Cassava planting method trials in NW Cambodia - yield and economic analyses

ACIAR Project ASEM/2013/003
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NW Cambodia used to look like this….

Unfortunately it now looks like this….

Does planting method have an effect on yield and profitability?

- **Farmers in the NW conventionally plough twice and pull up large hills to plant cassava**
  - **Stems are planted vertically in the soil**

- Eastern Cambodia plant on the flat ground
  - Stems are often planted horizontally
  - Mechanical planting is horizontal

Is there a difference?

Hill Vertical

Hill Horizontal

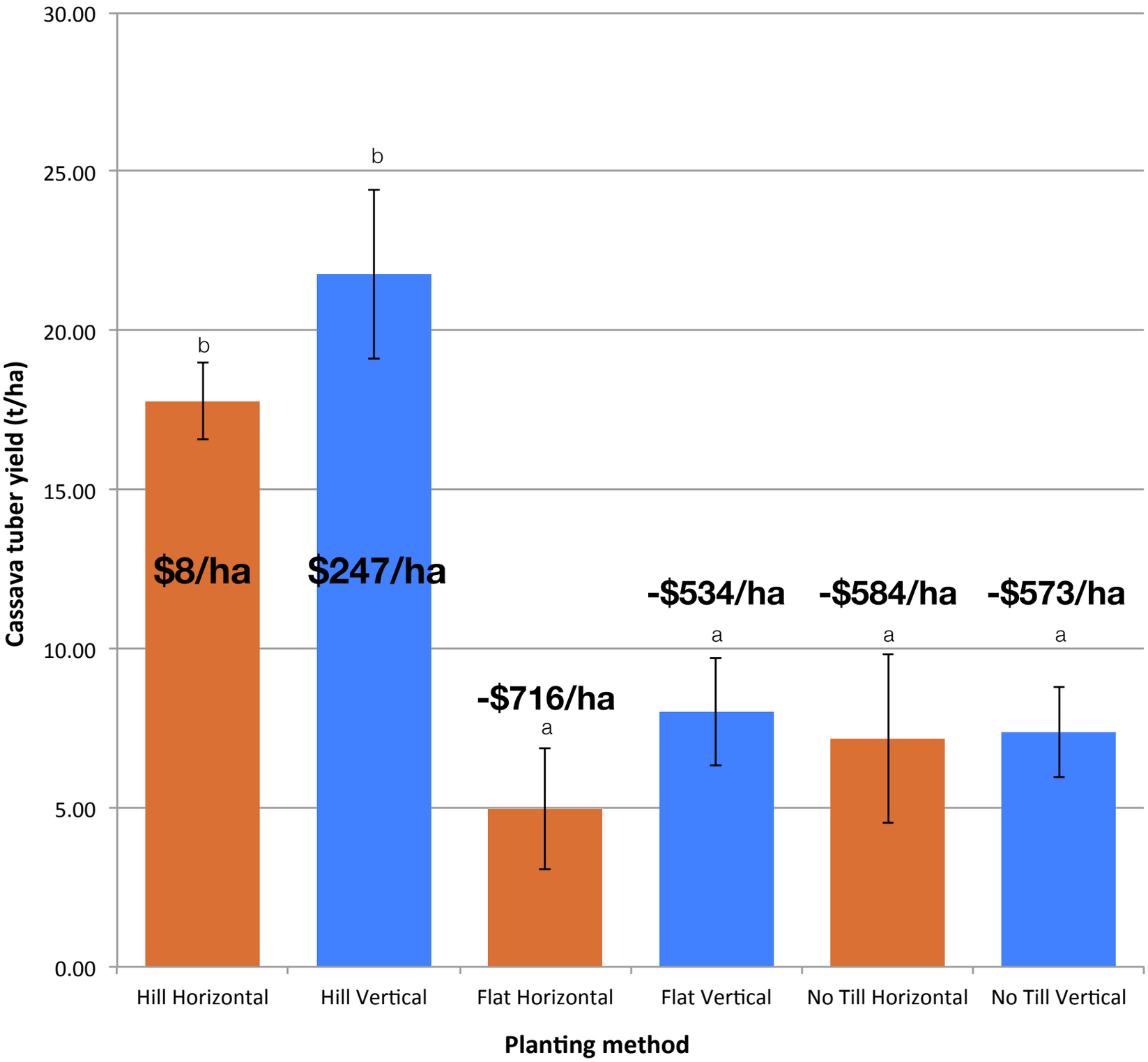
No Till Horizontal

Min Till Vertical

Min Till Horizontal

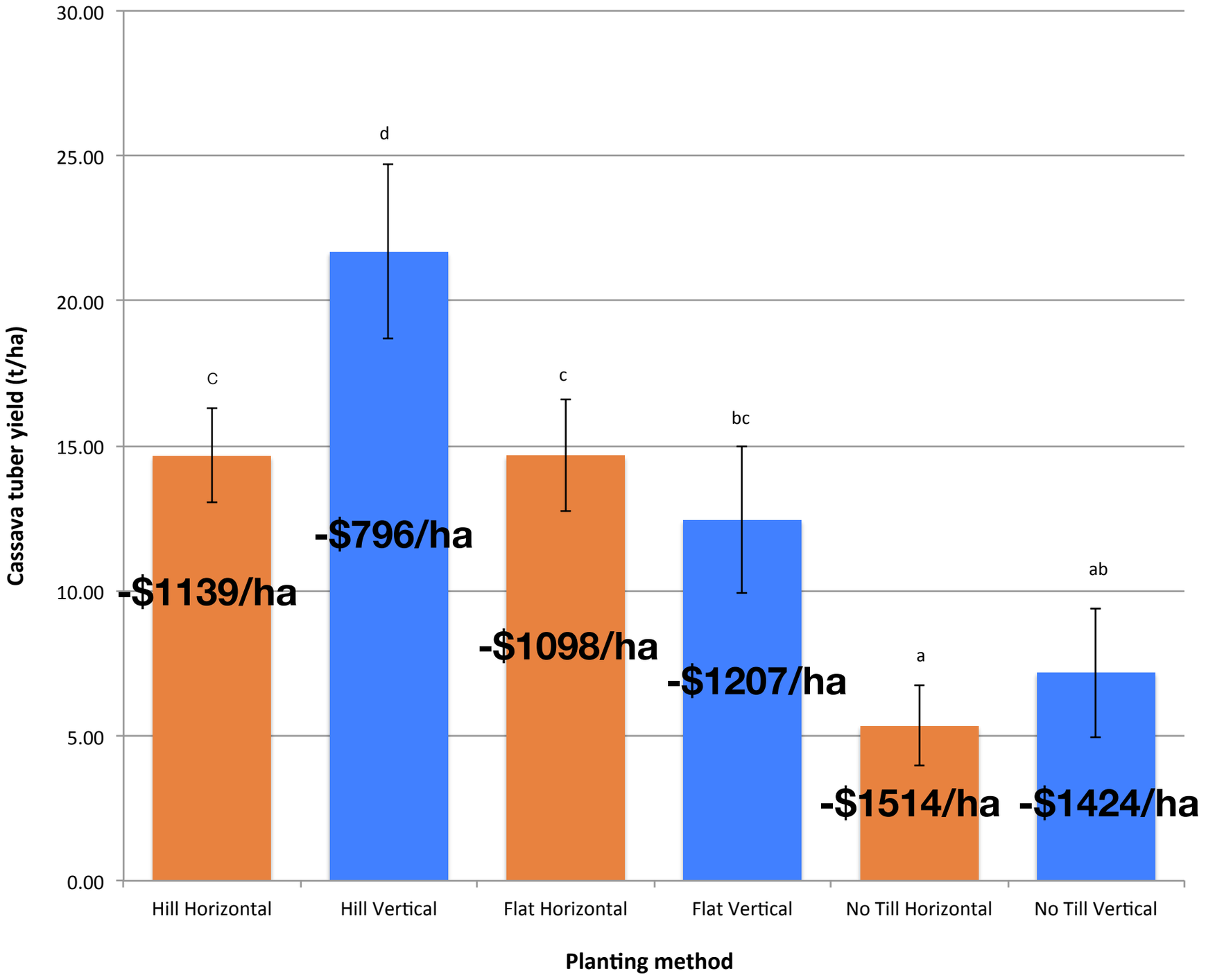
No Till Vertical

Planting Method Trials - Samlout 2017-18

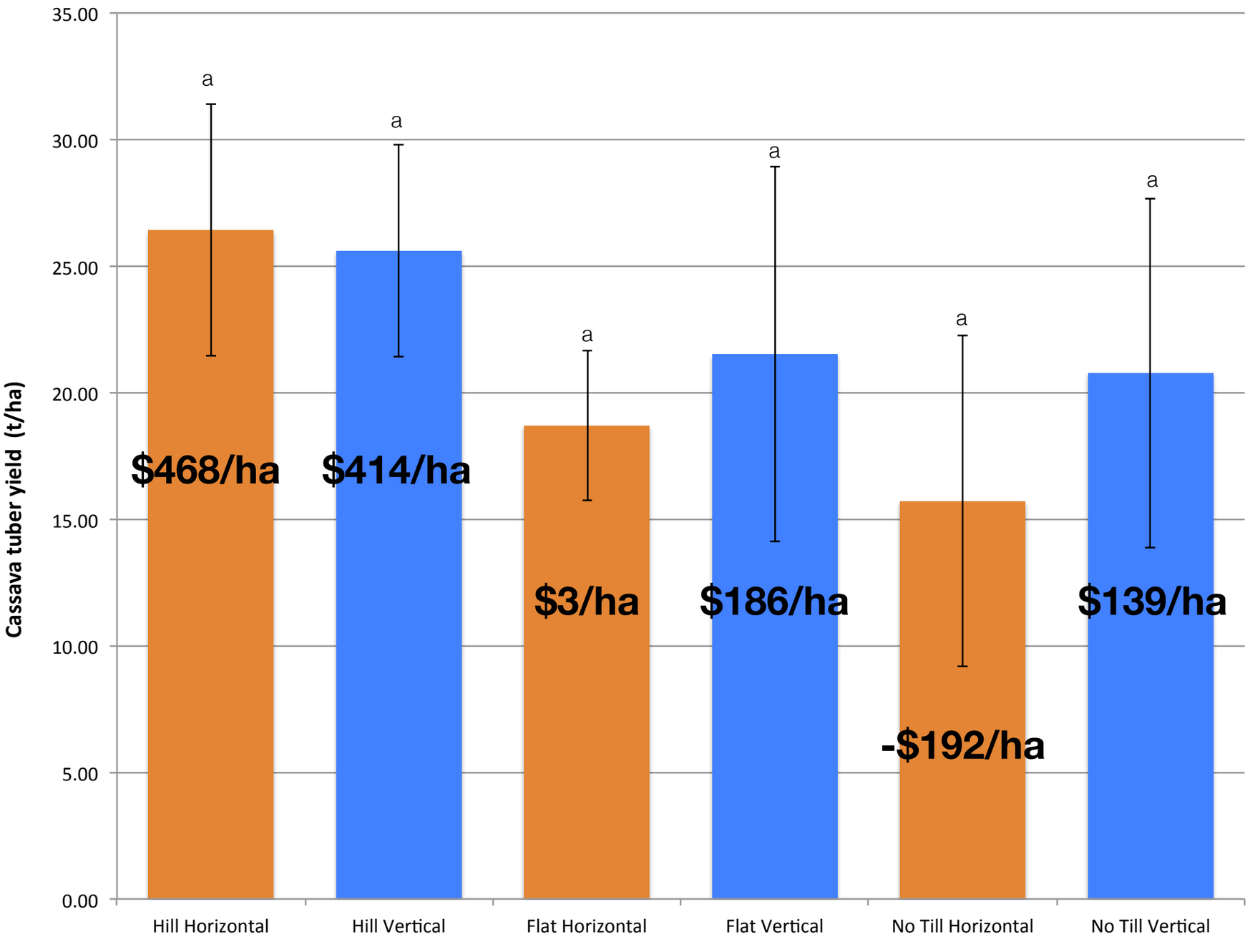


Conventional hilled treatments were the only methods to yield positive gross margin returns

Planting Method Trials - Samlout 2018-19

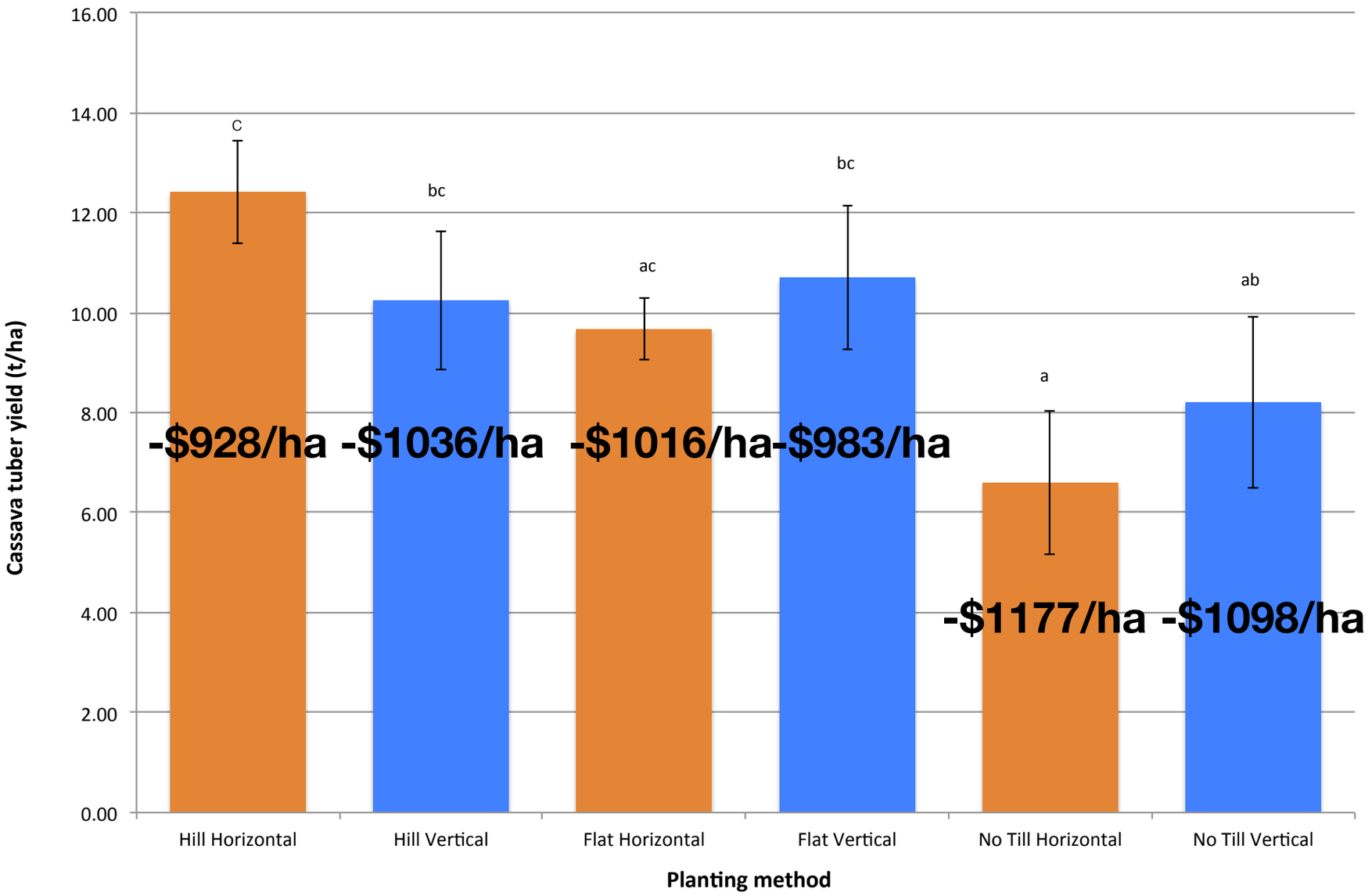


Planting Method Trials - Pailin 2017-18



No significant differences between any treatments for yield or gross margin returns

Planting Method Trials - Pailin 2018-19



Conclusions

- **On-farm research** is very difficult in Cambodia
    - Increased weed control costs due to years of poor farming practices
    - Stake quality - staggered plantings for research = reduced vigour
    - Herbicide drift from neighbouring fields
- **Samlout** - farmer practice yielded the highest each year
    - Breakeven yield sustainable?
- **Pailin** - amazing soil = more even playing field
    - Trend for increasing yield with hilled up practices
- **Environmental cost** - measuring infiltration, runoff and sediment loss