



# **GSMA mAgri Webinar**

## **28<sup>th</sup> March 2019**

**How to prioritise agricultural value  
chains for digital interventions**



# Webinar Agenda

1. What is the GSMA mAgri Value Chain Assessment Tool?
2. How can you identify priority value chains for agricultural payment digitisation?
3. What tools can you use to improve DFS providers' understanding of agricultural procurement?
4. How in-depth value chain research can help you identify suitable mobile use cases and agribusiness partners?
5. Q&A



# The GSMA mAgri programme

Who is GSMA M4D?

GSMA Mobile for Development (M4D) works with the mobile industry to identify opportunities and deliver innovations with **socio-economic impact**.

What is mAgri's mission?

The mission of M4D's mobile agriculture programme (mAgri) is to advance the **productivity, profitability** and **financial inclusion** of **smallholder farmers** through **scalable** and **commercial mobile services**.

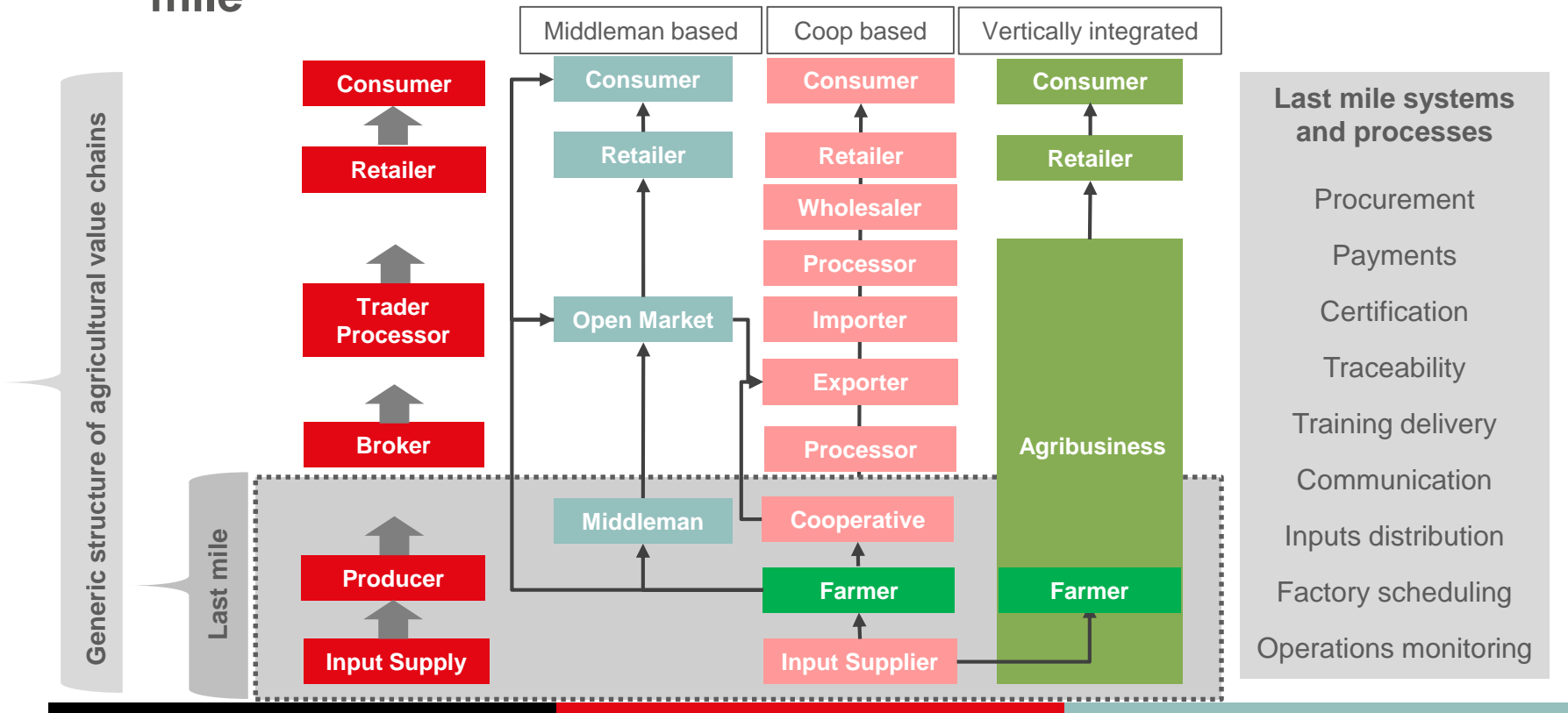
What have we achieved?

Since 2009, the mAgri programme has supported **12 projects** which have reached over **10 million** smallholder farmers across **Asia & Africa** with mobile information services.

Plans for 2019/2020

- **Convene** the industry to share experiences and learnings on mobile agriculture.
- **Identify** best practices for service design, business models, go-to-market.
- **Launch** an Innovation Fund in June 2019 to support B2B2C agribusiness digitisation services in Africa and Asia.

# Focusing on the opportunity to digitise the agricultural last mile





# Digital tools address pain points of farmers and businesses in the agricultural last mile

Business challenges

## Information

Farmers do not follow best practices, lack skills and information

## Payments

Cash payments are risky and costly  
No access to credit, savings and insurance

## Identity

Farmers do not possess formal and/or economic identities

## Traceability

Agribusinesses need full and real time visibility in the last mile

## Monitoring

Agribusinesses need to monitor operations and assets

## Analytics

Agribusinesses need business data to inform decision making in real time



Digital solutions

**Information services via mobile**

**Mobile money**

**Digital profiles**

**Track and trace systems**

**IoT applications for agriculture**

**Agribusiness analytics**



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# The GSMA mAgri VCAT provides a framework for analysing value chains

## WHAT

A **framework for analysing value chains** and supporting digital interventions in agriculture, particularly the digitisation of agricultural procurement payments. The focus of the tool is providing instructions, recommendations and examples to help analyse value chains for poverty reduction.

## WHO

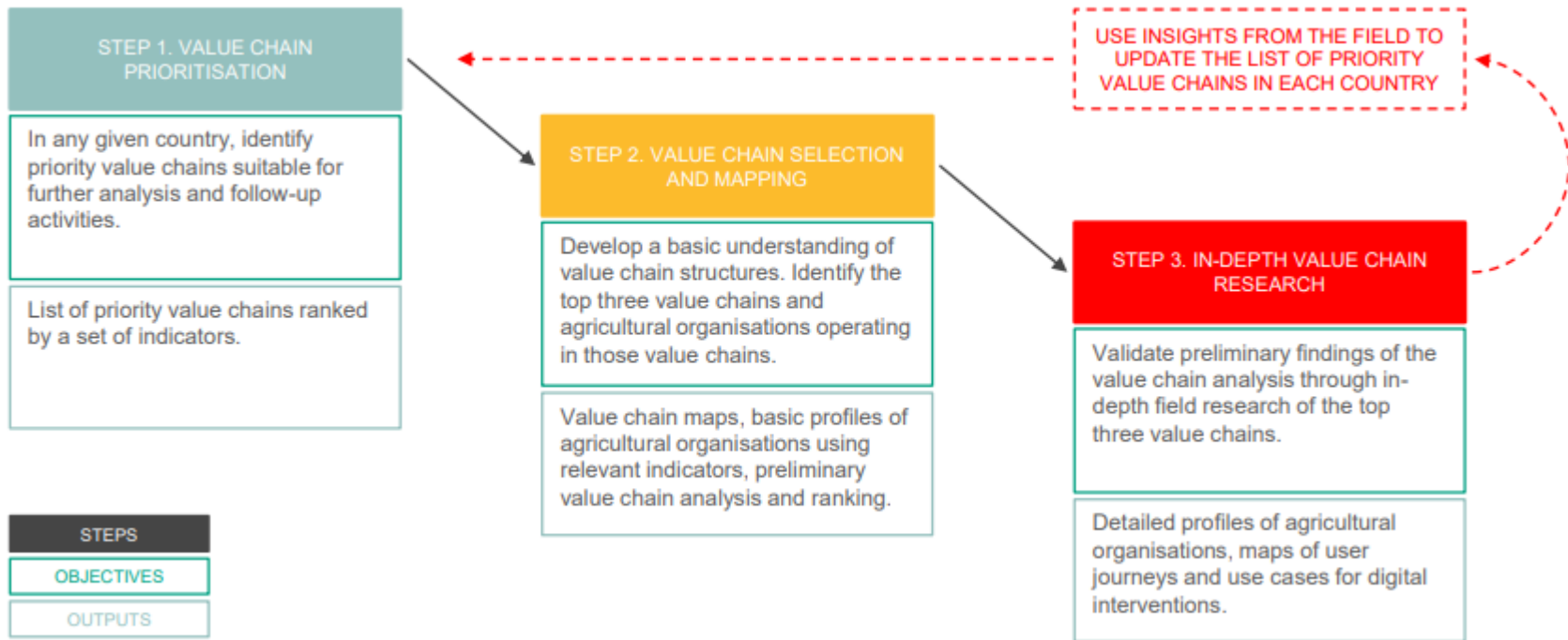
Primarily aimed at **providers of digital financial services** seeking to develop a better rural growth strategy, including mobile operators and other non-MNO mobile money providers. The tool would also be useful for AgTech companies and other digital agriculture implementers working to digitise the last mile.

## HOW

Employs a **step-by-step approach** used by the GSMA in engagement countries to identify suitable value chains and build a pipeline of agricultural organisations for digitising agricultural procurement payments. The approach can be adjusted as necessary to align with your research objectives.



# The VCAT is a 3-step guide to understanding agricultural value chains





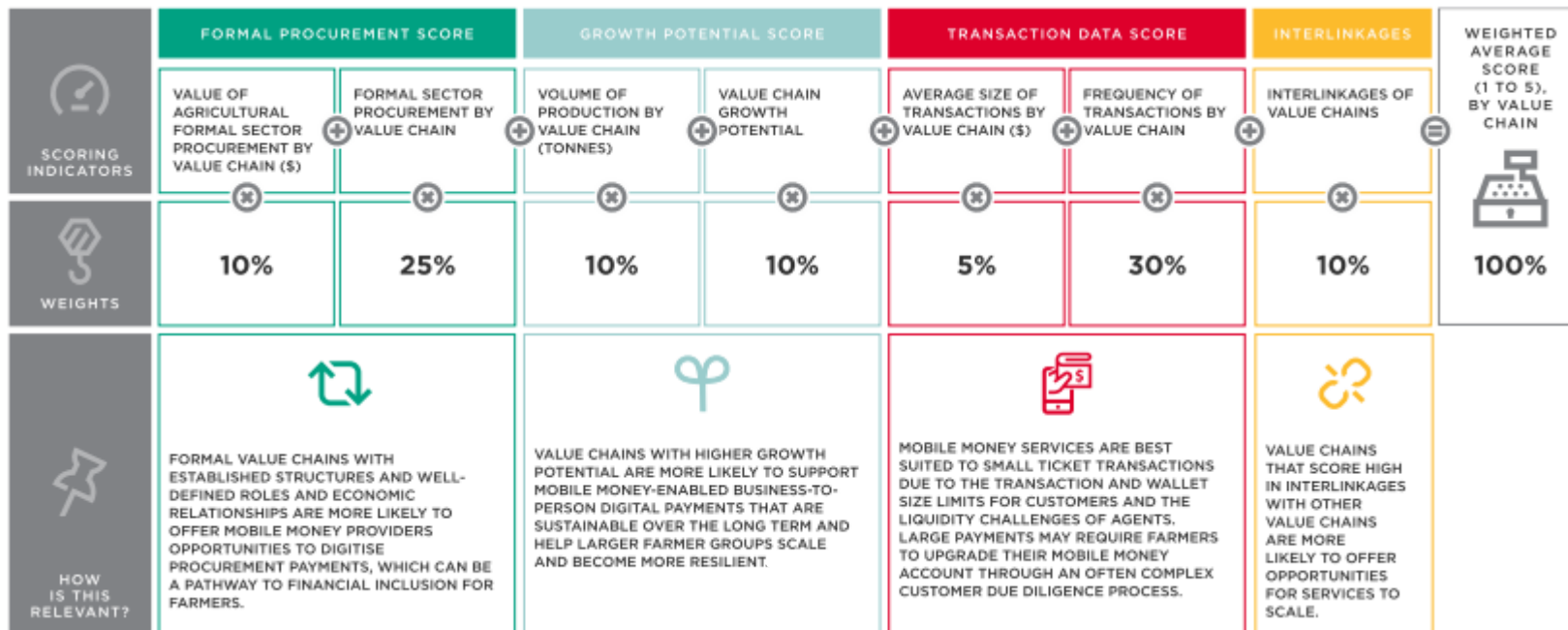


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# The GSMA has developed a model for identifying priority value chains for digital payments





# Output example: Oil crops and cocoa top list of priority value chains for payments digitisation in Ghana

SCORING INDICATORS	FORMAL PROCUREMENT SCORE		GROWTH POTENTIAL SCORE		TRANSACTION DATA SCORE		INTERLINKAGES	FINAL SCORE (WEIGHTED AVERAGE) <sup>9</sup>
	VALUE OF AGRICULTURAL FORMAL SECTOR PROCUREMENT BY VALUE CHAIN (\$)	FORMAL SECTOR PROCUREMENT BY VALUE CHAIN	VOLUME OF PRODUCTION BY VALUE CHAIN (TONNES)	VALUE CHAIN GROWTH POTENTIAL	AVERAGE SIZE OF TRANSACTIONS BY VALUE CHAIN (\$)	FREQUENCY OF TRANSACTIONS BY VALUE CHAIN	INTERLINKAGES OF VALUE CHAINS	
WEIGHTS	10%	25%	10%	10%	5%	30%	10%	100%
OIL CROPS	4	4	5	5	4	4	3	4.2
COCOA	5	5	4	4	2	3	4	3.9
TROPICAL FRUITS	4	4	4	4	4	4	3	3.8
NUTS	4	4	4	4	4	4	2	3.7
PALM OIL	2	3	3	3	4	5	4	3.7
RUBBER	3	4	2	2	4	4	4	3.6
EGGS	3	2	2	3	5	5	4	3.5
SPICES	4	5	3	3	2	3	3	3.5
MILK	2	2	2	2	5	5	5	3.5
ROOTS AND TUBERS	5	3	5	5	4	3	2	3.5



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## Value Chain Selection improves stakeholders' understanding of agricultural procurement

If you are a mobile money provider:

- ✓ **create basic profiles of agricultural organisations** that include insights from semi-structured interviews with stakeholders in these organisations;
- ✓ select agricultural organisations for profiling using **criteria such as direct procurement, large supplier base and high transaction frequency**;
- ✓ in these profiles, **include key procurement data and information on activities** in the last mile that help you understand the potential to digitise particular value chains;
- ✓ to evaluate this potential, run an **assessment of the foundational issues** (prerequisites) that allow the digitisation of agricultural payments.

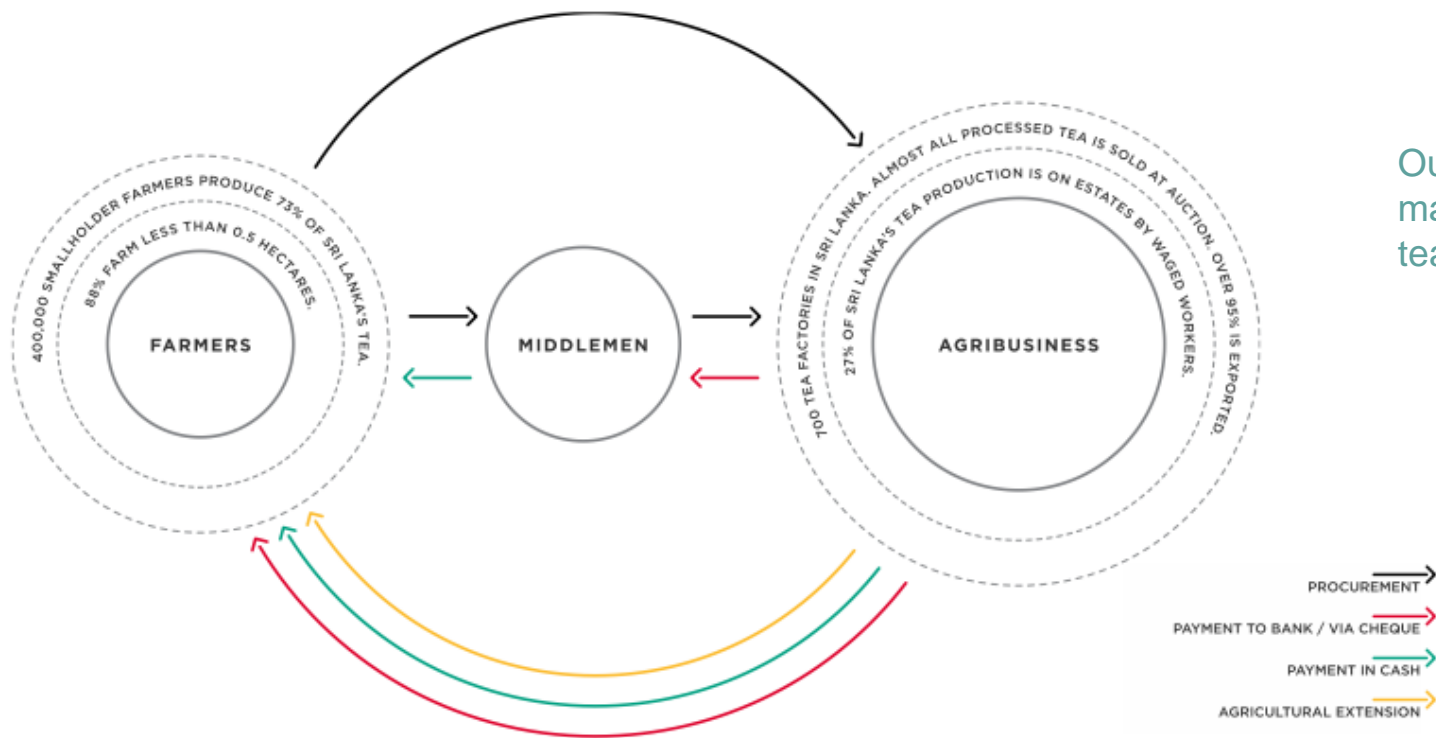


## Output example: profile of an agricultural organisation and its procurement activities

ORGANISATION DETAILS	Organisation name	Organisation type	Contact details
VALUE CHAIN DETAILS	Primary value chain	Location and number of farmers in direct procurement	Crop seasonality
PROCUREMENT ACTIVITIES	Number of direct payments to individual farmers	Single transaction value	Current payment method
KEY VALUE CHAIN ACTIVITIES	Details of contract farming	Description of farmer profiling process	Participation in certification or export schemes



# Use Value Chain Mapping to develop a basic understanding of value chain structures



Output example:  
map of Sri Lanka's  
tea value chain



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## In-Depth Value Chain Research can identify suitable mobile use cases

Use semi-structured interviews with key stakeholders in the value chain to generate the following outputs:

- ✓ **detailed profiles** of selected agricultural organisations;
- ✓ **description of key activities** with an emphasis on those involving farmers and buyers;
- ✓ **mapping of key pain points** for farmers and agricultural organisations against these activities;
- ✓ **assessment of** agricultural organisations' **readiness** to adopt last mile digital tools;
- ✓ **identification of mobile use cases** for digital interventions, for example, digitising last mile payments.



## Output example: a map of activities and pain points in the tea farmer journey unlocks opportunities for digitisation beyond mobile money

	HARVEST	CROP HANDOVER	QUALITY CONTROL AT FACTORY	PAYMENTS
Activity description	Farmer stores plucked green tea leaf in 22-kilo natural fibre sacks	Farmer hands over leaves to collector at field edge	Farmer's harvest is weighed using digital scales and deductions are made based on moisture, leaf quality and weight of sacks	Farmer receives advances and balance payments based on recent supply history
Pain points	<b>Unpredictable weather</b> patterns affecting harvest and yield	<b>Farmer unaware of collection time</b> (farmer must be physically present all afternoon while truck is collecting from farmers)	<b>Farmer does not know how much is being deducted at factory</b> ; only discovers upon receipt of remittance advice  <b>Latest green leaf price</b> only known via word of mouth / if visited factory	Farmer is required to <b>travel to factory</b> to receive cash advances or <b>to bank</b> to cash out  Individual <b>factory policies</b> limit how much they are prepared to pay in cash  Farmer potentially carries a large amount of cash (cash-handling risks)
Opportunity areas	Weather forecast tool	Collection schedule shared with farmers	Instant push notifications to farmers	<b>Mobile money solution as the entry point to last mile digitisation</b>



# Highlights of the Value Chain Assessment Tool

## Value Chain Prioritisation

- ✓ The GSMA's model scores value chains against key indicators affecting the digitisation of agricultural procurement payments and ranks them in order of priority.
- ✓ The potential to digitise agricultural procurement payments is greater in formal value chains experiencing high transaction frequency and transaction values that are compatible with mobile money transaction and wallet size limits.



# Highlights of the Value Chain Assessment Tool

## Value Chain Selection and Mapping

- ✓ Creating profiles of agricultural organisations based on key procurement indicators and last mile activities gives mobile money providers a basic understanding of value chain structures and allows them to assess the suitability of particular value chains for digital payments.
- ✓ To maximise benefits for farmers, mobile money providers should profile and seek partnership opportunities with agricultural organisations involved in direct procurement from a significant number of farmers.





# Highlights of the Value Chain Assessment Tool

## In-Depth Value Chain Research

- ✓ In-depth field research helps to create detailed agricultural organisation profiles, map user journeys and identify use cases for digital interventions that extend beyond digital payments.
- ✓ Field observations and semi-structured interviews with value chain stakeholders help digital agriculture implementers to recognise inefficiencies in agricultural value chains that can be addressed with holistic digital solutions.



## Contact us!

If you are a mobile money provider, **email us** at [magri@gsma.com](mailto:magri@gsma.com) **to request:**

1. estimates of the potential **direct revenue opportunity** in selected countries from digitising business-to-person payments and government-to-person transfers in agriculture; and
2. a **list of priority value chains** in selected countries that are likely to be suitable for further analysis and follow-up activities
3. joining the GSMA mAgri Priority Learning Partners (PLP) group



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**Thank you for joining**  
**For more information reach out to us**  
**via [magri@gsma.com](mailto:magri@gsma.com)**