

Peter Roggekamp
DCED MRM seminar
March 2016



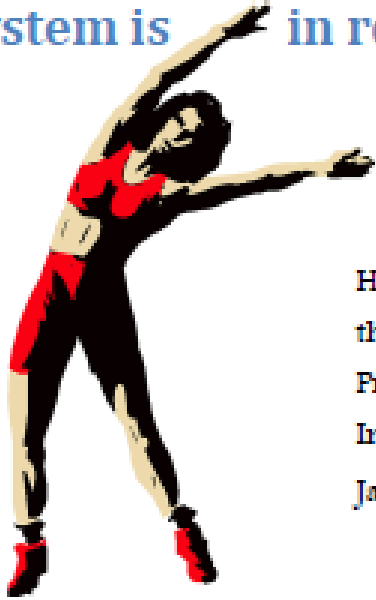
CAVAC 2010-2015 FULL CIRCLE



- (Irrigation)
- Fertilizer
- Pesticides
- Vegetables
- Media
- Business Enabling Environment

- ~~Agritools~~
- ~~Seeds and varieties~~
- ~~Model farmer dry season~~
- ~~Market infrastructure~~
- ~~PP dialogue~~
- ~~Export promotion²~~

We are in good shape and a practical M&E-system is in reach for many of us.



Handout –notes for my presentation at
the “Current Trends and Results in
Private Sector Development”,
International Seminar, Bangkok 17-20
January 2012 by Peter Roggekamp

As donors, consultants and implementers in private sector development we have come a long way over the last few years in developing a workable and realistic monitoring system that potentially produces credible data and that is useful as a management quality system. Under the umbrella of the DCED Standard the outline of a practical and credible monitoring and impact reporting system has evolved. Many programs are now implementing a system that is based on impact logics, impact chains, result chain or whatever people call it. Some project just started, others have been operating for a few years.

Where initial benefits of working with impact logics and applying the DCED Standard is now obvious for many, there are still valuable lessons to be drawn how to get more out of your M&E system. This can be done by integrating a DCED Standard based M&E system better with management structures in your organization.

This note lists some thoughts and is hopefully a basis for further discussions. Result chains and monitoring plans have gotten most of the attention over the last few years. This note is looking at the next step, building a full M&E management system around the logics and plans.

- **One internal QA&R system**, with external quality control
- QA&R should be **integrated** with the other management systems.
- **Big boss** needs to **drive** QA&R
- Develop and maintain a **culture of honesty and self criticism**.
- **Key indicators developed** early in the project.
- The QA&R system needs **permanent maintenance** to keep the right balance between simplicity and credibility.
- **All professional staff** should be **involved** with clear roles and responsibilities.
- External support should be managed. No handing over.
- Starting early on with **periodical triangulation sessions**.
- Early on there should be a realistic **agreement with the donor** on what level of impact data can be expected and when.
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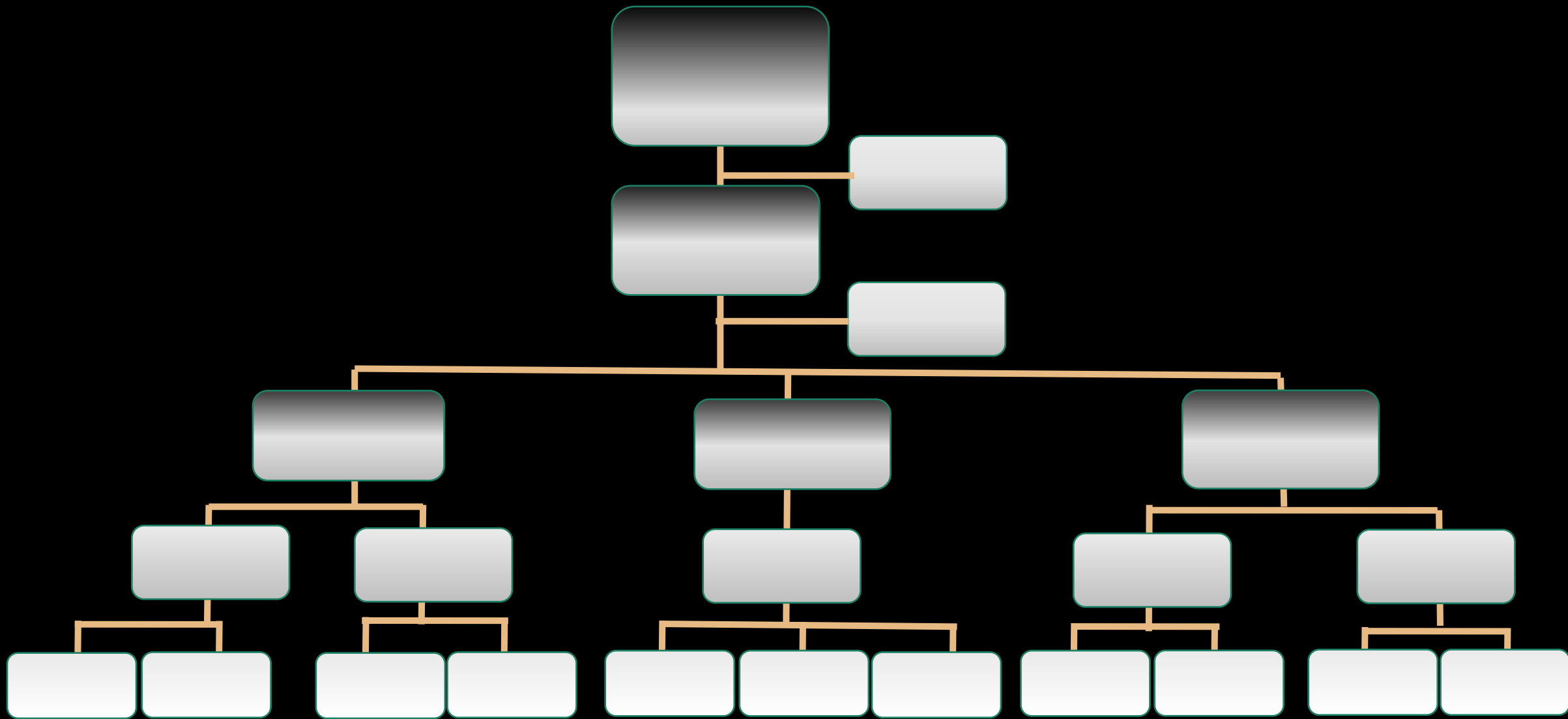


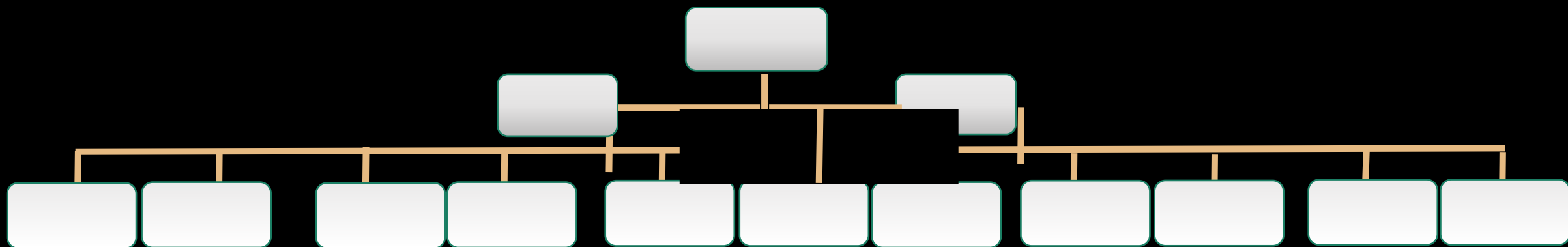
Re-search

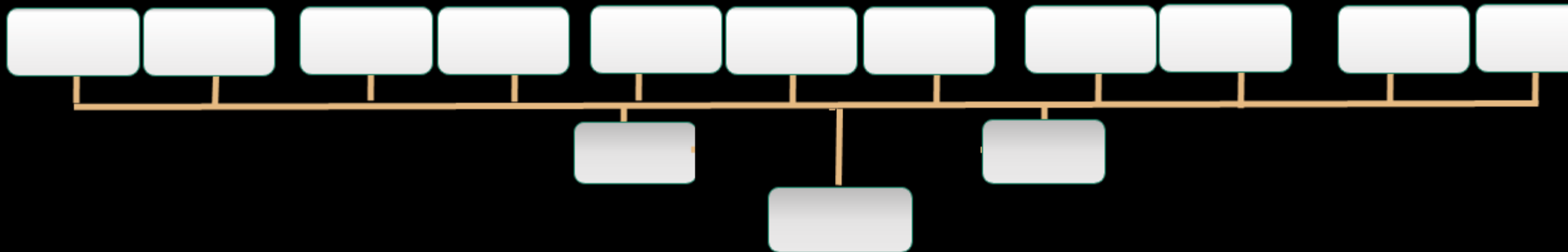
Measurable indicators
An attribution path
Sampling

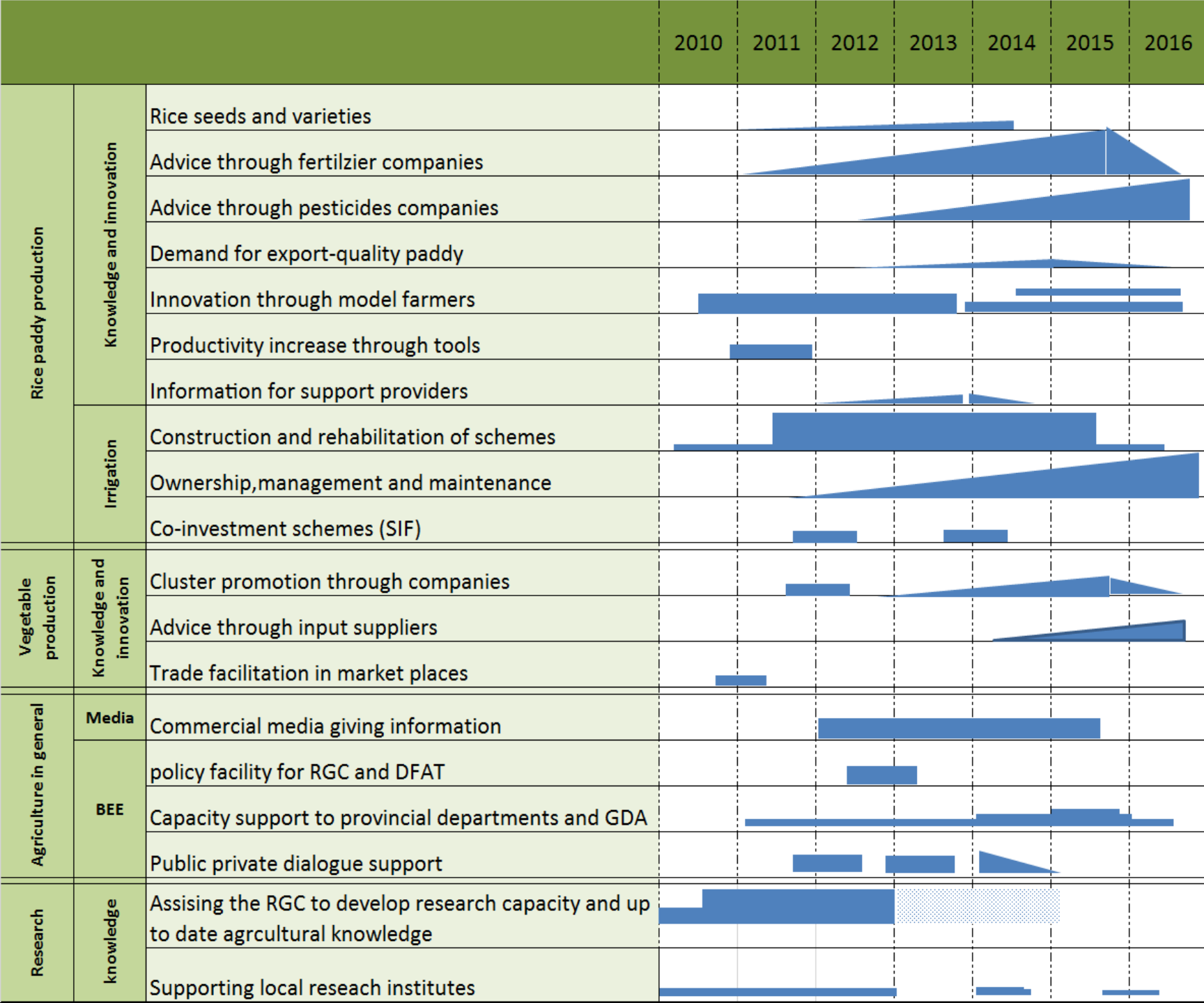
Producing impact











Access:

- Support available for2,000,000 farmers
- Direct clients of companies that changed business model through CAVAC700,000 (fertilizer)
.....500,000 (pesticides)

Outreach:

- Farmers that changed practices by 2017.....600,000 + (200,000)
- Corrected for potential double counting.....340,000 + (200,000)

INP	Reference code	Reference	Activities	2011	2012	2013		2014		2015		2016		2017		Total	
				Supported by CAVAC	Supported by CAVAC	Supported by CAVAC	100% by Company	Supported by CAVAC	100% by Company	Supported by CAVAC	100% by Company	Planned	Expected (95%)	Planned	Expected (85%)	Up to Aug 2017	Up to Dec 2017
HPC I			Field Demonstration (field demo)														
	A1.1a	A1.1a_HPC I_List of field demo	120 Field Demonstrations conducted	40	40	40		0		0		0		0		120	120
	A1.1b	*A1.1b_HPC I_Assess KAP of field demo 1&2 year [Feb 2012]	% of deomo farmers get knowledge from field demo	10%*	80%*	10%***						Outreach ignored. Not convinced the quality was good enough. HPC 1 was really a pilot intervention					
	A1.1c	**A1.1c_Note on HPC evaluation [June 2013]	# of demo farmers get knowledge	4	32	4											
	A1.1d	***A1.1d_HPC Evaluation-3rd year Demo Farmer[Apr 2014]	% demo farmers apply knowledge	25%*	35% **	25%**											
			23 field demo farmers apply knowledge	1	11	11											
			15 farmers reached by one FDF		15	165		165**								345	345
			70% of farmers get knowledge demo farmer		11	116		116								242	242
HPC II			50% farmers apply knowledge (outreached)***		5	58		58								121	121
			Village Retailer Training														
	A1.2a	A1.2a_List and Pre-posttest evaluation of HPC II [Aug 2014]	104 retailers get trained			55		49		The retailers are likely to continue supporting farmers but it will be mainly the same farmers. So no additional outreach claimed after 2014						104	104
			93% trained retailers increase knowledge			51		46									
	A1.3c	A1.3c_Yetak I_Note of increase knowledge on fertilizer use of r	77% of the retailers give advice			39		35									
	A1.4c	A1.4c_Yetak I_Impact assessment on farmer [Aug 2013]	73 farmers reached by a trained retailer			73		73									
			Total farmers reached			2,875		2,561								5,437	5,437
	A1.3e	A1.3e_Farmer KAP from retailer training [June 2015]	77% of farmers get and apply knowledge			2,214		1,972								4,186	4,186
YE TAK I			Total farmers get and apply knowledge													4,186	4,186
			Retailer Training (Provincial dealer training)														
	A1.3a	A1.3a_Report on Ye Tak Training [Feb 2014]	155 retailers get trained		155	The retailers are likely to continue supporting farmers but it will be mainly the same farmers. So no additional outreach claimed after 2012										155	155
	A1.3b	A1.3b_Assess retailer training of Yetak [Mar 2012]	50% trained retailers get knowledge		78												
	A1.3c	A1.3c_Yetak I_Note of increase knowledge on fertilizer use of r	77% of trained retailers give advice		60												
	A1.3d	A1.3d_Impact assessment on farmer of Yetak I [Nov 2013]	93 farmers reached by a trained retailer		93												
			Total farmers reached		5,550	-		-		-		-		-		5,550	5,550
	A1.3e	A1.3e_Farmer KAP from retailer training [June 2015]	77% of farmers get and apply knowledge		4,273	-		-		-		-		-		4,273	4,273
YE TAK II			Total farmers get and apply knowledge													4,273	4,273
			Village Retailer Training														
	A1.4a	A1.4a_Retailer training Database-HPC and YETAK	191 retailers get trained			191				The retailers are likely to continue supporting farmers but it will be mainly the same farmers. So no additional outreach claimed after 2014						191	191
	A1.4b	A1.4b_Consolidated Report_7 trainings 2014_EN	87% of trained retailers increase knowledge			166											
	A1.3c	A1.3c_Yetak I_Note of increase knowledge on fertilizer use of r	77% of trained retailers give advice					128									
	A1.4c	A1.4c_Yetak I_Impact assessment on farmer [Aug 2013]	73 farmers reached by a trained retailer					73									
			Total farmers reached					9,340		-		-		-		9,340	9,340
	A1.3e	A1.3e_Farmer KAP from retailer training [June 2015]	77% of farmers get and apply knowledge					7,192		-		-		-		7,192	7,192
			Total farmers get and apply knowledge													7,192	7,192
			Farmer meeting														
		Informed by Binh Dien in Aug 2015	150 farmer meetings will be conducted							50		50		50			150
		Informed by Ye Tak in Aug 2015	50 farmer per farmer meeting							50		50		50			150
			Total farmers reached							2,500		2,500		2,500			
	A1.9b	A1.9b_FarmerAssessment_FM_LaySeng [Jul 2015]	94% of farmers get knowledge							2,350		2,350		2,350			
			52% of farmers apply knowledge							1,222		1,222	1,161	1,222	1,039		3,422
ayon Heritage			Total farmers get and apply knowledge														10,614
			Staff Capacity Building														
	A1.5a	A1.5a_Training in rice and vegetable production for BHG staff	30 staff get trained			30										30	30
			100% of staff get knowledge			36											
	A1.5b	A1.5b_Technical Assessment of BHG Staff [Nov 2014]	# of farmer meetings				1,733		2,120		2,120	2,120		2,120		5,973	

Malyasan	A1.6a	A1.6a_ MSG_ Farmer KAP Assessment [Mar 2015]	# Field day (without field day)					1	2		1	2		4	8
			130 farmers join field day					130	130		130	130		130	130
			Total farmers reached through field days					130	260	-	130	260		260	1,040
	A1.6b	A1.6b_ Farmer KAP of MSG's demo [Jun 2015]	37% farmers get and apply knowledge							48	96	48	45.7	96	272
			# Field demo (without field days)					3	2		45	24		24	98
	A1.6c	A1.6c_ MSG_ Demos without Field days [Aug 2015]	8 farmers join each field demo					8	8		8	8		8	
			Total farmers reached through demos					24	16	-	360	192		192	784
Papaya			17% farmers get and apply knowledge							4	3	61	58.1	33	93
			Total farmers get and apply knowledge												364
			Field Demonstration (Field Demo)												
	A1.7a	A1.7a_ Note of Papay KAP assessment[May 2014]	# Field demo					7		3	3	5		5	23
			# Field day					6		0	1	3		3	13
			35 farmers per field demo					35		0	35	35		35	
	A1.6b	A1.6b_ Farmer KAP of MSG's demo [Jun 2015]	Total farmers reached					210		-	35	105		105	455
Anachak			37% of farmer get and apply knowledge							78	-	13	12.3	39	123
			Site Specific Fertilizer Recommendation Development												
	A1.8a	A1.8a_ Note of Anachak [Jul 2015]	8 field demos will be conducted by the company							0		4		4	8
	A1.9c	A1.9c_ Field Demo Assessment of Lay Seng [May 2015]	48 farmers reached per field demonstration							0		48		48	
			Total farmers reached							0		192		192	384
	A1.6b	A1.6b_ Farmer KAP of MSG's demo [Jun 2015]	37% of farmer get and apply knowledge									71	67.5	71	128
	A1.8b	JA1.8b_ Justification note from Anachak [Aug 2015]	Retailer Coaching (through leaflet distribution)							18		6		6	30
			108 village retailers get coached								54	90		36	180
	A1.4b	A1.4b_ Consolidated Report 7 trainings 2014 EN	87% coached retailers gain knowledges								47	78		31	
	A1.3c	A1.3c_ Yetak I_ Note of increase knowledge on fertilizer use of r	77% of coached retailers give advices								36	60		24	
	A1.4c	A1.4c_ Yetak I_ Impact assessment on farmer [Aug 2013]	73 of farmers reach by a coached retailer								73	73		73	
Lay Seng			Total numbers of farmers reached								2,641	4,401		1,760	8,802
	A1.3e	A1.3e_ Farmer KAP from retailer training [June 2015]	77% of farmers get and apply knowledge								2,033	3,389	3,220	1,356	6,405
			Total farmers get and apply knowledge												6,533
			Farmer Meeting												
	A1.9a	A1.9a_ Lay Seng farmer meeting [June 2015]	# of farmer meeting					4	35		250	360		360	1009
			32 farmers per meeting					32	32		32	32		32	
			Total farmers reached					128	1,120		8,000	11,520		11,520	32,160
	A1.9b	A1.9b_ FarmerAssessment_FM_LaySeng [Jul 2015]	94% of farmers get knowledge					120	1,053		7,520	10,829		10,829	30,230
			52% of farmers apply knowledge					63	547		3,910	5,631	5,349.4	5,631	14,656
			Field Demonstration (LFD)												
	A1.9c	A1.9c_ Field Demo Assessment of Lay Seng [May 2015]	# FD					3			2	7		7	19
			48 farmers join LFD					48			48	48		48	
Eung Suykimly			Total farmers reached					144			96	336		336	912
	A1.9d	A1.9d_ Justification for field demo_LS [Aug 2015]	70% of farmers get and apply knowledge					101			67	235	223.4	235	591
			Total farmers get and apply knowledge												5,159
			Farmer Meeting												
	A1.10a	A1.10a_ Note of Ung Suy Kimly [Aug 2015]	# of farmer meeting						100		100	100		100	200
			150 farmers per meeting						150		150	150		150	150
			Total farmers reached						15,000		15,000	15,000		15,000	22,500
	A1.5c	A1.5c_ Report of Farmer Meeting by BHG [May 2015]	57% of farmer get and apply knowledge						8,550		8,550	8,550	8,122.5	8,550	12,825
			Total farmers get and apply knowledge												12,825
															32,490
												Total projection		102,066	185,426

Plausible attributable yields increases
due to

..... Irrigation activities

....better seeds and varieties

....export promotion
.... model farmer training
....better use of fertilizer

....better use of pesticides

....activities in the vegetable market
....support to commercial media
....model farmers dry season activities

Plausible attribution:	<i>Relatively easy</i>	<i>partly possible</i>	<i>hard</i>	<i>not feasible</i>
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Tools:	Direct monitoring	Monitoring sales	Monitoring change in farmer practices	Case studies and literature
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~~Yields~~ Additional production

	Realistically measurable?	Possible to aggregate?	Capture change over time?	Attributable	In 2015?
Irrigation	Yes,	Yes	Yes, before and after construction.	Yes	Adoption not complete.
Seeds	Yes for new seed producers, not for varieties	Yes	Yes for new seed producers, not for varieties	Possible	
Export exchange visits	No , yields may not change. Maybe farmers get a higher price or other benefits.	No	More difficult	Not easy	
Export contract farming	Yes	Yes	yes	Yes	Yes
Wet season model farmer training	Yes	Yes	Difficult to establish a before and after	Not too easy	Adoption not complete.
Fertilizer	Yes	Yes	Not easy as adoptions goes slowly	KAP, partly possible	Adoption not complete.
Pesticides	Hard to assess reduced crop loss. Maybe through indirect indicators	Yes	Late as activities not finished	Maybe partly plausible.	Still very early
Vegetable	Not feasible , yield is not a suitable indicator for many and fast changing varieties.	No	Possible. CAVAC conducted an extensive baseline.	No	yes
Commercial media	Impact to diverse . No theory of change to base impact on.	No	No	No	Too early
Dry season model farmer	Impact to diverse. No theory of change to base impact on.	Not really		Not really possible	Too early

Table 4: Yearly impact of CAVAC supported activities on increased production.							
	Reliability of data		Sustainability	Until September 2015		Until December 2017	
				ton paddy	Value m. USD	ton paddy	Value m.USD
Irrigation schemes	+++	Very reliable	Very likely for most schemes	123,368	24.7	218,461	43.7
Support to fertilizer companies and model farmers on fertilizer	++	Very plausible.	Assured	51,763	10.4	Likely to be higher	10.4
				32,744	6.5		6.5
Other support to model farmers wet season	-		likely			<i>Not measured but will have real impact</i>	
Support to model farmers dry season	±	Indicative / case studies	Will continue.			11,822	2.4
Support to pesticides companies	+	Potentially plausible	Early, seems already irreversible.			115,384	23.1
Vegetables	-	case studies	Not sure			<i>Not measured but will have impact</i>	
Export		attribution / displacement questionable.	Not sure	4,518	0.90	<i>One could argue that this is a one time impact.</i>	
Media	±	indicative	indications			<i>Potentially large impact</i>	
Seeds and varieties		not measured	Serious doubts				
PDA and GDA support		not measured	Not likely.			<i>Certainly had impact</i>	

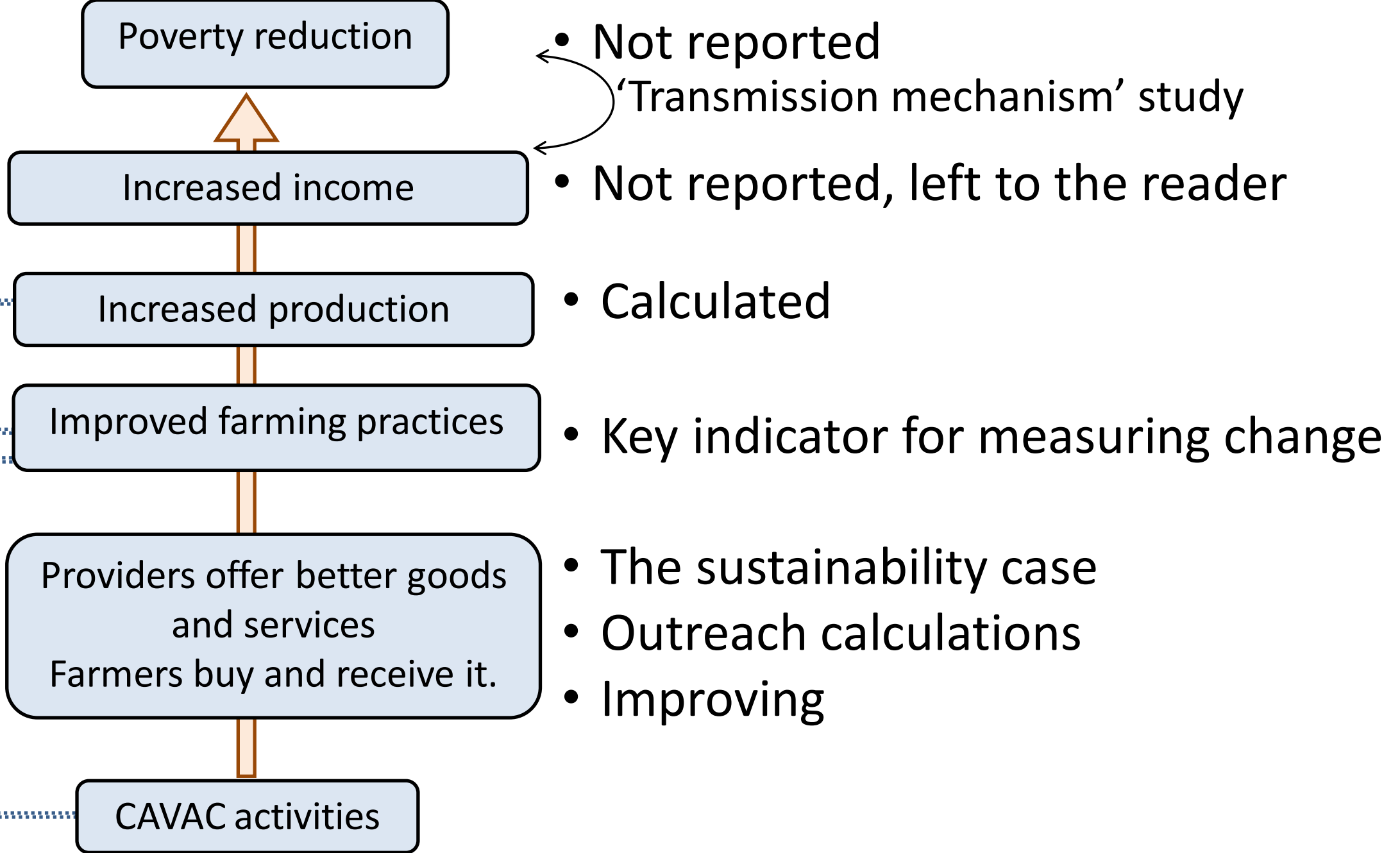
Wet season
Dry season

16

Link established

(regression analysis)

attribution



$$\Delta Y = \sum B_x * (X_{\text{after}} - X_{\text{before}}).$$

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.695 ^a	.483	.471	1.17397

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.891	.171		16.930	.000
Sum P in basal stage	.012	.003	.156	3.561	.000
dummy for flooded areas	.651	.157	.192	4.135	.000
7.How much area that you cultivate DSR in total?	.000	.000	.087	2.739	.006
D_KPT	-.519	.143	-.133	-3.622	.000
D_Kampot	-.352	.131	-.098	-2.687	.007
D_variety_IR504	1.153	.162	.355	7.099	.000
D_variety_IR85	1.026	.206	.192	4.970	.000
D_variety_IR66	.723	.241	.107	3.004	.003
Sum N in TL	.019	.004	.205	4.444	.000
Sum K in TL	.022	.009	.092	2.539	.011
Sum N in PI	.018	.005	.173	3.763	.000
Sum K in PI	.019	.005	.133	3.429	.001
Total amount of chemical fertilizer per ha	-.003	.001	-.220	-2.828	.005

Lessons

- M4P can work and....
.....can be measured (partly)
- 4 years ago + portfolio approach + re-SEARCH
- Final impact data were a surprise;
too late for improvements

Lessons related to the Standard.

- Very useful to guide measurements.
- Audit was useful for credibility and internal discipline.
(year 3 was good timing)
- Results chains useful for early monitoring and outreach.

Recommendations:

- Measure what you can, not what you must. Test it.
- Balance simple with credible.
 - RM is not a hobby of the RM experts.
 - Don't measure everything, focus on your main markets.
 - Crowding in and indirect outreach: monitor, but don't measure.
- Attribution is a search not a design.
- CAVAC II design:
 - Year 1 & 2: Do, learn and improve only.
 - Year 3: Design serious research and make choices.

- CAVAC website: [..www cavackh.org](http://www.cavackh.org).
- Write up for this seminar.
- Part 1 and 3 from CAVAC's completion report
- Drop box.
- Seminar paper 4 years ago
- Managers program design paper, 2 years old.

