

**Learning from Senegalese school farms  
in agroecology, which efficient practices  
can be advocated for newcomers?  
A comparative analysis.**

Mireille De Graeuwe and Kevin Maréchal

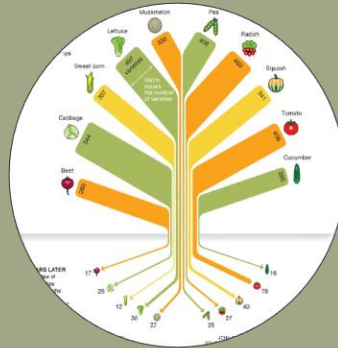


# 1. INTRODUCTION

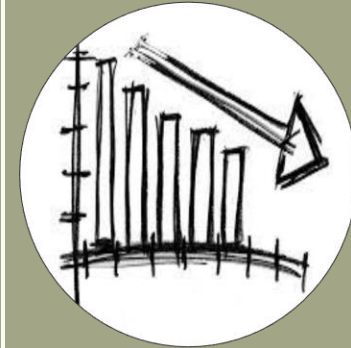
## AGRICULTURAL CHALLENGES



**Degradation**



↓ **Biodiversity**



↓ **Income**

## AGROECOLOGY

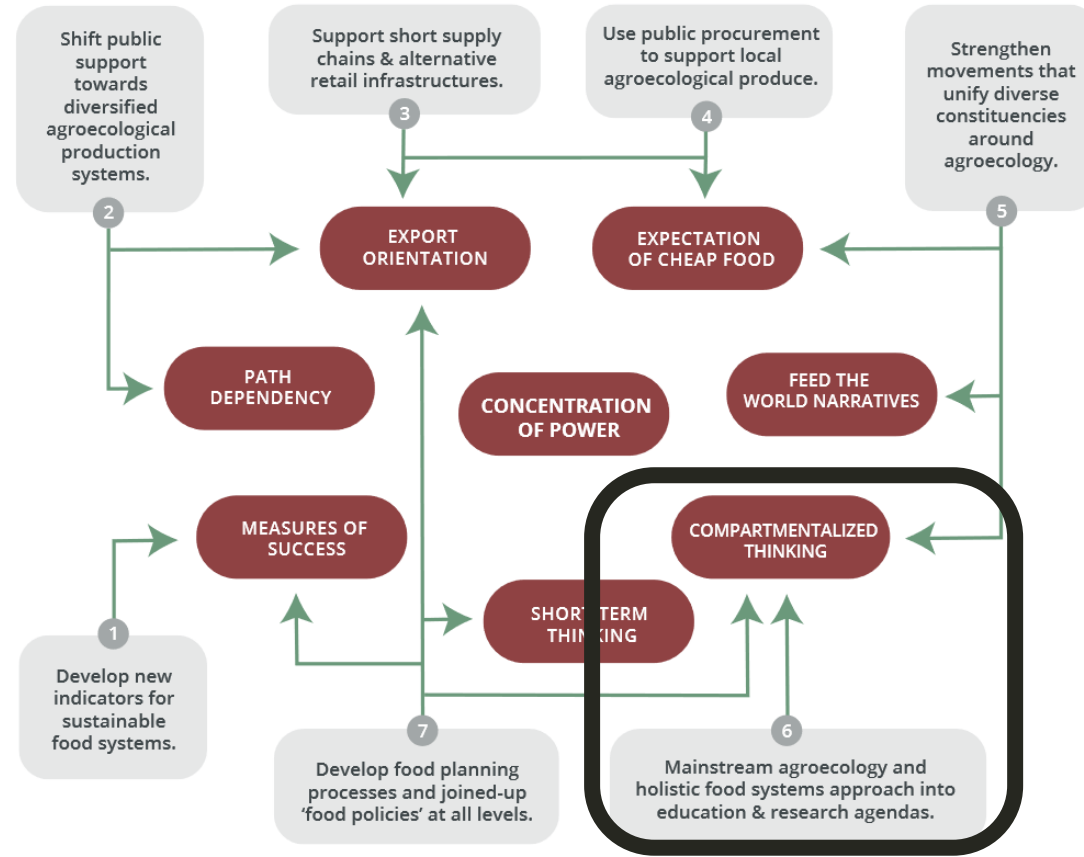
AGROECOLOGICAL TRANSITION TOWARDS SUSTAINABLE AGRICULTURE AND FOOD SYSTEMS

### The economic potential of agroecology: Empirical evidence from Europe

Van Der Ploeg et al (2018), *Journal of Rural Studies*



## POINTS FOR CHANGE



## EDUCATION

2 types



Farmer-to-farmer trainings



School farms

Picture 's sources:  
[www.inter-reseaux.org](http://www.inter-reseaux.org) (left)  
[rethink.earth/](http://rethink.earth/) (right)

## EDUCATION



School farms



# 2. MATERIALS AND METHODS



# QUALITY OF TRAINING



**POSITIVE FEEDBACK**



**FONDAMENTAL  
KNOWLEDGE**



**PROFESSIONALIZATION**

# LOCALISATION AND SELECTION

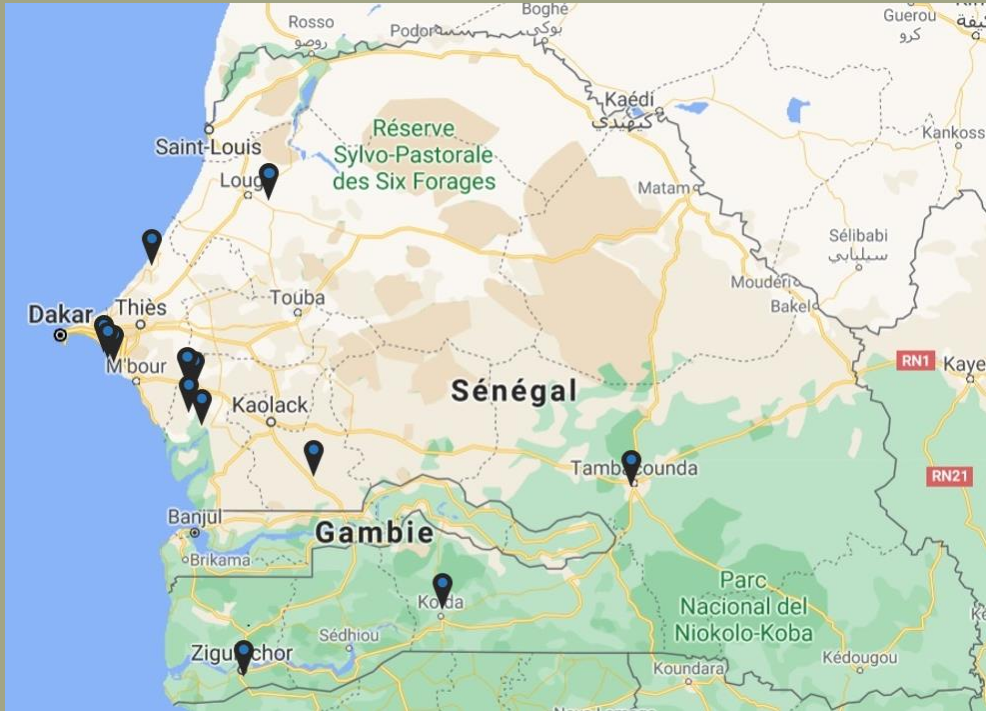
22



16



13



1

**Training > 6 months**

2

**Pedagogical experience > 8 years**

3

**Cohort(s) got graduated  $\geq 1$**

**4 School farms**

# THE 4 SCHOOL FARMS

	A
Partnership with universities or colleges	
Partnership with peasant network	
Partnership with local authorities	
Spiritual dimension	x
Ordinary training duration	< 1 year
Number of cohorts graduated	8
Level of training seniority	High
Good expertise level of all trainers	x
Lectures	Participative
Access to data of former learners	
Ordinary Monthly fee (CFA)	< 25 000
Diploma	School
Starter kit	CFA

# THE 4 SCHOOL FARMS

	<b>A</b>	<b>B</b>
Partnership with universities or colleges		
Partnership with peasant network		
Partnership with local authorities		
Spiritual dimension	x	
Ordinary training duration	< 1 year	2 years
Number of cohorts graduated	8	1
Level of training seniority	High	Middle
Good expertise level of all trainers	x	
Lectures	Participative	Ex cathedra
Access to data of former learners		x
Ordinary Monthly fee (CFA)	< 25 000	< 25 000
Diploma	School	National Level
Starter kit	CFA	

# THE 4 SCHOOL FARMS

	School Farms		
	A	B	C
Partnership with universities or colleges			
Partnership with peasant network			
Partnership with local authorities			x
Spiritual dimension	x		
Ordinary training duration	< 1 year	2 years	< 1 year
Number of cohorts graduated	8	1	8
Level of training seniority	High	Middle	High
Good expertise level of all trainers	x		
Lectures	Participative	Ex cathedra	?
Access to data of former learners		x	
Ordinary Monthly fee (CFA)	< 25 000	< 25 000	> 50 000
Diploma	School	National Level	School
Starter kit	CFA		Materials

# THE 4 SCHOOL FARMS

	School Farms			
	A	B	C	D
Partnership with universities or colleges				x
Partnership with peasant network				x
Partnership with local authorities			x	
Spiritual dimension	x			
Ordinary training duration	< 1 year	2 years	< 1 year	2 years
Number of cohorts graduated	8	1	8	1
Level of training seniority	High	Middle	High	Low
Good expertise level of all trainers	x			x
Lectures	Participative	Ex cathedra	?	Active
Access to data of former learners		x		x
Ordinary Monthly fee (CFA)	< 25 000	< 25 000	> 50 000	0
Diploma	School	National Level	School	School
Starter kit	CFA		Materials	

# THE 4 SCHOOL FARMS

	School Farms			
	A	B	C	D
Partnership with universities or colleges				x
Partnership with peasant network				x
Partnership with local authorities			x	
Spiritual dimension	x			
Ordinary training duration	< 1 year	2 years	< 1 year	2 years
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# THE 4 SCHOOL FARMS

	School Farms			
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# THE SAMPLE

**Hyp: identity**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>Total</b>
<b>Former learners interviewed</b>	8	13	25	8	54

# DATA TREATMENT ANALYSIS

## 1. Feedback

Lexical field analysis



Factorial analysis of correspondences

## 2. Fundamental knowledge

Descriptive statistics



ANOVA




TUKEY and ki Square's tests

## 3. Professionalization

Descriptive statistics



Fisher exact's tests



# 3. RESULTS

# FEEDBACK ABOUT THE TRAINING

Indicators	School Farms			
	A	B	C	D
Interesting	56%	77%	58%	100%
Acquisition of knowledge	33%	77%	54%	63%
Incomplete	0%	15%	4%	0%
Missing tools for practical lessons	0%	15%	0%	0%
Professional opportunity	0%	0%	17%	0%
Starter kit	0%	0%	4%	0%
Spiritual and self-development	33%	0%	0%	0%
Good living conditions	0%	15%	8%	0%
Group experience	22%	31%	13%	25%

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# FEEDBACK ABOUT THE TRAINING

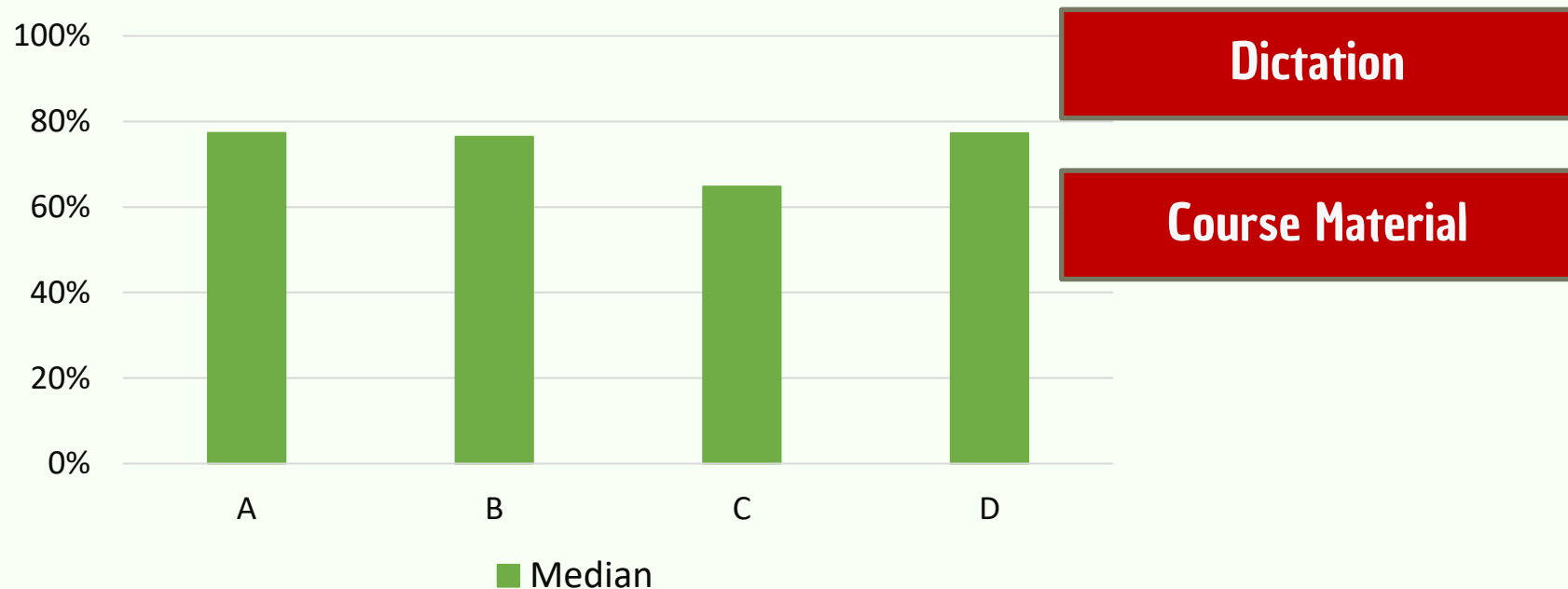
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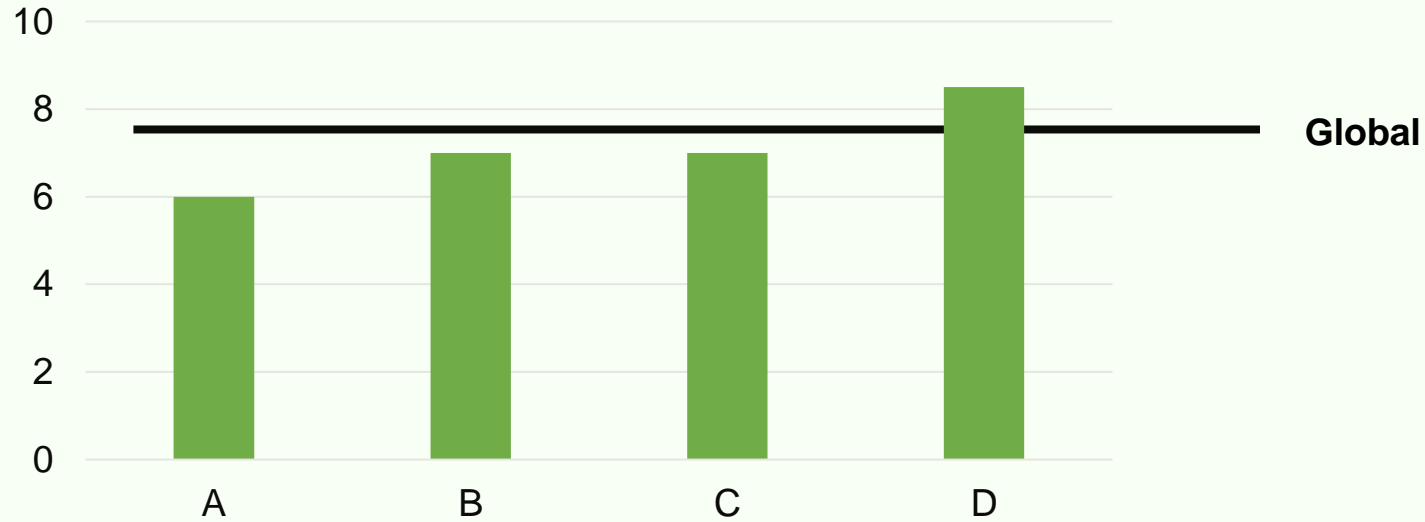
## Lessons' satisfaction





# FUNDAMENTAL KNOWLEDGE ACQUISITION

## Agroecology's level of comprehension (Median)



## FUNDAMENTAL KNOWLEDGE ACQUISITION

### Number of agroecological practices mentioned (Median)



# FUNDAMENTAL KNOWLEDGE ACQUISITION

## Scores obtained in agroecology

**Being a farmer**

**Standard of living**

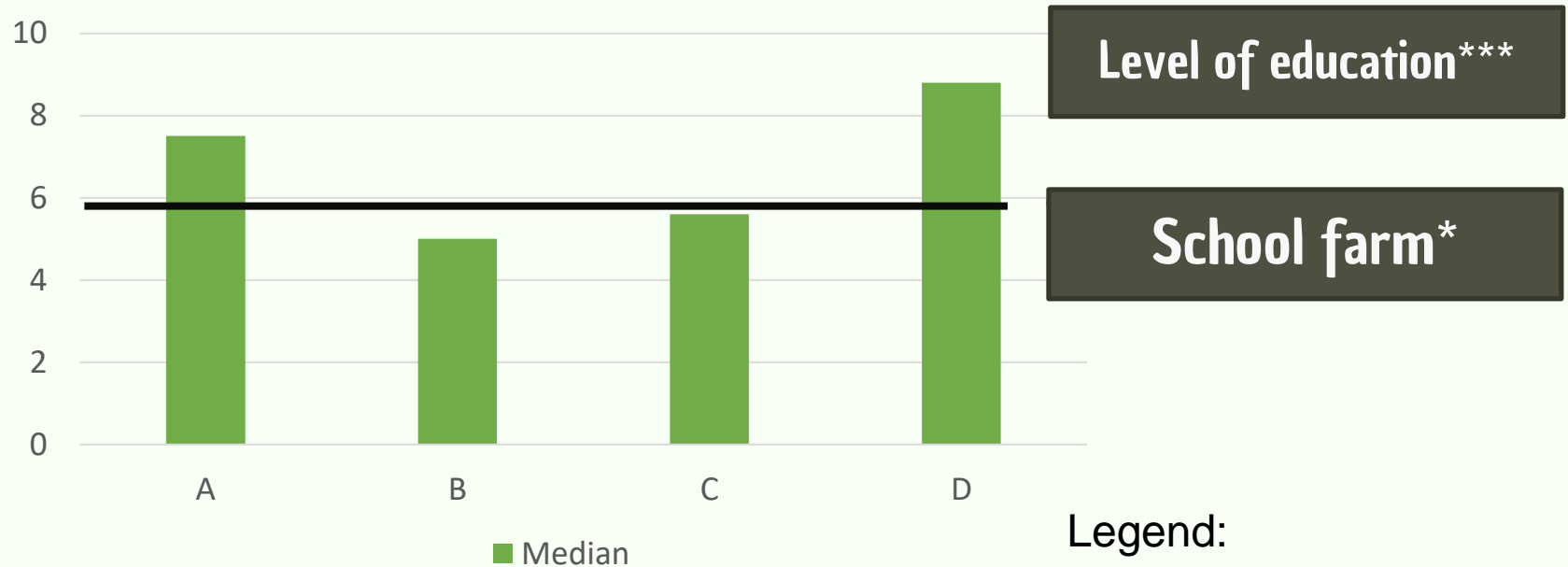
**Level of education**

**School farm\***

Legend: \* < 0.05 (p-value)

## FUNDAMENTAL KNOWLEDGE ACQUISITION

### Management score (on 10) by school farm



# FUNDAMENTAL KNOWLEDGE ACQUISITION

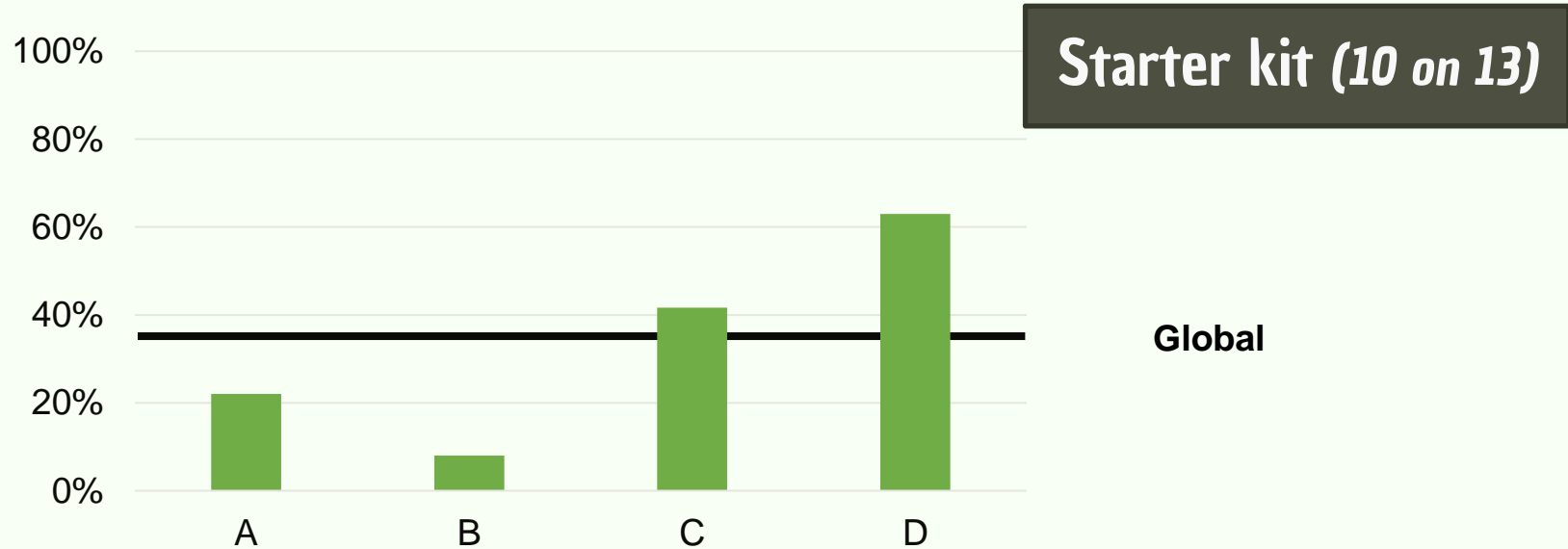
**Scores obtained in agroecology**

**Management score (on 10) by school farm**

**Training Dates**

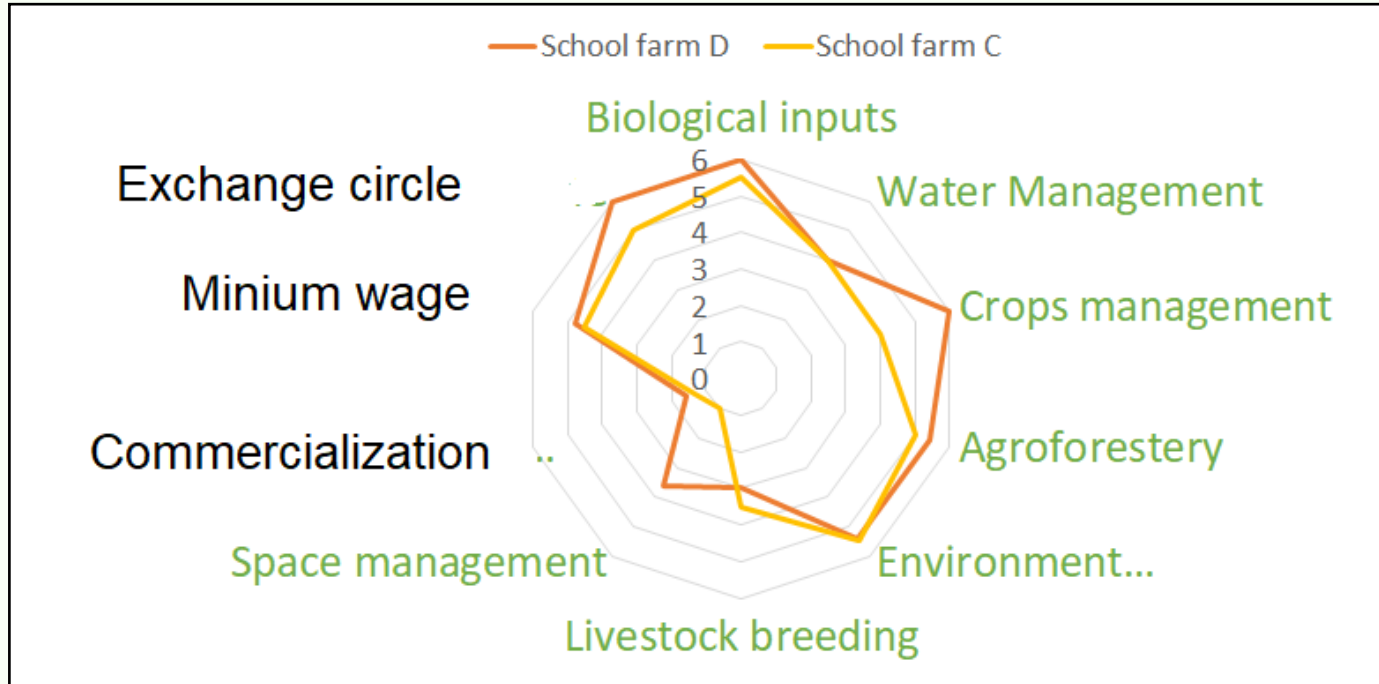
# PROFESSIONALIZATION

## Pourcentage of business installation's



# PROFESSIONALIZATION

## Agroecology's pathways (mean)





# 4. DISCUSSION

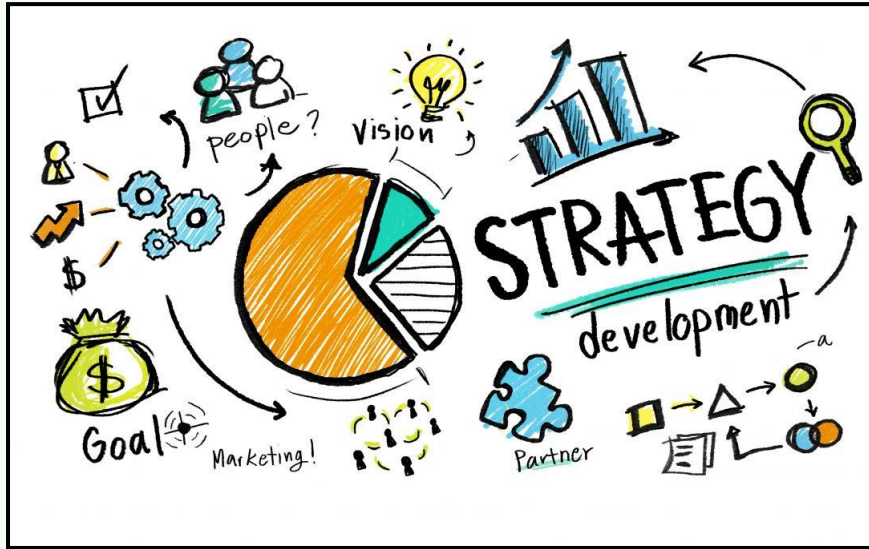


# SCORES' LEVELS



**Francis et al. (2008)**  
*Transdisciplinary Research for a  
Sustainable Agriculture and Food Sector.*

# PROFESSIONALIZATION



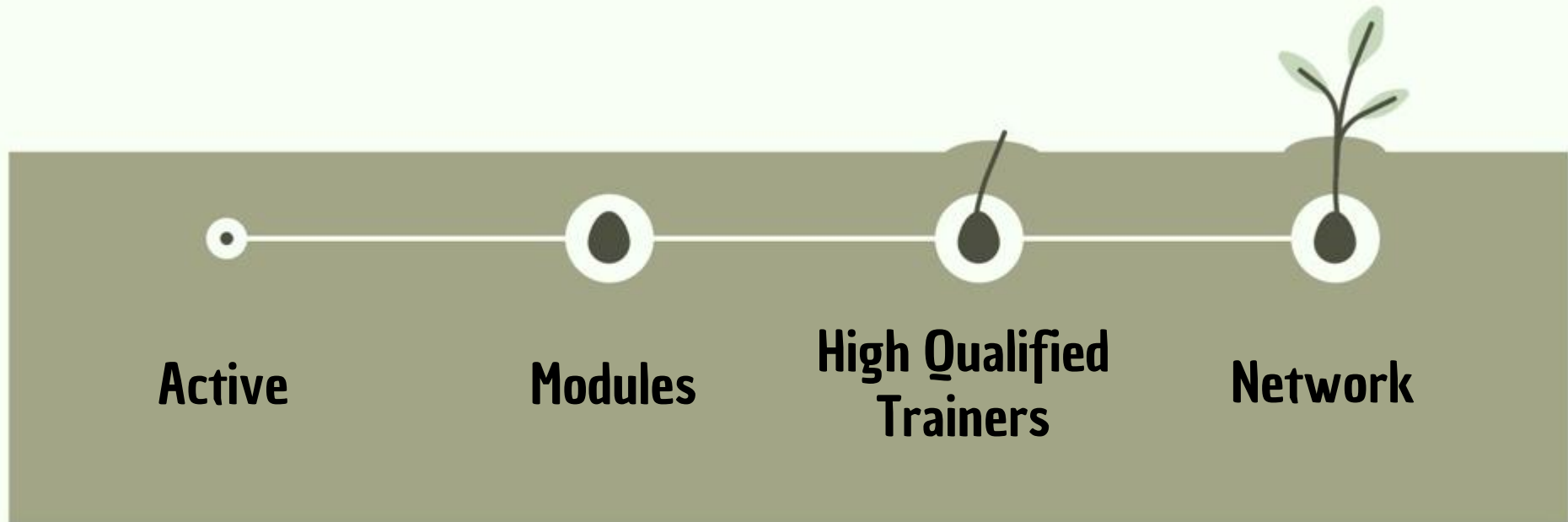
**Fares et al. (2012)**

*Agroecological transition, innovation and lock-in effects: The impact of the organizational design of supply chains.*



# 5. CONCLUSION

# FARM D



What next?

