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The key to your profit!

Cost assessment in egg production

Academy Asia H&N 2021
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Efficiency of production

1. Technologic/quality point of view.
2. Economic point of view.

- Production results based on calculations that comprise all costs incurred during the production.

Objectives of the presentation

- Show the important costs involved in egg cost assessment.
- Show how some changes in the production planning, performance and egg quality impacts on egg cost and profitability of the organization.

Assumptions of this study

- Brown Nick until 80 weeks
- # Eggs per Hen Housed: 367
- Feed intake: Average of 115 g/bird
- Average feed cost: 305 €/ton
- Enriched cage in Europe (Spain).
- Cost unit: €/dozen of eggs

Production data 80 weeks

Eggs per Hen Housed	367,0
Dozens per hen housed	30,6

Kg Feed per Hen Housed	49,11
Grs per hen per day	115

Kg Feed/dozen	**1,606**

Rearing (17-19 weeks)	2
Production (20-80 weeks)	61
Cleaning & Disinfection	6

Total weeks per cycle	**69**

Production cycle per year	**0,76**

Dozens produced per year	**23,1**

Dirty/cracked egg

	Cage
% Downgrade eggs	6,0%
% Clean saleable eggs	94,0%

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1. Feed Cost

Feed (euros/doz)	0,490
Kg/doz	1,606
Feed Cost (€/ton)	305

Kg/doz	1,606
Grs/hen_day	115
Eggs per Hen Housed	367

- Calculate the Feed cost / dozen of eggs.

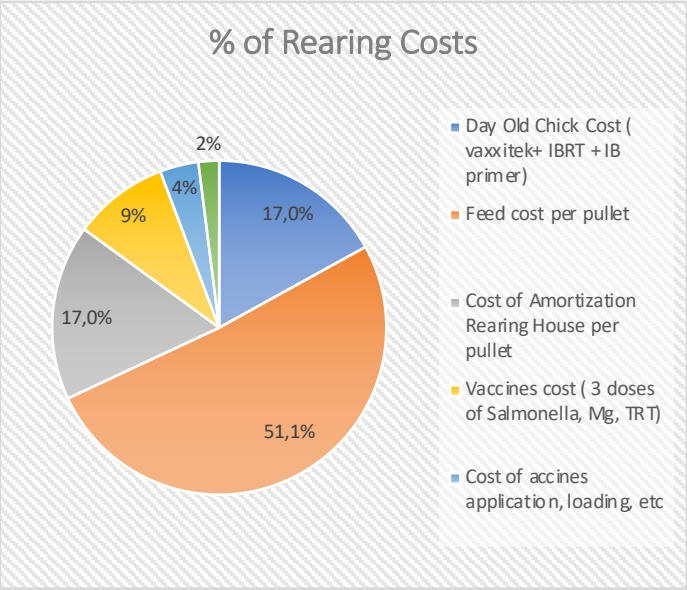
2. Rearing Cost (pullet amortization)

Kgs/pullet	6,937
Feed Cost €/kg	0,295

Day Old Chick Cost (vaxxitek+ IBRT + IB primer)	0,68
Feed cost per pullet	**2,05**
Electricty, gas, depreciation cost of Rearing House per pullet	0,68
Vaccines cost (3 doses of Salmonella, E. Coli, Coryza, Mg, TRT)	0,37
Cost of accines application, loading, etc	0,15
Transport cost from rearing to production house	0,08

TOTAL COST PER PULLET AT 19 WEEKS	**4,01**

Hen Depreciation (€/doc)	**0,131**
Euros/hen(*)	4,01
Dozens per Hen Housed (week 80)	30,58
Eggs per Hen Housed (week 80)	367



In this study a pullet costs €4,01 at the end of 19 weeks of age.

3. Depreciation of facilities

DEPRECIATION	
€/hen	14,5
Dozens/hen per year	23,1
# of years of the depreciation	12

Euros/dozen	**0,052**

4. Others

- Labor
- Contracted services
- Supplies
- Quality cost
- Others

COST OF LABOR PER DOZENS / YEAR	€ 0,017

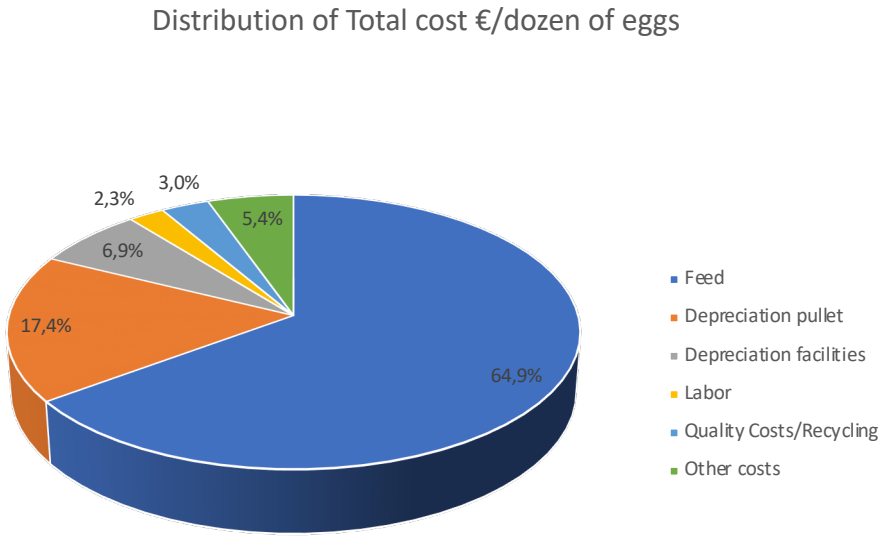
1 farmer for every 70,000 hens (at farm)	
Famer cost + Part of the proportional cost of Manager plus veterinarian	€ 28.000,00
* Dozens/year	1.616.484

DIRTY AND CRACKED EGGS	0,022
% Dirty and cracked eggs	6,0%
% Clean saleable eggs	94,0%
Sales Dirty and Cracked egg	0,38
Production cost	0,754

Average Sale Price (same than cost)	0,732
Difference Price received	**0,022**

Summary of costs – Enriched cages in Europe (Spain)

Feed	0,490
Depreciation pullet	0,131
Depreciation facilities	0,052
Labor	0,017
Quality Costs/Recycling	0,023
Other costs	0,041
Total Cost of €/dozen	**0,754**



- Cost inside the farm.
- Then must add grading, packing, etc.

Feed Cost

- Biggest share of the total cost.
- Always know the feed intake per hen.
- **NEVER** restrict feed intake and nutrients.
- H&N Birds can adapt to the feed intake you want.
- When is necessary, changes need to be made.

- The goal is to **maximize saleable eggs** rather focus on reduce costs.

Depreciation of the birds

1. Persistency
2. Mortality
3. Egg Shell quality as warranty of persistency.

- Saleable eggs.

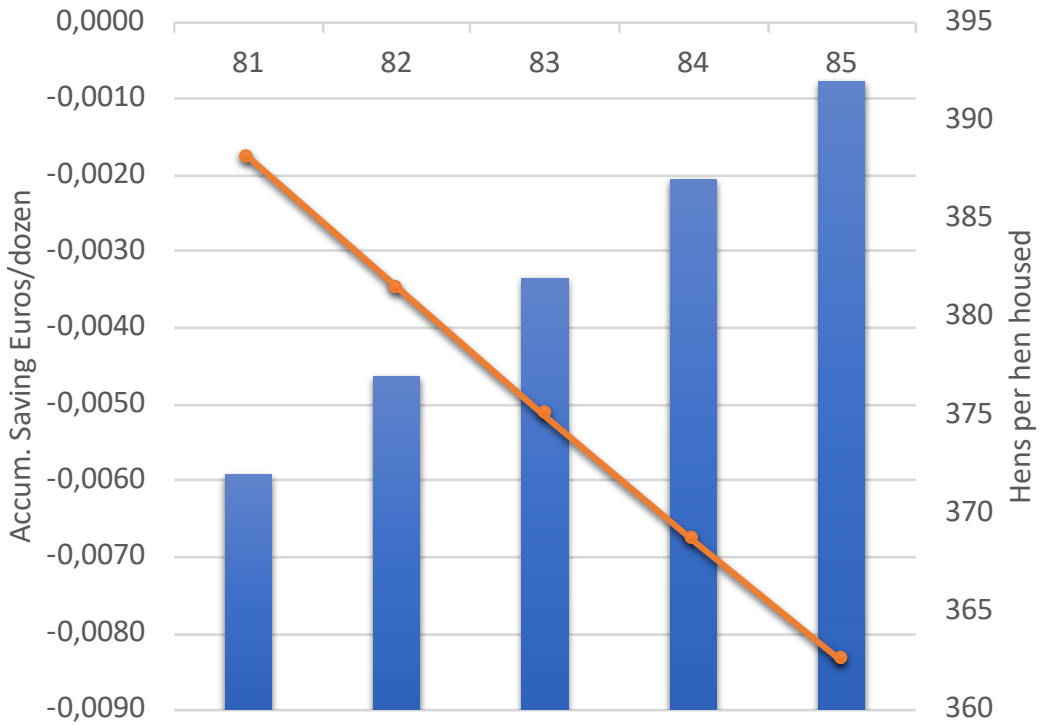
- H&N Birds can produce up to 90-100 weeks of age (one cycle).

Depreciation of facilities

- Depends on each company.
- Better and new facilities could warranty better performance.
- Cage vs Enriched cages vs Aviaries vs others cage free.

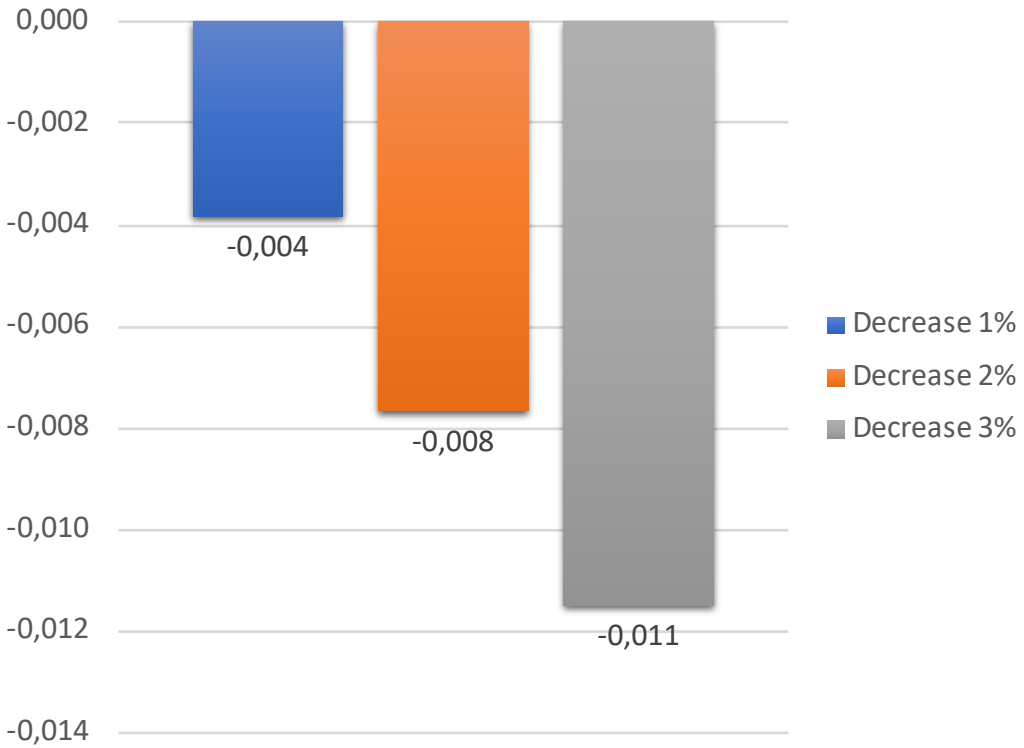
LET'S DISCUSS SOME MANAGEMENT OPTIONS THAT H&N BIRDS HELP YOU TO SAVE COSTS BY MAXIMIZING INCOME.

Extending the production cycle: H&N Birds give you persistency



- For every weeks we extend the production cycle we sabe **0,0017 euros/dozen** and **0,055 euros/hen.**
- Depreciation

Better Egg Quality: H&N Birds give you excellent egg quality.



- For every 1 % of reducing downgrades, we are saving **0,004 euros/dozen** and **0,012 euros/hen.**

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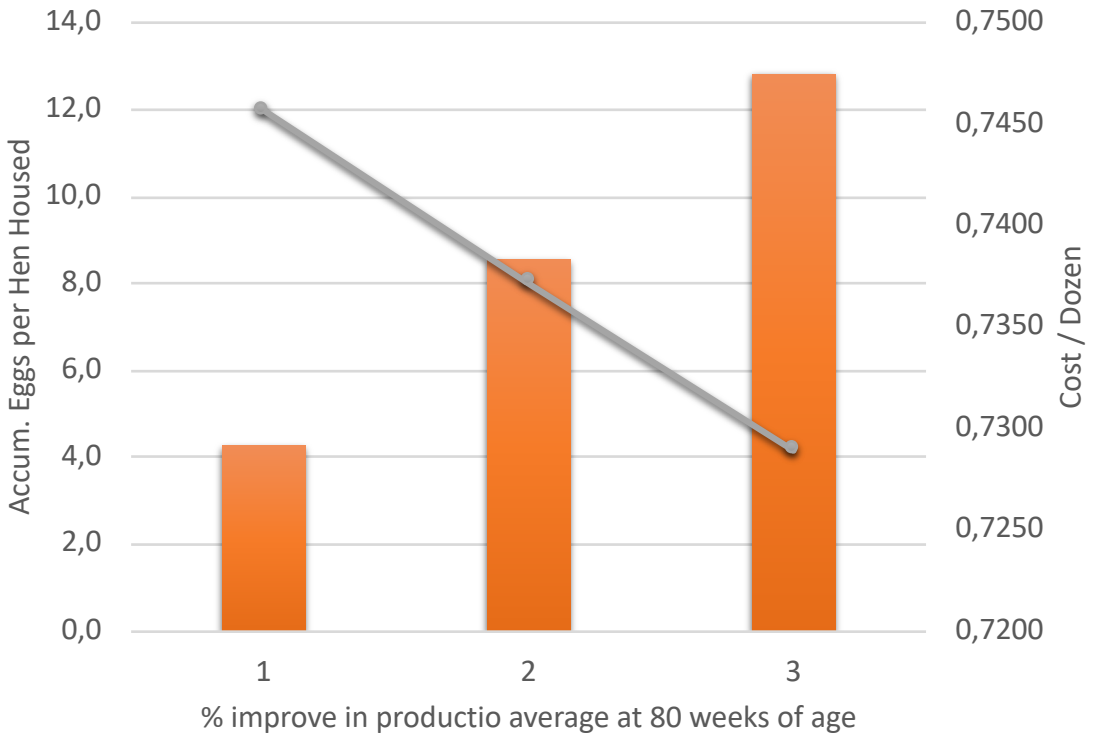
Improve in Production %: H&N Birds give you great production.



- For every % improved in egg production we won 4,3 egg per hen housed and save **0,009 euros/dozen and 0,26 euros/hen**

Summary of Effect of improvements

IMPROVEMENTS	€/Hen		
	1	2	3
Extending Cycle (weeks)	-0,0546	-0,1085	-0,1616
Decreasing dirty-cracked eggs (%)	-0,115	-0,230	-0,345
Improve in production (%)	-0,261	-0,515	-0,764
TOTAL	**-0,4302**	**-0,8533**	**-1,2700**

- Matrix to see the effect of improvements

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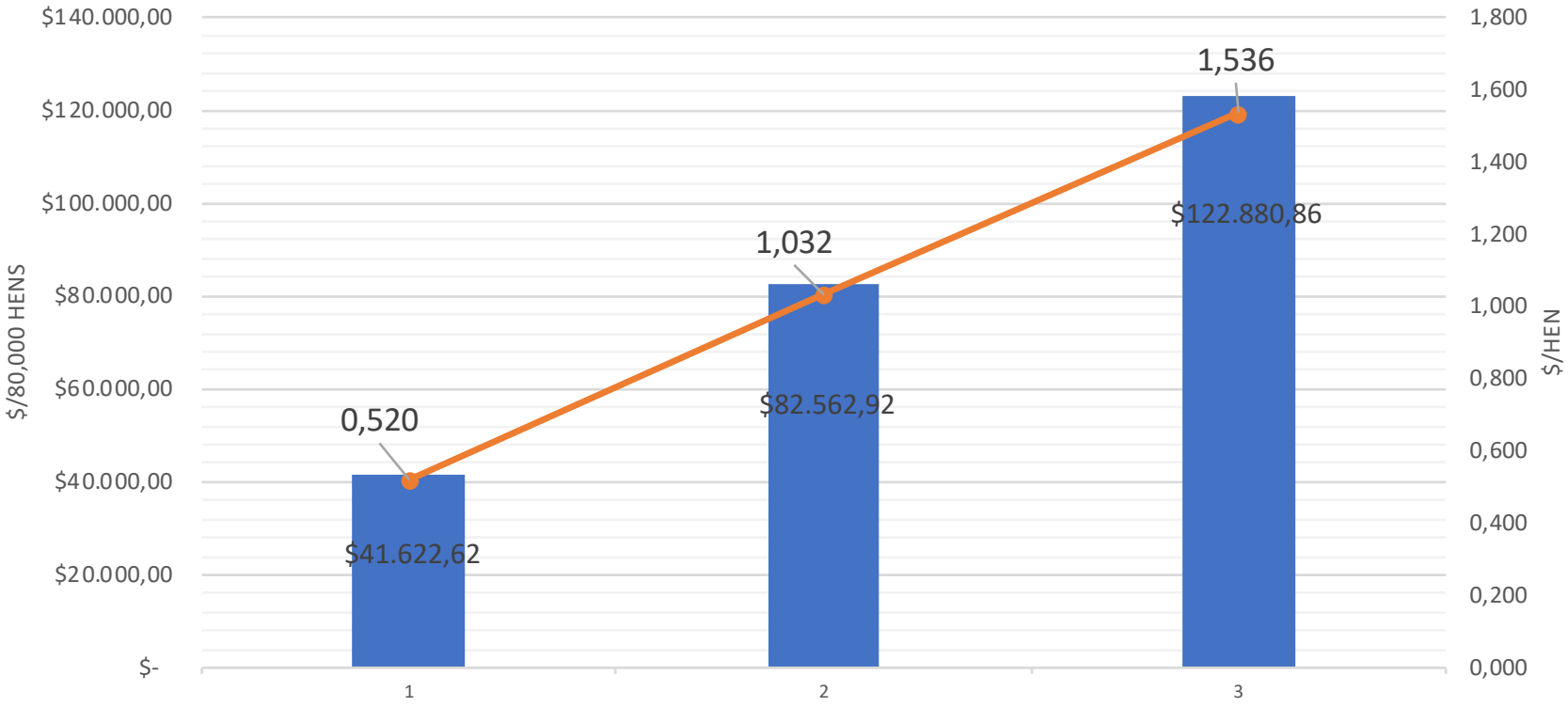
Farm of 80.000 hens

IMPROVEMENTS	USD/Hen		
	1	2	3
Extending Cycle (weeks)	$ 5.285,06	$ 10.499,09	$ 15.643,96
Decreasing dirty-cracked eggs (%)	$ 11.122,32	$ 22.244,64	$ 33.366,96
Improve in production (%)	$ 25.215,24	$ 49.819,19	$ 73.869,94
TOTAL	$ 41.622,62	$ 82.562,92	$ 122.880,86

Total improventes per increase in: longer cycle, egg quality and production %



Costs from the Incomes perspective

- Optimize the expression of the genetic potential of our birds according to our market demands.

- Optimize the incomes from the market through maximize the number of saleable eggs according to both: the market grading (desirable egg weight) and good eggshell quality.

Costs from the Incomes perspective

- Never limit the genetic potential by the restriction of any input. For, example FEED.
- Distribute the egg mass within the egg weight classification that market demands.
- **Saleable eggs and not total eggs** as the source of the income.

Important things to know

1. Number of saleable eggs
2. % of downgrade
3. Egg weight
4. FEED INTAKE / BIRD
5. Egg Mass

Conclusion

- Cost must be measured in economic terms.
- As consequence of study the optimization of technical and economic indexes and optimization of incomes.
- **Profitability = balance of a good cost management plus a MAXIMIZATION OF INCOMES.**

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H&N LAYER ACADEMY

INTERACT WITH US!

Make use of our multiple-choice poll tool and pick what you think is correct.

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Thank you, questions?