

Table of Contents

I. Problem statement and research objectives	6
II. Theoretical Framework	10
Introduction to Institutional Economics.....	10
Transaction Cost	12
Organization Theory.....	14
Institutional Economics of Foreign Aid.....	17
III. Methodology	21
IV. Research Area	22
V. Variety Development	30
Preliminary stage.....	31
Elite trials.....	32
Delivery of promising materials by ICRISAT	32
Regional trials.....	33
National trials.....	33
Release	33
Dissemination and multiplication	36
VI. Country Case Studies	39
Malawi	39
Country descriptions.....	41
Variety Release Procedure	43
Department of Agricultural Research Services (DARS)	44
Dissemination and Final Remarks.....	48
Mozambique	49
Country description	51
Variety Release Procedure	52
National Agriculture Research Institution (IIAM)	53
National Seed Department (DNSA).....	55
Final Remarks	57
Zambia	58
Country description	60
Variety Release Procedure	62
Zambian Agriculture Research Institute (ZARI).....	64
Seed Control and Certification Institute (SCCI).....	66
Final Remarks	68
VII. Discussion and Conclusions	70
VIII.Bibliography	74
IX. Appendix	82

List of Figures

Figure I: Components of transaction costs.....	14
Figure II: Factors in the design of organization	16
Figure III: Information access in a foreign aid scheme.....	18
Figure IV: Historical GDP of Malawi, Mozambique and Zambia	22
Figure V: Average AgGDP growth Malawi, Mozambique and Zambia	23
Figure VI: Groundnut domain in the region	27
Figure VII: Variety development procedure.....	30
Figure VIII: Groundnut releases by country	34
Figure IX: Relation of AgGDP and R&D investments in Malawi	40
Figure X: AgGDP per hectare and arable land in Malawi	41
Figure XI: Agro ecologies of Malawi.....	42
Figure XII: Research staff and composition in Malawi	45
Figure XIII: DARS staff and dedication to groundnut research	46
Figure XIV: Relation of AgGDP and R&D investments in Mozambique.....	49
Figure XV: AgGDP per hectare and arable land in Mozambique.....	50
Figure XVI: Districts of Mozambique	51
Figure XVII: Research staff and composition in Mozambique	53
Figure XVIII: IIAM staff and dedication to groundnut research	54
Figure XIX: Relation of AgGDP and R&D investments in Zambia	59
Figure XX: AgGDP per hectare and arable land in Zambia	60
Figure XXI: Agro ecologies of Zambia	61
Figure XXII: Agriculture research staff and composition in Zambia	62
Figure XXIII: ZARI staff members and dedication to groundnut research.....	65

List of tables

Table I: GDP of Malawi, Mozambique and Zambia (breakdown by sector).....	23
Table II: Major constraints in groundnut seed production	27
Table III: Adoption rate of improved varieties.....	28
Table IV: Historical groundnut variety releases.....	35
Table V: Impediments for private sector involvement	37
Table VI: Composition of Agricultural Technology Clearing Committee	44
Table VII: IIAM staff composition	55
Table VIII: Variety Release and Registration Sub-Committee (SCRLV).....	57
Table IX: Interviewed professionals	82
Table X: GDP, AgGDP and agricultural contribution to the economy of Malawi, Mozambique and Zambia	83
Table XI: Arable land in million hectares	84
Table XII: AgGDP per hectare (US dollars)	84
Table XIII: GDP of Malawi, Mozambique and Zambia (breakdown by sectors).....	80

Acronyms

AFSTA:	African Seed Trade Association
AgGDP:	Agricultural Gross Domestic Product
Agr&D:	Agricultural Research and Development
ASWAp:	Agriculture Sector Wide Approach
ATCC:	Agricultural Technology Clearance Committee
CAADP:	Comprehensive Africa Agriculture Development Program
CABI:	Centre for Agriculture Bioscience International
CGIAR:	Consultative Group on International Agriculture Research
CNS:	National Seed Committee of Mozambique
DUS:	Distinct Uniformity Stability
EPTD:	Environment and Production Technical Division
GTZ:	Gesellschaft für Technische Zusammenarbeit
GIZ:	Deutsche Gesellschaft für Internationale Zusammenarbeit
FANRPAN:	Food Agriculture and Natural Resources Policy Analysis Network
FISP:	Farm Input Subsidy Programme
FPVS:	Farmer Participatory Variety Selection
ICRISAT:	International Crops Research Institute for the Semi-Arid Tropics
IFPRI:	International Food Policy Research Institute
IITA:	International Institute for Tropical Agriculture
IMF:	International Monetary Fund
IPR:	Intellectual Property Rights
JCE:	Malawi Junior Certificate of Examination
MAFS:	Ministry of Agriculture and Food Security
MASA:	Malawi Seed Alliance
MINAGR:	Ministry of Agriculture of Mozambique
MSCE:	Malawi School Certificate of Education Examination
MDG:	Millennium Development Goals
NARS:	National Agricultural Research Systems
NEPAD:	New Partnership for Africa's Development
NVRT:	National Variety Release Trials
PROAGRI:	Mozambique Agricultural Public Sector Expenditure Program
RI:	Research Institute
R&D:	Research and development
SADC:	Southern Africa Development Community
SCCI:	Seed Control and Certification Institute
SCRLV:	Variety Release and Registration Sub-Committee
SNA:	Social Network Analysis
Sq:	square kilometre
SSA:	sub-Saharan Africa
STAM:	Seed Trade Association of Malawi
TC:	Transactional Cost(s)
TRIPS:	Trade Related aspects of Intellectual Property Rights
USEBA:	Basic Seed Unit of Mozambique
VRC:	Variety Release Committee
WB:	World Bank
WTO:	World Trade Organization