

'MAVENISM' AND 'INNOVATIVENESS' AMONG SMALL RUMINANT KEEPERS IN KENYA'S ISIOLO AND MARSABIT DISTRICTS

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ABSTRACT

Small ruminants play an important social and economic role in the lives of many pastoralists who inhabit many parts of Northern Kenya. Compared to other parts of the country, the area is poorly served by modern communication services but as mobile telephone services are rolled into these areas, this gap is slowly eroding. This possibility will likewise improve the chances of providing this population with up-to-date market intelligence which in turn should improve the returns from the sale of livestock in distant markets. To operationalise this, the use of the internet as well as SMS delivered market intelligence through the National Livestock Market Information System (NLMIS) was launched in 2007.

As a novel idea in the region, it was expected that information about its existence would pass through a series of intermediaries. Based on a study of 250 pastoral households, this paper attempts to explore the concepts of mavenism, opinion leadership and innovativeness in the marketing of small ruminants from the larger Marsabit and Isiolo Districts of Eastern Province, Kenya. The results are mixed with an indication that mavens are not necessarily those with large flocks. It further concludes that though the NLMIS is still relatively unknown among respondents, the presence of market mavens who in the study are indistinguishable from opinion leaders could catalyze the spread and eventual use of the system.

INTRODUCTION

Small ruminants play an important role in the livelihoods of many arid and semi arid dwellers. In Kenya, there were an estimated 27.7 million goats and 17.1 million sheep in 2009 (Census 2009). Most of these small ruminants are found in the drier parts of the country including Northern Kenya, Eastern

Province and Rift Valley. Small ruminants reproduce quickly and are relatively easy to manage thereby spreading risk inherent in agricultural production (Ehui *et al.*, 2003). On the demand side, they are preferred over beef by about 55% of the population in Kenya (Juma *et al.*, 2010). The major outlets for small stock include the larger towns such as Nairobi and Mombasa, after either being trucked or trekked from these rearing areas. From Marsabit, 46% of sheep and goats go from the producer straight to the terminal market with the remaining going through intermediate traders (Juma *et al.*, 2007). More often, pastoralists who are able to concentrate truck loads are those who sell directly to the terminal market while those supplying less than this have to do with market intermediaries. These traders reported that they received market information regularly. It is reported that in Kenya, producers share of the final retail price for red meat ranges between 47-52% (Aklilu, 2002).

Provision of marketing information or the improvement of the capacity to communicate the same can however have a positive effect on market transactions in terms of improving sales and identifying markets offering better prices (Kariuki & Kaitho, 2006). The theory of information and market signals including available evidence on the relationship between market integration and economic development, suggest that greater access to information sources such as ICT's, can improve the living standards of the rural poor through enhancing the functioning of relevant markets (Eggleston *et al.*, 2002) since poor communication increases search and monitoring costs (Pingali *et al.*, 2005). The scale of operation in other studies has been shown to positively and significantly affect the decision to acquire information and to adopt agricultural technology (Abdulai *et al.*, 2008).

Pastoralists seem to have good enough access to climate and price information and that lack of information does not significantly limit marketed offtake as these informal networks are believed to generate and distribute reliable and timely information about livestock market conditions

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(Barrett *et al.*, 2004a). Important sources of this information are traders, friends and relatives. Traders have a competitive advantage over producers in terms of market information access (Kariuki *et al.*, 2009). Pastoralists have also been known to hold on to their stocks even when prices improve, usually after the onset of rains (Sekala 2001, Barrett *et al.*, 2004b). If early warning systems do work, this information should have a way of reaching the pastoralists whether through the mass media or through their informal information networks. That way, they are forewarned and begin selling off excess stock if they place a premium on the avoidance of stock losses.

The NLMIS

Established in 2000, the Kenya Livestock Marketing Council (KLMC) is an organization whose mission is in part to disseminate accurate and timely market information to traders and producers with an aim of improving the living standards of livestock producing communities in Kenya. Initiatives of the KLMC and the National Livestock Marketing Information System (NLMIS) would complement informal market information sources. Launched in 2007, the NLMIS was designed to capture market price and trade information as well as characteristics critical to the supply side of livestock marketing and share the same with all players. The overall objective of the NLMIS is to increase market access for livestock producers and traders since the system allows users to reduce transaction costs by reducing reliance on brokers for information and to conduct market transactions on their behalf. Its development is envisaged to assist in providing credible and timely livestock marketing information. Over 5,000 people in 2007 were reached by the training and awareness creation activities which were implemented in 13 districts which included Marsabit and Isiolo (Kariuki *et al.* 2009). Traders were observed to have an advantage over producers in the acquisition of such market information. This means that one of the segments of the intended beneficiaries of this system (producers) might be lagging behind in benefiting from the NLMIS. To overcome this, marketplace experts might be able to play a role in bridging such information gaps existing among livestock producers.

Market mavens, opinion leaders and innovators

Marketplace experts such as market mavens, are defined as; *'individuals who have information about many kinds of products, places to shop, and other*

facets of markets, and are socially inclined to initiate discussions with acquaintances and respond to requests from their acquaintances for market information'. These are neighborhood experts who have information ranging over several topics (Feick and Price 1987). Over the recent past, this concept of mavens has been explored in the marketing literature (Chelminski & Coulter, 2007; Clark, *et al.*, 2006, 2008; Clark & Goldsmith, 2008). They are defined as being distinct from opinion leaders in that, they are generalists rather than specialists in the kind of information they possess. These individuals rely on the power of weak ties acting as effective diffusers of information as word of mouth is more than twice as effective as mass media in influencing consumers to for example switch brands hence the interest in this special category of people by marketing researchers. Opinion leaders on the other hand are people who have expertise on a narrower range of topics and have been observed to have more expertise on durable commodities (e.g. automobiles) as opposed to mundane items which do not have status connotations. Innovators on the other hand are persons who are first movers to the extent that they are the first to act upon new information. These can be thought of in the same light as the innovators mentioned in many adoption studies. One study has gone further to characterize communicative adopters as persons who are both opinion leaders and innovators (Venkatraman, 1989). These few examples show that such socially gifted people exist and therefore, their role in inducing change cannot be downplayed.

The objectives of this work are several. We wish to establish to presence of mavens among pastoralists and investigate if they have information relating to the NLMIS. If they exist and have this information with them, it is conceivable that they constitute an information bank at the grassroots. Harnessing the power of these persons in dissemination can therefore open up an important window for the spread of information through the actual targeting of such people by service providers.

METHODOLOGY

Two hundred and fifty pastoral households in the larger Marsabit and Isiolo districts of Eastern province were interviewed using an instrument featuring the Maven scales developed by Feick and Price but adapted to this study of small ruminants by making necessary amendments to the original items. Each item was administered on a 7-point strongly disagree to strongly agree likert scale

TABLE I- DISTRIBUTION OF SAMPLE HOUSEHOLDS INTERVIEWED IN MARSABIT AND ISIOLO

District	Division	No. of Households
Isiolo	Isiolo East	13
	Isiolo Central	17
	Merti	30
	Garba Tulla	30
	Kinna	30
	Sericho	30
Marsabit	Maikona	20
	Korr	20
	Laisamis	20
	North Horr	10
	Gas	10
	Kargi	10
	Loiyangalani	10

which ranges from 6 to 42. To distinguish market mavenism (MM) from opinion leadership (OL), we opted to construct the question '*How often do you provide other people with specific information on prices and available markets for sheep and goats*' as a measure of opinion leadership. In addition to the opinion leadership question, we also designed two innovativeness measures (IN) which were measured by the two questions '*When new prices for sheep and goats emerge in the market, you (sell much later than most people=1..you are among the first to sell sheep and goats=5)*' and '*When a new livestock drug first appears in the market, you (buy much later than most people=1..you are among the first to buy these drugs =5)*'. All these questions hopefully capture the specificity needed to distinguish between these concepts.

Data were analysed using the SAS program (v.8.1). Basic statistics were derived from this data and factor analysis was used to explore the validity of the data collection tool. Simple correlations were also produced to investigate the relationships among the scales used in this study.

RESULTS

Descriptive statistics from the maven scale are presented on table 2 below. What is clear from here is that over half of the respondents consistently identified themselves as having the qualities of a maven (they agreed to these ratings). The 6 scale items yielded a mean of 30 and a standard deviation 7.4. A closer examination indicates that at least 25% of the respondents did not directly regard themselves as mavens on the final MM question. The mode was 6 (agree) for all MM items and 3 (rarely) for the OL item (table 3). The mode is 3 (buy/sell at the same time as others) for both IN items (table 4). Careful examination of the innovativeness factor shows that in general, over 40% of the respondents state that they are among the first to sell/buy when new prices are introduced or when new drugs are in the market. The data further suggests two things; that since most dispose small stock at the same time; this could easily depress prices at the market. Secondly, that many market mavens or opinion leaders are not first movers. This is a counterintuitive finding since it would be expected that being in possession of information should make one a first mover.

To explore this further, we split the data into three groups by grouping these respondents by the IN items. One group we called the low innovativeness (those scoring sell or buy later than most), the second group we called the moderate innovativeness group (those who sell and buy at the same time as others) while the third group we termed as the high innovativeness group (those buying or selling before most). For innovativeness in the sale of sheep and goats, these groups comprise 22.7%, 28.5% and 48.8% respectively. On innovativeness in the purchase of livestock drugs, 33.8%, 23% and 43.2% of respondents fell in the low, moderate and high groups respectively.

'Mavenism' and 'innovativeness' among small ruminant keepers

TABLE II - SUMMARY OF RESPONSES FOR THE 6 MARKET MAVEN SCALE ITEMS (PERCENT)

Item	1= strongly disagree, 7= strongly agree						
	1	2	3	4	5	6	7
Do you like introducing new brands and products to your friends?	5.26	9.72	5.67	5.67	15.38	44.53	13.77
Do you like helping people by providing them with new information about livestock drugs?	0.81	4.86	2.83	6.07	18.62	46.56	20.24
Do people ask you for information about livestock drugs, places to sell livestock and prices for livestock?	4.07	9.76	8.54	9.35	9.35	38.21	20.73
If someone asked you where to get the best buy on several types of livestock drugs, you could tell him/her where to shop for these	1.22	5.71	3.27	6.53	15.10	49.39	18.78
Your friends think of you as a good source of information when it comes to new products or sales	4.62	14.29	4.62	21.85	8.82	32.77	13.03
Think about a person who has information about a variety of products and likes to share this information with others. This person knows about new products, prices, sales and so on, but does not necessarily feel he/she is an expert on one particular product. How well would you say this description fits you?	10.98	10.57	5.28	11.79	18.70	33.33	9.35

TABLE III - SUMMARY OF RESPONSES TO THE OPINION LEADERSHIP ITEM (PERCENT)

Item	1= Never, 7= Very frequently						
	1	2	3	4	5	6	7
How often do you provide other people with specific information on prices and available markets for sheep and goats?	1.2	13.4	30.8	18.2	13.0	22.6	0.8

TABLE IV -SUMMARY OF RESPONSES TO THE INNOVATIVENESS ITEMS (PERCENT)

Item	1= much later than most people, 3= at the same time as others, 5= are among the first				
	1	2	3	4	5
When new prices for sheep and goats emerge in the nearest market, you (sell)	9.0	13.8	28.5	27.6	21.1
When a new livestock drug first appears in the market, you (buy)	14.8	19.0	23.0	22.2	21

The correlation coefficients between these measures are as shown on table 5. The results show that the correlation between the MM and OL is much higher for the moderately innovative group than all others groups. Since herd sizes are a meaningful wealth measure among pastoralists, we use TLUs to investigate how mavenism relates to this wealth measure. The moderate innovative class also happens to have larger herd sizes than the other two groups and the correlation between MM and OL is also larger. Interestingly, for this group that sells and buys at the same time, the MM measure is slightly lower than for the other groups.

TABLE V - MEAN TLU SIZES AND CORRELATIONS BETWEEN MAVENISM AND OPINION LEADERSHIP FOR THREE INNOVATIVENESS CLASSES

		Low	Moderate	High
New sheep and goat prices		16.52 (17.01)	28.71 (27.93)	26.06 (31.93)
Mean MM score		30.42	28.38	31.04
Correlation between MM & OL ^a		.246	.518	.407
New livestock drugs		19.55 (20.98)	37.30 (35.48)	16.02 (17.74)
Mean MM score		30.09	26.66	32.86
Correlation between MM & OL ^a		.256	.454	.399

Interestingly, there appears to be no consistency in the results. For instance, the correlation between MM and OL is high for the moderately innovative group, they own more stock but collectively, their MM score is relatively low. This appears not to be the general conclusion we can make from the correlation between MM and TLU which returns a significant ($p < 0.05$) negative correlation. In our data, the smaller the herd, the more MM score he/she has and the more he/she can be considered an OL.

NB: Figures in brackets are standard deviations

^a: These correlation coefficients are all significant at 1%

Less than 2% of the respondents had heard of the NLMIS, which was our measure of how deep this information had percolated among the studied

population. This low penetration means that the NLMIS is mostly used by traders and other players and not many pastoralists are currently using the system nor aware of its presence. Even in areas such as Kinna which was among the places where the sensitization on the NLMIS was carried out in 2007, knowledge of its existence was still surprisingly very low. About 46% of the respondents had access to a mobile piece with ownership dependent on district of residence or better still, penetration of the mobile network through which NLMIS transmits information. For instance, all districts of the larger Marsabit have over half of their respondents having no access to phones while Isiolo was the only district where over half had access to mobile phones. Gender on the other hand is not a significant determinant of mobile phone ownership. Mobile phone ownership notwithstanding cannot reasonably be used as a basis for the low infiltration of the NLMIS generated information. One would expect to find the use of the system to be concentrated in areas where the mobile connectivity is dense but this did not turn out to be the case.

CONCLUSION

To the best of our knowledge, this is the first study we are aware of that attempts to formally apply the personality measurement to study pastoral marketing behavior. In the end, these tools appear to hold some promise in identifying personality traits which have been studied in the marketing field and could be borrowed for similar studies. Supplementary analysis reveals that the scales used are able to distinguish mavenism from innovativeness although for opinion leadership, they fail to differentiate. The results are however mixed in identifying the role of mavens in the spread of market related information although the low spread of knowledge of the NLMIS also limits the analyses that can be applied to the data.

In addition, the study results show that knowledge of the NLMIS has not been deep among pastoralists in the studied area. This means that some effort will need to be put up in sensitizing these communities further.

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