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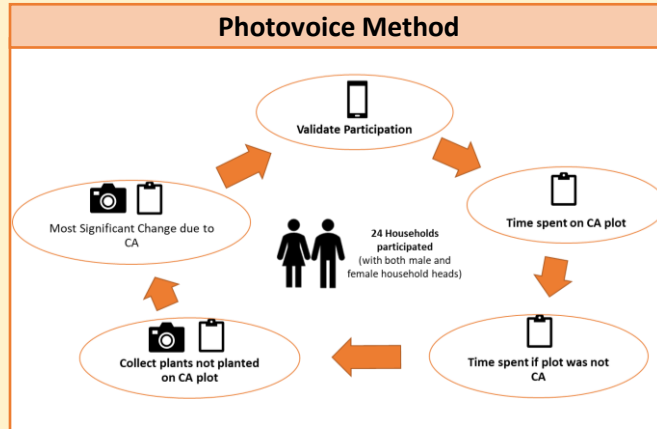
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Context

The agronomic impacts of CASI are well documented, yet farmers' **perceptions of changing weed management practices and implications on household roles and responsibilities** and **agency exchange** remains underexplored

Purpose

- Apply a gendered lens to understand if CA weed management practices create additional burden for Females
- Understand how additional time and money obtained through Implementing a CA system is utilised



Study Locations

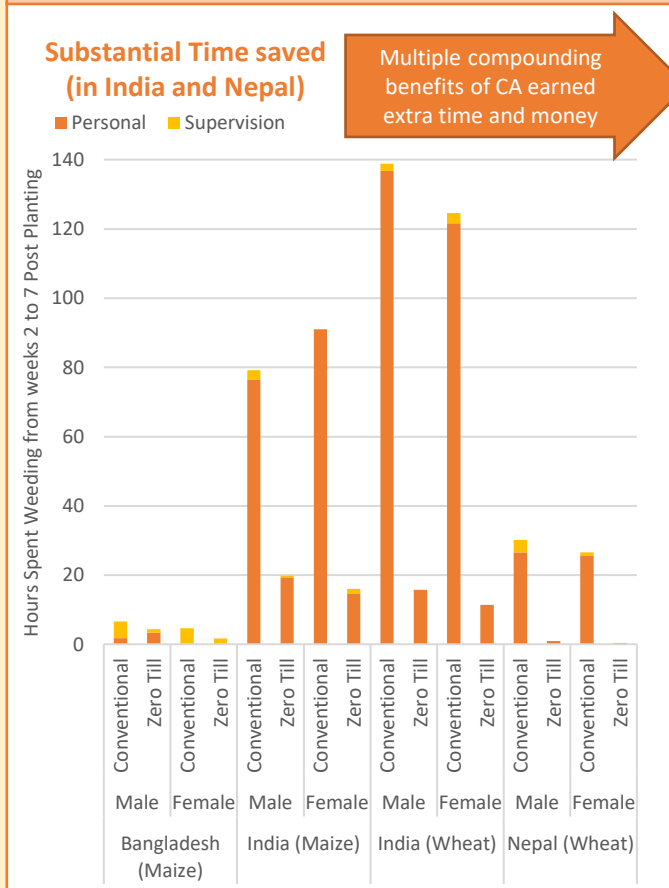
For Maize:
Pirgunj, Birgunj (Bangladesh)
Dinhata (West Bengal, India)

For Wheat:
Ghughumari (West Bengal, India)
Bhokraha (Sunsari, Nepal)

Findings: CA does not reinforce or deepen existing inequalities and have multiple secondary benefits!

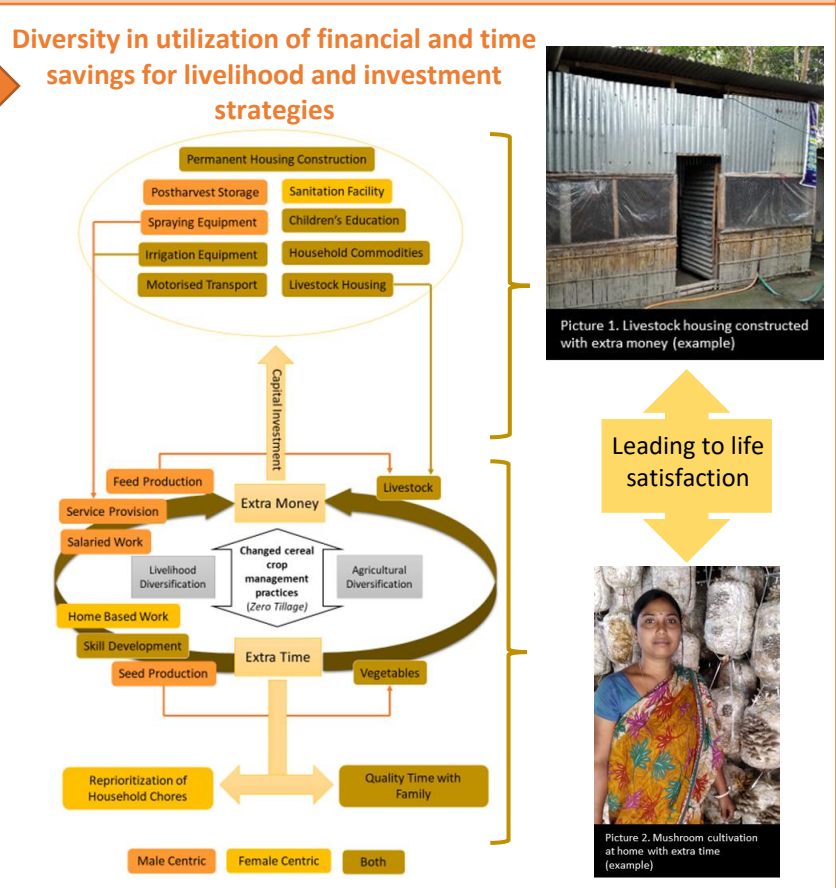
Substantial Time saved (in India and Nepal)

Multiple compounding benefits of CA earned extra time and money



Region/Crop	Gender	Practice	Personal (Hours)	Supervision (Hours)
Bangladesh (Maize)	Male	Conventional	~5	~5
	Female	Zero Till	~5	~5
India (Maize)	Male	Conventional	~78	~2
	Female	Zero Till	~20	~2
	Male	Conventional	~90	~2
	Female	Zero Till	~15	~2
India (Wheat)	Male	Conventional	~138	~2
	Female	Zero Till	~125	~2
Nepal (Wheat)	Male	Conventional	~10	~2
	Female	Zero Till	~28	~2
	Male	Conventional	~30	~2
	Female	Zero Till	~25	~2

Diversity in utilization of financial and time savings for livelihood and investment strategies



Permanent Housing Construction, Postharvest Storage, Sanitation Facility, Spraying Equipment, Children's Education, Irrigation Equipment, Household Commodities, Motorised Transport, Livestock Housing

Feed Production, Service Provision, Salaried Work, Livelihood Diversification, Home Based Work, Skill Development, Seed Production, Reprioritization of Household Chores

Extra Money, Livestock, Agricultural Diversification, Extra Time, Vegetables, Quality Time with Family

Male Centric, Female Centric, Both

Leading to life satisfaction

Picture 1. Livestock housing constructed with extra money (example)

Picture 2. Mushroom cultivation at home with extra time (example)

Conclusions

- Household investments link to **livelihood satisfaction** highlighting **overall wealth creation**
- Income **opportunities for men** extend **beyond the household domain**
- Women** tend to engage in **home-based work** that allows for simultaneous management of **household chores**
- Future **extension** efforts focus on **weed management** and **herbicide use**
- Benefits of ZT**, and more broadly cereal system intensification may be **broader** than originally envisaged and highlight the **importance** of exploring **direct** and **indirect** benefits with users

CIMMYT International Maize and Wheat Improvement Center

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Australian Government Australian Centre for International Agricultural Research



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