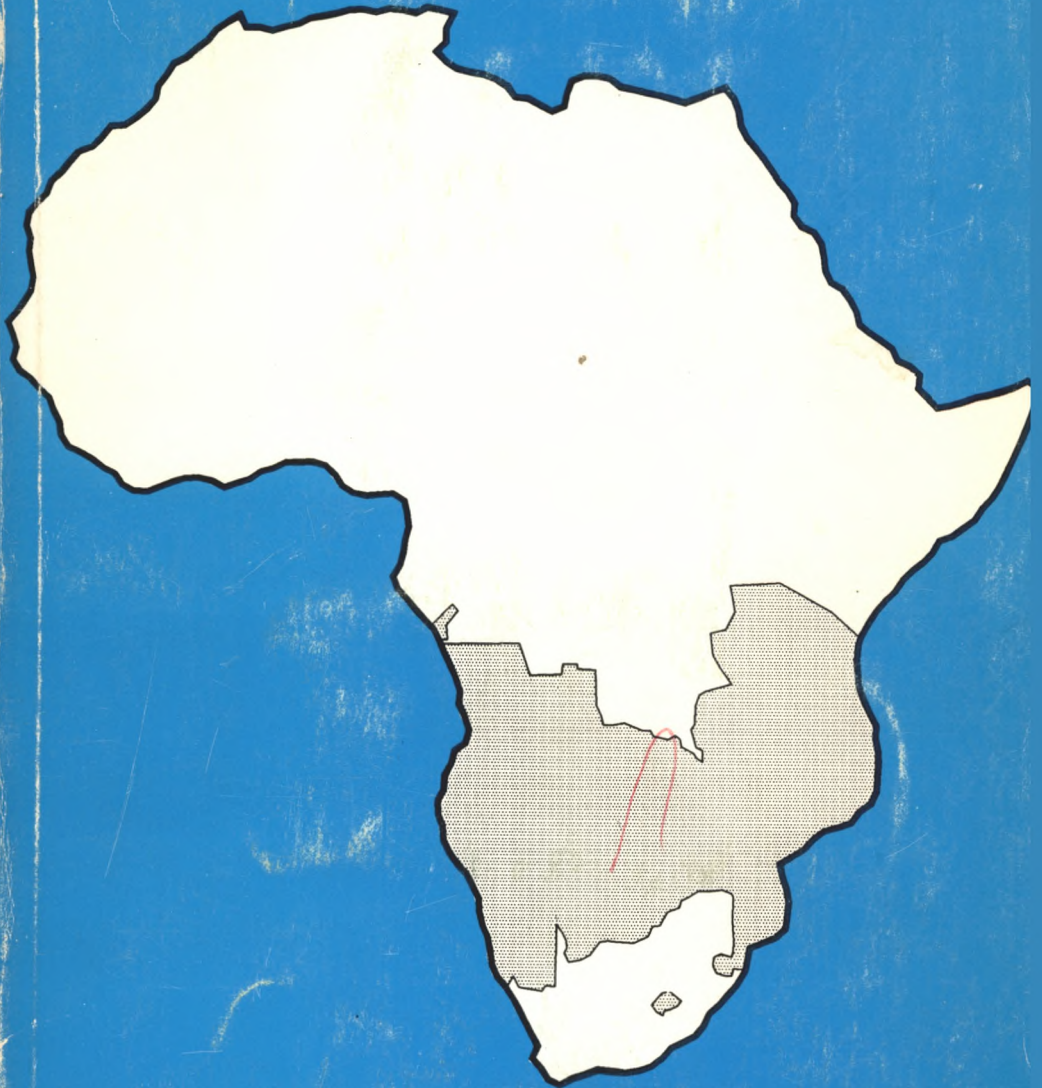


Market Reforms, Research Policies And SADCC Food Security



Edited by

Mandivamba Rukuni & J.B.Wyckoff

University of Zimbabwe UZ/MSU Food Security Research in Southern Africa Project

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II

Early Warning Information, Food Access And Nutrition Policy: Issues and Options

Current Status And Future Plans Of The SADCC Early Warning Unit (REWU)

R.T. Masundire¹

INTRODUCTION

Most of the countries which constitute the Southern African Development Coordination Conference (SADCC) are primarily agrarian. Their agricultural sectors, however, generally have been unable to produce enough food to meet domestic needs or to generate enough revenue to buy food on world markets for several decades.

To resolve these problems, the original nine SADCC countries agreed that a programme of regional cooperation should be mounted to accelerate economic growth, agricultural development and regional food security. The **LUSAKA DECLARATION** of April 1980 created SADCC with the specific objective of accelerating economic growth through regional cooperation. Cooperation in food security, one of the first concepts launched through SADCC, led to the establishment of the SADCC Food Security Programme.

PROJECT BACKGROUND

The SADCC Council of Ministers was given the task of adopting a work programme for SADCC and designating member States to coordinate activities in specific areas of regional cooperation. Zimbabwe was designated to coordinate SADCC's food security activities. The Government of Zimbabwe (GOZ) developed a number of proposals to improve food security in the region. In November 1980, the Council of Ministers adopted the document "Project Proposals for Achieving Regional Food Security", prepared by GOZ, as the initial food security programme of action. One of the proposals was for **An Early Warning System for Regional Food Security** with the objective of establishing "a food data recording system that will monitor food availability in terms of stocks, progress during the production season, and final food output."

¹Agricultural Economist, Regional Early Warning Unit for Food Security.

ESTABLISHMENT OF THE REGIONAL EARLY WARNING SYSTEM (REWS) PROJECT

In September 1981, GOZ on behalf of SADCC, formally requested the assistance of the Food and Agriculture Organization of the United Nations (FAO) to undertake a feasibility study on the establishment of a **Regional Early Warning System (REWS)**. The study was conducted in 1982 and FAO's subsequent report supported the proposal and recommended that:

- Regional Early Warning Unit (REWU) be established in Zimbabwe; and,
- National Early Warning Units (NEWUs) be established or strengthened in each SADCC country.

The report was approved by the Council of Ministers in May 1983. DANIDA agreed to provide funds for a three-year operational phase of the project. SADCC then requested that FAO provide technical assistance for the establishment of the REWS. FAO and GOZ jointly decided that thorough preparatory work was needed before the project could be implemented. FAO agreed to finance the preparatory phase of the project which began in June 1985.

FAO prepared documents for the establishment of NEWUs in Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland and Zimbabwe and also for the formation of the REWU. Tanzania and Zambia had started their own early warning systems before the SADCC project commenced but, as members of SADCC, they became part of the SADCC Regional Early Warning System. The units in Tanzania and Zambia are currently funded by the Governments of Norway and the Netherlands respectively.

The project document for Phase I of the project was signed in May 1986 designating FAO as the executing agency but it was not until mid-1987 that the REWU had recruited its full complement of staff. Phase I will be completed in November 1990 and it will be followed by a second five year phase.

Establishment of National Early Warning Units

Tanzania and Zambia were the only SADCC countries with established early warning systems in 1986. Some elements of early warning activities also existed in Botswana and Zimbabwe. The basic elements of an early warning system were not in place in the remaining five countries. There were diverse "methodologies" and approaches to early warning work and significantly different definitions of basic food security concepts existed.

During the latter part of the pre-implementation phase of the project and the early months of Phase 1, visits were made by REWU staff to all SADCC countries to assist in the establishment of NEWUs. The REWU updated the project documents of several countries in preparation for signing. By the end of 1987 all SADCC

countries had their NEWUs established and operational. The NEWUs were staffed by FAO staff in agro-meteorology and either agro-statistics or agro-economics. Counterpart staff in the same disciplines were to be provided by national governments. This was not always possible because of a shortage of trained manpower and staff turnover.

Establishment of the Regional Early Warning Unit

While initially there were only two persons in the REWU, by mid-1987 it was fully staffed with a multi-disciplinary team of six professionals. FAO and SADCC each provided an agricultural economist, an agricultural meteorologist and an agricultural statistician.

STRUCTURE OF THE REWS PROJECT AND LINKAGES WITH NEWUs.

The REWS project is composed of 10 interlinked and complementary components:-

- the nine country based National Early Warning Units (NEWUs) which make assessments of the food security situation in each member State; and
- the Harare based Regional Early Warning Unit (REWU), which makes periodic regional assessments of the food security situation, deriving its information mainly from submissions from NEWUs. The REWU also provides technical support to the national units.

Links have been established between these components in the broad areas of:

- a) coordination of early warning activities;
- b) provision of assistance and advice; and
- c) training.

Most of the NEWUs are located in Ministries of Agriculture. Where NEWU staff work under one roof, the staff have been seconded from departments of meteorology, statistics and from other relevant ministries. Other NEWUs operate through inter-ministerial committees set up to oversee early warning activities.

INSTITUTIONAL ARRANGEMENTS

The REWS project is part of the SADCC Food Security Programme which is under the overall responsibility of GOZ through its Ministry of Agriculture. The project is directly responsible to the Food Security Technical and Administrative Unit (FSTAU), the implementing agency for the REWS project on behalf of SADCC. As such, it is responsible for providing the linkage between the project and the Council of Ministers, other regional policy-making authorities, national decision-making authorities of member States and cooperating partners.

OBJECTIVES OF THE REWS PROJECT

SADCC firmly believes that food security is achieved nationally and regionally only when each country and the region can guarantee all its citizens both physical and financial access to adequate food of an appropriate nutritional quality throughout the year. This means that food security is achieved by ensuring both availability of food and its affordability at the household level.

Long-term Objective

The objectives outlined in the project document include immediate and long-term objectives. The long-term objective of the project is to improve regional food security in the SADCC countries through the establishment of an effective early warning system which provides advance information on crop production and food supplies, and alerts all those concerned well in advance of an impending food shortage or surplus so that suitable and timely remedial action can be taken.

Immediate Objectives

Phase I the REWS project had the following immediate objectives:-

- to establish National Early Warning Units (NEWUs) in all SADCC countries;
- to establish a Regional Early Warning Unit (REWU), link the nine NEWUs and coordinate all their activities into a SADCC Regional Early Warning System;
- to advise and assist the NEWUs as and when required;
- to organize training of the professional staff of the NEWUs; and,
- to provide SADCC with regular regional food security information based on data from the NEWUs.

Addressing the Issues of Food Requirements and Access to Food

The project's stated objectives focused on efforts to provide information on food production and supply. No specific objectives addressed the questions of food requirements and access to food. After the inception of Phase I, SADCC reviewed its food security programme and recognised that access to food was an essential additional component of food security. As a result, REWU expanded its early warning activities to include food needs assessments. Phase II includes nutrition surveillance information activities to further address the issue of access to food.

ACTIVITIES UNDERTAKEN IN PHASE I :
MID-1987 TO LATE-1990

First Meeting of NEWUs and REWU Staff : October 1987

The REWU organized a three-day meeting in Harare in October 1987, attended by the NEWUs, to discuss operational and technical issues relating to early warning and to chart operations throughout Phase I. The REWU prepared a model national early warning bulletin, together with a set of definitions and guidelines, to be used in the preparation of NEWU bulletins.

Methodological Work

There was little knowledge and experience at the inception of the REWS, in making objective assessments of the food security situation either at the national level or for the region as a whole. The REWU, from the outset, carried out work to improve the methodologies used by the NEWUs to assess country food security.

Methodologies in Agroecconomics.

The REWS project has adopted the commodity base concept by using Maize Equivalent (M.E.) in making food security assessments for all monitored commodities. M.E. is the amount of another crop needed to supply the same amount of calories as a given amount of maize. Maize equivalent accounts for the considerable differences in caloric value per unit of weight of the various crops and makes data comparison and aggregation possible. Most NEWUs are currently using M.E. in part of their assessments.

- *Determining commodities to be monitored:* The REWU used FAO Food Balance Sheets for each SADCC country to determine the "normal" or "status quo" caloric contribution of individual commodities to the total diet. This established the relative importance of each food crop. The most important food staples were selected for monitoring by the NEWUs. Appendix I identifies the commodities and their approximate percentage contribution to the total calorie supply in each country.
- *Assessing Food Requirements in Terms of "Nutritional Need" or "Normal Supply":* The caloric contribution of the major staples to the total diet was converted to a *per capita* weight basis and used as a measure of normal supply for human consumption of those commodities.
- *Assessing food balances at the sub-national level:* The REWU also recognized the need for the NEWUs to determine food balances at the sub-national level, especially in those countries where marked differences exist in food consumption patterns in different areas. As a result, a method for preparing balances at the provincial level was developed by the REWU and

recommended for use by all NEWUs. Most NEWUs were preparing sub-national food balances by the end of Phase I.

Methodologies in Agrostatistics.

- *Crop forecasting:* Forecasts of crop production provide an important agricultural statistic for food security assessments. But the methodology used in most SADCC countries needs refinement. In Malawi the methodology currently used for crop forecasting is subjective, cumbersome and sometimes arbitrary. The REWU devised an improved methodology, based on crop forecast sample surveys, which has been implemented as a pilot survey in two of the eight Agricultural Development Divisions in that country.

Mozambique does not have a statistical system for estimating or forecasting crop production. A pilot survey, designed by the REWU, was implemented in Manica Province during the 1988-89 crop season. Due to loss of staff from the NEWU, work on this survey could not be undertaken in the 1989-90 season but will be reinstated during the 1990-91 season.

In Swaziland, no field surveys were undertaken for crop production forecasting. The Government accepted a proposal by the REWU to undertake suitable sample surveys during the 1990-91 crop season.

Methodologies in Agrometeorology.

- *Crop water balance model:* The FAO methodology for agrometeorological crop monitoring uses such concepts as crop coefficients, water holding capacity and wilting point of the soil, effectiveness of rainfall and rate of evapotranspiration. Effective use of the methodology requires sound knowledge of the regime and balance of soil moisture in fields planted to different crops.

Collection, Scrutiny and Analysis of Data

In compiling SADCC food security bulletins, the NEWUs and REWU use primary data in agro-economics, agrostatistics and agrometeorology generated by relevant national organizations through their field staff. The NEWUs collect, collate, scrutinize and further analyse data from these sources in making food security assessments.

The objectives of primary data collecting agencies and the NEWUs are not always the same. Thus, data do not always meet early warning needs. They have to be processed and presented in a form which can be easily interpreted and used. Data have often been found to suffer from inaccuracy, incompleteness, lack of timeliness, inconsistency and the lack of comparability. The NEWUs continuously interact with the data collection agencies to overcome these shortcomings.

Issuing of Food Security Bulletins and Other Reports

In 1986, Tanzania was the only country producing an early warning/food security bulletin. However, by the end of Phase I of the project, all countries were producing such bulletins.

The first issue of the REWU quarterly bulletin was published in 50 copies. As interest in this document gradually increased, the number published has increased accordingly. At present 200 copies of the bulletin are published and distributed to an average of 15 addressees in each SADCC country, to SADCC authorities, to 15 major donor countries, to several international organizations, the media, universities, libraries and other interested institutions.

Quarterly Bulletins

These are the main output of the NEWUs and REWU. The REWU began publishing regular quarterly bulletins soon after the October 1987 meeting based on information contained in NEWU bulletins. At present, the REWU bulletin contains a chapter dealing with the SADCC regional food security assessment together with nine other chapters devoted to country assessments. Each chapter is further divided into two sections:

- an assessment of the Food Security Situation; and,
- an assessment of Factors Affecting the Food Security Situation.

The REWU aggregates, analyses and edits the data received from the NEWUs on the above items in assessing the food security situation to obtain a regional picture of food supply, demand and distribution.

"Early warning" does not relate only to the identification of expected physical food surpluses/deficits in any given year. It also includes assessment of natural, economic and social factors and their longer term effects on food security in different countries. The bulletin contains a table summarising the information for the commodities monitored together with their assessed contribution to the diet. A glossary of the terminology used is provided readers and users. (See Appendix II).

Monthly Updates.

The first monthly issue was published in February 1990. Updates report on changes that have occurred since the previous quarterly bulletin.

Special Reports.

The REWU is requested to compile assessments of the latest food security situation in the region on the eve of important SADCC meetings such as Annual Summits, the Council of Ministers meetings, the Standing Committee of Officials, etc.

Training

Activities relating to "early warning for food security" are relatively new and, therefore, lack a well established methodological tradition. REWU designed training courses to help NEWU staff carry out early warning activities in their respective units.

EVALUATION OF PHASE I OF THE PROJECT

A Tripartite (SADCC/DANIDA/FAO) Mission reviewed the progress of the REWS project in October/November 1988 and concluded that the results achieved were well in line with the project's objectives. The main constraint was the slow establishment of the NEWUs which limited the quality and flow of information to the REWU and slowed down its activities.

The Mission's overall findings were as follows:

- all components of the REWS project had been established and were fully operational;
- NEWUs had been set up in all SADCC countries and information was flowing to the REWU on a fairly regular basis;
- SADCC was being provided with regular food security information through quarterly bulletins of good quality;
- information supplied by the REWS was an essential input for other projects under the Food Security Programme and was particularly useful for food security planning and policy formulation in member States;
- the activities of the NEWUs were being coordinated within the limits dictated by national priorities;
- assistance to NEWUs should be increased during the remainder of the project; and,
- training for professional staff of the NEWUs had been conducted.

The Mission also concluded that, although progress had been achieved, more work needed to be done to improve the quality of food security reporting. The quality of data available to the NEWUs in some countries was still inadequate and the value of training of national staff had been reduced by heavy staff turnover.

The Mission therefore concluded that further assistance would be required in order to attain the long-term objective of the project and recommended that additional funds be provided to Phase I to enable the project to operate at full capacity until June 1990.

PHASE II: 1990 TO 1995

The major goal of the project during Phase II is to consolidate, further strengthen and expand the activities of the Regional Early Warning System, which has been established at the regional and national levels, so that the overall REWS will be self-sustaining and fully operational by the end of Phase II.

The project proposal has been designed to phase out international staff in the REWU and NEWUs and ensure that long-term early warning activities are wholly taken over by SADCC and national staff by the end of the Phase II.

The main support to the Tanzania and Zambia NEWUs continues to be provided through separate programmes. However, it is envisaged that these Units will participate in training and other umbrella activities under the REWS project. The current support to these NEWUs would be augmented in Phase II to facilitate their full participation in the REWS. In particular, assistance will be provided to enable them to attend regional training courses, seminars, review meetings and for the acquisition of necessary communication equipment.

It was also recommended that the staffing of the REWU and the NEWUs be designed to allow the REWU to provide technical support to the NEWUs for extended periods and to minimize the international staff component in the NEWUs.

The First Two Years of Phase II

The REWU staff for the first two years will focus on the following activities:

Monitoring of Access to Food

The scope of early warning activities will be expanded to generate information on food access *via*:

- the identification of population groups with limited resources;
- monitoring factors which can adversely affect vulnerable groups; and,
- monitoring the outcome of the reduced access to food in terms of nutrition and health status of these population groups.

This information will be useful to governments for the short-term targeting of relief interventions and for the development of longer term policies and programmes to strengthen food security.

Early Warning Manual

REWU will compile a manual of early warning methodologies in the SADCC region.

Information Network

The REWU will assist in establishing and strengthening an information network among relevant government institutions to enable the NEWUs to collect required information for short and long term remedial measures.

Training

The REWU staff will be actively involved in conducting training programmes at regional and national levels.

Namibia

During Phase II, Namibia will become a full-fledged member of the system. The September 1990 issue of the REWU bulletin included a chapter on Namibia.

PROJECT FINDINGS AND CHALLENGES

Usefulness of Food Security Bulletins

Based on feedback, it is obvious that the REWU bulletins are greatly appreciated by recipients such as the SADCC Secretariat, the SADCC authorities in Zimbabwe, FAO and WFP, the donor community and others. The information contained in these publications is considered reasonably accurate and reliable. The bulletins are also considered to be an effective tool in fostering cooperation among the SADCC member States. The SADCC Summit communique of August 1990 on the state of food security in the region was based entirely on information provided in the REWU's SADCC Food Security Bulletin.

Problems in Assessing Food Requirements

The REWU has developed a methodology for assessing specific requirements in terms of "nutritional need" or "normal supply" for the commodities monitored individually and combined as M.E., based of FAO Food Balance Sheets. The method entails assessing the adequacy of anticipated production to meet requirements for human consumption and other non-food uses. The method requires accurate and up-to-date knowledge of annual estimates of:

- population at the sub-national level;
- the "normal" *per capita* requirement of commodities for human and other needs; and,
- anticipated production.

More work is required in this area, especially in determining normal requirements which requires historical data on actual commodity consumption over many years.

Data on consumption patterns for regions/provinces are difficult to come by in most countries.

Substitutability of Commodities

The use of maize equivalent (M.E.) pre-supposes complete substitutability of different commodities. This may not necessarily be true except in a period of serious food shortages.

Gross Versus Net Requirements

The REWU has preferred to use gross estimates in assessing requirements, which assumes incorporation of both non-food use and losses, in calculating consumption needs. Others have advocated that requirements should be net of non-food use and losses. The majority of SADCC countries utilize gross estimates of production and consumption and REWU considers it appropriate to be consistent.

End-of-Year Carry-Over Requirements

Carry-over requirements vary tremendously from one country to another. The logic of an individual country's determinations appears questionable in many instances. Carry-over stocks are important as they influence commodity import targets from year to year, depending on the level of domestic food availability.

APPENDIX I
Background information for the SADCC countries

Country	Marketing Year	Mid 1990-91 Marketing Year Population		Food Commodities being monitored	
		Number (000)	Average Annual Growth Rate (%)	Commodity	Share in Total calorie intake *** (%)
Angola	January/ December	10 002	2,7	Maize	19
				Cassava	29
				Wheat	9
				Rice	3
				Sorghum/Millet	2
Total	67				
Botswana	April/ March	1 297	3,3*	Maize	31
				Sorghum	11
				Wheat	11
				Rice	2
				Millet	1
Total	56				
Lesotho	July/ June	1 623	2,6	Maize	44
				Wheat	20
				Sorghum	11
				Total	75
Malawi	April/ March	8 522	3,7	Maize	63
				Rice	1
				Cassava	2
				Sorghum/Millet	3
				Total	69
Mozambique	May/ April	15 840	3,0*	Maize	28
				Wheat	5
				Rice	6
				Sorghum/Millet	5
				Cassava	36
Total	80				
Swaziland	May/ April	774	3,2	Maize	46
				Wheat	9
				Rice	2
				Total	57
Tanzania	June/ May	24 188	2,6**	Maize	24
				Sorghum/Millet	6
				Paddy	6
				Cassava	25
				Pulses	5
				Wheat	2
				Banana	2
				Sweet Potato	2
				Total	72
				Zambia	May/ April
Wheat	8				
Paddy	1				
Total	69				
Zimbabwe	April/ March	9 789	2,9	Maize	45
				Sorghum	3
				Millet	5
				Wheat	9
				Total	62
SADCC Region		80 175	3,0		70

*World Bank estimates ** Revised by FAO on basis of 1988 census. *** Based on recent FAO Food Balance Sheets except in Mozambique.

APPENDIX II

The Food Security situation for the 1990-91 marketing year
(000 tonnes)

	Maize	Sorghum	Millets	Wheat	Maize Equivalent
1. Opening stocks on 1-4-90	1 158,0	45,0	21,0	195,0	1 404,4
2. Domestic production	1 993,8	90,9	142,7	325,0	2 522,6
3. Domestic availability (1 + 2)	3 151,8	135,9	163,7	520,0	3 927,0
4. Estimated consumption	1 667,1	93,9	147,9	320,0	2 199,1
5. Carryover requirements on 31-3-90	500,0	0,0	0,0	200,0	687,6
6. Total requirements (4 + 5)	2 167,1	93,9	147,9	520,0	2 886,7
7. Surplus (+) or Deficit (-) (3 - 6)	+ 984,7	+ 42,0	+ 15,8	0,0	1 040,3
8. Planned exports for the entire marketing year	350,0	5,0	1,0	0,0	355,8
9. Import requirements	0,0	0,0	0,0	53,9	50,6
10. Planned imports for the entire marketing year	0,0	0,0	0,0	53,9	50,6
11. Forecast closing stocks on 31-3-91	1 134,7	37,0	14,8	253,9	1 422,7

APPENDIX III

Planned Foodgrain imports and exports during the period 1-4-1990 to 31-3-1991
as of 30 June 1990 (000 tonnes)

	Maize	Sorghum	Milletts	Wheat	Maize Equivalent
1. Import requirements	0,0	0,0	0,0	0,0	0,0
2. Imports Planned:					
a. Commercial imports received	0,0	0,0	0,0	53,9	50,6
b. Commercial imports to be received	0,0	0,0	0,0	0,0	0,0
c. Food aid received	0,0	0,0	0,0	0,0	0,0
d. Food aid pledged but not received	0,0	0,0	0,0	0,0	0,0
3. Uncovered import gap (1 - 2)	0,0	0,0	0,0	0,0	0,0
4. Available for export	984,7	42,0	15,8	0,0	1 040,3
5. Planned exports:					
a. Actually implemented	350,0	5,0	1,0	0,0	355,0
b. Not yet implemented	75,0	0,3	0,0	0,0	75,3
	275,0	4,7	1,0	0,0	280,5
6. Unutilised export availability (4 - 5)	634,7	37,0	14,8	0,0	684,3

APPENDIX IV

The Food Security situation by country in the SADCC region for the 1990-91 marketing year
(000 tonnes M.E.)

Item	Angola	Botswana	Lesotho	Malawi	Mozambique	Swaziland	Tanzania	Zambia	Zimbabwe	SADCC Region
1. Opening stocks	32,6	132,5	38,7	236,0	56,3	7,9	246,1	768,4	1 404,4	2 922,9
2. Domestic production	740,3	52,7	156,2	1 447,4	2 107,3	1 306,8	7 002,3	1 520,7	2 522,6	15 680,1
3. Domestic availability (1 + 2)	772,9	185,2	194,9	1 683,4	2 163,6	138,5	7 248,4	2 289,1	3 927,0	18 603,0
4. Estimated consumption	1 284,1	218,9	373,9	1 647,8	2 851,9	177,5	5 729,4	1 658,3	2 199,1	16 268,9
5. Carryover requirements	54,1	92,0	16,4	51,6	109,4	2,0	324,6	225,0	687,6	1 562,7
6. Total requirements (4 + 5)	1 338,2	310,9	390,3	1 699,4	2 961,3	179,5	6 054,0	1 883,3	2 886,7	17 831,6
7. Surplus (+) or Deficit (-) (3 - 6)	-565,3	-125,7	-195,4	-16,0	-797,7	-41,0	1 194,4	405,8	1 040,3	771,4
8. Planned exports for the entire marketing year	0,0	41,9	0,0	4,0	0,0	6,0	37,5	5,4	355,8	450,6
9. Import requirements	565,3	176,2	195,4	27,0	799,3	46,9	251,3	65,0	0,0	2 254,4
10. Planned imports for the entire marketing year	279,2	168,6	214,7	158,0	504,9	45,2	31,5	12,4	50,6	1 993,1
11. Stocks on 30-06-90	n.a.	n.a.	n.a.	1,1	36,3	6,7	182,1	596,9	n.a.	823,1
12. Forecast closing stocks	0,0	93,0	35,7	189,6	0,0	0,2	1 513,0	690,4	1 422,7	3 944,6

APPENDIX V

The Food Security situation by commodity in the SADCC region for the 1990-91 marketing year
(000 tonnes)

Item	Maize	Wheat	Paady Rice	Sorghum/ Millets	Fresh Cassava	Other Crops	Maize Equivalent
1. Opening stocks	2 435.5	258.9	146.3	143.8	14.2	5.0	2 922.9
2. Domestic production	8 131.5	501.6	898.1	1 137.7	11 317.9	1 884.1	15 680.1
3. Domestic availability (1 + 2)	10 567.0	760.5	1 044.4	1 281.5	11 332.1	1 889.2	18 603.0
4. Estimated consumption	8 888.9	1 040.4	1 157.2	1 365.3	10 577.6	1 048.7	16 268.9
5. Carryover requirements	1 159.5	284.5	63.2	36.0	14.0	9.5	1 562.7
6. Total requirements (4 + 5)	10 048.4	1 324.9	1 220.4	1 401.3	10 591.6	1 058.2	17 831.6
7. Surplus (+) or Deficit (-) (3 - 6)	518.6	-564.4	-175.9	-119.8	740.5	841.0	771.4
8. Planned exports for the entire marketing year	361.4	13.8	5.0	36.0	121.2	0.0	450.6
9. Import requirements	1 225.1	618.1	267.0	239.8	257.7	0.0	2 254.4
10. Planned imports for the entire marketing year	979.6	474.6	251.6	2.0	0.0	0.0	1 993.1
11. Stocks on 30-6-90	742.4	25.7	79.7	0.0	0.0	0.0	823.1
12. Forecast closing stocks	2 549.6	309.9	192.1	96.2	877.0	880.5	3 944.6



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