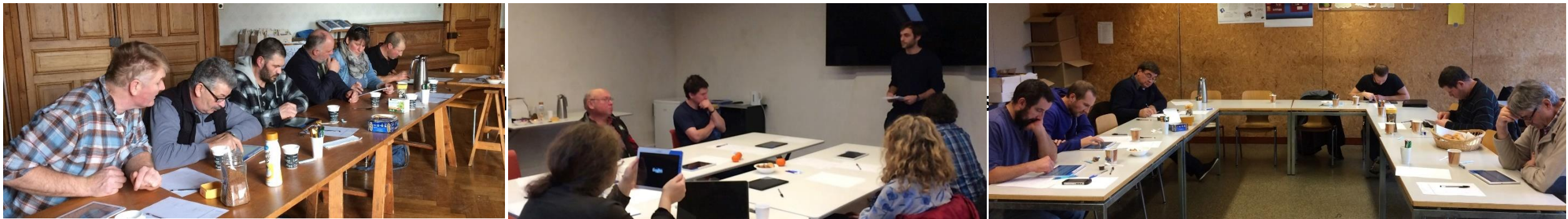


Assessing and building farming system resilience in Switzerland

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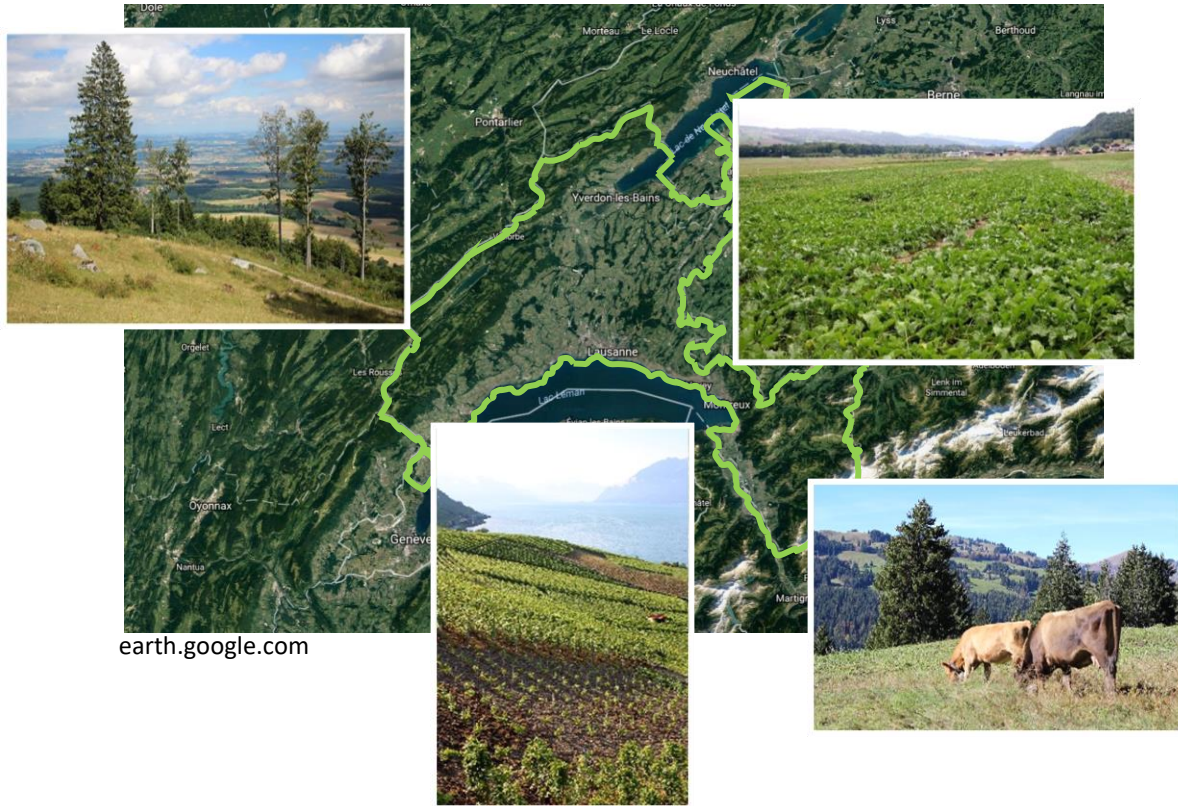


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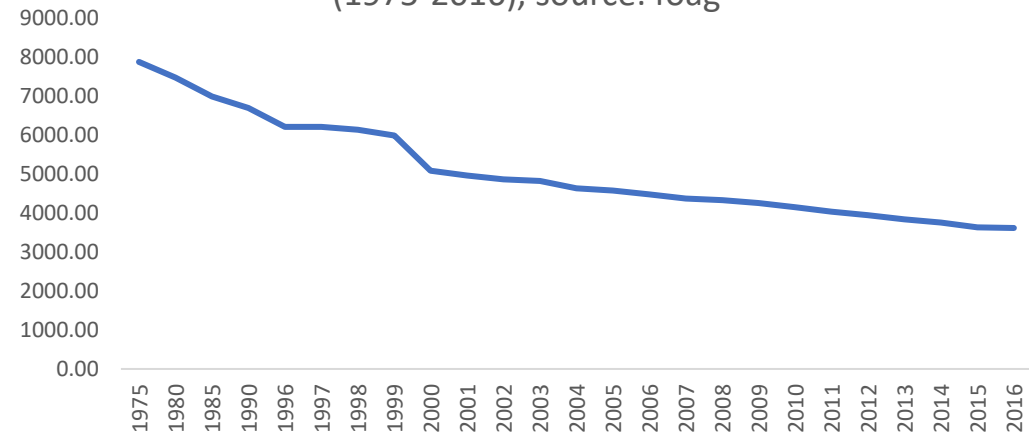
FiBL

Introduction: challenges to agriculture in Canton de Vaud



earth.google.com

Number of farms in the canton
(1975-2016), source: foag



Policy changes since 1992

Climate change

Social pressure for agroecology

Fear of liberalism

Objectives of the project

- **Assess** the resilience of Swiss farms from Canton de Vaud using the SHARP tool developed by the FAO and adapted to Switzerland.
- **Identify and spread** solutions/innovations to build resilience at a farm level.

SHARP: Self-evaluation and Holistic Assessment of climate Resilience of farmers and Pastoralists

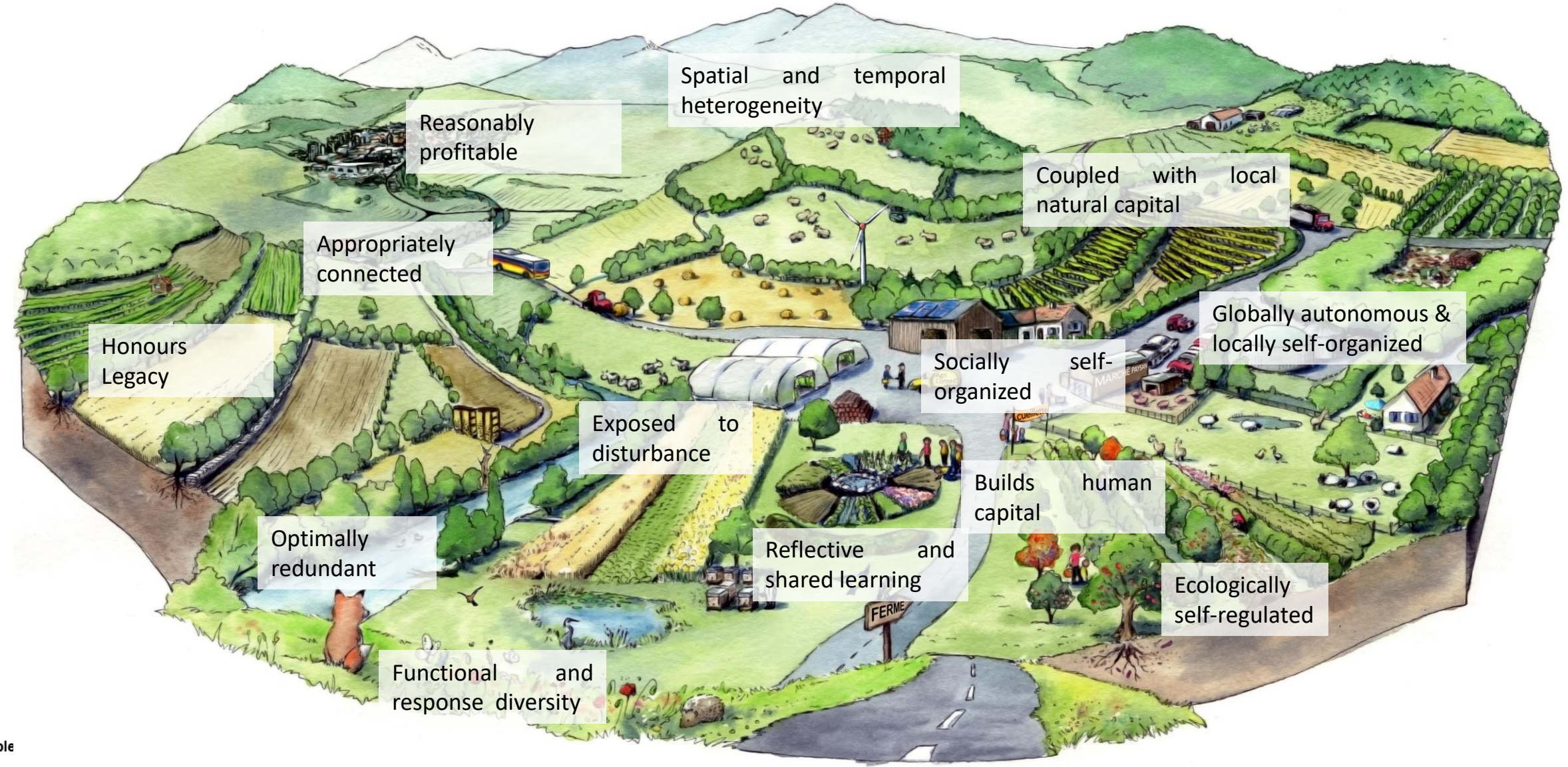
Initial purpose

- FAO : Identify relevant **development projects** to build **climate resilience** at a **farm level**
- Stay relevant for very different contexts, thus be an **adaptable tool**.
- Provide **holistic** assessments based on people's priorities and knowledge.

Scientific background

- Cabell & Oelofse literature review (2012) on farm resilience.
-> 13 indicators of farm resilience from an empirical perspective.
- Choptiany et al. (2016) translate this list of indicators into a set of questions and build a first version of SHARP.

The 13 behaviour-based indicators of resilience



Score computation

SHARP has 3 different question types associated to different scores, all rated on a 0-10 scale

- **Technical questions** giving a more expert-based resilience assessment
- **Adequacy questions** displaying a farmer's self-perceived satisfaction for each topic
- **Importance questions** displaying a farmer's perceived importance of each topic for his farm/household

Each technical question relates **to one topic** and **one or more behaviour-based resilience indicator**.

Questions can thus be grouped by topic or indicator.

The assessment for each topic and indicator is simply the **average of all related technical questions**.

Adequacy and importance questions are mostly used for prioritizing projects by the FAO but are not linked to the resilience indicators. They can also help understand farmers' area of concerns.

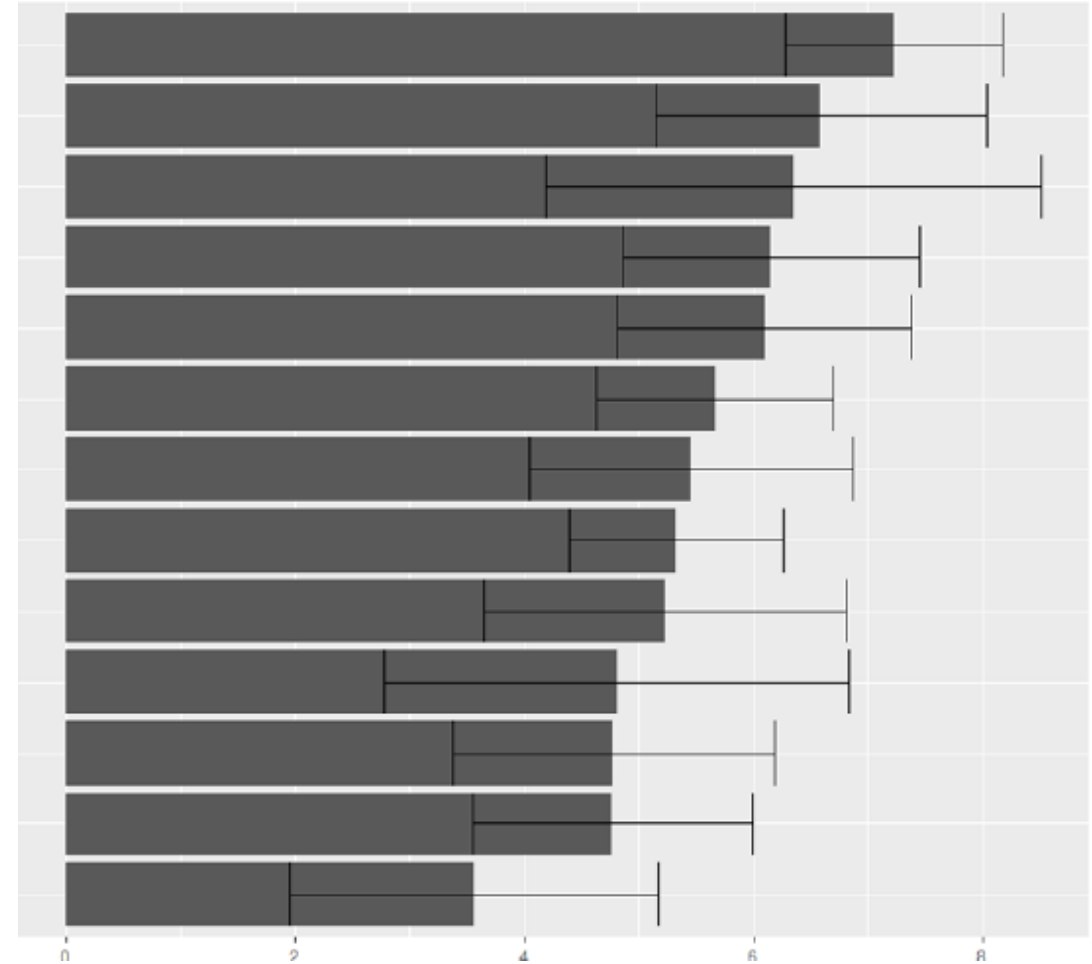
Local discussion workshops with farmers

- Same farmers were invited for 2 workshops (data collection and discussion)
- Each of the 10 workshop areas corresponded to one region (often a district)
- The topics discussed were the ones considered both with low resilience according to the survey, and of high importance by the participants.

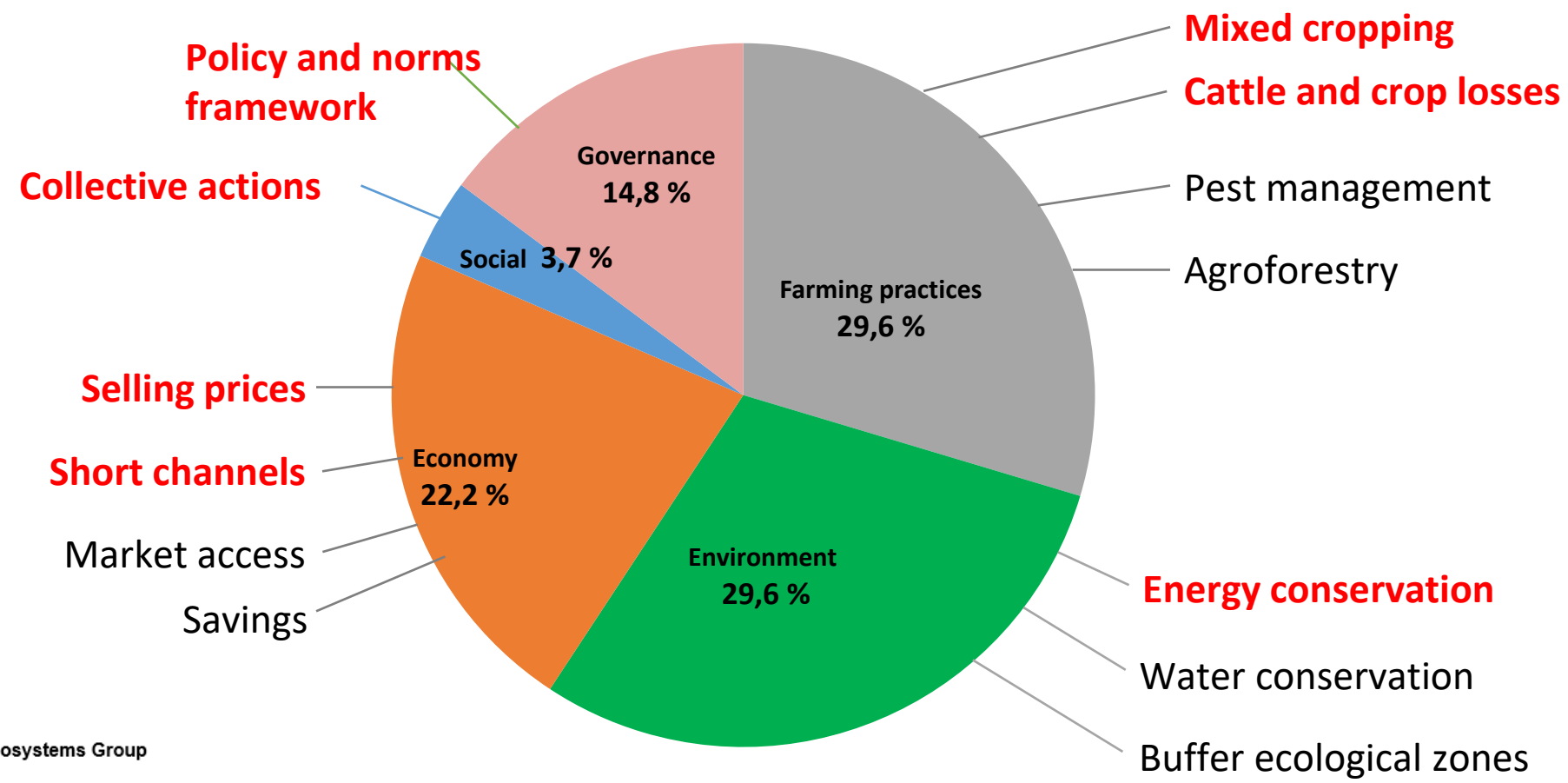


Key results by indicator

- Builds human capital**
- Appropriately connected**
- Spatial and temporal heterogeneity**
- Reflective and shared learning
- Reasonably profitable
- Coupled with local natural capital
- Socially self-organized
- Globally autonomous and locally interdependent
- Optimally redundant**
- Ecologically self-regulated**
- Honours legacy**
- Functional and response diversity**
- Exposed to disturbance**



After having identified them as problematic, the following topic were discussed in workshops with farmers



Discussion on the causes of low resilience in workshops with farmers

Policies

- Too strict, numerous and fluctuating **norms/legal aspects**
- Too high **dependence on subsidies**
- Lack of long-term **support towards innovative practices**

Discussion on the causes of low resilience in workshops with farmers

Knowledge

- Lack of **practical knowledge and experience**
 - Cover crops are considered interesting but too little economic and agronomic knowledge on this topic limits their implementation.
 - marketing and contract negotiation

Market Prices

- High dependence on **a few input sellers and output buyers.**

Limitations of the study

- Too great diversity of situation. A focus on one region or production branch could have provided more insights
- Possibly high tendency of farmers to complain about the agricultural policy when invited by the administration to a workshop broadly discussing agriculture
- Subjectivity in the choice of questions and scoring
- Bias in terms of participants due to varying degrees of available time and interest. Participants are likely to be more resilient than the average farmer.

Main conclusions

- **Agricultural policy** has an ever-stronger impact on farms
 - High **dependence on subsidies**, major stress and driver for farms and farmers
 - Need for a **more flexible** and **long term** agricultural policy
- High concern among farmers on their role and their autonomy. Economic actors or public service officers?
- **Agroecological practices** need extra **support** to be broader applied
 - Many farmers are waiting for **local practical and economic examples** to adapt them to their farm. Support to innovations and exchange between farmers would help.
- **Training** for farmers needs to be adapted to their new needs and to agroecology, incl. for already installed farmers.

Follow-up after this project

- Resilience assessment and innovation exchange platform
www.resiliencepaysanne.ch
- Project to implement and better understand agroforestry in Switzerland
<https://www.agroforesterie.ch/projets/projet-agroforesterie/>

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