other than bank lending can be estimated reasonably accurately can a safe domestic credit level for enterprises be estimated. Nominally the IMF does follow that approach; in practice it seems to estimate each item very conservatively and then bargain up a bit rather than trying to get the least unlikely empirical estimate.

For agriculture the potential costs of faulty estimation are very high. If the initial estimate was too low then the amount allocated for crop (or input) marketing finance will not be adequate and payments will be delayed. If crops are well above projections the same result will ensue. If seasonal swings are understated, the only way to stay within ceilings is deferred payments to (forced lending by) agricultural producers. This does happen because IMF teams often negotiate seasonal ceilings as matters of policy rather than seeking the best attainable estimates of the degree and pattern of seasonality as a matter of fact. Lags in processing, transport and export sales (or payment receipts) are likely, especially if output is above estimates, as both Fund and Government personnel tend to underestimate such physical and institutional bottlenecks. The Hobson's choices of delaying payment to growers - for up to a year on a substantial portion of the price of Kenya coffee in 1985 and 1986 - and breaking a performance target are almost inevitable and the problem sector is most likely to be agriculture.

Interest rate increases (to move toward or achieve a positive real interest rate) are seen by the IMF as a way to increase savings and to rationalise use of domestic credit. On the first count it can be said that the theoretical case is problematic and the empirical evidence (in SSA or elsewhere) does not suggest a strong correlation. For the latter the case is somewhat better, subject to the danger that financial strength and/or willingness to take risk, rather than underlying profitability, may be the dominant considerations in respect to seeking or doing without credit on the demand side. If they are, that pattern introduces a bias against agricultural production other than large estates and against small farming households in particular.
Interest rate increases can be - indeed generally are - inflationary. They are a major cost element especially in distribution (including agricultural marketing). As most commercial sectors in SSA seem to work on cost-plus-markup pricing, interest rate increases are likely to raise margins. In the case of export crops - where the higher cost cannot be passed forward - they ultimately reduce grower prices (or tax revenues). Both of these results are negative for agriculture absolutely and relative to other sectors.

Higher interest rates (even if preferential) to farmers in practice result in a transfer to other sectors for the obvious reason that they are a cost farmers are unlikely to be able to pass forward. This is exacerbated by the fact that farmers as a group are normally large net creditors with non interest bearing claims on the marketing system (including its co-op and private segments) far above their interest bearing debts to banks, merchants and specialised financial institutions.

This returns to the issue of prompt cash payment. High inflation and high interest rates make delayed payment a heavy tax on/disincentive to farmers. IMF performance criteria for credit ceilings tend to increase delays. Yet in Ghana, the action taken under adjustment that has been most welcomed by cocoa farmers has been the substitution of cashable checks instead of the former chit system with its lengthy payment delays. Similarly in 1986 Tanzanian peasants by and large welcomed the return of procurement from marketing boards to co-ops because the latter often paid more promptly. Both in the price and the credit aspects of IMF dialogue and programmes this prompt payment theme seems to receive unduly little attention.

(iv) Fiscal Policies

The standard fiscal performance clause in an IMF programme is a ceiling on government borrowing from the domestic banking system. The preferred method is usually expenditure (especially recurrent expenditure) cuts, but the Fund is normally flexible on means. The impact on agriculture depends largely on how the reduction is achieved. Within an overall ceiling, a reduction in government borrowing clears space for greater enterprise, including agricultural, credit.
If the reduction results from additional soft external finance or largely non-agricultural taxes (e.g. a graduated sales tax tends to weigh less heavily on poor people and on agricultural producers not only because of self-provisioning but also unprocessed commercialised foodstuffs are necessarily zero rated), then the net results in respect to agriculture will be positive.

Taxes on agriculture, such as export or industrial use taxes, are a different matter. They unambiguously reduce rural income and at least to some extent, either deter agricultural output or divert it to other crops. While in principle usually opposed to export taxes, the Fund has not been very firm in pushing root and branch fiscal reform in the cases in which they form a high proportion of present revenue, as in Ghana or Uganda. Paradoxically, in both these cases the reconstruction of the indirect tax base could allow cuts in the relatively high export tax rates.

User fees - perhaps a Bank more than a Fund enthusiasm - seem to be backed more from a belief in using the market than from any serious evaluation of fiscal alternatives. The administrative and cost implications of millions of tiny charges - for example, standpipe monthly user fees, clinic visit and vaccination charges - are appalling from the point of view of cost efficiency of revenue collection. On pure net revenue grounds, higher indirect taxes are almost always superior to virtually all user charges. However, with respect to agriculture the Fund and Bank have not (or not yet) advocated extension officer fees. Oddly enough Tanzania used to charge them on a proportional basis for some products by having export crop authorities pay for their own extension staff and set a grower price taking these costs into account - a policy reversed in 1984 to allow higher grower prices as well as to recentralise extension.

The general user charge problem is that most are regressive (especially basic health, primary education, communal drinking water). As most rural residents are poor the case against such charges from the point of view of most agricultural households is strong. Strong, but under some circumstances refutable. If rural (or urban) households wish to raise funds to rehabilitate or expand basic services which the state cannot provide, this should probably be encouraged. In extreme cases such as Somalia it is hard to see how else basic rural services can be recreated. But for such self help to work well it
needs to be community - or at least local service unit - levied, with ad hoc exemptions for the truly poor, and to be seen to provide support for specific services actually provided to the community paying. Those are tests few, if any, centralised user fee systems can pass.

Expenditure reduction is likely to harm agriculture and agriculturalists. Cuts in primary health, basic education and water supply (and in transport provisions in all ministries) fall disproportionately on rural areas. So do cuts in road maintenance. Within agricultural spending long term functions - such as research - tend to fare worst.

In the shorter term, control on bank borrowing by means of blocking releases or delaying payment of local bills creates inefficiencies, preventing rational budgeting by any ministry. Since, in practice, it cuts back most on travel and on operating supplies, it is more damaging to agriculture and rural services more generally than to, say, general administration. Payment delays result in work done delays, additional charges and general blockages. Ghana is a clear recent case in point. There, these problems were exacerbated as recurrent expenditure (including maintenance and much of rehabilitation) was cut more severely than capital. The combined result has been to destroy the viability of the budgetary process as an economic management tool (Green 1987a) for the sake of marginally tighter apparent expenditure and tighter actual bank borrowing control.

Expenditure on health, education and water is not - as the Bank and, to a degree, the Fund are coming to admit - purely humanitarian. Ill health reduces productivity now and in the future if the disease is serious; illiteracy is comparable. Finally lack of basic services is clearly a major push factor in rural to urban migration. Despite verbal acceptance of these points (stressed in UNICEF 1987) it is hard to feel they are seriously integrated into mainline Fund (or Bank) fiscal dialogue and programming.

Subsidies are an automatic IMF target. This seems to be independent of their share in the budget or their beneficiaries. The pressure to end food subsidies was as strong in Tanzania (where they never exceeded 2% of recurrent expenditure and were de facto mixed consumer/grower subsidies) as in the Sudan and Zambia (where they are clearly consumer subsidies and much larger). Agricultural input subsidies have not been equally high profile targets.
However, both the Fund and Bank's preference is for higher grower prices allowing, in theory, full cost pricing of inputs.

The case against standard food subsidies is simple. They either eat up a disproportionate share of revenue and reach most or all of the urban and accessible rural population (e.g. Sudan, Zambia) or they are fairly low cost but actually serve a relatively small urban group (e.g. Tanzania, Mozambique). Zimbabwe phased out food subsidies of the first type with parallel minimum wage increases (which did not, by their nature protect rural smallholder or informal sector buyers) and Tanzania dropped its food subsidies on realising that their initial broad coverage had contracted to formal sector wage earners in the capital city. The Tanzanian Government also raised the minimum wage in the relevant year.

In general, a good case can be made against food subsidies. Employment on public works is usually more efficient than giving away food, as is raising wages rather than subsidising food. Subsidy programmes that eat up high proportions of recurrent revenue are likely to reduce spending on rural health, education, water, road maintenance and extension services to benefit primarily urban consumers. This holds even if the subsidy is financed by food aid, in which case cash payments are generally superior to actual food delivery, except in cases such as supplementary child feeding (school or clinic) and immediate emergency relief.

The exceptions underline a more general point - while a case has to be made for any subsidy it is not safe to assume no case is valid. An example is a fungicide against a contagious disease, for example, copper sulphate to control coffee berry disease. One non-user can destroy the crops of ten users. In this case, an 80% subsidy (as practiced in Tanzania) may be more economically rational than full cost pricing (as in Kenya). The most serious drawback has been that Tanzanian growers (with a 5 to 1 price differential for a high value/weight ratio product) find it all too profitable to smuggle copper sulphate to Kenya and to secure excess supplies to do this, thereby subsidizing Kenya's balance of payments at Tanzania's expense. economy.

Lastly, freer trade - a clear IMF goal - need not have fiscal effects. Revenue tariffs can readily be converted into sales taxes at point of import or manufacture. However, tariff cuts and relaxation of quantitative
restriction on agricultural products can affect growers. If the exchange rate is still overvalued or if time is not allowed for adjustment, the rural income and output effects could be severe. The relaxation of general import barriers cannot be predicted as having a uniform effect. In some cases it can result in lower prices for incentive goods. On the other hand - and this appears to have happened in Uganda over 1982-84 - it can shift imports from intermediate to consumption goods with negative implications both for the supply of agricultural inputs (especially implements) and the basic domestic consumer manufactured goods that farmers commonly wish to buy.

(v) Investment Policies

The IMF is not always concerned to reduce government investment; it is concerned with rationalising it and ensuring that it does not crowd out private investment. It is normally agreed that considerable fixed investment in the 1970s in SSA yielded derisory additions to output. The problem of low returns to large scale investment has undoubtedly been particularly severe in SSA agriculture and agro-industry. Thus, virtually no large West African irrigation schemes are viable if the tests of covering operating costs, significant increments to net farmer incomes over the pre-irrigation position, maintenance and debt service coverage, and a net external account gain are applied.

The IMF generally holds that gaps in basic infrastructure which constrain the efficiency of private producers call for a shift toward rapid rehabilitation-focussed government investment in infrastructure ("stock capital") to support private sector directly productive investment. At least the latter half of the premise appears hard to challenge. Its meaning in respect to agriculture varies and, in fact, the IMF in this respect usually defers to the World Bank for detailed proposals.

Both the Bank and the Fund have followed the increasingly common thrust by a number of SSA governments since the late 1970s toward a higher share of agriculture in total investment. The one caveat which may arise is whether fixed capital, working capital (credit and input supplies) or recurrent (extension, statistics, research) spending are being balanced efficiently. On the face of it non-wage recurrent expenditures (statistics, field travel,
research) and working capital have been underfunded relative to fixed capital formation. Further, in the context of smallholder rainfed agriculture, it is arguable that the really key fixed capital formation by the government may well be in transport, water, marketing, storage and/or processing, not through direct investment in the agricultural sector proper. To the extent that this is true, the emphasis on agricultural fixed investment has commonly led to inefficient 'investment' in large scale irrigation and mechanisation projects.

The IMF's hope that additional foreign private investment can be attracted is - in agriculture and more generally - unrealistic in SSA, outside of some special cases. Current and projected export crop prices and trends do not make investment attractive, irrespective of other constraints such as overvalued currencies and profit remittance. For the potential investor Malaysia and Brazil can easily outbid SSA. Moreover, large scale mechanised production of most domestic food crops is not cost efficient in SSA. For Ghanaian mechanised rice production, the import content appears to exceed the cif cost of imported rice. Only with massive state subsidies, tax concessions or consumer-funded high prices and expectations that such measures would be sustained could foreign private investment be expected to occur. The issue is not African state hostility to private investment so much as low profit ability and high risk prospects which no amount of statutory codes can address adequately.

(vi) Institutional Reform

Accountability, non-interference and responsiveness to market forces (seen as including competition and effective pressure for cost efficiency) are the key themes of the IMF's reform advice for agricultural and other sector institutions. For agriculture this approach has concentrated on public procurement/marketing bodies.

However, apart from the fact that accountability is meaningless without specifying to whom, one major problem has been the fact most SSA crop marketing bodies have not suffered from a lack of autonomy but rather a lack of effective policy control by governments. Similarly the Fund's faith in African markets and their degree of competition as well as the cost efficiency (at least from the growers' viewpoint) of private marketing are, to put it
mildly, optimistic.

This is not, however, to argue (as some critics do) that the Fund's critique lacks relevance. Reform is frequently needed and needed urgently. How, unfortunately, is a question with few general answers at operational level. This is partly a data problem. Accounts are frequently so bad that even a basic cost breakdown is not possible. Cost cutting in the absence of that base is like punching a feather pillow or wielding an Alexandrine sword. Furthermore, in some cases profitability (as opposed to a reasoned net surplus or deficit target) may not necessarily be a suitable test. Providing a guaranteed price to all growers, provisioning distant areas, holding intra-year reserves are all functions which tend to be loss-making for the enterprise even when economically efficient in sectoral or national terms.

Finally, through what kind of competition, and by means of what particular channels real resource costs are likely to be lowered nationally and (which is not necessarily the same thing) growers' share of proceeds raised is, in practice, rarely self evident and not uniform. The assumption that private sector procurement and marketing gives growers a larger share is - at least in general - not proven. In the late 1920's and 1930's under a purely private marketing structure, the share of Fob cocoa proceeds received by growers in Ghana varied widely but seems to have averaged under 30%, roughly the level recently maintained with a public marketing board. In Tanzania in the 1960's and 1970's two wholly privately marketed staple foods - plantains and Irish potatoes - had grower shares relative to retail prices comparable to those received by grain growers on officially marketed grain. The distribution sector may have been highly profitable (and thus had lower real resource cost shares) but the impact on grower revenues cannot be predicted as being unambiguously beneficial. This suggests that any simple solution - such as private traders or cooperatives - does not exist.

Toward a More Viable Articulation

This is not the place to seek to articulate a complete model agricultural sector strategy for a typical SSA economy. However a sketch roughly parallel to the IMF programme areas surveyed above may be useful. It is divided into short (18 months), medium (to 5 years) and long time periods.
Measures are listed roughly in the same order as in the foregoing review of IMF approaches and not in order of importance (which will in any case vary from country to country and over time). No attempt is made to provide complete coverage.

1. **Exchange rate adjustment.**

   **Short** - substantial movement toward realistic rate to reduce disincentives to export production, to claw back smuggled exports and to stop monetised food aid amounting to *de facto* dumping against domestic producers.

   **Medium** - when the policy may begin to pay off in export volume - completion of move to viable rate and installation of a system (e.g. active crawling peg) to maintain it.

   **Long** - continuation of management of rate to avoid reappearance of severe overvaluation.

2. **Producer prices.**

   **Short** - remove major illogicalities (especially bias against exports).

   **Medium** - move toward guaranteed floor price procurement for a handful of non-perishable staple foods and fob related (say with a 70% of Fob price rule of thumb target for grower payments) export crop prices.

   **Long** - complete medium term measures.

3. **Sectoral Credit**

   **Short** - Ensure adequate allocations within overall DCF, especially to procurement and marketing, processing and manufacturing. Review medium and long term agricultural credit programmes. Institute cash or cheque payments to growers on procurement and ensure prompt procurement to end forced, non interest bearing lending by farmers.
Medium - continue short term policies. Restructure development credit - with special reference to women and to poor farmers - if appropriate.

Long - continue medium term policies.

4. Recurrent Agricultural Budget

Short - begin to restore working capital provisions (e.g. credit, operating inputs for ministry programmes). Rebuild statistical, analytical, monitoring capacity. Redeploy (preferably to own account farming) surplus personnel.

Medium - complete working capital restoration. Begin adaptation of services (including extension) to research results. Utilize statistical, analytical, monitoring base.

Long - build on policies of medium term.

5. Farm Level Operating Inputs

Short - begin restoring use of implements, fertilisers, seeds and pesticides of proven efficiency. Restore animal drawn implement development and animal training if viable programme had existed; if not commence such a programme.

Medium - Complete short term policies. Add to coverage selectively on basis of proven research findings validated by user demand.

Long - build on medium term policies.

6. Basic Rural Services (health, education, water)

Short - begin restoration of previous coverage. Plan workable strategy for moving to universal provision. Assess appropriateness of content and accessibility of past provision.
Medium - complete short term policies. Institute content revision (e.g. comprehensive immunisation, preventative component in primary health care). Begin drive to universal coverage.

Long - build on medium term policies.

7. Transport, Storage, Processing

Short - emergency restoration of existing but debilitated or collapsed capacity. Development of priority restoration and expansion policies.

Medium - complete capacity restoration, begin expansion with special attention to gap filling. Create storage and processing systems designed to minimise cross-haulage and to even out seasonal crop, animal and input movement fluctuations thus reducing seasonal peak transport needs.

Long - build on medium term policies.

8. Marketing

Short - institute emergency cost control, devise accounting and accountability structures. Improve physical capacity and enforce prompt payment.

Medium - put accounting and cost control in place. Introduce competitive, multi channel elements in non-export (and perhaps export) sub-sectors. Increase (or create) direct accountability to growers.

Long - Build on medium term policies. Explore shifting central government owned marketing to key export crops plus buyer of last resort - holder of intra year stocks - competitive force in being roles.

9. Research

Short - maintain and stabilise existing institutional capacity and promising projects. Learn from farmers as to their existing best techniques and innovations. Adopt and test (including for user friendliness and economic viability) known but untested innovations.
Medium - build on short term policies. Put strategy priorities into operation and articulate further steps. Build systematic input from farmers into system.

Long - build on (and begin to reap substantial benefits from) medium term policies.

This programmatic sketch does not in principle contradict IMF concerns. In practice it does not articulate very well with the standard 18 month Standby Loan.

If such articulation is to be achieved there will be need for IMF programmes to be modified to meet the particular constraints that exist in SSA. Below, certain lines of approach are suggested:

1. Dialogue on sectoral, real (i.e. non-monetary) and social issues with the IMF should be broadened and deepened.

2. Conditionality - and especially performance criteria - should be narrowed to progress toward realistic exchange rates, to government domestic bank borrowing and to overall credit expansion.

3. Performance criteria should be determined along viable lines, an outcome that is more likely outside of a confrontational approach to negotiation, and include flexibility in application (especially where increased agricultural output beyond expectations is a main cause of pressure on credit ceilings).

4. A realistic view (not constrained by a 3 year or even a 5 year time horizon) of how long special external support will be needed to achieve sustainable - in both economic and political terms - structural adjustment with growth should be determined.

5. That time perspective should structure the phasing of instrumental changes and of performance criteria even if the actual standby programmes are of shorter duration;
6. Fund drawings (excluding the Structural Adjustment Facility) should not exceed in total 20\% of annual export earnings or of total external programme support funding in any year. Beyond that only the softer Special Facility funding should be seen to be appropriate;

7. SSA states should create the capacity to prepare coherent, empirically sound sectoral programmes to be presented to the Fund (and, more important, to provide a basis for national political and economic strategy) with priority being given to the agricultural sector.
Annex

Policies Included In IMF Stand-By Programmes Of 1985-1986 With Direct Impact On Agriculture

1. Exchange Rate Policies

Initial devaluation and subsequent adjustment to approach and hold to an equilibrium or realistic exchange rate. Intended to raise the relative prices of tradeables in general and agricultural exports/imports in particular.

a. Coordination of currency depreciation with producer price increases formalised more sharply.

b. Policy changes made in various aspects of the exchange system to help bolster agricultural exports.

c. Liberalisation of imports intended for agriculture.

d. Increased availability of foreign exchange resources for agriculture made possible (including retention schemes).

2. Pricing Policies

Raising real prices of tradeables and especially agricultural exports to restore domestic price relativities comparable to those in the global market. Intended to raise and to rationalise agricultural production and to remove the need for subsidies.

a. Producer prices set by marketing board raised.

b. Minimum procurement prices raised.

c. Food prices liberalised or made flexible in line with cost increases.
d. Prices of public enterprises in agro-industries raised (i.e. their selling prices).

e. Retail price of fertilisers raised.

3. Credit Policies

Credit ceilings combined with sub-ceilings on government (and sometimes public enterprise) borrowings. Aimed at managing/restraining demand and at reducing crowding out of commercial enterprises by government (or chronic loss-making marketing board) borrowing. Real interest rates raised to positive levels to induce savings and rationalise use of credit.

a. Financing needs of buffer stocks met.

b. Seasonal credit needs of agricultural sector taken into account in setting quarterly credit ceilings.

c. Overdue loans to agricultural sector reduced.

d. Agricultural sector included among priority sectors in selective credit control.

e. Attempts made to improve security of loans to farmers, e.g. through guarantee fund or insurance scheme.

f. Attempts made to improve farmers' access to banks.

g. Foreign funds obtained to support loans to farmers.

h. Preferential interest rate on credit for food crop production and marketing increased.
4. **Fiscal Policies**

Reduction of government borrowing (especially of domestic bank borrowing) including rationalisation/reduction of public services - with uneven attention to prioritisation among or within services. To reduce tax burdens, provide space for entrepreneurs, and to increase efficiency with which (and charges at which) remaining services are provided.

a. Import duties on fertilisers lowered.

b. Lower-than-average rate of taxation set for agricultural incomes.

c. Tax on first sale of important tree crop lowered to 50 per cent of standard rate.

d. Gradual reduction of export taxation on agriculture started.

e. Import bans on competitive products replaced by moderate tariffs.

f. Food subsidies (introduced previous year) to be phased out.

5. **Investment Policies**

Rationalise state investment, concentrate on infrastructure and on rehabilitation, reduce directly productive investment role in favour of private (or autonomous public) enterprise. Increase efficiency of investment, enhance stock capital provision by state in support of enterprises.

a. Public investment programme aimed at increasing share of agriculture.

b. Various measures designed to improve efficiency of public investment in agriculture.
c. Begin to restructure technical packages to increase suitability to local conditions.

6. Supply and Structural Problems

Close bottlenecks by increasing openness of procurement and supply to the market (and to private enterprises) and by improving provision of public and public enterprise services. Create a climate increasing farmers' ability and incentives to produce.

a. Measures to improve the distribution and quality of inputs to farmers.

b. Revitalisation of credit delivery, extension services, storage and milling capacity and other support services attempted.

c. Diversification of agricultural output.

d. Promotion of increased self-sufficiency.

7. Miscellaneous Institutional Reform

Increase accountability to market forces wherever possible (including but not only by privatisation) and to improve managerial capacity of public enterprises and services. To increase cost efficiency, to reduce need for/levels of subsidies.

a. Introduction of measures to enhance privatisation within agriculture.

b. Price liberalisation measures introduced.

c. Various steps taken to improve management of public enterprises in agriculture.
d. Measures to introduce more effective approaches to extension inaugurated.

Notes:
1. Certain policies could be included under more than one heading.
2. Adapted from Johnson (1987) from whom seven areas and the lettered examples, but not the headnotes, are derived.
References /Background Sources


, 1984, The Debt Crisis and The World Economy


, and R. Lawrence, 1980, The Balance of Payments Process in Developing Countries, Pergamon, New York

, 1987, Balance-of-Payment Adjustment in the 1980s, special issue of World Development, Vol 14, No 8


__, 1984a, 'IMF Conditionality' (review article) in Third World Review


__, 1985b, 'IMF stabilisation and structural adjustment in sub-Saharan Africa: are they technically compatible?' in C. Allison and R. H. Green (eds.), 'Sub-Saharan Africa: getting the facts straight', IDS Bulletin vol 16 no 3, July


__, 1986a, 'The IMF and Stabilisation in Sub-Saharan Africa: a critical review', IDS Discussion Paper 216, June

__, 1986b, 'Food policy, food production and hunger in sub-Saharan Africa: retrospect and prospect', International Journal, Vol. XLI, No. 4, Autumn

__, 1987a, 'Budget Management as Economic Management: Some Key Concerns', in Ndegwa, Mureithi and green, 1987


Griffith-Jones, S. and R. H. Green, 1984, African External Debt and Development: A Review and Analysis, UNCTAD technical assistance study for African Centre for Monetary Studies, Dakar


__, and C. Harvey, 1985, World Prices and Development, Gower, London


____, 1983b, The IMF And Africa In the 1980's, International Finance Section, Department of Economics, Princeton (Essays in International Finance No. 152)

____, 1984a, 'An agenda For a New Bretton Woods', World Policy Journal

____, 1984b, 'Outward orientation, import instability and African economic growth, an empirical investigation' (mimeo)

____, 1985, 'Aid and liquidity: the neglect of SSA and others of the poorest in the emerging International Monetary System', Journal of Development Planning, 15, April


Hugon, P., 1988, 'The Impact of Adjustment Policy in Madagascar' in Colclough and Green, 1988

IMF, 1983, World Economic Outlook, Washington

____, 1984a, World Economic Outlook, Washington

____, 1984b, Survey, September

____, 1985a, World Economic Outlook, Washington


____, 1986, World Economic Outlook, Washington

____, 1986/87, IMF Survey


Khan, M., 1984, 'Macroeconomic Adjustment In Developing Countries: A Policy Perspective', World Bank Research Observer, Vol 1, No. 2, January

Killick, T., 1987, 'Unsettled Questions About Adjustment With Growth', International Monetary And Financial Issues For The Developing Countries, UNCTAD, Geneva


Lipton, M., 1985, 'Research and the Design of a Policy Frame for Agriculture', in T. Rose (ed)

Loxley, J., 1984a, 'The IMF and the poorest countries, the performance of the least developed countries under IMF stand-by arrangements', North-South Institute, Ottawa


Polak, J. J., 1957, 'Monetary analysis of income formation and payments problems', IMF Staff Papers, 6, June

Rose, T. (ed), 1985, Crisis and Recovery In Sub-Saharan Africa, OECD Development Centre, Paris

Taylor, L., 1985, 'IMF conditionality: incomplete theory, policy malpractice', April (mimeo)


Wheeler, D., 1984, 'Sources of stagnation in sub-Saharan Africa', World Development, vol 12 no 1


