PPILOW

A workshop on business models in *organic* and low-input *outdoor* pig and poultry production

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Brussels

7th of March 2024

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 816172

Objectives of today's workshop

The aim of todays workshop is to elaborate the most critical features of and the most urgent actions needed to strengthen low-input outdoor and organic pig and poultry production in Europe.

However, the main focus is in organic production.

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Agenda of today's workshop

Agenda

9:00 Registration

9:15 Welcome, introduction of participants

9:25 Presentation of PPILOW project & business model ideas

9:40 Interactive session 1: Assessing the idea in small groups

- Welfare measures and the value proposition
- Distribution channels
- Potential impacts (benefits, disadvantages, costs, unintended consequences)

10:40 Break

10:50 Interactive session 2: What challenges need to be overcome?

- Which market actions are needed to deliver products to the market in a commercially viable manner?
- What policies can do to support the market penetration of proposed models?
- What risks/caveats/challenges are associated with the business approach?

11:50 Conclusion

- Selection of the most critical features (among those that you identified) and the most urgent actions
- Light lunch
- Closure

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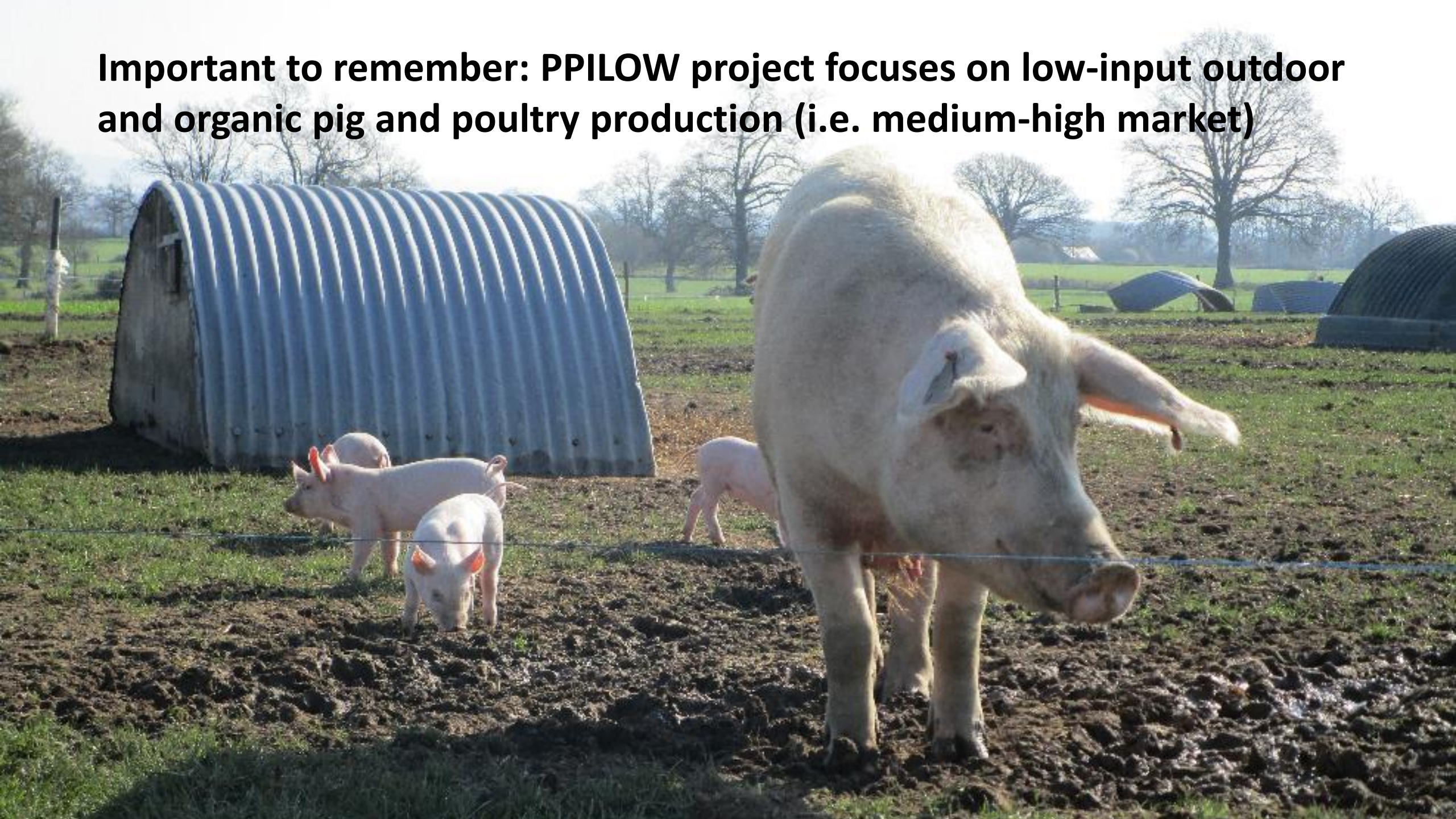
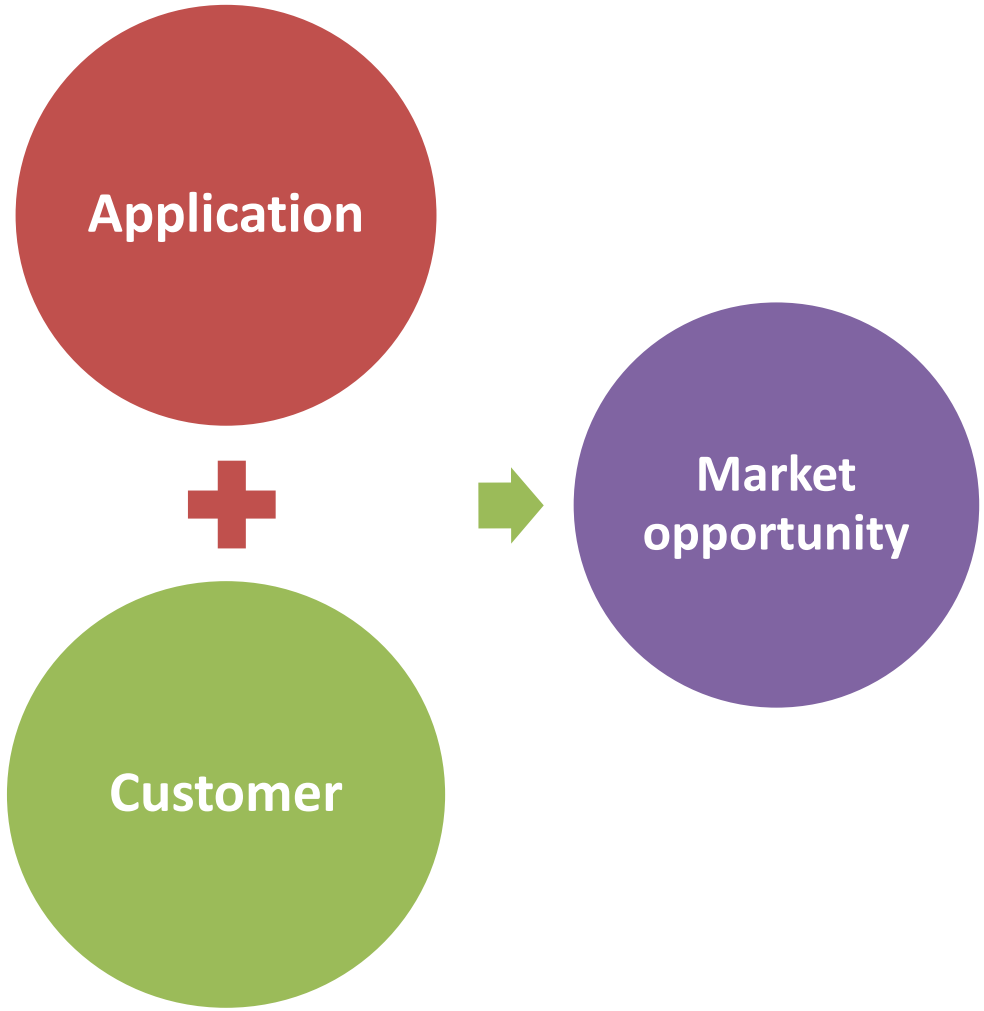
Important to remember: PPILOW project focuses on low-input outdoor and organic pig and poultry production (i.e. medium-high market)



PPILOW When does a market opportunity exist?



- A viable business must be profitable business
- Economic evaluation of costs and revenues is an essential part of evaluating a business model, but a business model is a broader concept

➔ How value is generated and how does the structure of value chain contribute?

- High challenge likely increases the costs (and hence the price), but also makes it more difficult to copy the business idea.

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Customer segments that you are targetting

What problem(s) they have? Who are early adopters?

Value proposition:

Clear and compelling message: Why your product is worth buying.

Solution: What are the top features?

Comparison: How things are done today?

Channels to reach the customers

How you will make money?

Costs & resources needed?

How & how much revenue is collected?

Metrics to measure your performance

Competitive advantage: How you can retain it? Is it easy to copy?

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We are investigating a business matrix

Value proposition **➔ How the product is superior?**	**How the customers are reached?** **Traditional supply chain**	**A short supply chain** .
A set of measures for enhanced organic pig production	Business case 1A	Business case 1B
A set of measures for enhanced organic poultry production	Business case 2A	Business case 2B

Farming in Europe is diverse!

Feature	Benefits	Disadvantages
Organic pigs (baseline)	Organic farming well-known, certified by competent authorities, environmental emissions per land area. Welfare benefits (e.g. natural behaviours). Emphasise farming system as a whole.	Elevated cost of production, strict regulations, antibiotics and feed additives mostly not allowed
Low-input outdoor (not organic)	Lower cost and less regulation than in organic	Price may be lower than in organics. Not harmonised Low degree of standardisation, often not certified


What did the consumers / the public think?

How do you perceive the conventional indoor production of poultry and pigs (median responses)?

	Unpleasant / Pleasant	B			e / Safe	Unethical / Ethical
FI	3.00				0	2.00
DK	3.00				0	3.00
RO	4.00				0	4.00
GB	2.00				0	2.00
DE	2.00				00	2.00
BE	2.00				.00	2.00
NL	3.00				3.00	3.00
FR	2.00	2.0			2.00	2.00
IT	2.00	2.00			2.00	2.00
All	2.00	2.00			3.00	3.00

For most of the countries, consumers had either "neutral" or "negative" perceptions on **conventional indoor** production of poultry and pigs (Romania exception with "positive" views)

How do you perceive organic production of poultry and pigs (median responses)?

	Unpleasant / Pleasant	Bad		safe / Safe	Unethical / Ethical
FI	4.00			.00	4.00
DK	4.00			00	4.00
RO	4.00			0	4.00
GB	4.00			0	4.00
DE	4.00			0	4.00
BE	4.00			0	4.00
NL	4.00			00	4.00
FR	4.00			.00	4.00
IT	4.00			4.00	4.00
All	4.00	4.		4.00	4.00

In all countries, consumers had "positive" perceptions on **organic production** compared to conventional indoor production

How do you perceive non-organic outdoor production of poultry and pigs? (median responses)?

	Unpleasant / Pleasant	Bad /		afe / Safe	Unethical / Ethical
FI	4.00			00	4.00
DK	4.00			0	4.00
RO	4.00				4.00
GB	4.00				4.00
DE	3.00				3.00
BE	3.00			0	3.00
NL	3.00			00	3.00
FR	4.00			.00	4.00
IT	4.00	4.		4.00	4.00
All	4.00	4.00		3.00	4.00

In all countries, consumers had “neutral or “positive” perceptions on **non-organic outdoor production**

Measures common to both pig and poultry production

Feature	Benefits	Disadvantages
Use of welfare self-assessment tool	Systematic welfare data collection, quality scheme, raises awareness on welfare, benchmarking and improvement of welfare on the farms, Farmer can personally do systematic welfare assessment.	Self-assessment not certified, usefulness depends on the user/user's skills
Enhanced management of outdoor/range area	See species-specific slides	See species-specific slides
Plants and plants extracts to limit parasitic & bacterial infections	Certain plants can limit parasitic and bacterial infections in pigs and hence improve pig health and welfare and reduce medication needs The most promising feed supplements to improve health and welfare of hens (production, welfare, gastrointestinal health and egg hygiene). Reduced antibiotic use, less concerns about the residues	Costs and availability of plants and extracts, efficacy?,

How organic *pig* products/production would be improved?

Feature	Benefits	Disadvantages
Rearing entire male pigs for slaughter (no castration)	An alternative to castration: Less mutilations, vet interventione & pain. Enhanced animal welfare and production performance of male pigs. Meat quality.	The risk of boar taint, may reduce slaughter weights. A combination of appropriate genetics, management and slaughter weight should be identified to ensure consumer acceptance.
Selective breeding for enhanced piglet survival & robustness	Lower piglet mortality, increased piglet survival, hence improved competitiveness. Correlation with traits such as lower aggressiveness Preferably improved local breeds, which cope with the weather and can be used in marketing.	A tradeoff between productivity and pigs' adaptability to local conditions? Potentially higher production costs when using a local breed. Progress of other traits? Small volume of breeding organic pigs.
Innovative, animal-friendly hut design	Protect piglets from crushing Thermoregulatory comfort of piglets and sows.	Investment costs.
Enhanced outdoor area management	Better straw & water management, cleanliness. Less adventitious bursitis, injuries, stomach ulceration, mortality and morbidity and lung damage than in pens. Positive image of outdoor access.	Biosecurity challenges (pests, diseases, soil…), extreme weather (hot, cold, dry, wet), risk of predators

How organic *poultry* products/production (eggs & meat) would be improved?

Feature	Benefits	Disadvantages
Dual-purpose genotypes to reduce the culling of day-old male chicks	Response to ethical concerns, increased the supply of slow-growing genotypes, Less fether pecking, better bone strength. Opportunities for novel products (e.g. targetting to small families, senior persons) Meat quality. Lower P & E content of feed Valorisation of the meat-purpose genotypes	Elevated production cost, reduced production performance (laying and growing), Requires: new diets/feeds & feeding strategy, changes the nature of farmers' work, proper training and knowledge on management of the system Scattered system: meat & eggs => Expertise Feed & other inputs to be adapted to the
Enhanced outdoor area management, optimised design for the outdoor area (e.g. enough shelters/bushes, access to short-rotation willow and hazel tree area, insect feeding, modularity)	Improved use & exploration of outdoor area; reduced stress, risk of feather pecking/ damage, mortality & predatory damage. Economic benefits to the farmer; better performance. Nicer to work on the farm.	Biosecurity challenges (pests, diseases, soil…), extreme weather (hot, cold, dry, wet), risk of predators
Early-life strategies that result in resilient birds (on-farm hatching, enriched environment with periodic access to insect larvae)	Improved bird welfare, resilience and performance when they face stressful situations, reduced mortality. Better adaptability to outdoor & climate challenges (e.g. heat waves) & stress. No bird transports if hatching on the farm. Possibly lower usage of veterinary inputs.	Additional costs? Higher energy cost in the poultry house Technical equipment for hatching. Training needed. Little added value to consumers expected.

PPILOW An example: Comparison of dual-purpose genotypes in meat production

Based on on-station trial of the males of selected dual-purpose genotypes in Germany

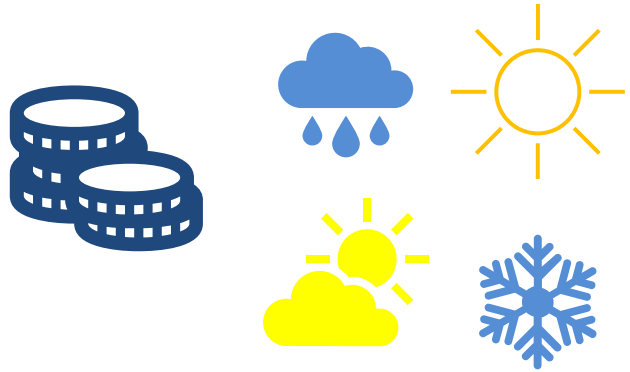
	Feed Conversion Ratio (FCR)	Daily weight gain (g/day)	Feed consumed (g/bird)	Final live weight (g)	Mortality at farm level (%)
Genotype A	3,4	26,1	7,4	2,2	1,1
Genotype B	3,5	20,8	6,1	1,8	1,1
Genotype C	3,4	19,3	5,5	1,6	2,1
Genotype JA 757	2,7	44,6	10,2	3,8	3,3

	Total costs (€/100 kg LW)	Total returns (€/100 kg LW)	Profit margin (€/100 kg LW)
Genotype A	305	590	285
Genotype B	335	590	255
Genotype C	342	590	248
Genotype JA 757	235	360	125




What are the barriers for improving animal welfare?

- **Common factors**
  - Lack of a price premium
  - Unpredictability of rules and regulations
  - Strict rules and regulations



- **Farm-specific factors**
  - Cost of implementing measures
  - Measures are difficult to put into practice
  - Increase in labour costs
  - Production conditions on the farm
  - Lack of information, advice and skills

Approaches to reach the market

Structure	Benefits	Disadvantage
1) Traditional supply chain		
Traditional retail	Easy, established channels: Farmers ➔ Processors ➔ Retailers & restaurants	Competition, low profit & inadequate differentiation?
2) Alternative supply chain in different forms		
Direct sales	No middlemen, value addition & branding	Limited market, reaching the customers requires a lot of effort
Via restaurants or local stores	High value adding potential, larger purchase per customer than individual consule	Limited quantity, requires B2B marketing, price may play an important role especially when there are competing farms nearby
Online	Potential for innovation & regular customers	Requires marketing effort and online visibility, logistics may be a challenge, price sentitive as customers can easily compare?

Examples of how to obtain revenue streams from the market

Model	Benefit	Disadvantage
Advertising	Simple, transactional	Customers expect return on investment
Affiliate	Easy for customers to enter	Low control of branding
Bundling	Sell more products	Relies on discounting
Fee-for-service	Simple billing	Requires pipeline of new leads
Franchise	Low initial cost	Difficult to maintain quality, control
Freemium	Potential for rapid growth	How & when profit is generated?
Pay-as-you-go	Easy for customers to enter	Customer retention?
Retailer	More profit margin	High competition
Subscription	Continuous revenues	High customer churn

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Poultry

BUSINESS MODEL CANVAS

KEY PARTNERS

Farmers
Feed supplier
Supplier of genetics
Hatchery
Slaughterhouse
(Egg packer)
(Local) retailers, restaurants, online stores
Advisers, trainers
(Organic) certification bodies

KEY ACTIVITIES

Public's awareness raising.
Ensure that genetics and special advice are available.
Educate farmers
Design diets suited to the breed and develop products on smaller birds.
Certification?

KEY RESOURCES

Collaborative farmers
Knowhow & advice
Ease to obtain dual-purpose animals (supply).
R&D capacity
Marketing capacity

Premium organic eggs/chicken meat.
Ethically more sustainable organic animal products.
Animals are healthier and there are less antibiotic residues.
The birds can explore outdoors on the range and express their natural behaviors.
Welfare of animals is monitored continuously and their welfare is cared from birth to the end of their live.
Slow & local food.

CUSTOMER RELATIONSHIP

Open, transparent & interactive, offering an alternative food solution
Emphasis on naturalness
Collaboration with local food stores, restaurants and aimal welfare organisations

CHANNELS

Multi-channel approach: traditional routes & direct contact with customers, including online selling
Branding & awareness-raising
Website & social media
Open days on the farm

Ethically conscious consumers who are in doubt regarding the mainstream farming systems
Customers with high WTP for premium products and those paying attention to product quality
Vegetarians who eat eggs?
Smaller households, senior citizens
Consumers, who appreciate locality

COST STRUCTURE

May increase production costs (enrichments, labor, planting outdoor area, foraging material). Feed price may be lower, but feed efficiency reduced
Marketing costs, logistic costs of in alternative chains,
Working time to use the app

REVENUE STREAMS

Expected price premium, possible revenues if selling directly to consumers
Regular revenue from customers who have scheduled subscriptions
Avoid some loss of revenue because of diseases
Risk: will consumers buy small chicken?

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Photo: iStock /Sonja Filitz

Pigs

BUSINESS MODEL CANVAS

KEY PARTNERS
Farmers
Feed suppliers
(Organic) certification bodies
Supplier of genetics
Slaughterhouse & processor
(local) retailers, restaurants, online stores
Advisors, trainers & research how to manage boars

KEY ACTIVITIES
Public's awareness raising, marketing.
Educating the farmers.
Improve rearing.
Genetic selection agains boar taint & piglet mortality
Research to reduce boar taint
Design appropriate diets

KEY RESOURCES
Knowhow & advice
Staff to sort carcasses
Innovative huts
R&D capacity
Marketing capacity
Product portfolio which can use smelly carcasses

Premium organic pork.
Improved welfare: practices reduce the pain of animals
Animals are healthier and there are less antibiotic residues.
Pigs can explore outdoors and express their natural behaviors, (e.g. next-building, rooting).
Welfare of animals is monitored continuosly and their welfare is cared from birth to the end of their live.
Leaner meat is suited to whole meat products.
Slow & local food.

CUSTOMER RELATIONSHIP
Open, transparent & interactive, offering an alternative food solution
Emphasis on naturalness
Collaboration with local food stores, restaurants and aimal welfare organisations

CHANNELS
Multi-channel approach: traditional routes & direct contact with customers, including online selling
Branding & awareness-raising
Website & social media
Open days on the farm

Ethically conscious consumers who are in doubt regarding the mainstream farming systems and appreciate high-quality meat.
Customers with high WTP for premium products and those paying attention to product quality-
Consumers of special meats & local products.

COST STRUCTURE
No castration costs, less piglet disposal & mortality.
The costs of enrichments, labor, outdoor area maintenance, huts, new genetics, mitigating & detecting poar taint, working time to use the app. Lower feed use/cost per kg on male pigs. Increased cost per pig if using local breeds.

REVENUE STREAMS
Expected price premium, possible revenues if selling directly to consumers
Regular revenue from customers who have scheduled subscriptions
Avoid some loss of revenue because of diseases
Possible lower price is boar taint is an issue

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Interactive session 1

9:40-10:40 Interactive session 1: Assessing the idea in small groups

- Welfare measures and the value proposition
- Distribution channels
- Potential impacts (benefits, disadvantages, costs, unintended consequences?
- Plenary discussion

Short break

Interactive session 2

11:50 Interactive session 2: What challenges need to be overcome?

- Which market actions are needed to deliver products to the market in a commercially viable manner?
- What policies can do to support the market penetration of proposed models?
- What risks/caveats/challenges are associated with the business approach?

11:50 Conclusion

- Selection of the most critical features (among those that you identified) and the most urgent actions
- Light lunch

PPILOW **PARTNERS**

Thank you for your attention

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