GOALS ASSESSMENT OF LIMITED RESOURCE FARM HOUSEHOLDS IN TRINIDAD

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Introduction

To act on the premise that farm households have one goal that is unalterable over time is to delink farming behaviour from wider human behaviour, and that is risky. Farm households behave in much the same way as other people do in the determination of the goals to be pursued towards maximizing welfare. Welfare is more than just financial ability to procure food, shelter and other material possessions. It also includes other intangibles such as status, prestige and upward mobility.

Indeed while maximization of the welfare of the family could be an umbrella goal of all household heads, there could quite possibly be a maze of competing goals existing within the household by its various constituents. The major goal or mix of goals to be pursued by the family as a unit or by specific individuals will therefore influence the decisions that are made at farm level and will be in line with their values, beliefs, abilities, motivations, resource levels and needs. Also, these goals may be quite fluid in the hierarchy as situations affecting farm family change, and a predominant goal at one point in time may become a secondary goal in the mix at a later time.

Merrill Sands (1986) lists some of the goals which have been found frequently to have high priority in small farm households as profit maximization, cash maximization, subsistence security, flexibility, and long term economic stability. Gasson et al. (1988) in listing another set of household goals state that the goals linked to securing independence, intrinsic work satisfaction and maintenance of sufficient leisure time are often ranked by farmers high in their order of goals. In developing countries as the drive to develop suitable technologies and refine transfer processes ascends on national agricultural agendas, it is important that less speculation and more exact determination of the goals of intended beneficiaries be done.

Purpose

Firstly this paper presents a framework for, and an approach to the assessment of goals of limited resource farm households using a practical tool and simple analysis.

Secondly, it attempts to link a more precise knowledge of goals with more defined and appropriate educational strategies.

Methodology

The process of goals assessment for the sample involved two (2) steps, namely, development of goals and ranking of goals.

Step 1: Development of Goals

The goals that existed within the farming system were discerned and then clarified through a process of informal dialogue with the key informants in the area under study. Researchers, extensionists, agro shop dealers, buying agents and selected farmers were all interviewed separately by the researcher. From the wide variety of goals that were thought to exist, a short list of six (6) most common goals were selected for evaluation. The goals appeared to be a mix of economic and social goals, and were reworded after a formal pretest to ensure similar understanding by all respondents. They were listed as:-

1. To acquire more material possessions.
2. To improve the quality of life of the family.
3. To make the most income.
4. To satisfy family food needs and get extra cash.
5. To increase the size of the farm.
6. To maintain family customs.

Step 2: Ranking of Goals

The method of paired comparisons was used to determine the goal hierarchy among the targeted farmers. The method is reviewed (Bradley, 1976) and recommended for its practical simplicity, and was also used successfully to both rank order goals, and at the same time select the primary goals of a specified target of limited resource farm families (Harper and Eastman, 1980).

In this test, a list of all possible pairs of goals was presented to each respondent, and they were asked to select their preferred goal from each pair. The assumption is that respondents' appraisal of goals will reflect internal agreements and are homocentric to the family unit.

The numbers of pairs of goals was determined by n (n - 1)/2 where n = number of goals to be ranked. Thus for the six (6) generalized goals used in this study, fifteen (15) pairs were developed. An example is: "Would you prefer to make the most income or to maintain family customs"?

For this study one hundred (100) limited resource farm households who farmed one hectare or less of land were selected by a simple random sampling procedure from a population who were similar in many circumstances e.g. limited access to credit and land for expansion, low ability to influence the decisions of agricultural organisations, constraints to increased production, outmigration, system of production etc.

The results were summarized into a frequency matrix showing the number of times each goal was preferred over the others by the respondents. A summary of the table provided the rank order of the goals as they existed among the households investigated.

Scaling and Scoring Procedures

Scale values were developed using the procedure reported in Edwards (1957) in order to place the goals along the relative continuum, which appeared initially to stretch from economic goals at one end to social goals at the other. It involved conversion of the number of times each goal was preferred over the others into proportions. Then, the proportions for each goal were added together and translated into scale values.

To obtain the goal orientation of each household, i.e. where each lies along the continuum and to develop a score, each respondent was asked to select his two (2) main goals from a random presentation of the six (6) goals. A respondent's score was the average of the scale values of these two goals. It is assumed that an individual who is more oriented towards economic goals would be more likely to make a choice at the end of the scale where economic goals lie and vice versa.

Supporting Data

Some other characteristics of the farm household were also assessed as part of this study in order to examine linkages, to interpret the goal hierarchy developed and to suggest possible extension educational interventions. The characteristics determined were, household size, type, and stage of life cycle development, level of education of households' decision makers, land tenurial arrangements, length of time in farming, time spent on- and off-farm, and children's activities on farm.

Results and Conclusion

Characteristics of the households

Data collected revealed that a slight majority of households comprised less than 4 members, with 42% having between 5 - 8 members. The overwhelming majority (78%) consisted of nuclear type households, consisting of father, mother and own children only, and were in the middle stages of their life cycle development where the children have left school and are working either on or off the farm. The data showed an average of two children supporting the activities on the farm on a part-time basis.

Level of education data, as assessed over the extent of formal education received by both respondent and spouse, revealed that the majority (57%) had at least a medium level of education (primary school level) while 23% had a high level (both secondary school level education).

Only 35% of the households owned the land on which they farmed and were thus entitled to use it as collateral for loans etc, all the others had some insecure arrangements to farm. The sample revealed an experienced farming community, 70% being involved for more than 10 years and with 40% more than 20 years. In spite of

this however, only fifty-five percent of the sample were full time farmers, the others having some other form of employment off the farm.

Goals of the Household

The F matrix (Table 1) summarizes the ranking of the goals assessed from the sample of limited resource households. The number in each cell indicates the frequency with which the goal stated in the column was preferred over the goal stated in the row. Reading across the table, the numbers in a given cell indicate the frequency with which the goal represented by that row was not preferred to the goal represented by the given column.

The totals of the column represent the ranking of the goals by the sample of one hundred (100) limited resource households. The columns have been arranged so that goals appear in ascending order.

Table 1 shows that within the sample the preferred goals were directly associated with money. It shows that "To satisfy family food needs and get extra cash" is the most preferred goal among farmers. "To make the most income" is ranked second by farmers. Goals stated in non-monetary terms like "to improve the quality of life for your family" and "to increase the size of your farm" follow third and fourth respectively, behind the goals directly linked with money. Within the sample, "to maintain family customs" was the least preferred goal.

The scale values developed according to the procedure described in the methodology are also indicated on Table 1. The calculated values range from zero (0) to two (2), and confirms that the farmers' goals lie on a psychological continuum which involves a non-economic orientation at one end of the scale, passing through various stages of the psychological inclination, to economic orientation at the other end of the scale. Alternatively stated, it means that farmers goals stretch from traditional, subsistence orientations, passing through various stages of development, to full commercial orientations.

Subsistence --------> Semi commercial --------> Commercial

0----------2

Non-economic Orientation ----------> Economic Orientation

TABLE 1: F Matrix and Rank of Goals for One Hundred (100) Limited Resource Farm Households

F Matrix	*To maintain family customs*	*To acquire more material possession*	*To increase the size of your farm*	*To improve the quality of life for your family*	*To make most income*	*To satisfy family food needs and get extra cash*
To maintain family customs.	-	81	97	96	100	96
To acquire more material possessions.	18	-	74	85	93	96
To increase the size of your farm.	0	25	-	83	70	80
To improve the quality of life for your family.	2	15	16	-	64	69
To make the most income.	1	8	32	37	-	57
To satisfy family food needs and get extra cash.	3	4	18	32	43	-
TOTAL	24	133	237	333	370	398
RANK ORDER	6	5	4	3	2	1
SCALE VALUES	0	1.2	1.7	1.86	1.92	2.0

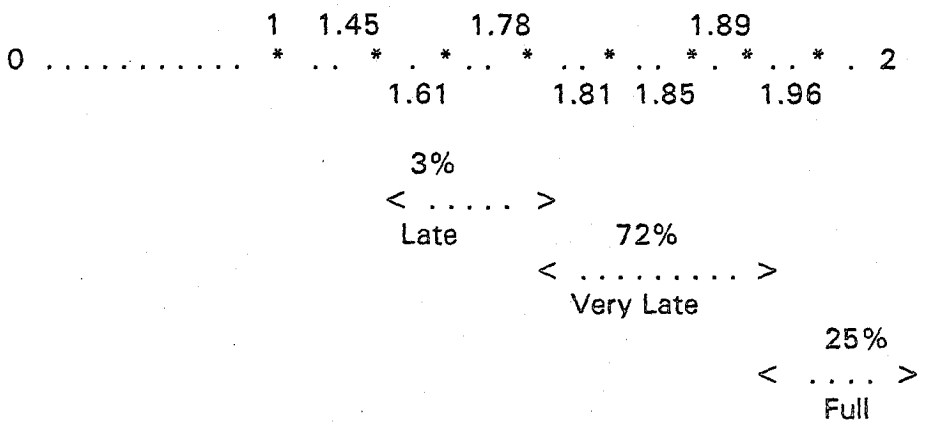
The score for each household as calculated from the mean of the two goals preferred most from the set of goals, is regarded as the linear transformation of the subjects' position on the psychological continuum on which the original statements were scaled. The frequency distribution of the goal scores for the sample is presented in Table 2.

TABLE 2: Distribution of Goal Scores of 100 Households

Scores	% of Households	Cumulative %
1.45	1	1
1.60	1	2
1.78	1	3
1.81	44	47
1.85	28	75
1.89	1	76
1.96	24	100
	100	

The distribution shows that all the households have strong, economic goal orientations some stronger than others. Moreover, the data show that ninety-seven percent (97%) of all the scores obtained lie in the fourth quarter of the continuum, with twenty-four percent (24%) obtaining scores of 1.96, close to the maximum score that is possible to be obtained.

The scores were categorised into late, very late, and full economic stages of economic orientation. The distribution shows that only three percent (3%) of the sample are in the late stages, the majority (72%) are in the very late stages, and twenty-five percent (25%) are in the full economic stage.



Educational Importance

Desire to learn is an important ingredient of a successful training programme and goals often distill this desire.

Since interventions are usually targeted at communities rather than at individuals, a knowledge of goals and the ordering of these goals on a community level would be beneficial in the selection of objectives and strategies. For example, no strategy will probably work if farmers' priority goal is "to get out of farming", whereas goals such as "maintaining traditions or family customs" hint at the need for a programme to probably alter processes in the affective domain. Where goals are positive and encouraging, the strategies would probably require a strong training programme to either add, replace or modify existing knowledge and skills. This was the case for the category of farmers used in this investigation.

Further, as educational programmes are prepared, knowledge of goals of the targeted communities can be used as a variable for disaggregation of communities into specific groups, either singly or in combination with other key variables such as age, stage of development, level of education, on/off farming patterns etc. Educational programmes can then be tailored to suit these very specific categories of audiences with a greater chance of success.

On a broader level, goals influence decisions taken, and if there is need by interventionists to modify or change a decision, then a prerequisite would be a knowledge of the prevailing goals in the system.

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