

LA NOSTRA
ESPERIENZA,
LA VOSTRA
SICUREZZA.

Farrowing management and housing



QUESTIONS

- 1. HOW TO AVOID SOW'S MOVEMENTS LIMITATIONS/RESTRICTIONS DURING LACTATING PERIOD AND AFTER?***
- 2. HOW TO DEAL WITH HYPER-PROLIFIC SOWS?***

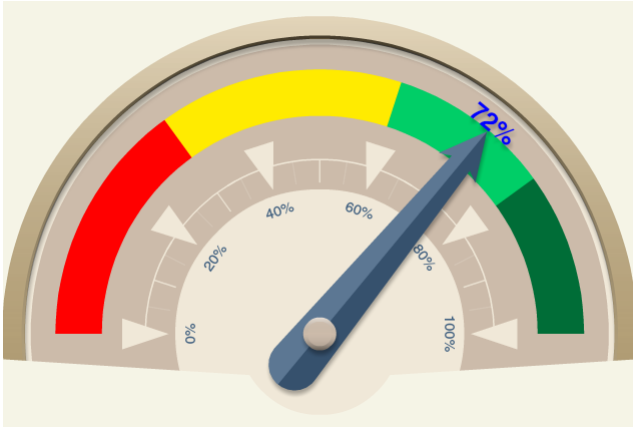


INTRODUCTION

Farrowing management and housing

Performance

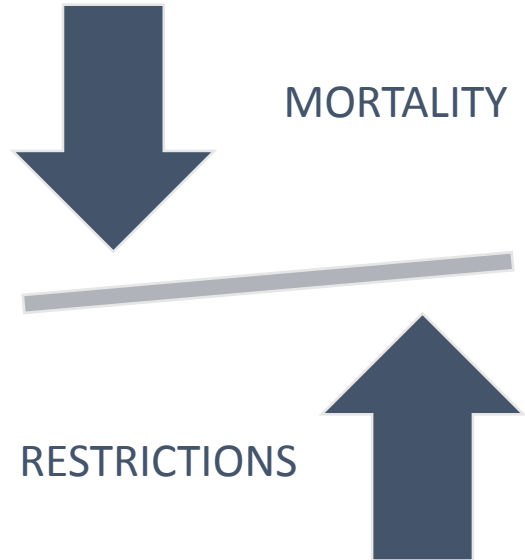
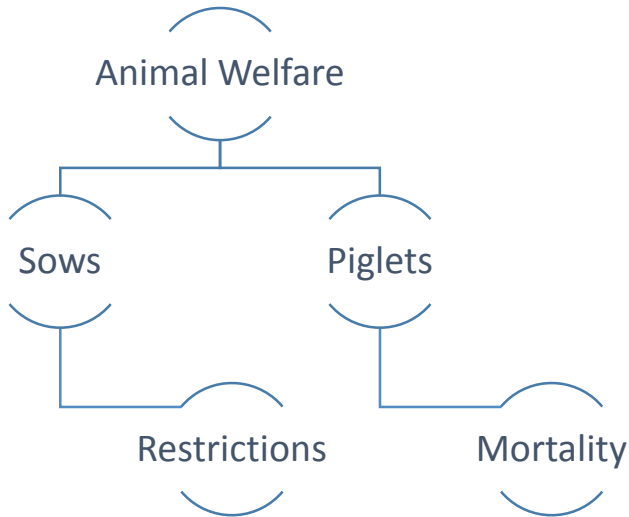
Animal
Welfare





INTRODUCTION

Farrowing management and housing



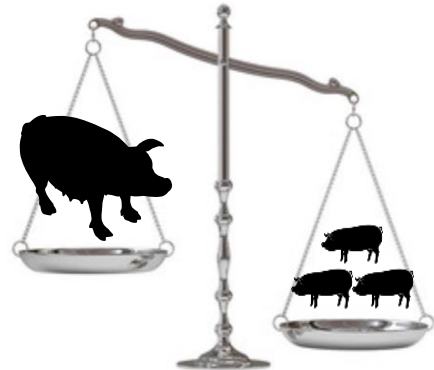


STRUCTURES

Farrowing crates

Keeps the sow as still as possible:

- ✓ **Prevention of piglet-crushing**
- ✓ **Lower effects of behavioural problems**
- × **Restrictions to sow's movement**
- × **Risk of lesions**



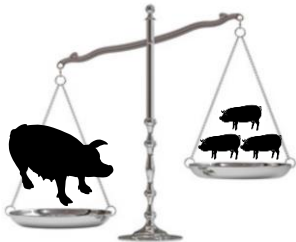


STRUCTURES

Free housing system

Ensures sow's free of movement:

- ✓ **No restrictions to sow's movement**
- × **High risk of piglet-crushing**



Source: <https://www.gazzettadalba.it/2019/01/alla-ricerca-del-cavour-il-maiale-nero-perduto/maiale-nero-2/>



STRUCTURES

Partial-restricted system

Free-movement system,
integrated with a small restricted
area:

- ✓ **Prevention of piglet-crushing
using a safe area restricted to
the sow**
- ✓ **Free movement for the sow**





POSSIBLE SOLUTIONS

Moving to loose housing system

- ✓ Increasing sow's welfare (less restrictions)
- ✓ Ethological behavior
- ✓ Less injuries for sows caused by crates
- × Higher risk of piglet-crushing
- × Increasing of management cost
- × More space needed -> reducing number of sows or enlarging farrowing sector
- × Adapting structures (crates) requires money



POSSIBLE SOLUTIONS

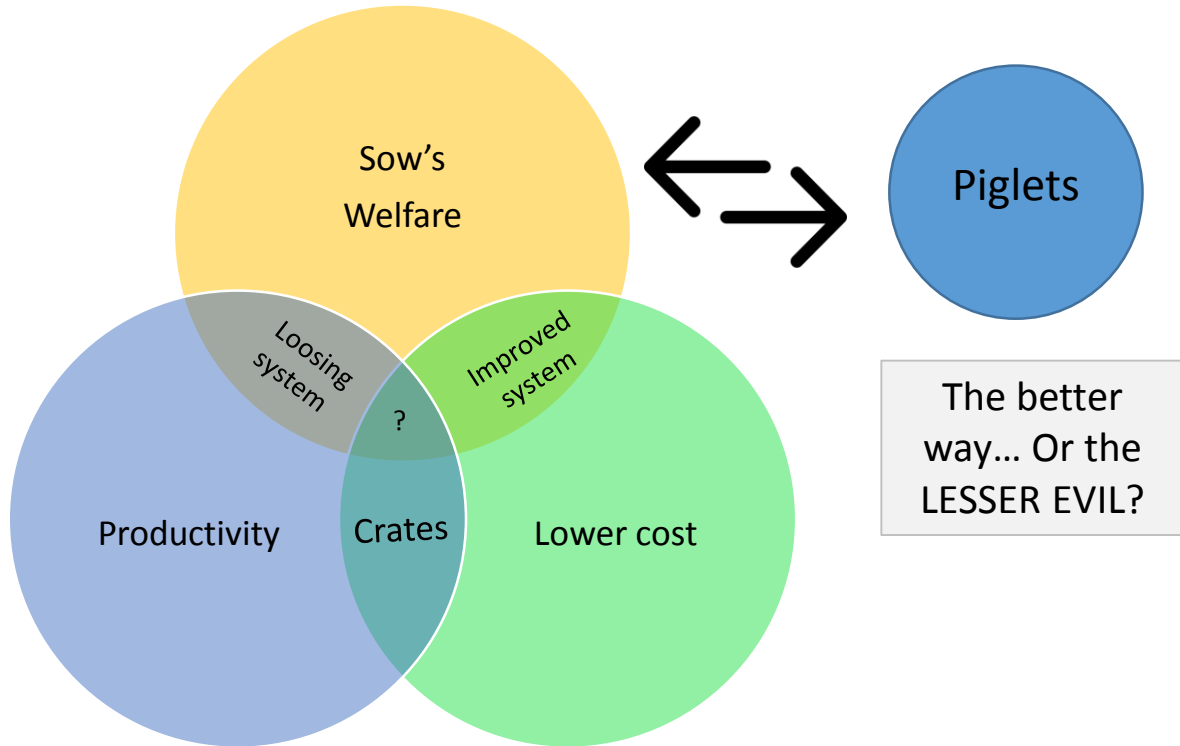
Improving farrowing crates system

E.g.: enabling movement after some days, removing crates afterwards etc.

- ✓ **Increasing sow's welfare (less restrictions)**
- ✓ **Ethological behavior**
- ✓ **Acceptable risk of piglet-crushing (?)**
- × **Increasing of management cost**
- × **More space needed**
- × **Adapting structures (crates) requires money**



STRATEGY APPROACH





What was asked by delegates to EURCAW

INDICATORS OF GOOD/POOR WELFARE OF SOWS AND PIGLETS DURING FARROWING

GUIDELINES FOR GOOD PRACTICE ON MANAGEMENT DURING FARROWING

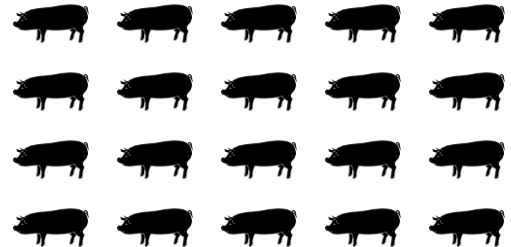
IDENTIFY “DEMONSTRATOR FARMS” FOR GOOD EXAMPLES



INTRODUCTION

Hyper-prolific sow

- ✓ Large increase of productivity
- × Colostrum - milk for all piglets
- × Lower litter uniformity
- × Lower birth weight average





POSSIBLE SOLUTION

- *Moving sows*

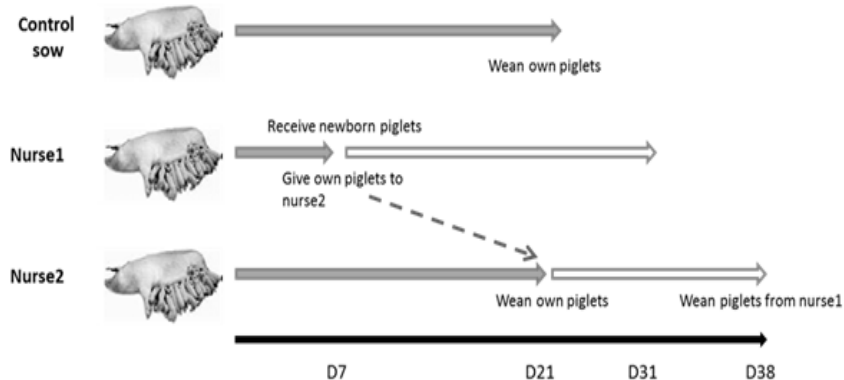
- ❖ *Nurse sows strategy*

- ✓ Large increase of productivity (Higher no. of weaners/sow)

- × Internal biosecurity

- × Management

- × Hard to implement in loose systems



Baxter, E. M., et al. "The welfare implications of large litter size in the domestic pig II: management factors." *Animal Welfare* 22.2 (2013): 219-238.



POSSIBLE SOLUTION

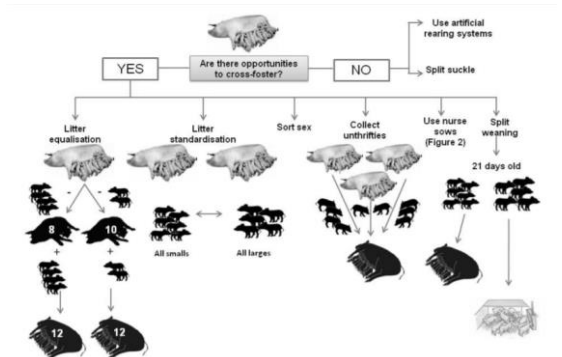
Moving piglets

> *Cross-fostering*

- ✓ Large increase of productivity (Higher no. of weaners/sow)
- ✗ Internal biosecurity
- ✗ Trouble for piglets movements and management

> *Early weaning (all or partially)*

- ✓ Large increase of productivity (Higher no. of weaners/sow)
- ✗ Internal biosecurity
- ✗ Behavioral issues (higher risk of tail biting) and health issues (AMU)



Baxter, E. M., et al. "The welfare implications of large litter size in the domestic pig II: management factors." *Animal Welfare* 22.2 (2013): 219-238.



POSSIBLE SOLUTION

- *Milk machine line*

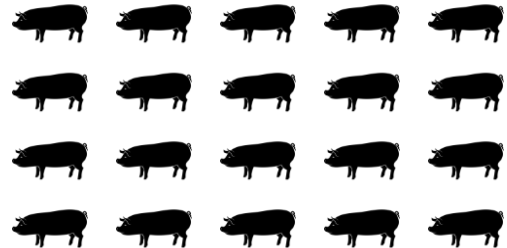
- ❖ *Specific for each pen*

- ❖ *Rescue deck system*

- ✓ Large increase of productivity
(Higher no. of weaners/sow)

- ✓ Less risk in biosecurity

- × Increasing of management cost





POSSIBLE SOLUTIONS

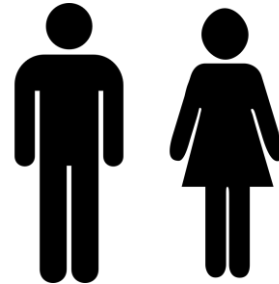
Certification of animal welfare

- ✓ **Good incentives for farmers**
- × **Who pays? Consumers? (...)**



Training of stockmen

- ✓ **Feasibility**
- × **Time consuming**
- × **Develop of adequate SOPs**





What was asked by delegates to EURCAW

IDENTIFY BEST PRACTICES FOR MILKING MANAGEMENT

DEVELOP TRAINING MATERIALS – INSPECTORS

IDENTIFY GAPS OF KNOWLEDGE

Acknowledgements

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Thanks for your kind attention!



Farrowing management and housing

- Cleanliness of sows and pens
- Farrowing crates and alternative systems
- Piglets management, floors and heat sources
- Available space for delivery
- Enrichment and nesting materials
- Mortality of piglets



CLEANLINESS: SOWS

CLEANLINESS OF SOWS

"Pregnant sows and gilts [...] If they are placed in farrowing crates, pregnant sows and gilts must be thoroughly cleaned."

Evaluate the procedures declared by the farmer

Sows are NOT cleaned/washed before moving to the farrowing crates

Sows are PROPERLY cleaned/washed before moving to the farrowing crates



FARROWING PEN

FARROWING PENS

"Farrowing pens where sows are kept loose must have some means of protecting the piglets, such as farrowing rails"

"Where a farrowing crate is used, the piglets must have sufficient space to be able to be suckled without difficulty"

Verify the presence of structures for piglets' protection and if they can be suckled without trouble

Absence of protections for the piglets and/or not enough space available for suckling

Presence of protections for the piglets and/or enough space available for suckling





ENRICH. MATERIALS

Structures and equipment - Material for exploration and manipulation: type

DIR 2008/120/EC Annex 1 chapter I point 4
and chapter II letter D point 3. and
EU/2016/336

"[...] pigs must have permanent access to a sufficient quantity of material to enable proper investigation and manipulation activities, such as straw, hay, wood, sawdust, mushroom compost, peat or a mixture of such, which does not compromise the health of the animals".

Check presence and type of material(s) for exploration and manipulation. It (they) must be clean and available for all pigs

Indicate which material or materials are present in each PEN:

☐ Absent

- If present:

- ☐ Bedding of straw or vegetables
- ☐ Straw, hay or vegetables in a rack
- ☐ Straw pellets
- ☐ Fresh and soft wood (e.g. poplar, willow)
- ☐ Hard wood
- ☐ Pressed wooden blocks
- ☐ Natural fiber ropes
- ☐ Metal / plastic chain
- ☐ Other material of marginal interest
- ☐ Other suboptimal material
- ☐ Other optimal material
- If Other specify _____

- Indicate if clean:

☐ Clean

☐ Dirty

- Indicate if available-accessible:

☐ Available-accessible

☐ Not available-not accessible

Absence of materials or presence of only marginal material (e.g. chain, plastic objects) or not suitable (e.g. tires) for pigs	INSUFFICIENT
Presence of more than one sub-optimal material (not complementary) or a mixture of materials (at least one marginal and a sub-optimal) that guarantee all the properties of suitable materials (complementary)	IMPROVABLE
Presence of, at least, an optimal material or two sub-optimal materials that guarantee all the properties of suitable materials (complementary)	OPTIMAL



NESTING MATERIALS

NESTING MATERIALS

"In the week before the expected farrowing time sows and gilts must be given suitable nesting material in sufficient quantity unless it is not technically feasible for the slurry system used in the establishment."

Verify if the materials are present and adequate

Materials are absent or insufficient (quality/quantity)

Materials are sufficient (quality/quantity) or is not possible to provide nesting materials (incompatibility with the manure removing system)

Materials are optimal (i.e.: straw provided as bedding and nesting material)





PIGLETS

PIGLETS – FLOORS AND HEAT SOURCES

"A part of the total floor, sufficient to allow the animals to rest together at the same time, must be solid or covered with a mat, or be littered with straw or any other suitable material".

Verify the presence of a surface suitable for piglets' resting

No / insufficient surface available

Presence of a suitable surface (concrete or mat) for the piglets

Presence of a suitable surface (concrete or mat) for the piglets and an heat source (e.g.: heating lamps)





PIGLETS



PIGLETS – MORTALITY

Evaluate piglets' mortality (yearly prevalence)

More than 20%

Between 12% and 20%

Less than 12%



INDIRECT ABM



SPACE FOR DELIVERY

SPACE ALLOWANCE – NATURAL/ASSISTED FARROWING

"An unobstructed area behind the sow or gilt must be available for the ease of natural or assisted farrowing"

Verify if the space is present and adequate

Unobstructed area not available (e.g.: farrowing crates adjacent to the wall)

Adequate unobstructed area available (e.g.: farrowing crates guarantees enough space behind the sow)



STRUCTURES

SPACE ALLOWANCE

"[...] the construction of or conversion to installations in which sows and gilts are tethered is prohibited."

Sows should be able to lay and raise up without hitting structures

Sows are tethered; farrowing crates are not large enough or they may cause injuries to the sows

Sows are not tethered; farrowing crates are correctly sized

Farrowing crates are not used (alternative systems)

Evaluation should consider:

- Age (primiparous / multiparous)
- Genetic



**No lesions
Proper positioning of
SOWS**



LINKS



Documents available at <http://www.classyfarm.it/>

System access via <https://www.vetinfo.it/>