

FARMING STYLES AND EXTENSION IN BROADACRE CROPPING

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Abstract

Traditional extension models such as the 'diffusion of innovations' are still widely accepted even though they fail to explain adequately the adoption behaviour of farmers and despite the rise of 'bottom-up' models and group extension methods. 'Farming styles' theory promises to provide agricultural science and extension workers with a better model for understanding adoption behaviour and the multitude of management strategies utilised by farmers and the rationales behind these strategies. This study identified the range of farming styles that exists in the southern broadacre cropping zone. A total of 27 styles were identified through focus groups. However, case studies with individual farmers revealed that many of these styles are unlikely to exist in reality, but exist as social constructs that guide farmer action. Therefore, farmer practice is seen to be a social process guided by social judgements made by farmers of the range of styles or farming practices they are aware of.

Key words: *Farming styles, extension, broadacre cropping, adoption behaviour.*

The effective extension of information to farmers has always proved problematic. Innovations seen by agricultural science as beneficial to farmers, such as management methods to combat herbicide resistance in weeds, have been taken up at what has been seen to be unacceptably low levels. Agricultural science has sought ways to understand the adoption practices of farmers in order to improve the uptake of such innovations. Traditionally, extension has categorised farmers according to their propensity to adopt innovations and/or according to broad economic or farm size criteria. While this may superficially describe the adoption of some innovations, it is far from adequate for explaining the immense diversity in farm management strategies. It fails to place enough emphasis on the rationale for individual farmers' actions, it subordinates a farmer's own knowledge, and ignores the social basis of farming (5, 7). Despite this, such categorisations persist and have become accepted to the point that some farmer participants in this study have routinely quoted adopter categories and described adoption bell-curves.

A better way to understand farmer practice may be found in the rural sociological theory 'farming styles' developed by Prof. Jan Douwe van der Ploeg at Wageningen Agricultural University in The Netherlands (5, 6). Farming styles theory focuses on farming as a social process, with cultural, economic, political and farm management components. By recognising consistencies in these social goals of farmers, we can form more appropriate categorisations (styles) of farmers that allow better targeting of the extension message and should lead ultimately to a change in agricultural research priorities to better reflect what farmers themselves require. Through involvement in the Cooperative Research Centre for Weed Management Systems (CRCWMS), the authors have sought to utilise farming styles theory to assist the CRCWMS in the promotion of integrated weed management (IWM) strategies.

'Farming styles' is already being applied in other contexts such as viticulture (1, 3). In this paper, we report on the preliminary results that have emerged from focus groups and case studies with broadacre farmers in the Riverina region in southern New South Wales.

Method

Nine focus groups were conducted with farmers, and another with agronomists, within a 200 km radius of Wagga Wagga between March and May 1997. Groups of four to ten farmers were asked to 'brainstorm' to identify differences between farmers and describe all the types of farmers they know of.

A 'theme-ing' process was used to develop categories or 'styles' of farmers. Discussion over refreshments following each focus group provided the opportunity to gain feedback on how the process worked, and more particularly, how the participants related to the 'styles' that were identified. The results of each focus group were then aggregated into a final list of 'styles'.

The next phase involved undertaking case studies with a number of farmers who were selected by extension officers as being representative of particular 'styles'. The intention was to see, through the case studies, just how valid each style was in terms of its application to that farmer. To test the consistency between the style that farmers were selected as belonging to, and their self-identification, style 'portraits' were constructed from the style descriptions that arose from the focus groups. The portraits, crafted to reflect the concepts embedded in each style, were written in the first person so that they could be presented to farmers on individual cards. Case study participants were asked to rate the portraits on a four-point scale:

1. a lot like me;
2. a fair bit like me;
3. a little bit like me; and,
4. not at all like me.

Table 1: List of styles identified in focus groups.

Major styles	Minor styles	Poorly defined styles
Innovative* Traditional* Progressive* Middle of the road (M.O.R.)* Resource limited - personal* Resource limited - structural*	Lazy farmer Risk taker* Skite Hard driver (Hungry) Doom & gloom Lifestyler Old rich (Squattocracy) Expansionist Grazing emphasis* Organic Autocrat* Perfectionist* Secret farmer* Diesel burner* Tinkerers (Frustrated engineer)* Opportunist Developers	Committee person Lucky farmer Mediator Safety-net Farmer (Off-farm income)
* Styles included in case studies		

Results

Focus groups

Most participants showed some enthusiasm for the concept of farming styles, but some were unable to identify a wide range of styles. Some groups identified as many as 16 discrete styles, whereas one group identified only eight styles. While the main styles were frequently identified, some of the minor styles mention-ed were poorly described and were not uniformly accepted by all group members. However, in

informal discussions after the formal process, farmers were accepting of most of the styles that were mentioned as having arisen from other groups. Agronomists, particularly those with a lot of experience, were also enthusiastic about the styles, many recognising all or most of the final list of styles (Table 1).

A problem that emerged in the process was the dominance of extension language to describe categories of farmers, with adoption categories frequently being mentioned. The focus group facilitators (Howden or Vanclay) made a special effort to emphasise that what they were after was the way farmers thought about other farmers in their own terms.

Other problems related to the ability of farmers to articulate their understanding, inconsistencies in the language used, and varying interpretations of the words used to describe styles, ie. the style 'labels'. Those who seemed more able to articulate styles were farm women, and better educated males. However, these people also identified 'extension' categories more frequently, possibly because of a greater exposure to extension.

The final list of styles was created by aggregating the results of all the focus groups. An expert group of social researchers and extension staff was used in the aggregation process.

Selection of case study participants

Despite commitment to the styles that were identified through the focus group process, the participant extension officers found it difficult to nominate farmers for some styles, particularly the less common ones. There was also disagreement between the extension officers about what style certain individual farmers represented, and some commented that farmers could be representative of a number of styles (this was also mentioned by some farmer participants), thus challenging the notion that the styles might be mutually exclusive. At the time of writing, case studies were being conducted on 24 farms with farmers identified as belonging to 13 of the styles C two with each of the six major styles and the remainder with seven of the more fully described minor styles (Table 1).

Case studies

The most important issue emerging from the case studies so far is that farmers have mostly not identified themselves with the same style they were selected as belonging to. Only four of the 24 farmers selected their identified style, three of these in the 'Progressive' or 'Innovative' categories C farmers who have a lot more contact with agronomists and who are more widely known by farmers in general. More significantly though, only eight farmers selected their identified style as being 'a lot like me', and eight farmers thought that their identified style was only 'a little bit like me' or 'not at all like me'. Farmers also had difficulty in selecting one style as most like them and many selected up to seven styles as 'a lot like me'. Thus, there is inconsistency between farmers' self-identification of their style, and the style assigned to them by extension staff.

Generally, the style assigned by the agronomists could be explained by the broad practices of the nominated farmers. For example, 'Diesel Burners' use cultivation more than is viewed as currently acceptable. However, a propensity to cultivate and/or a love of driving machinery only emerged as one of a number of factors that influenced the practices of farmers identified as 'Diesel Burners'.

Many farmers demonstrated that they were acutely aware of the normative (value or social) judgements implicit in the descriptions of some styles. They would read 'between the lines' of the style portraits to infer meaning which would colour each portrait with differing levels of social desirability. For example, some styles were seen in a negative light, and farmers did not want to be associated with the negative aspect, even if the portrait did describe them to some extent.

Despite not selecting their identified style, farmers were generally enthusiastic about the styles, and especially about a number of the concepts such as experience, efficiency, lifestyle (family), optimality, etc. mentioned in the portraits. These concepts were not given credence within old extension models which focussed only on adoption (7).

Conclusion

The application of farming styles theory to broadacre cropping has revealed that the 'diffusion of innovations' model is still prevalent in farming discourse, manifesting itself in those categories readily identified by farmers which tend to approximate the adoption categories. Most farmers seem to understand the concept of farming styles and the individual styles themselves, yet only a small percentage of farmers readily identified with a specific style. There was a poor fit between the style assigned to a farmer by agronomists, and the styles selected by participant farmers to describe themselves.

The consistent emergence and acceptance of the farming styles in general suggests a form of 'mythologising' (2) of styles. The range of styles mentioned in the focus groups, and in farming discourse generally, includes styles that might not exist in reality, but are exaggerated or 'demonised' images which effectively maintain some social control over acceptable farming practice. Farmers' practices seen as not conforming with acceptable modern practice are exaggerated by the assigning of a label (eg. 'Diesel Burner', 'Tinkerer', 'Autocrat') thereby obscuring and/or delegitimising so labelled farmers' broader management styles. A number of farmers, usually the better educated male farmers, were readily able to quote stories of these archetypal types using pejorative terms and often the labels which also emerged from the focus groups.

Thus, although these types may be myth and farmers do not identify solely with any one style, farmers do recognise 'styles' as 'heuristic' ideal types and position themselves - ie., devise their own management strategy - using these styles as a reference (often unconsciously), according to their own perception of what constitutes good farm management (4, 7). The set of styles which informs individual farmer practice is referred to by van der Ploeg as the 'repertoire'(6).

The findings of this study to date suggest that the categorisation of farmers into 'styles' is problematic. Yet, despite the fact that the 'styles' uncovered during this research are heavily influenced by extension language and the mythologising of socially unacceptable practices, farming styles theory does allow us an insight into how farmers socially construct their management practices. By revealing how farmers articulate their management goals - expressed as positions in regard to styles - farming styles theory will provide a better model for understanding those goals, and therefore allow for the better targeting of extension.

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