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Farmers can respond to climate change by modifying their technologies or management practices, or both. In this paper, we examine the choice of crop, irrigation, and cover as a bundled decision by a farmer. Using discrete choice analysis and a cross section of farms from Israel, we test whether these decisions are sensitive to climate and find that they are. In the case of Israel, the farmers completely substitute capital for climate. Simulating increase in temperature suggests that warming would lead Israeli farmers to shift mainly to orchards under cover and irrigation. But it is likely that bundling adaptations will...

Research highlights: □ We study the choice of crop, irrigation and cover as a bundled decision of farmers. □ Using discrete choice analysis we test the sensitivity of the decisions in response to climate. □ In the case of Israel farmers completely substitute capital for climate. □ Future warming would lead to a shift to orchards under cover and irrigation. □ Bundling adaptations will provide flexibility and sustainability for future farmers.

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