COMMUNICATION AND DECISION MAKING AMONG FRUIT GROWERS IN THE PHASWANA AREA OF NORTHERN PROVINCE

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ABSTRACT

Potential farmers identified in the study were mainly males and were of a higher socioeconomic status and had greater access to agricultural resources than average households. They were still living in varying degrees of poverty and lacking agricultural support services. Decision-making was mainly male dominated, but wives played a greater role in decision implementation. It was concluded that there was a proportion of small-scale farmers who had the potential to become commercial farmers, provided the necessary institutional support was available. New strategies aimed at alleviating rural poverty, and successfully involving members of disadvantaged communities in commercial agriculture need to include land reform, capacity and institution building, scientific communication planning, as well as developing appropriate farming systems, taking cognisance of socio-cultural factors.

1. INTRODUCTION

Studies addressing the characteristics of small-scale farmers with the potential of becoming commercial farmers, including personal factors, decision making, access to agricultural information, socio-economic variables and the socio-cultural milieu have been limited. These included studies by Bembridge (1986) and Nicholson (1989). This study focuses on these important characteristics with the objective of obtaining background information, which may be useful in promoting entrepreneur farmers among disadvantaged communities. Suggestions are put forward on some important issues which need to be considered in formulating strategies to promote commercial farming among such communities.

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2. METHODOLOGY

The study was based on interviews and farm observations with all fruit farmers who were identified as having 20 or more fruit bearing trees in three adjoining villages in the Phaswana area 30 - 40 km from Thohoyandou. Individuals identified, as opinion leaders were those cited by at least four of the fruit growers as having provided useful information to them. In this study it was hypothesised that levels of agricultural production were below optimum and -certain farmer characteristics were acting as constraints to communication of farming information. It was also hypothesised that contact with information sources was inadequate and related to farming progressiveness (Tshikolomo, 1996)

3. PHYSICAL POTENTIAL

The study area, situated in the Luvuvhu river basin has a mean annual rainfall of 716 mm, which is generally adequate for dryland crop production, as well as the growing of certain fruit trees such as mangos, citrus, guavas, macadamias and dates. The area has access to Perennial River water from which there is a good irrigation potential. Physical infrastructure such as roads, schools, clinics, electrification and telephones are reasonably well developed (Tshikolomo, 1996).

4. RESULTS

4.1 Personal characteristics

Fruit growers were predominately males (90%), with a large proportion (38%) in the over 60 age group. Most household heads (54%) were married, one-third of whom had more than one wife. Thirty six per cent of heads of households had received no schooling and at least 40 per cent were illiterate and unlikely to be responsive to written forms of communication. The majority of heads of households (58%) were resident at home, while a further 32 per cent were commuting to work at varying intervals (Table 1).

4.2 Socio-economic characteristics

Generally speaking the fruit growers were of a considerably higher socioeconomic status than the average household in the area (Bembridge & Tshikolomo, 1992). Nevertheless, a large proportion (72%) were classified as living in varying degrees of poverty comparing monthly expenditure data with minimum subsistence income levels (South African Labour Development Research Unit, 1994). Fifty eight per cent were full time farmers (Table 2).

Table 1: Characteristics of household heads (N = 50)

	Respondents		
Characteristics	No.	⁰ / ₀	
Gender			
Male	45	90,0	
Female	5	10,0	
Age groups			
< 40 years	12	24,0	
41 - 60 years	19	38,0	
< 60 years	19	38,0	
Education level			
Nil	18	36,0	
1 - 7 years	12	24,0	
8 – 12 years	11	22,0	
>12 years	9	18,0	
Marital status			
Married monogamous	30	60,0	
Married polygamous	12	24,0	
Widowed	5	10,0	
Single	3	6,0	
Residential status			
At home	29	58,0	
Commuter	16	32,0	
Employed away	5	10,0	

Generally speaking, this category of small-scale farmers were better off than average households in the area (Bembridge and Tshikolomo, 1992), when evaluated in terms of standard of housing, household appliances and ownership of vehicles (Table 2).

4.3 Agricultural production

As is common in the communal land areas, the majority of households had inadequate land holdings and farming equipment to derive a reasonable living from farming alone. They also lacked capital for inputs as evidenced by the low

Table 2: Socio-economic characteristics of household heads (N = 50)

	Respondents		
Characteristics	No.	0/0	
Employment			
Employed	21	42,0	
Unemployed	29	58,0	
Monthly expenditure			
<r300< td=""><td>20</td><td>40,0</td></r300<>	20	40,0	
R300 - R600	20	40,0	
>R600	10	20,0	
Housing standard			
Traditional	21	42,0	
Traditional + modern	24	48,0	
Modern brick/iron	5	10,0	
Household appliances			
Modern stove	38	76,0	
Refrigerator	22	44,0	
Kitchen furniture	29	58,0	
Lounge furniture	21	42,0	
Radio	46	92,0	
Television set	26	52,0	
Telephone	16	32,0	
Motorised transport	21	42,0	

expenditure on inputs (Table 3). Yields from fruit trees were found to be considerably below optimum. Although it was not possible to obtain adequate information on total household income, based on expenditure data (Table 2), on average, on the basis of expenditure and crop production data. Approximately 45 per cent of household income was derived from farming (Table 4). The fruit growers tended to own greater numbers of large stock and have a larger income from vegetables than the average rural household, which suggests that a proportion of them have entrepreneurial ability and the potential to become independent farmers.

4.4 Household decision making

Decision-making is a key factor in farm management. In this study it was found

Table 3: Household data on agricultural production (N = 50)

	Respondents	
Characteristic	No.	0/0
Arable land holding (ha)		
<5	27	54,0
6 - 10	5	10,0
11 - 20	13	26,0
>20	5	10,0
Farm implements		
Plough	8	16,0
Planter	5	10,0
Cultivator	4	8,0
Tractor	2	4,0
Annual expenditure on inputs		
Nil	7	14,0
<r100< td=""><td>25</td><td>50,0</td></r100<>	25	50,0
R100 - R200	11	22,0
>R200	7	14,0
Bearing fruit trees		
20 - 100	19	38,0
101 - 200	11	22,0
201 - 300	5	10,0
>300	15	30,0
Annual income from fruit (N = 30)		
<r500< td=""><td>15</td><td>50,0</td></r500<>	15	50,0
R501 - R1000	3	10,0
R1001 - R2000	4	13,3
>R2000	8	26,6

that decisions on purchasing capital items such as implements, furniture, motor vehicles and home improvements, the male head of household was invariably the most important decision maker. Possibly because of the absence of male heads of households in employment, wives tended to play a more important role in deciding on food purchases and farming activities, such as weed control.

Table 4: Mean annual farming expenditure and income (N = 50)

Income	Mean	S. D		
Fruit	1093,36	2125,88		
Vegetables	345,08	981,57		
Crops	290,40	762,99		
Cattle	2499,00	3819,64		
Sheep	35,00	177,35		
Goats	170,40	316,88		
Pigs	34,00	66,27		
Poultry	65,60	87,25		
TOTAL	4532,84			
Expenditure				
Fruit/Crops	1719,98			
Livestock	523,26			
TOTAL	2243,24			
GROSS MARGIN	2289,60			

Wives played a more important role in implementing decisions, particularly purchasing food and home improvement articles, and to a large extent in farm activities, especially weed control (Table 5).

Table 5: Role of household heads and spouses in important aspects of decision making and implementation (N = 50)

	Decision making			Decision implementation		
ACTIVITY	Head	Wife	Both	Head	Wife	Both
	%	%	%	%	%	%
Weed control	46,3	41,5	12,2	16,1	83,9	0,0
Purchasing implements	88,0	8,0	4,0	82,0	20,0	0,0
Purchasing furniture	75,8	9,1	15,1	53,3	46,7	0,0
Purchase motor vehicle	85,0	0,0	15,0	90,0	0,0	10,0
Purchasing food	44,7	47,3	8,0	15,2	84,8	0,0
Home improvement	67,6	5,4	27,0	34,8	65,2	0,0

According to the survey the most important household decisions concerned improving family living and household income. The interest in fruit growing and farming was borne out by the finding that decisions relating to fruit growing and

general farm management were the most important farming decisions (Tshikolomo, 1996).

Probably because pensions and employment were the major source of income, respondents in this study regarded general household decisions as of greater importance than farming decisions.

4.5 Sources of farming information

Allied to the problem of low levels of education and literacy (Table 1), thus far the printed media has played a minor role as a source of information in the small-scale farming industry (Bembridge, 1995). In this study 46% had access to written information, mainly in the form of popular journals with little research based information. Although the majority (76%) listened to radio broadcasts on farming (Table 6), such information tends to be of general interest, with little technical content. The same applies to television. However, electronic media has an important role to play in awareness campaigns.

Table 6: Distribution of heads of household according to contact with sources of agricultural information (N = 50)

Source of information	No.	0/0
Mass Media		
Printed media	23	46,0
Radio	38	76,0
Television	26	52,0
Group media		
Farm demonstrations	36	72,0
Farm discussions	29	58,0
Farmers' days	24	48,0
Meetings	21	42,0
Individual		
Other farmers	28	56,0
Govt. extension	19	38,0
Corporation extension	25	50,0

Grass root groups are central to people centred development. Group methods of communication are also more cost-effective than individual visits. The majority of farmers (72%) had contact with information through method and result

demonstrations on fruit growing, crops and livestock. It was found that attendance at demonstrations correlated significantly with contacts with extension officers (P < 0.001), farming broadcasts (P < 0.01), publications (P < 0.01) and other group functions such as meetings (P < 0.01) and farm discussions (P < 0.10), as well as with farming income (P < 0.01) (Tshikolomo. 1996), suggesting that research based information is reaching mainly the progressive farmers with greater entrepreneurial ability.

Only about half the farmers had individual contact with extension officers (Table 6). These were farmers with significantly higher farm income (P < 0.01). They also used other farmers (P < 0.001) significantly less as a source of farming information (Tshikolomo, 1996).

A comparison of opinion leaders cited in this study and their followers, showed that opinion leaders did not differ much from their followers with regard to gender (mainly male), residential status, number of fruit trees owned, household expenditure and status in the community. Opinion leaders tended to be younger and better educated, but they did not have significantly greater contact with electronic media and extension officers. Their major sources of information included family members, other farmers and ministers of religion. A general conclusion was that opinion leaders were a weak link in the communication chain because of their limited access to research based information (Tshikolomo, 1996).

4.6 Socio-cultural factors

In any programme of intervention aimed at bringing about beneficial change knowledge of the socio-cultural milieu is essential. Among the Venda people there are a number of cultural factors, which tend to impact on decision making and socio-economic development. These include traditional and polygamous marriages, extended families, male dominated power and authority, sharing of goods and traditional cultural ceremonies, including feasts and burials, all of which may have a negative or positive influence on the household economy. Ancestor worship, including dedication of animals to ancestors, as well as the belief in the power of the 'gods' through ancestors also have an impact on social life, especially among the older generation.

On the agricultural side, the traditional interplanting of grain and legume crops still persists. There has been a tendency among extension officers not to recommend traditional crop growing methods, but rather to advocate inappropriate commercial farming methods. Other cultural beliefs such as not being permitted to plant Njugo beans before the flowering of the round leaf *kiaat* tree, and women not being permitted to enter land with a pumpkin or groundnut crop, or a cattle kraal during menstruation days also still persist (Tshikolomo, 1996).

Certain dietary taboos are also important in local culture. These include aversion to eating fish, eggs and some parts of chicken (Tshikolomo, 1996). This brief outline reinforces the need for extension and development agencies to have a clear understanding of local culture and customs, and adapt their programmes accordingly.

5. CONCLUSIONS

The results of this study showed that farmer characteristics such as age, socioeconomic status and contact with information sources all had an influence on farming progressiveness in terms of farming income.

There is undoubtedly a cadre of small-scale farmers, who with the necessary institutional support have the potential to become fully-fledged commercial farmers.

Any strategy to promote agricultural development needs to go hand in hand with rural development programmes aimed at alleviating rural poverty through the provision of basic needs and the promotion of income earning projects.

Important needs for agricultural developments include provision of inputs, credit and marketing facilities, as well as access to relevant research based information, which was found to be lacking in this study. A critical issue is the formulation of land tenure arrangements, which promote security. This is probably best achieved by trained facilitators assisting local communities in the decision making process leading to acceptable land reform measures.

An issue often neglected in agricultural and rural development programmes is empowerment and capacity building through institutional development at the "grass roots" level. Strong local leadership and a sense of community are essential for comprehensive and sustainable rural development. The weak leadership found in this study emphasises the need for training of local leaders

and institution building as a necessary cornerstone of agricultural extension and technology transfer strategies.

With greater access to education women are playing an increasing role in household decision making and often have the burden of implementing decisions, particularly physical agricultural work. There is a need for greater involvement of women in local development and agricultural extension programmes.

An assessment of the socio-cultural milieu and social networks that make up a community's social capital is fundamental to revitalise local agriculture and to promote rural development. For example, agricultural researchers should be looking at ways and means of improving inter-cropping practices, as well as adapting technology to local farming systems in co-operation with local structures.

Generally speaking the approach to communication in the small-scale farming sector has been of a top-down nature, with little, if any, scientific planning of communication strategies. The benefits of new technology have accrued to those who are already more advantaged. Extension and development agencies need to involve local communities in meeting their information needs. For example, the design of media graphics aimed at semi-literate readers needs to be context based. More emphasis needs to be placed on more cost-effective group learning, as well as on distance education.

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