Vegetables Production in Drip Irrigation and Conservation Agriculture for the Disadvantaged Women in Siem Reap, Cambodia

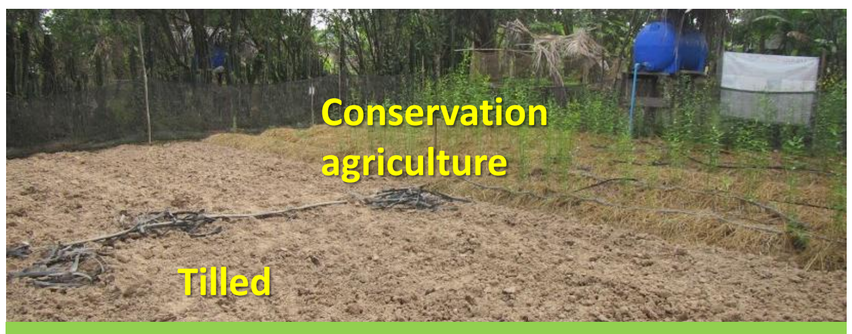
Don Immanuel Edralin, Saren Ry, and Manuel R. Reyes

North Carolina Agricultural and Technical State University

Hypothesis: Conservation agriculture and drip irrigation will decrease labor, increase yield and income, and improve soil health

Conservation Agriculture Principles

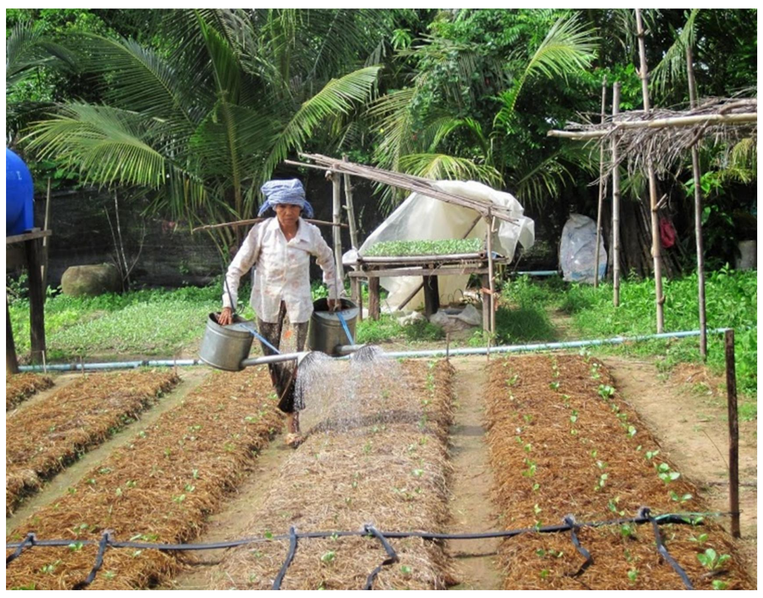
Site: Five women farmers in Siem Reap with area of 100 m^2 divided into 4 plots



Results:

- *What observations can you infer from photo above?*
- *Yield* - lowest TD and highest CA not significant at 5%
- *Net income* – highest CA, depreciated cost of tank and drip with drip life shorter in tilled systems
- *Labor* – least labor in CAD with drip as key; in CA labor is saved by not tilling but labor is added by addition of mulch and cover crop

Impact: Reduced labor and income of $350 in 100 m^2 , per capita income is $944



Conventional Watering

Drip Irrigation

Tilled

Conservation Agriculture

Treatments: (Randomized Complete Block Design with five replications)

T – Tilled

TD – Tilled with drip irrigation

CA - Conservation agriculture

CAD- Conservation agriculture with drip irrigation

Yield	T	CA	TD	CAD
Chinese Cabbage (kg)	391	397	362	382

Income ($) for area of 100 m^2	T	CA	TD	CAD
Gross income (G)	165	164	152	164
Expenses (E)	41	39	59	49
Net Income (G-E)	123	125	92	115

Labor	T	CA	TD	CAD
Time in hours	75	70	54	49

This poster is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the Horticulture Innovation Lab 'Women of Siem Reap Project' and do not necessarily reflect the views of USAID or the United States Government.

USAID FROM THE AMERICAN PEOPLE · HORTICULTURE INNOVATION LAB · UC DAVIS UNIVERSITY OF CALIFORNIA · SANREM INNOVATION LAB Feed the Future Innovation Lab for Collaborative Research on Sustainable Agriculture and Natural Resource Management · ADDA Agricultural Development Denmark Asia