

TABLE OF CONTENTS

EXECUTIVE SUMMARY	vii
ACKNOWLEDGEMENTS.....	xiii
DEDICATION	xv
LIST OF TABLES	xvi
LIST OF FIGURES.....	xvii
LIST OF ABBREVIATIONS	xviii
1. INTRODUCTION	1
1.1 MOTIVATION	1
1.2 BACKGROUND AND JUSTIFICATION	3
1.3 PROJECT OBJECTIVES	4
1.4 LAYOUT OF REPORT	4
1.5 REFERENCES.....	5
2. MATERIALS AND METHODS.....	7
2.1 DESCRIPTION OF THE STUDY AREA.....	7
2.1.1 GENERAL	7
2.1.2 CLIMATE	9
2.1.3 TOPOGRAPHY	10
2.1.4 SOILS.....	12
2.1.5 SUITABILITY FOR CROP PRODUCTION USING <i>IRWH</i>	13
2.2 EXIT STRATEGY AND PARTICIPATORY ACTION RESEARCH	14
2.2.1 INTRODUCTION.....	14
2.2.2 AN EXIT STRATEGY	15
2.3 PARTICIPATORY ACTION RESEARCH.....	16
2.3.1 COMMUNITY	17
2.3.2 MOBILIZATION.....	17
2.3.3 CAPACITY BUILDING.....	17
2.3.4 EMPOWERMENT.....	17
2.3.5 HUMAN WELL-BEING	18
2.3.6 SELF-RELIANCE.....	18
2.3.7 COMMUNITY PARTICIPATION	18
2.4 COMMUNICATION CHANNELS.....	18
2.4.1 MASS MEDIA	18
2.4.2 GROUP APPROACH.....	20
2.4.2.1 Information, farmers’ and open days, exhibitions and demonstrations	20
2.4.2.1.1 <i>Information and farmers’ days</i>	20
2.4.2.1.2 <i>Open days</i>	20
2.4.2.1.3 <i>Exhibitions</i>	21
2.4.2.1.4 <i>Demonstrations</i>	21
2.4.2.2 Pre- and post-harvest focus group discussions	21
2.4.2.2.1 <i>Pre-harvest focus group discussions</i>	21
2.4.2.2.2 <i>Post-harvest focus group discussions</i>	22
2.4.2.3 Festivals.....	22
2.4.2.3.1 <i>Pre-harvest festivals</i>	22
2.4.2.3.2 <i>Post-harvest festivals</i>	30
2.4.2.4 Training and workshops	31
2.4.2.5 Demonstrations.....	37
2.4.2.5.1 <i>On-station demonstrations</i>	37
2.4.2.5.2 <i>On-farm demonstrations</i>	37
2.4.2.6 Focus group discussions	38
2.4.2.7 Computer program	39
2.4.2.8 Three-dimensional models	39
2.4.2.9 Training of technical assistants.....	40
2.4.3 INDIVIDUAL APPROACH	40
2.5 DATA COLLECTION METHODS	42
2.5.1 FOCUS GROUP DISCUSSION	42
2.5.2 IN-DEPTH INTERVIEWS	42

2.5.3	PERSONAL INTERVIEWS	43
2.5.4	PERSONAL OBSERVATION	43
2.6	INDICATORS	44
2.6.1	TECHNOLOGY EXCHANGE INDICATORS	44
2.7	REFERENCES.....	44
3	IMPACT OF DIFFERENT COMMUNICATION CHANNELS	46
3.1	INTRODUCTION.....	46
3.2	MATERIALS AND METHODS	48
3.2.1	COMMUNICATION CHANNELS.....	48
3.2.2	INDICATORS TO VERIFY EFFECTIVENESS OF DIFFERENT COMMUNICATION CHANNELS	49
3.2.3	DATA COLLECTION.....	49
3.3	RESULTS AND DISCUSSION	49
3.4	SUMMARY	52
3.5	REFERENCES.....	53
4	EXPANSION OF <i>IRWH</i> IN THE TARGET AREA.....	55
4.1	INTRODUCTION.....	55
4.1.1	DIFFUSION.....	55
4.2	MATERIALS AND METHODS	58
4.3	RESULTS	58
4.3.1	EXPANSION OF <i>IRWH</i> IN THE TARGET AREA	58
4.3.2	EXPANSION PROCESS OF COMMUNITIES	59
4.3.3	MOTIVATORS AND DEMOTIVATORS.....	63
4.3.3.1	Motivators	64
4.3.3.1.1	Create excitement.....	64
4.3.3.1.2	Leadership-pro.....	64
4.3.3.1.3	Establish structure	65
4.3.3.1.4	Collective action/Communal approach.....	65
4.3.3.1.5	Positive sanctions (encouragement from ARC-ISCW)	65
4.3.3.1.6	Good communication/co-ordination.....	65
4.3.3.1.7	Good yield benefits during the first year	66
4.3.3.1.8	Regular meetings.....	66
4.3.3.1.9	Festivals.....	66
4.3.3.1.10	Video.....	66
4.3.3.1.11	Good goals and an action plan	66
4.3.3.1.12	Maintenance.....	67
4.3.3.1.13	Income from <i>IRWH</i>	67
4.3.3.1.14	Communication channels.....	67
4.3.3.1.15	Simplicity of technique	67
4.3.3.2	Demotivators	67
4.3.3.2.1	Development project overload without any coordination.....	67
4.3.3.2.2	Cultural issues	68
4.3.3.2.3	Village politics	69
4.3.3.2.4	Lack of respect for each other	69
4.3.3.2.5	RDP houses – small homesteads	69
4.3.3.2.6	Drought.....	70
4.3.3.2.7	Leadership-anti	70
4.3.3.2.8	Confusion	70
4.3.3.2.9	Cliques.....	70
4.3.3.2.10	Job opportunities and death/loss of leadership.....	70
4.3.3.2.11	The subscription fee.....	71
4.3.3.2.12	Dysfunctional committees	71
4.3.3.2.13	Unfulfilled promises	71
4.3.3.2.14	Dependency syndrome.....	71
4.3.3.2.15	Lack of tools	71
4.3.4	THE PERSPECTIVES OF NON-ADOPTERS	72
4.3.4.1	Lip service/broken promises.....	72
4.3.4.2	Cultural/belief aspects	72
4.3.4.3	Gender	72
4.3.4.4	Other important prerequisites.....	72

4.3.5	THE BEST WAY OF GAINING ENTRANCE	73
4.4	SUMMARY	74
4.5	REFERENCES.....	75
5	EXIT STRATEGY THROUGH THE EMPOWERMENT OF RURAL COMMUNITY-BASED PRODUCER ORGANIZATIONS.....	77
5.1	INTRODUCTION.....	77
5.1.1	DEFINITION AND IMPORTANCE OF COMMUNITY-BASED PRODUCER ORGANIZATIONS	77
5.1.1.1	Traditional (informal) producer organizations	77
5.1.1.2	Formal (new) producer organizations.....	77
5.1.2	ROLES AND FUNCTIONS OF DIFFERENT TYPES OF PRODUCER ORGANIZATIONS	78
5.1.2.1	Advocacy or policy formation producer organizations	78
5.1.2.2	Economic and technical producer organizations	78
5.1.2.3	Local development	78
5.1.3	RATIONALE FOR IMPORTANCE OF CBPOs IN AN EFFECTIVE EXIT STRATEGY ..	79
5.1.4	ISSUES TO BE CONSIDERED IN DEVELOPING CBPOs.....	79
5.1.4.1	Capacities which require strengthening.....	80
5.1.4.2	Partnerships with agricultural service providers.....	81
5.1.5	RESEARCH, DONORS AND CBPOs.....	82
5.1.5.1	Lessons learnt across the world.....	82
5.1.6	EVOLUTION OF CBPOs: A CENTRAL ISSUE FOR AN EXIT STRATEGY	83
5.2	MATERIALS AND METHODS	84
5.2.1	INCEPTION PHASE OF THE IRWH TECHNIQUE IN THABA NCHU.....	84
5.2.2	THE BEGINNINGS OF CBPOs IN THABA NCHU: THE PROCESSES.....	85
5.2.3	EVALUATION OF STAKEHOLDERS.....	88
5.3	RESULTS AND DISCUSSION	88
5.3.1	PROCESSES IN DIFFERENT VILLAGES.....	88
5.3.1.1	Yoxford village.....	88
5.3.1.2	Woodbridge 2 village	89
5.3.1.3	Feloanè village	90
5.3.1.4	Potsane village.....	91
5.3.1.5	Klipfontein village.....	92
5.3.1.6	Balaclava village	92
5.3.1.7	Rooibult village	93
5.3.1.8	Modutung village	94
5.3.2	MEETINGS WITH SELECTED CB:WHIGs.....	94
5.3.3	COMMUNITY EMPOWERMENT THROUGH THE CB:WHIGs AND THE MB:WHIG ..	95
5.3.3.1	Status of the CBPOs in Thaba Nchu	95
5.3.3.2	Roles and functions of the CB:WHIGs and MB:WHIG.....	95
5.3.3.3	Operational structure and aspirations of the TSFC.....	96
5.3.3.3.1	Structure of the Executive Board.....	96
5.3.3.3.2	Aspirations of the TSFC.....	97
5.3.4	STAKEHOLDER INVOLVEMENT.....	97
5.3.4.1	Identification of stakeholders present from the start of the project	97
5.3.4.2	Roles and functions of the different stakeholders.....	98
5.3.4.2.1	Water Research Commission.....	98
5.3.4.2.2	Department of Agriculture	99
5.3.4.2.3	ARC-Institute for Soil, Climate and Water	99
5.3.4.2.4	Free State Department of Agriculture: Agricultural Extension Services.....	99
5.3.4.2.5	FSDA: Research and Management.....	101
5.3.4.2.6	Tswelelopele Small Farmers Cooperative.....	101
5.3.4.2.7	University of the Free State (Department of Sociology)	101
5.3.4.2.8	Other stakeholders.....	101
5.3.4.3	Stakeholder workshops.....	102
5.3.4.4	Evaluation of the role-players on the exit strategy	104
5.3.5	CHALLENGES AND LESSONS LEARNT	105
5.4	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	107
5.5	REFERENCES.....	109

6	TRAINING GUIDELINES FOR TRAINERS AND FARMERS	111
6.1	INTRODUCTION.....	111
6.2	MATERIALS AND METHODS	111
6.2.1	TRAINING MANUALS FOR FARMERS AND EXTENSION OFFICERS	111
6.2.2	TRAINING GUIDELINES FOR FARMERS AND EXTENSION OFFICERS	112
6.3	RESULTS	113
6.4	SUMMARY	113
7	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	114
7.1	GENERAL DISCUSSION.....	114
7.2	CONCLUSIONS.....	120
7.3	RECOMMENDATIONS AND ADDITIONAL RESEARCH NEEDS	121
8	CAPACITY BUILDING	124
8.1	FARMERS.....	124
8.2	EXTENSION	125
8.3	RESEARCHERS.....	125
8.4	TECHNICIANS	126
8.5	SUMMARY	127
8.6	REFERENCES.....	127
9	LIST OF RESEARCH OUTPUTS	128
9.1	PRESENTATIONS.....	128
9.2	REPORTS AND PUBLICATIONS.....	136
9.3	MEDIA.....	139
9.4	PRESS RELEASES	139
9.5	VISITORS.....	140
9.6	CAPACITY BUILDING.....	141
9.7	TECHNOLOGY EXCHANGE.....	143
9.8	TRAINING MANUALS.....	145
9.9	AWARDS	145
	APPENDICES.....	147