

**Marketing of Agricultural Produce and Inputs  
in  
Northern Province  
Zambia**

A study prepared for

**The Norwegian Agency for International Development  
(NORAD)**

by

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# Executive Summary

## STUDY ON MARKETING OF AGRICULTURAL PRODUCE AND INPUT IN NORTHERN ZAMBIA

### Objectives of Study:

1. Establish whether observed marketing problems are related to institutional deficiencies, unnecessary regulations or other factors.
2. Establish the need for foreign support.
3. Suggest how support is to be given and through which channels.

### Legal Framework and General Policies

The marketing of agricultural produce and inputs in Zambia has been characterized by state intervention. The participation of the state, which dates back to pre-independence period and has continued up to the present, has been based largely on the premise of providing cheap food for the urban population, mainly in the Copperbelt, which produces the major source of foreign earnings - the minerals.

As a result of this intervention marketing institutions have developed more so through legislation and active government participation than as a natural response to market opportunities. The marketing process for both farm produce and and inputs has at one time or another therefore revolved around marketing boards, government companies, and government supported Cooperative Unions.

After independence, in addition to providing cheap food for the miners' market, intervention was further justified on the grounds that it was catalytic to the development of peripheral marginal areas. In this regard legal provisions in the various legislations provided for monopolistic trading in both inputs and produce by the various marketing boards.

While enjoying monopoly in trading, the boards were compelled to be buyers of last resort. The former provision ensured that the government policy of cheap food for the miners was effectively carried out, and the latter provision attempted to address the issue of development in peripheral marginal areas relative to the main markets.

In our view, the marketing problems are only partly caused by institutional deficiencies. It mainly emanated from the dual policies of:

- a) Cheap food for the urban population.
- b) Even development of the whole country and extension of production and marketing opportunities to the farthest corner without regard to cost. Deficit operations were to be covered from government coffers which often were empty.

Simultaneous pursuance of these policies has kept the price of the main food staple, mealie-meal, at a low level, effectively taxing the agricultural sector for the benefit of the urban population. This has prevented accumulation of capital and investment in the rural sector, hampered the development of a sustainable agriculture and caused serious misallocations in the economy.

The recent announcement of liberalization of agricultural marketing is an attempt to address the issue of reduction in cost. However, as long as limits are set for producer and consumer prices, and with a trading margin at an illusionary level, sufficient competition in the market and thereby "market efficiencies" are unlikely to occur. If the cooperatives are still going to be the buyers of last resort, and the floor price is set at a level which gives non-profitable margins, the cooperatives are bound to continue to be deficit operations and a drain on the treasury.

Nonetheless, maintaining deregulation as well as providing reasonable margins could greatly help reducing handling costs and is a useful transition to a fully fledged free competitive market situation which the government hopes to achieve by 1993.

### **Policy Considerations**

Recent policy changes towards a more competitive market should be encouraged. Past government interventions were wasteful in terms of scarce government funds. They resulted in massive misallocation of resources, and did only partially achieve the welfare goals.

Virtually all agricultural products except maize have now been deregulated, with prices fluctuating according to demand and supply. Consumer prices for these items have not increased more than mealie-meal over the last few years. This has been achieved without government spending, and seemingly without negative welfare impacts.

The heavily subsidized expansion in maize production has already peaked. The removal of general subsidies in this sector should continue. Welfare goals should be pursued through social policy *per se*, not with agricultural policy as the main tool.

A complete deregulation of the maize sector will have profound impacts on the economy:

- \* The area planted in maize will continue to decrease till it has found a sustainable level. Production of other crops will increase.
- \* The price of mealie-meal will increase substantially, an educated guess is in excess of 50%.
- \* The urban population without possibilities for own food production will be hardest hit. The urban poor will be in a very difficult position. This may cause a



reversal in in the rural-urban migration. Social programs may be necessary to cushion the impact during the transition period.

- \* The diet will change somewhat, with more emphasis on traditional foods. This may result in an improved diet.
- \* The consumption of chemical fertilizers will be reduced.
- \* Deregulation will result in seasonal and regional price differences.
- \* Commercial producers will benefit from the deregulation.
- \* Producers located close to the consumers will benefit from removal of the transport subsidies, as will those located near major transportation routes.
- \* The Northern Province, located away from major markets for both inputs and produce, will be at a comparative disadvantage. Those in the peripheral areas of the Province will be hardest hit as far as their participation in the commercial market is concerned. Some export opportunities exist to bordering countries. Resource poor individuals will be worst off. Female producers make up the majority of this group.
- \* The major obstacle is the lack of infrastructure making import-export activities more costly or impossible.
- \* The government lacks necessary funds to provide such infrastructure, and to mount supporting measures for those most negatively affected.
- \* The government is still caught between two conflicting goals: on one hand an expressed commitment to free trade and economic efficiency, on the other hand the painful issue of social welfare which no pragmatic, democratically based government can ignore. The current state of the Zambian economy calls for adherence to the efficiency goal. Pursuance of this goal is urged by IMF and important donors. In the short run, the impacts of this adjustment may undermine the public support for the current government.

### **Recommendations for NORAD:**

1. Accelerate the improvements in rural infrastructure in the Northern Province. This will in fact give most benefits to the poorest segment of the population.

- \* improved road network, especially rural feeder roads. This should be done with a labour intensive approach, creating both local income and commitment.
- \* agreements with regard to maintenance of rural feeder roads should be made with the primary beneficiaries, to avoid further drain on public funds.
- \* expanded coverage with storage sheds and depots in the region.

\* intensify the supply of oxen for haulage to/from storage sheds, depots and market places.

2. Involvement with the private marketing sector should be restricted to supply of start-up capital for essential and sustainable activities to strategically selected targets. The private sector has been hamstrung by three key factors;

- a) Government restrictions and interventions reducing profit-margins.
- b) Lack of physical infrastructure.
- c) Lack of venture-capital.

When legal constraints are removed, and prices allowed to fluctuate, the private sector will operate where they find it profitable. Improved infrastructure will give traders access to buyers/sellers at reduced cost.

Venture-capital will still be a problem. For NORAD, the Small Scale Enterprise Development Project may be used as a tool for specific targets.

Commercial banks, who need guarantees or injection of capital, have currently a lower effective interest rate than Lima Bank. They also have a better loan recovery rate.

General transport subsidies should be avoided. It will create misallocations in the production on a non-sustainable basis. Private transporters are making money in the Province today, and services are slowly expanding. Venture-capital is needed to accelerate this expansion, especially for combined passenger/goods transport. This would especially benefit small scale marketing agents, mostly women without own means of transport.

Emergent producers should when needed receive credit to enter commercial agriculture. This should especially favour women. The credit should be on a one-time-only basis, so that it becomes a vehicle for entering the sector, not a hidden subsidy for sub-optimal production which cannot be sustained.

3. Support to the cooperative movement can be an effective tool of reaching the resource poor in the villages, especially women. Current operations of the top-down cooperative structure are costly, inefficient and with poor foundation and response at the grass-roots level.

Therefore, the current NORAD support to the cooperative movement in the Northern Province should be revised along the following lines, taking advantage of the current and forthcoming changes in the marketing and distribution systems to lower marketing costs and improve services, but simultaneously providing needed development support to its target group:

- a) The support to get the Northern Cooperative Union (NCU) accounts updated and audited should be continued till the task is completed, so that the true picture of the Provincial CU operations becomes clear. Only on this basis can its activities be assessed and revamped. If more resources are required to finish this in a few months, they should be provided.

b) NCU should be a service institution to its members. It should be basically self-financed through commercial ventures which also benefit its members (warehousing, wholesale, workshop, hammermill maintenance and repairs, processing, etc.) NCU marketing activities should be curtailed.

c) NCU should provide two services requiring and deserving external support to District Cooperative Unions (DCU's), Primary Cooperative Societies (PSU's), and most importantly, to "Neighbour Coops" or "Village Coops" at the grass-roots level. These are:

\*training and development to members and staff

\*accounting and auditing

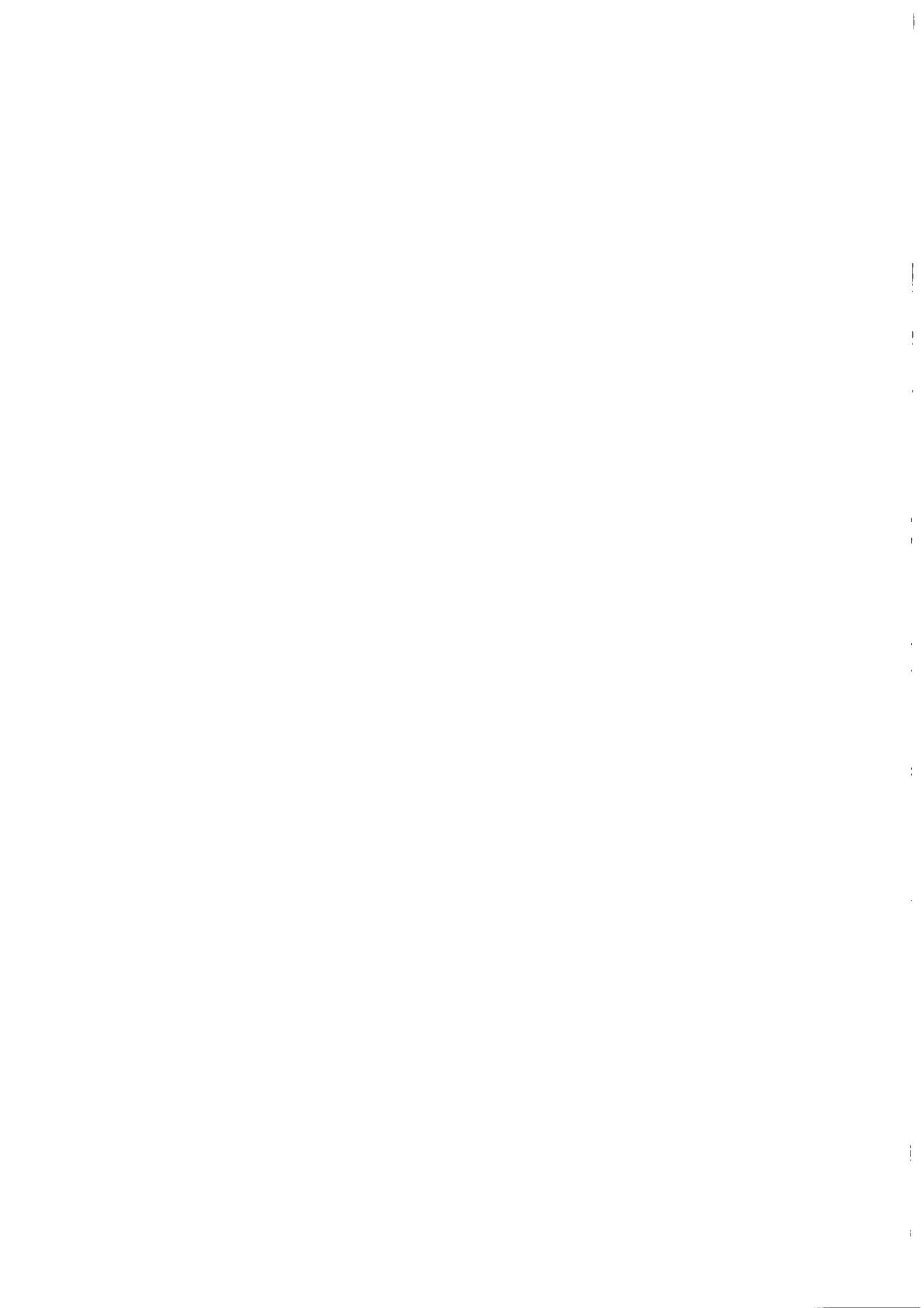
These two services should be the focus of NORAD support to the cooperative movement. It is imperative that the services are oriented to and reach the true grassroots level, which is below the Primary Societies, at depot/shed level. Functional "subcommittees" have already been formed at this level in a few Primary Societies. Subdividing the current large Primary Societies (2000-3000 members) into smaller and homogeneous producer groups around local common interest objects/activities such as sheds, depots, storage, distribution and milling, may create "true" cooperatives which respond to the needs of the members rather than acting as government agents. Smaller cooperative entities are likely to be the most conducive environment for women's active coop participation.

External support in establishing and making viable such neighbourhood units will materially enhance the weaker rural groups in coping with the dramatic changes which Zambia is facing as a result of the deregulation and trade liberalization. It will not hinder attaining efficiency in marketing, but will significantly assist in pursuing the welfare policy of the government, a policy which otherwise is in jeopardy.



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## **ACRONYMS**

<b>AFC</b>	<b>Agricultural Finance Company</b>
<b>CCS</b>	<b>Cooperative Credit Scheme</b>
<b>CPCU</b>	<b>Central Province Cooperative Union</b>
<b>CPI</b>	<b>Consumer Price Index</b>
<b>CSO</b>	<b>Central Statistical Office</b>
<b>CUZA(Z)</b>	<b>Credit Union and Savings Association</b>
<b>DCU</b>	<b>District Cooperative Union</b>
<b>ECU</b>	<b>Eastern Cooperative Union</b>
<b>FNDP</b>	<b>Fourth National Development Plan</b>
<b>GDP</b>	<b>Gross Domestic Product</b>
<b>ISTA</b>	<b>International Seed Testing Association</b>
<b>LCU</b>	<b>Luapula Cooperative Union</b>
<b>LINTCO</b>	<b>Lint Company of Zambia</b>
<b>MACO</b>	<b>Ministry of Agriculture and Cooperatives</b>
<b>MOA</b>	<b>Ministry of Agriculture</b>
<b>Namboard</b>	<b>National Agricultural Marketing Board</b>
<b>NATCO</b>	<b>National Tobacco Company</b>
<b>NCDP</b>	<b>National Commission for Development Planning</b>
<b>NCU</b>	<b>Northern Cooperative Union</b>
<b>NCZ</b>	<b>Nitrogen Chemicals of Zambia</b>
<b>NWCU</b>	<b>North-Western Cooperative Union</b>
<b>OECD</b>	<b>Organisation for Economic Cooperation and Development</b>
<b>PCU</b>	<b>Provincial Cooperative Union</b>
<b>RCACS</b>	<b>Rural Cooperative Agricultural Credit Scheme</b>
<b>SCCI</b>	<b>Seed Control and Certification Institute</b>
<b>SPCMU</b>	<b>Southern Province Cooperative Marketing Union</b>
<b>TAZARA</b>	<b>Tanzania-Zambia Railway</b>
<b>U.S.</b>	<b>United States</b>
<b>WPCU</b>	<b>Western Province Cooperative Union</b>
<b>ZAMSEED</b>	<b>Zambia Seed Company Limited</b>
<b>ZCF</b>	<b>Zambia Cooperative Federation</b>
<b>ZSGA</b>	<b>Zambia Seed Growers Association</b>
<b>ZSPA</b>	<b>Zambia Seed Producers Association</b>

## **AGRICULTURAL MARKETING : LEGAL FRAMEWORK AND GENERAL POLICIES**

The marketing of agricultural produce and inputs in Zambia has been characterized by state intervention. The participation of the state, which dates back to pre-independence period has continued up to the present. It has been based largely on the premise of providing cheap food for the urban population, mainly in the Copperbelt, which produces the major source of foreign earnings - the minerals.

As a result of this intervention marketing institutions have developed more so through legislation and active government participation than as a natural response to market opportunities. The marketing process for both farm produce and and inputs has at one time or another revolved around marketing boards (GMB, ARMB, Namboard, DPB, TBZ), government companies (Lintco, Zahort, NATCO, Zamseed, Cold Storage, ZAPP, government owned millers) and government supported Cooperative Unions.

After independence, in addition to providing cheap food for the miners' market, intervention was further justified on the grounds that it was catalytic to the development of peripheral marginal areas. In this regard legal provisions provided for monopolistic trading in both inputs and produce by the various marketing boards.

While enjoying monopoly in trading, the boards were also compelled to be buyers of last resort. The former provision ensured that the government policy of cheap food for the miners was effectively carried out. The latter provision attempted to address the issue of development in peripheral marginal areas relative to the main markets.

Applying this general policy of legal framework to the agricultural production and marketing in the Northern Province, the two most relevant legislations are:

The National Agricultural Marketing Act of 1969 and  
The Cooperative Societies Act of 1970.

The Marketing Act prescribed, among other things, that the marketing of agricultural produce as well as the supply of inputs, including external trade, would be the sole responsibility of Namboard. Other organizations could only be its agents in the event Namboard so deemed fit.

The Cooperative Societies Act provided on the the other hand for the establishment of cooperatives as independent private organizations to do business on behalf of its members for their benefit. The Act provides for the

development of the cooperative movement as mass organizations on a self-help basis.

Most cooperatives in Zambia are agricultural based unless other legislation give them the freedom of undertaking business in the manner most beneficial to their shareholders. Thus under the National Agricultural Marketing Act of 1969 the cooperative unions can only trade as agents in the buying of produce and distribution of inputs.

The development of the cooperative movement in Zambia, while being within the legal framework of the provisions of the Cooperative Societies Act of 1970, has largely been a response to changing institutional arrangements arising from government's attempt to lower agricultural marketing costs, while at the same time keeping its hand on the consumer price level.

The cooperatives have largely followed a top-downward development. For example, in 1981, after massive criticism of Namboard's inefficiency in providing inputs on time, the government decided to restrict Namboard to inter-provincial and external trade. This decision resulted in the establishment of Provincial Cooperative Unions (PCU) which had no grassroots base, i.e. functioning Primary Societies to handle intra-provincial maize and fertilizer marketing.

The cooperatives were, until 1988/89 crop season, organized on a three tier structure consisting of

- Primary Cooperative Societies (PCS)
- Provincial Cooperative Unions (PCU)
- Zambia Cooperative Federation (ZCF)

In 1988/89 the government decided to insert another tier between the PCUs and the PCSs, in the form of District Cooperative Unions (DCUs). This new feature in the cooperative structure is still in the process of finding its place, currently with no proper shareholders. Most of its intended shareholders (Primary Societies) are still affiliated directly to the PCUs. The DCUs are therefore existing without necessarily complying with the provisions of the Cooperative Act.

In its quest to streamline coop marketing operations and reduce costs, the government decided in June 1989 to disband Namboard and transfer the remaining functions (external and intra-provincial trade in maize and fertilizer) to other organizations. CFZ, the apex organization of the cooperative movement, was handed the responsibility for trade in maize, while the Nitrogen Chemicals of Zambia (NCZ), previously a fertilizer producer, became responsible for import and inter-provincial trade of fertilizers. Along with the

new duties, most of the assets and liabilities of Namboard were handed over to the two organizations, seemingly without clear policy guide-lines.

The transfer of of public assets and liabilities from Namboard (a government body) to ZCF (the coop apex organization legally owned by by private individuals through their memberships in the primary societies) raises accountability questions regarding tax-payers money (Auditor General's Report 1990). This is not a concern of this study. But of direct interest to this study is the question to which extent the transfer will result in the cost reductions, which was the main objective of the transfer.

In the whole process of transferring the functions of Namboard to the cooperatives and NCZ one fails to capture concrete evidence for government decisions to effect institutional changes except its precept that such a change would reduce costs. Admittedly there was room for increased operational efficiency of Namboard, with possible cost reductions through for instance reorganisation of its structure, without necessarily reducing or indeed dissolving its functions.

Thus one is lead to believe that the government took these decisions because the chronic problems of agricultural marketing were all along perceived as being inherent in the institutional arrangements performing the marketing functions, rather than as result of the underlying policy issues outlined above.

In fact, it was the policy which has given rise to the institutional arrangements. Therefore, as long as the policy issues were not re-appraised, institutional changes merely transferred the problems without resolving them. This is clearly evidenced in the chaos in the market following Namboard's exit, in terms of financing crop purchase, transport of crops to safe storage, distribution of inputs etc. As late as December 1990 some farmers were still awaiting pick-up of their maize, and many farmers have as of mid-March 1991 not received their pay for deliveries last cropping season. The same "inefficiency" fury which led to the dissolution of Namboard is now heaped on the institutions that were forced to take over Namboard's functions. This suggests that the diagnosis of the problem was incomplete and the solutions were piece-meal and unsatisfactory.

In our view, the marketing problems are only indirectly related to institutional deficiencies, but mainly emanating from the dual policies of

- a) cheap food for the urban population
- b) even development of the whole country and extension of production and marketing opportunities to the most distant corner without regard to cost, deficit operations to be covered from government coffers which often were empty.

In September 1990 the government took a radical step in the marketing arrangement for maize, whereby anybody are allowed to collect maize and sell it to millers. This fully removes the statutory monopoly on maize marketing insofar as institutional arrangements are concerned. Those entering the market for the 1990 marketing season were however obliged to operate within a price band of Kw 284 at farmgate and 442 at millgate per 90kg bag, leaving a margin of Kw 158 for handling and transport. This margin is so low that it effectively has kept all but the coops out of maize marketing, except in production areas close to mills. The coops have to operate, even though they are incurring losses. Inter-provincial trade losses (transport charges from Kasama to the Copperbelt are over Kw 500 per 90 kg bag) are supposed to be reimbursed by the government, but the payment is often late or partial.

This recent announcement of liberalization of agricultural marketing is a further attempt to address the issue of reduction in cost, however, as long as limits are set for producer and consumer prices, and with a trading margin at an illusionary level, sufficient competition in the market and thereby "market efficiencies" are unlikely to occur.

Nonetheless, maintaining deregulation as well as providing reasonable margins could greatly help reducing handling costs and is a useful transition to a fully fledged free competitive market situation which the government hopes to achieve by 1993.

## PRICING AND SUBSIDY POLICIES

The policy of cheap food for the urban population has meant active government intervention in the marketing system. The main intervention tool has been pricing and subsidy administration. By this process, the government sets uniform produce and fertilizer prices. Government marketing institutions do the marketing of produce and distribution of fertilizer for a fee determined and paid by the Ministry of Finance or other government agencies.

The discussion that follows below uses maize and fertilizer marketing as examples because the pricing and subsidy policies have largely centred around the marketing of these two products.

In conformity with the general policy of cheap food, pricing policies for maize and fertilizer have been aimed largely at achieving self sufficiency at regional and national level as well as to address the question of equity. The question of "fair compensation to all farmers" regardless their location vis-a-vis consumption centres has been the main consideration and driving force behind the introduction of and maintenance of uniform farm gate prices across the country irrespective of how much it costs to ship out maize or ship in fertilizer. It appears that social welfare rather than economic considerations have dominated the pricing and subsidy policy. The main effect of this policy has been to encourage maize production in Eastern and Northern Provinces. Being far from the main consumption centres, this resulted in a substantial increase in transport costs.

The maize producer price has generally been below that prevailing at the border. Given the closed market for maize (exports were prohibited) this has meant that the regulated pricing policy for agricultural produce has taxed the farmers, most of whom are in low income brackets.

In order to keep consumer prices at "affordable" levels the government equally fixes mealie meal retail prices while paying the marketing system subsidies to meet the handling costs. These subsidies appear to be inadequate and have resulted in annual loss accumulation by the marketing institutions and most of their capital has been eroded. In an attempt to lower costs to the farmer, the government has fixed fertilizer prices on a pan territorial basis and like for maize, marketing subsidies have been paid to the marketing organizations without reflecting real cost of fertilizer to the user.

On face value, one is led to conclude that farmers are being subsidized in the production of maize. However, an analysis of the method used in arriving at maize producer price and that of mealie meal indicates that fertilizer subsidy as long as it is used in maize production is in fact a subsidy to consumers. By using cost of production method, the fertilizer cost component is that fixed by the government rather than actual. This lowers the producer price at which the marketing agencies buy the crop which in turn lowers the into-mill price.



The actual beneficiary of subsidized fertilizer used in growing maize is the consumer.

However, full benefit of subsidy on fertilizer accrues to farmers who use fertilizer on crops other than maize where prices are not rigidly controlled. It is estimated that 90% of all the fertilizer bought by farmers is used on maize and that almost all of the fertilizer bought by small scale farmers is used on maize. Thus only the 10% of fertilizer that goes to other crops is actually subsidized. Here the main beneficiaries are the bigger and diversified producers. Thus in itself, fertilizer subsidy benefit different producers unequally. Its main effect has been to reduce in absolute terms the amount of credit a farmer may need relative to what it would have been had the economic price been charged.

### **Subsidy Structure and Magnitude**

The Republic of Zambia's "Evaluation of the Performance of Zambia's Maize Subsector" (p.9-10) summarizes the main direct subsidy instruments to the subsector in the 1980's as follows :

- \* a price differential subsidy on commercial fertilizer
- \* a marketing subsidy on commercial fertilizer which covered 50% of the cost of marketing
- \* a price differential to the then-existing Namboard and PCUs to cover the difference between the Namboard and PCU purchase and selling price of maize
- \* a marketing subsidy, first to Namboard and later to the cooperative unions covering all costs of intra-provincial maize marketing
- \* a marketing subsidy to cover the cost of moving maize from surplus to deficit provinces (the inter-provincial marketing subsidy)
- \* a price differential subsidy on commercial imports of maize (when necessary) to cover the difference between the buying and selling price of imported maize
- \* a subsidy to Zamzeed to cover the added cost of imported seed when imports were more expensive than domestic maize
- \* the provision of coupons to disadvantaged urban and peri-urban consumers (annual income less than K20,500) to reduce their expenses on mealie-meal
- \* a price differential subsidy to millers in those years in which the margin between the into-mill price and the selling price of mealie-meal did not cover the milling costs

An estimate of the direct payments by the government the last four years are provided below. Note that the year is the cropping year, not the calendar

year, thus the fertilizer subsidies shown for 1991 were incurred in the calendar year 1990.

### Fertilizer Subsidy (K million)

Year*	Maize*	Other Crops**	Total***
1988	194.64	10.22	205.90
1989	321.30	35.70	357.00
1990	855.00	95.00	950.00
1991**	1667.70	185.50	1853.00

\* Cropping Year

\*\* Estimated from total based on 90% of fertilizer used on maize. Ministry of Finance estimate 80% over the last 10 years, but the authors believe 90 % is more correct for the period covered here.

\*\*\* Source: Ministry of Finance and own estimates.

### Maize Subsidy (K million)

Year*	Handling	Coupons	Total***
1988	770	-	770
1989	700	600	1300
1990	1303	1300	2603
1991**	2478	1246	3724

\* Cropping Year

\*\* Estimate

\*\*\* Source: Ministry of Finance and own estimates.

Government support to maize research and extension might be considered a further subsidy to the subsector. These are not included here as they are generally regarded as long-term productive investments. The expenditures

listed above are clearly recurrent with no future returns expected. Also not included is a 15% premium paid to Nitrogen Chemicals of Zambia (NCZ) to enable it to supply fertilizer to the domestic market in competition with imports. This is seen as a subsidy to the industrial sector, not to agriculture.

The combined burden of the subsidies to the maize subsector is a heavy one, and have lately become intolerable. In the early part of the 1980's, maize subsidies were in the order of 5 to 10% of the total government budget. By the latter part of the 1980's it had increased to 16% of the budget.

In 1990, maize related subsidies were in excess of the budget deficit. The figure below illustrates this:

**MAIZE RELATED SUBSIDIES IN RELATION TO GOVERNMENT BUDGET (RECURRENT AND CAPITAL) AND BUDGET DEFICIT**

Year*	Govt	Budget	<u>Maize Subsidies**</u>	
	budget (K'm)	deficit (K'm)	(K'm)	% of Budget
1980	1657.6	160.3	154.0	9.3
1981	1388.6	155.7	87.1	6.3
1982	1643.2	658.1	138.0	8.4
1983	1475.9	8.6	124.7	8.4
1984	1484.6	284.8	81.6	5.5
1985	2184.3	280.4	134.0	6.1
1986	5383.6	1025.7	565.0	10.5
1987	5837.5	2146.8	638.4	10.9
1988	8359.3	1531.2	1413.0	16.9
1989	9838.0	3699.0	1585.6	16.1
1990	24503.3	2801.4	3363.9	13.7

Source: Ministry of Finance, Financial Report, as reported in GRZ: Evaluation of the Performance of Zambia's Maize Subsector, p.15.

\* Calendar year.

\*\* Based on the assumption that 80% of total agricultural subsidies go to the maize subsector.

To meet this drain on public funds the government has turned to increased borrowing and expansion in the money supply. Thus the deficit has contributed to the growing rate of inflation.

The issue of pricing and subsidies has pre-occupied government since the mid 1980s in the hope of improving marketing efficiency. Some subsidies such as price differentials of maize and fertilizer have in the process been eliminated, thereby allowing some increase in user prices.

In spite of this effort the magnitude of subsidies continues to rise in nominal terms thereby exerting excessive pressure on the government budget. In the face of falling revenues and a weak economy the choices have become increasingly limited. In the recent past questions have been and are now being asked. Does a pricing system which ignores the usual parameters of supply and demand in maize marketing and fertilizer distribution benefit today's economy as it did the one of the 1960s? Should maize continue to be produced in areas which impose a high transportation cost? Is it not the subsidy of fertilizers and mealie meal which has allowed the across the border trade to thrive? Is the inability of the marketing system to function smoothly, such as financing the crop purchase, storage, late payments to farmers etc. due largely to inept management of excessive state intervention in the market? Why is it that when price controls have been lifted e.g. in the case of vegetables, beef, beans, wheat etc. such market problems do tend to be minimized or completely disappear?

Answering these questions in the correct perspective has made government to realize, admittedly out of budgetary pressure, that the diagnosis to the perennial problem of maize and fertilizer marketing as being inherent in institutional arrangement was merely a symptom. The real cause is the pricing interventions. Most important, there appears to be a general realization at policy making level that social welfare considerations when used to determine economic policy largely result in inefficiencies, loss of incentives and market distortions without any real benefit accruing to the intended target group.

In the wake of this realization, government has taken decisions, as part of its restructuring programme, to gradually make the maize/fertilizer marketing more responsive to the needs of the market i.e. make it more competitive and with it reduce government role both in the financing of crop purchases as well as paying subsidies.

The first step towards this goal was taken in September 1990 when the government allowed entry in the maize marketing of others in addition to the Cooperative Movement within the prices set at K284 per bag to the farmer and K442 at the mill-gate. Furthermore, the path to export markets is being paved. In the same policy announcement as government has allowed production in excess of 10 000 bags to be exported.

For the 1991 marketing season (May- September 1991) the prices have been set at K500.00 per bag to the farmer and to be sold to the miller at a maximum price of K750.00 allowing a margin of K20.00. More so, individuals are now permitted to buy and mill their own maize. This is expected to somewhat reduce price of mealie meal as meal price can easily be less than the maximum allowed. To achieve maximum effect through direct milling, a programme of widespreading hammermills in peri-urban and rural centres has been mounted through SIDO and VIS. The programme is expected to be completed by 1993 when the market will be fully decontrolled and free.

For fertilizers, the market has been deregulated and anyone is now free to import fertilizers. This will substantially push up the price of fertilizers. The cooperatives will be compelled to operate in a more business-like manner and/or diversify their operations into non-marketing activities or indeed face a natural death. Furthermore, different production patterns and crop mix especially in Eastern Province and Northern Province are likely to emerge which may not necessarily be bad from both an ecological and a nutritional point of view.

## SUMMARIES OF RELATED STUDIES AND DOCUMENTS

Norwegian Assistance to Agricultural and Rural Development in Northern Province, Zambia. Programme Review May-June 1990, Scanteam a.s.

The document reviews all NORAD supported activities in the Northern Province. Two of these are linked to agriculture marketing:

### **ZAM 033** Cooperative Savings and Credit Project.

1990 Budget : NOK.3.0 million

Stated objectives: To provide credit and credit advice to farmers/members of primary societies with special attention to small scale farmers.

Operational impact: Increased production of maize through seasonal loans to farmers, and investments in hammer mills and oxen on very favourable terms by primary societies.

Scanteam conclusion: The project contributes to important institution building in rural areas, but availability of credit may not have a significant impact on objectives such as increased production, productivity, improved standard of living or self-reliance. The project is facing three major problems: inflation, mismanagement and poor repayment of loans.

Scanteam recommendation: Discontinuance of Norwegian support.

### **ZAM 038** Local Co-operative Development Project.

1990 Budget: NOK 8.8 million.

Stated objective: To assist in developing independent democratic and economically well-functioning co-operatives in the Northern Province with emphasis on the primary societies and women, to the benefit of the members and rural population.

Operational impact: NCU has contributed to the maize boom, accelerated commercialization of agriculture in NP and increased income of better-resourced farmers. In so doing, it has also exerted negative impacts on the environment and nutritional intake of consumers, and reduced the farmers' vulnerability as regards fluctuation in the price and availability of inputs. It has also reduced crop losses through improved storage facilities. Sales of hammer mills have increased local capability to produce mealie meal. Insufficient data to judge impact of coop consumer shops.

Scanteam conclusion: NCU is the instrument by which maize is extracted from NP at a low cost to supply maize flour to urban areas. Donor support and

monopoly privileges of NCU are important elements in the agricultural and marketing economics of NP. To the extent that the maize marketing, haulage, retailing and workshops functions of NCU are providing useful services, they should be able to compete with commercial ventures, without subsidization. However, the operation NCU has for years been hampered by rampant mismanagement and financial malpractices.

**Scanteam recommendation:** In light of numerous and severe negative attributes of NCU-operations, NCU should be pruned, and concentrate on essential activities. Continued NORAD support cannot be justified.

**Republic of Zambia:** Social Action Plan 1990-93 Consultative Group for Zambia, April 1990. The GRZ is inviting donor participation in implementing its multi-sectoral social Action Programme (SAP)

The strategy underlying the SAP calls for measures not just in the social sector (health and education), but in all sectors where there is potential to aid the poorest and most vulnerable groups. Of particular interest to the study are the following strategies:

-boost agricultural production, with special emphasis on small farms and units headed by women, and diversification of production away from hybrid maize.

-provide more income earning opportunities to poor households, by supporting production of non-maize commercial crops, development of hammer mills and hand mills, expanded rural non-farm employment opportunities through small scale enterprise development and public works on infrastructure such as rural feeder roads and market places.

SAP takes note of the extreme deficiencies in roads, market places and public transport. It states that the extensive decline and deterioration of these vital elements of basic physical infrastructure have multiple adverse effects including

- i) -making it more difficult and costly for people to move around, reducing mobility and employment/income opportunities and adding costs
- ii) -inhibiting the development of commerce
- iii) -lowering productivity generally.

SAP emphasises that the above problems are particularly critical to the most disadvantaged segments of the population.

Regarding Rural Feeder Road Maintenance and Improvement, SAP envisages a labour-intensive public works programme aimed at eliminating the marketing bottleneck of deteriorated and offer vulnerable district roads. With regard to marketplaces, SAP aims to improve the whole section, from small village markets to big complexes in urban centers (central authorities, district councils and cooperatives will have to collaborate). In addition to the

physical facilities needed, there is a need to eliminate the excessively restrictive regulations and controls on markets, that is, who can trade, where, how, when and at what price.

The liberalization of marketing is a vital adjunct to the liberalization of prices now underway, and essential for economic growth and raising income. SAP states explicitly that there will be need for policy changes that allow buyers and sellers greater flexibility as regards access of new markets and negotiations of prices.

#### A new Fertilizer Marketing system for Zambia: May 1989

Fertilizer is a critical input to Zambia's agricultural production and its timely availability at "affordable" cost to the farmer, particularly the small scale cultivator, has greatly influenced yields and overall output of particularly maize, the staple crop.

An effective and efficient fertilizer marketing system is a must for Zambia. The fertilizer marketing system, the report points out, is currently faced with logistical problems, pricing distortions and poor management. This has resulted in losses of well over 10%, as well as leakage to neighbouring countries, estimated at 20,000 tonnes in 1988.

The study done, almost two years ago, proposes that NCZ, the sole producer of fertilizer take over from Namboard the importation of fertilizers and become the primary supplier. A number of reasons are given to justify this. One important reason is that ZCZ can quickly identify the need to import fertilizers when local production cannot satisfy demands. In order for this system to work, the study recommends that:

- a) ownership should pass as the product moves down along the chain unlike the present where the Unions are agents and the product is Namboard's.
- b) NCDL should continue to liaise with donors to get fertilizer support, and should work in close collaboration with NCZ to enable the latter to adjust its commercial inputs.
- c) NCZ as central authority, should allow as many dealers as possible to enter the fertilizer distribution trade to allow increased access to fertilizer by farmers at competitive prices.
- d) A more flexible pricing system needs to be in place, based on actual costs but allowing sufficient margins for the marketing system to perform efficiently.
  - i) Initial price or Provincial headquarters to concepts of actual cost at NCZ (Lusaka/Kafue) + warehousing cost + margin for retailing.
  - ii) As the marketing system matures a shift to regional and then to open supply + demand, determined price is then allowed to develop.



e) The report emphasises the need for timely allocation of foreign exchange. The report cautions that for the system to perform effectively, it must be implemented in its entirety over a phased period to allow sufficient time for planning and implementation.

It quantifies potential benefits of this system to K490 million annually, when fully implemented by 1992.

### Evaluation of the Performance of Zambia's Maize Subsector, August, 1990

Maize production is, after copper, the most important economic commodity and yet it is highly regulated with controlled producer and consumer prices.

Substantial resources in agriculture go to the production and marketing of maize. The report discusses at length the distortions and inefficient utilization of resources that have arisen from excessive government control of the maize subsector, and how, over the years, government has attempted, with very little success, to streamline the marketing system.

Chapter III discusses the maize production patterns in terms of area, yields, inputs supply system and its inadequacy, agronomic capacities of soils and fertilizer application and questions the present system whereby only certain standard fertilizers are in use. It points out issues needing attention in the supply of fertilizer, credit, farm machinery and landownership issues. These physical services to maize production are far from effective, but could substantially increase maize production if they were made efficient.

The farm level pricing of maize, using cost of production method, does not capture all the farmers costs and market factors, and alternative use of resources are ignored. The uniformity of these prices, both regionally and over time, has sent wrong signals about production as well as disposal of the crop. It has also disaligned the internal prices from those of neighbouring countries penalizing farmers even more. Issues of inadequate weighing and grading are also highlighted.

In Chapter IV, the report examines maize production and marketing alternatives, emphasizing reduction of the subsidy burden on the government without necessarily decreasing maize production. It sets options for the delivery of the basic inputs seed, fertilizers, farm implements and draught power, credit and land.

Chapter V discusses the marketing of maize and the problems currently besetting the system with regard to procurement, storage, stock management, transportation, processing, retailing and associated costings of performing these functions and raises a number of issues needing addressing, if the market is to operate efficiently.

In Chapter VI, four options to marketing are presented ranging from the present administered system to a fully controlled system with associated implications for each option.

Finally Chapter VII sets out the timetable for phasing the various activities into place, to ensure minimum disruption to the production process, as the market adjusts towards a free decontrolled operational mechanism.

## **THE IMPACT OF PRICING AND SUBSIDY POLICY ON THE MARKET PERFORMANCE**

We have earlier alluded to the distortions caused by pricing policies adopted by the government and the resultant financial subventions in form of subsidies. Economically, these policies created an environment for the institutionalization of inefficiencies as well as taxing the producer. This has had its own effect on production patterns as well as increasing income inequities. More so, they have inhibited the development of business management acumen in the market, relegating the profitability aspects of the business to as a secondary objective in setting operational plans.

In addition to pricing policy, government has, from time to time, issued administrative instructions for marketing institutions to undertake un-economic marketing functions. For example, Cooperatives are obliged to buy yellow maize at the same price set for white maize. The effective demand for yellow maize is different (often lower) than that of white maize because it is not a preferred mealie meal by consumers. The Cooperatives therefore, have difficulties in disposing of yellow maize. At the time of this study, substantial quantities of yellow maize from the 1989/90 marketing season were in the warehouses of CPMU unsold. This holding of undesired inventory contributes to weak financial positions of the Cooperatives especially so when purchases are made from bank overdrafts. To date government owes NCU K9.6 million for maize for the 1987/88 season.

Last year the government forced NCU to undertake door to door purchases of soaked and therefore worthless maize in Isoka District. The government promised to reimburse NCU, but has not done so yet. The outstanding transport cost amounts to about K8 mill. The above examples are by no means complete. They only help to illustrate the conditions under which Namboard and now the Cooperatives have operated. But more so they show the extent to which profit considerations are ignored. Up until now, no opportunity has existed for the marketing system to make profits in price regulated produce.

The mechanism used to determine consumer prices is tied to producer price of maize. The government fixes into-mill price at which marketing organizations release the maize as and when requested by the millers. This price is uniform throughout the season (May-April) thereby ignoring storage costs. The government equally fixes the retail prices of mealie meal based on cost of milling recovery principle plus a small margin for profit. Cost of milling information is supplied by millers. Similarly, other marketing channel costs have been determined on the basis of information supplied by marketing organizations on the cost of handling as dependent largely on the ability of

the government to come up with the money more than on whether costings supplied by marketing organizations represented cost effectiveness or efficiency.

During the earlier years of economic buoyancy government set into-mill price at below producer price and paid both price differential and handling subsidies to Namboard and Cooperative Union. The subsidies were provided by the marketing organizations. This has over the years cultured the marketing organizations into being complacent and inefficient rather than being business-like organizations. The incentive to be prudent disappears in such a system and results in unnecessary wastage (losses of produce) at the expense of the economy.

However, when the government revenues began falling short of expenditure demands, government became more conscious of saving costs. It thus began to gradually loosen its grip on the prices of a number of agricultural commodities. Today all, except maize, have been decontrolled.

At the same time the Treasury began to carefully scrutinize cost for marketing supplied by cooperatives and Namboard. Subsidies started to be determined on what government thought it cost to handle maize, using cost estimates supplied by marketing organization as reference information. Throughout the last decade (1980/90) government has fixed subsidies at levels much lower than it actually costs to handle the crop.

Given that into-mill price is seasonally uniform, the reduced subsidy levels which often are paid late anyway, have resulted in large overdraft carry-overs. It has become "normal" for cooperative unions to enter a new crop marketing season with high outstanding overdrafts, resulting in high and unnecessary financing costs. As an example, NCU paid back its 1989 bank overdraft of approximately K100 million at the beginning of 1991. This only happened after costly follow-ups with Lusaka to release outstanding subsidies. To date, last season's crop subsidies have not yet been fully paid to the Unions, nor have they paid all the farmers.

On the other hand, marketing of crops other than maize, where prices are not controlled, has proven to be profitable. Wheat, sunflower, groundnuts and beans now enter the market largely on the basis of supply and demand. Handling these crops has provided profit making opportunities for most cooperatives.

It has also backfired. In the eagerness to take opportunity of the relatively free market, but without business skills, some cooperatives have bought large quantities of commodities which they have problems selling due to temporary gluts in the market. NCU is experiencing this in the marketing of beans. At the time of this study (March 1991) the Union had 8 000 bags of mixed beans in its warehouse, out of 12 000 bags bought. Considering that a new crop of beans soon will be on the market, chances are low that this large inventory will be cleared before the new crop comes in. The Union most likely will lose a considerable amount of money, and the blame can be squarely put on its inadequate foresight and incorrect assessment of market conditions.

This incident has other repercussions. Because NCU bought all the beans they could get last year at favourable prices to the producers, a lot more acreage has been allocated to bean production this year. Now NCU is saying it will not buy any beans this year, and the ultimate loser is the producer reacting to misguided signals from NCU. To the NCU management it is a slight embarrassment, to the producers it is their livelihood. The market forces may make business executives out of the coop management, but it will be costly - to the producers.

It can therefore be concluded that the controlled and heavily regulated maize market has neither provide profit opportunities for the cooperatives, nor fostered entrepreneurship and business skills among its employees.

In such a case, the extent to which the organizations can be blamed for inefficiencies is largely academic in the negative sense of the word. The future success depends on the manner and speed with which the government acts in setting realistic prices and subsidies on the way to a more free market. In recent years both price levels (into-mill price) and magnitude of marketing subsidies (compensation for handling and transport) have been far from satisfactory, not to mention the laggardly release of compensation money.

These factors combined with frequent policy changes have resulted in a very chaotic and demoralized marketing arrangement for Zambia's main staple, maize. It baffles even a seasoned grain marketeer. Hope for the future lies in the fact that the deregulated commodities have found price levels and marketing channels which serve the country far better, and that this is recognized at top policy levels.

## FUNCTIONING AND PERFORMANCE OF THE COOPERATIVES

The history of cooperatives in Zambia is a relatively short one. Although the first Cooperative Society was registered as early as 1904, the really meaningful business activities started in the 1940's. Cooperative Unions were registered in the Eastern and Southern provinces, mainly for the marketing of agricultural produce and supply of agricultural inputs.

After independence the government encouraged the development of cooperatives in a wholesale fashion. A number of cooperative societies were formed without sufficient understanding among members. As a result, the failure rate was very high. In most cases the cooperatives came into existence through political persuasion rather than due to felt needs by its members to meet economic goals

According to the Cooperative Societies Act, the operation of a cooperative organization in Zambia is basically as a corporate body with limited liability. This means that it is a private organization which operates in accordance with its bylaws for the ultimate benefit of individual members holding shares in it. Embedded in the bylaws is the democratic control of the cooperative with the central objective of promoting the economic interest of its members.

In practice cooperatives have been used mainly as a tool to carry out government policies, economic and social. The functioning of the cooperatives has thus been characterized by:

- a) Gradual transfer of marketing responsibilities to the coops in the last decade. They became a complete market monopoly for maize and key inputs by the end of the decade.
- b) Business policy of the cooperatives has become an external variable in their operation. This is largely determined by government without necessarily being coordinated with the economic interests of the membership.
- c) As a result of a) and b), cooperatives have been financed from public funds giving government a basis to have a say in the operations of the cooperatives.
- d) Cooperatives have in practice become the only marketing outlets for key commodities, thereby having to serve both members' and non-members' interest.

- e) The monopoly status justified the government's active creation of cooperatives, even where there were no grass-roots desire to have them.

The result of the above is that the financial participation of members have been substituted by government loans. Furthermore, the cooperative employees have by and large taken control of the affairs of the cooperatives and the members have become mere observers and basically relegated to just customers of the cooperatives. The employees have their loyalty and allegiance upward towards the government and politicians, not to its members.

Thus cooperatives, while appearing on paper to be owned by individuals who have voluntarily come together to advance their economic interests, are in fact government sponsored institutions performing functions on behalf of the government affecting the wider population. The performance of the cooperatives reflects the extent of success or failure of government policy in agricultural marketing.

The main functions performed by the cooperatives are:

- a) Procurement of produce from farmers.
- b) Storage and transportation of produce.
- c) Disposal of produce to millers and other users.
- d) Distribution of seeds, fertilizer and other inputs.
- e) Supply of credit to farmers.
- f) Processing of certain agricultural commodities, i.e. milling.

We have already pointed out that the government intervention in the marketing system largely set the pace for the functioning of cooperatives in Zambia. How then have cooperatives functioned and performed under these conditions?

The functioning of the cooperatives have been interpreted largely according to whether they have been able to deliver the goods on time, without regard to

the factors influencing the deliveries. Hence functioning of the cooperatives is weighed on the basis of how fast they are seen to perform the various marketing functions. The time taken to procure produce, pay the farmers, safely store the crop are criteria often used for subjective evaluation of the performance of the cooperatives. Hence delayed payment to farmers and lack of transport and proper storage are taken as indicators of "poor" performance of the cooperatives.

Financial resources (money) are most critical to the timeliness of various operations. Their appropriation and release have important impacts on whether cooperatives are "functioning" or not. Delayed release of funds to the Cooperative Unions results in activity backlog for the coops and difficulties for the farmers who only see the coop and not the forces at play behind. It therefore goes without saying that the government behaviour and the timing of its actions are central to the functioning of the cooperatives. The coops (and previously Namboard) have been plagued with problems of being able to perform their duties on time. This failure of the coops to perform their functions are related mainly to two factors:

The first is the lack of urgency on part of the government to respond to the needs of the coops, particularly in arranging the required finance to procure the crop from farmers and paying the subsidies. Unfortunately the coops cannot do this on their own, because pricing policies inhibit their ability to accumulate own resources.

The second factor is inadequate training of the management layer in the cooperatives. This has compounded the problems of timeliness of operations. Furthermore an ill-trained management has largely been responsible for substantial physical losses in both maize and fertilizer handling. Internal financial controls are weak if not non-existent.

This has resulted in misappropriations and misapplication of substantial sums of money. Accounting is generally inadequate due to poorly trained staff, and as result auditing is often difficult. NCU accounts in Kasama have not been audited for the last three financial years ending 31.March 1990, in violation of the Union's own by-laws.

On several occasions auditors have expressed concern over the inadequacy of the accounts, but NCU has not seen fit to react. The same inadequacies continue to re-appear in subsequent accounts. For example, in 1986 cheques amounting to K3,076,143.00 were issued and honoured by the Bank, but they were not recorded in Books of Accounts. NCU has continued to record accumulated losses on its overall trading account. By 1987 accumulated



losses stood at K16,302,202 (See table below) As seen from the table, in three of the six years NCU recorded a profit which helped to reduce the losses.

### **Trading Profit and Loss, NCU Kasama (K)**

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Year	Profit (Loss)	Accumulated Profit (Loss)
1982	(4,885,373)	(8,440,964)
1983	63,095	(8,377,869)
1984	(831,403)	(9,209,272)
1985	(12,267,191)	(21,476,463)
1986	2,697,283	(20,247,231)
1987	3,945,029	(16,302,202)

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Source: Auditor General's Report 1990

NCU is not in a position to deliver more recent accounts, so it is impossible to say what the situation is today. Without audited accounts there cannot be an Annual Board Meeting . NCU has now an Interim Chairman of the Board, appointed by the government.

The accumulated losses imply erosion of shareholder capital which stood at only K13,713 in 1987. To offset this loss over K16 million would have been needed. This deficit of shareholders' funds reflects the seriousness of the problem which under normal business practice would have called for mandatory liquidation. The fact that that NCU still operates in spite of this precarious state indicates the extent of state cushioning through bank overdrafts guaranteed by the government and the payment of subsidies.

The coming of market decontrol, therefore, has significant implications for NCU. If it is to survive this storm, extensive adjustments in its operations are imperative. The organization will have to develop a market information system as well as modern (computerized) accounting and inventory control systems. These are essential for making important business decisions in a competitive

market. Indeed, NCU may have to examine whether it should continue to trade in maize. It has decided not to handle fertilizer this season.

Whatever it decides to do, the cooperative element will need to be maintained and invigorated. This means it has to be decided how it can best serve its membership, the primary societies. The prospects tend to point towards profit making ventures which can be used to finance services to the Primary Societies such as membership training, accounting, credit and auditing. It is in this area of services where donor support may be required until the operation becomes sustainable. This can be seen as an investment in human capital necessary for the development of the region, not as support to an inefficient marketing agency.

## **PRIVATE ENTERPRISE**

Private business is already involved in marketing and distribution in the Northern Province. They have in the past been hampered by restrictions on commodity trading, subsidized operation of the cooperatives, lack of capital and poor physical infra structure. With gradual deregulation of the market, much of the institutional barriers are already down or withering away.

The subsidization of unprofitable marketing of the cooperatives is on its way out, creating possibilities for interesting profit margins. A sure indicator of this is the speed with which private entrepreneurs have entered into marketing of already deregulated commodities. If the government allows reasonable margins for maize trade, the private sector has indicated its readiness. Whether this will come to pass depends on how the government will handle the sensitive issue of maize marketing. As of today (March 1991) the institutional barriers have been removed, but with controlled prices not leaving room for cost recovery and profit except for very short hauls.

The need for venture capital is a returning issue with most traders and transporters. With a negative interest rate on credit because of the high inflation, the need may have been overstated in interviews the team had with the private sector. But for many small scale entrepreneurs this is an effective barrier against market entry.

The single most important issue outside of the major population area is the poor and often non-existing road network. The more distant, the poorer the roads the higher cost of marketing. Improving this element in the marketing structure will literally open up the hinterland and allow goods and services to flow, giving the resource poor access to the market. This includes roads of all types but especially rural feeder roads and bridges. An investment of this nature has a clear social profile, as it will benefit those most who can least afford to arrange own transportation.

Given the current financial situation the government cannot be expected to carry out this much needed investment at a rate which will substantially eliminate the current high cost of isolation. This should therefore be a paramount goal for external assistance, commensurate with donor policy of addressing the poorest segment of the society.

Related to road infrastructure is also the issue of collection/delivery points of commodities. The NORAD sponsored program of shed and depot structures is clearly an intervention which not only prevents damage of goods, but cuts costs for the transporters and traders, thus benefiting society at large, but mostly those which the program intends to assist.

## **.MARKETING AND CROP PRODUCTION**

### **Important Crops**

Commercial farming in the NP has increased dramatically in the last decade when compared to the post independence period. Maize sales in 1988 for example, represented an increase of more than 2 600% over the average sales in 1960s. Over the same period, the combined sales from all other provinces have increased by only a little over 400%.

All the main preferred staples, cassava, maize, millet and sorghum grow in the NP. As outlined in the Fourth National Development Plan, development emphasises self sufficiency in staple foods. It is the policy of the province to encourage and support the production and marketing of these crops.

Population in the NP is on the increase (800 000 people) hence there is need for a corresponding increase in food production. Maize is becoming a preferred staple replacing more traditional staples of finger millet and cassava.

Commercial crop production in the NP is largely centered around the production of crops such as beans, millets and maize. However, production of maize absorbs a considerable portion of farm labour and the income from maize sales dominates that from other food crops. Because of this dominance by maize over other crops grown, key policies governing the marketing system in the province are generally aligned to suit marketing of maize. One could assume therefore, that improvements in the marketing of maize would ultimately influence marketing of other crops.

### **Amounts Produced**

Crop production and sales from the NP now have a national significance. Over the last decade provincial sales have increased by 38% per annum. NP was once a very peripheral contributor to national food reserves. For

example, from 1960 to 1979, NP never contributed more than 2% of nationally marketed maize. The situation began to change in the early 1980s to the point where by in 1988 NP contributed 11% of the marketed maize in Zambia. Even if NP can never match the levels of maize sales in Central, Eastern and Southern Provinces, NP already has a critical role to play in national food security due to the regularity of its climatic conditions.

There is only a handful of large commercial farmers in the province. Over 90% of the total farming community are small and medium scale farmers.

A survey conducted in 1988 (ARPT) showed that 38% of the total cropped area in the province was devoted to maize production. The remainder was shared among all other crops grown in the province. Out of the number of farmers interviewed, 75% grew maize. No other cash crop was as significant. From the same sample of farmers, only 14% had sold beans, 8% had sold rice, and a fraction had sold soy-beans. These results suggest that commercial farming in the NP is basically the production of maize.

About 15% of the sample were female headed households. Half of these did not grow maize while less than a quarter grew and sold maize. It was assumed that this low participation in commercial dealings of maize by this group could be due to the perennial discriminatory credit conditions that hinder women from obtaining credit in their own right.

Average yield from fields of small scale farmers was under three tonnes per hectare. It has been estimated that the potential yield of maize under improved management is more than five tonnes per hectare.

### **How commercialized is crop production ?**

Sales of maize provide a major source of income for the average small scale farmer in the NP. The mean value of the income from maize sales to all farms is equal to 66% of all income from crops and beer sales. It contributes about 48% of total household income including off-farm income. In 1987-1988 season sample budgets for small scale maize farmers in the NP indicated that farmers obtained on average a profit of K 1664 per farm (ARPT, 1989). On average, 44% of the maize harvested was retained by farm households for home consumption, bartering, and paying for labour hire. Thus more than half

of the maize is sold either through formal channels such as NCU or informally to private buyers.

### **How dispersed are production areas?**

Major agricultural areas in the province are found in zones identified by the ARPT as Zone 2 and 3 ( the central plateau and the north east plateau). These areas include Mporokoso, Mpika, Isoka, Kasama, Luwingu, Chinsali, and Mbala. These districts are spread over an area of 150 000 sq.m.

Because these districts vary in their productivity, NCU depot density, crop sales, fertilizer deliveries and accessibility vary considerably throughout the province. Mbala and Isoka districts for example, have the largest number of depots and the highest overall sales and deliveries. These are followed by Kasama, Chinsali, and Mpika Districts. Other districts have fewer depots and considerably lower turnover.

The reported increase in crop production was the result of intensive research on agronomic and socio-economic factors that influence production in the province. For example, the development and introduction of early maturing maize varieties has permitted farmers to plant maize later than before with minimal losses in yield.

Services provided by the Northern Cooperative Union (NCU), and other supporting institutions like ZAMSEED, and ZCF have all contributed positively to this increase in production. Of equal importance, is the work done to improve feeder roads in the NP by IRDP, VAP, and ZAMCAN.

These advances in agricultural development have attracted a number of potential commercial enterprises both from within and outside the province. The opening of the Tazara Corridor is likely to facilitate the opening of more commercial farm land. All these have contributed to increased crop production in the NP.

It has been reported by some researchers that production of maize in the NP is probably the most expensive in the country. This is the result of several factors. Soils in the province are generally poor requiring higher applications of fertilizer. Because of the low acidity in most soils, liming is necessary to ensure successful cropping. The high rainfall that lasts over four months causes excessive leaching of soil nutrients making soils less productive. The province together with the Eastern Province are the most peripheral maize growing areas. The province is several hundred kilometres away from the major markets such as the Copperbelt.

## **Effect of poor marketing system on crop productivity**

A number of studies have revealed that crop production in the province is greatly hampered by the gross inefficiencies of the present market system. For example, failure to supply inputs and collect produce before the onset of rains has been due to the inability of the marketing agent (NCU) to provide enough trucks to haul both input and produce. Similarly, failure by NCU to pay farmers on time has forced farmers to reduce the area cultivated because they are unable to purchase inputs on time.

It is also estimated that over 10% of the fertilizer imported and paid for by the Government is wasted due to excessive handling of bags (acceptable percent loss is 2%). The province handles about 400 000 bags of fertilizer. This implies that about 80 000 bags of fertilizer are wasted due to poor handling. This amount of fertilizer could produce an equivalent of 500 000 bags of maize, sufficient to feed 10% of the population in the province for the whole year.

Crop production and sales especially that of maize in the NP have been influenced largely by timeliness of supply of inputs. More specifically, the supply of fertilizer has the greatest impact. Efficiency of fertilizer supply can be assessed according to four different criteria:

Sufficiency of the quantity supplied to the province

Time of delivery to province

Speed of haulage to PCS depots

Equity distribution to districts within the province

Data obtained from NCU in 1987-88 and 1988-89 showed that provincial fertilizer supplies were generally insufficient relative to estimated provincial needs. In 1988-89 season for example, the requirements for fertilizer by the province was about 500 000 bags of basal dressing and 400 000 bags of top dressing fertilizer. By December 15, the province had in stock 400 000 basal and 350 000 bags of top dressing fertilizer.

Insufficiency of total quantities supplied can be compounded by late arrivals. Given the time lag in hauling fertilizer from main depots to rural depots,

fertilizer would be available to farmers too late in the season. To complicate the issue even more, the current schedule for estimating input needs is set by national authorities and cannot be adjusted by NP. It is important for the NP to devise some method of estimating its inputs needs two years in advance.

Even if the overall quantity of fertilizer supplied to the province was adequate, the efficiency of fertilizer supply can be affected by equity distribution to districts within the province. This has happened before. For example, in 1988-89 season Kasama District received a little more than half the basal fertilizer requested for but more than 100% of the top dressing fertilizer requested while other districts received slightly less than requested.

Supply of seed to the province improved in 1988-89 due to the stationing of a ZAMSEED representative in the NP. Before this, seed supply was poor both in terms of needed quantities and seed varieties. A sample survey of farmers in NP indicated that in 1987/88, about 20% of maize farmers had begun planting late (after December 15). Virtually all of these had not received their maize harvest payments and inputs on time from NCU.

In general, the late arrival of seed at the local level results in lower maize yields than would be obtained if seed were available on time. In some cases, the yield loss can be very great. For example, in the 1989-90 season, farmers who planted early avoided many of the devastating effects of the dry weather which came late in the growing season. Farmers typically begin to plant maize within two weeks or less after receiving their requisites.

It is evident from the above discussion that the inefficiencies in the marketing system greatly contribute to low crop production. Attempting to grow maize with reduced amounts of fertilizer can still produce a decent maize yield in provinces like Central and Eastern but not in the Northern Province. It has been estimated by the SPRP that yield of maize is decreased by about 30% when recommended fertilizer rates are reduced by 20%.

## **Summary**

In sum it has been shown that the present marketing system is in fact injurious to the crop production of the province. Timely delivery of inputs alone could increase crop production by as much as 4% of the total crop production in the province. Similarly, timely collection of the produce will save more than 30% of the harvested crop (equivalent to 200 000 bags of maize per year). Excessive handling of both fertilizer and produce has resulted in losses ranging from 10% to 12%. The internationally acceptable rate is 2%.



An improved marketing system may reduce current losses with up to 8%. This saving will yield up to 500 000 bags of maize (90 kg bags). It is assumed that privatisation in agricultural marketing will promote competition among traders (Cooperatives included). This competition will provide an assured market for farmers at an acceptable producer price. This will be an incentive for farmers to produce more. It is assumed that the increase in crop production will not be less than 10% of the current production level.

Peripheral farmers may not be fully serviced by the proposed improvement in marketing system. However, government programs are under way to support their marketing and sustain or increase their crop production. It is possible to increase this group's production capacity with improved access to market and with start-up credit. Government sources estimate that such an improvement in the services given to peripheral farmers can readily increase crop production by no less than 10% of the total crop production in the province. It is also estimated that the majority of farmers that will benefit from this arrangement are those in Luwingu, Chilubi, Mporokoso and Kaputa districts. Whether these government plans will be implemented remains to be seen. In the meantime, selective use of start-up credits to selected resource poor targets should be considered by donors. Female headed households which make out more than a third of all rural households should be given special consideration.

Another area of improvement is the construction of village based storage facilities. These will reduce post harvest losses and will allow farmers to sell their produce at a time when the produce will fetch a higher price. Storage at village level will consequently assist farmers to make more income from their produce. This increased income could be invested in buying more inputs to grow more, and generally improve the living standards.

## **SPECIAL ISSUE I: GENDER ISSUES**

*A Food Strategy Study*, 1981, (p 15-16) divides the Zambian rural community into:

- (a) Large scale commercial farmers with more than 40 ha. under cultivation constituting 0.1% of total farm units.
- (b) Farmers cultivating 10 to 40 ha. constituting 3,5% of all farm units.

(c) Small scale commercial farmers with 1-10 ha. make out 20.2% of all farm units.

(d) Traditional farmers with less than 1 ha. who do not purchase inputs and market little of their agriculture production. These make out 76.2% of all farm units.

One third of all rural households are women headed, and virtually all of them are found under group (d). The "Farmers" perceived by extension workers as commercially-oriented male heads of families consequently make out a very small proportion of the Zambian rural population. Furthermore they constitute a group whose own labour contribution to cash crop production is often minimal.

The tendency to regard the Zambian farmer as a commercially oriented male is rarely challenged by rural women most of whom are illiterate or ill-educated and used to think that extension services is not meant for them. The needed changes in attitude to rural women consequently have to come from policy makers and extension services.

The bias against women farmers is however often aggravated by the skewed sex ratio among extension workers and contact farmers. Where female extension is available it has often focused more or less exclusively on home economics. Consequently it can fairly be stated that the services and resources provided by GRZ to the agricultural sector have not been designed to ensure that women will be recipients or beneficiaries.

With the Fourth National Development Plan this fact has been given due concern for the first time. Hopefully it will lead to a reorientation of rural policies and practices to fully include the interests and constraints of women. The Adaptive Research Planning Teams (ARPT) may be an indication of a new approach as when gender considerations now are being incorporated into their farming system research.

### **The Fourth National Development Plan**

The Fourth National Development Plan (FNDP) emphasises the central importance of human resource development. The full integration of women in development is part of the plan's overall effort to ensure the fullest possible participation of all sections and communities in the country. Though rural women's first responsibility is that of producing food crops, women contribute

more than 50% of the labour input in the production of cash crops for the market.

Apart from water projects and hammer-mills, the plan makes a point of the fact that little has been done to alleviate the burden of rural women's farm and domestic labour activities. Women are not represented proportionate to their number in local communities, and are largely absent as title holders to land, recipients of extension services and as members in primary societies. There are still few agricultural projects which include women on an equal footing. Planning for transport and communication do rarely take the needs of women as producers and as mothers into account. (FNDP p. 444).

To ameliorate the situation of women the FNDP enlists a number of investment programmes. The following have a direct relevance for women as regards marketing of agricultural produces and inputs<sup>1</sup>. (FNDP p. 462-468)

- (1) A K. 30 mill (89-93) project to assist women to start businesses in line with the identified development priorities of the country based on local production of locally produced goods.
- (2) A K. 700.000 (89-94) project to ensure that women marketeers have facilities for preserving perishable produce; to make women aware of the improved technologies of food processing and preservation; and to make fruits and vegetables available at all seasons.
- (3) A K. 600.000 (89-91) project to identify needs to develop appropriate modes of transportation and attain improved planning that takes into consideration production and domestic transportation requirements among rural people.
- (4) A K. 500.000 (89-93) project to create awareness on the role of women as regards participation in the co-op. movement, targeted to public and NGO office bearers.
- (5) A K. 600.000 (89-93) project to conscientize lending institutions, business establishment and women on the special needs of women in productive activities.
- (6) A K. 1,5 mill. (89-93) project to study the need for training among women in the informal sector and women entrepreneurs, to design and run training programmes.

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<sup>1</sup> Projects to raise awareness and understanding of women's rights and diversified roles in society are excluded.

## **Women and the cooperative movement**

Women make out only 25% of the approx. 500.000 members of Zambia's 500 primary cooperative societies. The continuing imbalance between men and women in cooperative memberships and participation at all levels of the cooperative movement gives reason for concern. This is even more glaring when it is considered that the majority of cooperatives today are found in the rural areas where women contribute up to 80% of agricultural labour. Despite the fact that women make out more than fifty percent of the rural population very few women are on the cooperative boards of directors or participate as office holders. Thus women are largely absent from the policy formulating and decision-making machineries of these societies.

As regards the Cooperative Movement the FNDP makes the following recommendations:

- (1) make women an integral part of PS and increase their membership in the societies,
- (2) ensure that women are able to form and join PS that bring them economic benefits,
- (3) facilitate women's active participation in policy formulation and decision-making of cooperatives,
- (4) ensure that there is adequate staff to undertake the promotion of women's activities in cooperatives (FNDP p.454)

Because the cooperative movement in Zambia has largely been a men's movement, in 1986 ZCF proposed a comprehensive strategy to encourage women's increased participation. Female Training Officers were employed both at union and department level. Their job was i.a. to increase women's membership and active role in the Movement. However, because they are female officers working with women, the issue is easily ignored by everybody else, that is the men wielding power in the cooperatives.

According to Keller et al. (1987:24) there has been a tendency in the Cooperative Movement to stereotype the training skills and income generating opportunities considered "appropriate" for women. And when typical women's projects (sewing, baking, food processing) fails, the blame is put on the women participants or their trainers, and not on the fact that the so called "women's" projects are often poorly planned and funded, and launched without any assessment of markets and costs. A new development is however now taking place where women receive support in their capacity as food and

cash crop producers. The positive advantages that cooperatives can offer women in this respect include:

- (1) Promotion of women's active participation in local rural development.
- (2) Access to credit.
- (3) Access to services.

The Cooperative Movement only addresses agricultural issues related to the market. The contradictory relationship that has developed between cash crop production and household food security and nutritional requirements affects women in their daily activities. This must be taken into consideration when agricultural policies are drawn up if household interests are to be fully safeguarded. The widespread malnutrition in the Northern province is well documented i.a. in *The 1984 Nutrition Surveillance Programme Evaluation Report* (Min. of Health). According to this report 40% of the sample which included 5,25 of all children under five in the province, were malnourished, 25% being static in weight while as much as 15% of the under five were losing weight.

### **Women and credit**

Women's uneasy access to financial credits is another major issue raised in the FNDP. The lack of credit affects women's participation in income generating activities including their procurement of input supplies. Social attitudes regard women as incompetent entrepreneurs and consequently as bad risks to lending institutions. Women themselves lack confidence in their approach to seeking credit. The lack of registration and documentation in the informal sector where most women generate their incomes further limits women's access to credit. The banking system does not take the constraints women face into consideration.

With increased privatization in the agricultural sector women's lack of credit will worsen women's comparative disadvantages. In the recent past mechanisms such as revolving funds have been established to make credit available to women. Many of these efforts have been sporadic and short lived and involved very limited sums of money.

In most cases, women have been forced to organize themselves into groups to get loans. This enforced group cooperation among women consequently adds the complexities of peer cooperation to that of running a private business, a problem that male credit holders rarely have to face. Furthermore, women's needs often go beyond that of credit to include also

inputs like training or advisory services in management and business skills. As a result credit provided women may have had limited impact on their productivity.

It should be noted that women's repayment records are good, even if they do not make substantial profits for themselves. The recommended objective stated in the FNDP as regards women and credit is to ease women's access to credit in order to increase their productivity, particularly in the informal sector.

According to a study by Milimo, *Differential impacts of Zambia's macro economic and sector policies on agricultural production by female and male farmers - A consultancy report undertaken for the Women's section of NCDP, Febr. 1990*, women farmers receive disproportionately less agricultural loans than their male counterparts. While women made out 20,7% of the loanees from Lima Bank (Kabwe Branch) between 1987-88, they only got 11,3% of the money lent. In 1988/89 women made out 11% of the borrowers, touching 9,2% of the credit given. According to the same source, it was from the Lima Bank that most female credit receivers got their loans. Thus the figures from private lending institutions would be even more skewed. The reason lies not necessarily with the institutions. Even if few women received loans, 90% of those applying for credit got it, while the proportion of credit seeking men obtaining loans was 70%. ZCF information shows that though women formed only 16% of the agricultural loan applicants they made out 19,8% of those receiving loans.

Government lending policies do not discriminate against women farmers, even if extension staff does not seem to be of much help to women. The question of collateral does not arise in most cases where seasonal lending is concerned. What it takes for the small scale farmers is merely to show that she has a field to work. Some banks do however demand the husband's consent before approving loan to married women.

Milimo enlists the following reasons why married women do not apply for agricultural loans:

- \* It is not the job of a wife to get loans.
- \* Women think they are not entitled to loans or do not know how to go about getting it.
- \* Many women fear they will be unable to repay or that repayment will interfere with their household economy.

\*Women think credit is only for the well-to-do.

Women heads of households gave the following reasons why so few applied for loans:

- \* Unmarried women have little say in financial matters.
- \* Unmarried women have no husband to help them repay the loan, hence banks are not favourable to women heads of households.
- \* Credit is a male domain both on the borrowing and lending side.
- \* Illiteracy among women household heads.

Men gave the following reasons why women do not seek or get credit.

- \* Married women are under the control of the husband, and have for that reason limited powers.

### **Agricultural pricing policies**

Milimo's study considers the new pricing and marketing policies a great disadvantage for women. The disadvantage is not due to discriminating agricultural macro policies, but to the structure of Zambian rural society. Women are socialized into subservient and subordinate roles, which becomes a great constraint where agricultural services and resources are concerned.

Uncontrolled producer prices may encourage a small but strong trading community to gain control over the profitable maize market at the exclusion of the small producers. The fact that maize production has been subsidized through subsidized fertilizers, coupled with what small scale farmers consider good maize prices, have made small scale farmers shift from other mainly food crops to maize. This shift has jeopardized food crop production and contributed to increased marginalization of female farmers (p.43).

There is a well known tendency that the more commercialized a crop gets, the more the men take over. This is a trend fully recognized by the sample interviewed in the Milimo study. Here two third of the women were of the opinion that if the prices of what is now considered "women's " crops go up, men will start growing these produces and take over the control of the incomes from them.

These and other findings warrants that close attention be given to the differential impact of a decontrolled market on the financial situation and opportunities of men and women. In a culture like the one dominating the Northern Province where men and women often hold separate purses and women to a large part is the main or sole responsible for family well-fare, a further pauperization of women and of women headed households in particular may have devastating impact on urban and rural survival. The dismal nutritional situation already rampant clearly indicate that a large proportion of the population live from hand to mouth and may be unable to sustain life if their standards of living is further deteriorated. For them it will be a small consolation to know that producer prices may improve as the supply and demand may get stabilized. This will take a few years but their needs for food and incomes are immediate.

### **Marketing of crops**

Women are generally at a disadvantage when dealing with large traders who are males. Crops marketed through the big parastatals are mostly delivered either by big male commercial farmers, and/or by husbands of women who contribute most of the labour towards the production of the crops. Crops marketed through the parastatals are immediately defined as "men's crops", even when the produce are vegetables which is predominantly women's crops when produced for household consumption.

According to Milimo Zamhort which deals with fruits and vegetables (i.e. typical "women's crops") has no specific strategy or indeed dealings with female vegetable producers and marketeers. Sorghum and millet as well as tubers, sweet and irish potatoes and cassava, which are predominantly food and hence "women's crops", are not properly and adequately handled by the official marketing agencies. Because the official marketing organizations are big commercial enterprises which exclude women producers and vendors, there is need for specific strategies to address women agricultural workers and producers. There is also a need to place women in important positions in the marketing organizations.

It is mostly at minor markets and at village level that women engage in marketing their own produce. They sell groundnuts, potatoes and small and large livestock that belong to them. There is however no government policy or strategy to assist these producers to market their produce. Since there is no sure market for these crops, production is stunted and women farmers produce only what is required for their subsistence needs or what they can sell in their immediate surroundings. This means that available marketing interventions, as well as infrastructure to a much larger degree stimulate men to increase their agricultural yields than is the case for female farmers. (Milimo p. 47)



Another official marketing policy with special consequences for women farmers is the short marketing season lasting only from May to September/October. It is conceivable that some women would be more able and willing to sell maize in small quantities, and perhaps to better prices to needy households in the hunger months (Nov-Febr.). So far this has however not been possible in any organized way. In this respect a decontrolled market will benefit women who may hesitate to sell their surplus until they are sure that their family has sufficient food supplies to last until next harvest.

What women in agriculture most needs are proper market channels for the crops they grow; full participation in decision-making at household, village and district levels where decisions regarding inputs, sales and deliveries are made.

To satisfy these needs it is necessary to:

Streamline marketing functions of input and products of all crops, especially those associated with women, providing women with credit to purchase production resources, and skills in accounting and cost-benefit analysis and to assist in the socio-cultural process which will give women recognition as equal partners with their husbands.

## **SPECIAL ISSUE II: SCALE OF FARMING OPERATIONS AND INCOME DISTRIBUTION**

As has been shown throughout this study, the commercial farmers stand to reap most of the benefits of the coming deregulation of agricultural marketing. This is so because of their generally central location, stronger capital situation and strength in the marketplace, economies of scale and better managerial skills.

The study has therefore focussed on the problems and opportunities of the emergent and small scale subsistence farmers which includes the majority of female farmers in the region. This focus has been interwoven in the analysis above, and no repetition of these considerations are offered here.

But it should be stressed again that the income distribution is likely to be more skewed in favor of the resource-strong, and that investment in rural infrastructure is the most efficient means towards balancing this impact when

operating in a liberalized economy. The increased bias in income distribution is also a factor in favour of providing special start-up capital to women producers and traders.

## RECOMMENDATIONS

- 1. Accelerate the improvements in rural infrastructure in the Northern Province. This will in fact give most benefits to the poorest segment of the population.**

Major areas of donor attention:

\* improved road network, especially rural feeder roads. This should be done with a labour intensive approach, creating both local income and commitment. To avoid further drain on public funds and ensure sustainability of the investment, agreements should be made with regard to maintenance with the primary beneficiaries, people living along or near the road.

\* expanded coverage with storage sheds and depots in the region.

\* intensify the supply of oxen for haulage to/from storage sheds, depots and market places.

- 2. Involvement with the private marketing sector should be restricted to supply of start-up capital for essential and sustainable activities to strategically selected targets**

The private sector has been hamstrung by three key factors:

- a) Government restrictions and interventions reducing profit-margins.
- b) Lack of physical infrastructure.
- c) Lack of venture-capital.

When legal constraints are removed, and prices allowed to fluctuate, the private sector will operate where they find it profitable. Improved infrastructure will give them access to buyers/sellers at reduced cost.

Venture-capital will still be a problem. For NORAD, the Small Scale Enterprise Development Project may be used as a tool for specific targets.

Commercial banks, who need guarantees or injection of capital, have currently a lower effective interest rate than Lima Bank. They also have a better loan recovery rate.

General transport subsidies should be avoided. It will create misallocations in the production on a non-sustainable basis. Private transporters are making money in the Province today, and services are slowly expanding. Venture-capital is needed to accelerate this expansion, especially for combined passenger/goods transport. This would especially benefit small scale marketing agents, mostly women without own means of transport.

Emergent producers should when needed receive credit to enter commercial agriculture. This should especially favour women. The credit should be on a one-time-only basis, so that it becomes a vehicle for entering the sector, not a hidden subsidy for sub-optimal production which cannot be sustained.

**3. Support to the cooperative movement can be an effective tool of reaching the resource poor in the villages, especially women.**

Current operations of the top-down cooperative structure are costly, inefficient and with poor foundation and response at the grass-roots level.

Therefore, the current NORAD support to the cooperative movement in the Northern Province should be revised along the following lines, taking advantage of the current and forthcoming changes in the marketing and distribution systems to lower marketing costs and improve services, but simultaneously providing needed development support to its target group:

a) The support to get the Northern Cooperative Union (NCU) accounts updated and audited should be continued till the task is completed, so that the true picture of the Provincial CU operations becomes clear. Only on this basis can its activities be assessed and revamped. If more resources are required to finish this in a few months, they should be provided.

b) NCU should be a service institution to its members, basically self-financed through commercial ventures which also benefit its members (warehousing, wholesale, workshop, hammer mill maintenance and repairs, processing, etc.) Its marketing activities should be curtailed.

c) NCU should provide two services requiring and deserving external support to District Cooperative Unions (DCUs), Primary Cooperative Societies (PSUs), and most importantly, to "Neighbour Coops" or "Village Coops" at the grass-roots level:

- \* **training and development to members and staff**
- \* **accounting and auditing**

These two services should be the focus of NORAD support to the cooperative movement. But it is imperative that the services are oriented to and reach the true grassroots level, which is below the Primary Societies, at depot/shed level. Functional "subcommittees" have already been formed at this level in a few Primary Societies. Subdividing the current large Primary Societies (2000-3000 members) into smaller and homogeneous producer groups around local common interest objects/activities such as sheds, depots, storage, distribution and milling, may create "true" cooperatives which respond to the needs of the members rather than acting as government agents.

External support in establishing and making viable such neighbourhood units will materially enhance the weaker rural groups in coping with the dramatic changes which Zambia is facing as a result of the deregulation and trade liberalization. It will not hinder attaining efficiency in marketing, but will significantly assist in pursuing the welfare policy of the government, a policy which otherwise is in jeopardy.

## APPENDIX 1

### TERMS OF REFERENCE

for

#### **Study on marketing of agricultural produce and input in Northern Province in Zambia.**

##### **1. Background.**

During the Annual Meeting 7th to 9th November 1990 on ZAM 020-Agricultural and Rural Development in Northern Province, Zambia (ref. Agreed Minutes 5.12) it was agreed to carry out an independent study of the marketing of agricultural produce and the supply of farm input in the Province. The need for such a study has been recognised by all parties and it reflects the need for a better performance of the present system. There is also an assumption that the present marketing system to some extent limit agricultural production.

The study shall provide a basis for the decision on how to solve the problems the region is facing on marketing of agricultural produce and provision of agricultural inputs. The outcome of the study will be utilized in the forthcoming discussion concerning further NORAD-support to the Northern Province.

##### **2. Objectives.**

The objective of the study is to find out whether the marketing problems are related to institutional deficiencies, unnecessary regulation or other factors. For this purpose it is vital to establish the need for foreign support, and to suggest how support is to be given and through which channels.

##### **3. Scope of work.**

The study shall be carried out by an especially appointed team and shall comprise the following tasks:

- 3.1 -describe the legal framework and general policies which regulate marketing of agricultural products and the operation of both the cooperatives and other organisations in this sector.
- 3.2 -summarize the conclusions and recommendations drawn in similar studies and official documents dealing with such issues, and the practical implementation of these.
- 3.3 -outline in detail the national and provincial policy concerning the pricing and subsidising of agricultural production, agricultural input and transport of produce.
- 3.4 Asses the impacts of these policies on the market for agricultural products with particular attention to profitability in the distribution business.
- 3.5 asses the functioning of cooperatives, their profitability and general performance. Furthermore, the present problems and perspectives for Northern Cooperation Union (NCU) should be analyzed.
- 3.6 -asses the possibilities for involvement by private enterprises in the distribution and marketing of agricultural produce and inputs.
- 3.7 -asses how a better functioning agricultural marketing system could stimulate to increase the crop production.
- 3.8 -asses the gender specific problems, the team shall asses how the needs of female and male farmers are met as to marketing and input supplies and the nature of problems that are not met.
- 3.9 -The team shall address the problems of both large and small farms, with particular attention towards the small farm units. Attention should also be given to the income distribution effects within the agricultural sector in the Northern Province.
- 3.10 -The study should also consider and make recommendations regarding alternative marketing arrangements (organized and implemented by government institutions, cooperatives, private enterprises and combinations of these) that appear most appropriate in meeting the above needs of the farmers. The issue should be considered in a short term view (0-5 years) and in a longer term perspective where the development of sustainable institutions should be given great priority.

#### **4. Mode of work, participants.**

- 4.1 -The team should have 4 members, two appointed by NORAD and two by P.P.U. in the province.
- 4.2 -The work shall be carried out in close cooperation with the appropriate authorities at Provincial and National level and NORAD in Lusaka and Oslo.

4.3 -The work shall be carried out from February 27 to March 22, 1991. A preliminary report should be presented to PPU and NORAD, Lusaka not later than March 22, 1991 and the final report not later than April 4, 1991.

Oslo, February 25, 1990

for Kjell Storløkken

Director.



## APPENDIX 2

### STUDY TEAM:

Dr. Halvor J. Kolshus, Agricultural Economist, NORAGRIC Resident Representative, Dar es Salaam (Team leader).

Dr. Joseph Temba, Agronomist, Professor of Crop Science, UNZA, Lusaka.

Mr Francis Mbewe, Agricultural Economist, Director of Planning, Ministry of Agriculture, Lusaka.

Ms. Else Skjønberg, Sociologist, NORAGRIC Consultant, Oslo/Ås

### TEAM ITINERARY:

- Feb. 27 Kolshus arrives Lusaka, begin preliminary work.
- Feb. 28 Meetings NORAD, NORAGRIC, P.S. Cooperatives.
- Mar. 01 Continued meetings Lusaka, NORAD and GRZ offices.
- Mar. 02 Free day.
- Mar. 03 Travel to Kasama by car.
- Mar. 04 Meetings SPRP, NCU, PPU.
- Mar. 05 Meetings NCU, PPU, Library study, Visit Primary Society, visit NORAD financed storage shed. Return to Lusaka by air.
- Mar. 06 Attend FINNIDA/Dutch seminar on support to coops.
- Mar. 07 Temba and Mbewe join mission. Organizing work.
- Mar. 08 Meetings P.S. Cooperatives, NCDP, ZATPID, Min. of Coop.
- Mar. 09 Review collected background material.
- Mar. 10 Skjønberg arrives, team complete. Review material.
- Mar. 11 Meetings SCC-ZCF, USAID, NORAD, P.S. Agriculture, ZATPID.
- Mar. 12 Travel to Kasaba Bay by air. Team discussions.
- Mar. 13 Individual review and writing. Travel to Ndole Bay by boat.
- Mar 14. Team discussions, review and writing.

- Mar. 15 Price survey in local towns. Travel to Kasama by car.
- Mar. 16 Skjønsberg leaves team due to illness in family. Remaining team members survey private business Kasama, inspect sheds, meet NCU officials.
- Mar. 17 Team discussions, review and writing.
- Mar. 18 Meetings SPRP, PPU, MCC, NCU.
- Mar. 19 Field visit to Malole by car, visit Primary Society and private farms; meetings ARPT, NCU, private traders in Kasama.
- Mar. 20 Travel to Mpika by car, meetings DDSP, DCU, Primary Society and Depot subcommittee. Travel to Lusaka by car.
- Mar. 21 Team discussions, drafting aide memoire.
- Mar. 22 Meeting NCU Chairman of the Board, report writing, debriefing NORAD. Field work completed.
- Mar. 23 Kolshus returns to Dar es Salaam.

### APPENDIX 3

#### INDIVIDUALS AND INSTITUTIONS CONSULTED

Lønning, Arne.	NORAD senior programme officer, Lusaka
Årnes, Dag	NORAD land economist, Lusaka
Svads, Henning	NORAGRIC res. rep., Lusaka
Nestande, Egil	VAP Coordinator, Kasama
Malme, H.Kr.	NCU, Financial Controller, Kasama
Håland, Ådne	SPRP, Research Officer, Kasama
Zulu, Mr.	PMCO, Kasama
Gerstrøm, P.	NCU, Commercial Advisor, Kasama
Martins, Oluf	PPU, Kasama
Tonga, M.	Permanent Secretary, Min. of Cooperatives, Lusaka
Lubinda, F.	PPU, Chief Regional Planner, Kasama
Soko, Mike	NCDP, Acting Director, Lusaka
Chenowith, F.	USAID, Project Director, ZATPID, Lusaka
Mubanga, M.	Min. of Cooperatives, Director of Marketing, Lusaka
Øjermark, P.	SCC-ZCF Project Coordinator, Lusaka
Whalen, W	USAID economist, Lusaka
Foster, Mr.	USAID agronomist, Lusaka
Trivedi, J	House of Kasama, Manager, Kasama
Olsen, H	Interconsult, Resident Engineer
Bwalya, Sharon	Private Trader, Kasama
Chitimukulu, C.	Paramount Chief and MCC, Kasama
Kabaso, N	Minister of State, NP, Kasama
Mumba, Nicholas	Permanent Secretary, Min. of Agriculture, Lusaka
Kalebuka, D.H	NCU, General Manager, Kasama
Meka, Mr	NCU, Planner, Kasama
Beaudry, John	(Brother John), Chinci wa babili, Malole
Kasonde, M	Trent Farm, Malole
Gibson, Dutch	DDSP, District Coordinator, Mpika
Allison, Glenn	DDSP, Project Coordinator, Mpika
Masiwa, P.C	DCU accountant, Mpika
Chibale, Kingsley	Chairman. Pomba Primary Cooperative Society, Mpika
Patel, Mr.	NCU, Chairman of the Board, Kasama
Gjøes, Tore	NORAD res. rep, Lusaka
Siccorsi, B.	NORAD senior programme officer, Lusaka

## APPENDIX 4

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