

Evaluation of Farmers' Behaviors on Adopting Fertilizer Application According to Soil Analyses and Making Suggestions for Supports of Soil Analyses in Turkey

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Project Summary: Population growth in the world increases the demand and supply of agricultural production. Among the inputs increasing agricultural production fertilizers have an important role. Production increase in unit area can be achieved by applying sufficient fertilizers according to decisions of experts relying on soil analyses without harming soils, plants, humans and environment. Since 2009 an obligation has been issued for farmers who have fields 50 da and above. Those farmers who have soil analyses will get fertilizer subsidy and with this obligation attention is drawn to the importance of this issue. Although in 2016 soil analyses subsidy was suspended, it will go on for 2017 production period with a new approach. Considering the world wide awareness in terms of soil, plant, human and environment health, it is necessary for the farmers to adopt the fertilizer recommendations based on soil analyses.

In this project it is aimed to determine farmers' behaviors, their attitudes for applying the recommendations and to evaluate the approaches of farmers, extension workers' and experts' to fertilization and impact assessment of fertilization supports which is an essential issue in terms of yield, cost and plant, human, environment health.

Project's main population is constituted by the farmers who applied to the purposeful designated 42 laboratories in İzmir, Manisa, Ankara, Konya, Antalya, Adana, Diyarbakır, Şanlıurfa, Erzurum, Van, Samsun, Çorum, Tekirdağ ve Edirne provinces in 2015-2016. It is planned to make surveys with 840 farmers who apply, and 280 farmers who do not apply. Besides it is planned to reach every peer of the project by discussing with the experts from designated laboratories and extension workers from Directorate of Provincial Food Agriculture and Livestock. Farmers' attitudes and behaviors on fertilizer usage habits and innovations will be analyzed by factor analysis. Relation between these factors and farmers' socio economic characteristics, farmers' adoption of the fertilizer recommendations, pleasure from the recommendations, opinions on subject, trust in the laboratories will be determined by logistic regression. Chi-square analyses will be used to determine farmers' information sources, the relation between the farmers and extension workers and the research institutes. For impact analysis, double-hurdle (double threshold: double hurdle), data enveloping and partial budgeting analysis will be used. Also the data collected from experts and extension workers and the subject will be evaluated from all aspects. It is considered that the study will have an important role for conducting the agricultural extension works in an effective way.

Key words: Turkey, Fertilizer Recommendations, Adoption, Soil Analyses, Impact Assessment