Abstract Presentation

Number: H25C-05

WaterWorks: A Farm-Level Decision Support Tool in Irrigation Technology Investment

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Model objectives:
(i) assist long term investment decision making by determining the benefit and costs of modern irrigation technology under different cropping patterns and water trading scenarios
(ii) assist seasonal investment decision making for maximising net return by determining the optimal responses under given season allocations and water trading scenario

Model implementation:
- standalone program under Windows operating system
- crop parameters including land use, water use, price and cost can be set by users
- irrigation technology parameters for different crops can be set by users
- crop and irrigation technology parameters can also be set separately
- sensitivity analysis can be completed as many variables as needed
- model run results can be displayed on screen and printed on paper as well

1. Screen shoots of WaterWorks on crop and irrigation technology parameter setting

2. Screen shoots of WaterWorks on long time investment simulation

3. Screen shoots of WaterWorks on seasonal investment optimisation

(i) optimisation parameters (ii) screen output of optimisation result (iii) printer output of optimisation result (iv) charts of sensitivity analysis

WaterWorks for Irrigation Technology Investment

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