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Dealing with Water Scarcity and Salinity: Adoption of Water Efficient Technologies and Management Practices by California Avocado Growers

Wednesday, August 25, 2021 | 7 – 8 pm PKT

Abstract: The irrigated agriculture sector has been facing an increased scarcity of good quality water worldwide. Consequently, the sustainability of water intensive crops, such as avocado, is threatened when water becomes scarce and expensive, or when growers must use saline water supplies that reduce crop yields. A variety of irrigation technologies and water management practices are now recommended to help growers through times of limited water supplies and elevated salinity levels. To examine how growers adopt different practices and combinations of practices, we collected data from a sample of avocado growers in California. We used Kohonen self-organizing maps, and developed logit models to identify the most common bundles of technologies and management practices that growers are using to deal with water scarcity. We test the validity of the proposed bundles and factors affecting their adoption, using primary data obtained from a survey of California avocado growers at the height of the drought during 2012–2013. Results show that farm location, share of income from agricultural production, use of cooperative extension advice, and farmer characteristics, such as age and education, all play important roles in grower adoption of individual and bundled methods to adapt to water scarcity.



Dr. Ariel Dinar

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Moderated by Talha Manzoor, Assistant Professor, Centre for Water Informatics & Technology (LUMS)

Speaker Biography: Ariel Dinar is a Distinguished Professor of Environmental Economics and Policy at the School of Public Policy, University of California, Riverside (UCR). His work addresses various aspects of economic and strategic behavior associated with management of water, land and the environment. Dr Dinar received his PhD from the Hebrew University of Jerusalem. Since then he spent 15 years in the World Bank working on water and climate change economics and policy. In 2008, Dr Dinar assumed a professorship at UCR. Dr Dinar founded the Water Science and Policy Center, which he directed until 2014. Dr Dinar is an International Fellow of the Center for Agricultural Economic Research of the Hebrew University of Jerusalem, Israel since November 2010; a Fulbright Senior Specialist since 2003; and was named a 2015 Fellow of the Agricultural and Applied Economics Association. He authored and co-authored nearly 250 publications in peer reviewed journals, policy outlets and book chapters. He co-authored and edited 29 books and textbooks. He founded two technical journals (Strategic Behavior and the Environment, and Water Economics and Policy) for the latter one he serves at present as an Editor-in-Chief. He founded and serves as the Editor-in-Chief of the book series Global Issues in Water Policy.

The webinar can be attended via Zoom. In order to attend, the participants must register at the following link:

<https://wit.lums.edu.pk/BWSR2021>

Instructions to log into the webinar will be sent via email.

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