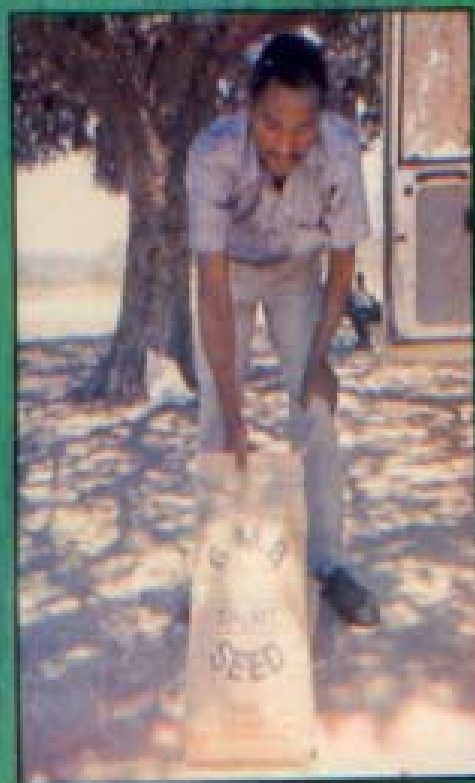
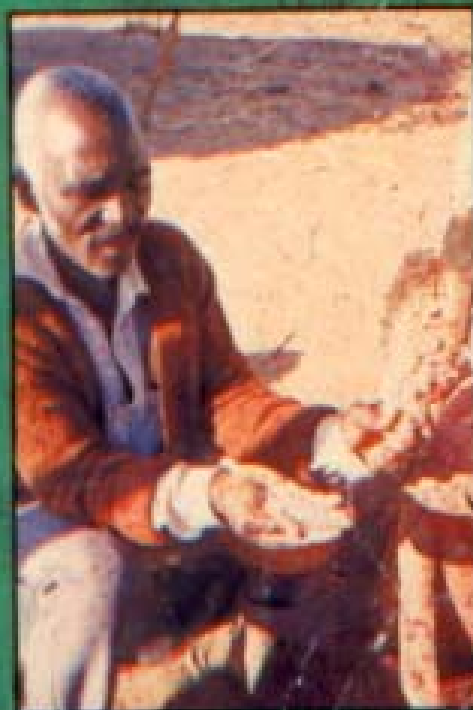


SOUTHERN AFRICA: FOOD SECURITY POLICY OPTIONS



Edited by

Mandivamba Rukuni & Richard H. Bernstein

University of Zimbabwe UZ/MSU Food Research in Southern Africa

TABLE OF CONTENTS

Foreword	v
Acknowledgements	vii

OFFICIAL OPENING:

BUILDING RESEARCH CAPACITY AND COOPERATION IN SADCC UNIVERSITIES	
Professor W.J. Kamba	3

SADCC'S FOOD SECURITY ACCOMPLISHMENTS AND CHALLENGES	
S.G. Muchena	7

SECTION 1: SADCC'S FOOD SECURITY PROGRAMME

SADCC'S EARLY WARNING SYSTEM FOR FOOD SECURITY	
A. Todorov and T. Ngara	13

THE ROLE OF AGRICULTURAL RESOURCE BASE INVENTORIES IN NATIONAL AND REGIONAL PLANNING	
M. Walsh, J. Samki, and H. Kamwendo	19

SADCC'S FOOD SECURITY PROGRAMME: FOOD PROCESSING AND PRESERVATION	
A.C. Masha	31

REVIEW OF GRAIN STORAGE AS AN ACTOR IN POST- PRODUCTION SYSTEMS IN SADCC	
T. Rukuni	37

THE SADCC REGIONAL FOOD RESERVE PROJECT	
G.W.J. Almond, K.J.M. Dhliwayo, and F.H. Drane	43

(i)

(ii)

TABLE OF CONTENTS

SECTION 2: MARKET LIBERALISATION AND FOOD SECURITY

<p>EFFECTS OF MARKET LIBERALISATION ON FOOD SECURITY IN TANZANIA H.K.R. Amani, S.M. Kapunda, N.H.I. Lipumba, and B.J. Ndulu</p>	<p>65</p>
<p>MARKET LIBERALISATION AND FOOD SECURITY IN MALAWI B. Kandoole, B. Kaluwa, and S. Buccola</p>	<p>101</p>
<p>MARKET LIBERALISATION IN ZIMBABWE: THE CASE OF SUBSIDIES, 1980 - 1987 R. Davies</p>	<p>123</p>
<p>MARKET LIBERALIZATION AND FOOD SECURITY IN MALI J. Dione and J. Staatz</p>	<p>143</p>
<p>SECTION 3: HOUSEHOLD FOOD INSECURITY IN SORGHUM BASED FARMING SYSTEMS IN THE SADCC REGION</p>	
<p>MAJOR ISSUES IN DESIGNING A RESEARCH PROGRAMME ON HOUSEHOLD FOOD INSECURITY M. Rukuni and R.H. Bernsten</p>	<p>173</p>
<p>TRADITIONAL HOUSEHOLD STRATEGIES TO COPE WITH FOOD INSECURITY IN THE SADCC REGION L.M. Zinyama, D.J. Campbell, and T. Matiza</p>	<p>183</p>
<p>THE STATE OF THE ART OF SORGHUM RESEARCH FOR COMMUNAL FARMERS IN ZIMBABWE J.N. Mushonga</p>	<p>207</p>
<p>HOUSEHOLD FOOD INSECURITY IN LOW-RAINFALL AREAS OF ZIMBABWE: INITIAL FINDINGS IN MUDZI, MUTOKO, AND BUHERA COMMUNAL AREAS. G. Mudimu, C. Mbwanda, S. Chigume, and J. Govere</p>	<p>217</p>

REFLECTIONS ON TWO DECADES OF RESEARCH ON
SORGHUM-BASED FARMING SYSTEMS IN NORTHERN
NIGERIA AND BOTSWANA
D.W. Norman, H. Sigwele, and D. Baker 235

SECTION 4: ACCESS TO FOOD

THE ROLE OF THE GOVERNMENT OF BOTSWANA IN
INCREASING RURAL AND URBAN ACCESS TO FOOD
K. F. Mokobi and S. Asefa 257

THE ROLE OF NONFARM ACTIVITIES IN THE RURAL
ECONOMY
P. Kilby and C. Liedholm 275

**SECTION 5: COMMUNAL MAIZE PRODUCTION, STORAGE,
AND MARKETING IN ZIMBABWE: IMPLICATIONS FOR
POLICY MAKERS**

THE GROWTH OF SMALLHOLDER MAIZE PRO-
DUCTION IN ZIMBABWE (1979-1985):
IMPLICATIONS FOR FOOD SECURITY
D. D. Rohrbach 307

POLICY IMPLICATIONS OF HOUSEHOLD GRAIN
MARKETING AND STORAGE DECISIONS IN ZIMBABWE
J. L. Stanning 329

**SECTION 6: WHEAT PRODUCTION AND IMPORTS IN
THE SADCC REGION: WHAT ARE THE TRADE OFFS?**

THE POLITICAL ECONOMY OF WHEAT CON-
SUMPTION AND PRODUCTION WITH SPECIAL
REFERENCE TO SUB-SAHARAN AFRICA
D. Byerlee and M. L. Morris 361

WATER-USE EFFICIENCY ON COMMERCIAL
WHEAT FARMS IN ZIMBABWE
S. Tembo and A. Senzanje 389

REFLECTIONS ON THE POLITICAL ECONOMY OF WHEAT PRODUCTION AND EXPORTS IN ZIMBABWE
D. W. Ntshang, H. Sigwot, and D. Baker

THE ECONOMICS OF EXPANDING COMMERCIAL WHEAT PRODUCTION IN ZIMBABWE 407

P. T. Ngobese

THE ROLE OF THE GOVERNMENT OF BOTSWANA IN INCREASING ACCESS TO WHEAT PRODUCTION
K. F. Moloi and S. Assefa

WHEAT POLICY OPTIONS IN ZIMBABWE: A COMPARATIVE ADVANTAGE APPROACH 419

M. L. Morris

THE ROLE OF THE GOVERNMENT OF BOTSWANA IN INCREASING ACCESS TO WHEAT PRODUCTION
K. F. Moloi and S. Assefa

FOOD TRADE AND FOOD AID IN THE SADCC REGION

THE ROLE OF THE GOVERNMENT OF BOTSWANA IN INCREASING ACCESS TO WHEAT PRODUCTION
K. F. Moloi and S. Assefa

GRAIN TRADE, BARTER AND TRIANGULAR TRADE: PROPOSED RESEARCH AND POLICY ISSUES WITH SPECIFIC REFERENCE TO ZIMBABWE'S EXPERIENCE 449

T. Takavarasha

THE GROWTH OF SMALLHOLDER PRODUCTION IN ZIMBABWE (1970-1980): IMPLICATIONS FOR FOOD SECURITY
D. D. Robinson

AGRICULTURAL MARKETING AND TRADE POLICIES TO PROMOTE FOOD SECURITY IN THE SADCC REGION: A RESEARCH PROPOSAL

K. Mlambo, D. Kingsbury, and J. Rusike

THE GROWTH OF SMALLHOLDER PRODUCTION IN ZIMBABWE (1970-1980): IMPLICATIONS FOR FOOD SECURITY
D. D. Robinson

MARKETING AND TRADE POLICIES IN ZIMBABWE: A RESEARCH PROPOSAL

302

THE POLITICAL ECONOMY OF WHEAT PRODUCTION AND EXPORTS IN ZIMBABWE
D. W. Ntshang, H. Sigwot, and D. Baker

MARKETING AND TRADE POLICIES IN ZIMBABWE: A RESEARCH PROPOSAL

302

THE POLITICAL ECONOMY OF WHEAT PRODUCTION AND EXPORTS IN ZIMBABWE
D. W. Ntshang, H. Sigwot, and D. Baker

MARKETING AND TRADE POLICIES IN ZIMBABWE: A RESEARCH PROPOSAL

302

THE POLITICAL ECONOMY OF WHEAT PRODUCTION AND EXPORTS IN ZIMBABWE
D. W. Ntshang, H. Sigwot, and D. Baker

MARKETING AND TRADE POLICIES IN ZIMBABWE: A RESEARCH PROPOSAL

302

THE POLITICAL ECONOMY OF WHEAT PRODUCTION AND EXPORTS IN ZIMBABWE
D. W. Ntshang, H. Sigwot, and D. Baker

MARKETING AND TRADE POLICIES IN ZIMBABWE: A RESEARCH PROPOSAL

302

FOREWORD

Throughout the SADCC region, policy makers require research results that can be used to design and implement policies that will improve food security in their countries. The objectives of the food security research project is to contribute to strengthening the regional knowledge base by conducting policy relevant research. In implementing this research, the project provides training for young researchers to strengthen their research skills; holds seminars and workshops; and publishes working papers reporting initial findings.

The annual conference provides an opportunity for the collaborating researchers to present their findings, receive feedback from policy makers and government official as a basis for identifying future research priorities, and to stimulate debate on food security policy issues. This proceedings contains revised versions of research papers prepared under the sponsorship of University of Zimbabwe/Michigan State University (UZ/MSU) Food Security Research Project in Southern Africa and presented at the University of Zimbabwe's Third Annual Conference on Food Security Research in Southern Africa, held at the Holiday Inn, Harare, November 1-5, 1987.

The papers included in this volume address critical food security issues in Southern Africa, organised around six themes. In the *Official Opening*, Professor W.J. Kamba, Vice-Chancellor of the University of Zimbabwe, highlights issues in building research capacity in SADCC universities. Representing the Ministry of Lands, Agriculture, and Rural Resettlement, Dr. Sam Muchena provides an overview of the challenges and accomplishments of SADCC's Food Security Programme.

The second section of the proceedings--*SADCC'S Food Security Programme*--presents an update on the current activities of the regional Food Security Programme; including papers on the early warning system, the inventory of agricultural resource bases, postproduction activities, and the regional grain reserve.

The third section--*Market Liberalisation and Food Security*--reports on research that analyses the history and impact of market liberalisation in Tanzania, Malawi, Zimbabwe, and Mali.

The fourth section--*Household Food Security in Sorghum Based Farming Systems in the SADCC Region*--includes papers by social and biological scientists that report on issues in designing household level food security research, traditional strategies for coping with food security, the state of the art for sorghum research in communal areas, the history and characteristics of food insecurity in two communal areas in Zimbabwe, and the implications of farming systems research in Botswana and Northern Nigeria for household food insecurity.

FOREWORD

The fifth section--*Access to Food*--includes papers that analyse the role of the Government of Botswana in increasing rural and urban access to food, and the role of nonfarm activities in the rural economy.

The sixth section--*Communal Maize Production, Storage, and Marketing in Zimbabwe*--reports on analysis of the factors responsible for the rapid increase in maize production since independence, and the policy implication of household grain marketing and storage decisions.

The seventh section--*Wheat Production and Imports in the SADCC Region, What are the Tradeoffs?*--includes papers that provide insights into the political economy of wheat production and consumption in Sub-Saharan Africa, the economics of expanding wheat production in Zimbabwe, and the comparative advantage and policy incentives for wheat production in Zimbabwe.

The final section--*Food Trade and Food Aid in the SADCC Region*--includes papers that give an overview of grain trade, barter and triangular trade in the SADCC region; and agricultural marketing and trade policies with a potential to promote food security. In addition, these papers propose research needed to better understand trade policy issues and constraints to expanding intraregional trade.

As the breath of the papers presented at the conference suggests, the Food Security Research Project views food security as much more than simply expanding food production. Food security will only be achieved when all households have the ability to acquire a calorie-adequate diet throughout the year. Improving food security involves two interrelated components: increasing the national availability of food through production, storage, and trade; and increasing household access to food through greater access to production resources, income (from the sale of agricultural products, off-farm work, and nonfarm activities) and government transfers. Therefore, to improve household food security, research needs to address not only micro level issues, but also to evaluate the overall policy environment to determine its impact on producer incentives and the distribution of the benefits of development.

Mandivamba Rukuni and Richard H. Bernstein

Co-Directors

UZ/MSU Food Security Research Project

University of Zimbabwe

Harare