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The Impact of HIV and AIDS on Household Agriculture and Food Security in the SADC Region : Preliminary findings and Policy Implications

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Policy Implications

1. One of the most important ways in which agricultural policy can contribute to reducing the spread and consequences of AIDS is to contribute effectively to poverty reduction. Risky sexual behaviors are, at least, partially related to limited opportunities to earn a livelihood through other means.

Therefore, greater focus on productivity-enhancing investments is likely to be a critical part of an effective response to the HIV/AIDS pandemic, and the extent to which progress is made in these areas over the next 20 years is likely to greatly influence living standards in these hardest-hit countries of eastern and southern Africa.

Policy Implications

2. Because resources are scarce, there is a gap between desired and available levels of funding and human resources for HIV prevention (e.g., vaccines, behavior change), treatment (e.g., ARV therapies), and mitigating the impacts of AIDS (e.g., social and economic programs to protect the living standards of afflicted households and hard-hit communities).

Therefore, governments and international organizations need solid guidance on the cost-effectiveness of alternative kinds of investments to simultaneously defeat the AIDS pandemic and the chronic poverty that characterized the region even before the onset of the disease but has been further exacerbated by it.

Policy Implications

- While much of the AIDS-agriculture literature to date has conjectured that AIDS would have a major effect on the availability and cost of labour, it is possible that capital constraints and knowledge may become a more severe impediment on maintaining agricultural output and productivity.

However, generalizations are unwarranted because of the heterogeneity of agricultural systems found in Africa. Researchers investigating the impacts of AIDS on the agricultural sectors need to carefully account for the context in which they are working, how their results may make sense within their specific context, and that their findings may not necessarily be generalized to other farming systems.

POLICY IMPLICATIONS

4. In terms of human capital, the key impacts of AIDS are on labour availability and the transfer of skills and knowledge. AIDS-affected households may have limited labour availability and there will be competing demands between caring and productive activities.

Hence- responses should not place additional burdens on households' time and labour; if a new activity is involved, the returns to that activity should be greater than those to an existing activity, which could be substituted

Interventions that increase labour availability will be useful, e.g. introducing labour-saving technologies, supporting production of less labour-intensive crops, but also assisting with caring and reproductive activities to free up time for other activities, and improving treatment for opportunistic infections so that less labour is lost due to illness and caring

POLICY IMPLICATIONS

5. AIDS can reduce financial capital through the extra healthcare costs during chronic illness, funeral costs, reduced income, and/ or increased costs from taking in orphans. Some potential responses, which must be tailored to the particular circumstances, include:

- § Safety nets and direct welfare support, e.g. via cash transfers, food aid, agricultural input provision, support for costs of health and education
- § Assistance with micro-credit, taking into account the particular difficulties that may be faced by AIDS-affected households in meeting repayment requirements and the considerations regarding their labour constraints
- § Assistance with livestock multiplication or re-stocking

6. Interventions to support social capital are perhaps less obvious than those for other types of assets, and are probably also less tested. Nonetheless the following interventions could be considered:

§ Providing support to households to repay local loans and maintaining the viability of such support systems

§ Supporting households and communities or CBOs caring for orphans (either through direct safety nets, or by supporting community initiatives such as communal fields and vegetable gardens)

§ Providing organizational support and capacity-building to relevant community-based organizations

§ Promoting greater gender equality and children's rights to reduce any cultural, social or stigma-related limitations on their participation in economic activities

§ Promoting greater inclusion of children and child-headed households in community activities

POLICY IMPLICATIONS

7. Most of the interventions in support of human and financial capital will, in turn, support physical capital by reducing the need for households to sell off productive assets, or by increasing their stock of assets. Additional responses include:

- § Direct provision of physical assets or of services for maintaining assets (e.g. veterinary services)
- § Lobbying for changes in inheritance laws to reduce asset losses following the death of an adult male or both parents, or for greater respect for and enforcement of existing laws, which are not respected in practice

POLICY IMPLICATIONS

Finally, the assessment results should be the primary guide to the type of intervention or response to be carried out. It will usually not be the case that all AIDS-affected households are in need of support, and there will typically be many unaffected households who are also in need who should not be forgotten.

There are a very wide variety of possible responses to the effects of AIDS on livelihoods, and a well thought out combination of interventions – particularly if they build upon possible synergies between one another and with interventions in other sectors relating to prevention, care and treatment – will be most effective.

Country	Number of HH s sampled per Country	Percent
Botswana	157	8.1%
Lesotho	210	10.9%
Namibia	144	7.5%
South Africa	48	2.5%
Swaziland	847	43.9%
Zambia	203	10.5%
Zimbabwe	320	16.6%
Total Regional sample	1929	100.0%

Table1: Number of HIV and AIDS affected Households sampled per country

	Number of households responding	Mean HIV & AIDS deaths	Std. Deviation
Zimbabwe	318	0.9	1.1
Zambia	203	0.6	0.8
Lesotho	78	1.0	0.2
South Africa	37	0.1	0.5

Table 2. Average number of HIV & AIDS related deaths from Lesotho Data

Table 3. Types of Illnesses Prevalent in the study sample for the Region

	TB	Cancer	Asthma	Swollen Limbs	Diarrhoea	Malaria
Zimbabwe	41.9	1.6	6.3	8.8	33.1	5.9
Zambia	16.7	-	-	-	4.9	12.8
Botswana	2.5	-	-	-	-	-
Swaziland	32.8	6.0	-	24.2	75.4	-
South Africa	2.1	2.1	10.4	-	6.3	-
Regional average	3.0	3.0	1.3	12.1	39.3	2.3

•About 5% of all households were headed by children under 18 years. The actual figures were 6.4% for Botswana, 3.9% for Lesotho, 1% for Namibia, 1% for South Africa, 2.5% for Swaziland, 6% for Zambia and 3.8% for Zimbabwe.

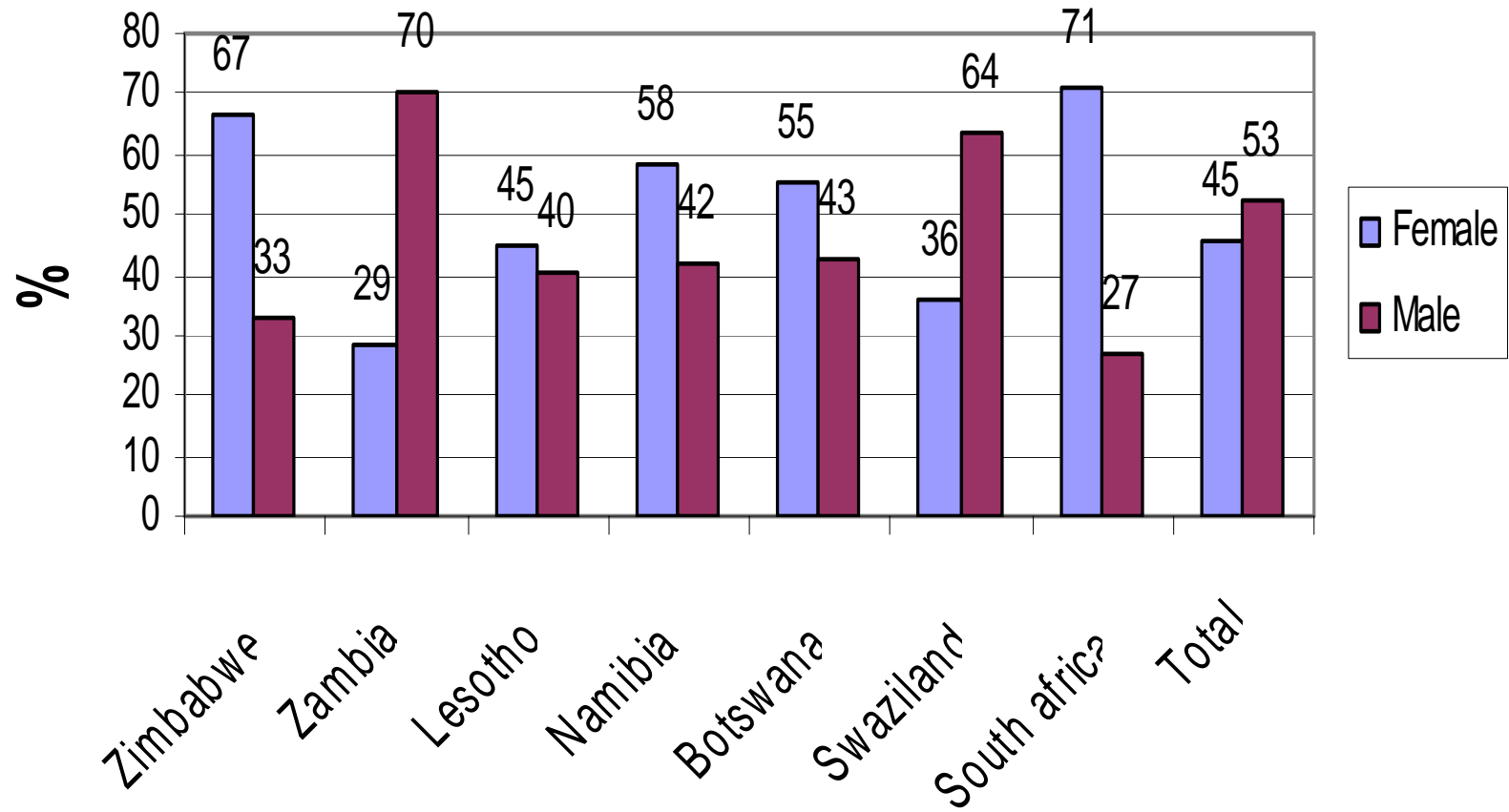
•30 % of households had 3 or more dependents. Of these, Zambian, South African and Namibian households had the largest numbers.

•65% of Households reported field sizes of under 2 ha. There was no correlation between field size and amount of fertilizer used.

•18.2 % of Households reported that HIV and AIDS illnesses and funerals deprived them of farming time.

•75% of households have a dependency ratio greater than 1 i.e. have more dependents than economically active members.

Gender of Household Head



	Both parents available	Divorced	Father available but mother elsewhere	Mother available but father somewhere	Never married	Orphans	Widow	Widower
Zimbabwe	35.6	0.0	0.3	4.7	3.4	3.3	47.5	3.4
Namibia	0.0	0.0	29.9	22.2	11.1	0.0	16.0	3.5
Botswana	39.5	1.3	0.0	8.3	2.5	0.0	26.8	0.0
South Africa	39.6	0.0	0.0	10.4	6.3	0.0	37.5	4.2
Total	10.1	0.1	2.3	3.4	1.8	0.6	12.2	0.9

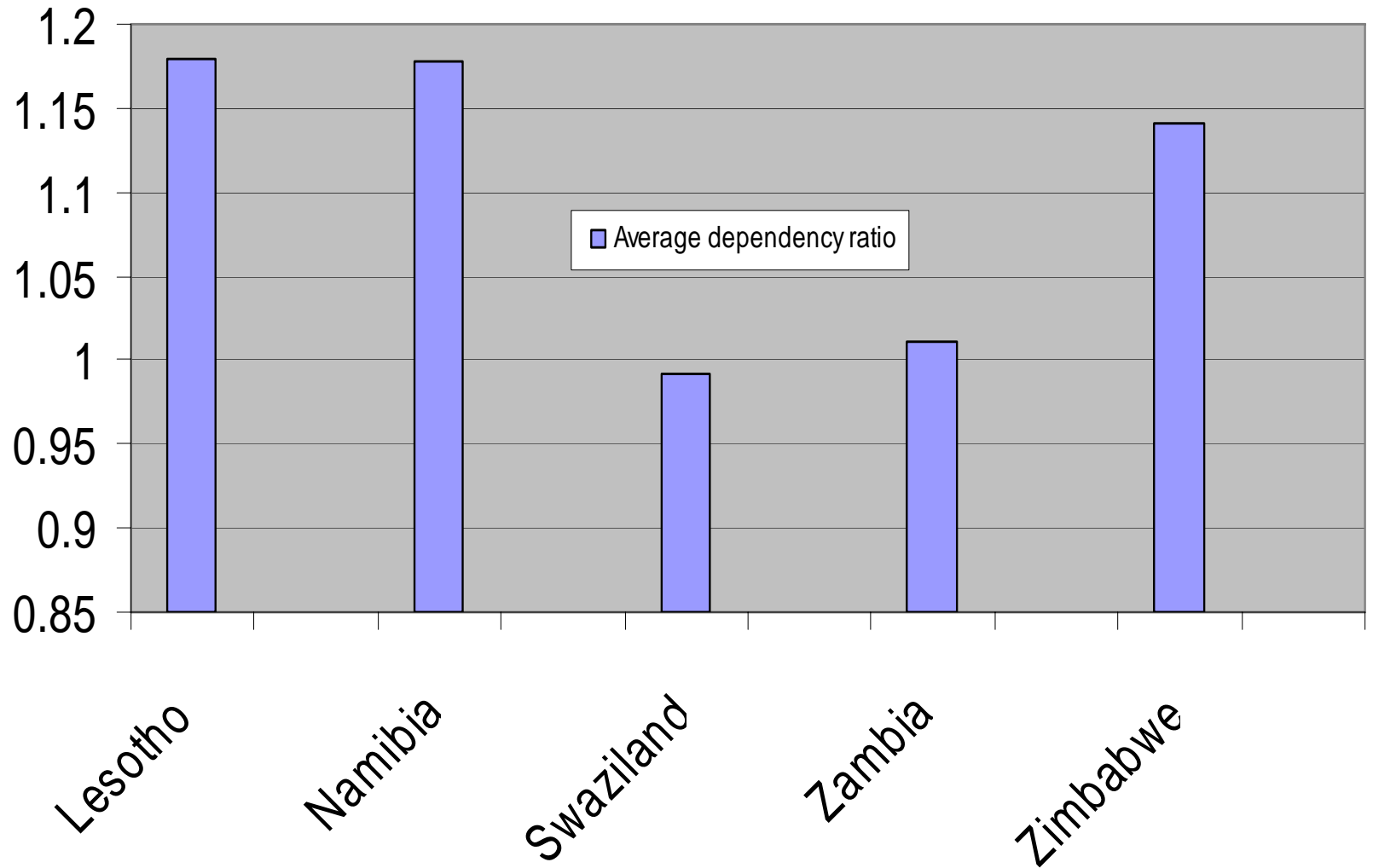
Table 4 Changes in Family Structures

Std

	Number of HHs	Mean HH size	Deviation	S.E Mean
Zimbabwe	320	5.6	2.2	0.1
Zambia	203	7.1	2.9	0.2
Lesotho	210	5.1	2.2	0.2
Namibia	144	7.8	4.0	0.3
Botswana	156	8.0	16.8	1.3
Swaziland	847	5.7	1.4	0.0

Table 5 Average Household sizes

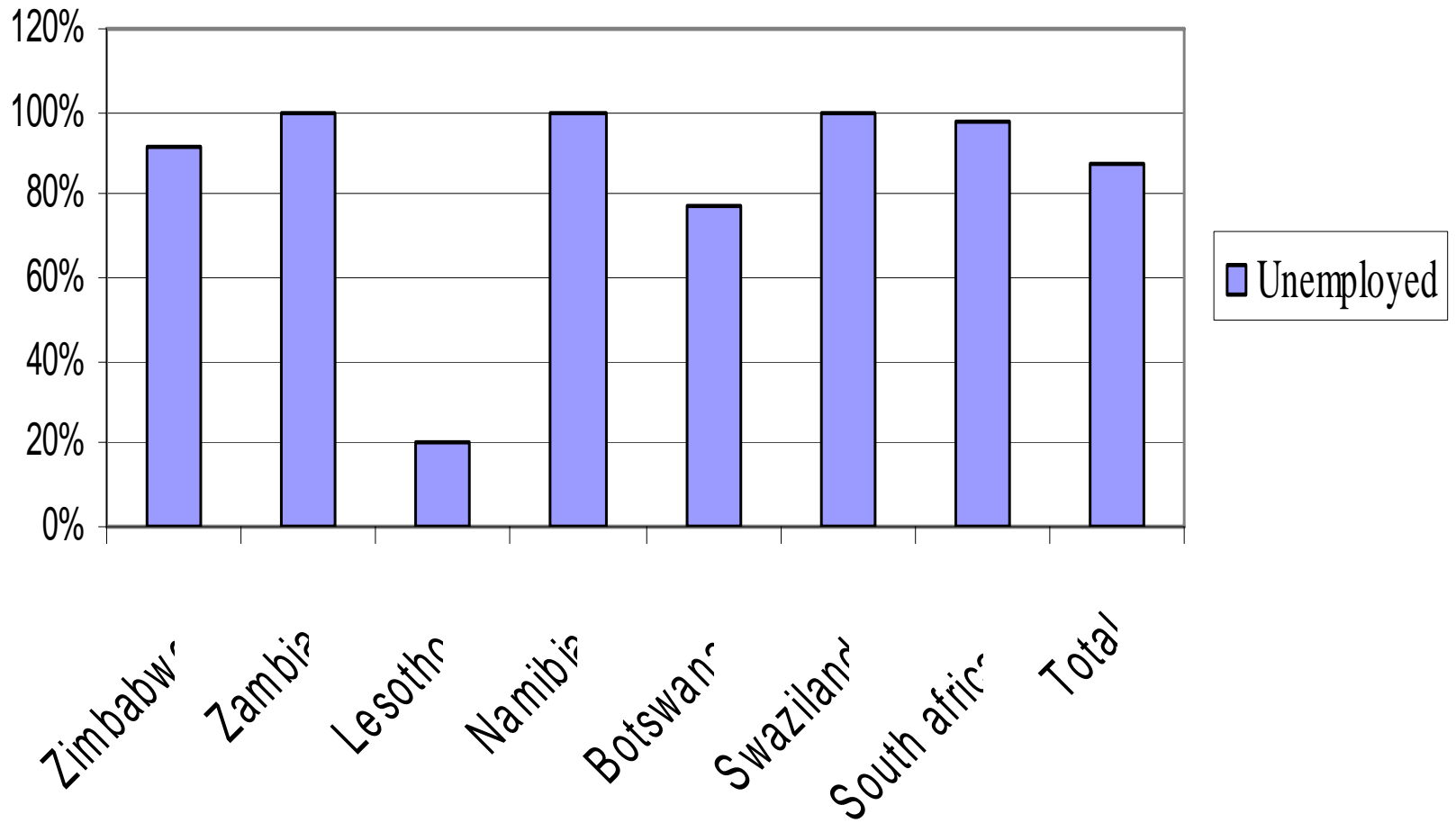
Average dependency ratio



	Not formally educated (%)	Primary education (%)	Secondary education (%)	Tertiary/College (%)	Totals
Zimbabwe	7.8	56.3	35.9		100
Zambia		56.7	24.6	2.0	100
Lesotho	16.2	45.2	17.1	1.9	100
Namibia	31.9	29.9	11.1	6.3	100
Botswana	39.5	43.3	14.0	1.9	100
Swaziland	12.0	23.3	50.8	4.0	100
South Africa	6.3	58.3	35.4		100
Total	14.1	37.6	35.6	2.8	100

Table 6: Level of Education of Household head (%)

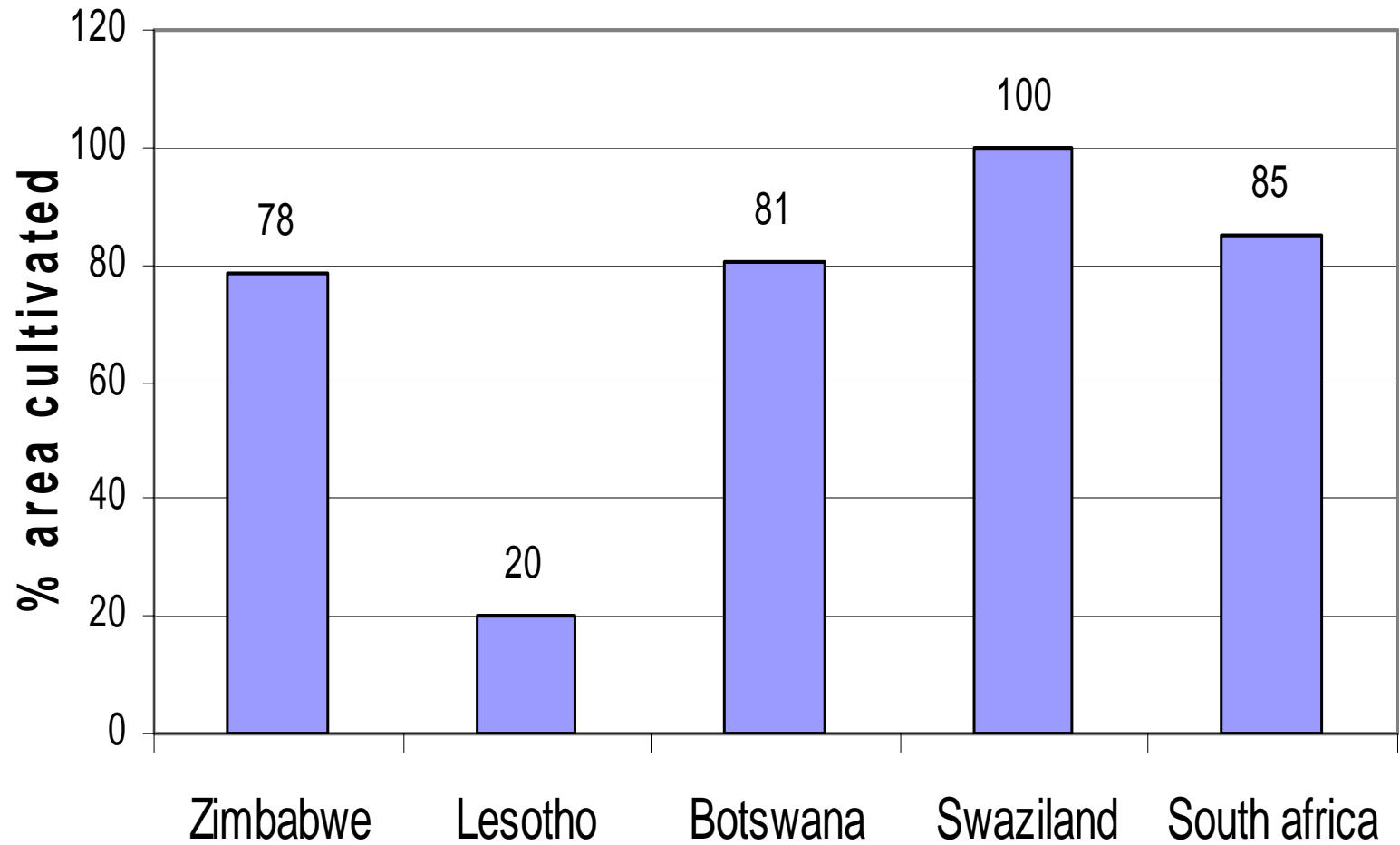
Employment Status of Household Heads



Country	No. of HHs	Mean	Std. Deviation	Std. Error Mean
Zimbabwe	320	1.1	0.6	0.0
Zambia	201	2.5	2.8	0.2
Lesotho	210	0.9	2.0	0.1
Botswana	138	5.5	6.0	0.5
Swaziland	574	3.5	2.5	0.1
South Africa	48	1.1	1.3	0.2

Table 7. Mean Total Field Size (ha)

Area cultivated in 2003-2004 season



	Sex of Family head	No. of HHs	Average Ha for study sample	Std. Deviation	Std. Error Mean
Field size	Female	704	2.1	2.1	0.11
	Male	749	3.0	3.0	0.12
% land cultivated	Female	622	77	77	2.00
	Male	578	87	87	3.86

Table 8. Arable land ownership and cultivation among different households in the study sample

Country	Millet %	Rapoko %	Groundnut	Tobacco %	sweet potato %	Maize %	Cotton	Roundnut	Paprika	beans	Vegetables	fruits
Zimbabwe	2	10	19	1	6	96		7	3	10	1	
Zambia	10		27	0	19	90	14	23				
Lesotho		18				42				19	25	5
Namibia		58				37					2	4
Swaziland	0		4	0	7	69	1	2		5	11	
South Africa			10			94				79	25	
Total	1	8	8	0	6	65	2	5	0	8	8	1

Table 9. Crops grown in different study sample countries in 2003-2004 production season

Input	Country	N	Mean per		
			ha (kgs)	Std. Deviation	Std. Error Mean
Maize seed	Zimbabwe	301	17.2	25.1	1.4
	Zambia	203	36.0	153.5	10.8
	South Africa	0			
Basal fertilizer	Zimbabwe	184	58.5	43.1	3.2
	Zambia	0	.	.	.
Top Dressing fertilizer	Zimbabwe	256	332.0	4371.6	273.2
	Zambia	0	.	.	.
	South Africa	48	32.7	49.6	7.2

Table 10. Input application rates in a few identified countries

	Value of sold crops (US\$)	Value of sold livestock (US\$)
Zimbabwe	34.50	7.90
Zambia	0.02	
Lesotho	6.40	25.63
Namibia	9.35	49.91
Botswana		62.93
Swaziland	304.97	338.38
South Africa	19.81	

Table 11. Value of sold crops and livestock

Country	Cattle	Donkeys	Pigs	Goats	Sheep	Poultry
Zimbabwe	1.1	2.3	2.0	2.3	0.0	6.1
Lesotho	2.8	1.7	1.8	7.7	2.3	5.0
Namibia	17.5	5.9	5.3	19.4	29.4	14.4
Swaziland	14.4	4.0	22.5	9.7	19.5	15.0

Table 12. Livestock ownership in the study sample

	Lesot ho	Nami bia	South Africa	Swazila nd	Zimbab we
Number	14	51	0	127	144
Sample size	210	144	48	847	320
Percent age	6.7	35.4	0.0	15.0	45.0

Table 13: Percentage of households with an Ox drawn plough

	Financial			
% of Households reporting loss of ...	Livestock sold	Farming implement sold	resources diverted	Farming time lost
Zimbabwe	19.4	0.9	54.1	68.1
Zambia	0.5		2.0	24.1
Lesotho	1.4	61.0		
Botswana	13.4			51.6
Swaziland		3.8	92.4	
South Africa			2.1	6.3
Sample average	4.5	8.4	49.8	18.2

Table 14. Reported losses due to HIV and AIDS

	Mean Monthly Expenditures (US\$)	Average Annual income (US\$)
Zimbabwe	22.28	81.04
Lesotho	1.90	27.24
Namibia	33.00	41.43
Botswana		188.50
Swaziland	417.21	427.94
South Africa	9.29	5.86

Table 15. Monthly expenditures and Total income

	School fees	Medical	Savings Account	Agric Expenses	Food Expenses	Burial Society	Labour Sharing
Zimbabwe	50.6	54.7	11.6	24.9	127.2	0.6	0.8
Namibia	14.0	4.6		5.4			0.0
Swaziland		57.9			164.3	380.6?	38.7

Table 16 Annual expenditures patterns in selected Southern African countries