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TRANSFER AND ADOPTION OF TECHNOLOGY BY SHEEP AND GOAT FARMERS IN QWAQWA : QUESTIONNAIRE FOR PERSONAL INTERVIEW

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General information

				For	off	ice	use	only
Name of intervi	ewee				1	-4		
Date of intervie	W							1
Respondent's na	ime							
Address:	P.O. Box							
	Town							
	Code							
Telephone num	ber							
Region								
Town/village								
Type of farming (Name one)		Mixed	1					
		Livestock	2					
		Crops - Irrigation	3					
		Crops - Dryland	4					
		Fruit - Irrigation	5		5			
Kind of farm (to	enure status) (Name one)	Private owner	1					
× ×	, , , ,	Communal	2					
		South African Development Trust	3					
		Open access	4					
		Rent & share cropping	5		6			

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A. Biographical ch	aracteristics			
A.1 Gender			Male 1 Female 2	
			Female 2	7
A.2 Age in years			years	8-9
B. Human capital	<u>endowments</u>			
Education ••••••				
B.1 What is your highest educa	ational qualification	s?		
	Farmer	Spouse(s)	Children	
None	1	1	1	
Grade 5 and lower	2	2	2	
Grades 6-7	3	3	3	10
Grades 8-9	4	4	4	11
Grades 10 Grades 11-12	5	5	5	12
Post-matric level	6 7	6 7	6 7	
rost-matric level	1	/	/	
Knowledge - farming e	vnorionco	•••000		
Knowledge - lanning e	experience			
B.2 How long have you been fa	arming?		years	13-14
B.3 How long have you been fa	-	ent farm?	years	15-16
B.4 How long have you been fa				
Crops	anning with the cur	ent enterprises.	years	17-18
Livestock			years	19-20
B.5 Indicate whether you have	the following abilit	ies:		
	Talk	Read	Write	
	Yes No	Yes No	Yes No	
English	1 0	1 0	1 0	
Afrikaans	1 0	1 0	1 0	
Sotho or any other native	1 0	1 0	1 0	
language				21-29
				I

B.6 Indicate your arithmetic abilities	None	1	
	None Little	2	
	Average Good	3	
	Good	4	30
	, i	i i	
B.7 Are you or your wife, family of the chief?	Yes	1	
	Yes No	2	31
	110	-	51

B.8 Rate the farmer (description of the farmer's characteristics) according to the following statements between 4 (strongly agree with the statement) and 1 (strongly disagree with the statement. (**Do not mention the headings to the farmer while completing the questions!!!**)

• •	Strongly disagree	Disagree	Agree	Strongly agree	
8.1 Leadership					
You are not afraid to try a new technique (pesticide) before your fellow farmers and you will try to do i on your own before seeking help. (Self-starter) Na ha o tsabe ho ka qala mokgwa o mong o motjha wa ho laola/ho thibela dikokonyana-hloko (mekgasa) pele ho dihwai tse ding pele o ka kopa thuso?	t a	2	3	4	
If you decide to do something on your farm, you wil do it and nothing will stop you from doing it. Haeba o ikemiseditse ho etsa ntho e itseng polasing/ mohlapeng wa hao, ha ho na le se ka o thibelang ho etsa seo/jwalo?	1	2	3	4	
Even though people tell you "it can't be done", you have to find it out for yourself. Haeba maikemisetsang av a hao batho ba o eletsa hire o keke wa tswella o tla qetella o entse jwang?	1	2	3	4	
8.2 Need for achievement of goals					
If you have a problem (challenge) on your farm you will keep on trying to solve the problem (challenge) and you will not quit. Haeba o na le bothata polasing/mohlapeng na o tla leka ho lokisa bothata boo kapa o tla bo tlohela ho fihlela bo o hlola na? Mohlala phokojwe e bolaya makonyana ka ho tlolela ka sakeng la hao bosiu? You have the ability to organise the four production	a 1 D	2	3	4	
You have the ability to organise the four production factors (land, labour, capital and management) in such a way that the goals set for the farm are achieved. Na ha o ka fuwa masimo/tjhelete/peo ho ntshetsa pele mohlap, o ka kgona ho sebedisa kapa o ka e sebedisa bakeng se seng/morerong o mong o sele?	2 1	2	3	4	

	Strongly disagree	Disagree	Agree	Strongly agree	
8.3 Creative skills					
You have the ability to adapt to changes in the farming environment. If the price of beef declines and the price of mutton (sheep) increases are you able to change your farming practices in such a way that you can start producing mutton for the higher demand? Na ha theko ya nama ya kgomo e ewa, mme nama ya nku e phahama na o ka leka ho hlahisa nama ya nku e ngata na? Na o ka ikamahanya le diphetoho na? Ho latela maemo?	1 1 1	2	3	4	37
You are always looking for opportunities to increase the profit of your farm (The creation and identifying of new markets for products. Have the ability to star growing a new crop, in some cases add value and create a new market for the new product.) Na o leka ka matla ho eketsa phaello ya hao ka he batla nmaraka moo o ka rekisang tlhahiso (boya/ lebese jj) teng ho fuma ha tjhelete ya hao?	1 1	2	3	4	38
8.4 Motivation to progress					
You are not dependent on subsidies or other incentives to adopt new technologies. Na hore o etse diphetoho tse isang katlehong o itshetlehile ditlhaisong tse tswang mmusong kapa o ka di etsa ka bowena na?	1	2	3	4	39
You like supporting and helping your fellow farmers when you see they are struggling or when they come to you with problems. Na o ka thabela ho thusa dihwai tse ding ha di na le mathata. Kopa o ka thabele ha ba hloleha ho atleha (mohlala mohlape wa bona o kula,/ o utsuwa).	e 1	2	3	4	40
8.5 Need for autonomy					
You do not often need to ask other people's opinions before you decide on important things - you can rely on your own knowlege or family to make good decisions. Na ha o ikemiseditse ho etsa ntho e itseng. O ka thabela ho utlwa maikutlo a ba tho ba bang ka sepheo sa hao na?	/ 1	2	3	4	41
You are not afraid to be different when it comes to the adoption of new technologies on your farm. Na ha o tshabe hoba mokgelo tlhahisong kapa nltafatsong?	1	2	3	4	42
8.6 Attitude towards risk (See D7)					

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Planning skills ••••••	00							
B.11 To what extent do you p	olan (maiker	nisetso) for	r the futu	ıre?				
		Some plan	s (rough e idea ab	d objective , incomplet out plannin idered)	e)	4 3 2 1		43
B.12 How long in advance do (maikemisetso)?	o you think i	is it necess	ary to pla	an		days		44-47
B.13 What are the future plan	ns for the fa	rm?						
Indicate in sequence of importance what future plans you have		n terms of tle or hecta		How c achieve t	lo you pl hese obje			
1.								48-49 50-51 52-53
2.								54-55 56-57 58-59
3.								60-61 62-63 64-65
4.								66-67 68-69 70-71
B.14 What do you think is th (planning that you must Place it in sequence of i	t do in futur	e) to make from 1 to 5	a long to			farm?		
		Not important	-	Important		Very important		
To have sole land rights Keep production costs low		1	2 2	3	4 4	5 5		72
Must get financial managem		1	2	3	4	5		73
training before I start farmin My farm must earn a substan		1	2	3	4	5		75
for growth I must be able to honour my		1	2	3	4	5		76
instalments each year								

1-4 | | | 2|

B.15	Who makes the following	agricultural	decisions?	(Mark on	ly the most	important
	one in each column)					

	-)					n 1	
1			Tec	hnical	Financial		
	Husband			1	1		
	Wife			2	2		
	Husband and w			3	3		
	Husband, wife	and children		4	4		5-6
	Father			5	5		7-8
	Husband and fa	ather		6	6		
	Mother			7	7		
	Manager			8	8		
	Husband and m			9	9		
	Other (specify)			10	10		
Financial manage	ment	000					
B.16 Do you keep any fa	arming records?			Yes	s 1		
				No	2		9
				ļ.	Į.		
						e l	
If "yes", which records?		Thorough neat	Rough incomplete	Only ide	a None		
Cost records		4	3	2	1	111	10
Income records		4	3	2	1		11
	C						1
Production records:	Crops	4	3	2	1		12
Production records:	Livestock	4	3	2	1		13
Labour records		4	3	2	1		14
Inventory records		4	3	2	1		15
Other (Specify): 1.		4	3	2	1		16
2.		4	3	2	1		17
3.		4	3	2	1		18
4.		4	3 3	2 2	1		19
			5	2	1		17
B.17 Do you think that l	keeping records	is important?		Yes	s 1 2		
				No	2		20
				·	·		

B 18	If "ves"	how	important	is	the	records	to	vou?
D .10	n yes,	110 W	important	13	unc	records	ιυ	you:

D.16 II yes, now important is the f	colus lo you?				
		Not important	Important	Very important	
Determining financial position		1	2	3	21
Decision-making and planning		1	2	3	22
To keep the bank or co-op mar	ager happy	1	2	3	23
Other (Specify)		1	2	3	24
					25
					26
Marketing management	••••000				
B.19 Are there output markets availa from your farm?	ble within an acc	essible dista	nce Yes No	1 2	5
B.20 Through which marketing syste	m do you market	your livesto	ck?		
		Livesto	ock type		

		Livest	ock type		
	Sheep	Goats	Wool & Skins	Hair & Skins	
Auction or public sale	1	2	3	4	
	%				6-17
Open market in town	1	2	3	4	
(%				
					18-29
Private sale	1	2	3	4	
	%				30-41
Local trader or cooperative	1	2	3	4	
(%				42-53
Own consumption	1	2	3	4	
(%				54-65
Value adding direct marketing	1	2	3	4	
(%				
Other (Specify)	1	2	3		66-77
	1	2	3	4	
	%				78-89

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Resources										
Farm size and l	and-use	•	••••00	0						
ov s	wher-		Rented land (ha)	State lar for whic no rent paid (ha	h muna is land	$1 \begin{vmatrix} Pa \\ s \end{vmatrix}$	rtner- hip ha)	Total area (ha)		
Croplands Irrigation Dryland				puid (iid					5-7	
									8-10)
PasturesIrrigationDrylandOrchards &vineyardsVeld									11-1 14-1 17-1	6 9
Total area (ha)							F	2	23-2	
2.2 Please provide t what is planned				egarding l	ast seasor	n's crop	s as we	ll as		
what is planned				egarding 1 3	ast seasor	n's crop 5	os as we	ll as Total		
what is planned Dryland:		ming seas	son.							
what is planned Dryland : Area planted Total yield (ton/kg)	1996 1997 1996 1997	ming seas	son.							
what is planned Dryland : Area planted Total yield (ton/kg)	1996 1997 1996 1997 1996 1997	ming seas	son.							
what is planned Dryland : Area planted Total yield (ton/kg)	1996 1997 1996 1997	ming seas	son.					Total	26-31 32-37 	
what is planned Dryland : Area planted Total yield (ton/kg)	1996 1997 1996 1997 1996 1997	ming seas	son.					Total R		
what is planned Dryland: Area planted Total yield (ton/kg) Total income (R) Irrigation:	1996 1997 1996 1997 1996 1997	ming seas 1 Maize	2	3	4	5	6	Total R R		
what is planned Dryland : Area planted Total yield (ton/kg) Total income (R)	1996 1997 1996 1997 1996 1997 1997	ming seas 1 Maize	2	3	4	5	6	Total R R		
what is planned Dryland: Area planted Total yield (ton/kg) Total income (R) Irrigation: Area planted	1996 1997 1996 1997 1996 1997 1997	ming seas 1 Maize	2	3	4	5	6	Total R R		
what is planned Dryland: Area planted Total yield (ton/kg) Total income (R) Irrigation:	1996 1997 1996 1997 1996 1997 1997 1996 1997 1996	ming seas 1 Maize	2	3	4	5	6	Total R R		
what is planned Dryland: Area planted Total yield (ton/kg) Total income (R) Irrigation: Area planted	1996 1997 1996 1997 1996 1997 1997	ming seas 1 Maize	2	3	4	5	6	Total R R		

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Other farm inco	me •••••000			
2.3 Do you render se	ervices to other farmers?		Yes 1 No 2	50
.4 If "yes", are you	paid for the services rendered?		Yes 1 No 2	51
.5 If 'yes", please st	ate the source and amount rece	ived.		
	Source		Rand	
				52-56
Total per year		R		
.6 Apart from incon household have a farming purposes	ne derived from farming, does any other form of income which s?	n is also used for	Yes 1 No 2	57
.6 Apart from incon household have a farming purposes .7 If "yes", please u .7 R5 .7 R10 .7 R11	ne derived from farming, does any other form of income which	n is also used for	Yes 1 No 2	57
.6 Apart from incom household have a farming purposes .7 If "yes", please u .7 R5 R10 R12 R20	me derived from farming, does any other form of income which s? use the following scale to compl Scale Code R0 - R500 1 $001 - R10\ 000$ 2 $0\ 001 - R15\ 000$ 3 $5\ 000 - R20\ 000$ 4 $0\ 001 - R25\ 000$ 5	ti, pension, se, Code	Yes1No2	57
household have a farming purposes .7 If "yes", please u .7 R5 R10 R15	me derived from farming, does any other form of income which s? use the following scale to compl <u>Scale</u> <u>Code</u> R0 - R500 1 $001 - R10\ 000$ 2 $001 - R15\ 000$ 3 $5\ 000 - R20\ 000$ 4 $0\ 001 - R25\ 000$ 5 $R25\ 000>$ 6 Source of income (e.g. café, tax rental income from hou	ti, pension, se, Code	Amount	58-63
 .6 Apart from incomhousehold have a farming purposes .7 If "yes", please u .7 If "yes", please u .7 R5 R10 R15 R20 Member of household 1. 2. 3. 4. Total income 	me derived from farming, does any other form of income which s? use the following scale to compl <u>Scale</u> <u>Code</u> R0 - R500 1 $001 - R10\ 000$ 2 $001 - R15\ 000$ 3 $5\ 000 - R20\ 000$ 4 $0\ 001 - R25\ 000$ 5 $R25\ 000>$ 6 Source of income (e.g. café, tax rental income from hou	ti, pension, se, Code	Amount (R)	

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		1-4	
Labour			
C.9 Family size at time of interview			
Adults	Number		
Elders 55 years and older		5-6	
Middle-aged 35-54 years		7-8	
Young adults 15-34 years		9-10	
Children (own) and relatives who stay permanent	tly in your home		
Older children (7-14 years)		11-12	
Younger children (6 and under)		13-14	
Total family size		15-16	
C.10 How many of your children and relatives we on your farm?	rk No. of people	e 17-18	
C.11 Do you employ permanent labour?	Yes 1 No 2	1 2 19	
C.12 If "yes", how many?	Labourers	5 20-21	
C.13 Do you employ seasonal or casual labour?	Yes 1 No 2		
C.14 If "yes", how many per year?	Labourers	8 23-24	
C15. If "yes", how many days per year?	Days	25-26	
Capital – Credit ••••••			
C.16 Do you make use of any foreign capital?	Yes 1 No 2		
C.17 If "yes", name the source, type, interest rate	and amount outstanding on 1/1/98.		
SourceType (Hire purcha(Commercial Bank/Co-op)overdraft/producti			
Formal sources		20.27	
Commercial Bank		28-37	
Agricultural cooperative			

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Agricultural Bank of South Africa					48-57
Agri-mark					58-67
Informal sources					
Credit unions					68-77
Credit clubs					88-97
Family and friends					98-107
Stokvels					
C.18 Do you need credit?			Yes No	1 2	5
C.19 Is credit available?			Yes No	1 2	6
C.20 If "no", please state why	not.				
Do not need extra money - h	ave enough money of your	own to buy inputs		1	7
Have no access to credit				2	8
The cost (interest) of money i				3	9
Bank does not want to lend n	-	t security		4	9 10 11 12 13 14 15
Poor repayment ability of farm Other (Specify):	11			5	11 12 13
Outer (Speeny).				7	12 13 14 15
C.21 How do you buy the inpu stock [sires], medicine, e		ts? (feed licks, ma	le breedin	ng	
Use only own funds				1	
Buy only on credit				2	
Combination of own fu	nds and credit			3	16

D. Risk management Risk (Ho nka mathata) oco D.1 Do you use remedies for parasites, diseases and/or sickness for sheep and/or goar? Yes 1 Mo 2 17 If "no", complete D.2 and D.3 and go to question D.6. If "yes", go to question D.4. Yes 1 1 D.2 Do you think that the use of sheep and/or goat remedies for parasites, diseases and/or sickness will increase your risk? Yes 1 1 D.3 If "yes" at question D.2, why do you say so? Specify, i.e. if there is a drought I will not be able to repay my debt 1 1 1 1 19 D.4 I "yes" at D.1, did the adoption of sheep and/or goat remedies for parasites, diseases and/or sickness change your attitude towards risk? No 2 25 D.4 I "yes" at D.1, did the adoption of sheep and/or goat remedies for parasites, diseases and/or sickness change your attitude towards risk? Yes 1 26 D.5 If "yes" at D.4, in which way? 1 26 27 30 28 30 28 30 28 30 28 30					For office use only
Risk (Ho nka mathata)	D.	Risk management			
D.1 Do you use remedies for parasites, diseases and/or sickness for sheep No Yes 1 1 No 2 17 If "no", complete D.2 and D.3 and go to question D.6. If "yes", go to question D.4. 1 1 D.2 Do you think that the use of sheep and/or goat remedies for parasites, diseases and/or sickness will increase your risk? Yes 1 1 D.3 If "yes" at question D.2, why do you say so? 1 19 2 Specify, i.e. if there is a drought I will not be able to repay my debt 1 1 19 D.4 If "yes" at D.1, did the adoption of sheep and/or goat remedies for parasites, diseases and/or sickness change your attitude towards risk? Yes 1 1 D.4 If "yes" at D.4, in which way? 1 26 2 25 D.5 If "yes" at D.4, in which way? 1 26 27 3 28 D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your parasites, disease and/or sickness, would it have an influence on your parasites, disease and/or sickness, would it have an influence on your parasites, disease and/or sickness, would it have an influence on your parasites, disease and/or sickness, would it have an influence on your parasites, disease and/or sickness, would it					
and/or goat? No 2 17 If "no", complete D.2 and D.3 and go to question D.6. If "yes", go to question D.4. Image: Complete D.2 and D.3 and go to question D.6. If "yes", go to question D.4. D.2 Do you think that the use of sheep and/or goat remedies for parasites, diseases and/or sickness will increase your risk? Yes 1 1 18 D.3 If "yes" at question D.2, why do you say so? Image: Complete D.2 and D.3 and go to question D.4. Image: Complete D.2 and D.3 and go to question D.4. Image: Complete D.2 and D.3 and go to question D.4. D.3 If "yes" at question D.2, why do you say so? Yes 1 1 19 2 120 Specify, i.e. if there is a drought I will not be able to repay my debt Image: Complete D.2 1 19 2 120 D.4 If "yes" at D.1, did the adoption of sheep and/or goat remedies for parasites, diseases and/or sickness change your attitude towards risk? Yes 1 1 26 27 D.5 If "yes" at D.4, in which way? Image: Complete D.4, in which way? Yes 1 1 26 2 1 23 23 33 33 33 <t< th=""><th>Ris</th><th>sk (Ho nka mathata) •••••</th><th></th><th></th><th></th></t<>	Ris	sk (Ho nka mathata) •••••			
If "no", complete D.2 and D.3 and go to question D.6. If "yes", go to question D.4. D.2 Do you think that the use of sheep and/or goat remedies for parasites, diseases and/or sickness will increase your risk? Yes 1 D.3 If "yes" at question D.2, why do you say so? Image: Specify, i.e. if there is a drought I will not be able to repay my debt Image: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	D.1	Do you use remedies for parasites, diseases and/or sickness for sheep	Yes		
D.2 Do you think that the use of sheep and/or goat remedies for parasites, diseases and/or sickness will increase your risk? Yes 1 18 D.3 If "yes" at question D.2, why do you say so? Image: specify, i.e. if there is a drought I will not be able to repay my debt 1 1 19 2 Image: specify, i.e. if there is a drought I will not be able to repay my debt 1 1 19 2 Image: specify, i.e. if there is a drought I will not be able to repay my debt 1 1 12 4 Image: specify, i.e. if there is a drought I will not be able to repay my debt 1 1 12 5 Image: specify, i.e. if there is a drought I will not be able to repay my debt 1 1 12 6 Image: specify, i.e. if there is a drought I will not be able to repay my debt 1 1 12 6 Image: specify, i.e. if there is a drought I will not be able to repay my debt 1 1 12 0.4 If "yes" at D.1, did the adoption of sheep and/or goat remedies for parasites, diseases and/or sickness change your attitude towards risk? Yes 1 1 1 2 0.5 If "yes" at D.4, in which way? 1 1 1 2 2 2 3 <td></td> <td>and/or goat?</td> <td>No</td> <td>2</td> <td> 17</td>		and/or goat?	No	2	17
parasites, diseases and/or sickness will increase your risk? No 2 18 D.3 If "yes" at question D.2, why do you say so? 1 19 2 20 Specify, i.e. if there is a drought I will not be able to repay my debt 1 19 2 20 3 21 4 22 5 21 4 22 5 23 6 24 24 24 24 D.4 If "yes" at D.1, did the adoption of sheep and/or goat remedies for parasites, diseases and/or sickness change your attitude towards risk? Yes 1 26 D.5 If "yes" at D.4, in which way? 1 26 2 27 3 28 30 31 32 D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1 32	If "n	no", complete D.2 and D.3 and go to question D.6. If "yes", go to que	estion D.	4.	
parasites, diseases and/or sickness will increase your risk? No 2 18 D.3 If "yes" at question D.2, why do you say so? 1 19 2 20 Specify, i.e. if there is a drought I will not be able to repay my debt 1 19 2 20 3 21 4 22 5 21 4 22 5 23 6 24 24 24 24 D.4 If "yes" at D.1, did the adoption of sheep and/or goat remedies for parasites, diseases and/or sickness change your attitude towards risk? Yes 1 26 D.5 If "yes" at D.4, in which way? 1 26 2 27 3 28 30 31 32 D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1 32	р2	Do you think that the use of sheen and/or goat remedies for	Ves	1	
Specify, i.e. if there is a drought I will not be able to repay my debt 1 1 19 2 20 3 21 2 2 3 21 4 22 5 23 6 24 24 D.4 If "yes" at D.1, did the adoption of sheep and/or goat remedies for parasites, diseases and/or sickness change your attitude towards risk? Yes 1 D.5 If "yes" at D.4, in which way? 1 26 27 3 28 3 28 3 30 6 31 7 32 32 D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1	2.2				18
D.4 If "yes" at D.1, did the adoption of sheep and/or goat remedies for parasites, diseases and/or sickness change your attitude towards risk? Yes 1 D.5 If "yes" at D.4, in which way? 1 26 D.5 If "yes" at D.4, in which way? 1 26 D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1	D.3	If "yes" at question D.2, why do you say so?			
0.4 If "yes" at D.1, did the adoption of sheep and/or goat remedies for parasites, diseases and/or sickness change your attitude towards risk? Yes 1 D.5 If "yes" at D.4, in which way? 1 26 D.5 If "yes" at D.4, in which way? 1 26 D.5 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1	Spe	cify, i.e. if there is a drought I will not be able to repay my debt		1	19
A				2	20
5 23 0.4 If "yes" at D.1, did the adoption of sheep and/or goat remedies for parasites, diseases and/or sickness change your attitude towards risk? Yes 1 D.5 If "yes" at D.4, in which way? 1 26 D.5 If "yes" at D.4, in which way? 1 26 2 27 3 28 4 29 5 30 6 31 7 32 D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1				3	21
0.4 If "yes" at D.1, did the adoption of sheep and/or goat remedies for parasites, diseases and/or sickness change your attitude towards risk? Yes 1 No 2 25 D.5 If "yes" at D.4, in which way? 1 26 1 26 2 27 3 28 29 30 6 31 28 29 5 30 20 31 7 32 2 1 1				4	22
D.4 If "yes" at D.1, did the adoption of sheep and/or goat remedies for parasites, diseases and/or sickness change your attitude towards risk? Yes 1 2 25 D.5 If "yes" at D.4, in which way? 1 26 2 27 3 28 D.5 If "yes" at D.4, in which way? 1 28 4 29 5 30 6 31 7 32 D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1 32				5	23
parasites, diseases and/or sickness change your attitude towards risk? No 2 25 D.5 If "yes" at D.4, in which way? 1 26 2 27 3 28 4 29 5 30 6 31 7 32 D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1				6	24
risk? No 2 25 D.5 If "yes" at D.4, in which way? 1 26 2 27 3 28 4 29 5 30 6 31 7 32 D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1	D.4		Yes	1	
D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1 26 Ves 1 28 4 29 5 30 6 31 7 32 32 32			No	2	25
D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1 Ves 1 2 3 3	D.5	If "yes" at D.4, in which way?			
3 28 4 29 5 30 6 31 7 32				1	26
4 29 5 30 6 31 7 32 D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1 No. 2 4 23				2	27
D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1 No. 2 32				3	28
0.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1 No. 2 1 33				4	29
D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your Yes 1				5	30
 D.6 If more definite information were available on the results of higher reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your No. 2 				6	31
reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your No. 2				7	32
reproduction with the usage of sheep and/or goat remedies for parasites, diseases and/or sickness, would it have an influence on your No. 2	D 4	If more definite information were evailable on the results of high an			
	D.0	reproduction with the usage of sheep and/or goat remedies for		1	
			No	2	33

34

35-48

1

2

3

D.7 Attitude towards risk: Which <u>one</u> of the following situations will you choose in your farming operation?

Variety A will give you a profit of R10 000 in two out of ten years and in the other eight years R0 (High profit, high risk) Sehlahiswa sa A se tla ofa phaello ya R10 000 lemong tse pedi tsa tse leshome (phaello e hodi-mo monyet la wa ho lahlehalwa o moholo) Variety B will give you a profit of R3 000 in six out of ten years and in the other four years R0 (Medium profit, medium risk) Sehlahiswa sa B se tla ofa phaello ya R3 000 lemong tse tsheletseng tsa tse leshome (phaello e mahareng le monyetla wa tahlehelo o mahareng) Variety C will give you a profit of R2 000 in eight out of ten years and in the other two years R0 (Low profit, low risk)

Sehlahiswa sa C se tla ofa phaello ya R2 000 lemong tse robedi tsa tse leshome (phaello etlase le monyet la wa tahlehelo o tlase)

E. Livestock technologies

E.1 Complete the	lollowin	g informa	tion.					
Numbers	Cattle	Mutton sheep	Wool sheep	Boer goats	Angora goats	Pigs	Poultry	Other
Male stock								
Female								
Offspring								
Total								
Number weaned per year								
Weaning percentage (%)								
Numbers sold per year								

Income per year (1996)	Cattle	Mutton sheep	Wool sheep	Boer goats	Angora goats	Pigs	Poultry	Other
Meat sales								
Milk, wool, skins & hair								
Own con- sumption (meat)								
Own con- sumption (milk)								
Dung (manure) sold								
Total income								

E.1 Complete the following information

Losses per year	Cattle	Mutton sheep	Wool sheep	Boer goats	Angora goats	Pigs	Poultry	Other				
Dead (older than one year) Dead (younger than one year) Total										49-64		
Stolen (older than one year) Stolen (younger									1	65-80	I	1
than one year) Total												

Income per year (1997)	Cattle	Mutton sheep	Wool sheep	Boer goats	Angora goats	Pigs	Poultry	Other	1-4
Meat sales Milk, wool, skins & hair									
Own con- sumption (meat)									
Own con- sumption (milk)									
Dung (manure) sold									
Total income									

Losses per year	Cattle	Mutton sheep	Wool sheep	Boer goats	Angora goats	Pigs	Poultry	Other			
Dead (older than one year) Dead (younger than one year)										5-20	
Total									1 1		
Stolen (older than one year) Stolen (younger than one year)									2	1-36	ļ
Total											

-	00		
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E.2 Indicate what type of male breeding stock you use (Mark only one per livestock type. If more than one source is used, mark the major source.)

	Mutton sheep	Wool sheep	Boer goats	Angora goats	
Borrow the neighbour's male stock	sheep	sheep	goats	goats	37-40
Any male stock the farmer can get hold of	1				
Locally bred male (grade) stock	ļ				45-48
Registered bred male stock	ļ				49-52
Artificial insemination	ļ				53-56
Communal owned male stock	ļ				57-60
Own bred	1				61-64
Other (specify)	ļ				65-68
E.3 If you do not use registered or grade male st (Mark as many as are applicable)	ock (sires)	give the r	eason why	/.	
Male breeding stock are too expensive				1	5-6
Have no money (cash) available to buy male bree	ding stock	2		2	7-8
Cannot get credit to buy male breeding stock	-			3	910
Male breeding stock is not easily accessible				4	11-12
Have no transport to get the male breeding stock	to my farı	n		5	13-14
The transport is too expensive to get the male brown	eeding sto	ck to my fa	arm	6	15-16
Male breeding stock will not have a large enough levels to pay for the extra expenses				7	17-18
It will increase the production risk of my farm				8	19-20
It will increase the financial risk of my farm due	to higher	debt		9	21-22
Decent male breeding stock is not freely available	e			10	23-24
Other (specify)				11	25-26
				12	27-28
				13	29-30
E.4 Do you make use of mating seasons?			Ye No		31
E.5 If "yes", indicate the mating season (Mark v	where appl	icable)			
	Mutton	Wool	Boer	Angora	
Summer	sheep	sheep	goats	goats	32-35
Autumn					32-33
Winter	ļ				40-43
Spring					40-43
opring					(4·4·-·4 /
					1

E.6 Indicate the importance for keeping different types of livestock by allocating a mark from 1 to 4 with 1 as unimportant and 4 as very important.

		Mutton	Wool sheep	Boer	Ang			
Culti	aral and religious purposes	sheep	sneep	goats	goa	115		48-51
	consumption (milk & meat)							52-55
	educe risk (diversification)							56-59
	n investment							60-63
	nal farming							
	the of money in case of emergency							64-67
								68-71
Othe	r (specify)							72-75
								76-79
								80-83
								9
E.7	Do you make use of veterinary surgeon serv	ices for sh	een and go	oats? Y	es	1		
2.7	Do you make use of vetermary surgeon serv		eep und ge	N		2	5	
				I	I	ļ		
E.8	If "yes":							
	Only when sheep or goats become sick					1		
	On a frequent basis					5	6	
E.9	If veterinary surgeon services are used on a	frequent o	asis, indic	ate now n	nany u	mes		
	per year.							
	1					1		
	Once per year Twice per year					1 2		
	Once per year							
	Once per year Twice per year					2		
	Once per year Twice per year Three times per year					2 3		
	Once per year Twice per year Three times per year Four times per year					2 3 4	7	
E.10	Once per year Twice per year Three times per year Four times per year Five times per year	n services,	please inc	dicate as 1	nany	2 3 4 5	7	
1	Once per year Twice per year Three times per year Four times per year Five times per year Six times per year If you do not make use of veterinary surgeo	n services,	please ind	dicate as 1	nany	2 3 4 5	7	-9
Vete	Once per year Twice per year Three times per year Four times per year Five times per year Six times per year If you do not make use of veterinary surgeo reasons as applicable, why not.		-		nany	2 3 4 5 6		-9 0-11
Vete Hav	Once per year Twice per year Three times per year Four times per year Five times per year Six times per year If you do not make use of veterinary surgeo reasons as applicable, why not.	ary surgeo	n services		nany	2 3 4 5 6		
Vete Hav Can	Once per year Twice per year Three times per year Four times per year Five times per year Six times per year If you do not make use of veterinary surgeo reasons as applicable, why not. erinary surgeon services are too expensive e no money (cash) available to afford veterin	ary surgeo eon service	n services		nany	2 3 4 5 6		0-11
Vete Hav Can The	Once per year Twice per year Three times per year Four times per year Five times per year Six times per year If you do not make use of veterinary surgeo reasons as applicable, why not. erinary surgeon services are too expensive e no money (cash) available to afford veterin not get credit to make use of veterinary surgeo	ary surgeo eon servico cessible	n services		many	2 3 4 5 6		0-11 2-13

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It will increase the production risk of my farm	7	20-21
It will increase the financial risk of my farm due to higher debt	8	22-23
Am involved in organic farming	9	24-25
Cultural reasons 1	10	26-27
Other (specify)	11	28-29
1	12	30-31
	13	32-33

E.11 Do you make use of external parasite (ticks), internal parasite,	Yes	1	
disease control vaccines or general mediction?	No	2	34

E.12 If "yes", indicate the name of the remedy as well as the number of times per year in the applicable square.

Type of	Name of	Type of animal					
medication	remedy	Mutton sheep	Wool sheep	Boer goats	Angora goats		
External parasite	control (Ticks)	(e.g. Deadline)				
1.							
2.							
3.							
4.							
Internal parasite	control (e.g. Ran	ide, Valbasen)	_			
1.							
2.							
3.							
4.							
Disease vaccination	on control (e.g. P	ulpy Kidney,	Brucelosis. et	c.)			
1.							
2.							
3.							
4.							
General medicati	on (e.g. Terramy	cin, Eye powd	er, etc.)				
1.							
2.							
3.							
4.							
Traditional reme	dies (e.g. Natural	plants)					
1.							
2.							
3.							
4.							

E.13	If you do not use EXTERNAL PARASITE REMEDIES (for ticks) please indicate as many
	reasons as applicable, why not.

The remedies are too expensive	1	35-36
Have no money (cash) available to buy the remedies	2	37-38
Cannot get credit to buy the remedies	3	39-40
The remedies are not easily accessible	4	41-42
Have no transport to get the remedies to my farm	5	43-44
The remedies will not have a large enough effect on my reproduction levels to pay for the extra expenses	6	45-46
It will increase the production risk of my farm	7	47-48
It will increase the financial risk of my farm due to higher debt	8	49-50
Am involved in organic farming	9	51-52
Cultural reasons	10	53-54
Difficult to use and handle	11	55-56
The remedies are not freely available	12	57-58
Do not know how to use remedy	13	59-60
Do not know there is a remedy	14	61-62
Other (specify):	15	63-64

E.14 If you **do not** use INTERNAL PARASITE REMEDIES, please indicate as many reasons as applicable, why not.

The remedies are too expensive	1	65-66
Have no money (cash) available to buy the remedies	2	67-68
Cannot get credit to buy the remedies	3	69-70
The remedies are not easily accessible	4	71-72
Have no transport to get the remedies to my farm	5	73-74
The remedies will not have a large enough effect on my reproduction levels to pay for the extra expenses	6	75-76
It will increase the production risk of my farm	7	77-78
It will increase the financial risk of my farm due to higher debt	8	79-80
Am involved in organic farming	9	81-82
Cultural reasons	10	83-84
Difficult to use and handle	11	85-86
The remedies are not freely available	12	87-88
Do not know how to use remedy	13	89-90
Do not know there is a remedy	14	91-92
Other (specify):	15	93-94

		For off	ice use only
E.15 If you do not use DISEASE VACCINES, please indicate as many reasons as applicable, why not.		1-:	5
The remedies are too expensive	1		6-7
Have no money (cash) available to buy the remedies	2		8-9
Cannot get credit to buy the remedies	3		10-11
The remedies are not easily accessible	4		12-13
Have no transport to get the remedies to my farm	5		14-15
The remedies will not have a large enough effect on my reproduction levels to pay for the extra expenses	6		16-17
It will increase the production risk of my farm	7		18-19
It will increase the financial risk of my farm due to higher debt	8		20-21
Am involved in organic farming	9		22-23
Cultural reasons	10		24-25
Difficult to use and handle	11		26-27
The remedies are not freely available	12		28-29
Do not know how to use remedy	13		30-31
Do not know there is a remedy	14		32-33
Other (specify):	15		34-35
E.16 If you do not use GENERAL MEDICATION REMEDIES, please indicate as many reas as applicable, why not.	asons		
The remedies are too expensive	1		36-37
Have no money (cash) available to buy the remedies	2		38-39
Cannot get credit to buy the remedies	3		40-41
The remedies are not easily accessible	4		42-43
Have no transport to get the remedies to my farm	5		44-45
The remedies will not have a large enough effect on my reproduction levels to pay for the extra expenses	6		46-47
It will increase the production risk of my farm	7		48-48
It will increase the financial risk of my farm due to higher debt	8		50-51
Am involved in organic farming	9		52-53
Cultural reasons	10		54-55
Difficult to use and handle	11		56-57
The remedies are not freely available	12		58-59
Do not know how to use remedy	13		60-61
Do not know there is a remedy	14		62-63
Other (specify):	15		64-65

F. Information and	trainin	g sourd	ces			For c	ffice	use o	nly
If an extension officer accompan this stage. (Arrange with the exte farmer while you are busy with t	ension offic	er before i	the visit to			1	-5 	1	1
Training - Informal (shor	t course	s in agri	culture)	•••••000					
F.1 Did you receive any training your farm?	on the tech	nologies y	ou adopted		fes 1 fo 2		5		
Information									
F.2 What source(s) of information following decisions, acquire is applicable)									
	Technical decisions	Financial decisions	Marketing decisions	Information on new tech- nologies	Training				
Radio				U					7-11
Television									12-16
Extension publications (all leaflets, periodicals)									17-21
Co-farmers - neighbours									22-26
Department of Agriculture – Extension officers									27-31
Cooperative - Extension officers									32-36
No one - use own physical or technical records									37-41
No one – use own financial records									42-46
Bank manager									47-51
Supplier of inputs like the cooperative manager									52-56
Sell to the buyer who is the closest to my farm – do not consider different markets									57-61
Market agents									62-66
Read in the press (newspapers, magazines, etc.)									67-71
Veterinary surgeon									72-76
Chief									72-81

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Chair person sheering association Other (specify):					82-86 87-91 92-96 97-101 102-106 107-111
F.3 Do you need any extension advice?			Yes No		$ \begin{array}{ c c c c c } & 1-5 \\ & 1 & 2 \\ & 6 \\ & 6 \\ \end{array} $
F.4 If "yes", is one of the following extension o	fficers avai	lable when	n you need	them?	
			Yes	No	
Government extension officers			1	0	7
Cooperative extension officers	1 0		1	0	8
Input suppliers extension officer companies (seed, fertiliser, chemicals, feed, animal medicine, etc.)				0	9
 F.5 How many times have you been visited by a Government extension officers Cooperative extension officers Input suppliers extension officers TOTAL 	n extension	n officer th	nis past sea	ason? Times Times Times Times	10-11 12-13 14-15 16-17
F.6 Do you think the extension officer has enou necessary information you need on your tech					
		nical		ncial	
Government extension officers	Yes	No 0	Yes	No 0	18-19
Cooperative extension officers	1	0	1	0	20-21
Input suppliers extension officer companies	1	0	1	0	
(seed, fertiliser, chemicals, feed, animal medicine, etc.)	1	0	1	0	22-23

G. G.1 Indicate which of the following institutions' services are freely and easily accessible to you, the farmer. Government extension system 1 24 Cooperative extension system 2 25 Agricultural research 3 26 Input suppliers (businesses where farmer can buy seed, fertiliser, fuel, etc.) 4 27 Output markets (institutions like the co-op where you can market your outputs) 5 28 Banking services 6 29 7 Other (specify) 31 30 32 H. Infrastructure H.1 Indicate which of the following infrastructures are freely and easily accessible or available to you, the farmer. Roads 1 33 2 Transport 34 3 Telephone 35 Electricity 4 36 Local markets 5 37

6 38 7 39

8

41 40

Institutions

National markets

Other (specify)

International markets