

PRACTICE ABSTRACT

SHARING EXPERIENCES FROM: SWITZERLAND

Test and demonstration of adapted harvesting mechanization for small scale harvest on high-stem fruit trees in difficult terrain

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Test and demonstration of adapted harvesting mechanization:

1. **Bosco olivespeed** - is a net-harvester, originally developed for olive harvest. Michael Fässler a MIXED-corefarmer proposed to import and test this harvester for the Swiss MIXED system due to the following reasons: a) Big increase in efficiency, replacement of hand-harvest; b) High fruit quality due to soft catch on the net; c) Manageable by few people (3-4); d) Can be used in steep terrain. There is no such machine used in Switzerland by now - such trees were harvested by hand.

2. **STIHL SP-452** - Motorized, portable shaker by STIHL was not known by the Swiss network and presented at a MIXED corefarmer-meeting. Several corefarmers showed interest in testing this machine. Allows shaking of single trees/branches by one person. Could supplement hand-harvesting and increase efficiency of smaller scale production.

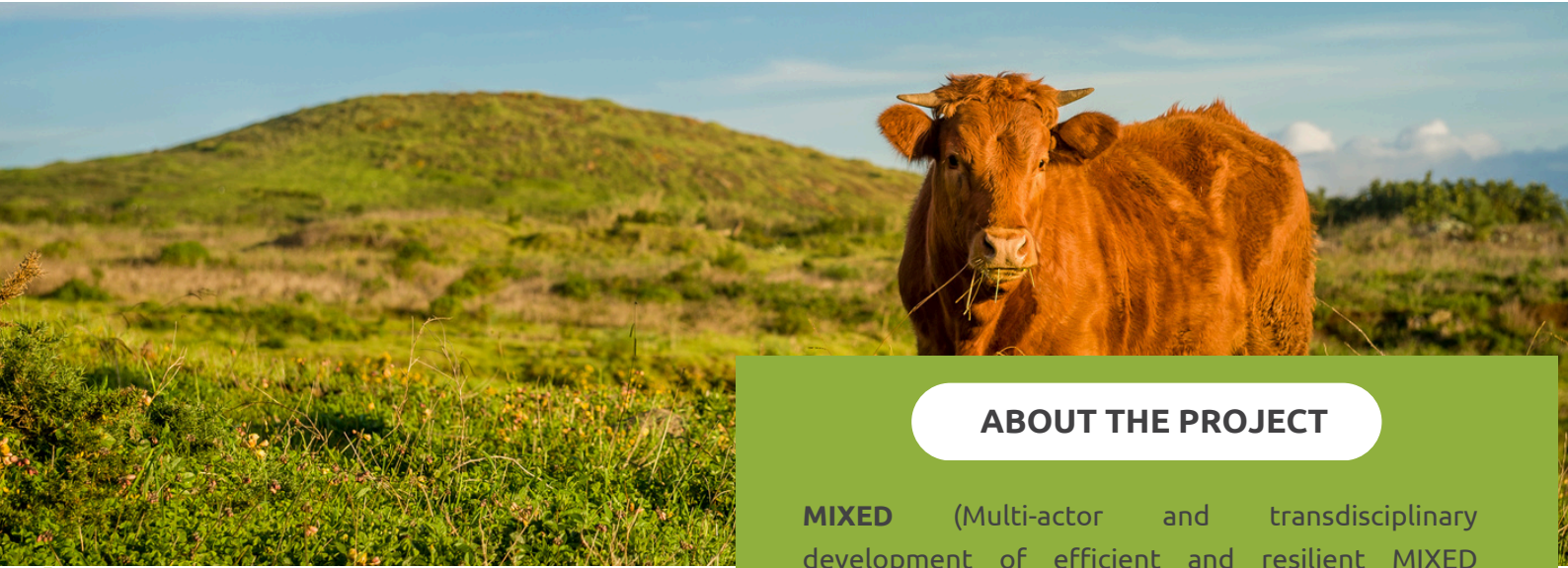
Demonstration day at Ruedi Obrist's farm on the 7. of August: The "bosco olivespeed" and the "STIHL SP 452" were showed and demonstrated on young high-stem plum trees. Interested Farmers were invited by the corefarmers directly and via Hochstamm Suisse. Even though the field season was full on, 15-20 interested farmers showed up. Several trees were harvested, questions asked and already further lending/exchange of the machines was organized by the farmers.

Conclusion:

- The new mechanization allows harvesting with small groups of 3-5 people (big mechanization needs 15-20 people and is only efficient for big plots).
- "Bosco olivespeed" with correct tires can be used in steep terrain where by now only harvest by hand was feasible.
- Big interest by farmers in general.
- Trees up to 10-15 years can be harvested, older trees are probably too big for the "bosco olivespeed".
- STIHL SP 452 caused damage to the bark of young plum and cherry trees.

Improvements are developed and tested.





ABOUT MIXED IN SWITZERLAND

In Switzerland MIXED is implemented jointly by Hochstamm Suisse and FiBL. The project focuses on fruit trees and livestock with the involvement of one group of farmers practicing MiFAS (Mixed Farming and Agroforestry Systems).

ABOUT THE PROJECT

MIXED (Multi-actor and transdisciplinary development of efficient and resilient MIXED farming and agroforestry systems), an EU-project, is supporting the development of European Mixed Farming and Agroforestry Systems (MiFAS) that are more efficient and resilient to climate changes.

7M€ BUDGET	19 PARTNERS	10 COUNTRIES
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Swiss farms are small structures and can be characterized as 'family farming'. A typical Swiss tree production system includes around 100 fruit trees per hectare. More extensive fruit tree production also exists, with for example 20 trees per hectare but here the focus is rather on the 'intensive' and 'typical' system. The Swiss MiFAS is primarily engaged in North Western and Central Switzerland.



MIXED partners from Switzerland:

FiBL

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