



Green Innovation Centres for the Agriculture and Food Sector – India

M&E Exchange – session 1

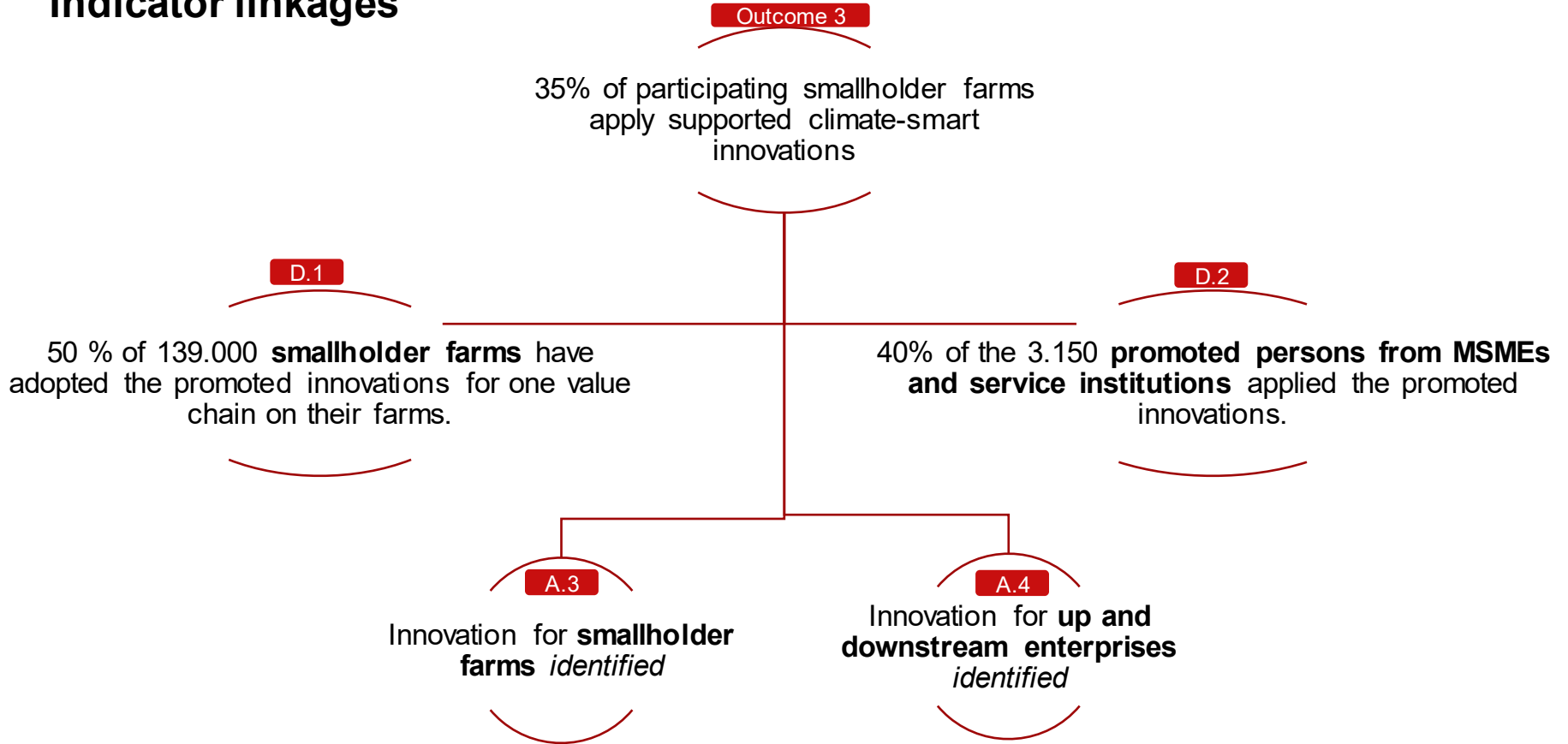
June 2020



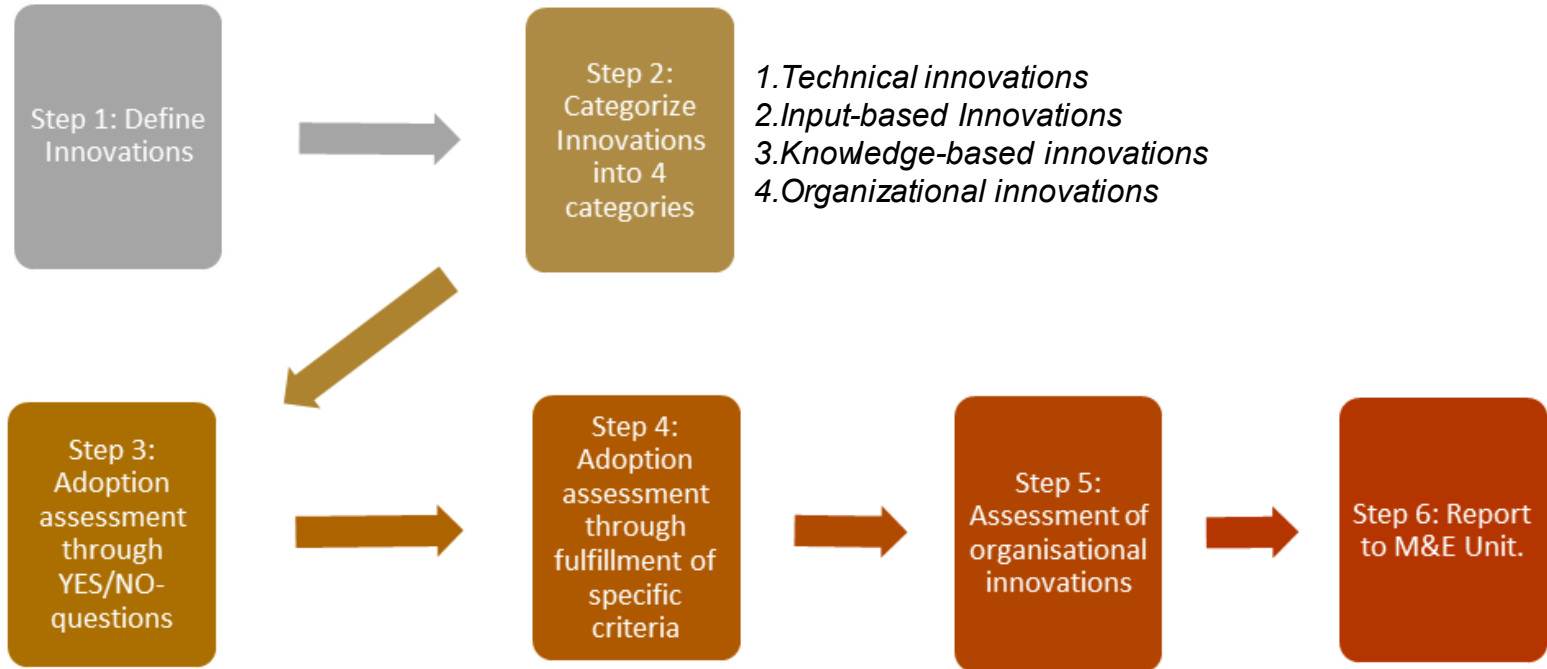
Implemented by



Indicator linkages



Guidelines from Bonn



Examples from Nigeria

Table 17: Crop specific criteria used for assessing GAP per topic

Topic	Criteria per value chain			
	Cassava	Maize	Potato	Rice
Plot measurement	Plot recently measured yes/no			
Site selection	Crop rotation with recommended previous crop (or new land)	n/a	Crop rotation with recommended previous crop (or new land)	n/a
Land preparation	50 % each: building heaps/mounds/ridges + ploughing	Correct method of land clearing	Correct method of land clearing	33 % each: Levelling + establishing bunds + establishing canals
Use of improved variety	Only counted if from credible source			
Sowing/ planting	20 % each: correct measurement method + correct planting distance + on heaps or ridges+ no intercropping+ in lines	25 % each correct measurement method + in lines + on ridges + replacing seed	33 % each: correct planting distance + no intercropping+ in lines	50 % each: germination test yes/no + transplanting/direct sowing
Weed management	Counted if 2-4 rounds of weeding (manual or chemical)	Counted if 2-3 rounds of weeding (manual or chemical)	Counted if 2-3 rounds of weeding (manual or chemical)	Counted if 2-4 rounds of weeding (manual or chemical)
Pest and disease management*	Action yes/no when occurrence of pests/diseases			
Use of mineral fertilizer	33 % each: Right type, right place (mode of application) and right time (2-3 MAP)	Use both urea and NPK during the season	33 % each: Right type, right place (mode of application) and right quantity	Use both urea and NPK during the season
Harvesting	50 % each: correct harvesting period 10-18 MAP + moist soil during harvest	n/a	33 % each: correct harvesting period 8-12 WAP + sunny weather +correct field sanitation	Checking moisture content yes/no
Post-harvest management	n/a	Correct storage yes/no	Correct storage yes/no	50 % each drying on mat/tarpaulin + storing on shelve/palette
Crop specific topic	n/a	Use of aflasafe use yes/no	n/a	Water management: # of times excess water drained >2 (2 weedings, harvest)

Source: Author.

Examples from Nigeria

Table 16: Weighted GAP adoption scores for cassava, maize, potato and rice value chain

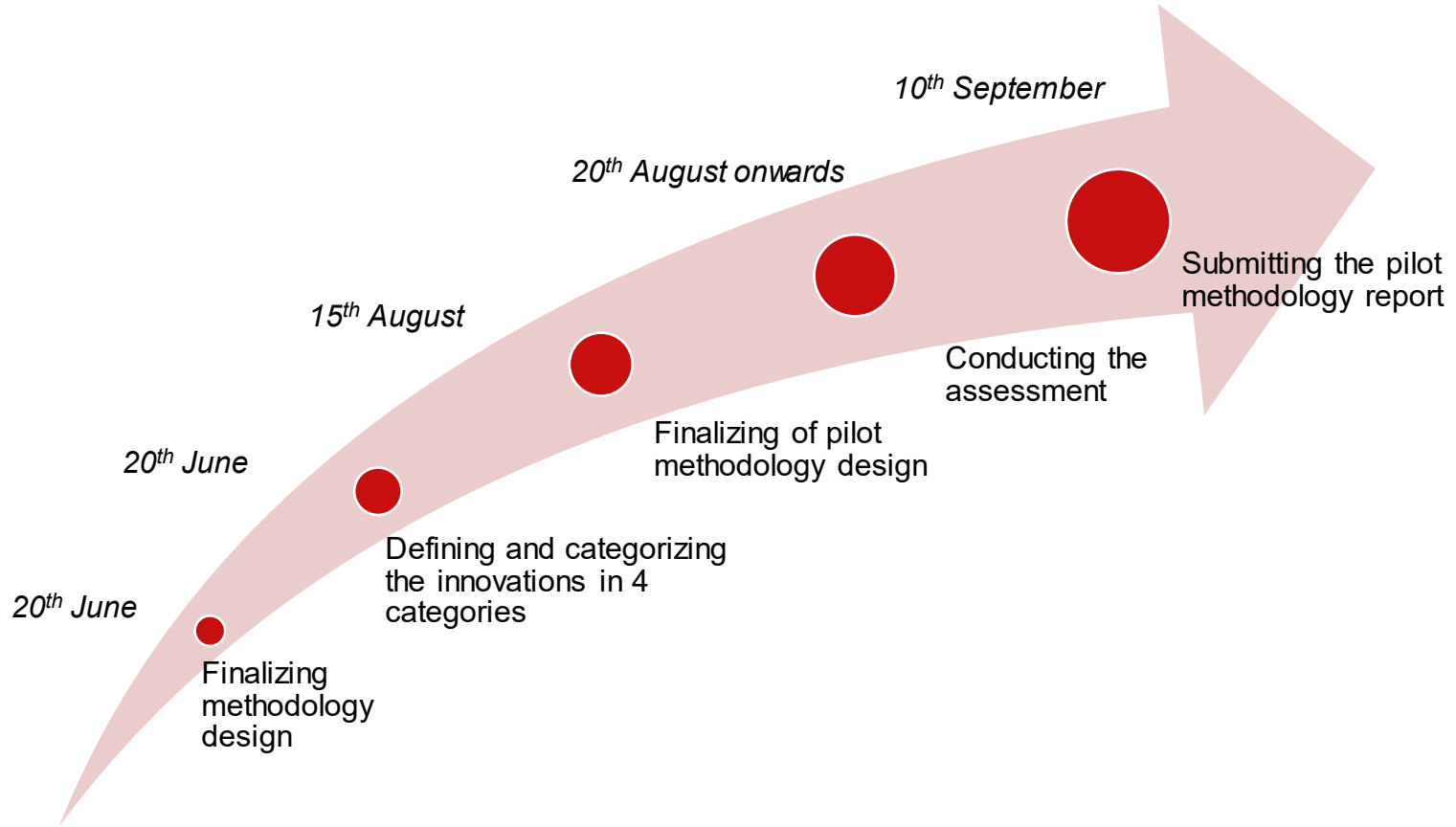
Value chain Topic	Cassava		Maize		Potato		Rice	
	Weights	Results	Weights	Results	Weights	Results	Weights	Results
Plot measurement	1	43%	1	44%	1	26%	1	39%
Site selection	2	45%			2	46%		
Land preparation	2	55%	1	99%	1	96%	2	77%
Use of improved variety	2	13%	2	54%	2	9%	1	21%
Sowing/ planting	2	53%	2	69%	2	59%	2	52%
Weed management	2	34%	2	90%	2	38%	2	91%
Pest and disease management*	1	75%	1	64%	2	76%	1	79%
Use of mineral fertilizer	2	16%	1	94%	2	65%	2	49%
Harvesting*	1	76%			1	68%	1	52%
Post-harvest management			2	78%	2	7%	2	81%
Crop specific topic**			2	25%			2	13%
Weighted mean		40%		67%		46%		57%

*For pest and disease management lower occurrence has been considered for weighted mean, equally for cassava harvest which has not been started by every farmer

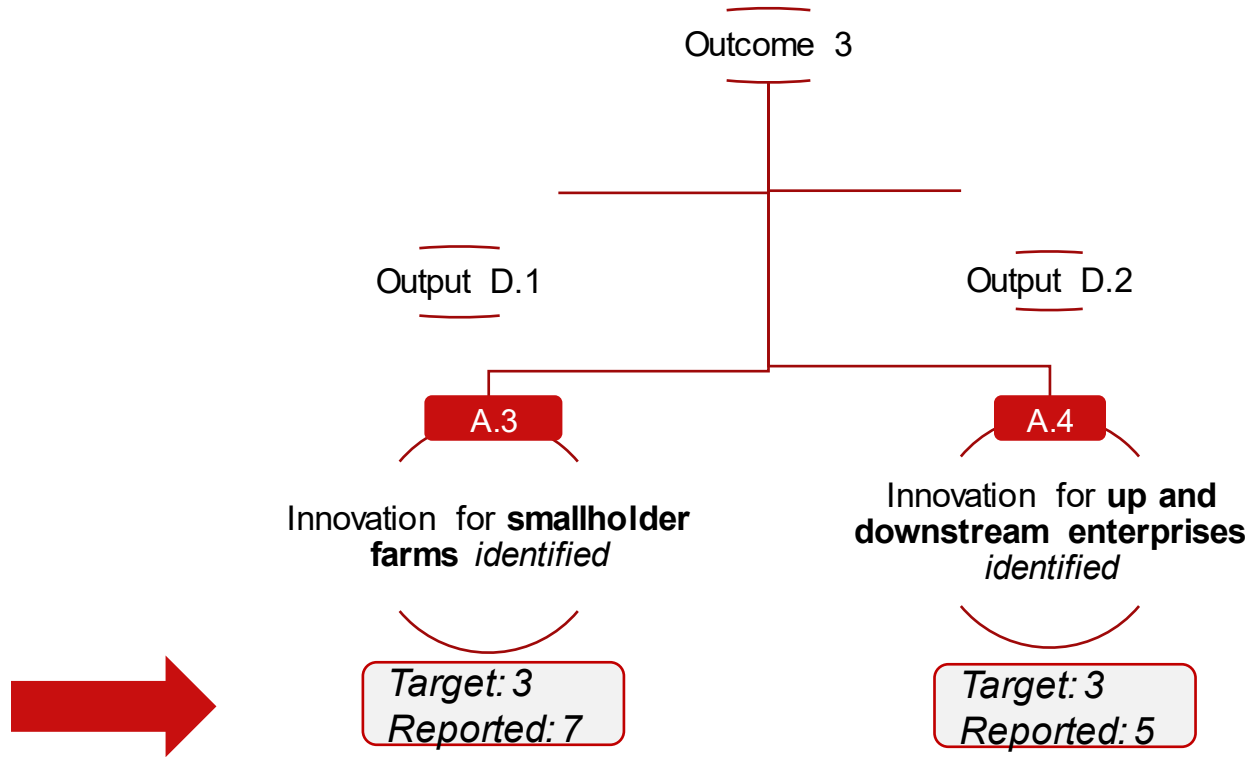
**use of aflasafe for maize and water management for rice

Source: Author.

Timelines



Indicator status



A.3 Current Innovations – smallholder farmers

Target: 3
Reported: 7

Title of innovation	Value Chain
POP/GAP	Potato
POP/GAP	Tomato
POP/GAP	Apple
Adapted Potato Planters <i>(Mechanisation)</i>	Potato
Smart Farming Potato App	Potato
Precision Irrigation <i>(incl. Drip, Moisture Irrigation and Farm Ponds)</i>	Cross-Cutting
Mobile soil testing by FFEM	Cross-Cutting

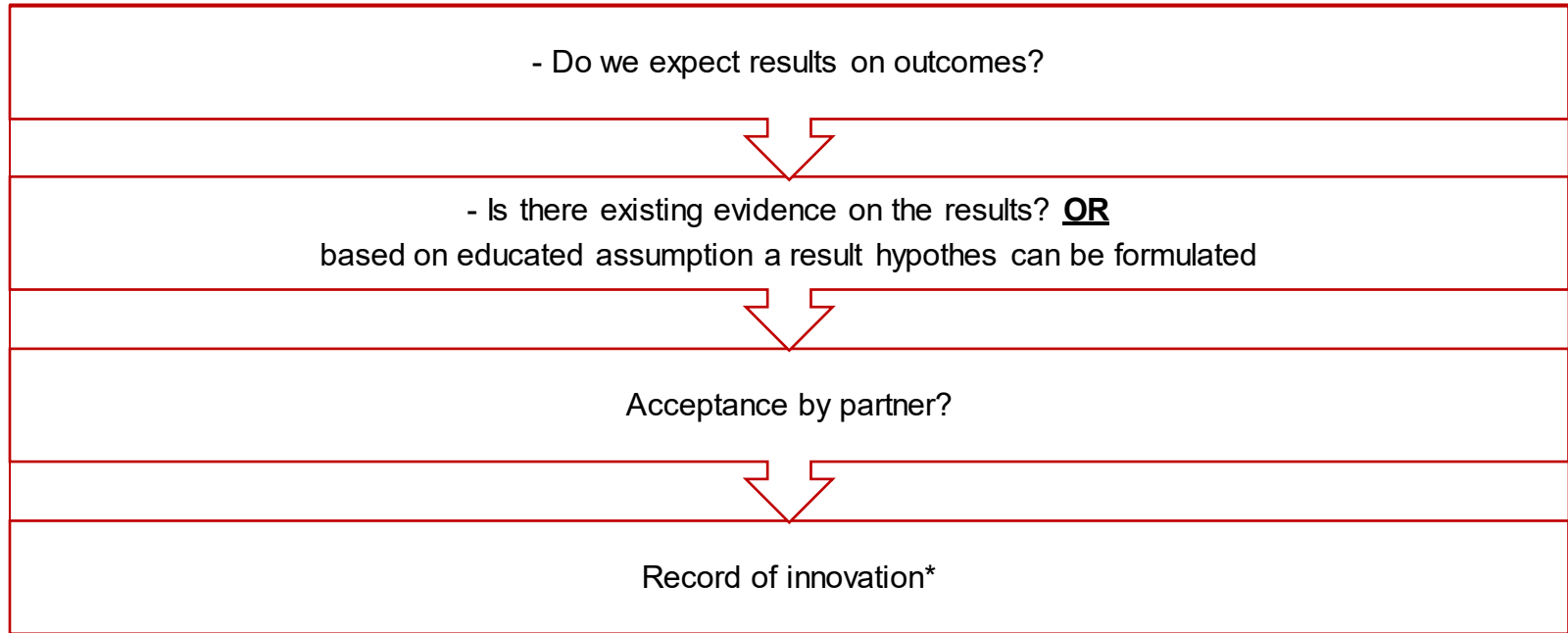
Current Innovations – Up and down stream enterprises

Title of innovation	Value Chain	Partners
Model Nurseries	Tomato	AFC and APMAS
Enhanced Cold Storage	Potato	AFC
Quality Seeds	Potato	AFC
Fast Track Programme	Cross-Cutting	WHH
FPO Manual <i>for Board of Directors</i>	Cross-Cutting	WHH

Target: 3

Reported: 5

Selection criteria / Methodology to select innovations



****At least one innovation is defined per value chain, extension module and as climate smart!***

Innovation categories

Technical & input-based

- use of a certain (input) factor: e.g. technology, machinery, processing and marketing; planting material, seeds, soil fertility measures, animal husbandry, diversification of cultivation methods, finances

Knowledge based

- education, training, etc.
- include many innovations that are very similar across projects but operate under different names (e.g. POP/GAP)
- e.g. methodological cultivation trainings, post-harvest trainings, trainings for processing and marketing, business trainings

Organizational innovations

- e.g. service providers, stakeholder networks, contract types, cooperatives and other groups.