



Perceived room for manoeuvre of farmers in a situation of limiting growth possibilities

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Abstract – The relation between farm development and its direct surroundings is of renewed interest. Growing urbanization and changes in societal demands increase the need for farmers to integrate developments in their direct surroundings in farm development. Especially in densely populated regions with high natural or cultural-historical value, farmers are challenged to integrate changes in the biophysical and societal environment in farm strategy. Opportunities for farm development may lie outside traditional growth strategy, this makes opportunity identification more challenging. In this study we focused on the perceived room for manoeuvre of farmers, defined as the number of options the farmer perceives as viable to generate income on his farm. In a specific case study of Kampereiland, an area close to important nature reserves and a designated National Landscape, we send a survey to 102 dairy farmers. Using a two-step cluster analysis based upon a three component principal component factor analysis, we found four distinct clusters. When the clusters are related to actual current and preferred activities great similarities are found between the groups, indicating tensions between opportunities seen and activities preferred.

INTRODUCTION

Farmers are more and more challenged to integrate changes in the biophysical and societal environment in their farm strategy, especially in densely populated regions with a high natural or cultural-historical value. An interesting issue where the research fields of entrepreneurship and of rural sociology meet, is the concept of autonomy, what freedom in farm development does a farmer have and perceive? Within specific biophysical and social surroundings different farming styles evolved (van der Ploeg 2003). The relation with nearby surroundings became less important to the farmer, farm location became an address for production, loosening the connection between product, production and location (Wiskerke (2009). New services and functions of rural areas for urban dwellers is another important development (OECD 2006; Horlings 2010).

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The farmer, in his role as entrepreneur, needs to act strategically in order to reach the goals set. The room for manoeuvre for farm development reflects both exogenous and endogenous developments and as such depicts the number of opportunities the farmer perceives (sees) as viable in order to obtain an income. The verb 'to perceive' reflects the fact that it is a personal matter. We defined room for manoeuvre as perceived by the farmer in this study as the number of options for farm development the farmer sees (perceives) as viable for his situation (and is as such by definition perceived). Figure 1 shows the conceptual framework in which perceived room for manoeuvre (RfM) is a central issue towards strategy formulation and (future) farm practices.

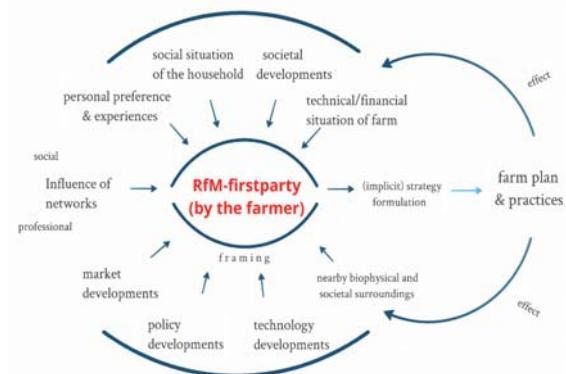


Figure 1. Conceptual framework RfM (Room for Manoeuvre).

RfM links to research fields of opportunity identification (Ardichvili, Cardozo et al. 2003), farmer decision making (Edwards-Jones 2006), motivation to change (McElwee 2006) and recognition of opportunities as suitable in general or as suitable for yourself as actor (McMullen and Shepherd 2006).

RESEARCH QUESTION AND METHODOLOGY

The central research question used in this study is the relation between perceived room for manoeuvre, current farmer's activities and farmer's preference within the perspective of farm development in a situation of limiting factors in the biophysical and societal surroundings. We selected a case study and developed a survey in which 15 options for farm development (see table 1) were presented to farmers, asking them to rank each option on a five-point Likert scale on the question 'how viable is this option for your situation to support your income'. Secondly farmers were asked to select the options they currently put in practice and to select the one option



they would prefer to do given a situation of no limitations.

Out of 102 addresses in total 85 farmers responded to the survey leading to 79 completed surveys. Using a three component primary component factor analysis as starting value, we performed a two-step cluster analysis leading to 4 distinct clusters. We made cross tables to study the relation between the clusters and both current activities and preferred activities.

Table 1. Options (in short) as presented in the survey.

Extensive dairy	Dairy & customers
Intensive dairy	Dairy & care
Organic dairy	Dairy & recreation
Joint farming	Dairy & another company
Dairy & off farm job	Relocation outside area
Dairy & energy production	Quit milk, another company
Dairy & nature conservation	Quit milk, residential
Dairy & processing	Other option named by farmer

Chosen case to study: Kampereiland

Kampereiland is an area of 4,200 ha agricultural land given out in tenancy to mainly dairy farmers. The owner is the city of Kampen which reclaimed this land in the delta of a river. All farmers have been under the same tenancy policy of the lessor and the general national and European agricultural policies. Kampereiland is part of National Landscape IJsseldelta (designated to maintain the character of the landscape) and two Natura 2000 reserves are neighbouring the area. The lessor developed a policy to emphasize the special value of Kampereiland for the city of Kampen (in terms of nature, landscape, recreation etc.) These combined circumstances limit the 'normal' development path in scale enlargement and may open new opportunities and hence influence the room for manoeuvre. The relative unity in background and historic development of the farms, creates a good situation to study differences in perceived RfM.

RESULTS

We found four distinct clusters of farmers with a distinct set of options seen as viable for farm development: specialised dairy farm oriented towards intensive farming (n=29), specialised dairy farm oriented towards extensive farming (n=21), diversified farming oriented towards extensive farming (n=21) and off-farm focused farmers. All clusters fitted our observations during the initial interviews and study of the region.

Table 2 shows that current activities of farmers are reflected in the distinct clusters of perceived RfM, indicating that farmers in their current farm development on the RfM as perceived. Multiple activities could be selected by one farmer, hence the relative high number of diversification activities within cluster 3, supporting the finding that diversified farmers often develop a portfolio of activities (Alsos 2007).

Table 2. Current farm activities in relation to clusters in perceived Room for Manoeuvre (more options per farmer).

Option (in short) \ Cluster	1 Specialised Intensive n = 29	2 Specialised Extensive n = 21	3 Diversified Extensive n = 21	4 Off-farm Extensive n = 8
Extensive dairy ¹⁾	5	20	18	5
Intensive dairy ¹⁾	21	5	2	0
Organic dairy	0	0	1	0
Joint farming ²⁾	8	0	2	1
Dairy & customers ¹⁾	0	0	4	0
Dairy & care	0	0	2	0
Dairy & recreation ²⁾	0	0	3	0
Relocating outside area	1	0	0	0
Quit milk, other comp. ¹⁾	0	0	1	2
Quit milk, residential ²⁾	0	0	0	1

¹⁾ P<0.01 ²⁾ p<0.05 (significant between clusters)

Table 3 indicates a strong preference for a specialised dairy farm (49 out of 79) with an intensive orientation as most preferred. Farmers differ in perception and are autonomous in seeing opportunities outside their own preference. Especially farmers in clusters with an extensive orientation may not perceive it as autonomous choice as their RfM is outside their own preference. We will conduct further research for a better understanding on the differences between clusters and the factors most of influence for the farmer in the perception of his RfM.

Table 3. Preferred activities in relation to clusters in perceived Room for Manoeuvre (one option per farmer).

Option (in short) \ Cluster	1 Specialised Intensive n = 29	2 Specialised Extensive n = 21	3 Diversified Extensive n = 21	4 Off-farm Extensive n = 8
Extensive dairy ¹⁾	1	9	3	1
Intensive dairy ²⁾	18	9	7	1
Organic dairy	0	1	2	0
Joint farming ²⁾	2	0	0	1
Dairy & nature conserv.	1	1	1	0
Dairy & care ¹⁾	0	0	4	0
Dairy & recreation	1	0	1	0
Relocating outside area ²⁾	1	0	1	2
Quit milk, other company	0	0	1	1
Quit milk, residential ²⁾	0	0	0	1

¹⁾ P<0.01 ²⁾ p<0.05 (significant between clusters)

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