

SOURCES OF INFORMATION FOR SMALL- HOLDER CATTLE FARMERS IN THE NORTH WEST PROVINCE, SOUTH AFRICA

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OUTLINE

- **Introduction**
- **Methodologies**
- **Results**
- **Conclusion**

INTRODUCTION

- **Estimated SA national is 14 million**
- **10% estimated to be dairy cattle**
- **Small-holder farmers own 40% of national herd**
- **Most small-holder farmers own 1-10 head of cattle**

INTRODUCTION

- **Small-holder herds are used for dual purposes (milk and beef)**
- **Performance of the public extension under question**
- **Can other sources complement public extension?**
- **Purpose: Identify sources and evaluate their influence on productivity**

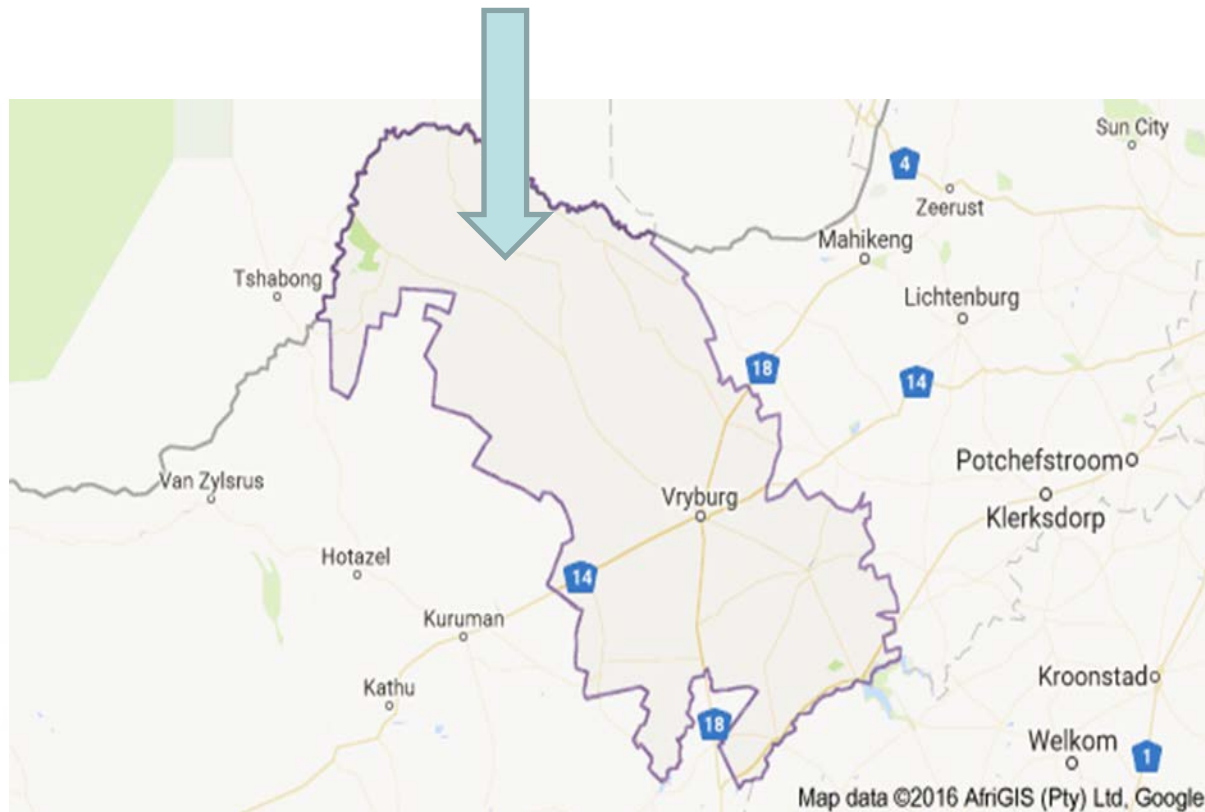
METHODOLOGIES

- 308 farmers were randomly selected from four extension service areas in the Dr Ruth Segomotsi Mompati District Municipality
- 45 minutes interviews during May till July 2012



METHODOLOGIES

- South Africa' largest beef producing district
- One of the most arid
- One of the poorest

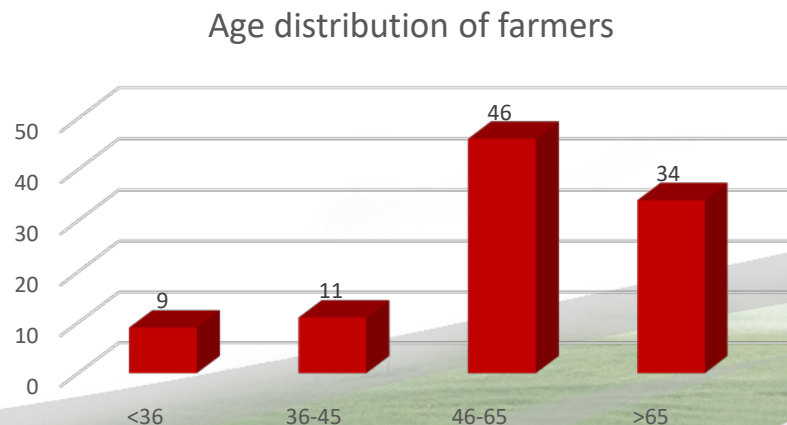


METHODOLOGIES

- **Ranking scale used to measure preferred channels**
- **Data analysis using SPSS 22 (2013)**
- **Correlation analysis to measure associations between channels and demographics as well as herd dynamics**

RESULTS

- Majority (76%) of farmers were male
- Average age of household head was 57
- Dominance of middle aged farmers (46%)
- Average years of schooling was 7.6



RESULTS

- Average herd size was 35
- Calving rate was 55%
- Herd mortality rate was 10%
- Herd off-take rate was 15%

Households by herd dynamics

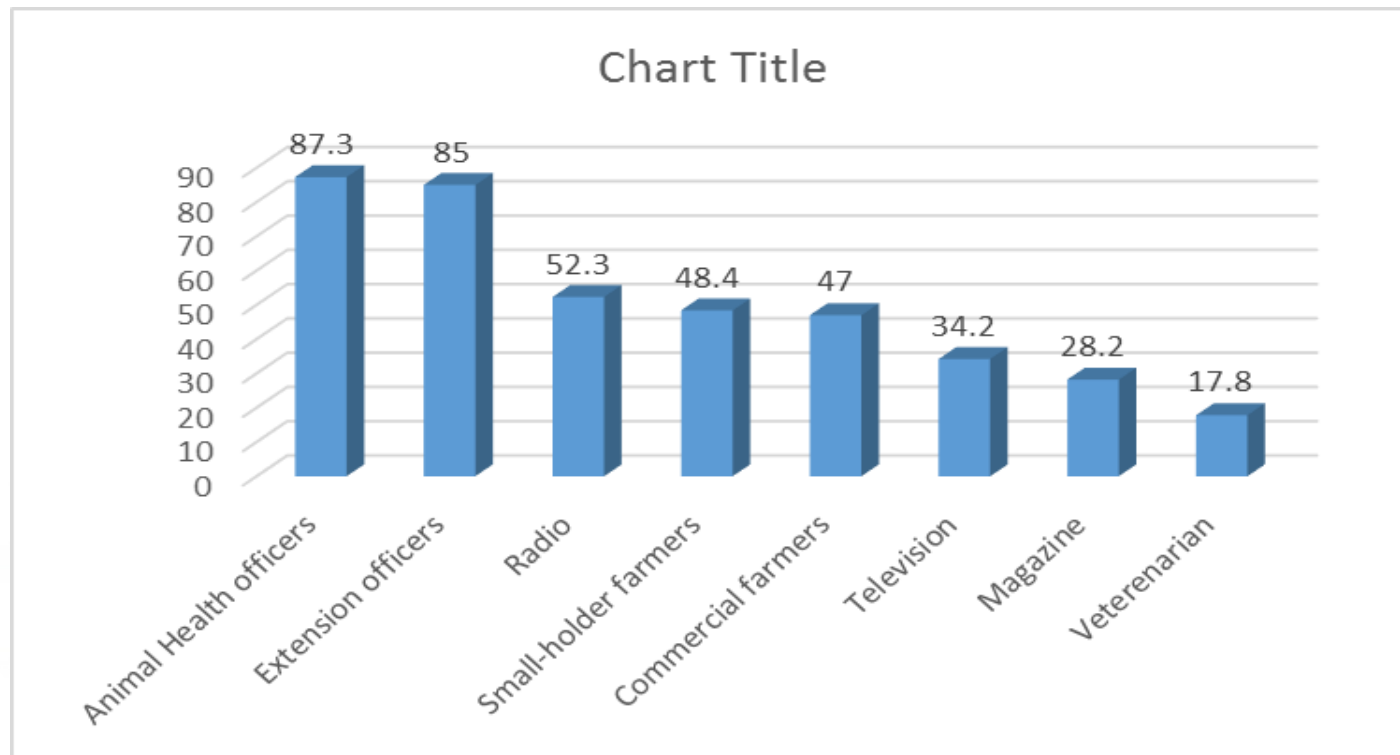
Herd size	No farmers	% frequency	Calving rate	Herd mortality rate	Herd off-take rate
1-10	57	18.5	55.5	18.1	22.5
11-30	121	39.3	51.7	8.8	12
31-70	94	30.5	57.5	8.6	13.8
>70	36	11.7	55.6	6.1	16.4
Total	308	100	55	10	15

Dairy ranching

- Only 7.7% of famers use dual purpose breed in crosses with indigenous breeds
- 35% of herds milk cows
- Average number of cows milked was 6 ranging between 1 and 20
- Average daily milk per household was 12 litres

Sources of information

- Animal health officers were main source
- Extension officers second source



Household attributes and sources

Sources of information	Age	Years of schooling	Gender	Herd size
Magazine	-.364**	.328**	-.130*	.179**
Radio	-.183**	.067	-.109	.186**
Television	-.298**	.139*	-.183**	.225**
Commercial farmers	-.128*	.113	-.179**	.174**
Small-holder farmers	.023	-.034	-.081	-.005
Extension officers	-.101	-.193**	-.096	-.014
Veterinarian	-.175**	.033	-.042	.126*
Study groups	-.075	-.080	.168	-.006
Office visits	.008	.071	.216**	-.268**
Telephone	.155	.097	.140	-.164

Household attributes and sources

- Owners of large herds relied on mass media including magazine, radio and TV as well as commercial farmers and veterinarians
 - But made less office visits
- The negative correlation (Table 3) suggest that radio porgrammes put less emphasis on issues of market and trade.

Herd performance and sources

Sources of information	Herd off-				
	Calving	Mortality	take	Sheep sale	Small stock sale
Magazine	.019	-.050	-.046	.015	-.043
Radio	-.027	-.113	-.161**	-.137	-.169*
Television	.072	-.114	-.105	-.190	-.186*
Commercial farmers	-.095	-.053	-.107	-.112	-.194*
Small-holder farmers	-.200**	.006	-.110	-.050	-.161*
Extension officers	.036	-.056	-.075	-.418**	-.053
Veterinarian	-.014	-.098	.050	-.088	-.101
Study groups	.066	-.001	.141	.135	.049
Office visits	-.147	.130	.114	.348**	.094
Telephone	-.127	-.035	.088	.393*	.296*

Household attributes and sources

- **Reliance on other small-holder farmers for agricultural information, resulted in:**
 - lower calving rates
 - fewer small stock sales.
- **The sale of small stock also declined as respondents relied on commercial farmers for information.**

Household attributes and sources

- While the depressed calving rates could be attributed to the limited scope of agricultural technology among small-holder producers
- The suppression of small stock sales by both commercial and small-holder farmers raises a question whether there is sufficient commercial orientation in the study area towards small stock farming.

Household attributes and sources

- There was a positive correlation between office visits and the sale of sheep
- This suggest that extension officers may use other experts in the office to persuade farmers to sell livestock during the face to face sessions.
- The use of telephone also increased the sale of both sheep and overall small stock

Household attributes and sources

- This implies the use of individual communication methods might induce a commercial orientation amongst small-holder.
- The apparent entrepreneurial orientation associated with office visits and telephone communication suggest
 - These such methods reinforce extension efforts to persuade small-holder farmers to become commercially oriented.

CONCLUSION

- **Should demographic characteristics be considered choosing channels for disseminating information?**
- **Does farmer to farmer extension concentrate on technical aspects at expense of entrepreneurship?**
 - Why are mass communication channels and farmer to farmer methods suppressing livestock sales?

CONCLUSION

- **Should extension methods e.g. group and mass media be combined to improve productivity and entrepreneurship**

Acknowledgements

- National Research Foundation



Thank you