# Branching out – building evidence for the Farmer Managed Natural Regeneration (FMNR) approach for land restoration



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# Farmer Managed Natural Regeneration (FMNR)

FMNR is both a community mobilisation approach for landscape restoration, and a <u>specific technique</u> to regenerate trees.





# As a technique...

It involves pruning and protecting tree and shrub regrowth to allow them to grow into trees

This brings the benefits of increased trees in the landscape – timber, firewood, forest fruits, medicinal products, income...







## Key elements of the FMNR project approach

Awareness creation & training



Favourable policy environment & forest rights



Advocacy – enhanced market access

Training – NRM & forest products

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Organisational structures

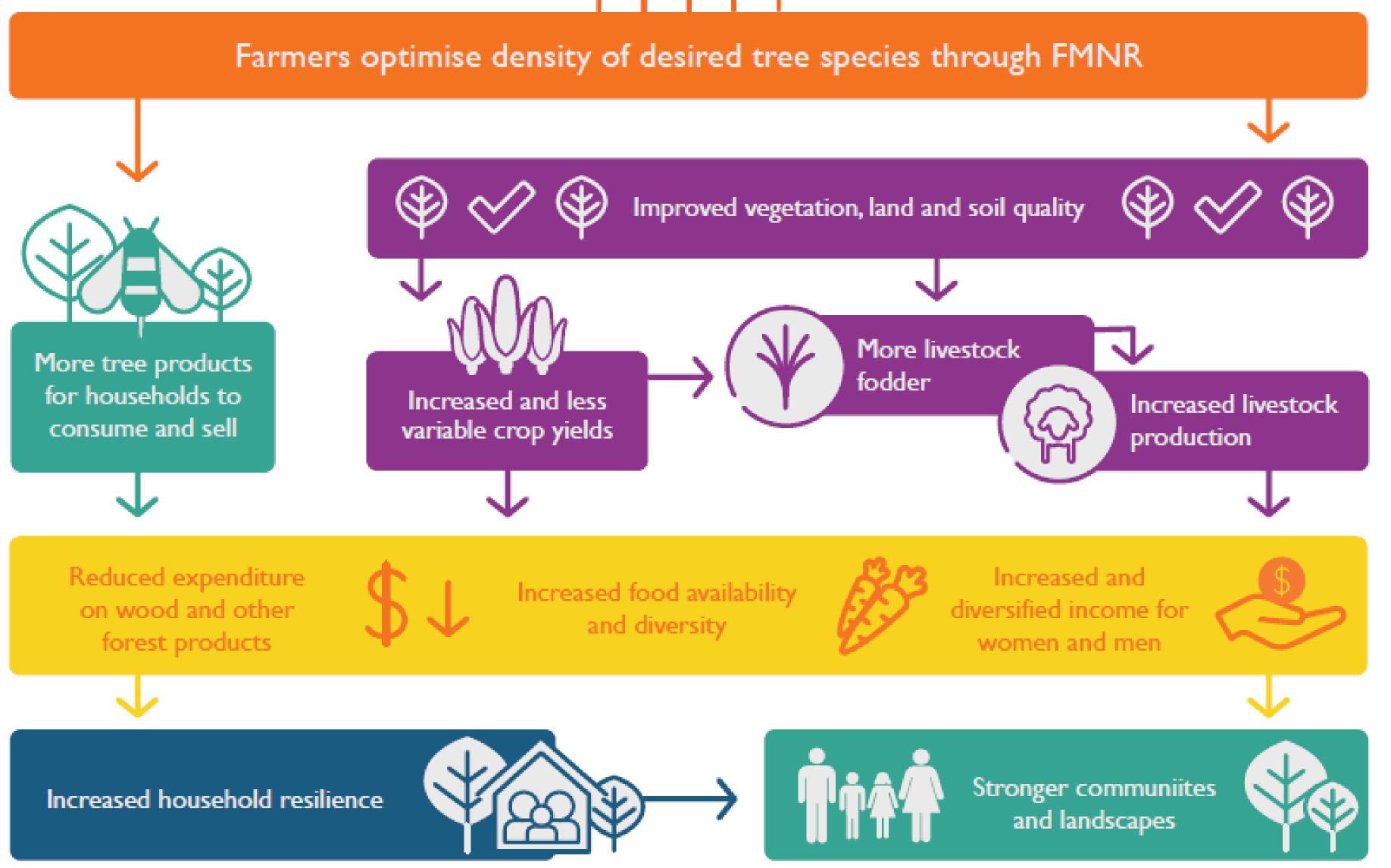


### Follow-up & encouragement



### Simplified FMNR program theory



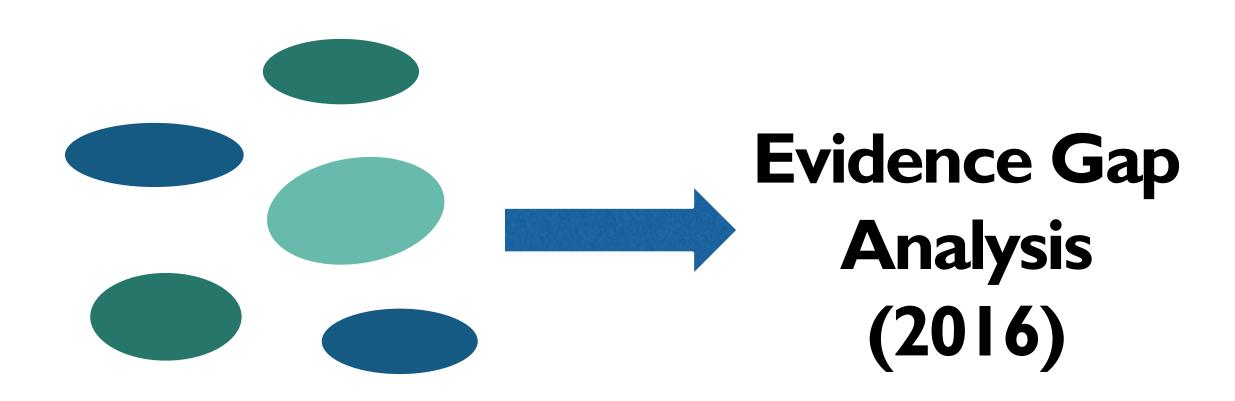


## SDGs





## Our evolving approach to building evidence



## Project **Evaluations**



## **Resilience and livelihoods**

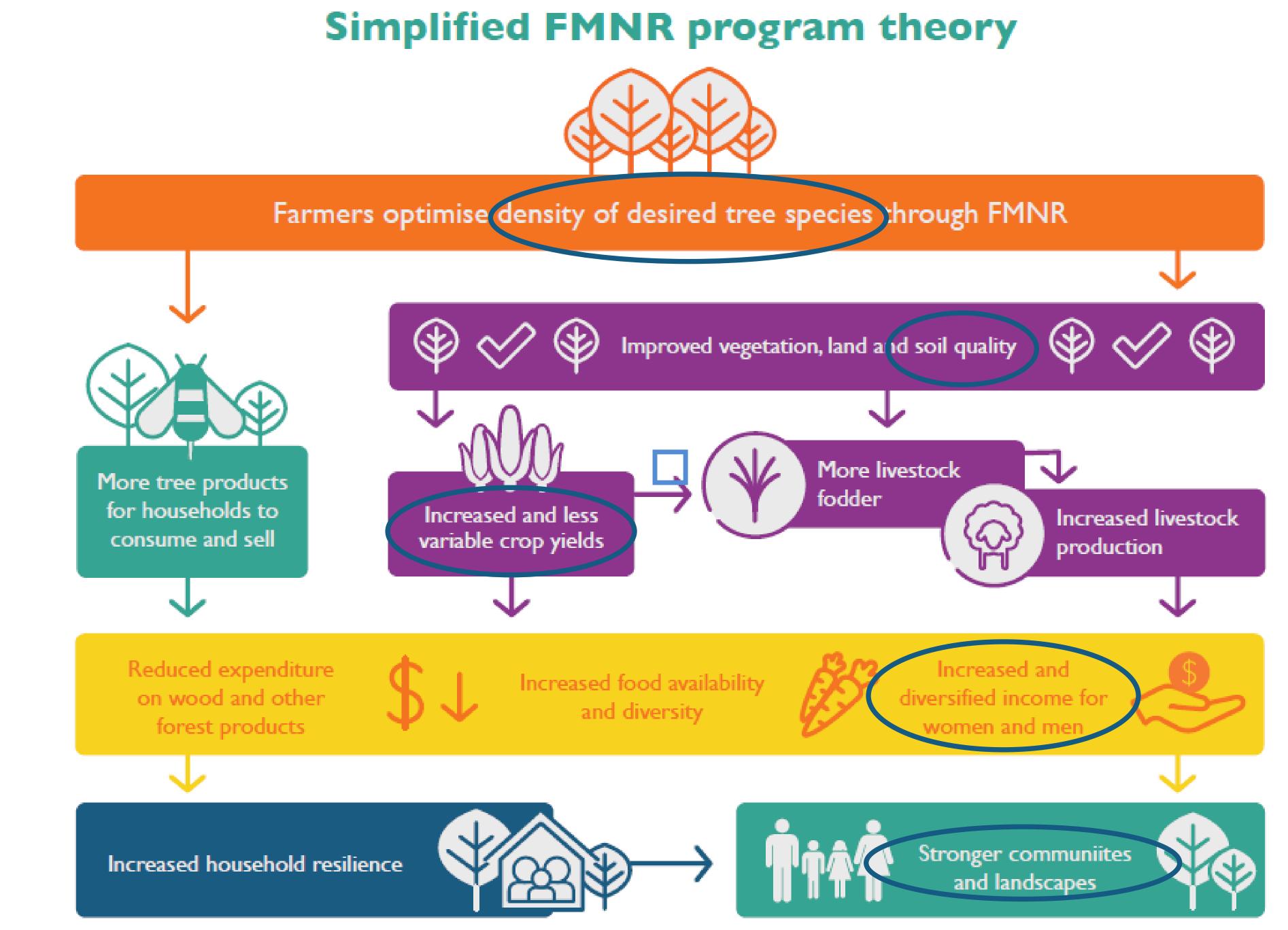
# Why did we do an Evidence Gap Analysis?

- programs
- Identify the evidence gaps
- Meaningful contribution to the knowledge space
- Plan evaluations in a more intentional manner
- Program improvement

Disciplined, reflective – and a living document



## Better understand what we know about the outcomes of our



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## Benefits of doing an evidence gap analysis

### Approach

- Identified gaps in our project model, especially around gender and consistency of indicators
- Update evidence

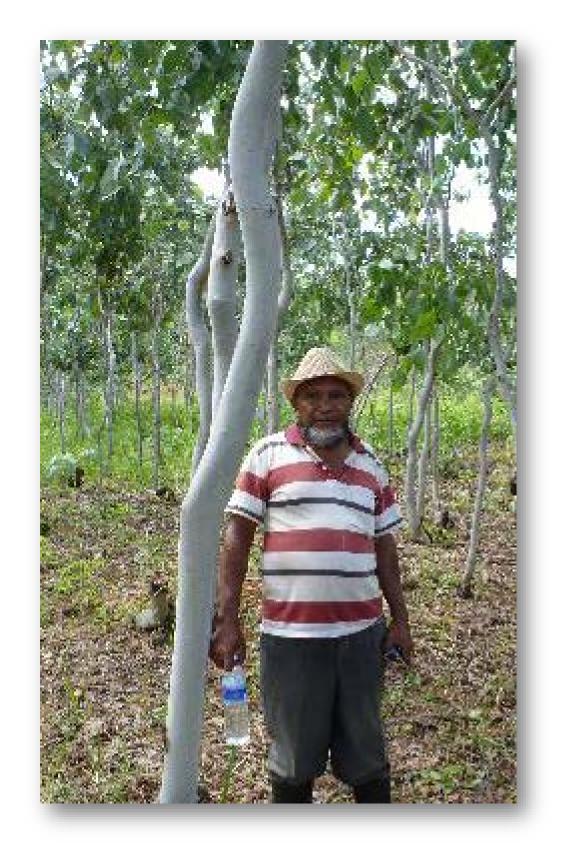
### **Programme Improvement**

- Were able to make recommendations following the review of implementation
- Developed specific gender-related recommendations following new insights

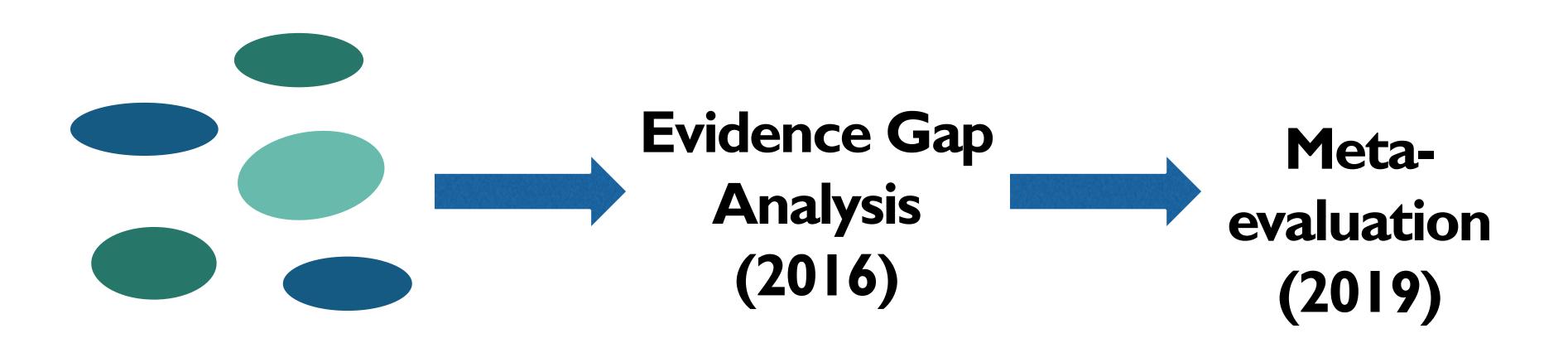
### **Evaluation planning & prioritisation**

- Identified regions/ contexts where evidence was scare informed new designs Provided excellent summary underpinned by detail regarding our program
- approaches





## Our evolving approach to building evidence



## Project **Evaluations**

## **Resilience and livelihoods**



## A meta-analysis was employed to examine these outcomes across projects

• A statistical technique used to systematically combine and reconcile



results for outcomes across multiple studies that may involve somewhat different study designs, sample sizes and present conflicting results.





## **Projects were selected based on the following criteria:** Incorporated an FMNR approach as part of its activities

- Minimum duration of 3 years
- Concluded within the five years from 2014-2018
- Endline evaluation reports and raw data were available
- Presented a sufficiently rigorous evidence base

## 8 projects, total sample size of 5095 households



## **Summary of findings**

FMNR have:

- high reach and uptake
- improved tree cover and tree density
- increased availability of wood and forest products
- improved land and soil quality
- increased income and decreased poverty
- improved food security
- improved child wellbeing
- improved gender equality and social cohesion



## Evidence suggests that recently completed World Vision-supported projects incorporating



### World Vision Households reporting an increase in the availability of firewood

#### Difference between participants and non-participants

Participants are 15 percentage points more likely than non-participants to report an increase in the availability of firewood.

#### Project

#### BRACCE

East Africa Kenya

East Africa Rwanda

East Africa Tanzania

East Africa Uganda

Humbo

Soddo

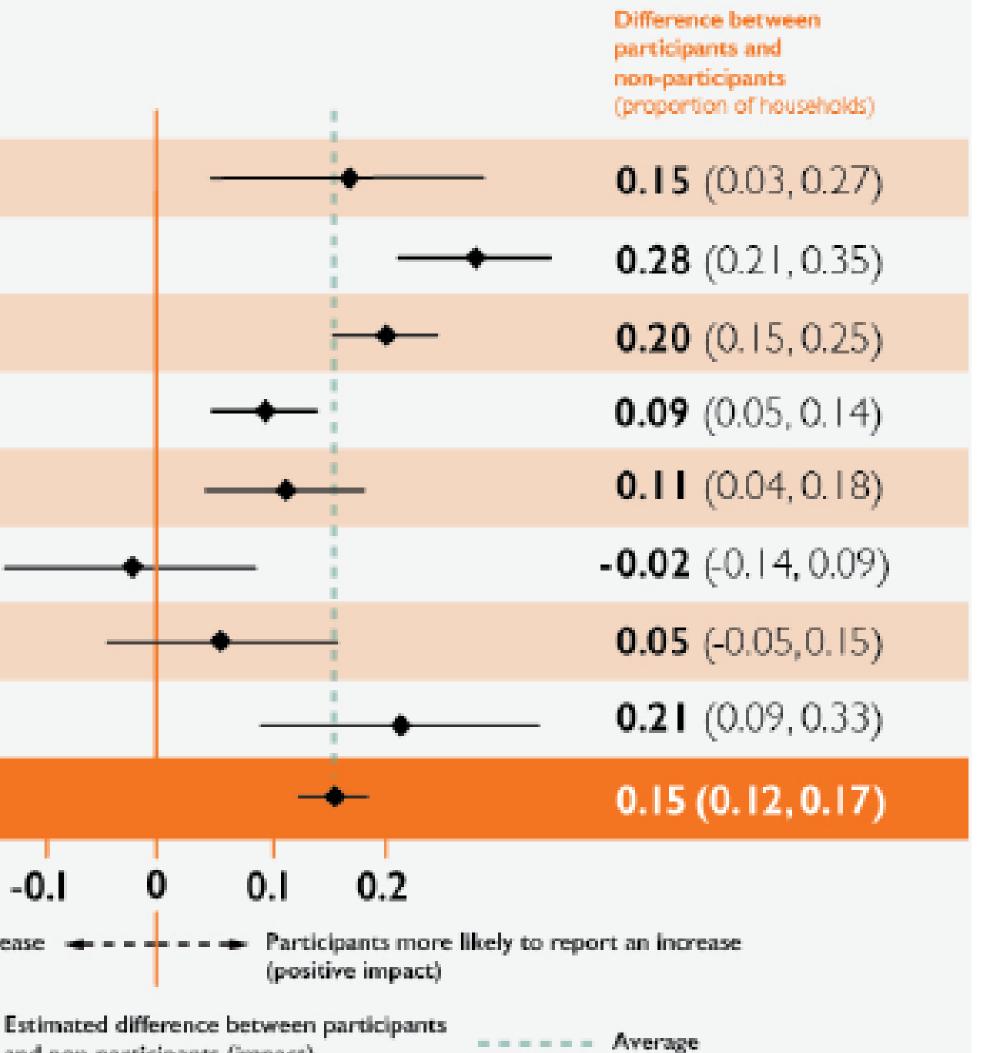
Talensi

Overall: (1-squared = 81.9%)

-0.2

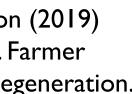
Non-participants more likely to report an increase -





Source: World Vision (2019) Evidence of Impact. Farmer Managed Natural Regeneration.





## **Average # months of food shortage**

#### Difference between participants and non-participants

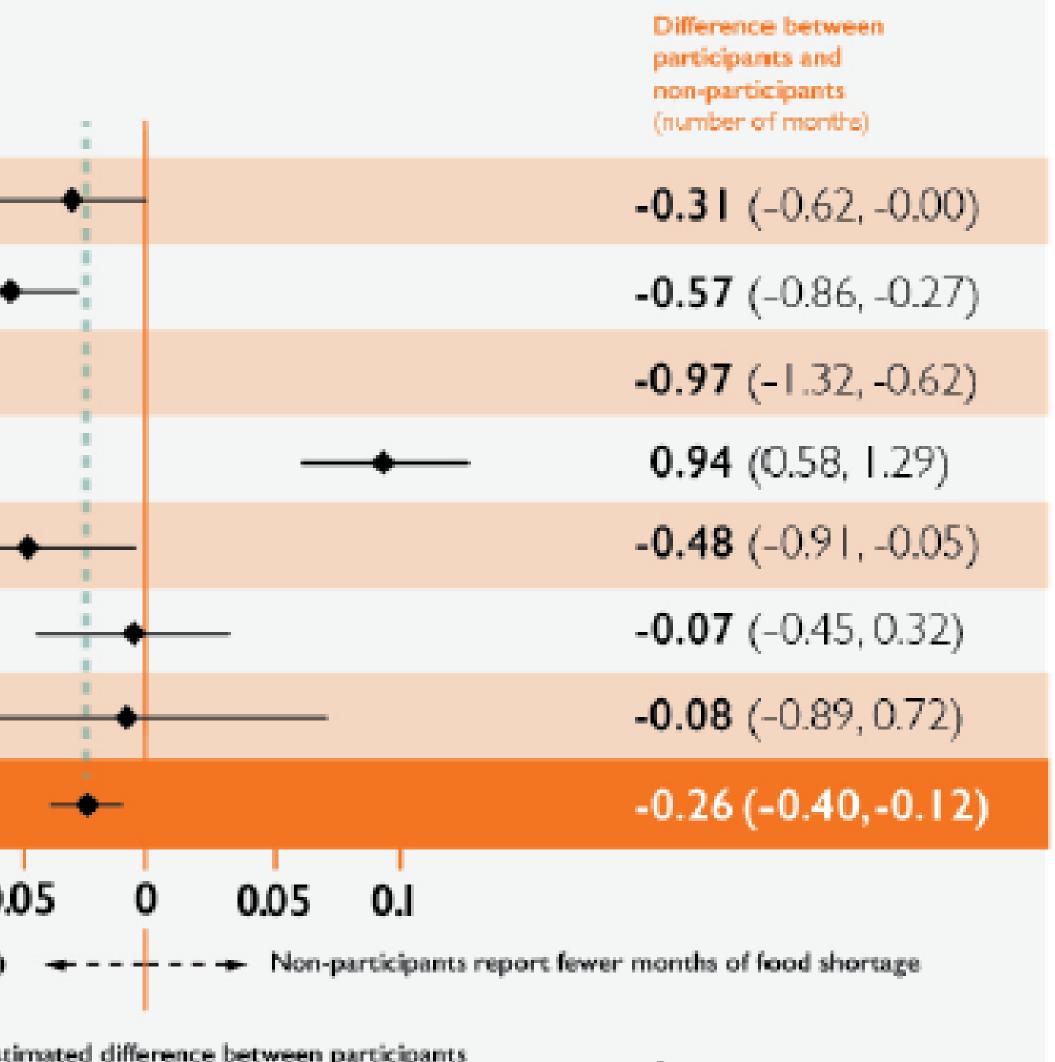
Participants report 0.26 fewer months of food shortage than non-participants.

### Project

	East Africa Kenya		-
	East Africa Rwanda	-	•
	East Africa Tanzania 🛛 🚽	+	
	East Africa Uganda		
	Humbo	_	
	Soddo		
	Talensi	-	
	Overall: (I-squared = 91.0%)		
		-0.1	0.
Participants report fewer months of food shortage (positive impact)			

95% confidence interval

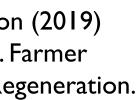
Estimated difference between participants Average and non-participants (impact)



Source: World Vision (2019) Evidence of Impact. Farmer Managed Natural Regeneration.

#### World Vision





## % of households that can provide well for their children

#### Difference between participants and non-participants

Participants are 8 percentage points more likely than non-participants to report being able to provide well for their children.

### Project

East Africa Kenya

East Africa Rwanda

East Africa Tanzania

East Africa Uganda

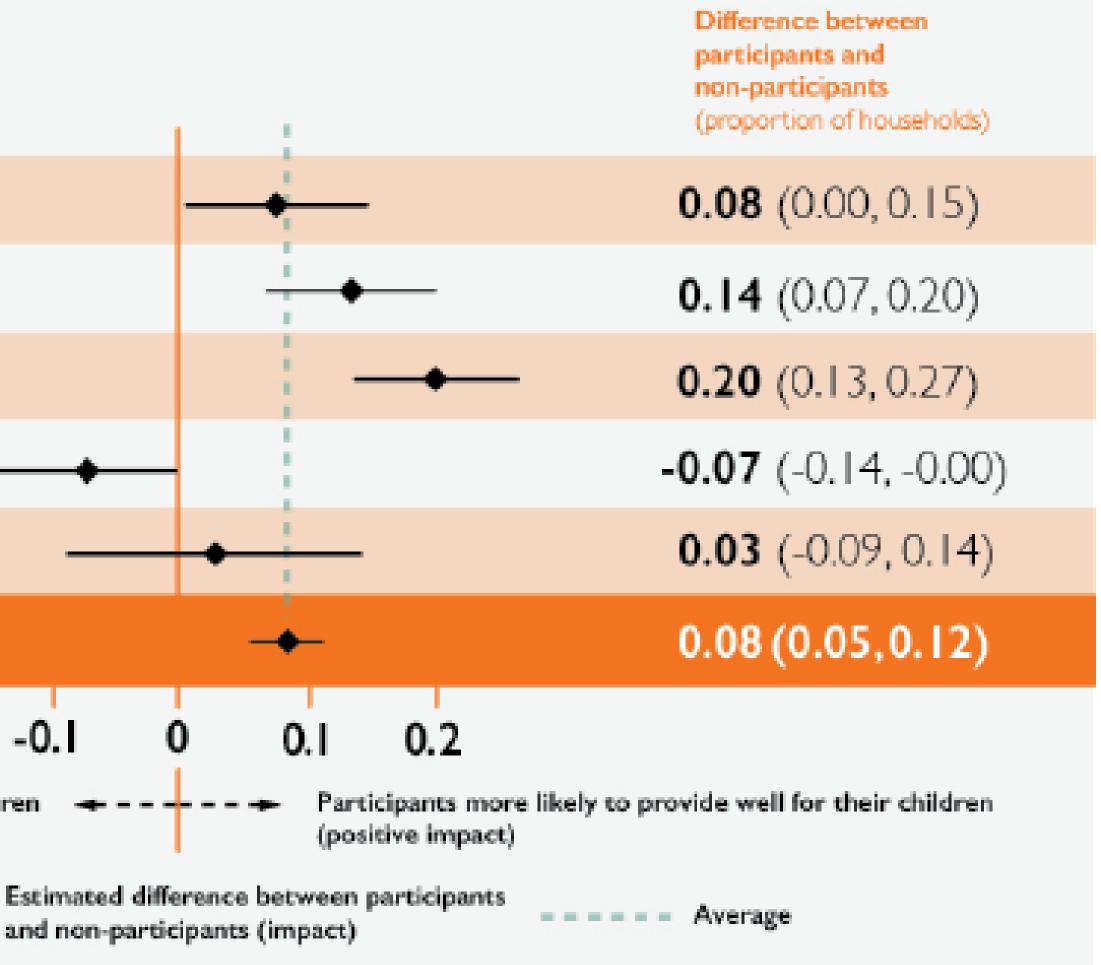
Talensi

Overall: (I-squared = 88.2%)

-0.1 -0.2

Non-participants more likely to provide well for their children

95% confidence interval



Source: World Vision (2019) Evidence of Impact. Farmer Managed Natural Regeneration.



## FMNR in Talensi, Ghana

- 96% of farmers practiced FMNR
- 81% reported an increase in trees in the community (BL 59%, p<0.000)
- 94% farmers using improved soil management practices
- Reduction in HHs reporting one or more hungry months (BL 87 % to EL 63%, p<0.000)
- 95% of HHs with multiple income sources, increasing resilience  $(57\% \rightarrow$ 95%, p<0.000)



"As for tintung lebge til (FMNR), I don't know where to start. It has helped us in many ways! Our goats go there to graze, our women get firewood, our children get fruits and we also harvest honey from the FMNR site."

 Participant, lead farmers focus group, Yameriga village.





## **FMNR** in Talensi, Ghana





# 2010

2015



## **Summary of findings**

FMNR have:

- high reach and uptake, but less so for female-headed households
- improved tree cover and tree density
- increased availability of wood and forest products
- improved land and soil quality
- increased income and decreased poverty
- improved food security, but not necessarily for poorer households
- improved child wellbeing, and more so for poorer households
- improved gender equality and social cohesion



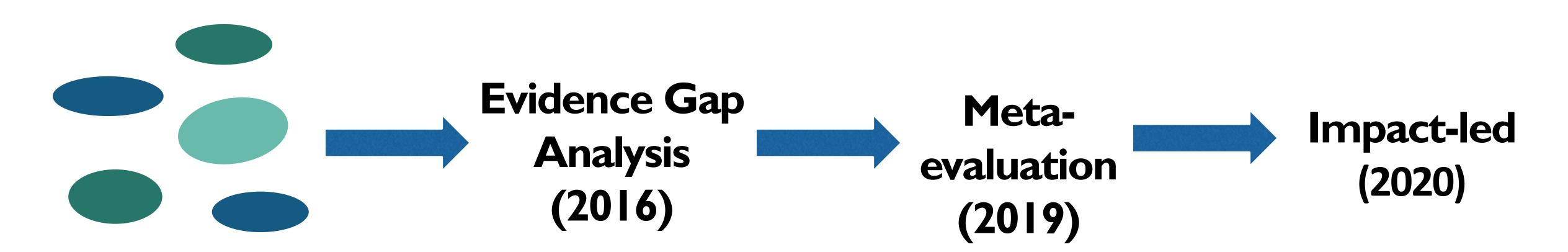
## Evidence suggests that recently completed World Vision-supported projects incorporating



# The next steps...



## Our evolving approach to building evidence



## Project **Evaluations**

## **Resilience and livelihoods**



# Twin-track approach to building a credible account of change

- Deep dive evidence building for key project approaches
- Improved decision making going forward
- Standardised indicators across breadth to allow for aggregation of data for reach and uptake
- Standing up the multidisciplinary 'Impact Hub'
- Systems development to capture impact across the WV footprint

# More deeply engage a broader audience









This programme is supported

# Thank you

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