

**YOU WILL BE  
MULTIDISCIPLINARY  
AND  
AGROECOLOGICAL**

But... What does it mean??

Let's write a review paper on Agroecology!



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Gembloux Agro-Bio Tech  
Université de Liège



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# Incorporate Agroecology within research

## The ongoing story of four young researchers...

4th BELGIAN AGROECOLOGY MEETING – BRUSSELS – 5th November 2014



LONG & WINDING ROAD TO A

# PHD

Séverin HATT, Sidonie ARTRU, Fanny BOERAEVE, David BREDART

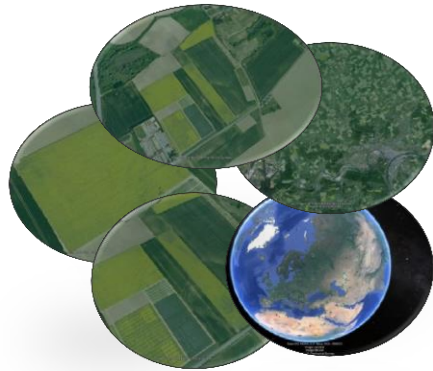
Ludivine LASSOIS, Sarah GARRE, Marc DUFRENE, Nicolas DENDONCKER, Pierre STASSART, Frédéric FRANCIS

# What Agroecology suggests

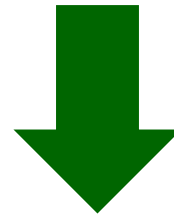


## It warns against one-fits-all solutions

(Lyon et al., 2011)



► **Cross scales**

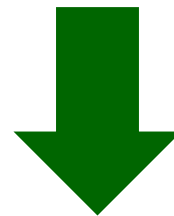


**AND**



► **Combine methods**

(Doré et al., 2011)



► **Multiple stakeholders**

(Mac Millan & Benton, 2014)

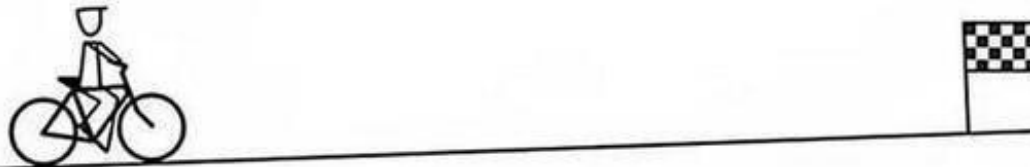


► **Various disciplines**

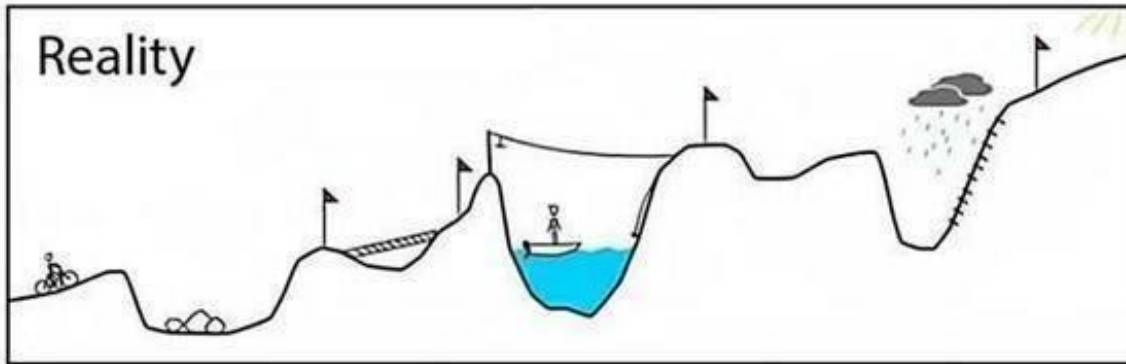
(Tomich et al., 2011)<sup>4</sup>



Initial plan

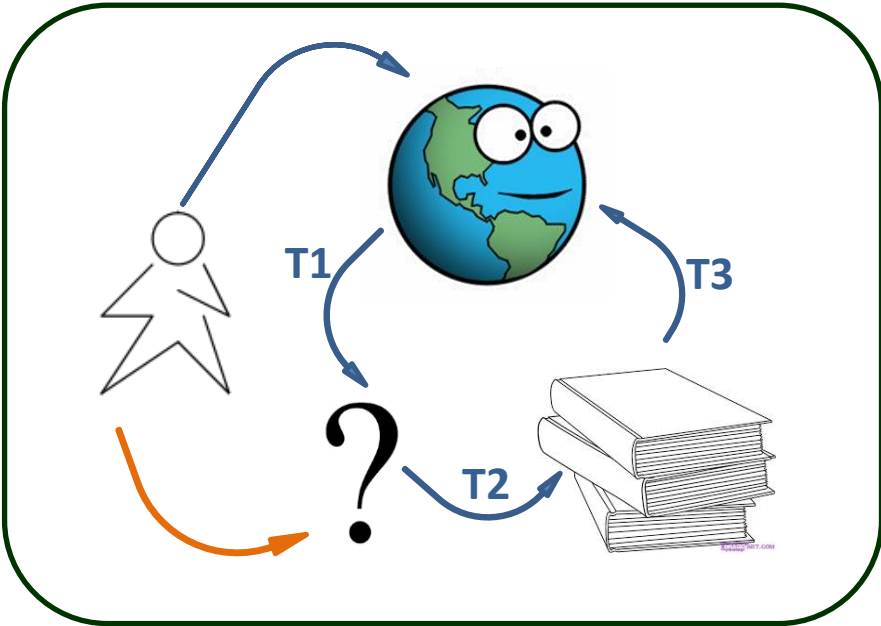


Reality

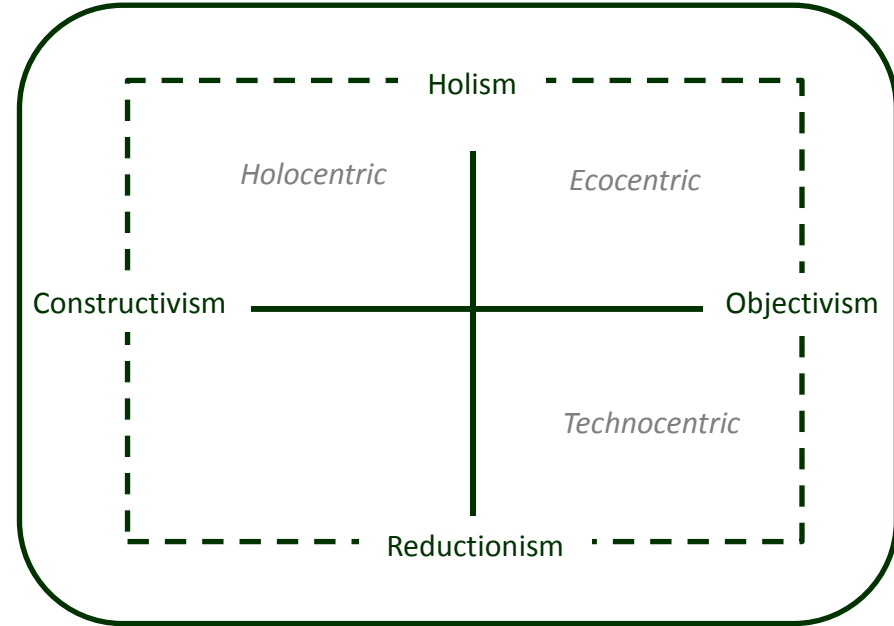


How putting agroecological principles into practice ?

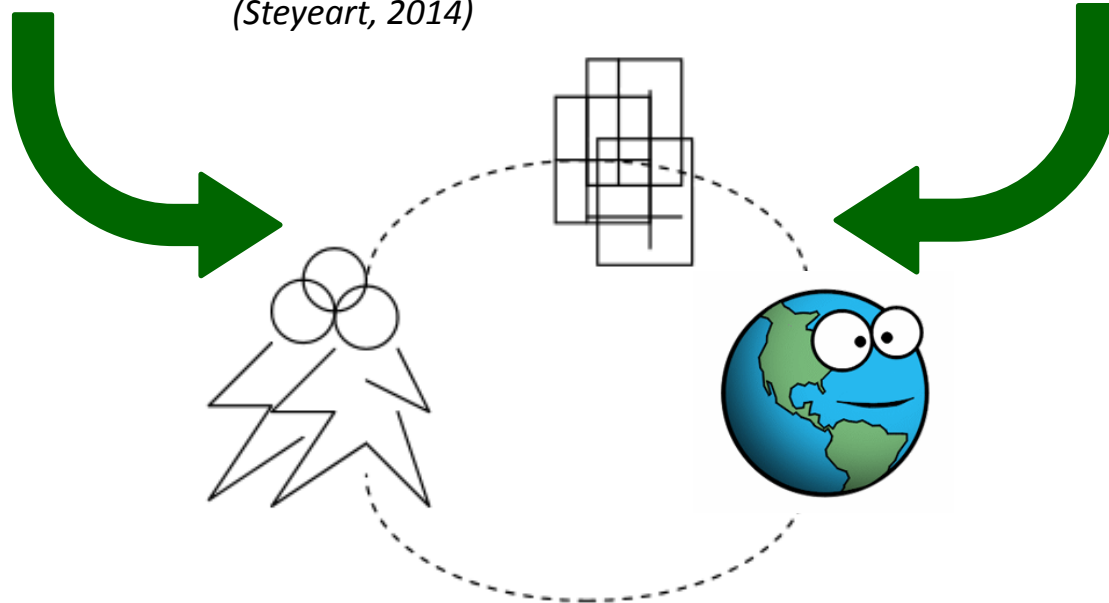
# Interdisciplinary seminar



(Steyart, 2014)



(Bawden, 1997)



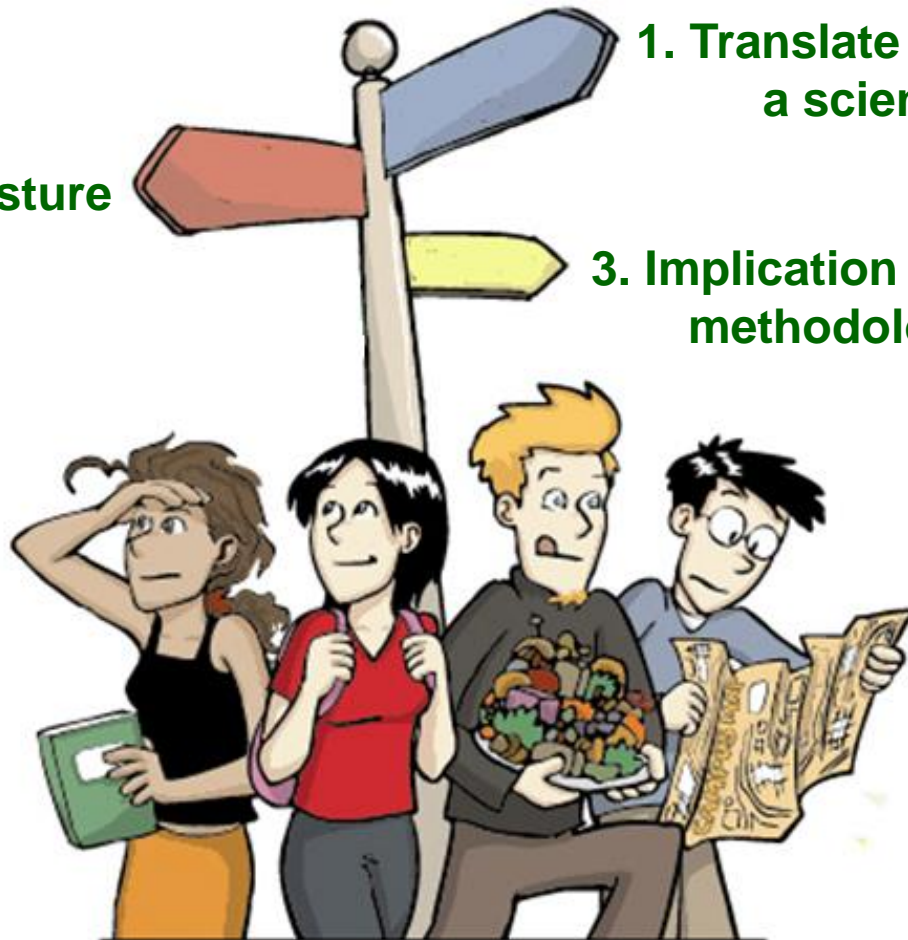


# How now does it challenge our way of doing research?

**2. Question our posture of research?**

**1. Translate a societal issue into a scientific problem?**

**3. Implication in terms of methodologies?**

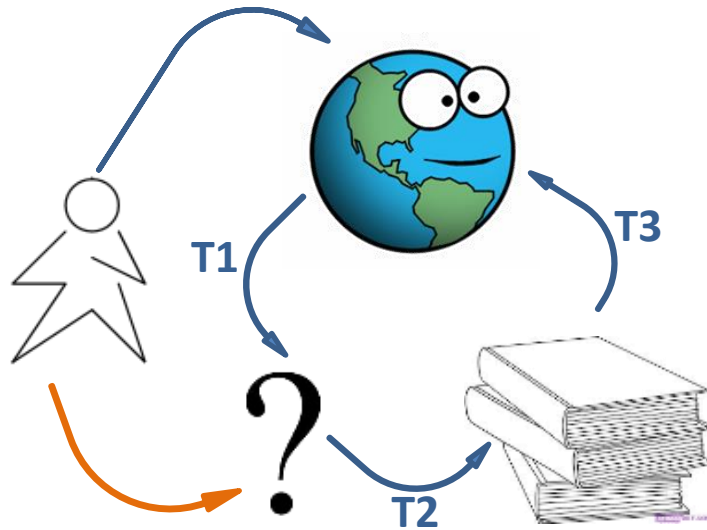


# 1. Translate a societal issue into a scientific problem?

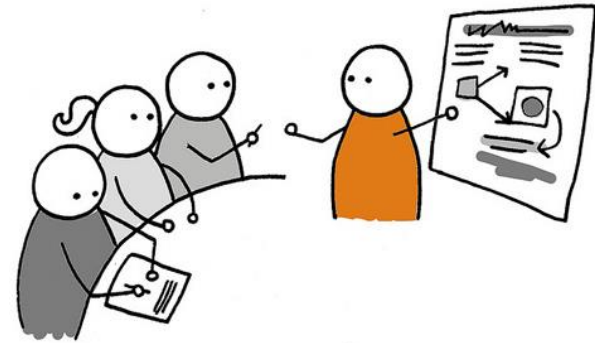




# Case: Ecosystem services (ES) in agriculture



T's: Field thesis committee

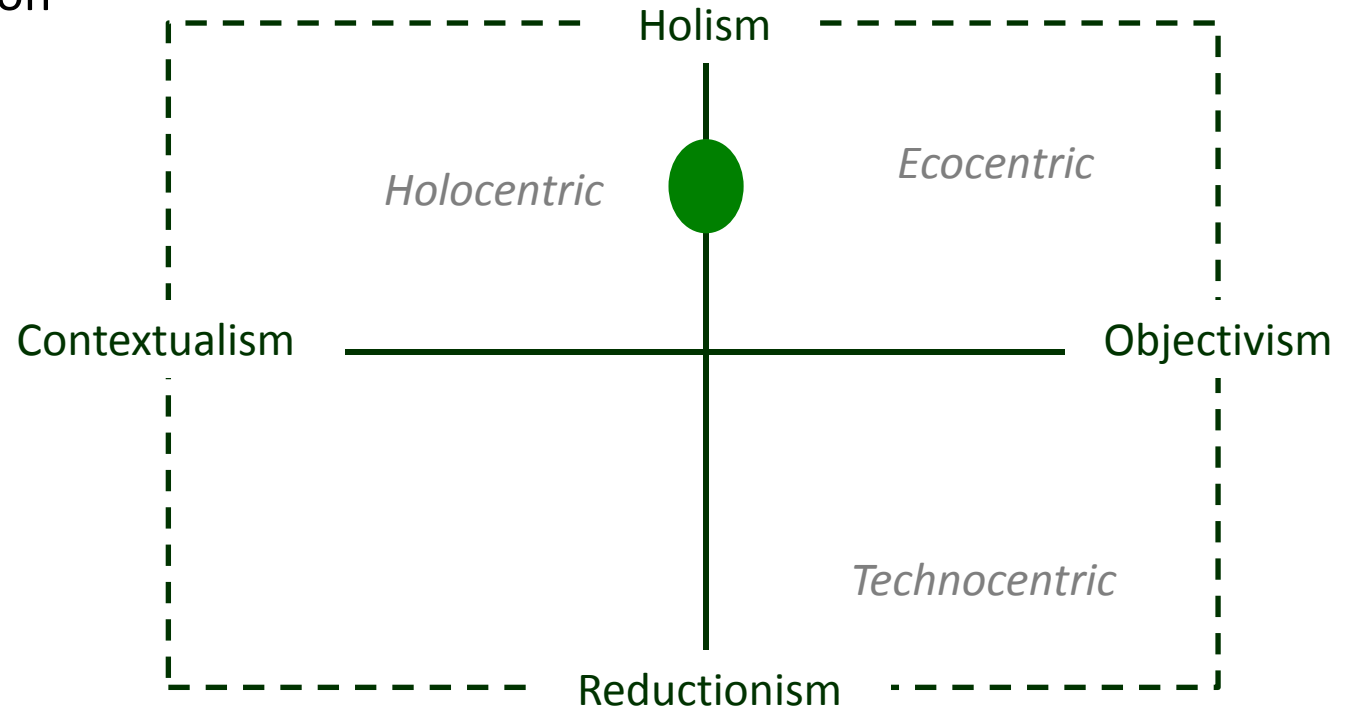


# Bawden 'Window on the world' matrix



**Tool used:** the framework of ES

- Biophysical ES valuation
- Social ES valuation



(Bawden, 1997)

## 2. Question our posture of research?



# Case: Learning processes

## Coordination – biodiversity and farming

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**Locked in public policies**

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**Transformative  
BUT Posture**

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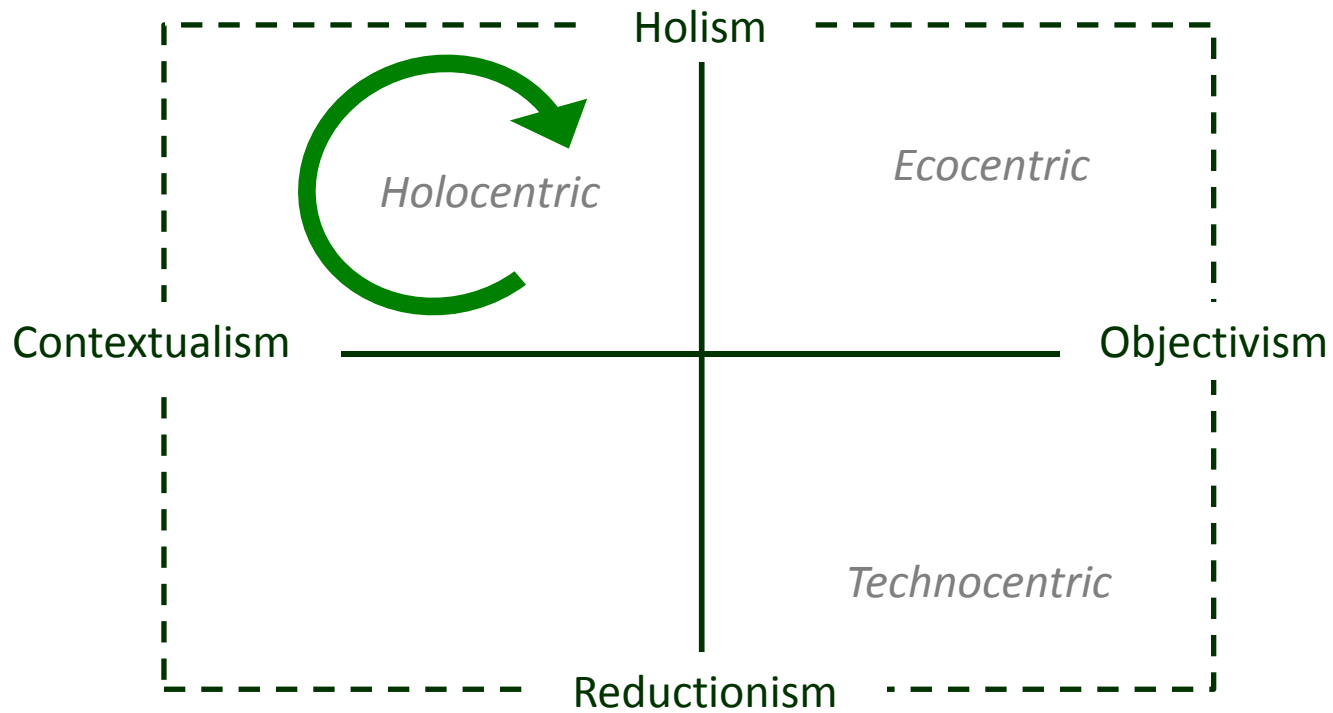
**Comprehensive  
BUT Topic**

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**Farmers searching for autonomy**



# Bawden 'Window on the world' matrix



(Bawden, 1997)

### 3. Implication in terms of methodologies?







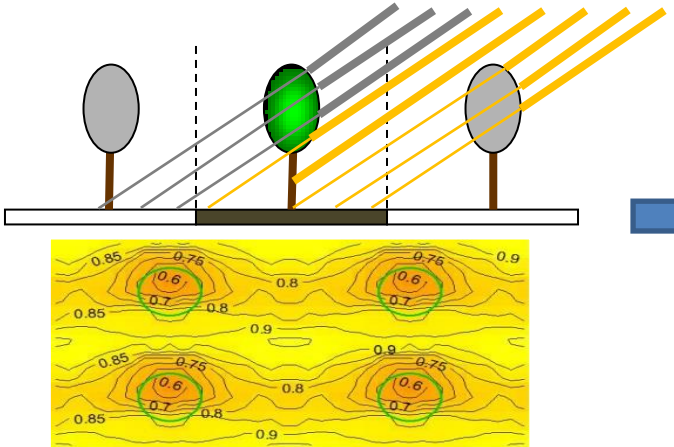
# Case: Agroforestry system in Belgium

## Agronomic field experiment



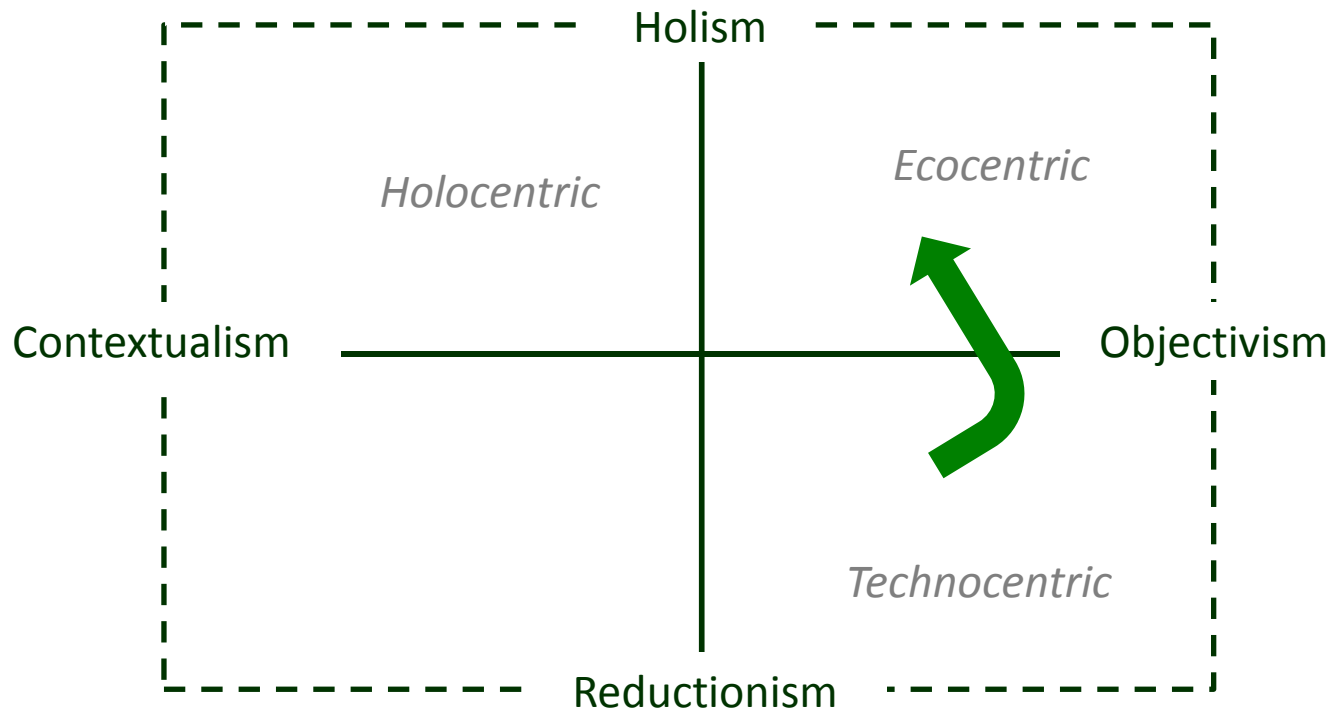
Quantification of process

## Modeling



Management tool

# Bawden 'Window on the world' matrix

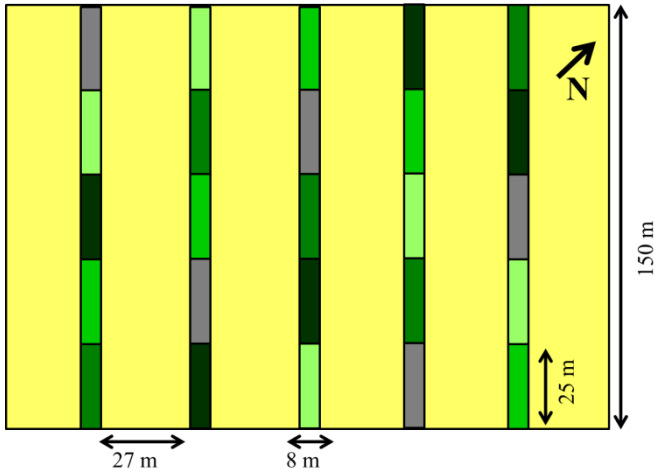


(Bawden, 1997)

# Case: Wildflower strips for controlling pests



## Experimental design



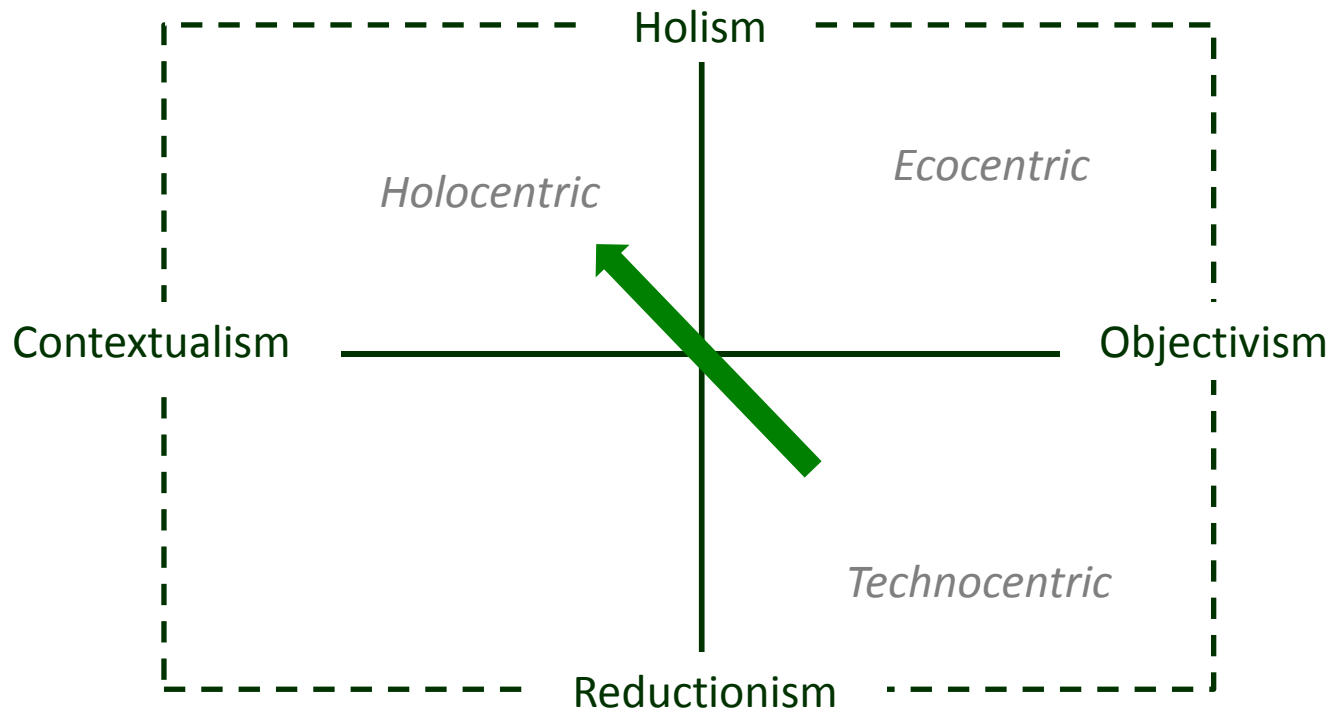
**Optimizing flower mix composition**

## Semi-directive surveys



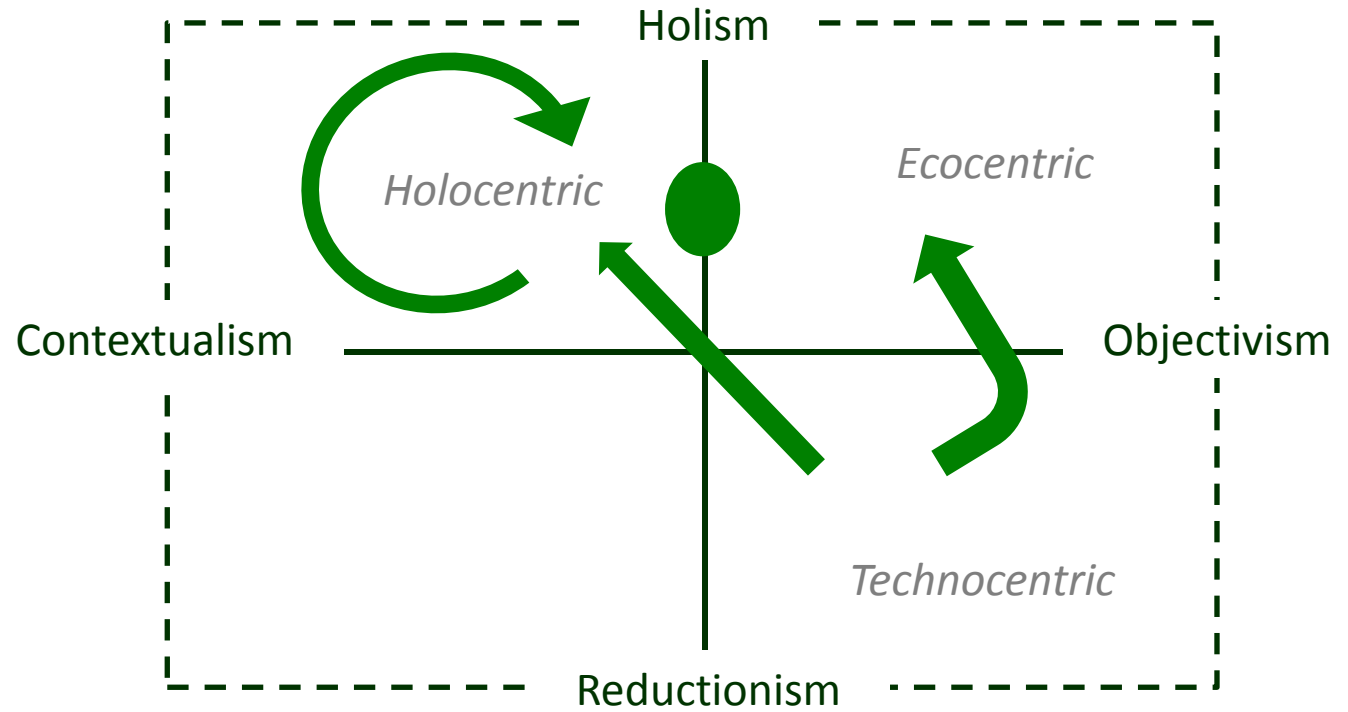
**How farming context affect wildflower strips implementation**

# Bawden 'Window on the world' matrix



( Bawden, 1997 )

# Conclusion



(Bawden, 1997)





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# THANK YOU !

## For more information

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