

## INTRODUCTION

- 230 rivers crisscross & 80% of Bangladesh is flood plain [Kamal et al. 2018].
- Sporadic flash floods in wetland areas (*Haor*) create a submerged situation that lasts 7 to 8 months, limiting agricultural use [Hussain and Salam 2007; Hossain 2014].
- Floating agriculture is a promising climate-smart practice in locations where regular land usage is difficult due to flooding, but it has a low adoption rate [Chowdhury & Moore, 2017].

### Objectives of the study

- Our research aims to identify the factors that motivate and barriers that inhibit the adoption of floating agriculture.



Fig. 1. Showing different stages of floating bed cultivation (Image credit: Fahmida Akter)

## METHODOLOGY

<b>Study area</b>	: Karimganj Upazila (sub-district), Kishoreganj
<b>Population &amp; Sampling</b>	: 1200 farmers; 120 farmers (10% of the population); random sampling
<b>Data collection methods &amp; instrument</b>	: February 2020; Focus Group Discussion (FGD); Key Informant Interview (KII); Survey; Structured & semi-structured interview schedule
<b>Theory</b>	: Rogers five stages innovation-decision model [Rogers, 2003]
<b>Focus question</b>	: Whether or not farmers practiced floating bed cultivation over the last twelve months
<b>Data analysis</b>	: Binary logistic regression and rank order; SPSS-25

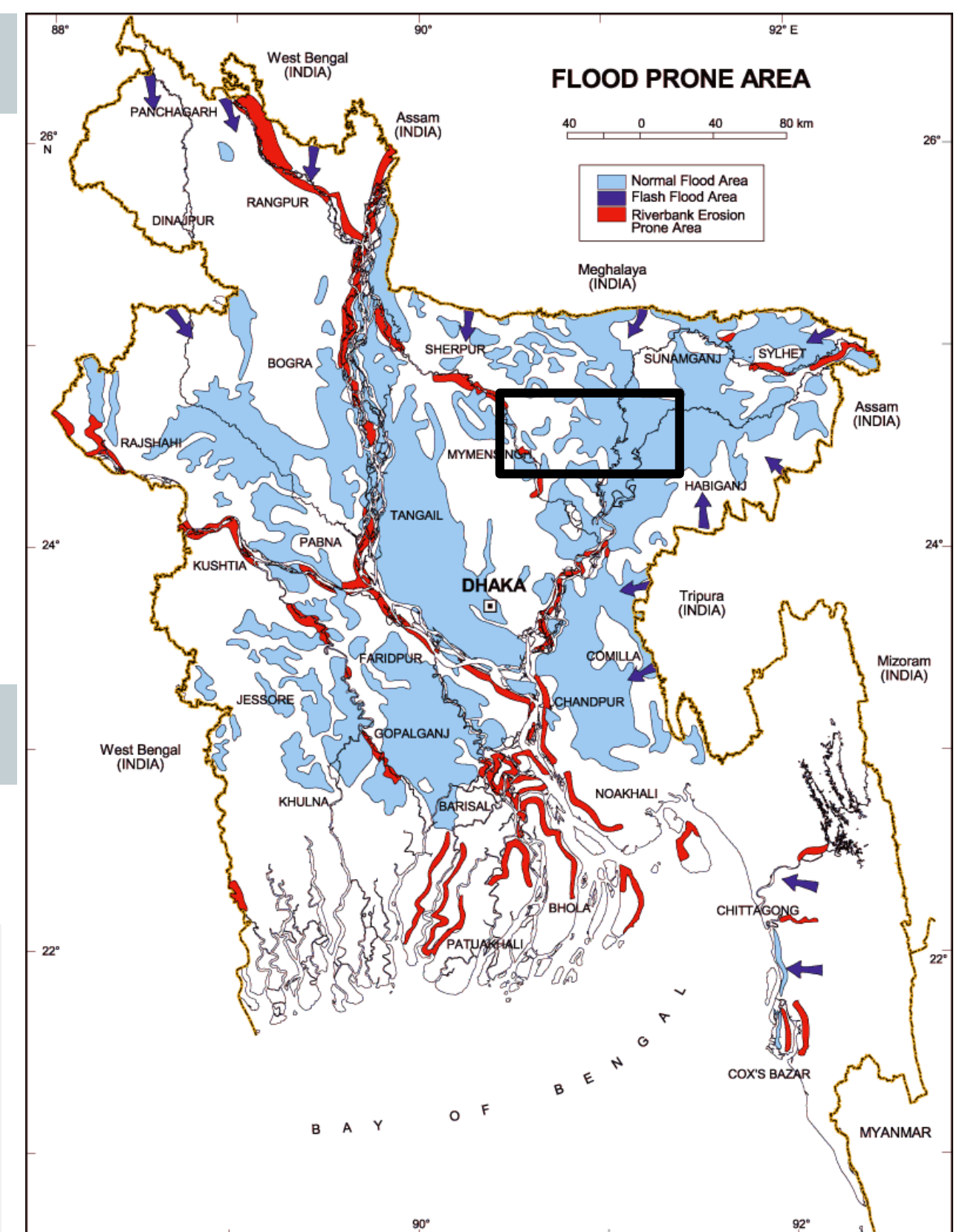


Fig. 2. Flood Prone areas of Bangladesh and study location

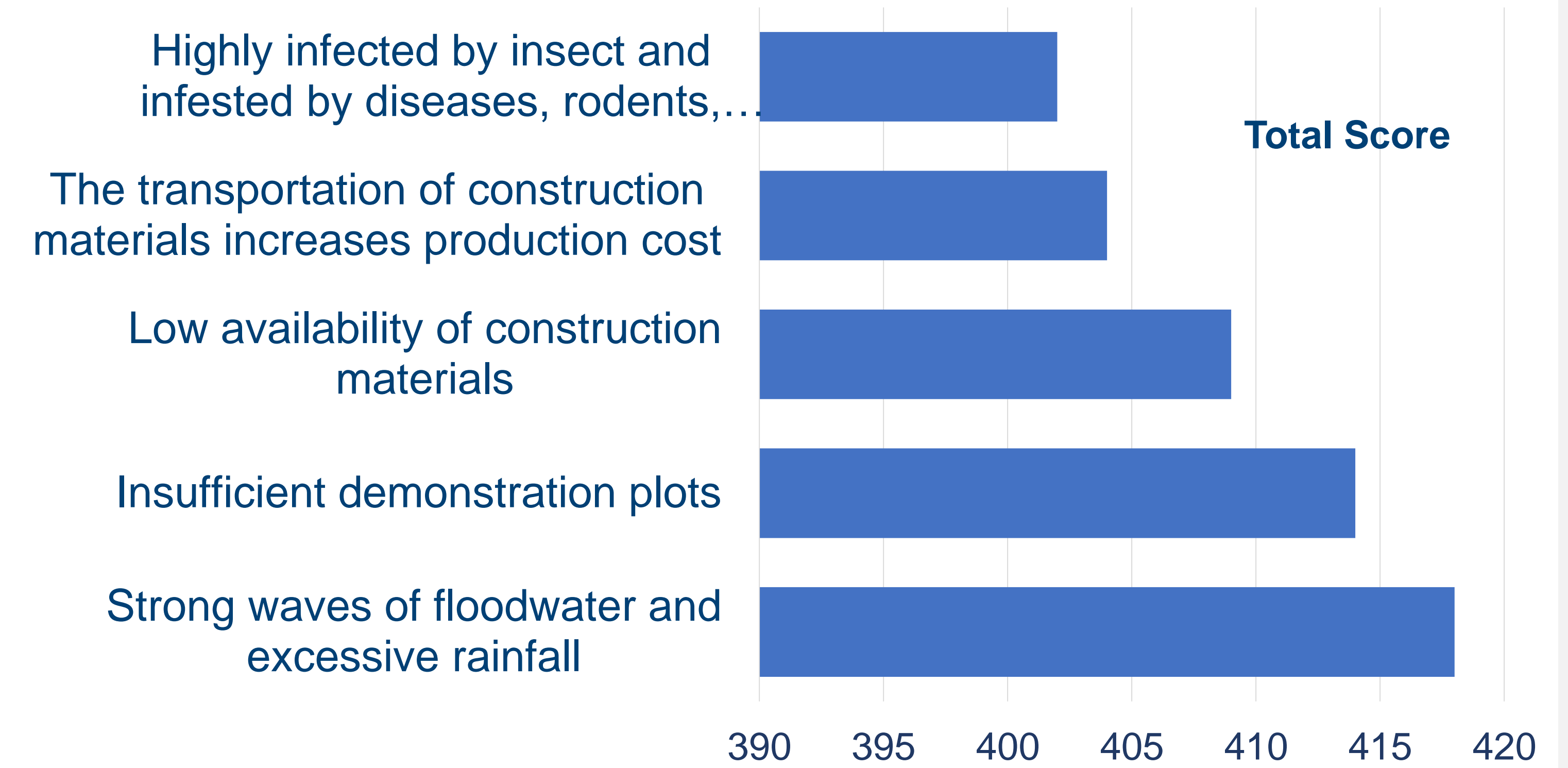
## FINDINGS

- The adoption rate is unsatisfactory.
- Education, trialability and observability are the demotivating factors
- Training related to floating agriculture, credit received, communication behavior, and complexity are the motivating factors
- Climatic and non-climatic factors inhibit the adoption of floating farming.

### Factors influencing the motivation to adopt floating agriculture

Variables	B	S.E.	Wald	df	Sig.	Exp (B)
Level of education	-0.15*	0.07	4.44	1	0.03	0.85
Agricultural training	1.53**	0.61	6.17	1	0.01	4.65
Credit received	2.26***	0.62	13.20	1	0.000	9.63
Communication behavior	0.39***	0.10	15.11	1	0.000	1.48
Trialability and Observability	-0.32*	0.15	4.74	1	0.02	0.72
Complexity	-0.12**	0.03	9.93	1	0.002	0.88
<b>Constant</b>	3.11	4.423	.496	1	0.48	22.49
<b>Cox-Snell R<sup>2</sup></b>					<b>0.482</b>	
<b>Nagelkerke R<sup>2</sup></b>					<b>0.572</b>	

### Barriers faced by Haor farmers in adopting floating agriculture



## KEY MESSAGES

- Characteristics of an innovation important for its adoption
- Farmers with a higher level of education should be prioritized for future development programs
- Communication, training facilities along with financial support need to be arranged
- Support services need to work on mitigating the current challenges

### Adoption decision

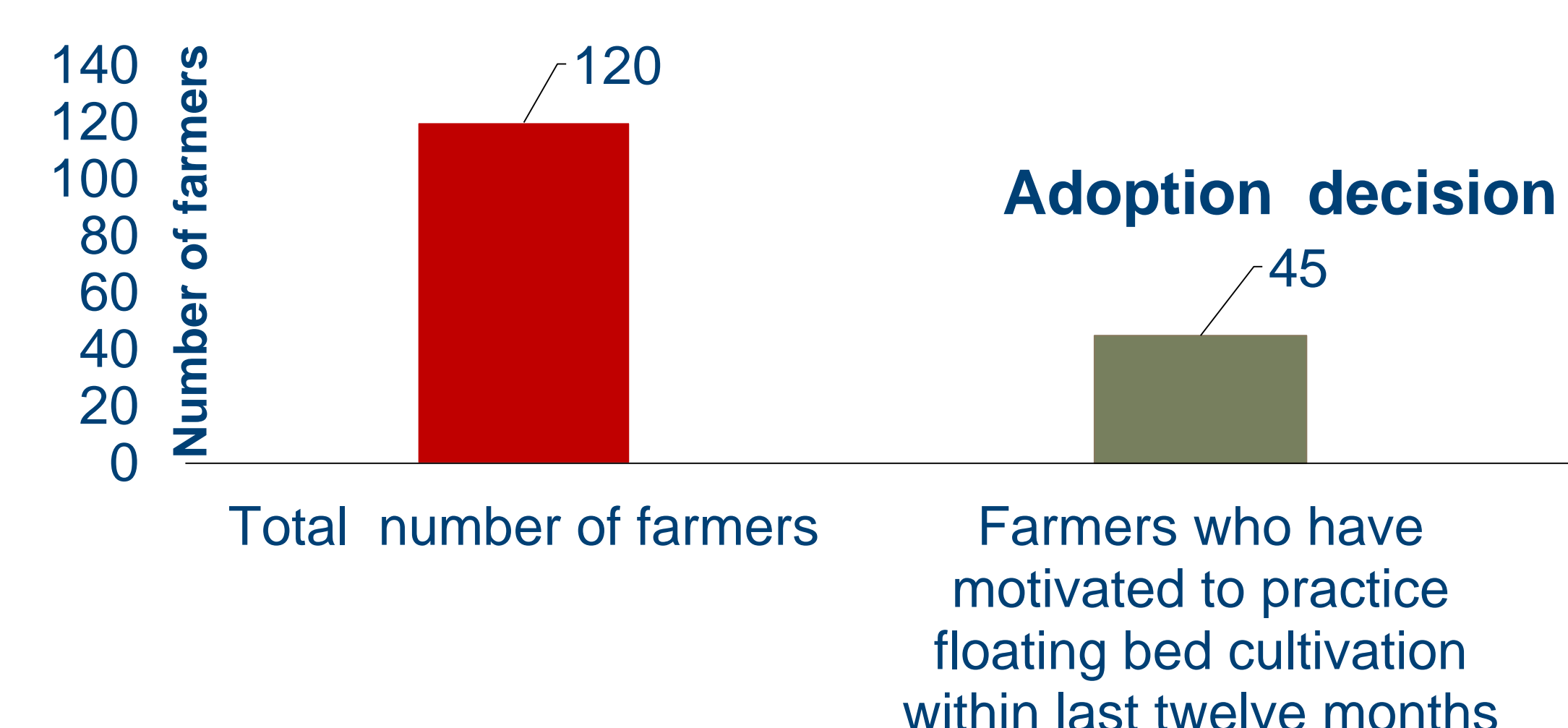


Fig. 3. Showing adoption decision of floating agriculture

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