Research Institute of Organic Agriculture FiBL
info.suisse@fibl.org | www.fibl.org




# Case studies on innovative combined indoor/outdoor organic pig systems

An overview of six innovative systems analysed in the Core Organic project POWER

IAHA Pre-Conference, 7th September 2021, Anna Jenni

# The project POWER and the goals of WP3

**POWER**

- Core Organic
- Animal welfare and resilience in organic pic production
- Environmental impact
- Total 8 countries
- Different topics (piglets, weaners, fatteners, sows)

**WP3: Innovative Systems**

- Italy, Denmark and Switzerland
- Innovative combined systems (indoor / outdoor)
- Animal welfare indicators
- in every season for one year
- GOAL: Factsheets with detailed description of systems for farmers and advisors

FiBL

POWER

# Why pig farming systems on pasture?

**Multi-factorial systems**

- With good management high animal welfare
- Difference between countries
- Consumer demand
- Inventive farmers

**Inspire others**

FiBL

POWER

# Material and Methods

Visits

Interviews

| Protocol | Content | Collected data |
|---|---|---|
| **Welfare indicators** | Animal-based indicators | Behaviour observation, soiling, consistency of faeces, runts, ectoparasites, body condition, eye inflammation, ocular discharge, ear lesions, injuries, shoulder lesions, vulva lesions, tail length, tail lesions, lameness, sun burn, etc. |
| | Resource-based indicators | Hospital pens, flooring and pen hygiene, provision of water, elements of pen design and enrichment |
| **Lifecycle Assessment** | Data on environment and economy | Management, productivity, manure storage, labour, costs, feed components, on-farm feed production, grass cover, nutrition input into soil, use of medication |
| **Resilience questionnaire** | Data on resilience and vulnerability | Reactions of the farms to various scenarios, impact of changes on farms, possibilities for farms to adapt to changes (e.g. climate, input costs, labour, legislation, outbreak of pig diseases, price for pigs and pork etc.) |

FiBL

POWER

# Italy

## IT1

- Pregnant sows, one boar: in olive grove
- Lactating period: stable with concrete outrun
- Weaners: Large paddock with grass
- Fatteners: fenced area with new paddock every two weeks (8 ha)
- Long pasture season and feed pigs with different crops on the paddock (40% of feed)

## IT2

- All pigs: forest area, large paddock (1-3 ha)
- Change of paddock every two to three months
- Recover of forest area at least one year
- Feeding in the morning preserve vegetation cover

FiBL

POWER

Pictures: D. Bochicchio

# Denmark

## DK1

- Sows outdoors all year around (service area indoors)
- Houses: four sows with individual paddocks
- Houses are moved by tractor
- Use of paddocks with sows for six month
- 1.5 to 2 years recovery from pigs
- Nose rings

## DK2

- Fatteners outdoors all year around
- 150 fatteners per wagon, 180 m2 paddock
- Wagons and outrun moved by tractor once or twice a day
- Pigs walk in outrun while moving (cameras)
- The pasture is used again after 3 years

FiBL

POWER

Pictures: R. Thomsen

# Switzerland


## CH1

- Special huts that can be moved by tractor
- Isolated and adapted on size of hearth
- All pigs outdoor all year round (breeding and fattening)
- One year on the same paddock bevor moving
- Rent the land
- Integrated in crop rotation

## CH2

- Self-constructed trailer for fatteners, moved my tractor
- Feeding, water and sleeping area on trailer
- Movable fence
- Permanent grassland
- One or two weeks on the same paddock
- Winter period indoor with concrete outrun

FiBL

POWER

Picture 1: F. Müller
Picture 2: C. Bürgi

# Conclusion and Outlook

**Animal welfare**

- High (natural environment, space)
- high attention of farmer
  - Adaption of system
  - Direct marketing
- Parasite control
- Alternative Breed

**Pasture management**

- Different ways to preserve health of soil
- Integration in crop rotation influence can be balanced
- Permanent grassland: preservation of grass cover
- Adaption of the system to the location of the farm

FiBL POWER

## Thank you for your attention!

POWER