UTILISATION OF LOCAL LEADERS IN SWAZILAND AGRICULTURAL EXTENSION

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ABSTRACT

The number of Extension Agents who teach farmers improved farm practices is grossly inadequate in Swaziland. The degree to which local leaders are involved in extension teaching to increase extension outreach has not been investigated. Hence this study determined the functions of local leaders in Agricultural Extension, identified their areas of training needs for improved extension teaching skills, investigated their attitudes towards undergoing extension training, and the contributions of leadership characteristics to performing the leadership function, viscidity, that is, pooling farmers together. Data involved 137 local leaders in Swaziland Agricultural Extension. Findings showed that leaders performed very few generic leadership functions to a considerable level, namely, providing a model (59.9%, Mean = 4.66), and enabling others to act (56.2%, Mean = 4.05). Majority (57.7 – 77.4%) of the leaders did not perform the conventional leadership functions in extension such as educating farmers on improved farm practices, and legitimising improved farm practices "Much and Very much." Leaders indicated "Very much" and "Much" needs for training in all areas of agriculture and extension including socio-psychological skills such as visioning (84.7%), technical skills such as those acquired in soil conservation and fertility improvement (86.1%), agri-business skills such as record keeping (61.3%), and extension teaching-learning skills such as working with groups (68.7%). Leaders had positive attitude towards undergoing training and then training other farmers in agricultural development, but lacked most of the leadership characteristics needed to function optimally as local leaders. Leadership characteristics such as empathy, and regarding themselves as members of the group, contributed 23.4% to viscidity as a function of local leaders. In conclusion, leaders performed few functions, and had many areas of training needs in extension. It is recommended that leadership training should be organised for local leaders to enable them perform optimally in extension teaching.

Key words: Local leaders, attitudes, leadership characteristics, leadership functions, training needs.

INTRODUCTION

Purpose of agricultural extension

Agricultural Extension was established in Swaziland in the 1930s for the purpose of assisting farmers in improving food production and their welfare (Trail, 1985). In the United States today, Agricultural Extension has adjusted its operations to meet the changing needs of its clientele, therefore, its six areas of operation include 4-H Youth Development, Agriculture, Leadership Development, Natural Resources, Family and Consumer Sciences, Community and Economic Development. Leadership Development includes training of professional and local leaders to acquire the skills for training farmers (USDA, 2008).

The problem statement

Production of food crops had recently declined in Swaziland. An example is maize (*Zea mays* L.,) which is a popularly consumed food item. The land area for maize production which accounts for 86% of the total planted area, declined from 69000 ha in 1999/2000 to 54000 ha in 2003/2004. The output of maize declined from about 113,000 tonnes to 67,000 tonnes during the same period (FAO/WFP, 2005). One of the strategies for bringing about increased food production is through training of Extension Agents who, in turn, train other farmers on improved farm practices. The ratio of Extension Agents to farmers is 1:400-500, while the ratio should be 1:50-100 for a good coverage (FAO, 2003). The financial need for an adequate number of Extension Agents is beyond what any nation can afford, when competing demands for their budgets are taken into account. Hence, the strategy of training local leaders among farmers who will train other farmers on improved farm practices and welfare, is indispensable. The identity, functions, characteristics, attitudes, and training needs of such leaders had been scarcely documented in Swaziland.

Objectives of the study

The objectives of this study were to:

1. describe the generic and conventional leadership functions of local leaders in Swaziland Agricultural Extension;
2. identify areas of training needs for improved functional performance by local leaders in Swaziland Agricultural extension;
3. determine the attitudes of local leaders towards undergoing training and then training other farmers; and
4. establish the relationship between personal and leadership characteristics of local leaders and performance of viscidity function in Swaziland Agricultural Extension.

Generic and conventional functions of local leaders in Agricultural Extension

Leadership exists in all human organizations and influences their performances. It influences work, family, education and the society as a whole (Mullins and Williams, 2006). In any social group, some leadership functions are performed to advance the

interest of the group. These are referred to as generic functions in this study. The functions which are normally performed by local leaders in extension are referred to as conventional leadership functions in extension. Ross and Hendry (1957) identified nine leadership functions in a social group which are generic functions. The functions include: First, viscidity, which involves facilitating pooling together of group members by cooperation, cohesiveness, discipline, minimising dissention and personal conflict. Second, hedonic tone means ensuring agreeableness among members by ensuring pleasantness, geniality and satisfying experiences. Third, syntality involves ensuring optimum group performance through group integration, morale, sociability and permeability. Fourth, is goal achievement through goal definition and resource mobilisation. Fifth, is initiative, which demands that the leader must start new ideas, projects, discussion and task implementation. Sixth, group and goal analysis involves regularly taking an objective look at the group goals, membership and methods for the purpose of improvement. Seventh, establishing structure involves creating positions and attaching functions to them as needed, and clarifying relationships among positions. Eighth, is ensuring effective communication by informing members of group activities, and receiving members' suggestions. Ninth, implementing philosophy of the organisation represented by the leader. The personal goals of the leader must be consistent with the group goals before the leader will be able to assist the group to attain such goals.

The conventional functions of local leaders identified by Jibowo (2000) and Savile (1968) included: first, educating the farmers on improved farm practices; second, legitimisation or approval of improved farm practices brought to farmers by extension agents; third, planning of extension and other rural development programmes with farmers; fourth, programme execution by contributing time, money, land and other resources for carrying out programmes. Fifth, leaders served as spokesmen and spokeswomen for their communities. Sixth, leaders served as father-figures or mother-figures for their communities. Seventh, leaders summoned people to meetings to discuss community issues including those channelled to the people through their leaders.

In transformational leadership, according to Bass (1985), leaders transform the fortunes of the group. This is done when leader raises the level of awareness about the importance and value of desired outcomes, alters or expands the wants and values of followers, and/or gets the followers to transcend their own self-interest. Kouzes (1987) regards leadership functions to be within the domain of leadership behaviour, and identified five behavioural practices of leaders to include challenging the process, inspiring a shared vision, enabling others to act, modelling the way, and encouraging the heart.

Characteristics of leadership

Leadership characteristics which are possessed to operate effectively, according to Ross and Hendry (1957) and Jibowo (2000) included empathy, which is the ability to share feelings of others; being a member of the group which involves sharing group values; and consideration which is the ability to help members in practical ways, such as providing training. Other qualities included surgency, which is the degree of talkertiveness, cheerfulness, originality, enthusiasm and alacrity; emotional stability which means that leaders have stable feelings at all times; desire for and recognition of leadership roles which demands that leaders are interested in the position and know their duties. The leader must have high intelligence, competence and consistency, self-confidence and ability to share leadership roles. The personal characteristics of leaders included scholarship, dependability, responsibility, activity, social participation and socio-economic status; boldness, mature age, marital status, gender, and health status.

Attitudes of leaders towards training

Although Mullins (2002) held the view that attitudes do not always predict actions, it is incontrovertible that individuals embrace what they like and avoid what they dislike. Hence, attitude of agricultural education teachers towards biotechnology was determined to predict their reactions to introducing the subject into the agricultural education curriculum (Kaufman and Rudd, 2006). What is encouraging is that attitudes can be changed and developed through measures such as the community leadership programme of the National Association of Community Leadership, which has an aim of assisting community leaders develop the attitude of helping community members acquire the skills needed to become what they want to become (Hustedde and Woodward, 2006). Local leaders can also undergo extension training so that they can also train other farmers.

Assessment of training needs

Training need assessment is to identify areas in which individuals should improve upon their capabilities so as to operate more effectively. Dlamini and Mogotsi (1992) observed that in-service needs assessment is to build a foundation for providing in-service training. Even within the area of leadership, transformational leadership practices can be taught and learnt (Bass, 1998). Hence, Kaufman and Rudd (2006) observed that the thoroughness involved in assessing the leadership needs was crucial to the value of the leadership training programme offered. The areas of knowledge, skill and attitude to be identified for training of leaders are many and diverse. Hustedde and Woodward (2006) identified 15 essential public skills which needed to be developed in rural leadership training programmes. The skills identified included visioning or futuring, active listening, collaboration, conflict resolution, deliberation, evaluation, facilitation, imagination, interviewing, negotiation, power analysis, strategic planning, team building, vigilance and volunteer management. Many of these needs correspond to local leadership training needs in extension. Similarly, Jibowo (2000) identified the areas for training of local leaders in extension to include understanding of culture, agricultural subject-matter,

working with groups, principles of learning, extension teaching methods, identification and use of local resources, programme planning and evaluation, and involvement of the local power structure.

METHODOLOGY

Population and sample selection

All people popularly recognised as local leaders in Swaziland extension constituted the population for the study. A total of 137 local leaders were selected from a randomly chosen community in each of the 17 Rural Development Areas (RDAs), using key informants, positional and reputational approaches. In using key informants, 10 knowledgeable adults who did not hold any official position in the community were chosen and asked to nominate those who played leading roles in Agricultural Extension. These were further asked to nominate people who had the reputation for getting things done in Agricultural Extension. Positional incumbents such as the Chief, school head teachers and officials of farmers' cooperative associations were asked to nominate those who led others in agricultural development process. Those who received three or more nominations were regarded as local leaders. Those leaders nominated were further asked to nominate other leaders in a snow-ball fashion until all leaders who received three or more nominations were included in the final list of leaders (Jibowo, 2000).

Research design, instrumentation, and measurement of variables.

The research design was a descriptive, correlation and regression study, utilising the survey research technique. The research instruments included a leader nomination form to obtain information from key informants and positional leaders, a Focus Group Discussion (FGD) guide which was used along with a voice recorder to obtain information on each objective of the study from a Focus Group of 5-10 respondents in each community; and an interview schedule. The interview schedule solicited detailed information on each objective with largely closed-ended questions.

Performance of leadership functions was measured by asking respondents to indicate how much they had performed each function included on a 6-point scale. Training need was measured by asking each respondent to indicate how much training they required to perform each function skilfully. Attitude was measured with attitude statements to which respondents were asked to indicate their agreement or disagreement on a 6-point Likert scale.

Perceived leadership characteristics were measured by asking respondents to indicate how much of the characteristics they possessed on a 6-point scale of Very Much, VM = 6; Much, M = 5; Slightly Much, SLM = 4; Slightly Little, SLL = 3; Little, L = 2; Very Little, VL = 1. Personal characteristics were measured with direct questions.

Validity, reliability of instruments; data collection and analysis

Content validity of the instruments developed for data collection was ensured by using three Extension Agents and two University Lecturers, who specialised in extension and rural development, as judges. They determined the appropriateness of the materials in measuring the contents each was designed to measure. The instruments were judged as very appropriate. The reliability coefficient of the interview schedule was found to be 0.85, using Cronbach Alpha reliability coefficient procedure (Suter, 1998). Data were collected by five trained Research Assistants and the researchers. The FGD was recorded in the FGD guide and the tape recorder to corroborate and support the written responses. Appropriate statistical techniques, including frequencies, means, standard deviations and regression analysis, were used to quantify the data. The regression analysis was used to determine the contributions of viscidity as a leadership characteristic to performance of leadership functions (Ary *et al.,* 2006). Determining the contributions of other leadership characteristics to performance of leadership functions were found to be too extensive to be included in the current study, hence was suggested for future research.

RESULTS AND DISCUSSION

Generic leadership functions and levels of performance

Data in Table 1 indicate that respondents performed nine out of 15 generic leadership functions (Mean ≥ 3.50). They did not perform six of the functions (Mean < 3.50).Data on level of performance indicated that majority of the respondents very much and much performed only two out of the 15 generic leadership functions. These functions included providing a model, performed by 59.9% with a mean of 4.66, and enabling others to act, performed by 56.2% with a mean of 4.05. Other generic function performed much and very much by less than 50% of leaders with means greater than 3.50 respectively included, encouraging the heart, performed by 34.3% with a mean of 4.13; initiative, 46% and 4.0; inspiring a shared vision, 31.4% and 3.86; goal achievement by resource mobilisation, 40.1% and 3.82; challenging the process for improvement, 30.6% and 3.76; viscidity, 41.6% and 3.55; and syntality, performed by 32.1% with a mean of 3.54. The result that only two of the 15 generic functions were very much and much performed by local leaders supports the finding by Pali-Shikhulu *et al.* (2008) that extension workers perceived participation of farmers in extension activities as unsatisfactory.

Conventional leadership functions and levels of performance

Data in Table 2 show that leaders performed only the conventional function of speaking on behalf of the community (Mean = 3.61). Local leaders did not perform the other six conventional leadership functions. It was therefore not surprising that none of the functions was very much or much performed (Mean < 3.50). This result is consistent with the findings by Jibowo and Dube (2008) that government attached low regard to training local leaders as an objective of Agricultural Extension in

Swaziland, hence the leaders were not in the position to perform the conventional functions of leaders in Extension.

Table1: Percentage levels of performance of generic leadership functions (N = 137)

	VMP	**MP**	**SMP**	**SLP**	**LP**	**VLP**	**No Resp.**	**Total**	**Mean**	**Rank**
Viscidity: Facilitating pooling together	16.1	25.5	18.2	8.0	3.6	27.0	1.5	100	3.55	8
Hedonic tone: Facilitating pleasantness	13.1	21.2	21.9	14.6	9.5	16.8	2.9	100	3.15	13
Syntality: Ensuring optimum performance	13.9	18.2	29.2	11.7	2.9	21.9	2.2	100	3.54	9
Goal achievement by resource mobilization	13.1	27	25.5	14.6	4.4	13.1	2.2	100	3.82	6
Initiative: Starting new ideas/projects	24.8	21.2	20.4	10.2	11.7	9.5	2.2	100	4.00	4
Group goal, membership, method analyses	13.9	21.9	10.9	8	13.9	29.2	2.2	100	3.18	12
Establish structure: Create posts, duties	5.1	13.9	31.4	11.7	11.7	24.1	2.2	100	3.08	15
Ensure effective communication	8.8	18.2	35.0	15.2	5.8	14.6	2.2	100	3.48	10
Implement philosophy of the organization or group	8.8	6.8	21.2	21.2	8.0	20.4	3.6	100	3.13	14
Transform fortunes of the group better	10.9	13.9	32.1	17.5	8.8	12.4	4.4	100	3.46	11
Challenging the process for improvement	13.1	17.5	30.7	24.8	3.6	5.1	5.1	100	3.76	7
Inspiring a shared vision	9.5	21.9	38.0	19.7	3.6	1.5	5.8	100	3.86	5
Enabling others to act	24.8	31.4	16.1	4.4	3.6	14.6	5.1	100	4.05	3
Provide a model/worthy examples for others	35.8	24.1	23.4	10.9	2.2	0.7	2.9	100	4.66	1
Encouraging the heart	24.1	10.2	38.0	18.2	5.1	0.7	3.6	100	4.13	2

VMP = Very Much Performed, MP = Much Performed, SMP = Slightly Much Performed, SLP = Slightly Little Performed, LP = Little Performed, VLP = Very Little Performed. Mean ≥ 3.50 = Performed; Mean < 3.50 = Not performed

Table 2: Percentage levels of performance of conventional leadership functions (N = 137)

	VMP	MP	SMP	SLP	LP	VLP	No resp.	Total	Mean	Rank
Educating farmers on improved farm practices	22.6	13.9	16.1	10.9	9.5	25.5	1.5	100	3.47	3
Legitimizing improved farm practices	5.8	36.5	33.6	8.8	0.7	13.1	1.5	100	2.69	7
Planning Extension Programmes	13.1	9.5	21.2	14.6	10.9	28.5	2.2	100	3.05	6
Programme Execution with own resources	19.7	17.5	17.5	10.2	2.9	29.2	2.9	100	3.46	4
Father-figure	8.8	19.0	21.9	27.7	8.0	11.7	2.9	100	3.48	2
Speaking on behalf of the community	23.4	18.2	16.1	12.4	4.4	23.4	2.2	100	3.61	1
Summoning others to community meetings	6.6	26.3	19.7	3.6	11.7	30.7	1.5	100	3.15	5

VMP = Very Much Performed, MV = Much Performed, SMP = Slightly Much Performed, SLP = Slightly Little Performed, LP = Little Performed, VLP = Very Little Performed. Mean ≥ 3.50 = Performed, Mean < 3.50 = Not Performed.

Areas of training needs of local leaders in Agricultural Extension

Data in Table 3 show that a majority of local leaders expressed very much and much need for training in all the 15 socio-psychological skills studied. These included visioning or futuring (84.7%), strategic planning (72.9%), imagination (72.2%), team building (72.2%), collaboration (70.0%), active listening (68.6%), and negotiation (66.5%).

Most of the respondents indicated the need for training to acquire technical skills in nearly all the six areas of crop production studied. These included vegetable production (86.9%) and soil conservation and fertility enhancement (86.1%). Majority of the respondents expressed the need for training in four of the six livestock production area studied. The areas included livestock disease management (62.7%), livestock pest management (61.3%), pasture and range management (59.1%), and livestock feed production (56.9%). Some people expressed very much and much need for training in beef cattle production (48.9%), and draught animal production (35%). This might be because those who engaged in livestock production and use of draught animals were familiar with the operations.

About half (50.4%) expressed very much and much training need in tractor operations, and tractor maintenance (48.2%). Majority of the respondents expressed very much and much training need in record keeping (61.3%), farm business management (57.6%); extension teaching-learning skills including working with groups (68.7%), extension teaching-learning principle and methods

(62.8%), identification and use of local leaders (60.6%), and evaluating extension programmes (51.1%). Some needed training in planning extension programmes (49.6%), and involving local power structure (39.4%).

Table 3: Areas of training needs in extension leadership skills by local leaders (N = 137)

	VMT	MT	SMT	SLT	LT	VLT	No Resp.	Total
Socio-psychological skills:								
Visioning or futuring	48.9	35.8	9.5	2.2	0	0	3.6	100
Active listening	46.0	22.6	25.3	2.2	0	0	2.9	100
Collaboration	35.0	35.0	13.9	8.8	2.2	0	5.1	100
Conflict management	34.3	24.8	21.2	8.0	2.2	5.8	3.6	100
Deliberation	29.2	29.9	26.3	5.8	2.2	0.7	5.8	100
Evaluation	31.4	24.1	26.3	10.9	0	0.7	6.6	100
Facilitation	27.7	30.7	20.4	11.7	2.9	0	6.6	100
Imagination	44.5	27.7	15.3	7.7	0	0	5.1	100
Interviewing	35.0	24.1	21.2	10.2	2.9	2.2	4.4	100
Negotiation	38.0	28.5	17.5	8.0	2.9	0.7	4.4	100
Power analysis	37.2	27.7	16.8	8.0	2.9	3.6	3.6	100
Strategic planning	47.4	25.5	16.1	1.5	1.5	4.4	3.6	100
Team building	56.9	15.3	7.3	5.1	5.1	7.3	2.9	100
Vigilance	35.0	22.6	21.2	10.2	2.9	5.1	2.9	100
Volunteer management	33.6	27	6.6	6.6	8.8	14.6	2.9	100
Technical skills:								
Crops: Crop pest management	47.4	33.6	11.7	1.5	0.7	2.9	2.2	100
Crop disease management	50.4	32.8	9.5	0.7	1.5	2.2	2.9	100
Irrigation for crops	62.8	22.6	6.6	3.6	0	2.9	1.5	100
Fruit tree management	48.2	19.7	10.2	5.8	7.3	4.4	4.4	100
Soil conservation and fertility	61.3	24.8	6.6	2.2	0	0.7	4.4	100
Vegetable production	50.4	36.5	5.8	2.2	0.7	0	4.4	100
Livestock: Small livestock management	40.1	23.4	22.6	7.3	2.2	0	4.4	100
Beef cattle production	32.8	16.1	15.3	14.6	8.8	9.5	2.9	100
Draught animal production	24.1	10.9	16.1	20.4	14.6	9.5	4.3	100
Livestock feed production	36.5	20.4	18.2	15.3	3.6	2.9	2.9	100
Livestock pest management	28.5	32.8	17.5	13.9	1.5	2.2	3.6	100
Livestock disease management.	29.9	32.8	17.5	10.2	2.9	2.2	4.4	100
Range and pasture management.	39.4	19.7	12.4	10.9	5.8	8.8	2.9	100
Tractor use: Tractor use on farm	34.3	16.1	10.9	2.2	5.1	26.3	5.1	100
Tractor and farm equipment maintenance	19.7	28.5	13.9	1.5	5.1	29.2	2.2	100
Agri-business: Farm business management	42.3	15.3	6.6	8.0	8.0	15.3	4.4	100
Record keeping	40.9	20.4	2.9	5.1	7.3	20.4	2.9	100
Extension teaching-learning skills: Planning Extension Programmes	22.6	27.0	30.7	9.5	2.9	4.4	2.9	100
Evaluating Extension Programmes	24.1	27.0	32.8	5.8	5.1	2.2	2.9	100
Extension teaching methods	25.5	32.1	21.9	7.3	2.9	3.6	6.6	100
Teaching-learning process and principles	24.8	38.0	22.6	5.1	2.9	0.7	5.8	100
Working with groups	45.3	23.4	4.4	4.4	5.1	11.7	5.8	100
Identification and use of local resources	33.6	27.0	26.3	4.4	1.5	2.9	4.4	100
Involving local power structure	20.4	19.0	30.7	10.2	6.6	7.3	5.8	100

VMT = Very Much Training needed, MT = Much Training needed, SMT = Slightly Much Training needed, SLT = Slightly Little Training needed, LT = Little Training needed, VLT = Very Little Training needed

The finding that local leaders popularly had much training needs in the socio-psychological, technical, agri-business and educational aspects of agricultural extension is consistent with expectation. This is a common situation in many developing countries. For instance, in Uganda, Extension Agents themselves who are to teach farmers have training needs in the technical, social, management, coordination, research and leadership aspects of extension (Mutimba, *et al*., 2007). Similar training needs were identified for improving professional competencies of Extension functionaries in Jammu Province of J & K., India by Slathier *et al.* (2007).

Attitude towards undergoing training and then training other farmers

Respondents overwhelmingly had positive attitude towards undergoing training on improved farm practices and then training other farmers (Table 4). Out of the seven positive attitude statements, a majority of the respondents strongly agreed and agreed to five statements. These included: liking the idea of undergoing training and then training other farmers on improved farm practices (79.5%); most of the leaders who undergo training are very likely to train other farmers (68.6%); shortage of Extension Agents demand that local leaders are trained and organized to train other farmers (68.6%); leaders of this community would be delighted at the opportunity to be trained by the Extension Staff so that they can train other farmers (60.6%); and farmers should be delighted to be trained by local leaders after the leaders have undergone training (54.0%).

Similarly, the greatest percentages of respondents strongly disagreed and disagreed to six out of the nine negative attitude statements. This position means that they had positive attitude. Some of these included: most of the farmer leaders are unlikely to train other farmers (59.8%); farmers to be trained have to pay for the training (53.3%); and farmers are not likely to attend the training programmes for non-leaders (53.3%). The fact that local leaders were positively inclined to undergo training and then train other farmers on agricultural development is an encouraging finding for the development of agriculture among local farmers in Swaziland.

Regression Analysis of performing leadership function, viscidity, with leadership characteristics.

Regression analysis of viscidity with leadership characteristics is shown in Tables 6, 7 and 8. In the model summary (Table 7), the adjusted R Square value of 0.234 indicated that all the independent variables could predict 23.4% of the variation in the dependent variable, which was viscidity. The Analysis of Variance, ANOVA, (Table 8), with F value of 2.744 which was significant at 0.001 level shows that all the independent variables were significant in determining the dependent variable, which was viscidity.

Table 4: Attitude towards undergoing training and then training other farmers (N = 137)

	SA	A	SLA	SLD	D	SD	No Resp.	Total
I like the idea of undergoing training, then train other farmers.	46.7	32.8	8.8	5.1	5.1	1.5	0	100
I am too busy to undergo training and then train other farmers	4.4	12.4	21.9	16.1	8.0	37.2	0	100
I support the idea of undergoing training to develop my farm only.	7.3	14.6	21.2	11.7	8.0	37.2	0	100
To train other farmers after undergoing training, I need remuneration in form of highly reduced payment for farm inputs	32.1	12.4	14.6	10.2	16.8	13.1	0.7	100
Farmers to be trained by me after undergoing training have to pay me.	2.9	10.9	11.7	20.4	11.7	41.6	0.7	100
Farmers should be delighted to be trained by trained local leaders.	28.5	25.5	25.5	3.6	8.8	6.6	1.5	100
Most farmers in this community are not likely to attend training programmes by local leaders.	2.2	11.7	23.4	8.8	41.6	11.7	0.7	100
Most trained farmer leaders are very likely to train other farmers.	21.9	46.7	17.5	8.0	5.8	0	0	100
Most of the farmer leaders who undergo training are very unlikely to train other farmers.	2.9	7.3	11.7	17.5	37.2	22.6	0	100
Shortage of Extension Workers demand that local leaders are trained to train other farmers	40.1	28.5	11.7	2.9	8.8	6.6	1.4	100
High cost of financing Extension Workers demand that local leaders are trained to train other farmers.	16.1	32.8	28.5	5.8	11.7	4.4	0.7	100
Extension Agents have the job of training farmers; not local leaders.	21.9	21.2	13.9	5.8	18.2	16.8	2.2	100
Training local leaders could lead to envy by leaders not chosen.	34.3	19.0	16.1	13.9	10.2	5.1	0.7	100
Leaders of this community would be delighted at the opportunity to be trained so as to train other farmers	31.4	29.2	23.4	8.8	4.4	1.5	1.5	100
Available facilities are enough for a start to train local leaders so that they can train other farmers.	10.9	27.0	31.4	16.1	9.5	3.6	1.4	100
Government is not likely to support the policy of training local leaders who will train other farmers.	10.9	10.9	25.5	23.4	19.7	8.8	0.7	100

SA = Strongly Agree, A = Agree, SLA = Slightly Agree, SLD = Slightly Disagree, D = Disagree, SD = Strongly Disagree

Prediction

Figures in Table 5 can be used to predict the values of Y given the various values of X Where

Y = Viscidity

X1 = Empathy, X2 = Member of the group, X3 = Consideration, X4 = Surgency,

X5 = Desire for leadership role, X6 = Recognition of leadership role, X7 = Competence,

X8 = Consistency, X9 = Self confidence, X10 = Ability to share leadership role

Personal traits:

X11 = Intelligence, X12 = Dependability, X13 = Formal Education,

X14 = Responsibility, X15 = Activity, X16 = Social /organizational participation,

X17 = Income, X18 = Chieftaincy titles.

Data in Table 5 further show that β = -0. 552 for membership of the group. This means that, when membership of the group increases by one unit, viscidity will decrease by 0.552 units. This is contrary to expectation. It is possible that respondents believed that leaders have to be assertive and show that they are stronger than followers to be able to pool them to themselves. Prediction of viscidity, Y with the leadership characteristics in Table 5 is as follows:

$Y = 0.773 - 0.006X1 - 0.552X2 + 0.527X3 + 0.114X4 + 0.068X5\ldots\ldots + 0.233X_{18}$

(0.983) (0.042)* (0.013)* (0.488) (0.701) …… (0.237)

* = Significant at 0.05 level.

Some of the leadership characteristics were significant predictors of viscidity. These included membership of the group (P = 0.042), consideration (P = 0.013), ability to share leadership role (P = 0.001), dependability (P = 0.029), responsibility (P = 0.031), and activity (P = 0.000). These variables were good predictors of viscidity function of leaders.

The personal traits and leadership characteristics which significantly influenced viscidity should be given prominence in leadership training programmes for the local leaders to facilitate viscidity of trainees, and in managing groups of local leaders.

Table 5: Regression analysis results of viscidity with leadership characteristics

Leadership characteristics	Unstandar-dized	Coefficients	Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
1 (Constant)	0.773	2.023		0.382	0.703
Empathy: Feeling like others	-0.006	0.264	-0.003	-0.021	0.983
Member of the group: Being equal to other members	-0.552	0.267	-0.286	-2.070	0.042
Consideration: Solving members' practical problems	0.527	0.209	0.340	2.528	0.013
Surgency: Being talkative, cheerful, alert, enthusiastic	0.114	0.164	0.078	0.697	0.488
Desire for leadership role: Burning desire to play leadership role	0.068	0.178	0.045	0.385	0.701
Recognition of leadership role: Knowing leadership duty	0.213	0.236	0.112	0.912	0.364
Competence: Have technical skills needed by the job	-0.217	0.218	-0.133	-0.993	0.324
Consistency: Not changing mind arbitrarily	0.218	0.172	0.137	1.267	0.209
Self-confidence: Self assurance to effect action	0.168	0.210	0.120	0.800	0.426
Ability to share leadership role	-0.715	0.205	-0.429	-3.490	0.001
Personal traits:					
Intelligence	-0.398	0.275	-0.188	-1.446	0.152
Dependability	0.412	0.185	0.321	2.225	0.029
Formal education	-0.013	0.177	-0.009	-0.074	0.941
Responsibility	-0.476	0.217	-0.235	-2.197	0.031
Activity	1.144	0.269	0.469	4.249	0.000
Social participation/ Organization	-0.067	0.227	-0.036	-0.294	0.769
Income	0.268	0.188	0.157	1.429	0.157
Chieftaincy titles	0.233	0.196	0.131	1.190	0.237

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.606	0.368	0.234	1.616

Dependent variable = Viscidity. Predictor variables are the leadership characteristics in Table 5.

Table 7: Analysis of variance (ANOVA) results

Model	Sums of Squares	df	Mean Square	F	Sig.
1 Regression	128.969	18	7.165	2.744	0.001
Residual	221.944	85	2.611		
Total	350.913	103			

Dependent variable = Viscidity

Independent or predictor variables are the leadership characteristics in Table 6

CONCLUSIONS AND RECOMMENDATIONS

Respondents did not perform very much and much, most of the generic functions of leaders. Out of the nine functions performed, only two, namely, providing a model and enabling others to act were performed much and very much. Leaders did not perform six functions, including ensuring effective communication and hedonic tone. Leaders did not perform any conventional leadership function, except speaking on behalf of the community. Local leaders needed training in many socio-psychological skills including visioning and strategic planning. They needed training in nearly all technical skills involved in crop production such as vegetable production, soil conservation, fertility, and fruit tree management. Leaders had training needs in livestock management including disease and pest control, pasture and range management. Greater needs were expressed in crop production than animal production. An average percentage of leaders indicated training need in tractor and farm equipment operation and management.

Leaders expressed the need for training in many areas of Agricultural Extension including working with groups, teaching-learning principles and methods, programme planning and evaluation; and in agri-business operations including farm record-keeping and farm business management. The leaders had positive attitude towards undergoing training in improved agricultural practices, and then training other farmers on the skills they acquire. Leaders possessed few of the leadership characteristics including empathy, member of the group; personal leadership traits, surgency and competence. Leadership characteristics including member of the group, that is, feeling equal with other members of the group; consideration, that is assisting the group to solve practical problems, sharing leadership role, dependability, responsibility, were good predictors of performance of viscidity as a function of leaders.

Training programmes for local leaders should include acquisition of knowledge and skills to perform generic and conventional leadership functions, socio-psychological skills, technical skills in crop and animal production. The training should also include extension principles and methods, working with groups and agri-business management. The skill training should include acquiring leadership characteristics including empathy, sharing leadership role, helping the group to solve practical problems and dependability.

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