A Qualitative Study on the Reception of New Organic Feed Production Techniques in Menemen, Aegean Region

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Abstract

This study aims to provide an in-depth understanding of the opinions of Turkish forage legumes and animal farmers, researchers and marketing staff in ProRefine Project Pilot area on the new developments in organic animal husbandry regarding sustainability and their approaches towards these new experimental steps. The farmers are in Menemen, İzmir, Aegean Region where ProRefine Project, which focused on Lucerne cultivation methods in order to enhance sustainability in organic farming, took place. Within the Project there were two meetings with these stakeholders, inquiring their ideas and opinions on the new horizon the Project brings. These meetings were cam recorded and transcribed. Critical questions supplied by the Project itself incited the stakeholders to explain their views in detail which calls for a qualitative study to bring forth a better grasp of mind-set of the future users of such technologies. By dissecting and realigning the answers of the sample group, the habits, attitudes and notions of the stakeholders are thoroughly comprehended to see the possible difficulties that new technologies and scientific approaches may face in Türkiye, and if there is also a tendency to try new ways for the sake of profitability and sustainability.

Introduction

According to Food and Agricultural Organization (FAO) estimations by 2050, we will need to produce 60% more to feed 9.3 billion people, compared to what we do today. One approach toward such a future image is organic farming. Organic products have a higher price range, which can be speculated that it attracts farmers promising a higher income. Regardless, it can be seen that organic farming has been increasingly spreading. For example, annual growth rates of certified organic product sales in the U.S. had exceeded 20% since 1992 (NBJ 1999; USDA 2000d). There is no doubt that organic products are also trending in Türkiye (Oztürk, 2014). It is estimated that within a few years organic animal products will be one of the most demanded organic products in Türkiye. With the well adapted local breeds, natural pastures and meadows, increasing forage crop areas and sufficient workforce, Türkiye has a great potential in organic animal husbandry (Bayram, 2007).

As it is known that organic farming is an agricultural activity encouraging balanced improvement of social, economic and ecological factors in a specific cultural setting. In such a setting for organic animal husbandry, as a part of organic farming, being able to benefit from organic forage crops is an important point along with many other elements such as healthy husbandry, proper barn conditions or suitable brood and breeding race selection. (Kurtar, 2004)

One of the main problems in animal husbandry in Türkiye is the inability to produce sufficient quality roughage. The grazing of meadows and pastures, where the production potential of quality roughage has been greatly reduced due to the misuse that has been going on for years, or the supply of cereal straw and straw with very low nutritional value, are among the main reasons for the low yield in animal products (Açıkgöz, 2005)

it is known that one of the main reasons behind ProRefine project was the difficulties faced in protein rich feed acquirement in order to create a balanced diet of protein and energy rich feed in organic animal husbandry. Thus, ProRefine Project aimed to improve local production of protein feed in organic production, in particular for monogastrics, in different regions in Europe and Türkiye, through improved forage processing.

Considering the fact that above-mentioned information is on conventional forage crops, it is not surprising to think that the situation is far critical for organic feed systems. Under such conditions, ProRefine Project was conducted to solve the problem of organic feed in organic animal husbandry by

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recommending different value chains in accordance with the project results. The information and the experience gained in this Project brought an opportunity to evaluate the mindset of organic farming stakeholders of the region, to provide an insight on the steps which can be taken into consideration in the future decision making processes.

Material and methods

In this qualitative study, case study pattern was used. Case study is an empirical research method that studies a current phenomenon in its real-life context and examines situations in a multifaceted, systematic and in-depth manner. (Yıldırım and Şimşek, 2005; Patton, 1990; Cohen and Manion, 1997). The case study includes the stages of limiting the situation, determining the research case, searching the data set, creating the findings, making comments and writing the results (Denzin and Lincoln, 1996; Bassey, 1999). Since this study aims to explain the experiences of the potential stakeholders of ProRefine Project in the study group (Yin, 2003), the explanatory case study design was preferred. The empirical data was collected through focus group interviews. Within social science, this method is well-known as a method for collected empirical data within qualitative studies (Wilkinson, 1998).

Results

Study Population

The population of study is actors in the value chains of organic food production, and more specific the value chains of feed, meat and diary products, in Turkey, which consists of potential stakeholders of the ProRefine Project. ProRefine Project is a project within the scope of Core Organic Call, conducted with 26 participants from 19 countries.

Study Group

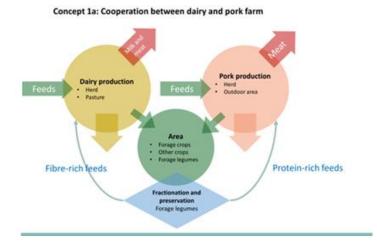
Representatives of actors in the organic farming sector in Izmir, Menemen Province, were invited for a study presentation and focus group interview in order to have an insight about the status of animal husbandry in organic farming in Aegean Region of Turkey. The representatives included farmers, agricultural engineers and representatives from animal feed companies. While the farmers are closely engaged in organic farming, agricultural engineers and private sector representatives focus on both organic and conventional agriculture. The presentation and focus group interview took place in one of the meeting halls of International Agricultural Research and Training Center, which was a partner of the main Project. The meeting hall can host up to 50 people, it is equipped with audio-visual systems. The study group was determined within the scope of purposeful sampling with variation in regard to role.

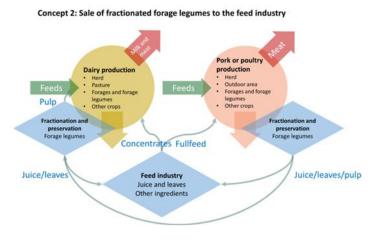
The study group was determined within the scope of purposeful sampling with variation in regard to role in the value chains and in the organic agricultural sector in general. Therefore, one person from each group attending the interview, farmers, entrepreneurs, engineers and private feed production sector representatives, was selected for a focus group interview.

Participant 1: Hasan FARUN, Farmer Participant 2: Bayram TÜRKSOY ,Entrepreneur Participant 3: Sevinç KOCAERMİŞ, Agricultural Engineer Participant 4: Deniz AKKOÇ, Tradesman,

Study Group Questions

Within ProRefine Project workpackages, there are two which is directly related to dissemination and farmer attitudes. Therefore, the Project Team already assembled a focus group consisting of farmers, engineers and representatives from the private sector. During the focus group meeting, they were presented two value chain concepts. The concepts are as follows;





After these concepts were presented, the interviewees were asked the open-ended question of;

1. What are the potential positive aspects of such local value chain of organic feed production?

2. What are the potential challenges barriers within this kind of value chain?

applying to both concepts.

The acquired data is analyzed through Critical Theory with positivism paradigm in order to understand the approach of the stakeholders towards innovation and new norms. It is seen in the all of the participants' answers; there is a highly skeptical approach towards a new understanding in animal husbandry.

Discussion

Analysing the responses of the participants, it is seen that in the Concept 1, although there is a slight tendency to try a new technology due to possible profits, the general approach to the concept is skeptical. Farmers do consider the possible financial gains and losses as priority. The private feed production sector

representatives also have a similar take on the subject, which channel judgement to a point where even previous possible positive effects of the projects are disregarded. The lack of drive for profits and the altruistic work understanding of agricultural engineers working for the public sector encourage them to take on new techniques. However, all the participants agreed on the interspecies contamination risk. Moving on to Concept 2, it is understood that participants focus mostly on the quality of the feed. High quality of the feed is appealing to all the participants. However, the inevitable correlation between high quality and high price again lead participants, who especially have economical concerns such as feed producers or farmers, to reconsider their decisions. Moreover, all the participants would prefer to see concrete positive effects of the feed, if possible by directly using and experiencing the feeds performance.

Conclusion

ProRefine project has aimed to bring a new approach to lucerne cultivation with leaf stripping and juicing technologies resulting in protein-rich and fibre-rich feed options through novel harvesting and biorefining techniques. Thus, forage legumes can be converted into protein- and fiber-rich fractions

Consequently, from this study, a part of ProRefine project, which aims to fulfil self-sufficiency in feed sector in organic farming, it can be concurred that Türkiye has a potential to increase its self-sufficiency level, however, a new approach can be met with skepticism. The stakeholders of the organic farming sector mostly have concerns about economical issues, they are interested in the high quality products, they require to see further evidence of a new system and they heed to the importance of hygiene in animal production, which again can be linked with economical issues due to the possibility of losses for sanitary reasons. It is understood that these new concepts require further studies to be accepted by the majority of the stakeholders.

Furthermore with the focus group interviews, it is seen that new techs and approaches may find a foothold in the target audience with quality and profit aspects. New projects combining these with environment-friendly understanding may provide the necessary further evidence for a better foundation in the agricultural sector.

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