

ABSTRACT

- Title:** Effect of land leveling on irrigation efficiency and soil productivity of some alluvial soils .
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- Purpose:** to evaluate the effect of two different land leveling practices ; traditional and dead level on soil productivity and moisture relationships . Performance of economical evaluation and social assessment of farmers adoption to land leveling processes .
- Methods:** Field experiment was conducted during the two successive seasons of 2004 and 2005, on wheat, rice and corn crops in Kafr El-Sheikh and El-Beheira Governorates .
- Findings:** It has been noticed that (0.0%) ground surface slope treatment achieved the highest production, the least amount of water delivered to crops, the highest values of water application, water distribution and water utilization efficiencies . The economical evaluation showed that dead practice may increase the farmer income by about 714, 653 and 224 L.E./ fed. for wheat, corn and rice, respectively at Kafr El-Shiekh site, while at El-Behiera site the corresponding increases were 728, 287, and 304 L.E./ fed . The social assessment showed that laser land leveling (dead leveling) should be shown as suitable method for saving irrigation water and obtaining and to increase benefit for unit water and land .

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