

# Promoting agroecological practices among Cambodian smallholder farmers - which incentives work?



**GlobalFood**

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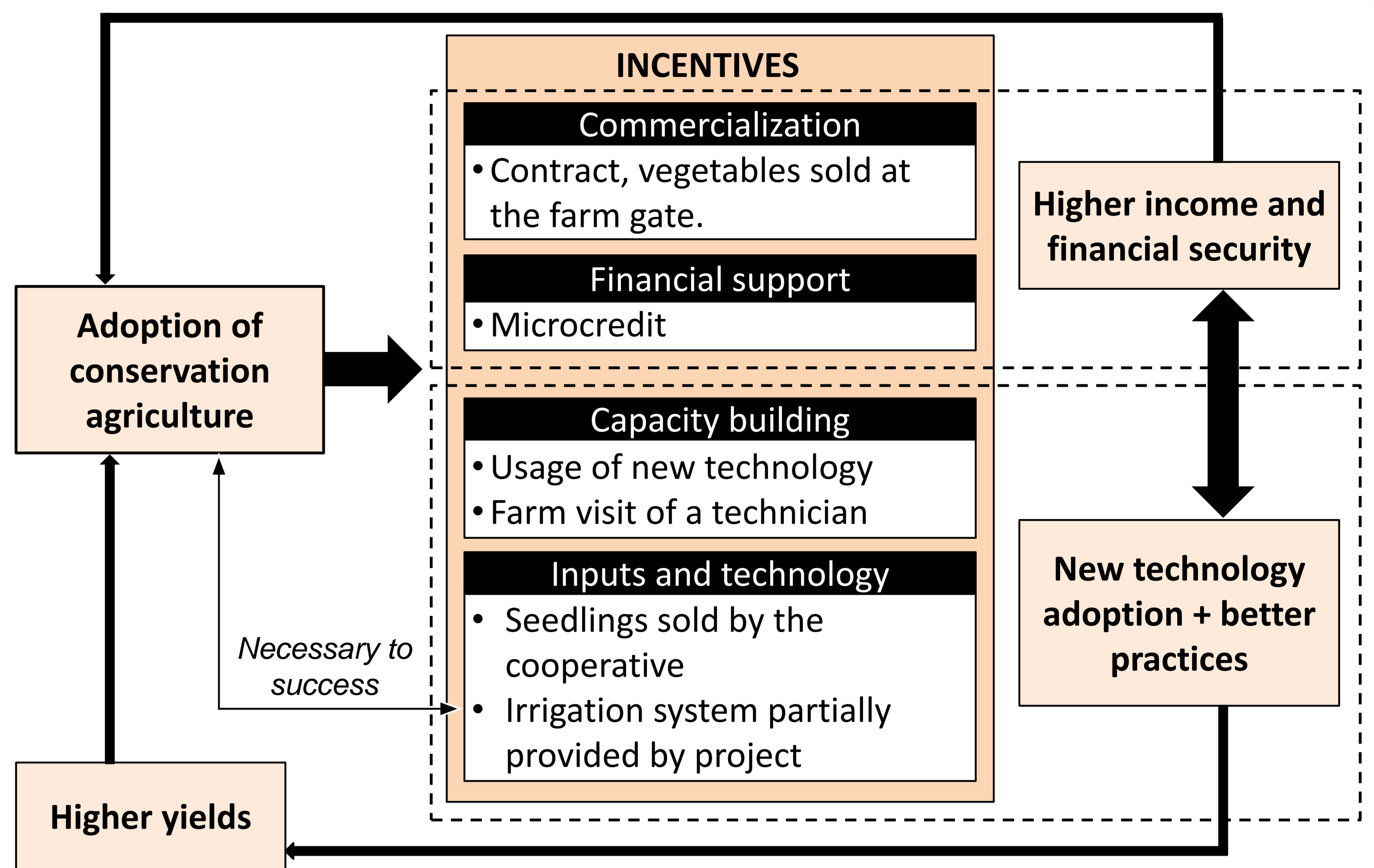
## Introduction

- Conservation agriculture relies on no-tillage, permanent cover of the soil such as mulch and crop rotation
- Conservation agriculture together with drip irrigation leads to higher yields in horticulture
- In Siem-Reap, Cambodia, different incentives are provided to encourage vegetables farmers to switch to conservation agriculture

## Research objective

- Identify the preferences of the farmers regarding those incentives.

## Conceptual Framework



## Choice Card and incentives

A	1	B
	Training	
	Seedlings	
	Drip irrigation	
	Time	
	Commercialization	
	Microcredit	
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## Data and Analysis

- 148 vegetables farmers interviewed from January to March 2017
- 84% are female, 16% are male
- 50% have a plot smaller than 200 sqm
- Discrete-Choice-Experiment carried out based on a paper-pen survey
- Each farmer had 18 choices between 2 "fictional" projects (Figure 1)
- Each project provided different incentives to switch to conservation agriculture
- Conditional logit model used to determine the relative importance of the different incentives
- Variation in the working time - quantitative attribute- enables further analysis



Figure 1: farmers filling in the survey

## Results

Attributes (ranked by importance)	Coefficient	Standard error
Commercialization contract	0.796***	(0.0430)
Microcredit	0.517***	(0.0489)
Drip irrigation	0.311***	(0.0470)
Training	0.296***	(0.0321)
Working time (increase)	-0.199***	(0.0464)
Seedlings	0.0754	(0.0450)

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

## Conclusions

- Financial security is the main driver of farmers' behaviour
- Farmers are not technology-adverse
- Potential differences between stated preferences and revealed preferences

## Recommendations

- Adoption of agroecological practices can be incentivized by reducing the financial risk

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