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## Factors Determining the Adoption of Agricultural Technologies

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### Key words

Technology adoption, program participation, water salinity, Abu Dhabi

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### Abstract

The development of the agriculture sector in Abu Dhabi involved considerable utilization of different production technologies. This paper attempts to highlight the main determinants of technology adoption in the sector. The technologies investigated include chemical fertilizers, chemical herbicides and pesticides, sprinkler and drip irrigation and plastic houses for protected agriculture. The preliminary empirical results showed that increased water salinity in the farm increased the likelihood of adopting drip irrigation technology. The older farmers seem to have a lower probability of adopting all the technologies studied except for chemical herbicides and drip irrigation where there was no significant association. Better educated farmers were more likely to utilize plastic houses as means of protected agriculture as well as using drip irrigation systems, however, they were less likely to apply synthetic fertilizers. Farmers participating in the vegetable purchase program and using drip irrigation were more likely to adopt the plastic houses technology. However, participation in government programs had mixed results on the adoption of other technologies.

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