

# today's agenda

- Introduction | 5m
- Part 1: Lessons from the Chithumba Model | 15m
- Part 2: Good Agricultural Practices: A Customer-Centric Lens | 15m
- Q&A | 15-20m
- Wrap up | 5m

### webinar housekeeping

- webinar will be recorded
- share your questions throughout the webinar in the chatbox
- keep your mics muted if you'd like to ask your question by audio,
   please save your question for the Q&A period

## about INNOVATE



March 2017 - March 2020



Funded by IDRC



10 projects/partners



### project portfolio



MALAWI:
1. AGRONOMY
TECHNOLOGY LIMITED



**NEPAL:** 5. IDE



8. I-DEV INTERNATIONAL
9. GLOBAL CANOPY



KENYA: 2. BIDHAA SASA 3. COIN22



**BANGLADESH:**6. CARE BANGLADESH



**BOLIVIA:** 10. CIDRE IFD



**RWANDA:**4. WORLD RELIEF



**PAKISTAN:**7. PAKISTAN MICROFINANCE NETWORK

10 partners across 8 countries – <u>learn more on our website</u>

## learning agenda key themes

#### **Customer Centricity**



How does customer centricity enable firms/organizations design and offer products and services that meet smallholder customer needs and demand?

#### **Smallholder Products & Services**



What key features and terms of financial products/services smallholder require to adopt new innovations or technologies? // What are the key features of new innovations/technologies smallholders require (or prefer) to try and buy?

#### **Smallholder Household Norms**



How do smallholder households prioritize business decisions, purchases and investments for upcoming crop cycles alongside competing household needs?

#### **Policy and Ecosystems Change**



What are the policy implications to enable firms/organizations and governments to better serve and align products (extension, finance and technologies) to meet smallholders needs?

# today's speakers



**Anne-Cécile Delwaide** 

Independent Management Consultant



**Nick Ramsing** 

Technical Director, Market Systems MEDA



### Introduction Chithumba model

Pre-harvest finance for farm inputs

Agricultural extension services

Marketing assistance

- High quality inputs provided on loan no upfront deposit
- Repayment in grain through the ACE warehouse receipt system (WRS)
- Repayment quantity calculated to cover all input costs No subsidy
- Training on good agricultural practices (GAP)
- Demonstration plots and trial of additional inputs
- Extension messages sent via ACE Market Information System
- Training on ACE 3 pillars: Warehouse Receipt System Market Information System – Trade facilitation
- 1st experience of ACE services through repayment
- Registration of farmers onto the ACE MIS Market prices and trade opportunities SMSs

## Model assumptions



**Access to Quality Inputs** 



**Access to Input Loans** 



**GAP Training** 



Access to ACE
Marketing Services



**Expected Results** 

Increased yield productivity



Increased farmer income from aggregation & higher yields

With reduced financial risk of non repayment

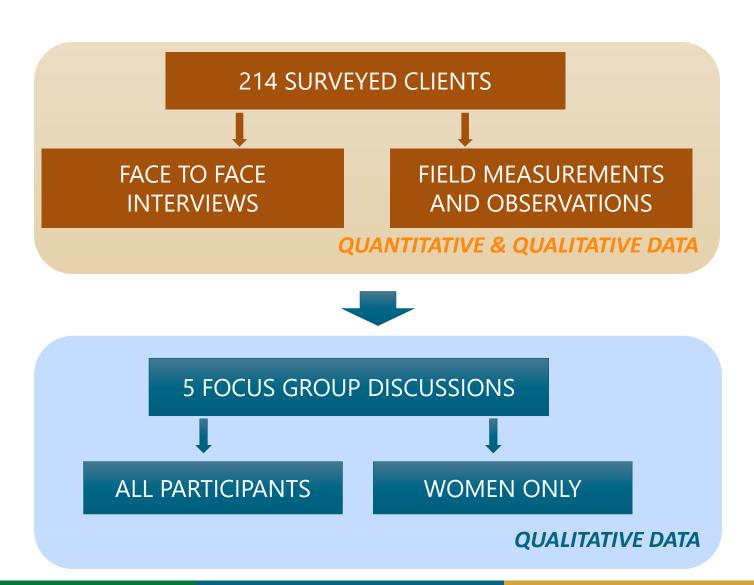
# Case-study objectives

A case-study to assess demand and adoption for the services provided under the Chithumba model.

	Service	Demand	Adoption
	Pre-harvest finance for farm inputs	Retention Rate Stated Demand	Repayment Rate
<b>+</b>	Agricultural extension services	Stated Demand	Implementation of the recommended practices
	Marketing assistance	Stated Demand	Use of ACE services

# Case-study methodology





### key results



## ONLY 21% OF THE RESPONDENTS ADOPTED THE GAP

13% DIFFERENCE BETWEEN MEN (28%) AND WOMEN (15%)

# Low adoption of GAP Contributing factors

Training effectiveness



Mistrust and reluctance to change

Ability to adopt GAP

## Training **Effectiveness**

99% of respondents claimed the GAP trainings were useful

Only 3% of those who did NOT adopt the GAP stated that they don't understand the recommended practices

Revised training strategy with interactive sessions, demonstration plots, participation of champion farmers and hand-outs



## Reluctance to Change

6% of those who did NOT adopt the GAP claimed they do not believe the recommended practices will result in a yield increase



# Ability to adopt GAP

Activity	Traditional Practice	Recommended Practice	Cited Constraints to Implementing Recommended Practice
Ridge Spacing	75-90 cm	75 cm	Farmers who rent land may not be allowed to alter existing ridge spacing.
Ridge Type	Standard triangular ridge	Flat topped ridge	Flat topped ridges require a relatively greater number of man hours to construct.
Row Type	Single row per ridge	Double row per ridge	Double the man-hours required to plant two rows per ridge.
Planting	2-5 seeds per hole, 15 cm apart	1 seed per hole, 5cm apart	Planting one seed per hole is difficult given the small size of soybean seed.
Weeding	Weeding by Hoe	Weeding by Hoe/Hand	Weeding between double rows on the ridge must be done by hand which is extremely tedious.
Pest and Disease Management	No use of chemicals or reactive treatment only	Preventive spraying	Lack of access to the inputs

The recommended agricultural practices are too labor intensive 64%

## Gender difference

Access to financial resources and time is more difficult for women.







### key recommendations

1 REFINE AND SEGMENT

2 ENABLE

3 UNDERSTAND







### 1. Call to remember foundational principles

"The real acid test for whether an ag project is worth its salt or not is whether farmers buy/pay for something.

When a project gets this right, then 'trade' between farmers and suppliers/buyers is the most salient and sustainable way to be assured that farmers' needs are being met."

- Nigel Motts, MEDA

### 2. Encourage to use data-driven client segmentation

### GAP challenges: know-how & incentives

1 | Farmer: Do I access GAP certified markets?

**Q:** How do I assess the *upgrade cost* in light of the anticipated additional revenue?

Buyer: How to increase supply from farmers?

**Q:** Am I targeting *the right* farmers with my 'supply produce for me' pitch?

**INGO:** How do we promote market linkages?

**Q:** What is the minimally acceptable business case required to persuade farmers to adopt GAP practices?

## appreciate the business case







**1:** Emphasize the market context, not only the agronomic and growing practices

2: Adopt a customer centric perspective that treats smallholder farmer segments differently

3: Adopt a business orientation to promote the business case and the value proposition

## Market Context: Market Sontext: Market Context:

#### **Premise:**

- different markets represent different market specifications
- the market specifications determine which GAP standards to implement
- farmers' production practices == specifications of targeted market

#### **Concern:** Could smallholder farmer be excluded from markets?

#### Risk depends on:

- size of market currently sell to
- growth of aspirational markets
- farmers' risk-adjusted perception of return

#### Recommend:

- agronomic practices must match market specifications
- clearly state market specs as assumptions

## Customer Centricity: farmers are not the same

#### **Premise:**

- industry literature addresses multiple growing conditions
- industry literature emphasize agronomy and growing practices
- but, tends to treat smallholders monolithically
   exception: CGAP work on segmentation and smallholder cashflow

The need: customer-centric approach: places customer at center of business decisions

#### customer-centricity:

- empathize with customer view
- assumptions: identify, test and validate
- learn best communication methods
- align to farmers' perceived value
- appreciate cost of doing business: labor!
- understand farmers' risk perception

#### Segment farmers!

- demographic
- farming behavior
- market transactions
- social factors

What is the minimally viable business case required to persuade farmer to adopt GAP?

## adopt a business orientation

### Simplified Net Revenue:

Net Revenue = Revenue [Price \* Quantity Sold] - Cost of Production - Other Costs

Where Cost of Production is the total of all the stages of production (e.g.:

preparation, planting, growing/maintaining, harvesting, post-harvest storage and/or

transport to market, etc.) and "Other Costs" reflects other relevant costs.

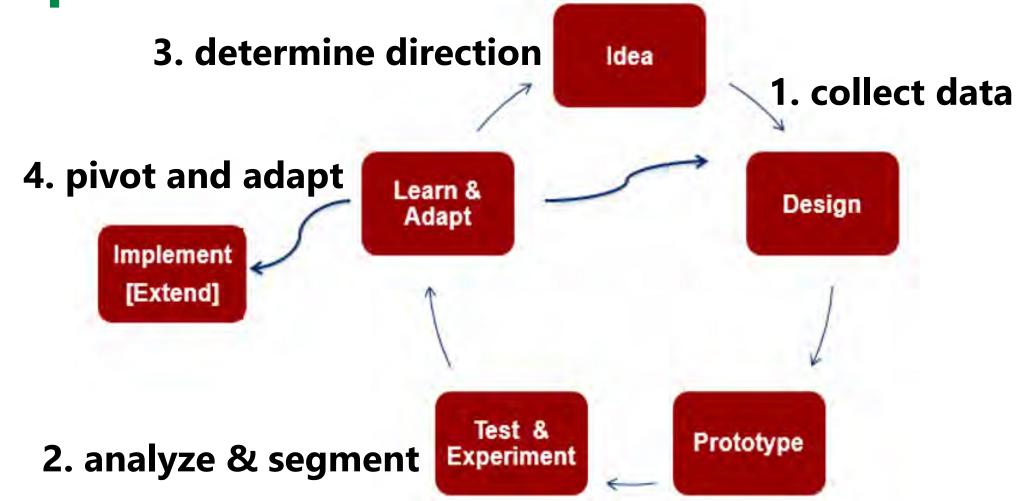
### Risk perception:

Use this data to segment!!

- obtain the desired yield from the upgrade cost
- able to sell the additional yield to generate additional revenue

### how implement:

**Experiment!** 



# example: clustering & segmenting

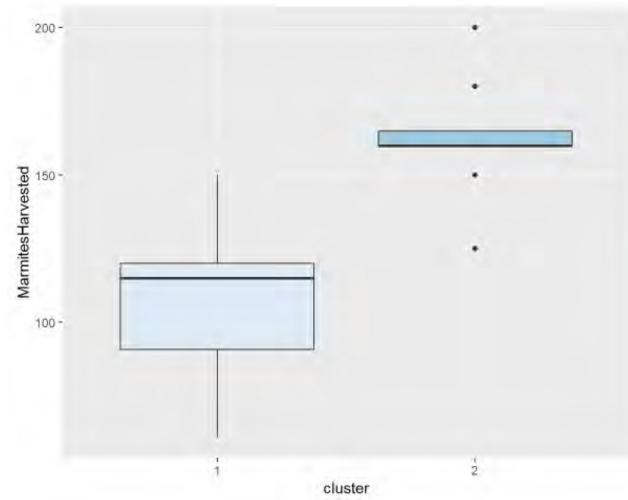
#### **Scenario:**

- 24 peanut farmers
- net revenue data: sales & production cost
- same technical growing support
- different yields: at least two groups

#### Why?

- demographics?
- growing conditions (soil, water)?
- behavior?

**Applied clustering algorithm** (Python scikit-learn)



cluster

### example:

**Clustering & Segmenting** 

#### **Observations:**

- segmented by production costs
- key: weed & preparation
- labor intensive activities
- implication for gendered roles?

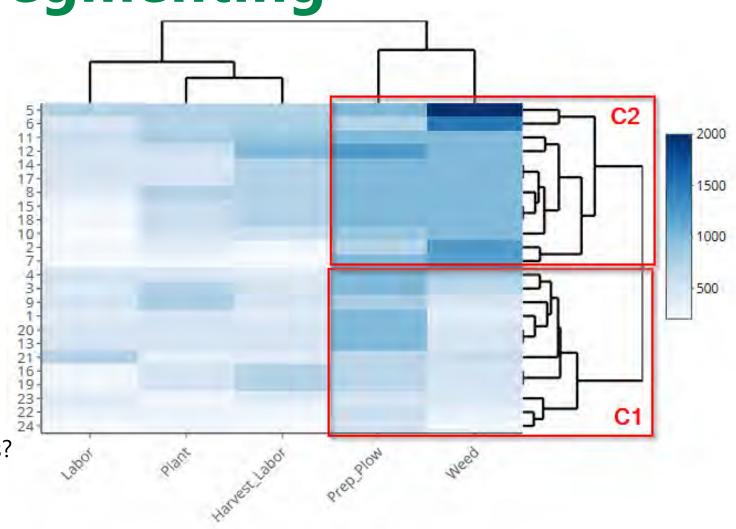
#### **Implications:**

C1: explore why not weeding

- empathize and understand
- target specific activities

**C2:** experiment with "next order" practices?

- soil health
- Integrated pest management



# concluding thoughts

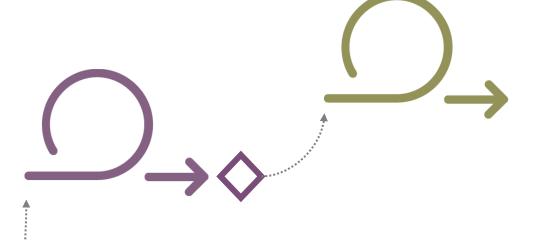
customer centricity

data-driven segmentation

#### business case

- net revenue
- markets







"It's pretty easy to know what you're doing when you're doing something that you've done before. Follow the path.

It's a lot more difficult when the task ahead is not quite the same as what you've done before. When wayfinding is required.

That's a different skill. That's the skill of finding the common threads, seeing the analogies and leaping over the crevices. Knowing how to do something you haven't quite done before."

- Seth Godin

# Q&A

### what's next?

- 1. Read the two featured papers
- 2. Check out our website
- 3. Sign up for our newsletter
- 4. Connect with our team

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