Applying an understanding of farmers’ values and goals to their farming styles

T.G. PARMINTER and A.M.L. PERKINS
AgResearch, Ruakura Agricultural Research Centre, PB 3123, Hamilton

Abstract

A study was undertaken to identify the relationships between farmers’ values and their farming goals. Fifty goals were first identified from interviews with 20 farmers in the Waikite Valley. In a further survey of 1100 farmers in Hawke’s Bay, King Country and Taranaki, respondents were asked to score the importance of each of the goals. The survey had 680 responses. Cluster analyses of the scores from the survey were used as the basis for developing 10 goal categories. The most important category of goals for 43% of the farmers was that related to maximising farm production and profitability. These goals could be associated with people who put a priority upon values which emphasised individual success. The environmental goal category was prioritised by 7% of farmers, with values emphasising the welfare of others and the management of natural resources. The implications of this study for consultancy strategies are that although most farmers ranked their production goals very highly, they also wanted to realise a whole range of other goals (often including the environment), all of which needed to be addressed. Policy agencies associated with environmental management to implement the Resource Management Act (1991) should develop strategies of working with farmers that account for the multiple goal structure of farming styles. This can be done by providing farmers with management options that can be used to satisfy a number of farming goals. The availability of such management options is likely to encourage greater levels of voluntary change.

Keywords: farming styles, goals, planning, values

Introduction

Farmers, like all people, have values1. Values are the framework through which people evaluate their own lives and the lives of others. Farmers express values through implementing a range of farming goals2 (Gasson 1973). In this study, the links between farmers’ values and their farming goals (both economic and non-economic) were examined by the authors to provide a categorisation (taxonomy3) of goals for further research.

The values used in this project were identified by Shalom Schwartz (Schwartz 1992) and came from a study of people throughout the world. Values are stable and used by people to select and evaluate behaviour and events. Farmers could express their values through their farming goals and objectives, and these last two would be more context specific and tangible than their underlying values (Parminter et al. 1993).

Schwartz’s values were:

1. Self-direction choosing, creating and exploring to achieve independence in thought and action.
2. Stimulation having a varied and exciting life with lots of novelty and challenge.
3. Hedonism seeking pleasure and sensuous gratification to enjoy life
4. Achievement personal success through demonstrating competence according to social standards
5. Power attaining social status and prestige, getting access to and control of people and resources
7. Conformity exercising self-restraint in actions, inclinations, and impulses likely to upset, or harm others, and violate social norms.
8. Tradition building respect, commitment and acceptance of the customs and ideas found by sharing cultures and religions.
9. Benevolence preserving and enhancing the welfare of people that provide frequent personal contact.
10. Universalism understanding, appreciating, tolerating and protecting the welfare of all peoples, and of nature.

---

1 Values are relatively stable attitudes towards abstract goals or endstates for human existence.
2 Goals are considered to be specific endstates or outcomes toward which people held positive attitudes. Unlike values, goals tend to be context specific.
3 A classification of concepts based upon similarities in empirically obtained data.
with the project. An assessment carried out by five researchers associated with Schwartz’s values were checked by an independent
Clarity of descriptions and their relationship to
of 50 statements defining each goal was developed.
identify the range of goals. From these interviews a list
were interviewed using semi-structured questioning to
identify farmer goals, and the second to obtain farmer
ratings for the importance of each goal. In the first
stage, 20 farmers in the Waikite Valley near Rotorua
were interviewed using semi-structured questioning to
identify the range of goals. From these interviews a list
of 50 statements defining each goal was developed.
Clarity of descriptions and their relationship to
Schwartz’s values were checked by an independent
assessment carried out by five researchers associated
with the project.
In the second stage, a postal survey was made of
1137 farmers on the electoral rolls for the Hawke’s Bay,
King Country and Taranaki regions, to understand and
test the relationships between goals. The farmers
contacted had been stratified according to region, and
were randomly selected. We received 680 (50%) completed responses. Respondents could add extra goals,
to those supplied, if they wanted to. However, no new
material was provided in this way. The survey had
questions about demographic variables (e.g., farming
enterprise type, farmer age) and two questions in which
respondents were asked to score the importance of the
supplied goals on a 1–20 scale (20 was most important).
The goal scoring results are reported in this paper.
An incomplete block design using 40 different
questionnaires was used to reduce respondent burden,
so that each respondent only had 20 (instead of all 50)
goals to score. Four types of cluster analyses were carried
out: median sort, single linkage, group average, and
complete linkage; the common elements apparent in all
these approaches at the 65–75% level are reported in
this paper.
When they had been returned, the results were
statistically analysed to identify:

- the rank ordering of goals, from their relative scores;
- the relationships between goals and values, by
  measuring the correlations of the scores for goals
  assigned to each type of value.

**Results**

In Table 1 are shown all the goals identified from the
Waikite Valley interviews, and the categories for them
(Business ...... Off-farm Interests) developed from
carrying out the cluster analyses of the survey results.
The first row in the table is the mean score (out of 20)
the farmers had for each farming goal category. The
scores ranged from a low of 9.4 to a high of 13.9. The
similarity in the scoring is indicative of the farmers’
consistent support for all the goals that they assessed in
the study. The lowest scoring goal was “having the
approval of parents or older people” which scored 5.2,
and the highest was “ensuring future financial security”
which scored 16.6.

The second row in Table 1 contains the mean
rankings of each goal category (based upon their relative
scores). The poorest possible ranking is 10. The third
row in the table is the proportion of farmers who ranked
that farming goal category highest overall. On average
the highest ranked goals were those associated with
farm production and profitability. Production goals were the
most important goals for 43% of farmers. Less than
10% of farmers had their highest goals associated with
the environment, although most farmers ranked
environmental goals relatively highly. No farmers put
community goals first.

In Table 1 each goal is listed within each of the
categories, from the goals scoring highest at the top of
the table to the goals scoring lowest at the bottom.
Underneath the table are listed the goals which were not
statistically associated with any of the categories listed
above. These excluded goals are listed from left to right
in descending order of their scoring by farmers. Although
these goals were still important to farmers, their pattern
of scoring was unrelated to the categories used in the
rest of the table. The goal statements underlined in the
table are the key goals in each category which in the
cluster analyses were the most discriminating amongst
that whole category of goals. For instance, in the category
of Business goals, the farmers’ scores for “building a
valuable business” can be used to provide an estimate
of the scoring for any of the other Business goals. Used
in this way, the key goals explain 46% of the scoring of
all the goals in the table.

In Table 1 each goal has a superscript to indicate
which value category of Schwartz they relate to. The
value labels are listed under the table and were further
described earlier in this paper.
Table 1  Farming goals in categories with key goals underlined: the mean scores\(^1\), mean rankings\(^2\), and proportion ranked first\(^3\)

<table>
<thead>
<tr>
<th>Business</th>
<th>Production</th>
<th>Autonomy</th>
<th>Environment</th>
<th>Community</th>
<th>Family</th>
<th>Personal Growth</th>
<th>Farm Capital Value</th>
<th>Respectability</th>
<th>Off-farm Interests</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.7(^1)</td>
<td>13.9</td>
<td>12.9</td>
<td>12.0</td>
<td>10.1</td>
<td>11.6</td>
<td>11.1</td>
<td>13.0</td>
<td>9.4</td>
<td>11.2</td>
</tr>
<tr>
<td>3.3(^2)</td>
<td>1.7</td>
<td>2.9</td>
<td>4.3</td>
<td>7.0</td>
<td>5.0</td>
<td>5.5</td>
<td>2.9</td>
<td>7.3</td>
<td>5.4</td>
</tr>
<tr>
<td>10(^3)%</td>
<td>43%</td>
<td>15%</td>
<td>seeing results from my own efforts(^5)</td>
<td>protecting the environment for future generations(^9)</td>
<td>being helpful to others(^9)</td>
<td>making the farm a family home(^7)</td>
<td>developing my own abilities(^9)</td>
<td>keeping the farm in good repair(^7)</td>
<td>being recognised as a top farmer(^7)</td>
</tr>
<tr>
<td>building a valuable business(^6)</td>
<td>maximising farm profits(^4)</td>
<td>being well informed about my type of farming(^7)</td>
<td>achieving the farm’s production potential(^A)</td>
<td>enjoying the natural surroundings(^5)</td>
<td>making a valuable contribution to my community(^A)</td>
<td>providing future opportunities for my children(^8)</td>
<td>having new challenges(^5)</td>
<td>paying off debts(^5)</td>
<td>keeping the farm the way it is(^7)</td>
</tr>
<tr>
<td>making the farm more adaptable to changing circumstances(^8)</td>
<td>getting the highest price for each farm product(^H)</td>
<td>being self-reliant(^H)</td>
<td>having the farm clean and unpolluted(^7)</td>
<td>being part of a stable community(^7)</td>
<td>keeping the farm in the family(^7)</td>
<td>having variety in work(^8)</td>
<td>increasing the farm’s value(^8)</td>
<td>having the approval of parents or older people(^C)</td>
<td>socialising with neighbours and friends(^H)</td>
</tr>
<tr>
<td>organising and following a farm plan(^F)</td>
<td>having the best quality livestock(^H)</td>
<td>flexibility in managing time(^D)</td>
<td>being in balance with nature(^D)</td>
<td>having a sense of belonging(^7)</td>
<td>involving all the family in the farm(^7)</td>
<td>making use of town facilities(^5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>being accepted by others as I am(^J)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excluded Goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ensuring future financial security(^I)</td>
<td>living comfortably(^I)</td>
<td>having loyal and friendly working relationships(^B)</td>
<td>working with livestock(^H)</td>
<td>making farm decisions in partnership(^B)</td>
<td>achieving farm ownership(^B)</td>
<td>enjoying physical farm work(^H)</td>
<td>being innovative(^B)</td>
<td>minimising my dealings with bureaucratic procedures(^D)</td>
<td>influencing agricultural policy and industry development(^H)</td>
</tr>
</tbody>
</table>

Values: Power\(^F\), Achievement\(^A\), Hedonism\(^H\), Stimulation\(^S\), Self-Direction\(^D\), Universalism\(^U\), Benevolence\(^B\), Conformity\(^C\), Tradition\(^T\), Security\(^S\)
In Figure 1 is shown typical changes in the ranking of farmer goals. The proportion of farmers with goals at each ranking (from their highest ranking to their lowest ranking) followed three different patterns. The figure fits stylised curves to actual data points, but could not be statistically derived because of insufficient data from the incomplete block design. Farmers who gave a high ranking for goals associated with production, autonomy, capital, and business tended to have a low ranking of goals associated with personal growth, community, and respectability. The reverse also applied. Goals associated with the environment, family, and off-farm interests tended to have a similar ranking for most farmers.

**Discussion**

Farmers’ management styles are influenced by their goals. Management styles have been described as the priorities farmers have for strategic use of limited resources: social, labour, economic and natural (Fairweather & Keating 1994). Much existing literature describes management styles in terms of farmer’s orientations towards business practices (Fairweather & Keating 1994). Yet even financial goals have been shown in this study to vary in their intent, depending upon the values they are associated with. For instance “maximising farm profits”, “providing future opportunities for my children”, and “paying off debts”, are associated with achievement, benevolence and conformity values. Agencies working with individual farmers to develop strategies for implementing farmer goals, will also be interested in whether the related management styles are likely to encourage or limit opportunities for change. Resource managers may be wanting farmers to join landcare groups to learn about ways of addressing community environmental concerns. A description of management styles can also be used to indicate the level of interest that people may have in off-farm priorities and community activities.

In the following discussion the interpretation of farmer values is based upon the work of Shalom Schwartz. From the results of our surveys, Power and Achievement values appear to be important to many of the farmers surveyed and were expressed in various ways in different aspects of farming life. Goals associated with these values were the key goals for Business, Production, and Farm Capital Value categories.

People with Power and Achievement values can be motivated to pursue their own personal interests even if they know other people or the environment can be disadvantaged.

In contrast, people in this survey expressed their Universalism and Benevolence values mainly through environmental and community goals. People with these values were considered by Schwartz to be more likely to transcend selfish concerns and promote the welfare of others and the natural world around them.

The goals associated with Hedonism values were either clustered into “off-farm interests” or else isolated from other clustered goals. Like Power and Achievement, Hedonism values are considered to be more focused upon self. In this study they were most often associated with people with off-farm interests. People with hedonistic values are likely to be less interested in being competitive, and limiting the amount of change in their lives than people with either power or achievement values. Therefore they might be more open to modifying their existing farming practices. People who consider stimulation and self-direction values highly were likely to emphasise goals for Personal Growth or Autonomy. They could be considered to be relatively open to change. Farmers that put a lot of emphasis upon goals from Farm Business, Respectability, Farm Capital Value, and Family categories with conformity, tradition, and security values will tend to be less open to change than other farmers.

**Conclusions**

Farmers express their values through a range of individual farming goals. Some of these fit categories of goals that can be evaluated in a similar way for their effects upon farm management styles. Farmers and their
advisors (e.g., consultants and resource managers) who can clarify and reflect upon values and goals may find planning and decision making easier.

Farm consultants should be identifying the full range of goals that farmers wish to address before setting management priorities. They also should consider their client’s underlying values, and how their values interact in the expression of farming styles.

Few of the farmers considered their environmental goals to be their most important. Therefore resource managers should encourage the use of management practices for environmental enhancement that satisfy a range of farming goals, if they want them to be widely taken up (Parminter et al. 1996). People with important environmental or community goals are the ones likely to be found in landcare groups, other farmers are more likely to act individually.

ACKNOWLEDGEMENTS

Thank you to the many farmers involved in the surveys. We hope that answering our questions encouraged you to reflect upon the rewards of being farmers. We appreciated the contributions made by Martin Upsdell, Mark Paine, Bruce Thorrold, Greg Lambert, Peter Moore, and Gavin Sheath, also Jenny Moore, and Moana Petre.

The study was funded by the Foundation of Research Science and Technology and AgResearch as part of a programme into the Management of Hill Country Catchments.

REFERENCES
