

Analyzing the impact of Farmer Field School Projects on Knowledge and Actions of Apple and Pear Farmers regarding Pesticide Use Safety, in the East Azerbaijan Province

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Considering safety practices for the use of synthesized pesticides for pest control in agriculture is one of the main health and ethical concerns that affects the health of farmers. On account of this, Farmer Field School approach is to improve farmers' knowledge and actions consistent with scientific principles and indigenous experiences. This descriptive- exploratory study aimed to investigate the impact of FFS projects on farmers' safety knowledge and actions when they use pesticides. The statistical population of the study consisted of apple and pear farmers in four districts of Ghuneymarkazi, Mishabeshomali, Sarajuyesharghi and Gheshlage markazi in Shabestar, Marand, Maraghe and Ahar Townships, covered and uncovered by the projects. A sample of 260 farmers was randomly selected using a multi-stage sampling technique and was structurally interviewed. The content validity of the questionnaires was reviewed by a panel of faculty members and agricultural experts. A pilot study was conducted to establish the reliability of the instrument and the Cronbach's alpha coefficients for the main constructs of the questionnaire were calculated between 0.6 and 0.9). The results indicated that on average, farmers' knowledge about complying safety principles during using pesticides was at a high level, but because of the FFS projects, the knowledge of participant farmers was more than the non-participants. Farmers' safety actions were lower than their knowledge and the participants complied safety actions more than the non-participants.

Key Words: Safety, spraying, Knowledge, Action, Farmer Field Schools