IMPLICATIONS OF ECONOMIC REFORMS FOR WOMEN IN ZAMBIA: THE CASE OF THE ECONOMIC REFORM PROGRAMME 1983-87

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I. INTRODUCTION

Economic adjustment refers to the process of responding to disequilibrium in the economy, particularly to deficits in a country's balance of payments. Short-term adjustment or stabilisation policies focus on the demand side of the economy, whereas longer-term or 'structural adjustment' policies emphasise supply factors and the need for fundamental changes in the structure of the economy. Stabilisation and adjustment policies, largely under the auspices of the International Monetary Fund and the World Bank, have dominated macro-economic policy-making in many developing countries in the last decade. The effects of such policies on social and economic conditions and, more recently, on specific social groups such as women and children, are now under scrutiny in many of these countries. Generally, however, it has proved difficult to establish the causal links between macro-economic adjustment policies and changes in micro-economic and social conditions.

Examining the implications of economic 'adjustment' in Zambia presents three major difficulties. First, whether the economic reform programme that Zambia introduced after 1983 qualifies as structural adjustment is debatable, for though Zambia was given financial pledges from the World Bank and other donors for a comprehensive programme of reform and sectoral rehabilitation, it did not receive a formal World Bank Structural Adjustment Loan (SAL). Thus, while the main emphasis of the Zambian programme has been on economic restructuring, the programme is not strictly comparable with those under the conventional World Bank view of structural adjustment. Secondly, because the period of intensive policy reform in Zambia (1983-87) was preceded by a period of macro-economic stabilisation, it is virtually impossible to distinguish what the effects of specific 'adjustment' policies have been. Thirdly, data problems preclude any conclusive statements about the distributional implications of the economic reforms for women in Zambia. In particular, data are lacking on the implications of the policy changes for social production, which includes women's domestic, unpaid labour-time in the reproduction and maintenance of labour power, child care and socialisation.

In spite of these difficulties, this study aims to examine the implications of the economic reforms for the labour and resources of women in Zambia, specifically looking at the implications for their role within the spheres of economic and social production, their control over intra-household resources, and their access to extra-household goods and services. However, because of the data problems, the analyses presented should be seen as tentative and interpreted accordingly.

II. ECONOMIC CIRCUMSTANCES AND REFORM PROGRAMME

The period since Zambia's independence in 1964 has been marked by dramatic changes in the country's economic fortunes. The economy grew rapidly in the 1960s and early 1970s, with rising copper exports providing the basis for buoyant government revenues and expenditures. The period was marked by intensive urbanisation and an ambitious government development programme. Until the mid-1970s, per capita incomes and per capita government expenditures were amongst the highest in Sub-Saharan Africa (SSA). But as Table 1 shows, from the mid-1970s real income per capita declined sharply, so that by 1985, taking into account variations in the terms of trade, it was scarcely more than half the level reached in 1970.[1]

TABLE 1: Population and Per Capita GDP and Income, 1970-85
(Kwacha. at constant 1970 prices)

	1970	1974	1975	1980	1983	1984	1985
population (000)	4,159	4,700	4,846	5,647	6,285	6,500	6,725
GDP per capita	305	314	297	251	200	191	190
GDY per capita*	305	291	217	186	166	167	163

* GDY per capita is equal to GDP adjusted for variations in the terms of trade.
Source: Colclough (1988), Table 1 p.52.

Zambia's economic difficulties are generally attributed to the exceptionally large drop in export earnings caused by the fall in the copper price. In 1984-85 the average real price of copper stood at only 40 per cent of its real value in 1970-72. The price fall was compounded by production difficulties which led to lower export volumes and lower export revenues; in 1985 the latter were approximately 30 per cent below those of 1970-72[2]. In an economy which depended upon copper for 93 per cent of its exports and nearly 40 per cent of its GDP, these events had dramatic consequences for domestic incomes, government revenues and expenditures, and the balance of payments.

To provide the background to Zambia's programme of economic reform in the 1980s, this Section summarises its economic performance and policy objectives since independence. Sections III and IV deal specifically with the distributional implications of these policies for urban and rural households and for women as producers, consumers, reproducers and carers in Zambia.

1964-74 : The Copper Boom

The decade following independence was marked by high and rising copper exports fuelled by a strong copper price. During the decade the Government set about an ambitious development programme which involved the nationalisation of a substantial proportion of mining and manufacturing activity and major investment in social services and transport infrastructure. This gave rise to a large parastatal sector and civil service which became by far the most important employer of the rapidly growing urban population[3]. The period was also marked by Government's efforts to support domestic consumption (mainly urban) through prices and incomes policy, the cornerstone being the subsidy on maize-meal. Subsidies and public sector wage increases contributed to a substantial rise in total government expenditure (TGE) and, over the decade, real per capita TGE rose by 160 per cent[4]. At this time real per capita incomes and government spending rose to some of the highest levels in SSA.

Throughout the period, copper dominated the economy and very little diversification took place. Development of rural areas was neglected. Agricultural producer prices were held below the world-price equivalent and

the internal terms of trade were maintained in favour of producers and consumers in urban areas. By the mid-1970s, the nominal and real exchange rates had been allowed to appreciate way out of line with those of Zambia's competitors.

1975-78: The Boom Comes to an End

Copper prices first began to fall in the early 1970s. By 1974-75 Zambia had experienced a 43 per cent drop in copper exports. Compounded by the dramatic rise in the price of oil in 1973-74, the fall in copper export revenues precipitated a serious economic decline in the mid-1970s. The initial policy response from the Government was minimal and the growth strategy remained largely unchanged, as did patterns of public spending which were well established by this time and difficult to curb. The proportion of public revenue contributed by the mining sector fell dramatically - from 55 per cent of the total in 1974 to 3 per cent in 1976 - and by 1975 Zambia had swung sharply into deficit on both current and capital accounts[5].

In 1976 Zambia negotiated its first Stand-By-Agreement (SBA) with the IMF. The main objective of the programme was to correct the balance of payments disequilibrium through the reduction of aggregate demand. Further policy measures included a 20 per cent devaluation and a ceiling on external borrowing from commercial creditors.

Economic performance during 1976-77 continued to deteriorate and failed to realise most of the SBA targets. Aggregate demand continued to rise and by 1977, inflation had doubled to 20 per cent per annum, imports had increased and the balance of payments had fallen further into deficit.

1978-1982: The Decline Continues

After four years, the Government recognised that the fall in the copper price was not a short-term fluctuation. In addition, the second oil price rise in 1979-80 and the continuing overvaluation of the Kwacha (in real terms) exacerbated the difficulties on the current account. Rising wage costs and a growing public sector deficit fuelled inflation. As a result, the second SBA, negotiated in 1978, contained more wide-ranging conditions to reduce macro-demand, diversify the production structure and restore equilibrium to the balance of payments. Pressure was also put on the Government to correct the bias against agricultural production by reducing the maize consumers' subsidy, increasing producer prices, promoting export crops and improving extension services.

Despite some improvement in the copper price in 1980-81, Zambia's recovery was not sustained and the trade deficit in 1981 was the highest on record. Foreign exchange shortages aggravated supply problems, and import constraints compounded problems of under-utilised productive capacity in industry and agriculture. As production declined, wage employment contracted, especially in construction, and inflation increased (fuelled by the decontrol of consumer prices at the end of 1982). During the period, average urban real incomes declined by an estimated 30 per cent[6]. Rural incomes were further depressed by the onset of a two-year drought.

1983-1987: The Reform Period

The turning point in the Government's commitment to comprehensive policy reform came in 1983. Until that time it had preferred short-term

financing over policies aimed at structural change and diversification of the economy; but in response to mounting pressures from the aid community, it agreed to introduce a far-reaching set of economic reforms under the umbrella of a third SBA. It also agreed to a programme of sectoral 'rehabilitation', to be financed by pledges from the World Bank, the African Development Bank (ADB), the European Community (EC) and other bilateral donors[7].

The main objectives of the prescribed reforms were to: reduce the Government's budget deficit; reduce the balance of payments deficit; promote sectoral rehabilitation, especially of agriculture, and encourage the growth of non-traditional exports; and liberalise markets and promote the role of the private sector. The main policy changes were: exchange rate devaluation of 60 per cent; reductions in Government spending, specifically on consumer subsidies and capital items, with a freeze on recruitment to the administrative cadre of the public service; and an increase in the taxation of mineral exports. These measures were further supported by a major rescheduling of Zambia's debt in 1984.

Other reforms were directed towards diversifying away from copper; they included measures to improve the efficiency of the agricultural and the industrial sector, to liberalise markets, and to improve the efficiency of parastatal operations[8]. The Government also announced a 'back to the land' policy in an attempt to encourage youths, unemployed and retired workers to return to rural areas and participate in agricultural rehabilitation. Land, inputs and credit were promised. Credit to farmers was expanded and increased emphasis was placed on producing agricultural products for export.

Throughout 1985, the Government remained committed to its programme of diversification. Producer prices were raised for most crops whilst consumer prices were raised for commodities such as milk, beer, rice, and for transport services. From 1980 to 1983, maize-meal prices increased 65 per cent, and from March 1985 to March 1986 they rose a further 40 per cent[9].

As economic conditions grew more severe, the pressures from within (and outside) for a major exchange rate adjustment intensified. In October 1985 the Government introduced an auction system to allocate foreign exchange, which represented the extent of its determination to pull the economy out of 2ecline. At the first auction, the value of the Kwacha aga.nst the US dollar fell by 56 per cent; by the end of the year it was 38 per cent of its pre-auction value[10].

In the first few months of the auction, supply conditions did ease slightly as a result of the increased availability of foreign exchange[11]. The depreciation of the Kwacha also improved the merchandise balance of trade as Zambian exports became more competitive and demand for expensive imports declined. Real GDP increased by 4 per cent above its 1984 level. The auction proved difficult to sustain politically, however, amidst rising criticism over its handling by Government and its effect on the cost of imported goods and services. Inflation was 37 per cent per annum by the end of 1985, rising to 54 per cent in 1987. In addition, the devaluation increased the costs of debt and debt servicing, leading to a deterioration in the overall balance of trade.

In September 1986, it was announced that the subsidy on the higher-grade breakfast maize-meal was to be withdrawn in October. Reaction to the announcement was immediate and violent. A week of rioting followed in Lusaka and on the Copperbelt. In response the Government postponed any

further price adjustments, while the 1987 budget contained palliative measures to quell unrest amongst consumers and local producers.

In April 1987, negotiations with the IMF over the future of the auction system broke down. On 1 May President Kaunda announced that the Government was halting the reform programme and suspending relations with the IMF. The auction system was ended and the exchange rate set to its pre-auction level[12]. In place of the IMF programme the Government introduced its own Interim National Development Plan (INDP) and later a more comprehensive National Economic Recovery Programme (NERP). Some of the elements of the IMF programme remained intact, notably the introduction of user fees in education and health services and a commitment to price liberalisation, but with the added commitment of seeking special measures to protect low-income groups. The main difference in the INDP was the end to the foreign exchange auction and the imposition of a 10 per cent ceiling on the proportion of foreign exchange earnings allocated to servicing the country's external debt.

Summary

The reforms thus had very mixed effects on Zambia's economic performance. On the positive side, agricultural growth improved, although this was partly due to better rains, and excessive government spending was restrained. On the negative side, inflation approached 60 per cent per annum and many essential goods were in short supply. Real GDP growth was estimated to be 0.5 per cent in 1986, falling to -0.2 per cent in 1987. Some pessimistic projections suggested a 15 per cent fall in domestic output in 1988-89.[13]

III. THE IMPLICATIONS OF THE REFORMS IN URBAN ZAMBIA

1. Employment and Incomes[14]

In 1980 54.5 per cent of the total Zambian[15] labour force were economically active, either in formal sector employment and self-employment/informal sector work or actively seeking work. Seventy-two per cent of the male labour force and 37 per cent of the female labour force were recorded as being economically active.[16]

In Zambia, the public sector (central and local government posts) and parastatals dominate the formal sector labour market. In 1980 public and parastatal jobs accounted for almost 75 per cent of all formal sector employment.[17] The bulk were in community and personal services (teachers, nurses and medical staff), mining and construction, manufacturing and transport. The 25 per cent of formal sector jobs accounted for by the private sector involved a broad range of occupations in finance, business, trade and distribution, manufacturing and agriculture.

Yet only about one-third of the total workforce is engaged in the formal sector. The remainder are active in the unorganised or informal sector, mainly as subsistence farmers but also as traders and in sales and services.

The data in Table 2 show the changing share of formal and informal sector employment for the Zambian labour force. Whilst each had remained

relatively constant in the early 1970s, by the late 1970s the share of formal sector employment was clearly on a downward trend and that of the informal sector was rising.

The data in Table 3 show the distribution of employment by sector and gender in urban Lusaka. That the parastatal sector and central government employed more males than females is explained by the high incidence of 'production jobs', normally considered 'male jobs', in the parastatal sector and the need for the holders of many jobs in central government to have advanced qualifications, to which men generally have greater access. Nonetheless, in 1985 the private sector [18] was the largest employer of both men and women, although it was more significant for the female workforce than for the male.

TABLE 2: Formal and Informal Sector Employment (excluding Non-Zambians), 1970-86

Year	Econ. Active Lab.Force ('000s)[1]	Formal Sector Labour Force (%)	Informal Sector Labour Force[2] (%)
1970	1258	24.6	45.4
1972	1341	25.3	44.7
1974	1430	24.5	45.4
1976	1527	22.7	47.3
1978	1641	21.0	49.0
1980	1759	20.5	49.5
1982	1880	18.6	51.4
1984	2014	17.4	52.6
1986	2158	16.2	53.8

[1] Labour force figures for 1984 and 1986 are estimated as continuing the 3.5 per cent annual growth rate recorded on average for the years 1975-82.

[2] Figures for the informal sector include urban and rural, derived as the residual of "economically active" less "formal" less estimated "unemployed".

Source: Monthly Digest of Statistics, Central Statistical Office, various issues.

TABLE 3: Distribution of Lusaka Urban Working Population by sector and gender, 1985 (percentages)

Sector	Males	Females	Total
Central govt.	17.1	13.0	15.9
Local govt.	6.4	7.2	6.7
Parastatals	20.6	9.9	17.5
Private sector	56.8	69.9	59.9

Source: Lusaka Urban Labour Force Survey 1987, Table 12, p21.

a) The formal sector

Between 1983 and 1987, policies aimed at reducing the budget deficit included a freeze on public-sector recruitment and wages, and lay-offs for workers close to retirement. Cutbacks in government capital expenditure, on the other hand, forced reductions in the number of labourers and unskilled workers regularly employed by the public sector, for example in construction and allied repairs. This probably affected male employment most directly.

Table 4 shows the magnitude of changes in key public sector expenditures from 1974 to 1985, including the Government's wage bill. It should be noted that total spending by central Government declined dramatically in real terms between 1976 and 1984. While the share of wages fluctuated, the fall in the government's wage bill in 1984-85 was dramatic. This coincided with the introduction of the freeze on recruitment to the civil service and measures to contain wage increases. It is also worth noting the significant increase in the share of total expenditure taken by debt servicing and the dramatic fall in that of capital expenditure (approximately 70 per cent).

TABLE 4: Changes in Central Government Finances, 1974-85 (millions of Kwacha and percentages)

	1974	1976	1978	1980	1982	1984	1985
Total expenditure (mn Kwacha)							
current	612.2	771.5	815.4	1,302	1,470.6	1,621	2,945.7
constant (1975) values	663.3	678.5	497.8	608.1	520.4	450.7	649.4
As % of total expenditure:							
Wages	20.5	22.9	23.2	19.7	24.2	28.2	18.4
Debt service	11.6	13.7	19.2	14.3	15.7	17.9	28.5
Current expenditure	72.0	78.9	79.4	83.1	84.5	83.6	84.5
Capital expenditure	28.0	21.1	20.6	16.9	15.5	16.4	15.5

Source: Colclough, C. (1988) from Table 5, p55.

Table 5 shows the occupational distribution of male and female workers in 1985. Over 50 per cent of the female labour force were in service and sales jobs, with sales being by far the most important category. Most sales jobs were in the private and informal sectors and therefore not directly affected by cuts in public-sector employment, although, as argued below, the indirect effects on the informal sector have been severe. On the other hand, around 45 per cent of the male labour force was employed in production, transport and labouring jobs, most of which were in the parastatal sector (mining, construction) and therefore directly affected by declining copper production and cuts in government spending.

TABLE 5: Lusaka Urban Occupational Structure and Gender Distribution (percentages)

Occupational Category	Males	Females	Total
Professional, technical and related workers	9.6	9.1	9.4
Admin. & managerial	3.5	1.0	2.8
Clerical & related workers	10.8	16.2	12.4
Sales workers	13.1	47.9	23.4
Service workers	14.6	14.9	14.7
Agricultural & forestry workers	3.3	2.5	3.0
Production, transport operators & labourers	45.2	8.3	34.3

Source: Lusaka Urban Labour Force Survey (1987) Table 8 p16.

Changes in public sector employment did affect women workers in low-wage and low-skill occupations, such as clerical and public sector services. During the 1970s, it had been Government policy to try to protect the incomes of low-paid, low-skilled workers by ensuring that wage awards stayed ahead of inflation. In the face of protracted economic decline however, the policy had the effect of making lower-paid employees relatively more costly to employ. Severe budget constraints and the imperative of reducing the public sector wage bill meant that these low-paid workers were the first to be made redundant. The result, contrary to the Government's objective, was a shift in the public-sector labour force which favoured the higher-grade employees over the less well paid. During the INDP (1987-88) it is estimated that total employment in the civil service fell by 3.5 per cent. The decline was most dramatic at the administrative level (12.5 per cent), the technical and educational level (8 per cent), the secretarial level (6.9 per cent) and the district messenger level (10.1 per cent). At the general professional level, employment rose by 7.8 per cent over the period. One commentator has summarised the effects as follows:

> As a result of the structural shift in and composition of wage employment, low-paid, low-skilled workers have borne the brunt of the stagnation in wage employment opportunities. ... Also, many workers were downgraded or forced into lower-paying, less-secure positions. The combination of these factors led to a much more rapid decline in

> the expected income of lower-paid workers, especially young workers and women.[19]

Job losses in these low-paid occupations had serious ramifications for the living standards of workers - male and female - in these occupations who tend to be from poor households and can ill-afford to lose regular income[20].

Data for the mid-1980s showing the effects of public sector retrenchments on male and female employment were not available. Fragmentary data suggest that unemployment was severe, was more serious in urban than rural areas and was especially serious among youth. However, definitions of 'open unemployment' are generally misleading in this context because, in an economy without a system of social security, workers categorised as unemployed are invariably engaged in some kind of economic activity in order to survive. Definitions of open unemployment therefore capture only part of the overall problem because they exclude disguised employment and underemployment. In that context it has been said:

> The unemployment problem is really more severe than has been depicted by the census data. If one were to include the marginally employed or underemployed populations the dimension of the unemployment problem in Zambia would be horrific. ... In the absence of any growth in formal sector jobs, the unemployed are forced into the informal sector where they may be "employed" by census definitions, but earn very low incomes. What is worse, those low incomes may well be getting lower over time as more people compete for a limited supply of income-earning opportunities.[21]

The growth of youth unemployment represents an additional strain on urban households as the number of non-working dependents increases. In 1986, 27 per cent of males and 28 per cent of females between the ages of 15 and 24 were recorded as unemployed[22]. The implications were particularly serious for large, low-income households with few economically active adults, as was the case for many female-headed households in the cities.

The picture presented by the official macro-data is partly confirmed by data from a micro-study carried out in 1986, covering 100 low-income households in urban Lusaka[23]. The study found only 18 per cent of women in the sample were in formal sector wage employment. The majority of these women were heads of households, being either unmarried with dependents or separated, divorced or widowed with dependents. Over 60 per cent of the married women - living with their husbands - declared themselves unemployed, even though some had secondary school education. The remaining women were engaged in income-generating activities in the informal sector.

In the sample, most women heads of household were working in the formal sector while some worked in self-employment. This was unexpected, given the widely held belief that female heads of household lack opportunities for education and training in order to enter formal sector employment. The study did not specify the kinds of employment these women were involved in - whether they required formal education and skills or not - nor did it specify whether they were in employment prior to the period of economic reform or in response to economic hardship. However, the fact that the majority of wives in the study declared themselves as unemployed or self-employed implied that it was less difficult for some women heads of household to enter formal employment than it was for married women, who had to overcome the double

discrimination of the labour market and their husbands' view if they were to enter the formal sector. Most of the husbands were in formal wage employment while almost all the remainder were in self-employment. Only two male respondents declared themselves unemployed, which indicated how important it was for low-income households to participate in some kind of economic activity in order to survive.

It was common, in households with an adult male, for a wife to be earning from self-employment activities. The study found that the importance of such activities had grown dramatically since 1983 as rising prices and falling real wages in the formal-sector increased difficulties in meeting basic consumption levels. The overall financial position of joint-households was generally better than that of female-headed households because of the possibilities of combining incomes from the formal and informal sectors or supplementing wage earnings with subsistence income from home grown produce (see sub section 3). In most cases where the female head was the sole earner, the time she had available to supplement falling wage incomes with own-account work was more limited. Thus, total household income was lower.

According to the 1980 Census, 30.6 per cent of all urban households were classified as female headed, and while many female heads of household were employed in the urban formal sector, they were predominantly in low-wage occupations - services and clerical[24]. Amongst these households, any loss of women's employment would be expected to have very direct negative effects on their own and their children's welfare. In joint households, it was the decline in male employment that had the most dramatic effect for women and children.

Women heads of households not engaged in the formal sector were active in own-account work; trading in fresh fruits, vegetables, brewing beer or undertaking domestic service. These occupations were, nonetheless, indirectly affected by the cuts in formal sector employment and household disposable incomes and the rise in competition amongst marketeers for ever decreasing shares of the informal sector market. This is discussed in more detail below.

As well as cutting back on public sector employment, the Government's reform programme also included guidelines on wage levels and restrictions on wage awards. These guidelines were for increases in wages generally well below the rate of inflation, implying a substantial decline in average real wages during the programme period.

The data in Table 6 show some erosion in average monthly earnings between 1983 and 1985 in the occupations that dominated the public sector - administrative and clerical. Only in the professional stratum and amongst production workers did nominal earnings actually rise. In all other occupations, they were lower in 1985 than in 1983. However, in the sales and services categories the dramatic drop in nominal earnings probably reflects the inclusion of informal sector activities in the 1985 survey and cannot be interpreted as an accurate reflection of the decline in monthly earnings. On the other hand, aggregate figures from another source (the CSO Monthly Digest of Statistics) indicated that real earnings in formal-sector community, social and personal services declined on average by 20 per cent between 1980 and

TABLE 6: Average Monthly Earnings of Paid Employees in Urban Lusaka, 1983 and 1985

Occupation	1983 Overall Average (Kwacha)	1985 Average (Kwacha)	Change (%)	1985 Average for Males (Kwacha)	1985 Average for Females (Kwacha)
Professional worker	394	546	+39	546.2	346.9
Administrative worker	808	699	-13	698.9	500.0
Clerical worker	278	261	-6	261.4	314.8
Sales worker	317	242	-24	242.3	144.3
Service worker	185	134	-28	134.5	105.2
Agricultural worker	135	133	-1	133.0	52.3
Production worker	185	206	+11	232.8	166.7
Total	243	246	+1	252.8	218.5

Source: Manpower Survey 1983 and Labour Force Survey 1987.

1985, which does lend further support to the data presented in Table 6. What is striking is the disparity between male and female earnings by occupation, which indicates the extent of discrimination in both formal and informal sector employment.

Table 7 shows the dramatic decline in real earnings at the administrative level of the public sector. The trends in the data support the view (Valentine (1985) and others) that the initial decline in earnings for low skilled and unskilled groups was less sharp than for the more skilled groups, whose basic starting salaries in 1983 were less than half their real value in 1975. However, as the effects of government austerity began to bite

TABLE 7: Indices of Salaries in the Public Sector: General Administration Scale, Real Terms, 1979-86 (1975=100)

Post	Jan 79	Aug 80	Jan 82	Jan 83	Nov 83	Oct 85	Jul 86
Under-Secrty	60	68	59	51	45	29	19
Ass. Director	60	62	53	46	41	27	18
Graduate entry	58	63	53	46	41	27	19
Diploma entry	59	67	57	50	44	31	21
Lowest paid employee [1]	71	89	89	87	83	70	49
Unskilled non established	73	85	90	91	88	75	53

[1] Lowest paid salaried employee.
Source: Colclough, C. (1988) extracted from Table 7, p59.

after 1983, the lowest paid workers suffered as well, particularly after October 1985 when the introduction of the currency auction system and the subsequent rise in domestic inflation caused real earnings across the board to plummet.

Comparing the data in Tables 5, 6 and 7 it can be observed that in the sectors and occupations where women were concentrated, average nominal earnings stagnated or fell, and in real terms the deterioration was more severe than in earnings from other occupations. According to Colclough (1988), during 1986 and early 1987 prices increased by approximately 65 per cent, compared with a 40 per cent increase in nominal earnings for most workers. It was shown in Table 5 that most women in formal employment were engaged in low-wage occupations, and labour market studies have shown that low-skilled, low-wage labour bore a disproportionate share of the cost of adjustment associated with public wage and employment restraints.

Data on formal sector incomes are, nevertheless, likely to over estimate the fall in household real incomes, given the importance of income generated outside the formal sector. A 1984 study of five low-income areas in Lusaka estimated that, amongst the lowest income households with garden plots, garden produce contributed about 37 per cent of total household income and about 50 per cent of household expenditure on food. For the slightly better-off households, garden produce was less important. Nonetheless, own-production provided them with an important buffer against the vagaries of the economic climate. The importance of urban gardening is discussed further in sub section 3.

b) The informal sector

While the urban formal sector has stagnated since the mid-1980s, the urban informal sector has become the source of employment and income for increasing numbers of individuals and households[25]. These workers were either squeezed out of formal sector employment or lacked the education and skills to enter into paid employment, or they have been trying to supplement rapidly dwindling formal sector wages. Yet, the lack of economic growth in the urban areas, combined with the growing urban labour force, means that those entering the informal sector face intense competition, whether in selling vegetables on the street corner, making charcoal or manufacturing import substitutes. Falling real incomes in the formal sector have also reduced the purchasing power of urban consumers for informal sector goods and services.

A few studies have confirmed that informal sector employment has been expanding rapidly and although the figures relate mainly to the late 1970s they are indicative of trends occurring in the 1980s. For instance, in one of the major compounds in Lusaka (the George Compound) it was estimated that between 1969 and 1977, the proportion of household heads employed in the informal sector increased from 5 to 24 per cent. In 1976 it was estimated that between 20 and 25 per cent of the total labour force in Lusaka were self-employed in the informal sector. By 1980 the proportion had increased from 25 to 30 per cent. Partly as a result of these increasing numbers entering the informal sector, household incomes in real terms in the compound were estimated to have fallen by only 7 per cent and 6 per cent in 1973-76 and 1976-77 respectively[26].

The data indicated that informal sector activity expanded during the period of economic reform, yet the numbers of people the sector could reasonably sustain remained limited by the scale of economic decline in the formal sector. Workers in the informal sector also have little protection against inflation and normally only limited access to credit and resources (or at a very high black market price) to improve their competitiveness. In this respect women producers and traders are especially badly off, having few or no capital assets with which to hedge against inflation and an insecure financial status.

Table 8 shows that in 1985 the proportion of persons working on their own-account was twice as high for women as that for men, although includes women trading in the informal sector and working in small family businesses for no direct remuneration; it does not, however, include women who work in the home (housewives), as they are considered outside the labour force.

TABLE 8: Employment Status in Lusaka Urban Working Population by Gender, 1985 (percentages)

Employment Status	Males	Females
Employer	3.1	1.5
Own-account worker	15.9	31.6
Paid employee	79.0	60.0
Unpaid family worker	2.0	6.9

Source: Lusaka Urban Labour Force Survey 1987.

There is a clear gender division of labour in the urban informal sector. Male operators dominate the more lucrative businesses such as electrical and mechanical repairs, tin-smithing, carpentry and related trades, grocery stores, tailoring and other small manufacturing enterprises. Female operators are concentrated in petty marketing, mainly of food and related items. Their products are normally highly perishable and prices can be high compared to official retail prices. Nonetheless, profit margins are very small compared to the more lucrative activities[27].

There was some indication from the 1985 Labour Force Survey that the occupational categories dominated by informal sector participants have longer working hours than in the formal sector. In the reference week, between 34 and 40 per cent of service and sales workers worked 57 hours or more; less than 10 per cent of professional, administrative and clerical workers did so. Furthermore, only 18 per cent of the men but 25 per cent of the women worked more than 57 hours, which is probably indicative of the greater involvement of women in informal sector activities, especially in trading.

Most young males consider work in the informal sector a temporary measure until opportunities in the formal sector improve. In contrast, it has been argued (by Bardouille) that most women - young and old - are permanently entrenched in low-level trading for want of better employment possibilities and that conditions have worsened since the economic crisis in Zambia. Women are more likely than men to remain static or be downwardly mobile in the informal sector because of the practical constraints such as lack of capital

and of access to business goods and storage facilities, and increasing competition within narrow trading opportunities. Also, since 1986-87 the Government has placed tight restrictions on street traders in an effort to stop over-pricing and black market practices. In so doing, women petty traders and youths have been harrassed and, in some cases, driven off the streets and fined or forced to set up stalls in markets for a daily rent. These kinds of pressure, really aimed at traders exploiting consumers due to the shortages of essential goods, pose a serious threat to the small incomes many women rely upon for meeting daily needs.

2. Social Expenditure

The IMF rarely makes explicit its views on reductions in government social expenditures. In a recent study, however, it did find that cuts in health and education expenditures accruing to the poor can adversely affect poverty groups, both in the short run (in terms of immediate consumption of services) and in the long run (by threatening the productive capacity of the poor).[28] Pressures to reduce total government expenditure and to switch resources away from so-called 'non-productive' sectors, often force governments into making cuts in their social expenditure programmes. This was the case in Zambia where between 1983 and 1985 per capita public recurrent expenditure fell in real terms by 23 per cent, while real per capita expenditure on health and education fell by 16 per cent and 13.6 per cent respectively.[29]

Health services

In a study of the social impact of economic reforms in Zambia since their advent in 1983, the World Bank attributed marked changes in both the quantity and quality of health and education services to the reform programme itself.[30] Health service provision deteriorated markedly in the mid-1980s due to falling real per capita expenditure, the increased cost of imported drugs - especially after the 1985 devaluation - and the exodux of medical personnel as real incomes in the health service declined. For example, the real value of the drugs budget in 1986 was estimated to be less than one-quarter its value in 1983, while between 1983 and 1986 the number of doctors per 100,000 of the population fell from 13 to 5.[31] All these factors can be associated with the economic reform programme.

The longer-term effects of cuts in health services expenditure are likely to be seen in changes in the health of the population. At the time of reporting it was still too soon to assess the full implications of the economic reforms for the nation's health. However, there is some evidence to show that general health conditions in Zambia worsened over the reform period. Of prime concern was the marked deterioration in nutritional standards during the 1980s. The incidence of malnutrition and malnutrition-related diseases increased markedly and, in the urban areas, was thought to have been aggravated by the economic downturn and rapid inflation. Other relevant factors include: high growth rates of population and inadequate housing, sanitation and water services in the poorer urban areas. The escalation of malnutrition since 1983 is thought to be a consequence of dietary changes and falling food consumption associated with diminished household real incomes. The latter are in turn associated with changes in employment, wages and prices brought about by the economic reforms.

The data in Table 9 give an indications of the seriousness of the nutritional problem in Zambia. In the decade up to 1983, the proportion of child hospital admissions attributable to malnutrition was fairly low and stable. After 1983, the proportion increased noticeably, along with a significant increase in the percentage of child hospital deaths attributable to malnutrition. These figures refer to hospital admissions and deaths only, and normally only the very worst cases of malnutrition are ever admitted into hospital. Thus, the extent of the problem of increasing malnutrition may still be largely undetected.[32]

Most of the available data on nutritional status concern children; very little information is available on women's nutritional status, although as a UNICEF/Government of Zambia (UNICEF/GRZ) study argues, there are a number of indications that it is a significant problem. One indication is the evidence of a relationship between total maternal deaths and the incidence of malnutrition and anaemias in women.[33] A less direct, but nonetheless important, indication of women's nutritional status is the increase in child malnutrition and malnutrition-related diseases. For example, it is suspected that high mortality amongst the newly born and during the perinatal period in hospitals is due to low birth weight as a result of malnourished mothers. There is also some indication that, although dietary changes and falling consumption of food have an impact on all household members, skewed patterns of intra-household income control and food allocation mean that adult women and children are the most directly affected. That is, mothers will forgo consumption of food in favour of their children, whilst a husband's control of household income may mean that he supplements his own consumption before that of other family members.[34]

TABLE 9: Malnutrition in Children Aged 0-14:
Hospital Admissions and Deaths, 1973-87
(percentages)

	Hospital Admissions	Hospital Deaths
1973	5.0	11.5
1975	5.2	10.7
1977	6.0	13.7
1979	6.2	16.8
1981	6.4	17.2
1983	7.0	23.5
1985	11.0	29.5
1987	17.0	37.0

Sources: UNICEF/GRZ (1986) & Clark and Keen (1988)

For the majority of urban residents the only alternatives to the health services provided by the state are those that have traditionally been available at the community and household level. One effect of the financial restraint imposed on the health service - shortages of drugs, equipment and personnel in hospitals and clinics - must be to shift a large part of the burden of health care back to the household. This has potentially negative ramifications for low-income households in particular, which do not have adequate facilities - housing, water and sanitation - or income to treat sick family members properly. Also, given the household division of labour, an

increase in the burden of health care in the home directly affects women's time allocation. In households where women are in paid employment, any time they take off to care for sick family members has a significant opportunity cost in terms of income (and potential consumption) forgone. In situations where women's income (from formal or informal sector worker) is vital for family survival, the opportunity cost of their time is high and positive and can force women into debt in order to pay for hospital treatment or drugs that allow them to continue working.

As yet, no data are available on the effects of changes in health service provision on womens' paid and unpaid work. But it is clear that changes in the level of health care administered by the state, combined with deteriorating health conditions, especially amongst children, has put additional strain on women's unpaid labour time as reproducers and carers. The stress on women's unpaid work affects their capacity to participate effectively in income - generating activities outside the home. The 'squeeze' put on their household labour time as public social services are cut back means that many women are forced into, or to stay in, casual part=time and low-paying work that can be combined with increasingly time-consuming unpaid responsibilities within the home.

Education provision

On the whole, reductions in recurrent expenditure on education have been less severe than the cuts in that on health-care, although in real terms they have been significant. The effects of the cuts are to be seen in the shortages of basic educational materials and equipment and the lack of maintenance of school buildings. Most of the education budget is now spent on salaries and wages, but at the cost of maintaining schools and supplying materials.[35]

Since independence, Zambia has been moving toward a system of free, universal primary schooling. Recent literacy surveys reveal that great strides have been made since 1964 in improving educational status. Nevertheless, illiteracy is still a significant problem, especially amongst women.

The reason for the higher rates of literacy amongst males is that more than two-thirds of the females in the 15-19 age-group are out of school. In the 20-24 age group, only 3 per cent of females attend higher education compared to 15 per cent of males. It has been estimated (Mulenga and Mwansa, 1985) that 48.5 per cent of the female adult population in Zambia was illiterate compared to 29.5 per cent of the male adult population.

Tables 10 and 11 both reflect the existing gender bias in the provision of and access to education. Females are slightly under-represented in Zambia's primary schools and grossly under-represented in the secondary schools, both as students and as teachers. As one writer has stated, "Zambian reality ... is one of unfulfilled promise regarding the removal of gender as a basis of discrimination"[36]. It is argued that these biases have been aggravated during the reform period by the increased burden placed on some households for meeting education expenditures through the introduction of school user fees in the face of declining real incomes.

TABLE 10: Literacy Rates by Gender, 1969 and 1980
(Zambians aged 15 years +)

Age Group	1969 % Males	1969 % Females	1980 % Males	1980 % Females
15-19	61.4	43.8	76.7	72.2
20-24	57.5	22.3	84.5	69.1
25-44	36.5	10.7	71.9	36.0
45+	12.3	5.0	32.8	7.2
age not stated	21.5	14.1	48.5	14.7

Source: UNICEF/GRZ (1986), Table 83, p.116.

TABLE 11: Girls Enrolled in Secondary Schools
(Selected Provinces), 1975 and 1980
(percentages)

Province	% females in province	1975 % girls in schools	1980 % girls in schools
Copperbelt	49.5	36.3	38.0
Lusaka	48.8	32.5	32.9
Southern	50.8	34.1	33.0
Northern	52.9	34.0	33.7
All Zambia	51.0	34.3	35.1

Source: Musonda, S. (1985) 'The Structure of Education in Zambia: Some Issues' p302, in Osei-Hwedie, K.E & Ndulo, M. (eds) 'Issues in Zambian Development', Roxbury, Mass.

A study by the University of Zambia in 1985 showed that parental expenditure on basic items necessary for children to attend primary school - learning materials, school funds, transport, lunches and uniforms - was around K200 per pupil in the urbanised regions of Lusaka, the Copperbelt and Central Province. In secondary education the average was K450, which was almost half the average per capita income of K950 (US$= 351.50) in 1985.[37]

Since 1985, the real value of the parental contribution has increased further with the general rise in prices, and this undoubtedly weighs heavily on the shoulders of parents. In 1986 the size of the parental contribution was further increased by the introduction of school user fees as part of the Government's efforts to reduce the financial burden of education funding. Initially the fees of K100 per term were levied on secondary school boarders only. The effect was not therefore universal, but for those parents with children boarding at school, the introduction of fees almost doubled their annual expenditure on education.

Although there is no direct evidence that girls and women are actively discriminated against in education provision, the data on illiteracy and enrolment indicate there is a structural gender bias in the education system. It is widely observed that boys are given preferential access to education, especially after primary-school level, and that cultural as well as financial constraints mean that girls do not benefit educationally to the same extent as boys. The drop-out rate is higher for girls at all levels of education, as they are more likely to be withdrawn from school in the event of a fall in household income, either to serve as unpaid family labour or to work alongside their mothers in petty trading and marketing.

3. Prices and Consumption

Since before independence, the maize subsidy has been the cornerstone of Zambia's food pricing policy. Maize provides almost half the calorie intake of the population and between 1975 and 1986 the subsidy absorbed between 5.6 per cent and 15.8 per cent of total Government expenditure. In 1986 it represented around 3 per cent of Zambia's GDP.

In 1982, as a precursor to the 1983 Stand-by Agreement with the IMF, the Government introduced measures to eliminate all controls on wholesale and retail prices, except for wheat flour and bread, maize meal and candles. The effect of the decontrol of prices is clearly seen in changes in the urban consumer price index shown in Table 12.

TABLE 12: Urban Consumer Price Index, 1980-87
(1975=100)

Category	1980	1981	1982	1983	1984	1985	1986	1987
Low-income[1] earners	203	231	260	311	373	513	733	938
High-income[2] earners	189	209	236	279	336	446	644	..

1 Low income (about two-thirds of the population) = income in 1974/5 below K100/month.
2 High income (about 10 per cent of the population) = income in 1974/5 above K300/month.
Source: Clark & Keen 1988, Table 2. p.24.

The figures in Table 12 show the dramatic rise in the cost of living resulting from the decontrol of consumer prices. The effects on low-income households were more dramatic than on high-income households, mainly because of the predominance of previously 'protected' food items in the consumption basket of low-income households. Efforts to reduce the maize subsidy also threatened the food-purchasing power of low-income households, for which the subsidy represented a significant income transfer, equivalent to approximately 20 per cent of the minimum government wage.[38]

Table 13 shows that prices of certain 'low-income' foods increased more sharply than those of foods eaten more by higher-income households. In particular, the price of the higher-grade and more expensive breakfast maize meal actually declined in real terms between 1983 and 1987. By contrast, the less expensive roller meal had almost doubled in real terms by 1983. Another important food in low-income diets - kapenta - increased dramatically in price between 1981 and 1983, while the price of chicken, which is more commonly consumed in higher-income households, fell in real terms during this period.

TABLE 13: Average Urban Retail Price Index, Selected Goods Deflated by Low-Income Food Items CPI, 1977-87 (1976 = 100)

	Breakfast Meal 50kg	Roller Meal 50kg	Bread 800g	Chicken 1kg	Dried Kapenta 1kg	Cooking Oil 5lt	Salt 500g
1977	85	85	138	96	96	85	102
1979	79	108	115	92	278	75	80
1981	87	137	141	100	330	89	71
1983	97	151	102	84	432	84	84
1985	86	137	134	84	321	106	150
1987	55	84	156	90	na	104	185

Source: Strickland (1989) op cit.

A study of the micro-effects of the rise in consumer prices on lower-income groups (Munachonga, 1986) found evidence of deteriorating child health and falling consumption levels in the majority of the households sampled. Two crucial ways in which households were attempting to cope with rising prices were identified. The most common strategy was to reduce the frequency of buying certain foodstuffs, particularly protein foods which had become prohibitively expensive. Many households reported having stopped buying meat altogether. Another item that many households no longer purchased was bread. Households were, in the main, relying on mealie-meal and vegetables for their daily diet, although some had even reduced their purchases of mealie-meal and had also cut down on the frequency of eating 'nshima' - maize porridge - their stape food. However, the substitution of foods within the diet of low-income households implies that the estimates of the Consumer Price Index in Table 12 may overestimate the real increase in the cost of living because the figures are based on a fixed consumption basket.

Table 14 compares the kinds of consumption strategies of husbands and wives in joint households, single male households and female-headed households. The data suggest that female heads of household chose to cut down

TABLE 14: Survival Strategies used by Different Types of Household: Responses in a Sample Survey, 1986

Strategy	Couples		Single Males	Female - headed households
	Males	Females		
	(n=67)		(n=14)	(n=19)
Borrowing/salary advance	30	29	4	4
Reduced number of meals per day	9	12	3	2
Reduced purchase of foods eg: bread, meat	7	10	1	8
Combination of all three methods	13	10	1	4
Growing vegetables, small business (wife)	7	5	2	-
Consumption unchanged	1	1	3	1
Totals	67	67	14	19

Source: Munachonga, M.L. (1986), Table 4, op cit.

their expenditure on certain foods, whilst the majority of joint-headed households chose to borrow or get an advance to cover food expenditures.

One explanation for the different strategies chosen by joint and female-headed households could be the constraints that single or separated women experience in borrowing or getting salary advances, compared to married men.[39] For example, socio-cultural norms can prevent women heads of households from borrowing money from men because their actions may be misinterpreted either by the men or by the public at large.[40] Moreover, women tend to be considered a greater financial risk than men, even when they are in business or wage employment. These views limit the access that women, especially women heads of household, have to alternative sources of cash. Thus, they are forced to stretch their limited income by reducing the amount and kinds of foods they buy.

Table 14 also shows that a number of joint households opted to grow their own food or to set up in business in order to survive. Urban cultivation or garden is not altogether a new phenomenon in Zambia, but recent research in Lusaka shows it increased since the early 1980s. Out of a sample of 250 households in five low-income areas, 99 per cent responded that their households were growing more food than in 1980, and 79 per cent attributed this to their household's declining purchasing power.[41]

In the study, none of the female-headed households responding cultivated garden plots, which may have been due to lack of time and family labour or poorer access to cultivable urban land. In another study (Sanyal) poorer households lived on small plots of land without adequate space for

gardening so they would have had to cultivate gardens on the urban periphery; this not only involved substantial travelling time, but land was also becoming increasingly scarce. In contrast, the better off households had garden plots close to their homes and invariably had more family labour available to work on the plots. Lack of data prevent further exploration of the differential access between female and joint-headed households to urban land. However, it might be hypothesised that because female-headed households tend to be amongst the poorest urban households and because, in Munachonga's study, female heads were found to do no gardening, they either experience difficulties in getting access to land or have insufficient time and resources to devote to own-production.

Sanyal's study found that garden produce could represent, on average, 50 per cent of household expenditure on food among the lowest-income households, which suggests that female-headed households without gardens are less able to supplement falling real earnings with subsistence production and, as a result, experience an even greater shock from rising consumer prices than non-female-headed households in the low-income bracket. Sanyal also found that women did most of the work on the gardens. Men normally did only the heaviest tilling at the early stages of crop planting, although younger men did more work than older men. Children assisted in many operations, normally at weekends so that they were not necessarily withdrawn from school for such purposes. The fact that women spent more time on gardening than other household members is explained by the household division of labour, in which women are responsible for food provisioning.

If, as the Sanyal study suggests, urban gardening has grown in response to worsening economic conditions and specifically to rising food prices, it can be argued that some women were able to respond positively by cultivating food for own-consumption. The evidence from the five low-income areas as a whole was that 73 per cent of households with gardens grew food solely for self-consumption while only 10 per cent sold some of the produce. Thus, the strategy of growing food was not considered, by the lowest income households especially, to be a source of cash income; rather it was meant to substitute specific purchased food items with home grown produce. This implies that it was the rising cost of basic fresh foods that encouraged women to cultivate their own food, rather than a desire to sell the produce and consume more expensive non-food commodities.

The importance of urban gardening in terms of household expenditure patterns is shown in Table 15. The data show that the lowest income group spent the highest proportion of income (77 per cent) on the purchase of food. For them, 37 per cent of their income and 50 per cent of their expenditure on food was provided through home cultivation, while for the better-off low-income households only 8 per cent of their income and 13 per cent of their expenditure on food was provided for by cultivation.[42]

TABLE 15: Monthly Expenditure and Benefits[1] for Different Income Groups, 1980 (Kwachas and percentages)

	Income Groups		
	K0-54[2]	K55-107.5[2]	K107.6-164.5[2]
Total expenditure: % of Y[3]	100	92	89
Expenditure on food: % of Y	77	92	59
Expenditure on non-food: % of Y	23	31	30
Benefit from gardening: % of Y	37	15	8
Benefit as % of total expenditure	37	16	9
Benefit as % of food expenditure	50	20	13

1 All expenditure and benefit estimates are median figures for each household category.
2 K54 = 0.5 times median income of low-income household,
K107.5 = median income of low-income household,
K164.5 = 1.5 times median income of low-income household.
3 Y = monthly income

The data presented so far go some way to showing that the effect of the decontrol of consumer prices (and to some extent of the devaluation of the Kwacha) was to increase the financial hardships of low-income urban households, with direct effect on the pattern and level of household consumption. Munachonga suggested that because of patterns of income allocation and control in joint households, the financial strain on women was particularly great. Mulenga argued similarly:

> Evidence indicates that men's advantaged position in terms of access to cash income enhances their position as regards allocation and control of family income. There is also evidence that the way the marriage relationship operates tends to reduce women's effective control of family income even when wives contribute their labour in family businesses.[43]

Munachonga, reporting on systems of allocation of money in households of married couples, found that no wife in the study was in total control of all the family income, while a large proportion had no access to the husband's income: husbands controlled and managed all the money and some did major grocery shopping. The majority of wives received fixed housekeeping allowances, the amounts being determined by the husbands (the earners). A minority of couples managed money jointly and shared responsibility for purchasing food and other essential goods and services. Thus, women often lacked direct control of the resources (cash) needed to provide meals. Unless husbands were willing or able to maintain the real value of housekeeping allowances, women found it very difficult to meet family consumption needs and were forced to adjust consumption patterns by purchasing less food, switching to cheaper and often inferior foods, or by preparing meals less regularly, as described above. Unfortunately, the absence of detailed data at household level precludes a closer analysis of the consequences of the economic reforms on certain types of household and on individual household members. Nonetheless, it is evident that the effects of the reforms were determined first by socio-economic status - high or low-income - and secondly, by the

gender relationships existing within households and outside in the sphere of employment, and by access to resources.

Summary

Women's position as producers and carers has been affected differently by the policy changes, depending on their socio-economic position and marital/residential status. On the whole, women in households with few economically active members and a large number of dependents probably fared worst, especially if they themselves were the sole income earner. Married women with few dependents and in paid employment probably fared best, although those who were not employed were dependent on their spouses' incomes, which declined in real terms, or were forced into earning supplementary incomes in the informal sector.

IV. THE IMPLICATIONS OF THE REFORMS IN RURAL ZAMBIA

1. Agricultural Production

Despite the differences in structural adjustment programmes in Africa, they hold one major objective in common: to bring about a major change in the rural-urban terms of trade and an improvement in output and incomes from agriculture. Much of the World Bank's programme lending to Zambia has been with a view to introducing major policy changes in the agricultural sector.[44] These were designed to increase production of both food and export crops by increasing incentives (prices) to farmers, improving the efficiency of the state marketing apparatus, removing subsidies and allowing the private sector to enter the marketing of agricultural produce. In practice, policies have involved paying higher prices to producers and the lifting of many marketing restrictions within Zambia.[45]

Table 16 shows the gradual increase in the proportion of the national product contributed by agricultural output which despite its fairly small share, was still responsible for over 70 per cent of employment in 1985. The proportion of national income accruing to workers in the agricultural sector remained very low, but it did rise, albeit marginally, between 1980 and 1985, whereas that of non-agricultural workers actually fell over the same period. This suggests that, during the reform period, there was a slight redistribution of income between urban (non-agricultural) and rural (agricultural) workers, partly as a result of the introduction of price incentives.

TABLE 16: Average Incomes of the Agricultural and Non-Agricultural Sectors, 1965-85 (percentages)

	1965	1980	1985
Share of agriculture in GDP	8.2	15.2	16.8
Share of non-agriculture in GDP	91.8	84.8	83.2
Share of agriculture in total employment	79.0	73.0	71.2
Share of non-agriculture in total employment	21.0	27.0	28.8
Share of agriculture workers in GDP	0.104	0.208	0.236
Share of non-agriculture workers in GDP	4.371	3.178	2.889

Source: Strickland (1989) op cit.

During the period of policy reform, agricultural producer prices were raised steadily in nominal terms, although increases in real terms were smaller and, as the figures in Table 17 show, sometimes negative, e.g. for cotton and tobacco.[46] Also, in spite of changes in producer prices, agricultural exports continued to perform poorly. In volume terms, those in 1980 were only 1 per cent of total merchandise exports, and in 1985 only 3 per cent. Only sugar and, to a much lesser extent, cotton showed any kind of success in export markets in recent years.[47]

Table 18 gives some idea of changes in aggregate crop area, production and sales after the initial round of price incentives and trade adjustments. It shows that crop areas and sales of maize and cotton increased signficantly, whereas the areas devoted to wheat and groundnut dropped markedly, despite an increase in producer prices in the 1980s. This suggests that price incentives did not automatically lead to increased production and that supply-side conditions (for example, crop labour requirements, credit availability) were also influential in shaping producer responses. However, as the Government had hoped, price incentives successfully reinforced the role of maize in national production.

The increased producer prices for maize, sunflower, groundnuts, soyabeans and coffee did not provide much incentive for the bulk of small-scale farm-households. These mainly produce cassava, millet and sorghum, whose producer prices were not increased. According to an ILO report, the cash income per economically active member of the 'subsistence' farming sector fell by 13 per cent between 1976 and 1985.[48] As Clark and Keen observed:

> This sector has borne the brunt of the recession in all aspects. There is still considerable migration to the towns and those left behind (often female-headed households) cannot provide the labour

TABLE 17: Index of Agricultural Producer Prices in Real Terms, 1965-88
1975 = 100

Period	Maize	Groundnuts	Cotton	Tobacco
1965-70	118	104	91	138
1970-75	111	91	89	112
1975-80	99	91	93	97
1980-85	119	106	59	97
1983-88	133	103	50	89

Source: Strickland (1989) op cit.

TABLE 18: Area, Production and Sales of Selected Commodities, 1985/86-1987/88

	Activity	1985/86	1986/87	1987/88	% Change 1986/87-1987/88
Maize	Area[1]	588	610	780	27.9
	Prod[2]	14,000	11,367	15,384	35.3
	Sales[3]	10,607	7,200	11,187	55.3
Wheat	Area[1]	6.0	6.9	1.7	-74.8
	Prod[2]	313	447	77.5	-82.7
	Sales[3]	33.8	42.2	68.1	61.3
Cotton	Area[1]	52.0	38.2	61.8	61.9
	Prod[2]	33,357	20,156	42,119	109.0
	Sales[3]	33,357	20,156	42,119	109.0
Sunflwr	Area[1]	57.2	31.6	39.9	26.1
	Prod[2]	612	340	246	-27.7
	Sales[3]	537	139	245	76.1
Grndnts	Area[1]	34.4	149.0	58.3	-60.9
	Prod[2]	227	593	401	-32.4
	Sales[3]	78.5	22.1	69.8	214.9

1 Thousand hectares.
2 Thousand bags.
3 Quantity marketed through official channels only and therefore figures quoted are an underestimate.

Source: Interim National Development Plan, Progress Report No. 2, July 1987-March 1988, NCDP/Republic of Zambia, p.102.

needed for farming, non-farm and wage labour activities and usually cannot afford to employ labour. Their poverty is compounded by the shortage of labour resources.[49]

Whilst a minority of small-scale producers have directly benefited from changes in producer prices, many more have been affected by price increases for essential food and non-food items. Contrary to the belief that rural households are able to meet most of their subsistence needs from own-production, the pilot household-budget survey for 1985 estimated that rural households spent 55 per cent of total expenditure on food, 19 per cent being spent on maize alone.[50]

The data in Table 19 show that rural consumers generally paid higher prices for staple foods than did urban consumers.[51] For processed foods, higher prices in rural areas were due to transport costs and the large distances between suppliers and consumers. The removal of price controls in 1982 had a widespread effect on both urban and rural consumers. Rural producers (predominantly women) reliant on selling 'traditional' food crops found their incomes being squeezed by stagnating producer prices and rising transport costs on the one hand and rising consumer prices on the other.

TABLE 19: Urban and Rural Consumer Price Index, May 1986
(National average = 100)

Area	Mealiemeal: Bkfast 25kg	Mealiemeal: Roller 25kg	Chicken 1kg	Cooking Oil 750ml	Bread 800g	Kapenta 1kg
Urban:						
Lusaka	96	99	98	95	98	120
C/belt	92	96	99	125	96	89
Central	98	99	90	90	105	87
Rural:						
North-West	105	114	n.a.	86	115	135
Northern	104	127	157	113	n.a.	78
Luapula	146	113	n.a.	152	89	57
Eastern	92	n.a.	92	94	130	107
Southern	107	102	110	98	118	81
Western	110	101	n.a.	92	n.a.	90

Source: "Pricewatch", Prices and Incomes Commission (1986) 2(3).

2. Household-Level Implications

In macro-economic terms, improved agricultural prices and better rains have had some of the desired effects by stimulating agricultural output (mainly maize) and farm incomes. At the micro-economic level, however, the effects are more complex. There is evidence that the income effects have been highly unequal between and within rural households, largely because of bottlenecks and inequalities already existing in the systems of agricultural production, crop marketing and distribution.

A study of household labour allocation, conducted amongst maize producing households in Northern Province during 1987, found that increased attention to marketed production coupled with higher producer prices for maize did not benefit all households or all members of households in the same way.[52] For example, in joint-headed households producing hybrid maize for sale (as well as for household consumption in some cases),[53] wives were having to allocate a greater proportion of their time on maize production, often at the expense of time spent growing other food crops - millet, beans, groundnuts - or on essential domestic activities. According to a study by the Rural Development Studies Bureau of the University of Zambia, women generally contributed more labour hours per day (8.5) than males (7.4) in agriculture as well as in non-agricultural tasks: 5 hours for females compared to 1-2 hours for males.[54]

The full extent of the shift in work patterns associated with the improvement in maize prices could not be determined precisely, because of the lack of time-series data on labour-use patterns. Informal interviews showed that the experience of both men and women was that their time was more fully employed under maize cultivation, although much of the increase in labour was concentrated in activities which absorbed more labour from females than from males, i.e., weeding, harvesting and post-harvest tasks.

There was no evidence that farm-households expanding hybrid maize production (and still using hoe technology) faced a critical problem of labour supply.[55] However, certain measures were adopted to spread seasonal labour inputs, especially at peak periods, and they were mostly practised by women farmers - weeding once only, mixing fertilisers, intercropping, and storing pre-prepared cassava flour for consumption during the peak labour season. These measures were evidence of periodic pressure on women's labour time.

In households headed by women, either widowed, separated or as a member of a polygamous marriage, problems with labour supply were generally more serious[56]. These households did not to produce hybrid maize, or only very little. They were often poorly endowed with adult labour of working age, especially male, and experienced difficulties with labour supply during peak work periods. This was reflected in smaller cultivated areas and their reliance on crops and activities that required less labour generally and male labour in particular - cassava, beans, local maize; beer brewing, petty trading and casual work. In these households, the increase in the producer price of maize had little direct impact on their incomes. In a number of ways they were constrained from responding to, and therefore benefiting from the higher prices, because of the cost of credit[57], shortages of labour, especially male for clearing land, and other key inputs such as fertiliser. Their lack of cash/capital resources was compounded by the limited market value of the crops that they did produce - mainly millet and cassava - and the cost of transporting the more valuable of them to market. On the whole, it was not feasible for these producers to switch their cropping patterns in response to changing price incentives.

Households that were able to respond to changing relative prices were well endowed with family labour resources and had sufficient capital to cover the cost of credit and buy in additional labour during periods of peak demand for labour.[58]

One consequence of the expansion of commercial maize production in the areas studied was an increase in the demand for casual labour. To a large extent this was met by an increase in the supply of women doing casual work (not a new phenomenon in the areas studied) and, to a lesser extent, of adolescent male labour. The women who participated in piecework tended to be from the less commercialised households and female-headed households. For them, casual work was a direct source of both food and commodities. The declining purchasing power of their cash incomes, due to rising prices for basic commodities, especially salt, soap and commercially sold maize-meal, and to the low market value of 'traditional' crops, encouraged these women into selling their labour in direct exchange for food/commodities. Wages paid in kind for piecework were, nonetheless, low, both absolutely and relative to wages paid in cash.

The effects of changing producer incentives were not, however, limited to changes in household labour use. The effects on women and men also depended on the process of intra-household income allocation and control. The labour allocation survey revealed that a major interest among men in cultivating hybrid maize was to gain direct control over cash income. In the areas studied, hybrid maize income was largely under male control, despite the fact that women supplied proportionately more labour time to its production. On the whole, wives did not have direct control of the proceeds of their labour on maize, although the degree of access they had to maize income varied between households. Men tended to control the disposal of the crop (to the marketing union) and to organise spending of any profits either on large purchases for the household, or on themselves, or to reinvest in maize by purchasing inputs for subsequent seasons. Some wives received a proportion of maize profits for purchasing clothes for themselves and their children, including school uniforms. The size of maize profits was nonetheless extremely variable by household and by season, and in some cases the share that wives received was wholly inadequate to purchase any durable items, being quickly absorbed into expenditure on daily essentials.

Whereas men tended to control maize income and any benefits accruing from changes in its price, women were in more or less direct control of any income accruing from the sale of other food crops, to which they also supplied most of the necessary labour input[59]. Income from these other crops was, normally, well below anything that could be earned from selling maize. In addition, the purchasing power of such income was declining as crop prices failed to keep pace with the prices of processed and manufactured goods.

A case of rising cash income was found, however, among women producing home-brewed beer. One effect of the increase in cash income among maize producers was the expansion in effective demand for locally produced beer. Produced from millet and maize, this became a major source of income for many women. With the increase in cash circulating among men, combined with the shortage of factory produced beer, local consumption of the domestic brew rose. It was estimated that the value added from beer brewed with home grown millet and maize could be between 60 and 200 per cent.[60] An investigation by the Adaptive Research Planning Team at Kasama, Northern Province, during the 1985/86 season showed that, in three sample areas, beer production was the most lucrative source of off-farm income (besides remittances) and more so than all on-farm activities except for sales of maize and beans. In Mbala, Northern Province, it was estimated that, in one sample household, beer production constituted about 30 per cent of the value of household production, while in other households, it provided between 5 and 14

per cent of the total.[61] For the sample as a whole, beer production represented about 7 per cent of the total value of production, which was more than the contributions of piecework, crafts, sales of charcoal and fish put together.[62]

There were, nonetheless, some negative implications to the rise in beer production: first, declining household food stocks with the increasing amounts of maize and millet used to produce beer; and secondly, a rise in the level of domestic conflict due both to the rise in beer consumption and to the increase in income under women's control.[63]

3. Rural Health Provision

Section III.2 mentioned the level of health service provision in Zambia, especially of the urban bias of much of this provision and the extent to which changes in government spending in recent years may have aggravated this bias.

Table 20 shows the magnitude of the urban bias in the health care system, despite government efforts to develop rural health services and, more recently, to adopt a primary health care approach. (the figures are taken from a review of primary health care in Zambia).

Table 20: Annual Allocations for Health Expenditure, 1980-82
(Kwachas per capita)

Rural Health Centre (RHC) areas	0.60
RHC + District Hospital areas	1.50
RHC + District + Provincial Hospital areas	2.35
Lusaka (Urban) areas	12.27

Source: Freund, P. (1986) 'Health Care in a Declining Economy: The Case of Zambia', Social Science and Medicine, 23:9, p 879.

A survey of health centres in 1986 showed that, as well as a bias in the regional distribution of services, 73 per cent of the centres had staff vacancies, 51 per cent of all vehicles were off the road and many of the rest were in very poor working order.[64] The most critical problem for rural health centres has been the supply of essential drugs and equipment. According to UNICEF estimates, only about K15 million of the budgeted K106 million was released for drug purchases in 1986/87 because the funds were not available. A survey of 63 rural health centres showed that, in some Provinces, the average out-of-stock period for essential oral rehydration salts, prophylactics and antibiotics was around 30 weeks.[65] The shortage of foreign exchange has also hit supplies of other essentials - from bicycles to syringes to soap. Immunisation schemes have been severely affected by lack of transport and shortage of kerosene to run refrigerators. As shortages worsen, a parallel market in essential drugs has begun to flourish, but at a very high price to the average rural household.

The decline in the services provided by rural health centres had a direct effect on the primary services most often used by women and children, such as maternal and child health clinics which undertake immunization etc. As a result, rural people have been forced to travel further to receive treatment and drugs. This meant that individuals and households have incurred

additional transport costs as well as substantial time costs in order to seek medical attention. In many cases, where illnesses have not been critical, treatment has been foregone, but at the cost of prolonged morbidity and, potentially, a decline in productive capacity.

This situation was described in a labour study[66] which cited female respondents who could not 'afford' to be ill, because of the direct cost of treatment and the time spent away from productive tasks. They spoke of the increased time spent caring for sick members of their household, especially if the children were required to attend the local hospital (30km away), where mothers are expected to stay with them to provide meals and subsidiary care for the duration of the treatment. One woman, who had taken time out to accompany her husband while he was receiving hospital treatment, had missed the entire planting season. As a result the couple were subsequently dependent on gifts and transfers from relatives and on hiring out their labour in order to make ends meet.

No data were available on the nutritional implications of changing cropping patterns and rising food prices in rural areas. A nutrition study conducted in the same area as the labour allocation study revealed that while child nutritional status was generally poor, there was no clear evidence to suggest that the expansion of commercial maize production or the increase in female labour-time spent on farm were contributory factors. However, the report does argue that increasing household income through the expansion of maize production does not necessarily improve the welfare or nutritional status of children or other household members, such as women. While income has undoubtedly increased for some (albeit not necessarily in real terms), the cash has had little effect on the local food system. In addition, household welfare is dependent on a combination of 'independent' enterprises and sources of income which are partly under threat from the expansion of hybrid maize cultivation. The report concludes by noting that:

> "There is evidence that child welfare in households with a variety of individual farming and food-processing enterprises is significantly better off than that in households whose resources and labour are concentrated in the hybrid-maize farming of one member".[67]

V. CONCLUSIONS

The objective of this study was to examine the distributional implications of the economic reform programme in Zambia (1983-87) for women as producers, reproducers and carers. Ultimately, however, inadequacies in the data prevent the presentation of any conclusive evidence of the implications for women. Nonetheless, from the quantitative information available, it is possible to suggest a number of preliminary conclusions. These are as follows:

(i) In the urban formal sector, stagnant or contracting opportunities for wage employment have directly affected many women workers, especially in the low-paying, low-skilled strata of the public and private sectors. In numbers employed, however, retrenchments in public-sector spending have probably affected males to a greater extent than females. Falling real earnings have, nonetheless, been a phenomenon among all strata of the public-sector and have affected male as well as female employees.

(ii) Stagnant employment in the formal sector combined with rising consumer prices and falling real wages have contributed to the expansion of own-account or self-employment activities in the 'informal sector'. The rise in the number of women participating in the sector is particularly noticeable. These women are generally from lower-income households and are either supplementing their husband's (or their own) formal sector wages or are providing the main source of income as heads of households. In spite of the increased importance of self-employment activities, women in the sector generally lack the resources or skills to develop their earning capacity. As a result, most women are confined to petty trading of fruits, vegetables and home-processed foods for very low returns. Generally, men working in the sector have better access to basic capital and inputs, as well as better chances of returning to formal sector jobs if the opportunities arise.

(iii) The economic reforms have had mixed effects in rural areas. Although aggregate statistics suggest the beginnings of a redistribution of income from urban to rural producers, micro-data suggest that the effects are highly variable between and within rural households. For example, small-scale farm-households able to grow hybrid maize are 'better-off' since the reforms, compared to households growing only the 'traditional' staple crops. However, since household members possess different degrees of bargaining power, the benefits of improved maize income do not accrue evenly within these households. Men tend to be indirect control of maize income and generally make the decisions on how it is to be spent. Women, on the other hand, although they provide more than 50 per cent of the labour time on maize, have only minimal control over maize income or subsequent expenditures. They normally control income from the sale of other, less lucrative crops, which have not been affected by the policy changes. In real terms, therefore, the value of 'women's income' has failed to keep pace with 'men's income', which has direct implications for household consumption patterns.

(iv) Rising consumer prices and shortages of certain essential commodities have affected women both as managers of household consumption and as direct consumers. A micro-study in urban Lusaka revealed a number of different strategies used by women in low-income households to cope with falling real purchasing power. They included: buying less food, buying less protein foods, preparing fewer meals per day and substituting home-grown vegetables for purchased vegetables. In rural areas, women, mainly from poor households but also from some better-off ones, were found to be doing piecework directly in exchange for food and commodities that had become increasingly expensive and difficult to find in rural shops.

(v) In rural and urban areas, retrenchments in government social expenditures have affected the provision of health and education services. The cuts in per capita spending on health services have been particularly serious, and have had the effect, especially in the urban areas, of shifting some of the burden of

health-care back into the home. This directly affects the household position of women, both as reproducers and carers. It is women's unpaid labour time that is most directly affected by family ill-health, while drug shortages, the introduction of hospital user fees (in urban areas) and staff and equipment shortages, have all put additional strain on their household time and resources. Caring for the sick can mean diverting time away from directly productive activities and cause a significant loss of income and, potentially, of consumption, especially in low-income households. The increase in women's/girls' unpaid labour time is one major (albeit hidden) cost of the reduction in government social expenditures.

VI. RESEARCH RECOMMENDATIONS ON DATA COLLECTION

It is argued that women's greater involvement in both the formal and the informal-labour markets, plus their increased workload within the household sector due to reduced resources and social services provided by the state, have all contributed to intensifying women's labour. Furthermore, inflation and the removal of food subsidies have raised the cost of living to an extent that consumption has been reduced. Conclusive evidence of the distributional implications of these effects is not however available because of inadequacies in the data base. Therefore, household-level data are needed on the following issues:

(i) labour-time allocation within urban households and the adjustments that are made to accommodate increased involvement by women in economic activities and unpaid family labour responsibilities - providing basic consumption, health-care etc.;

(ii) longitudinal labour-time data within rural households and the adjustments that are made to accommodate changes in production and the costs of social production;

(iii) household income and expenditure patterns by gender[68];

(iv) nutrition and health status disaggregated by gender and age;

(v) the nature and sequencing of household and community "coping" strategies in rural and urban areas, according to a household's socio-economic position, the gender and age of household members etc.

Studies such as the present one almost always conclude with a demand for more detailed data on a range of micro-economic and social issues. While the demand is usually justified, the reality is that data collection, especially of disaggregated household data, is very costly in both human and financial terms. In times of public-sector spending cuts and worsening living conditions, resources for data collection have a prohibitively high opportunity cost which make it unreal to expect yet more data to be collected without very careful consideration. In addition, some of the necessary data may already exist in small-scale surveys and field studies that have not yet been uncovered. Thus it is recommended that: first, an examination of existing sources of data be carried out before any demands are made for new surveys; and second, that on certain topics such as "coping" strategies,

consumption patterns, health status etc., additional data be generated by using small-sample and rapid appraisal techniques which can produce quick and effective results at minimal cost.

Notes

1. Colclough, C. (1988) 'Zambian Adjustment Strategy - with and without the IMF'; IDS Bulletin Vol. 19:1.

2. Ibid.

3. In 1963, 20.5 per cent of the population was urban, in 1969 29.5 per cent and in 1980 43 per cent - the third largest urban population in Africa.

4. Strickland, R. (1989) 'IMF Stabilisation and the Effects on Income Distribution and Welfare: The Case of Zambia', Ph.D thesis, Institute of Development Studies, Sussex.

5. Ibid.

6. Ibid.

7. The loan package was worth an estimated K650m (US$300m).

8. Colclough op cit.

9. Clark, J. & Keen, D. (1988) 'Debt and Poverty: the Case of Zambia', Oxfam

10. Strickland op. cit.

11. This helped to ease import constraints. Aggregate agricultural production showed marked gains during the year, due to a combination of good rains, higher producer prices and increased availability of foreign exchange for spare parts and inputs.

12. K8.00 = US$1.

13. The Economist Intelligence Unit (1988) 'Country Report: Zambia', No.3, London.

14. Only fragmented, cross-section data are available for this section and the analysis should be interpreted with some caution.

15. That is excluding non-Zambians.

16. The number of economically active females is considered to be an underestimate, however, due to problems in accounting for women's unpaid economic activity - see Bardouille, R. (1988) 'Opportunities for Women in Economic Activities in Zambia', Zimbabwe Journal of Economics 2:1.

17. This figure refers to both rural and urban Zambia, although most formal sector jobs are based in urban areas.

18. In the 1985 survey this includes the informal sector.

19. Valentine, T.R. (1985) 'Income-Distribution Issues in a Structurally Dependent Economy: An Analysis of Growing Income Inequality in Zambia', in The Zambian Economy: Problems and Prospects; IDRC (Ottawa) p228.

20. Low income can be defined in a number of ways. In urban Zambia the low-income group included households with gross monthly incomes of less than K150 in 1980 (below K481 in 1985). High income households included those with incomes above K400 per month in 1980 (K1,284 in 1985). Strickland, R. (1989) from CSO, "Consumer Price Statistics", Bulletin no. 1, 21.1980.

21. Bardouille, R. (1986) 'Manpower and Employment: Review of Recent trends in the Labour Market in Zambia'; UNDP Restructuring and Development in Zambia: Roles for Technical Cooperation, New York.

22. Lusaka Urban Labour Force Survey (1987).

23. Munachonga, M.L. (1986) 'Impact of Economic Adjustment on Women in Zambia'; UNDP Restructuring and Development in Zambia: Roles for Technical Cooperation, New York.

24. Mulenga, A.P. (1986); UNDP op.cit.

25. The Government's 'New Economic Recovery Programme: Fourth National Development Plan, 1989-1993' states that "formal sector employment would have to grow at the annual rate of 15 to 17 per cent to absorb the new additions to the labour force.... In the absence of employment opportunities in the formal sector (consisting of officially registered and licensed economic activities and businesses) a large section of the labour force is compelled to resort to other activities generally referred to collectively as the informal sector" (p67). The same report defines the informal sector broadly as consisting of all subsistence farmers, all own-account workers and all employers in unlicensed and unregistered businesses. It draws a further distinction between subsistence activities, which constitute 72 per cent of total informal sector employment, and 'modern or market oriented' unregistered or unlicensed activities which constitute about 22 per cent of total employment and almost equals formal sector employment.

26. ILO/SATEP (1984) 'The Impact of the Recent World Recession on the Zambian Economy; Lusaka (First Draft, p69).

27. Bardouille, R. (1988) op. cit.

28. IMF (1988) Occasional Paper no. 58, pp32-34.

29. Strickland (1989) op. cit.

30. IBRD (1986) "The Social Impact of the Economic Reforms in Zambia".

31. Clark, J & Keen, D. (1988) op. cit.

32. As available figures are not disaggregated by gender it cannot be established whether girls are more vulnerable to malnutrition and related diseases than boys.

33. Kwofie (1984) in UNICEF/GRZ (1986) 'Situation Analysis of Women and Children in Zambia', p.73.

34. Munachonga, M.L. (1986) op. cit.; Mulenga, A.P. & Mwansa, L.K. (1986) op. cit.

35. Swedish International Development Agency (1987) 'Education and Economic Crisis - the cases of Mozambique and Zambia'; Education Division documents No. 38.

36. Musonda, S. (1985) p. 301, op. cit.

37. K1= US$ 0.37 in 1985.

38. Clark, J and Keen, D (1988) op. cit.

39. Young single men may also have experienced greater difficulty than married men who tended to be older and in more secure employment.

40. Munachonga (1986) op. cit. p. 13.

41. Sanyal, B (1984) 'Urban Agriculture": A Strategy for Survival in Zambia'; Ph.D. UCLA.

42. Ibid, p. 166.

43. Mulenga, M.L. et al (1986), op. cit.

44. The agricultural sector in Zambia is characterised by dualism. Approximately 87 per cent (610,000) of all households in the rural areas are classified as 'traditional' or 'subsistence'. On the other hand there are 1,500-2,000 commercial farmers, many of them Europeans, who benefit from ready access to inputs, markets and services. They produce most of the country's agricultural exports. Between these two segments are a small group of "emergent farmers", the majority of whom are Zambian, ex-migrant and located on good quality land with adequate access to markets and services (Sanyal, B. (1988) 'Rural Development and Economic Stabilisation: Can They Be Attained Simultaneously?').

45. Clark, J & Keen, D (1988) op. cit.

46. The producer price for maize rose in nominal terms by 142 per cent between 1980 and 1985, although in real terms the increase was only 6 per cent. National maize output increased by 26 per cent over the same period. ODI Briefing Paper 'Agriculture in sub-Saharan Africa', 1987.

47. Kydd, J. (1988) 'Zambia'; Chapter 4, in Harvey, C. (ed) 'Agricultural Pricing Policy in Africa: Four Country Case Studies'; Macmillan.

48. ILO (1987) 'Employment and Incomes in Zambia in the context of structural adjustment'; Summary Report, ILO/SATEP; in Clark & Keen, op. cit., p. 33.

49. Ibid.

50. Zambia, Prices and Incomes Commission (PIC) and Central Statistical Office (CSO), Pilot Household Budget Survey 1985, PIC/CSO (Lusaka), 1987, pp.33-35.

51. These are officially gazetted prices only.

52. Evans, A. & Young, K. (1988) 'Gender Issues in Household Labour Allocation: The Case of Northern Province, Zambia'; ODA/ESCOR Research Report. The study used time allocation data for 1982/3 and cannot, therefore, provide quantitative evidence of the effect of changing producer prices on women's labour time. However, during 1987, additional (qualitative) research was carried out which provided information on the effects of higher producer prices on maize growers.

53. Some households in the sample areas had been growing hybrid maize since the late 1950s. Most however had not started to grow it until the late 1970s or early to mid 1980s. Local maize had been grown widely as a 'traditional' crop although usually as a relish/snack food. Finger millet, cassava and sorghum were the traditional staple crops in the area.

54. Due, J (1986) 'Intra-Household Gender Issues in Farming Systems in Tanzania, Zambia and Malawi'; paper presented at a conference on Gender Issues in Farming Systems Research, Gainsville, Florida.

55. Most were able to hire some casual labour (mainly female) at peak labour periods.

56. According to the 1980 Census, the proportion of households headed by women in the Northern Province ranged between 34 per cent and 52 per cent (CSO, 1980 Census Results, Table A-9).

57. Annual interest rates for agricultural credit in 1987 ranged between 20 and 25 per cent.

58. The most successful maize producing households tended to be headed by ex-migrants who had returned to their villages with savings or compensation from urban employment and who had invested in non-farm enterprises - bars, grocery stores, grinding mills - whose profits were used to fund agricultural expansion, labour hiring etc. There was only one example of a female-headed household operating in this way, and she was dependent on income transfers and investments from her husband who ran a bar and shop on the Copperbelt and was planning to return to the village on his retirement.

59. See Geisler, G. et al (1985) 'The Needs of Rural Women in Northern Province: Analysis and Recommendations'; Republic of Zambia NCDP/NORAD. Also Due, J. & Mudenda, T. (1985) 'Women's Contributions to Farming Systems and Household Incomes in Zambia'; Michigan State University WID Series No. 85, East Lansing.

60. IRDP (SMCI)/NFNC (1987), 'Report of the Nutritional Anthropology Investigation'.

61. Total value of production refers to the estimated value in cash or kind of on-farm and off-farm activities during the 1985-86 season. The difficulties in estimating the value of certain activities, including beer production, mean that the estimates cannot be precise; but they are nevertheless useful indicators of magnitudes (figures are gross, not net).

62. These data were provided to the author by Richard Bolt, the ARPT economist, during a visit in July 1987.

63. In the past, beer had been brewed for social occasions and as refreshment for communal work parties, and not directly for sale. Hence its consumption was more closely regulated.

64. Zambia in Figures (1986), Central Statistical Office, Lusaka.

65. Cited in Clark & Keen, op. cit., p30.

66. Evans, A & Young, K, op. cit.

67. IRDP (SMCI)/NFNC (1987) op. cit.

68. A major USAID/RDSB (UNZA) household-budget survey has been underway in Zambia for some years. The results are as yet not available, but when they are, they should provide a rich and invaluable source of household level data.