# **Information Sources for Farmers Growing Pulses in Turkey**

Oral Düzdemir
Faculty of Agriculture, Department of Field Crops
Gaziosmanpasa University
Tokat, TURKEY
orald@gop.edu.tr

Murat Sayılı
Faculty of Agriculture, Department of Agricultural Economics,
Gaziosmanpasa University
Tokat, TURKEY
muratsayili@yahoo.com

Hasan Akca
Faculty of Agriculture, Department of Agricultural Economics
Gazios manpasa University
Tokat, TURKEY
akcahasan @yahoo.com

**Abstract:** Literature review shows that articles focusing on information sources used by farmers growing pulses are limited. Although farmers lack technical knowledge related to cultivation of pulses, they do not benefit from extension staff at enough level. Therefore, they face difficulties while growing pulses. The aim of this study is to determine information sources (printed & unprinted material, universities, extension staff, media, private input sellers, chamber of agriculture, neighbour farms, etc) used by farmers growing pulses in Tokat province of Turkey. Data were collected from 142 farms via survey. Research findings showed that farmers growing pulses contact with agents selling seed for green bean, private agrochemical sellers and other farmers in the region. On the other hand, they get information at weal level from research institute, agricultural faculty, agro-based industry, printed material, and media.

Keywords: Pulses, information sources, Turkey

## Introduction

Pulses are one of the most important crop groups that have been cultivated by human beings since the first ages of history. Turkey is a homeland for many varieties of pulses. They have been cultivated and consumed in large quantities in Turkey for many years. The major varieties of pulses grown in Turkey are lentils, chickpeas, white beans, red beans and broad beans which are used for human nutrition, and vetches (Akova, 2006).

Turkey is one of the main pulses producers in the world. In 2007, production area, production amount and yield of chick pea in Turkey were 503 675 ha, 505 366 tons, and 1 010 kg ha<sup>-1</sup>, respectively. The figures for dry bean were 109 250 ha, 154 243 tons, 1 410 kg ha<sup>-1</sup>, respectively. In the same year, production amount was 519 968 tons for fresh bean, and 58 710 tons for kidney bean (FAO 2009).

#### **Material and Methods**

Primary data were used in the study. Data were collected from 72 farms growing bean and 70 farms growing chickpea via survey in Tokat province of Turkey.

The method of simple random sampling was used to determine farms to be surveyed (Dixon & Massey 1969):

$$n = \frac{N.S^2.t^2}{(N-1).E^2 + S^2.t^2}$$

Where, n is sample size, N is number of farm in the population, S is standard deviation, t is table value (1.86) at 95% significance level and 10% error, E is error.

Questionnaire was carried out in October 2006.

# **Research and Findings**

Agricultural information covers all published or unpublished knowledge in all aspects of agriculture (Agbamu 2006). Information is basic ingredient for increased agricultural production and productivity. Access to the right information at the right time in the right format and from the right source may shift the balance between success and failure of the farmer (Opara, 2008). Access to adequate information is very essential to increased agricultural productivity (Mgbada 2006, Ofucku et al. 2008). Benefiting from information sources can be changed depending on educational level of farmers. In developed countries, farmers contact with university and research institute actively. On the other hand, in developing and less developed countries farmers have not understood importance of these organisations at desired level. This situation can be changed in different parts of the same country.

Information sources used by pulse growers in Tokat province of Turkey are shown in Fig.1. In order to understand the subject, information sources were classified in three levels because benefiting level of farmers from information sources is different. In the research area, farmers growing pulses get information generally from private agents selling agrochemicals, other farmers (friends, neighbours, etc.) in the region, and seed agents for green bean. There is a knowledge share between farmers and four actors (governmental extension staff, chamber of agriculture, export-import unions, and chickpea seed sellers) at medium level. It was determined that growers of pulses do not contact with research institute, agricultural faculty, agro-based industry, printed material (books, journals, leaflets) and media (TV, Radio, etc.). This situation reflects only the idea of farmers growing pulses in the research area. Different results can be derived from other parts of Turkey.

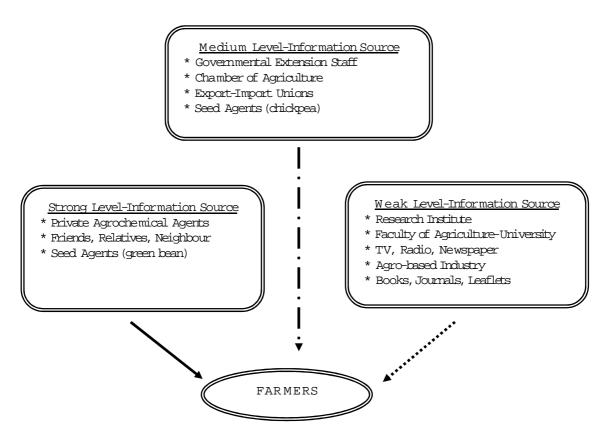


Figure 1: Information sources which pulses growers use

Research findings showed that farmers growing pulses get information about agrochemical usage especially from private sellers (bean growers: 69.45%, chickpea growers: 78.57%) while buying pesticides. At the same time, farmers believe that they have enough experience in the subject of fertiliser use in both bean (76.39%) and chickpea (77.14%) growing. In the subject of pesticide usage, they always contact with private agrochemical agents while buying pesticides (Tab. 1).

	Pesticides		Fertilizer	
	Bean	Chickpea	Bean	Chickpea
	(imigated)	(non-inigated)	(inigated)	(non-inrigated)
Yes, always	69.45	78.57	4.17	18.57
No, I have enough experience	8.33	12.86	76.39	77.14
Sometimes, when I need	22.22	8.57	19.44	4.29
Total	100.00	100.00	100.00	100.00

Table 1: Whether farmers get information how to use agrochemicals or not while buying them from agents? (%)

### **Conclusion and Recommendation**

To produce more quality, quantity and profitable pulses following recommendations can be advice to farmers:

- Growers should get information from extension staff instead of advice of neighbour farmers.
- Farmers growing pulses should benefit from academic staff working at agricultural faculty established in the region more than today.
- Education level of farmers should be increased via theoretical and applied agricultural training activity.
- Farmers should contact with different actors at desired level.

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