

## Effectiveness of On-Farm Water Management Practices in Apple Growing Areas in Balochistan

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Abstract—Current study sought to explore the perceived perception of Extension Field Staff (EFS) regarding the effectiveness of on-farm water management practices in apple growing areas, Balochistan the province of Pakistan. Five purposively districts of Balochistan province namely (1) Loralai, (2) Killa Saifullah, (3) Pishin, (4) Mastung and (5) Sibi were chosen. A sample of 100 extension field staff (EFS); 20 from each district were selected. The quantitative data thus collected were statistically analyzed by using Statistical Package for the Social Sciences (SPSS). Results indicated that EFS perceived that, more than half (53%) of the EFS belonged to the age group of 31-40 years. Most (44%) of extension field staff had received education up to M.Sc. (Hons.). More than half (51%) of the EFS had experience up to 5 years. More than half (54%) of the EFS did not receive any in-service trainings. EFS of the districts Loralai, KillaSaifullah, Pishin, and Sibi was agreed that lining water courses with scientific methods, renovation of water storage tanks, the precision of land leveling, demonstration centers, and supply of enough water throughout the season using latest techniques were effective methods which enhanced farmers crop productivity in their area. In Loralai district, seminars, demonstration plots, farmers' organizations were perceived often to almost always use by EFS where as electronic and print media, Water Course Association, group discussion, workshop and literature methods were used sometimes. In KillaSaifullah and Mastung, all the identified methods were used on sometimes basis. Significant differences were observed on 5 out of 8 categories about the use of extension methods as perceived by the extension field staff. The study recommended that the administrative follow-up to utilize improved watercourse and water storage tanks need to be improved until the desired results are achieved and regularized by the farmers. In this regard, extension teaching methods and capacity building program should be imparted for the farmers so that achieved the target of sequential crop productivity goals.

Keywords — apple, Balochistan, on-farm, water management practices, Pakistan