

# The VASA project - Trends in Agriculture

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Stakeholder: M. Mouton (Bill)

The logo for ALTERNet features the word "ALTERNet" in a bold, sans-serif font. "ALTER" is in blue and "Net" is in yellow. To the right of the text is a stylized graphic of a plant branch with several blue leaves and three yellow stars arranged in an arc above the leaves.

**ALTERNet**

# Objectives

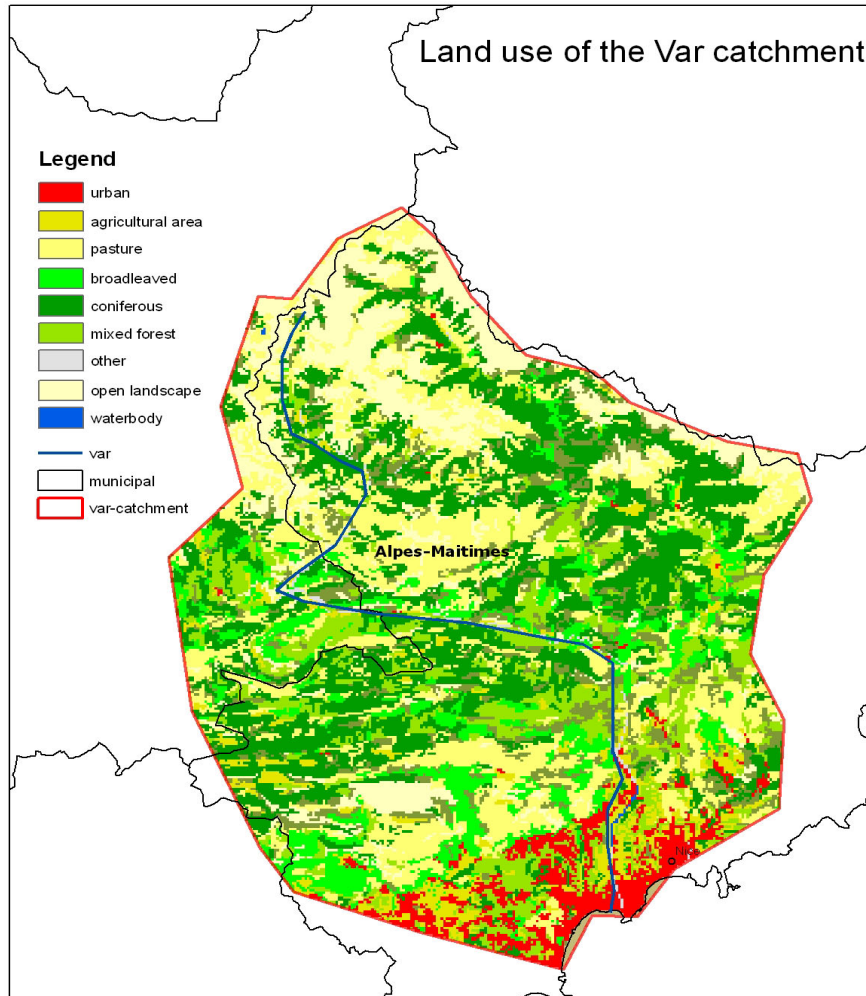
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*”To develop an adaptation strategy for the agricultural sector of the VAR catchment aimed at reducing vulnerability under 4 different scenarios”*

- What are the main drivers and pressures?
- What are the vulnerabilities?
- What strategies can reduce vulnerability?

# The Var Catchment – Agriculture

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- Domestic animal husbandry (especially sheep farming)
- Cultivation of different cereals, vegetables, fruit trees, lavender and olives
- Currently, traditional farming is decreasing (Abandonment of rural land and forest areas are increasing)

# Methods

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## 1. Applied multi-scenario approach

→ ecosystem + socioeconomic impact assessment

## 2. Applied 4 different scenarios from Millennium Ecosystem Assessment (MA)

→ Two time slices 2020 & 2050

→ with including narratives of SRES-scenarios

## 3. Assessed possible impacts in agriculture sector & adaptive capacity

→ Combined indicators (e.g. climate, land use, politics, economics) to assess vulnerability

→ Contact with stakeholder of agricultural sector

# The Stakeholder - M. Mouton

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- Lives in lower VAR Catchment
- > 1000 sheep
- Workforce: one shepherd
- Some crops

## Problems:

- Decreasing viability sheep farming
- Water availability
- Administrative barriers

# Drivers & Pressures - global

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Drivers	Pressures	Global Orchestration	Technogarden
Climate	Temperature	++	+
	Precipitation (Summer)	--	-
	Extreme events	+	+
Population	Rural to urban shift	++	+
Land Management	Abandonment	++	<b>0</b>
Planning & Policies	Subsidies	-	+
	Management policies	<b>0</b>	+
	Resarch & education	+	+
Economic developement	International markets	--	-
	Tourism	-	+

# Drivers & Pressures - regional

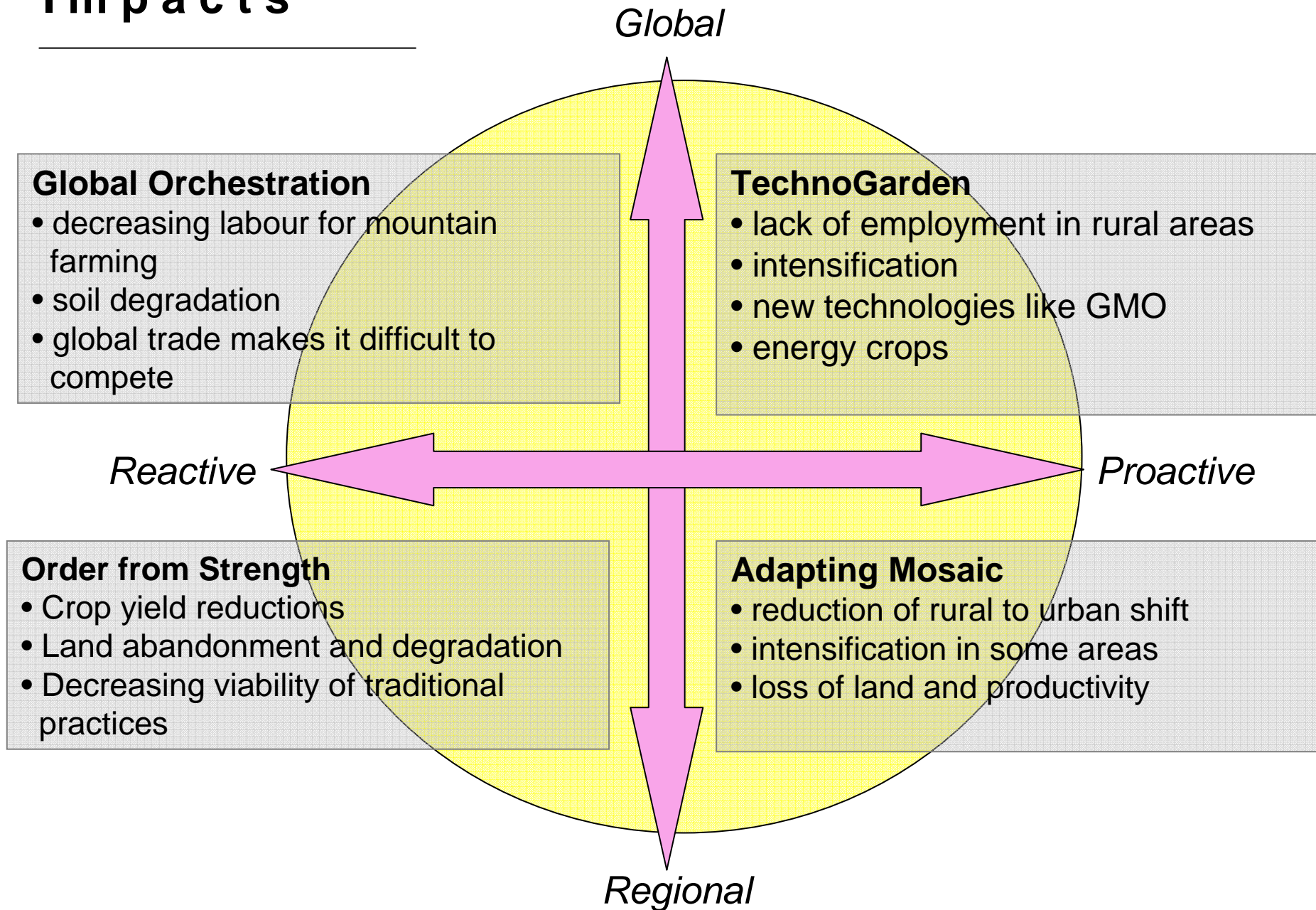
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Drivers	Pressures	Order from Strength	Adapting Mosaic
Climate	Temperature	+	+
	Precipitation (Summer)	-	-
	Extreme events	+	+
Population	Rural to urban shift	+	-
Land Management	Abandonment	+	-
Planning & Policies	Subsidies	+	+
	Management policies	+	+ [++] <sup>1</sup>
	Research & education	<b>0</b>	+ [++]
Economic development	International markets	-	<b>0</b>
	Tourism	--	-

<sup>1</sup>2050 trend

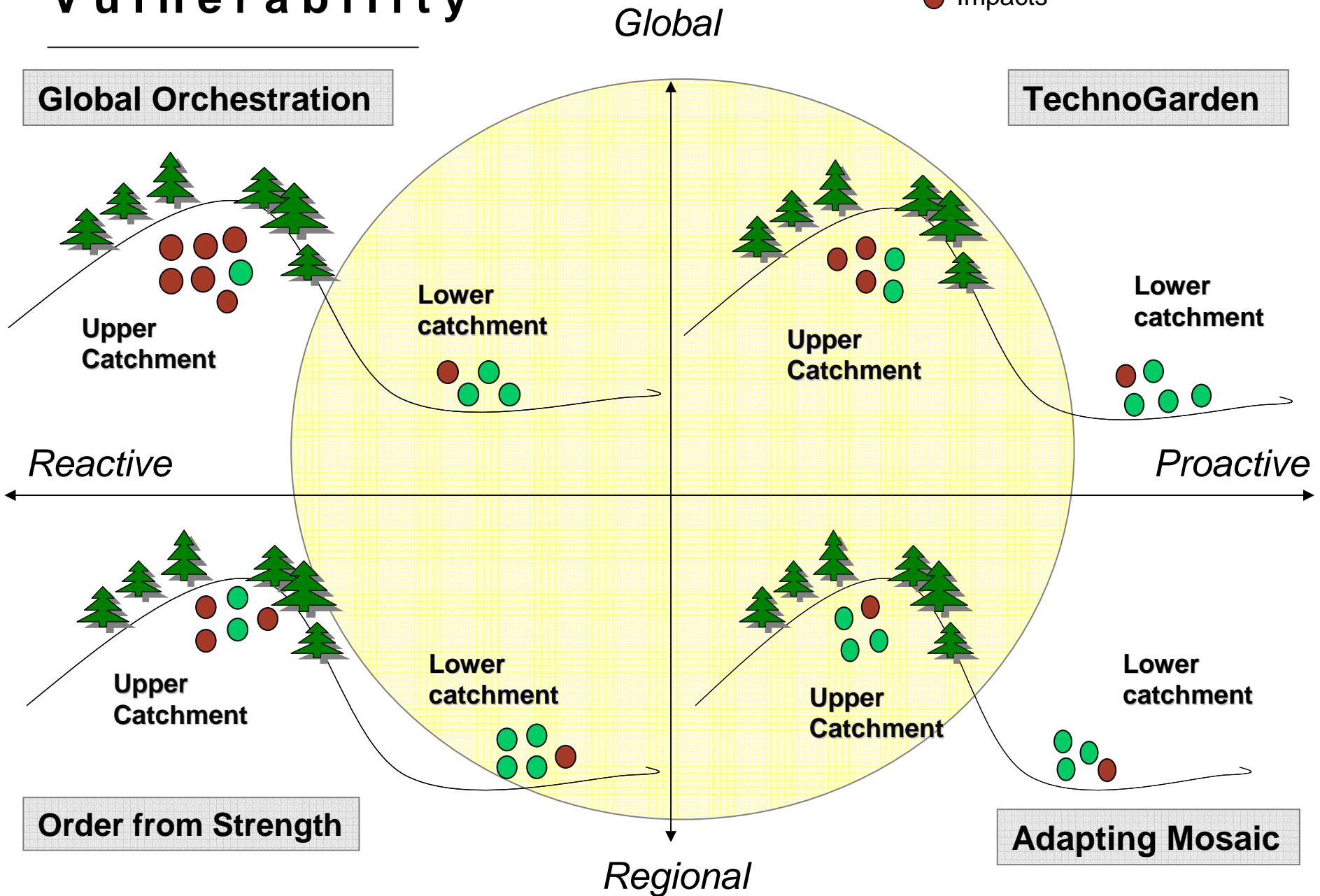
# Impacts

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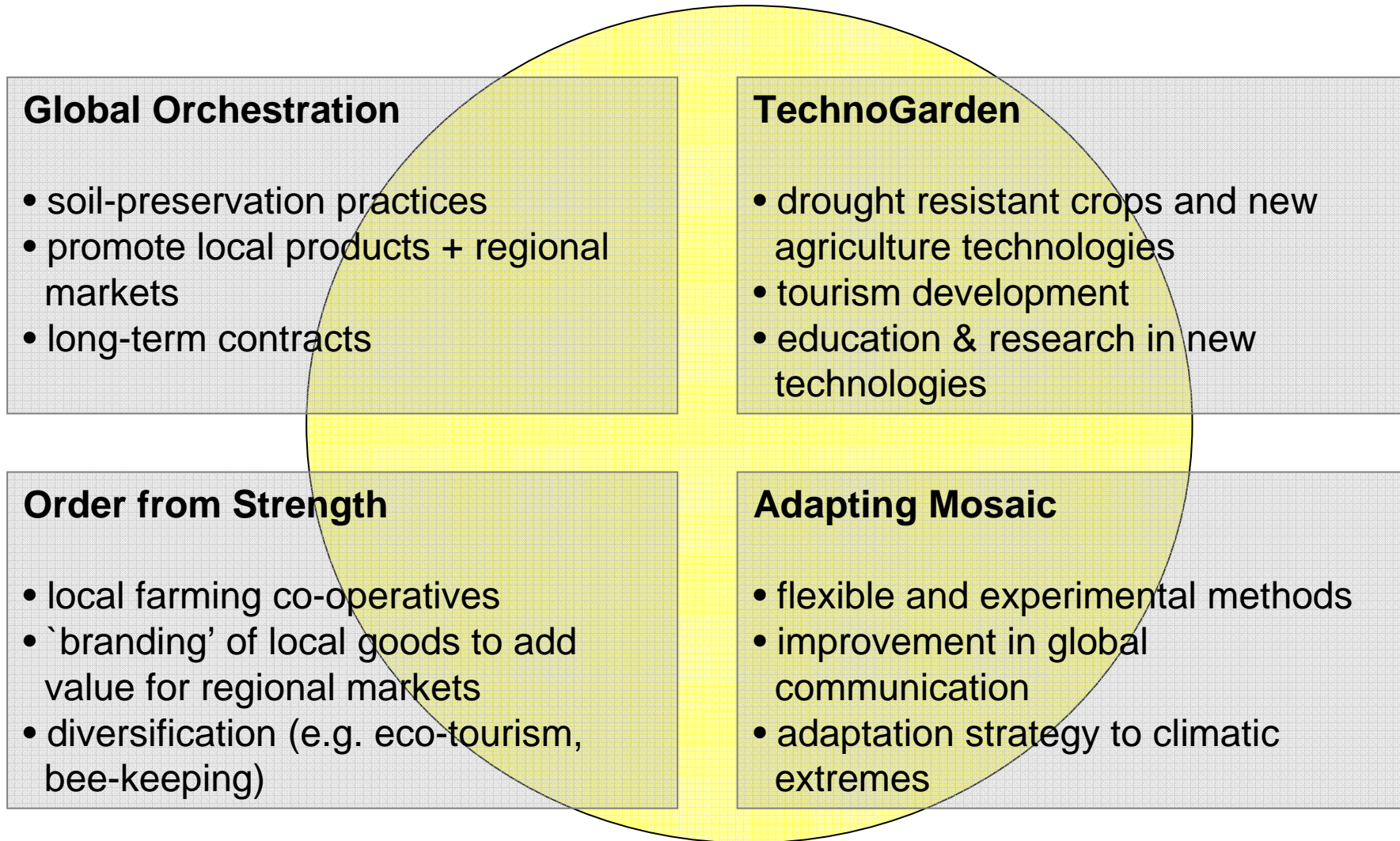
# Vulnerability

- Adaptive capacities
- Impacts



# Adaptive Strategy

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# Conclusions

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- Key impacts include **land abandonment, soil erosion, drought, intensification**  
→ decreasing viability of sheep-farming, loss of traditional cultural landscapes
- Vulnerability is highest in the Global Orchestration scenario and in the upper part of the Var catchment
- Impacts and vulnerability are similar in 2020 and 2050 but...  
...adaptive strategies should be developed early with the aim of managing the regional agriculture sustainably so as to protect livelihoods and biodiversity.

## **Key strategies for managing change:**

- Build adaptive capacity in upper catchment through local initiatives and stakeholder participation
- Reduce risk of environmental degradation by introducing sustainable and/or environmentally sensitive management practices and support research and education in biodiversity and ecosystem services.
- Diversification of enterprises

Thank you !

