

FARMER –RESEARCHER PARTNERSHIP, SANTA CRUZ, CALIFORNIA

CATEGORY:

POLICY RESEARCH FIELD CLIMATE

LOCATION/SCALE:

Santa Cruz, California

ORGANISATION:

University of California at Santa Cruz (UCSC)
Agroecology Program

PERIOD:

1988 - now

IN A NUTSHELL

This example is documenting how strawberry monocultures turned into sustainable agroecosystems through a 30-year farmer-researcher partnership.

It all started with a research partnership between a farmer and a researcher for agroecological transition of the conventional monoculture strawberry production. Step by step changes and improvements of the practices, thereby proving the feasibility in the field, has been a successful approach to drive a sustainability transformation. Through adoption of the practices by other farmers and companies in the region and an increased consumer awareness, organic production has scaled up and lead to an 8-fold increase of organic strawberry production between 1997 and 2016. At the later stage of the transformation also direct marketing was a key to success to provide market incentives for the farmers.

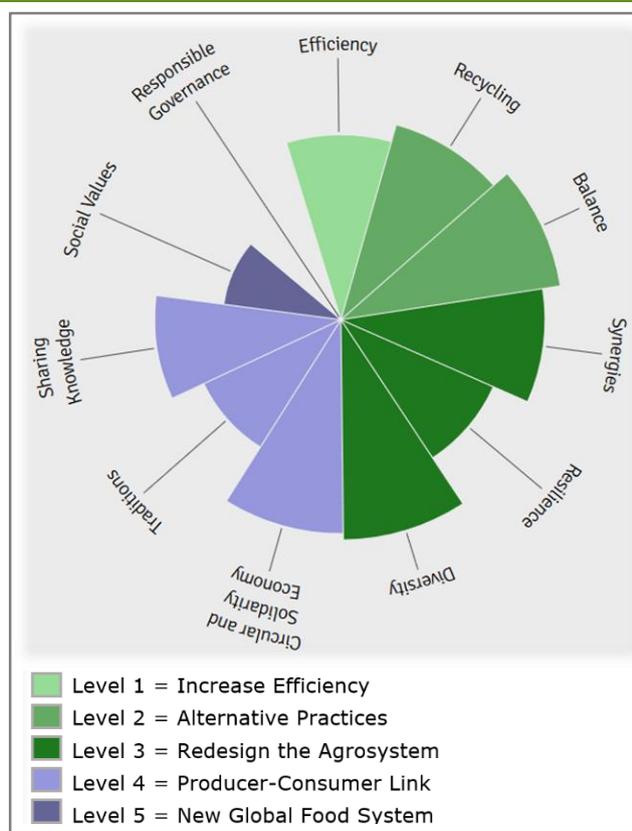


Figure: Assessment of the FRP based on FAO Elements of Agroecology and Gliessman's five levels of food system change

CONTEXT

Monterey and Santa Cruz counties account for about half of the total California strawberry crop, producing more than \$953 million worth of strawberries on 13,063 acres in 2016. Strawberry production has traditionally been done in a very conventional, water and chemical input intensive way. In 2017 a key fumigant, MeBR, was nationally banned, increasing the demand for and transformation to sustainable alternatives.

OBJECTIVE

The main goal was redesigning traditional large-scale monoculture strawberry production systems into an agroecological system through a researcher-farmer partnership by starting on one model farm and subsequent step-by-step scaling improvements and upscaling.

KEY INTERVENTIONS/RESEARCH

FARM LEVEL:

- Stepwise input substitution
- Model farm through farmer-researcher partnership
- «push-pull» pest management techniques
- Sophisticated crop rotations, intercropping
- Comprehensive, system-wide redesign that nurtures complexity and diversity

REGIONAL/NATIONAL LEVEL:

- Provision of access to research to solve upcoming challenges in the field (research-partnership)
- Alternative direct sales network

LESSONS LEARNED/CHALLENGES

This example of a larger scale transformation of strawberry monocultures is indicating that with sufficient resources, time and support from (participatory) research, transformations of a system in a very sceptical setting- the approach was considered as radical and - is possible.

To provide a price incentive and compensate the higher labour costs, decreased input costs and a direct sales system where also a key success factor to support this transition

Challenges for the future are mainly environmental ones such as soil erosion, nutrient leaching, groundwater depletion and saltwater intrusion.

RELEVANT LINKS

- IPES 2018: BREAKING AWAY FROM INDUSTRIAL FOOD AND FARMING SYSTEMS: Seven case studies of agroecological transition
https://ia601506.us.archive.org/7/items/CS2ExecutiveSummary/CS2_ExecutiveSummary.pdf

