Bottlenecks in organic farming in Northern Norway

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Abstract. In Norway, the goal of 15% organic food production within 2015 is too ambitious if the current growth rate of organic farmland is continued. Hence, a study of bottlenecks within organic farming systems in Northern Norway, and farmer's preconditions to convert was conducted in spring 2007. A questionnaire was sent to certified and former certified organic farmers, and a control group of conventional farmers. For organic farmers the most important bottlenecks were public regulations and organic price premiums. Conventional farmers feared yield decrease, restricted forage availability and extra work. In 2008, interviews with selected farmers and officials in local municipalities were conducted to explore the reasons for large differences between certified organic farmland.

Key words: conversion, farmer's motives, organic farming, regional level

INTRODUCTION

According to official data in 2008, 5.1% of the agricultural area of Norway has been farmed organically (Debio¹, 2009). This is far from the national goal of 15% organic food production and food consumption within 2015. On average, 7.9% organic farmers per year have dropped organic certification in Norway from 2002 to 2006 (Koesling et al., 2008). The reasons for that have been public regulations including standards for organic farming, agronomy, economy, and farm exit.

In the Northern part of Norway, organic farming has been part of rural development and listed among priorities in strategic plans of counties. However, differences between certified organic farmland in the municipalities are large and vary from 0% to 24% (Debio, 2009). In order to explain these differences, both a study of bottlenecks in organic farming (Thomlevold et al., 2007) and a study of factors that may explain these differences are presented in this paper.

MATERIALS AND METHODS

This paper is based on results from two studies (Thomlevold et al., 2007; Sturite, 2009) carried out in Northern Norway. In spring 2007, a questionnaire was sent to all certified and former certified organic farmers, and a control group of conventional farmers in Northern Norway. Totally, 174, 70 and 722 questionnaires were sent and 95, 17 and 257 questionnaires were received back, respectively.

¹Debio is the Norwegian inspection and certification body for agricultural production.

The questionnaire contained four parts: "General information about farmer and farm", "Information, marked, knowledge", "Conditions for organic farming" and "Experiences". The largest part of questions offered answers on a scale 1-3 or 1-5. There were also "yes /no" questions.

In 2008, the municipalities with small (< 2.5%) and large (> 10%) certified organic farmland were selected in Nordland county, totally thirteen and 8 municipalities, respectively. In these municipalities phone interviews with selected farmers and officials were conducted. Numbers of interview carried out per group is shown in Table 1. The questions for officials and farmers were related to municipality's contribution and attitude to organic farming and to explore the reasons for large differences between certified organic farmland.

organic farmland.							
Respondents		The municipalities with	The municipalities with				
		small part certified organic	large part certified organic				
		farmland (S-OF)	farmland (L-OF)				
-	Officials	13	8				
	Farmers	18	13				
	Total	31	21				

Table 1. Numbers of interview in the municipalities with small and large part certified organic farmland.

RESULTS AND DISCUSSION

1. Bottlenecks in organic farming

In Northern Norway, grassland occupies 97% of certified organic farmland (Debio, 2009) confirming that sheep farming, milk and meat production are important farm types in this part of Norway. The farmers' motives to manage their farms organically or conventional are showed in Fig. 1. It seems that organic principles were more important for the organic farmers than economical reasons. The values of environmental protection, food quality and health were identified as important rather than the professional challenge of organic farming. These findings support the results of a focus group study in several Europe countries where the values of organic producers were explored (Padel, 2008). More than 40% of certified organic farmers emphasised that organic price premium was too low and the organic standards changed frequently and unexpectedly. Former organic farmers mentioned problems with plant nutrient supply and procedures according inspection and documentation. Between 30 and 40% of certified and former certified organic farmers indicated that yield decrease, access to manure, weed control and high costs of organic feed grain was a challenge. These bottlenecks were mainly expressed by organic sheep farmers indicating the importance of farm-specific factors. On a contrary, more than 40% of the conventional farmers identified bottlenecks at the scale of farm. They mentioned yield decrease, extra work, and limited access to forage as main restrictions in organic farming, paying less attention to, for example, frequent changes in regulations.



Fig. 1. The farmers' motives becoming involved in organic farming or conventional farming (% of answers in each farming group).

Thus, the study indicated that selected farmer groups recognised bottlenecks in organic farming differently. While the conventional farmers related most important bottlenecks to internal circumstances, certified organic farmers recognised them in external conditions. This study supports results provided by Koesling et al. (2008) who studied farmer's reasons for opting out of certified organic production in Norway.

2. Large differences between certified organic farmland in Nordland county

In L-OF municipalities several factors were identified as important for successful establishment of organic farming in the municipality. Both interview groups (officials and farmers) mentioned that local enthusiastic organic farmers provoked interest for organic farming in the neighbourhood (Table 2). Thus, one or two successful organic farmers might influence converting process positively in the municipality. The role of advisers, local agricultural organisations and officials in the municipality also was important for successful development. Other reasons mentioned by officials and farmers that might influence a degree of certified organic farmland in the municipality are shown in Table 2.

Table 2. Reasons for large differences between certified organic farmland in the municipalities of Nordland county (% of answers from officials and farmers in L-OF and S-OF municipalities).

Reasons	L-OF municipalities		S-OF municipalities	
	Officials	Farmers	Officials	Farmers
Climatic conditions	25	-	8	-
Availability to disposable land	50	39	39	22
Farming traditions	13	23	15	-
Economical profitability	38	46	16	_
Farmer's own interest	13	23	31	28
"Neighbour effect"	75	31	61	50
Persons interested in organic farming	-	15	39	28
Advisory support	13	-	31	17
A degree of municipality's contribution	-	-	23	-
Acceptability in the agricultural organizations, sections and the farming community	25	31	8	6
Availability of information	-	23	-	17

Contrary to this, S-OF municipalities were characterised with extremely low activity within organic farming. Despite positive attitude to organic practise the most of the officials in these municipalities were little or not at all involved in developing processes related to organic farming. They explained it by low interest for organic farming from local farmers. At the same time, the farmers expected more support from officials or local agricultural organisations. The farmers also missed " neighbour effect" – enthusiastic organic farmers in the vicinity who could serve as positive example and share their experience during converting process (Table 2).

The analyses of interviews suggest that the most important relationships seems to be between certified organic farmland and officials contribution; certified organic farmland and people/organisations with organic interest in the municipality (neighbour effect); certified organic farmland and the attitude/interest for organic farming between farmers, local organisations and authorities; certified organic farming and availability for free (disposable) land in the municipality.

CONCLUSIONS

For organic farmers the most important bottlenecks were public regulations and organic price premiums. Conventional farmers feared yield decrease, restricted forage availability and extra work. Large differences between certified organic farmland in the municipalities seem to be related to several factors but mainly to organic farming community in the municipality. At the same time, both studies showed that there are further possibilities to develop organic production in the Northern part of Norway. To promote this, it seems that regulations and policies should be more stable and longterm, higher organic price premiums should be introduced and both knowledge and experience on organic farming should be shared between farmers and officials in the municipalities.

REFERENCES

Debio 2009. Statistics 2008 (in Norvegian).

- Koesling, M., Løes, A.K., Flaten, O. & Lien, G. 2008. Dropping organic certification effects on organic farming in Norway. *The 16th IFOAM Organic World Congress, Modena, Italy.*
- Padel, S. 2008. Values of organic producers converting at different times: results of a focus group study in five European countries. Int. J. Agricultural Resources, Governance and Ecology 7, 63–77.
- Sturite, I. 2009. Certified organic farmland in Nordland county why are differences between municipalities large? *Bioforsk Rapport.* 28, pp. 31 (in Norwegian, English abstr.).
- Thomlevold, A.R., Hoffmann, B., Lind, V & Bjøru, R. 2007. Mapping of bottlenecks in organic farming in Northern Norway. *Bioforsk Rapport* **69**, pp. 38 (in Norwegian, English abstr.).