



### SYSTEMIC CHANGE MEASUREMENT FRAMEWORKS IN KATALYST'S PHASE 3

# The Local Agri-business Networks (LAN) pilot study (Nov./Dec. 2015)

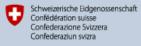
Presented by Fortunat Diener, Head of MRM, Katalyst DCED Global Seminar, Bangkok, 14th of March 2016

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## 1. KATALYST'S SYSTEMIC CHANGE MEASUREMENT FRAMEWORKS

### Two complementary measurement frameworks:

- Output level: scale/sustainability index for quantitative aspects
  - AAER matrix for qualitative aspects
  - copying and crowding-in, sustainability proxies
- Outcome level: new methodology (feasibility study in Fish sector in May 2015 and pilot study in LAN cross-sector in Oct./Nov. 2015)





## 1. KATALYST'S SYSTEMIC CHANGE MEASUREMENT FRAMEWORKS

### Scale and sustainability indices:

**Scale index:** Ratio between the number of people reached through interventions (access outreach) and the relevant sector boundary.

Sustainability index: Ratio between the number of leverage agents engaged by Katalyst and the number of agents that continue to provide services after the end of the intervention within the relevant sector boundary.

		Scale			
		Low	Low- Med	High- Med	High
Sustainability	High	L-M	H-M	H-M	Н
	High-Med	L-M	L-M	H-M	Н-М
	Low-Med	L t1	t2 L-M	L-M	Н-М
	Гом	L	L	L-M	L-M





## 1. KATALYST'S SYSTEMIC CHANGE MEASUREMENT FRAMEWORKS

#### **AAER Matrix:**

A descriptive tool to categorize systemic changes on intervention and sector level

"The initial partner continues to use the innovation that they originally adopted in the pilot phase, (relatively) independently of Katalyst."

### **ADAPT**

"A market partner successfully takes-up a pro-poor commercially viable and/or socially useful innovation."

**ADOPT** 

### RESPOND "Market players in the wider secto

"Market players in the wider sector, or in adjacent sectors connected to the market system within which the program has been working, are reacting to the adopted innovation by developing new offers and taking on new roles and responsibilities that support (or act in response to) its presence."

### EXPAND

"A sufficient number of other market players (or a few market players with a large market share) have adopted the innovation, or clear variants thereof."







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### Local agri-business networks (LAN): network of 3 stakeholders

#### 1. Gov. Extension Departments

(Agro, fisheries, Livestock)



#### 2. Trader Associations

(Agro input sellers, Output buyers)



### 3. Farmer Groups

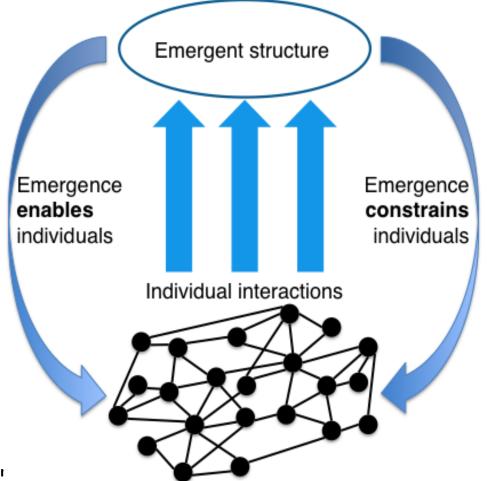


**FARMER** 





### **Emergence:**



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### Consequences of complexity thinking and emergence:

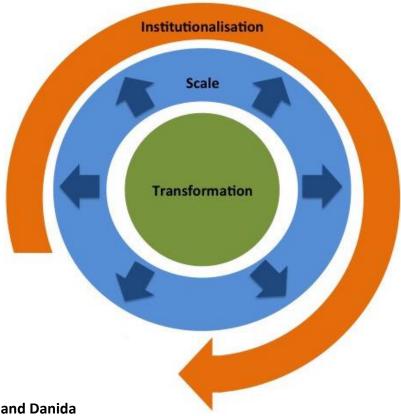
- complex systems are unpredictable on the level of the individual
- individual interactions lead to an emergent structure
- emergent structure is somewhat stable and predictable

#### **HOW CAN WE CAPTURE THIS EMERGENT STRUCTURE?**





### New systemic change framework on outcome level:



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### New systemic change framework on outcome level:

#### **Transformation:**

- starting point is to capture transformational change in the way how things are done by relevant individual actors
- beliefs and attitudes of individual actors define what and how things can be done on collective level, but are intangible
- capturing everyday narratives is a good way to capture collective believes and attitudes
- capturing transformation in narratives allows to capture the change in the emergent structure itself





### New systemic change framework on outcome level:

#### Scale:

- investigates whether change is reaching a critical mass
- asks whether people are affected by the changes in the system itself, rather than by the project directly
- scale of the change can give indication of significance of change





### New systemic change framework on outcome level:

#### Institutionalisation:

- looks for signs that indicate changes are embedded in the institutions of the system
- captures also commitment by system actors to maintain and potentially spread further the changes
- institutionalisation as a sign of stability of the new structure (the new "normal" way of doing things)





### Main research methods used in the LAN pilot study:

Transformation/scale: narrative research with SenseMaker

Institutionalisation: key informant interviews





### Why narrative?

- structure and transformation cannot be observed directly
- common use of metaphors and habitual practice embodies systems' structure
- narrative as explorative approach to make sense of behaviours in complex systems





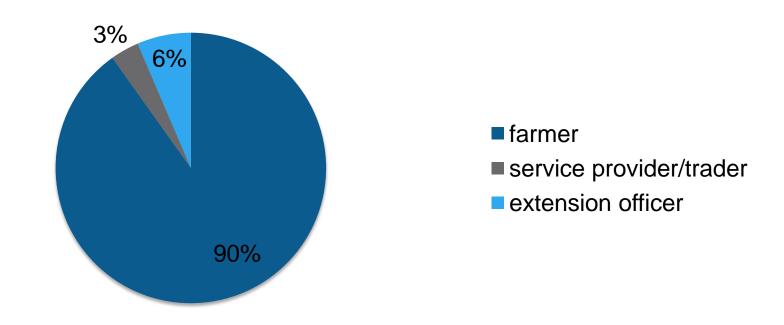
### Why SenseMaker?

- Research approach (based on anthropology, cognitive science, complexity science, system thinking)
- Tool (software suite allowing to collect qualitative data in statistically representative way)
- Allows self-interpretation (less bias)





Results - Data overview: 497 stories collected (1-22 Nov. 2015)







#### **Results - Transformation:**

- improved information accessibility, quality and relevance
- formal networks gain in importance
- increasing balance of trust and income generation potential
- growing importance of progress and innovation





#### Results - Scale:

- patterns in the spillover group not markedly different from the control group
- for farmers in the spillover group, copying from others more important than in other groups
- model does not lend itself to spreading itself on the local level
- connected with institutionalisation





#### **Results - Institutionalisation:**

- strong and promising signs of institutionalisation on local level
- limited institutionalisation at the central government level
- on-going efforts of Katalyst with central governement





#### **Conclusions**

- clear signs that there is systemic change in LAN sector
- changing attitudes and behaviours of farmers with regards to extension services
- further work on central level needed to strengthen institutionalisation and achieve sustainability





