

CHAPTER 7

CONCLUSIONS AND POLICY RECOMMENDATIONS

7.1 INTRODUCTION

This study seeks to contribute to the on-going debate on food security/insecurity commercialisation, an important developmental issue. It was motivated by concerns over the growing food insecurity problem in Uganda, a country that is predominantly rural and agrarian and has long been associated with aggregate food self-sufficiency. Historically, incidences of food insecurity have been associated with production shortfalls caused by adverse climatic conditions and insecurity/civil strife. The concerns however, are that besides production shortfalls, food insecurity increasingly is a result of the economic reform programme implemented since 1987. Rather than try to evaluate the food security situation within the broad context of the Economic Recovery Programme (ERP), the study is limited to the sale of food and its effects on food availability. Commercialisation of agriculture is a sector specific objective but has also been spurred on by policy changes that are part of the ERP.

Based on the premise that the ERP would benefit those involved in the cash rather than the subsistence and largely non-cash economy, the rehabilitation of the traditional cash crop economy was accorded high priority. However, their earnings, dominated by coffee the country's main export, are subject to fluctuations in international markets. To reduce instability induced in the economy because of these fluctuations, efforts to diversify the revenue base were put in place. In the agricultural sector, it included the promotion of non-traditional exports, many of which are food crops. The sale of food has also been spurred by growth in domestic and regional demand. The study finds that food crops are more widely cultivated than the traditional cash crops and to varying degrees, many are cultivated to meet both food and cash needs.

Besides the diversification of the revenue base, the sale of food is also important for overall economic growth, a national policy goal. In contributing to cash earnings, food sales enable the producers to consume goods and services provided by the market. This

should have positive spillover effects for domestic production and ultimately economic expansion. In this respect therefore, commercialisation of food should contribute to higher utility levels and export earnings. Income generated from food sales also contributes to the general welfare and development of the nation through expenditure on health care and education.

However, the main hypothesis of this thesis is also borne out by the findings of the study. On average, an increase in the proportion of food sold to that produced reduces daily food availability per adult equivalent. Similarly, households with children in different age brackets, inferring certain non-food cost implications, also reduce food availability. The area under cultivation is found to increase food availability. From these findings, this chapter draws the study's conclusions and makes policy recommendations.

7.2 STUDY CONCLUSIONS

7.2.1 Productivity

Land and labour availability are the most important factors of production. This is pronounced given the dominance of basic agricultural practices, more often unaided by either input use or more productive agronomic practice. A starting point for food security analysis under these circumstances is the production level. This mainly depends on the area of land under cultivation hence the allocation of resources to food production *viz a viz* other activities (livestock and non-food crop production or non-farm work) as presented in the conceptual framework. Ultimately, land and labour availability determine the area under cultivation, which the study finds to positively affect daily food availability. However, land use (cropping choices) also has a bearing on food availability given that yields and caloric variations differ by the nature of foods cultivated and by implication consumed. Given the vulnerability to food shortages, certain crops particularly cassava and sweet potatoes are important in that by their nature and because they are relatively less traded, impart a higher degree of food security.

The pressure on land is bound to increase with population growth. The study also shows a tendency for the more commercial households, on average, as having more land under production. Therefore if production remains mainly a function of cultivated area and

commercialisation progresses as envisioned by sectoral objectives, the demand for land is expected to increase. This in turn could increase inequitable land access, rendering some segments of the population more vulnerable to food insecurity.

Although not included in the conceptual framework, the climatic factor was discussed as an important factor to food security albeit beyond the control of the producer. Climatic fluctuations are a dominant factor in determining levels of production in any particular season, given that agriculture is predominantly rain fed. During the study, adverse natural phenomena, beyond farmers' control, were followed by food shortages in the short term. This shows that the country's early warning period for food shortages is short. It is also strongly indicative of weak insurance measures, more particularly household storage. The reasons for poor storage vary from insecurity of self and property, to high post-harvest losses because of poor handling and poor storage infrastructure. Besides, some foods are subject to high pest infliction.

As hypothesised, production levels are important in determining food availability. Because it is mainly a function of cultivated area, variations in land availability and productivity have a direct bearing on food security. Factors that affect either of the two variables will indirectly affect food security. Commercialisation is seen to encourage the allocation of resources, i.e. land, towards certain crops and given the negative relationship found between commercialisation and food availability, it further subjects the households to higher risk of food shortages.

7.2.2 Household characteristics

The defining characteristics of the household head have been shown to affect decision making and resource allocation within the households. However, the study finds that gains in human capital as reflected in the age and whether the household head has attained some formal schooling, are insignificant to food availability. The gender variable is also insignificant although it indicates that households that are female-headed are more food secure than male-headed households. Various group discussions revealed the general argument that men sell food but often at the expense of the welfare of their families. Female-headed households on the other hand tend to generate their income from other activities than food sales and in so doing, reduce the pressure to sell food.

Two aspects of the structure of the household, i.e. family size and dependence ratio however, negatively affect daily calorie availability as hypothesised by their proxy variables, primary school going children and those six years old or younger. On average, relatively large households are more constrained to meet their food needs. This is more so given the limits set on production levels by the available factors of production particularly land, as discussed above. Likewise, where fewer members of a household are productive, implying more mouths to feed per productive person, *ceteris paribus*, such households are rendered less food secure.

7.2.3 Commercialisation effects

From the conceptual framework, the effects of commercialisation on food availability can be direct or indirect and it was hypothesised that it is negative. The study finds that subsistence food needs are predominantly met from own farm production as food purchases, on average, make a small proportion of what is consumed. Therefore, by deducting from farm output, food sales directly reduce the food available for subsistence needs. The analyses did reaffirm this. However, the negative effects of commercialisation are cushioned by high food output. Households with relatively low food output and selling a large proportion of it are therefore more vulnerable to facing food shortages. This it is recalled, was illustrated by the conceptual framework, i.e. food available for consumption was dependent on how much of it was sold and implicitly on the output.

The indirect (income) effects of commercialisation on food security may be through the size of the food budget relative to other expenses as illustrated through the conceptual framework and/or the nature of foods purchased within the food budget. The study finds that higher food expenditure does not translate into either more calorie availability or the purchasing of the more expensive animal proteins. However, it is observed that during the year, calorie purchases per 100 shs spent on food reflects food scarcity on average. It is lowest later in the year after the harvest. Higher income levels therefore do not necessarily translate into better nutrition. Nonetheless, variations in the size of the food budget and choice of foods bought reflect food scarcity during the year.

The negative effects of commercialisation on food availability underscore the subsistence level of production. Food purchases make a small contribution to aggregate household food availability.

7.2.4 Effects of income and non-food expenditure

Despite the difficulty of collecting accurate data on income and expenditure in the absence of record keeping, there is an apparent need to diversify rural household income. This is reflected in different members of the household engaging in different income generating activities. Opportunities to generate income are however, limited and those that exist are closely related to activities in the agricultural sector and are therefore subject to its seasonal nature. The inter-group analyses, show that diversification of income (livestock income and non-farm activities) reduces the pressure to sell food to meet cash needs. Again it is recalled from the conceptual framework that cash could either be used to purchase food or on non-food expenditure or held as savings. Implicitly, a diversification of income contributes to non-food expenditure that would otherwise have been met through selling of food.

This is reaffirmed by the finding that pre-school and post-primary school children, proxy variables for the costs of health care and education respectively, reduce daily food available per adult equivalent. The implications are that accessing social services, i.e. health and/or education, increases the pressure to sell food. On average, the highest non-food expenditure centres are health care, education and spending on alcohol and cigarettes. As part of improved national budgetary management under the Economic Recovery Programme (ERP), a cost-sharing policy was adopted for the delivery of social services. It is only lately that Universal Primary Education has been introduced. The relief this direct subsidy imparts is evident in the observation that more households have children attending primary school than those with children attending post-primary school. From the above discussion, an indirect positive effect of the subsidy on food availability is inferred.

However, of concern is that on average, at least 30% of non-food expenditure are spent on alcohol and/or cigarettes. The implication of this finding is that there is a disproportionate distribution of income effects within the household, a large share of

7.2.4 Food security/insecurity

income going to meet the needs of one or two adults. This concern was widely shared by the respondents during the group discussions. It was generally expressed that the sum implications of expenditure on especially drinking, often meant that other needs in the household have to be foregone and these include food.

While increased taxation may seem an attractive way of mitigating against the negative effects of expenditure spent on alcohol and cigarettes, because beer selling and drinking largely operates in the informal sector, the challenges of enforcement would be immense.

Therefore, alternative means of income generation would positively contribute to food security by reducing the pressure to sell food to meet cash needs. Although food is a primary need, household priorities may demand that non-food needs be met at the risk of subjecting the household to food shortages. Food needs cannot therefore be looked at in isolation from such secondary needs. Poverty alleviation strategies that directly or indirectly relieve the household from these secondary pressures should positively bear on food availability.

7.2.5 Geographic differences

Variations in a number of factors create productivity differences. The agro-ecological setting for example influences the cropping patterns across different zones. Areas where certain crops are dominant are more vulnerable to food insecurity either because of crop specific characteristics or their tradability. The availability of basic factors of production discussed earlier, also vary by geographic location and have a direct bearing on production levels. Although there is similarity in the socio-economic factors that increase the pressure to sell food, the effects on food availability are cushioned by productivity levels, which are in turn influenced by other factors. The study finds that Mbale District, where many of the cultivated crops are highly traded, is the most food insecure. Cassava and sweet potatoes bear positively on food availability in Soroti and Apac District. Area specific differences therefore depend on how these different factors interact.

7.2.6 Food security/insecurity

The study's main hypothesis, that commercialisation of the food sub-sector is contributing to food insecurity as manifest in food shortages and/or inadequate food intake is borne out by the analyses that have been done. However, commercialisation itself, may not necessarily be motivated by profit making but rather by the need to meet other obligations within the household. Given that on the one hand opportunities to generate income off-farm are limited, and on the other, there is a readily available market for food, food is an important source of cash income. Food security/insecurity therefore brings into play other sectors and their respective policies, which need to be embraced in addition to the focus on the agricultural sector and production levels. It can therefore be seen that food insecurity is often a compound problem and other factors too have been found to have a direct or indirect bearing on food availability.

7.3 POLICY RECOMMENDATIONS

It is noteworthy that the re-enactment of the by-laws governing food reserves has frequently been called for by different stakeholders including respondents during this study, i.e. it should be mandatory that every household maintains a food reserve of stipulated quantities. However, promoting free market conditions on the one hand and legislating/instituting controls on some aspects or actors in the market on the other, are contradictory.

The policy recommendations here made emphasise the need to enable the population make informed decisions and choices in the manner in which they use their resources, food being a resource that is important for their well-being. Emphasis is also made of the need to mitigate against the factors that the study has found to put pressure on households to sell food. The decentralisation process is supportive of the overall recommendation that remedial measures/strategies be area (district) specific and based on the underlying factors in the area.

- The agricultural sector's development thrust over the years has focused on increased production that has mainly been from horizontal expansion. The role of production

in ensuring food availability has been underscored by this study. In general, increasing productivity presents the largest potential to ensuring food security. Directing strategies by production zone as proposed by sectoral programmes, should allow a focus on area specific constraints to increased productivity. Generally however, land pressure or the ability to bring more area under production, will increasingly put limits on horizontal expansion. More specifically, to increase productivity in Mbale District where land availability already is a constraint to varying degrees, strategies should be towards vertical rather than horizontal expansion. This calls for collaborative efforts between agricultural research institutions, the extension service, and farmers to come up with yield enhancing technology. Similarly, the labour constraint in Apac and Soroti districts could benefit from technology that encourages both horizontal and vertical expansions. The promotion of animal draught technology should therefore have a positive bearing on food availability. A collaborative effort between research, extension, and farmers would also be necessary.

- Food security considerations must include not just agricultural policy and performance, but those of other sectors that directly affect the welfare of the population, e.g. the social sector. Government's plan to invest further in social services through increased investment in both primary and post-primary education should have a direct bearing on food availability. However, strategies should directly target the poor and more vulnerable segments of the population. It is acknowledged that most of the poor are in rural areas and rely on farming for a livelihood, justifying this recommendation. The current policy of cost-sharing for health-care services could for example, be relaxed in vulnerable societies or waived for particular target groups like children. In reducing the cost implications of such services, the pressure to sell food should ease.
- Family planning services' and education as part of health care should be extended to rural areas through collaboration between the public sector and civil society. This recommendation is made considering the finding that family size and dependence ratio both negatively affect food availability. Assuming families are then planned within the context of available resources should bear positively on the ability of the

household to meet the food needs of its members.

- Government should encourage private sector investments in the rural areas or up-country urban centres as a means to creating jobs and diversifying the household income base. This should reduce the pressure to sell food as a means of generating cash income and would also be a long-term strategy to reducing poverty, which has a bearing on food security.
- To ensure that food consumed meets adequate nutrition requirements, the population needs to be empowered to make informed choices. This mainly calls for nutrition education. The economic standing of households, culture and cropping patterns all influence consumption patterns. This is therefore bound to be a gradual and long-term process. The introduction of Universal Primary Education presents an opportunity to ensure nutrition education with long-term benefits across the population. Nutrition education could be included as part of the primary school curriculum. In the short-term, the agricultural and primary health care extension services could collaborate in educating the population about the relationship between the foods they regularly consume and health. This should influence both what they consume and what they sell.
- Some crops, like cassava and sweet potatoes render households more food secure. Their production as food security crops should be maintained and encouraged where they are not being cultivated. More broadly, farmers need to be encouraged to plan the use of their farm so that it caters for both food and cash needs. The choice of crops that they cultivate would then be with the objective of meeting projected needs and should enable better post-harvest management. This would mainly be achieved through the agricultural extension service.
- A national food reserve to guard against production shortfalls has been considered unnecessary in Uganda. This is partly because of the challenges of managing national reserves and also because for most of the years, the country in aggregate, produces sufficient food. Nonetheless, an efficient and reliable early warning system to monitor production related variables and food movements given the increasing

integration of domestic and regional markets, is recommended. At the national level, this calls for the strengthening of the existing early warning system to service remedial institutions like the Ministry of Disaster Preparedness, among others. At the household level, efforts by the National Agricultural Research Organisation to encourage household storage, e.g. better storing seed and improved granaries, need to be furthered.

- A partnership between the public and the private sector in providing storage infrastructure closer to the producer such that they can sell their produce when they need to but that food is equally available when needed, needs to be explored. This may necessitate putting in place some investment incentives that are attractive enough for the private sector. Improved market information to both traders and producers is also expected to contribute positively towards households making decisions with a better understanding of how the market works and the likely effects on their own livelihoods.

7.4 CONCLUDING REMARKS

Food sales have been found to negate food availability. However, the commercialisation process cannot be looked at in isolation of the levels of production which are predominantly subsistence oriented, the demand for cash to pay for social services, goods on offer in the market, alcohol and cigarettes among others. Neither can it be looked at in isolation of the limited job opportunities off the farm and therefore few options the producer has of generating the much needed cash income from elsewhere other than food sales given the readily available market.

Although by-laws have in the past been applied to ensure self-sufficiency, regulating against commercialisation would be contrary to the free and open market policies that have been embraced under the economic recovery programme. Education is therefore necessary not as a remedy to food shortages, which are induced by the sale of food, but to ensure that the producers are empowered to make correct decisions with regard to the use of their resources, in this case food. However, it is also necessary for a re-evaluation of some of the social policies that have likewise been embraced under the ERP with a

view to reducing the costs of accessing these services by the vulnerable groups. Government has already moved to re-dress the policy of cost-sharing in the provision of social services as part of its long term programme geared to addressing poverty. However, more specifically it is recommended that this be done to address the negative effects that arise due to the social imbalances in society.

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