



Colors your world

EAAP 2024 Naomi Duijvesteijn (Global Sustainability Director & R&D Director Traditional Poultry)
'The role of the private (breeding) sector in sustainable transformation: an example of small scale poultry production in Africa'





Who, what and how? Understanding the market & challenge

Malnutrition: 282 million people in Africa (~20% of the population) are undernourished
Poverty: 462 million live in extreme poverty
Climate change: 95% of the farmers rely on rainfed agriculture for food & income



FAO. "Africa - Regional Overview of Food Security and Nutrition" 2023. Economist Impact. "Breaking the Cycle of Chronic Malnutrition in SSA." 2023. The World Bank. "The World Bank in Africa" 2023. Stockholm International Water Institute (SIWI). "Unlocking the Potential of Rainfed Agriculture." 2018.



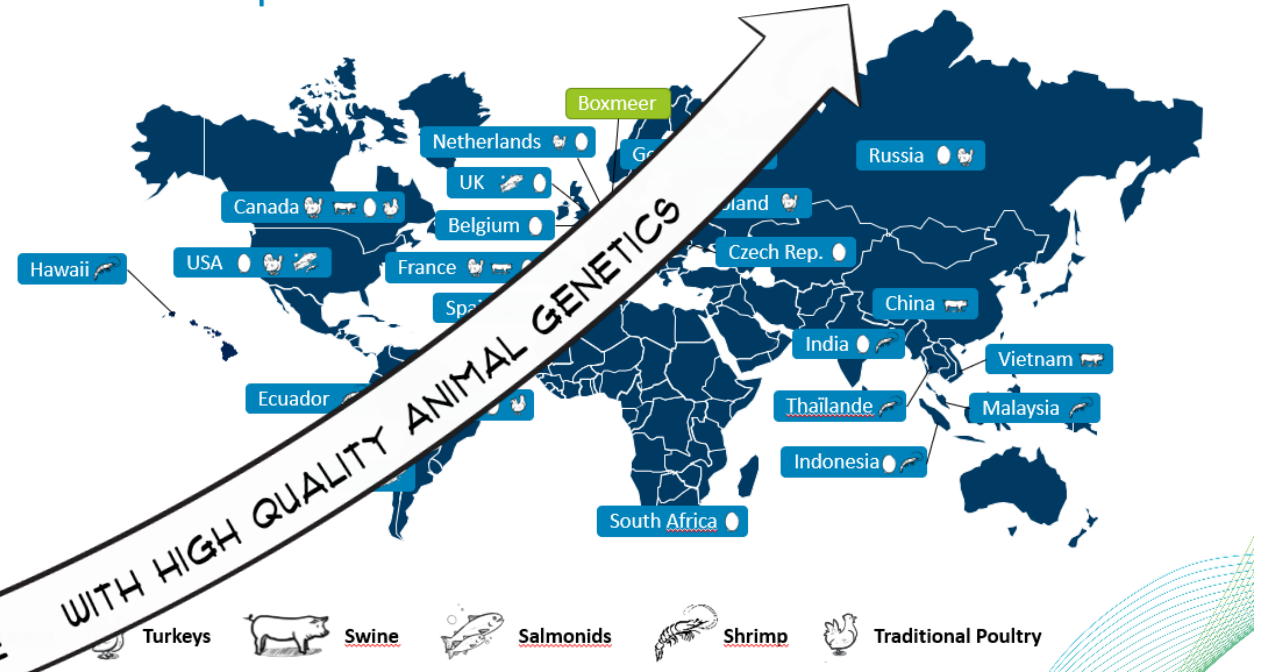
The challenge

- Reaching rural households
- Far away, dispersed, small transaction volume

And who are we?

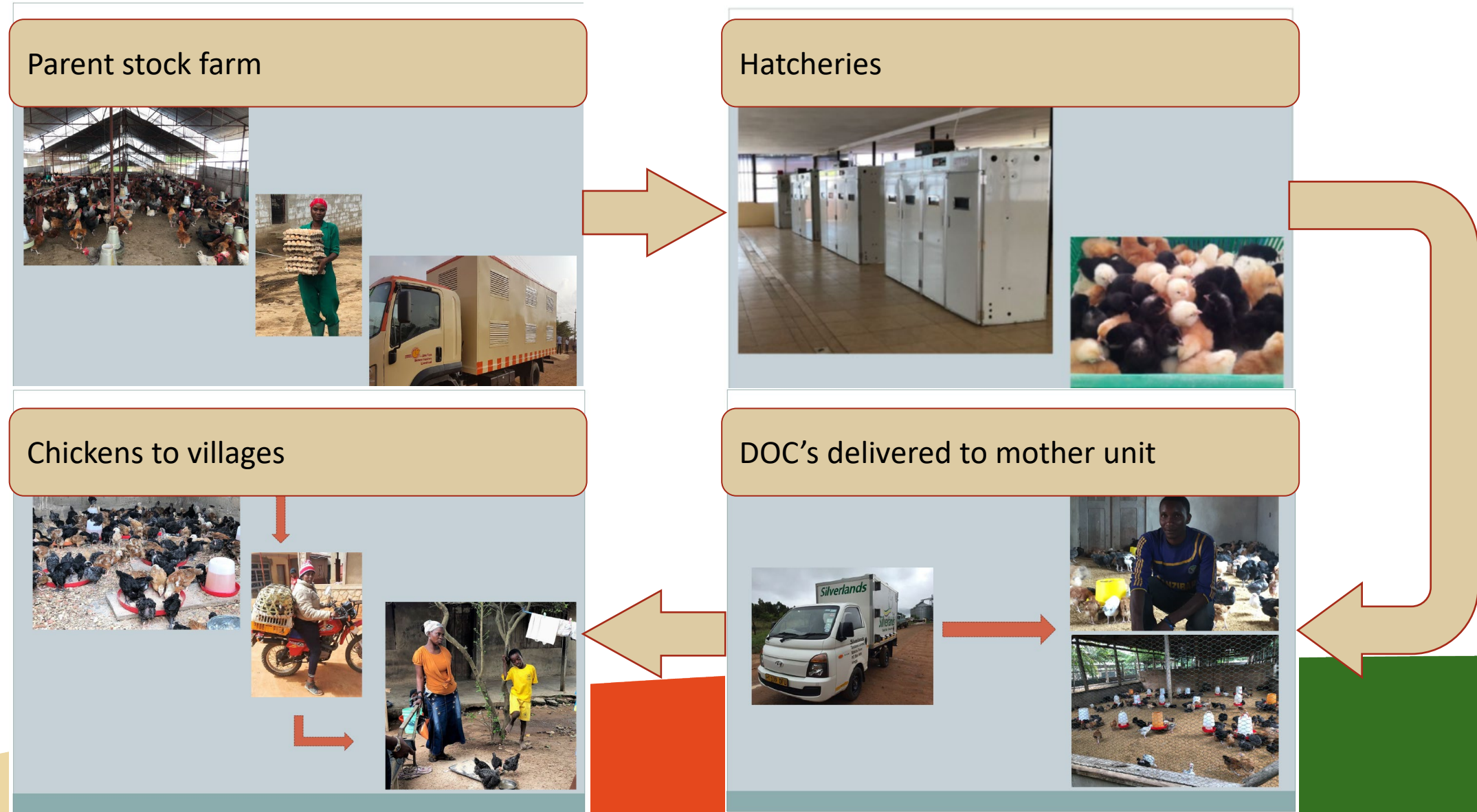


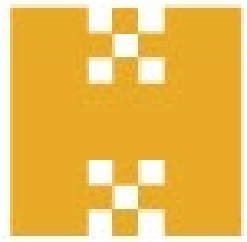
Global operations in 25 countries



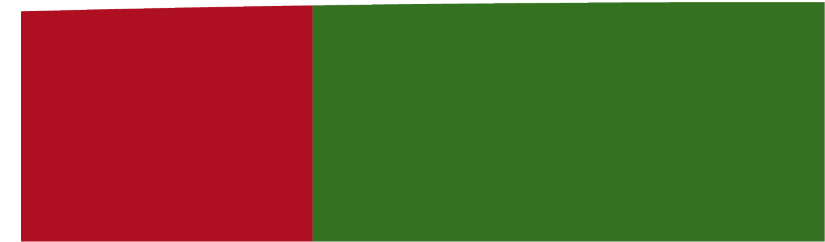
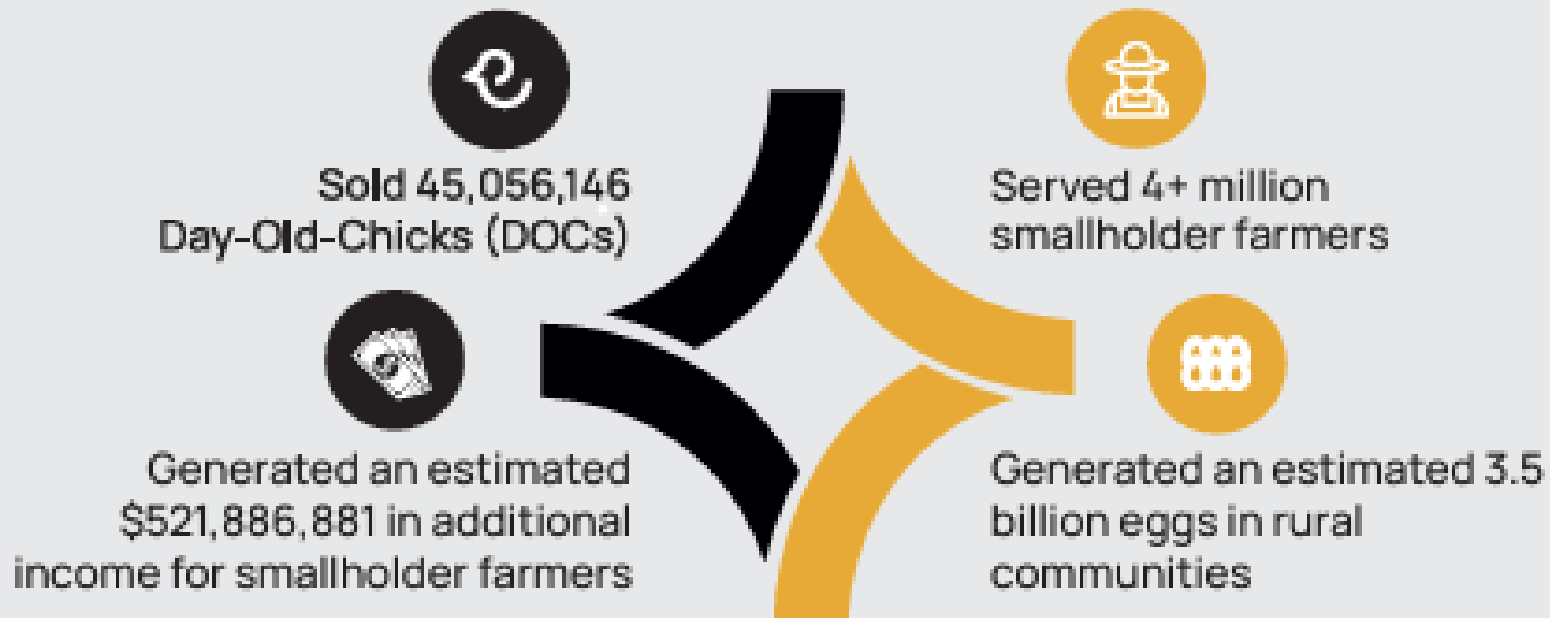
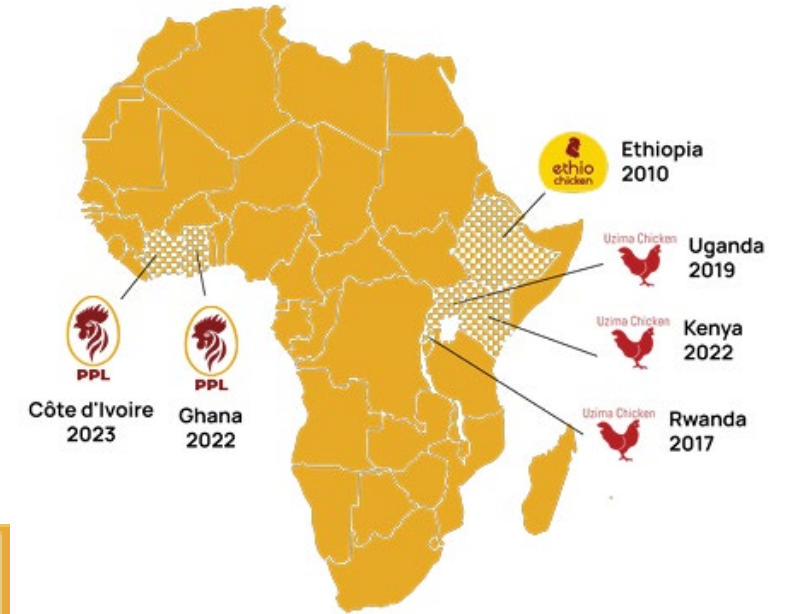
SUPPORTING THE GLOBAL FOOD CHALLENGE

APMI → African Poultry Multiplication Initiative





Hatch Africa



SAPPSA

*Sustainable access to
poultry parent stock in Africa*

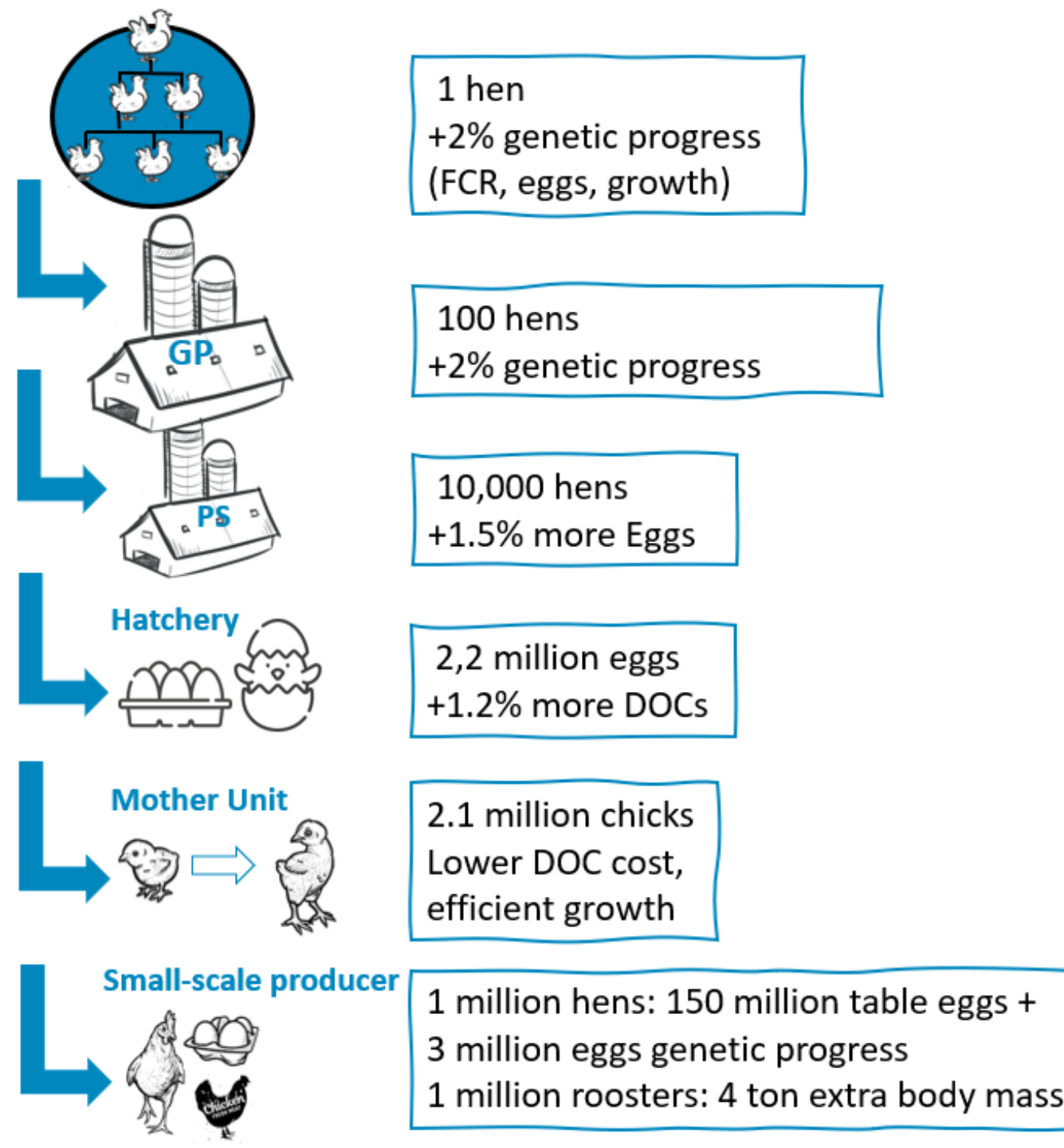
started in 2018, 5y project

BILL &
MELINDA
GATES
foundation



Why a breeding company?

- Small improvement in the top --> huge impact at the end of the value chain
 - Tech driven
 - Long term vision needed
- Distribution / logistics experts
- Technical experts



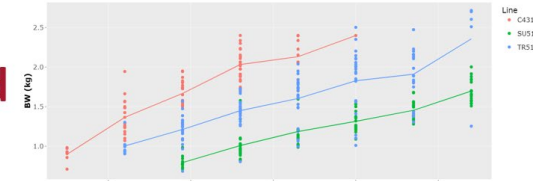


- Ethiopia
- Burkina Faso
- Tanzania
- Uganda
- Rwanda
- Senegal
- Zimbabwe
- Zambia
- Nigeria

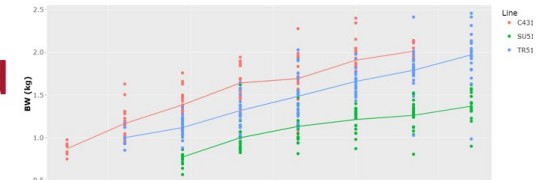
- Ghana (v)
- Cameroon
- Cote d'Ivoire
- Sudan
- Gambia
- Togo
- Namibia (v)
-



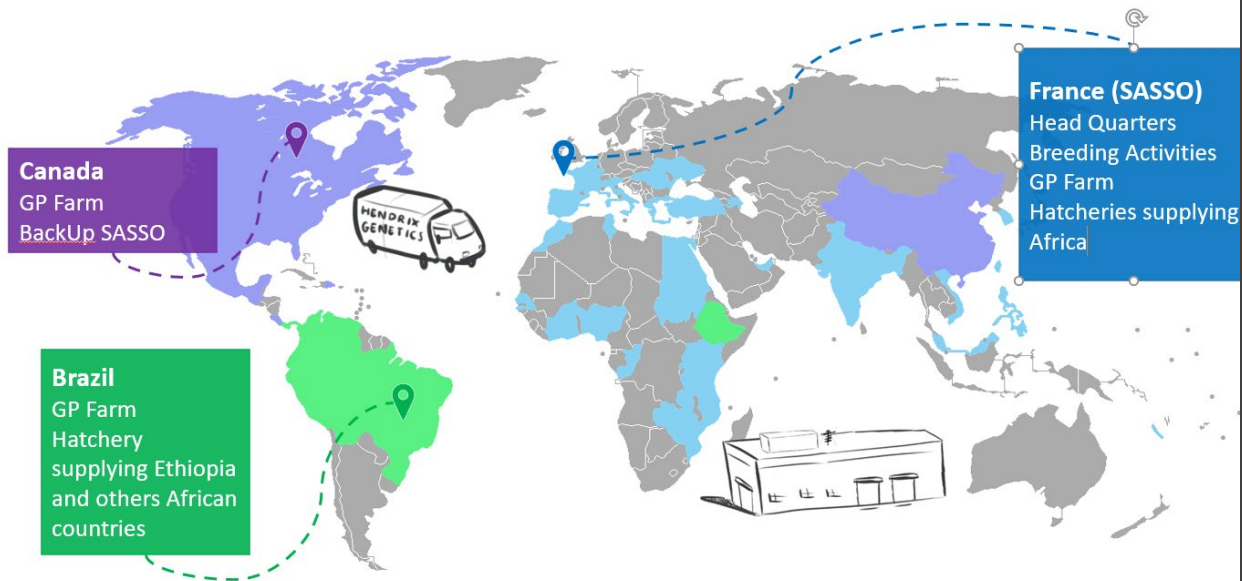
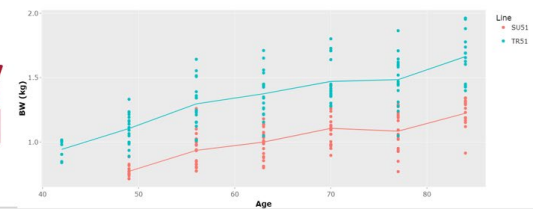
Fully Fed



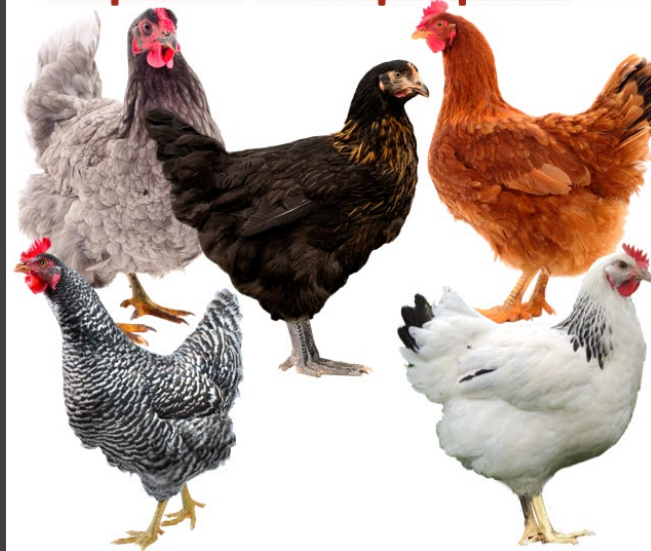
Half Fed



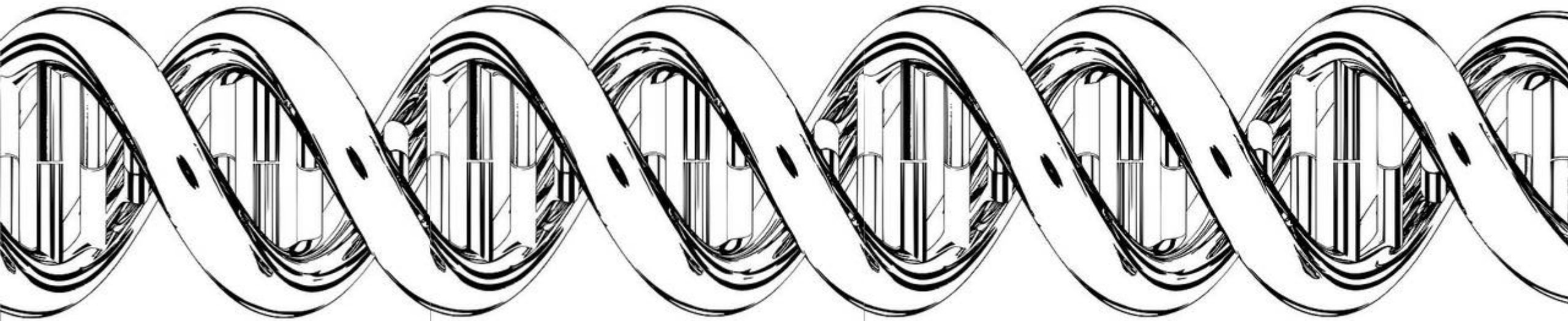
Quarterly Fed



Improve dual-purpose breeds: which cross



Genetics intermezzo





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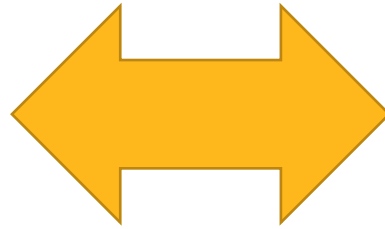
**Breeding dual purpose chickens for
challenging conditions**

Technique: recurrent testing

here

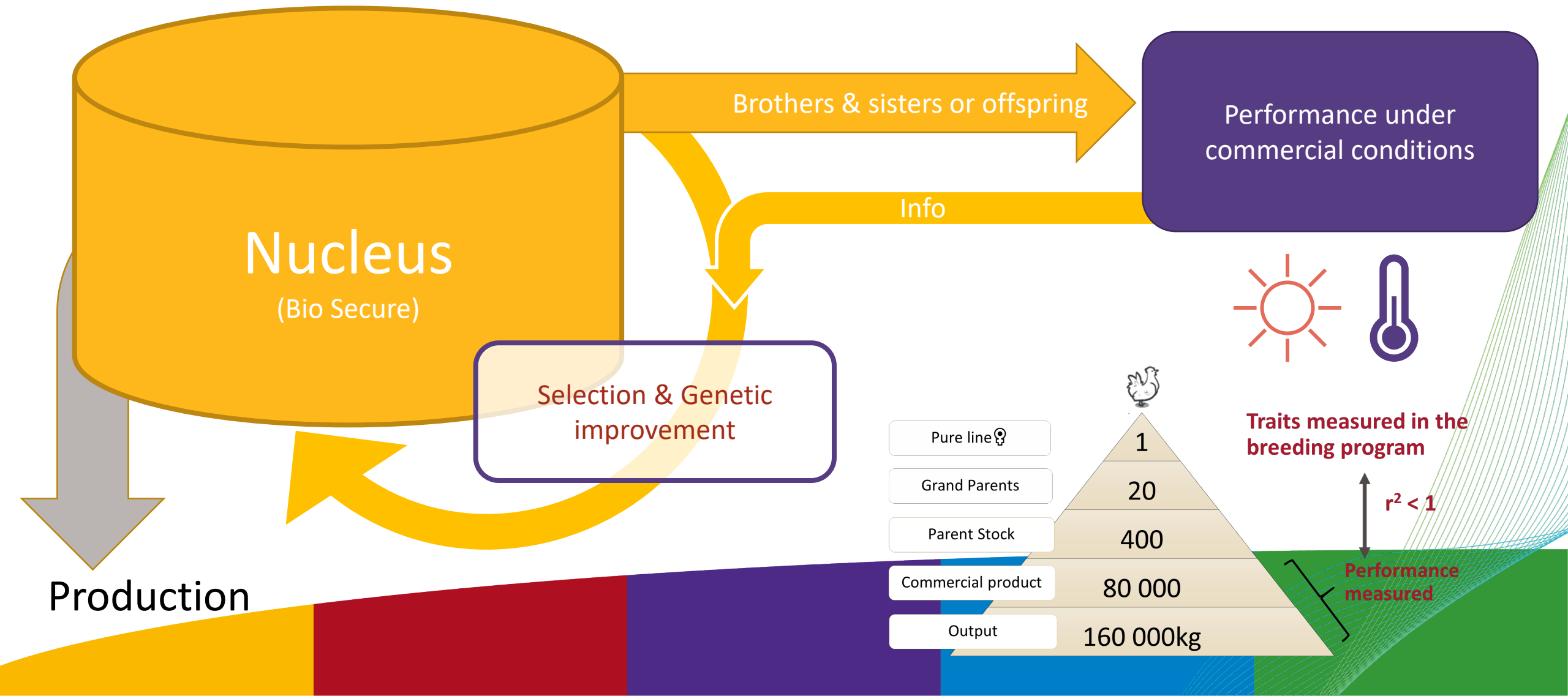
vs.

here



**Most likely performance is not the same → recurrent test
70% of our sales is for tropical climates**

Breeding program structure



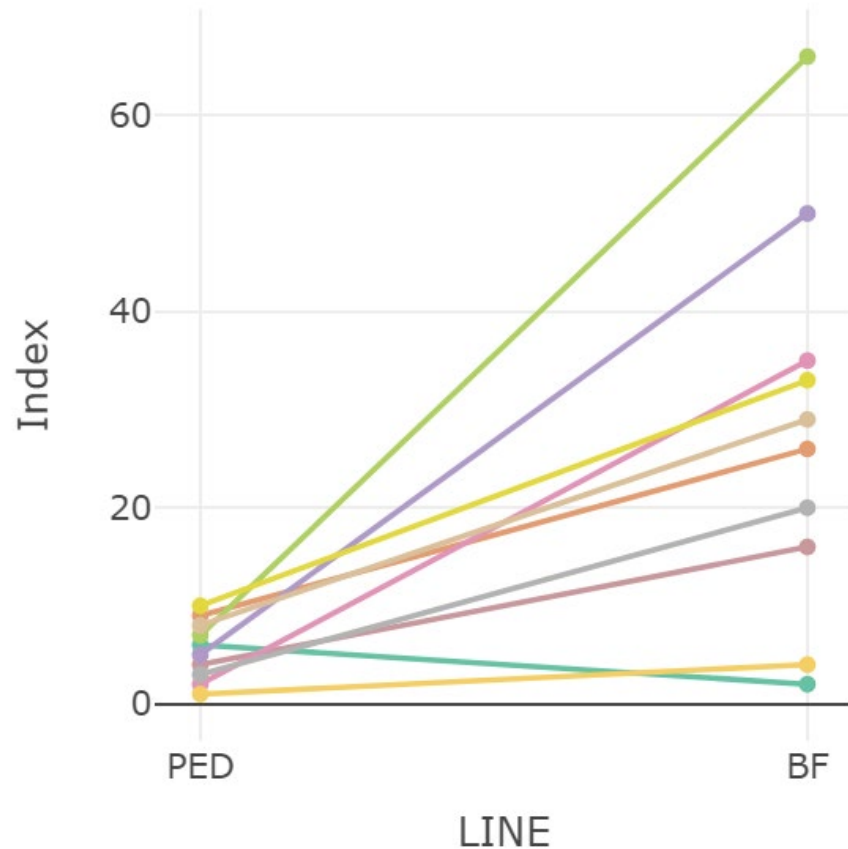
Send offspring to a challenging environment



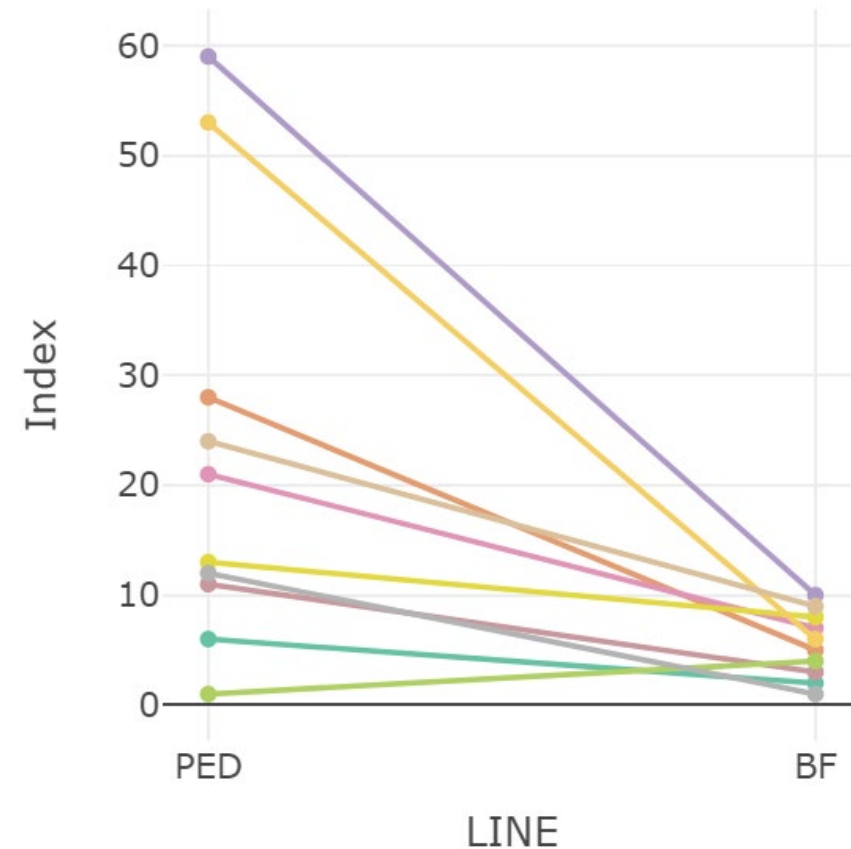
Measure them and include in the breeding program

Selecting the sires

Select the best sires from the pure-line breeding program



Select the best sires from BF for breeding program





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Crossing with local breed to adapt
to challenging conditions

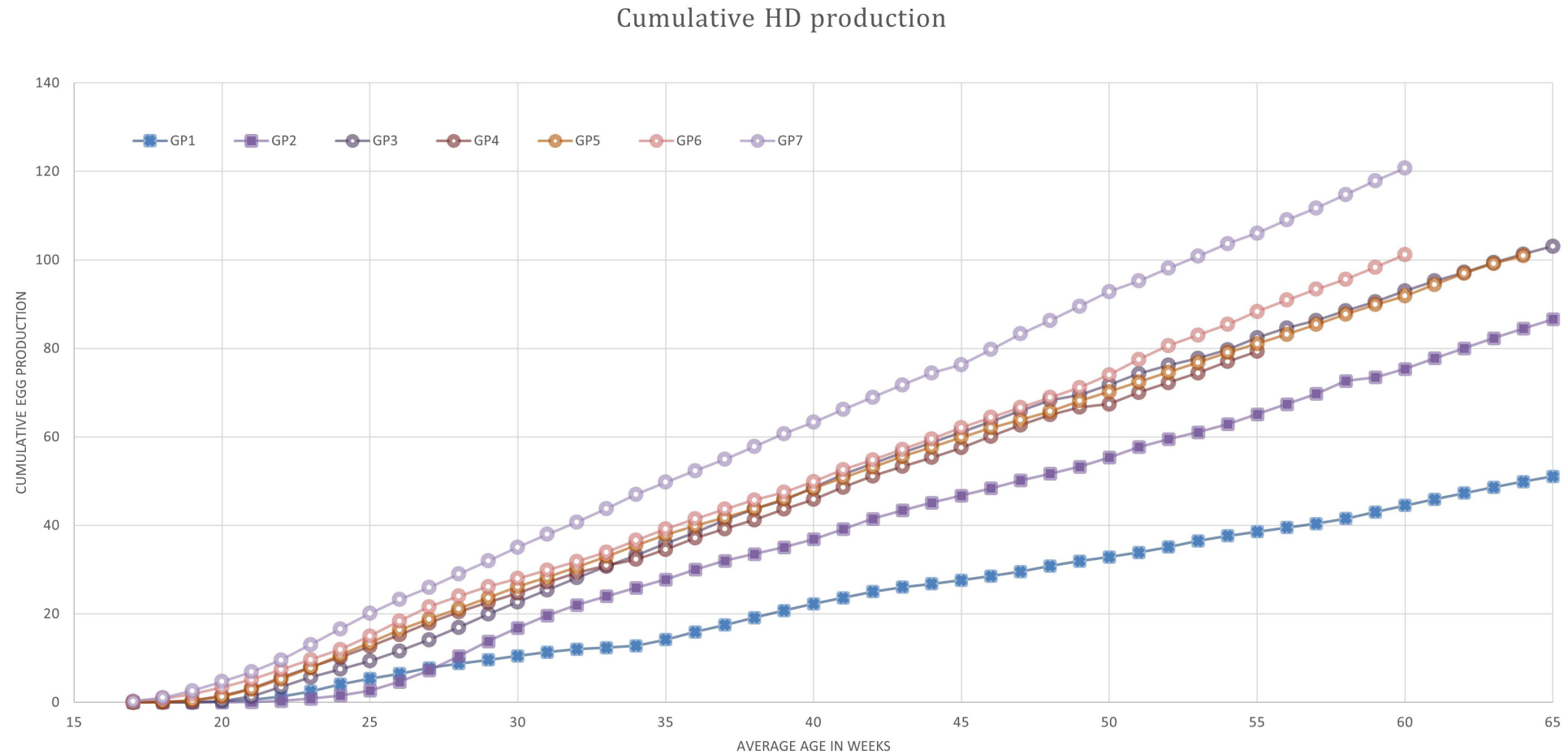
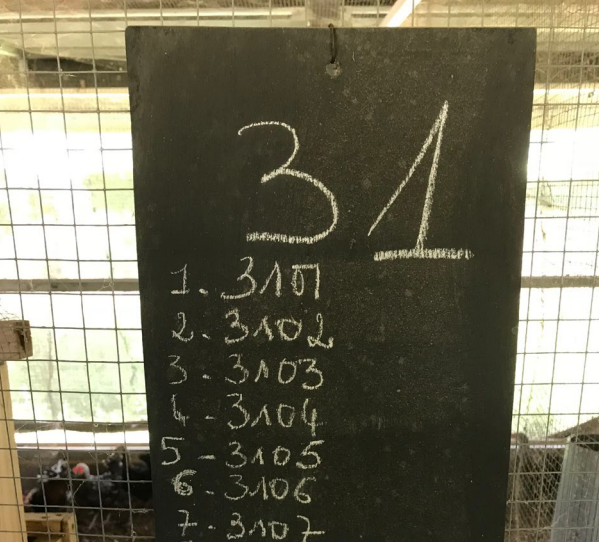
Example from Burkina Faso: Coq du Faso

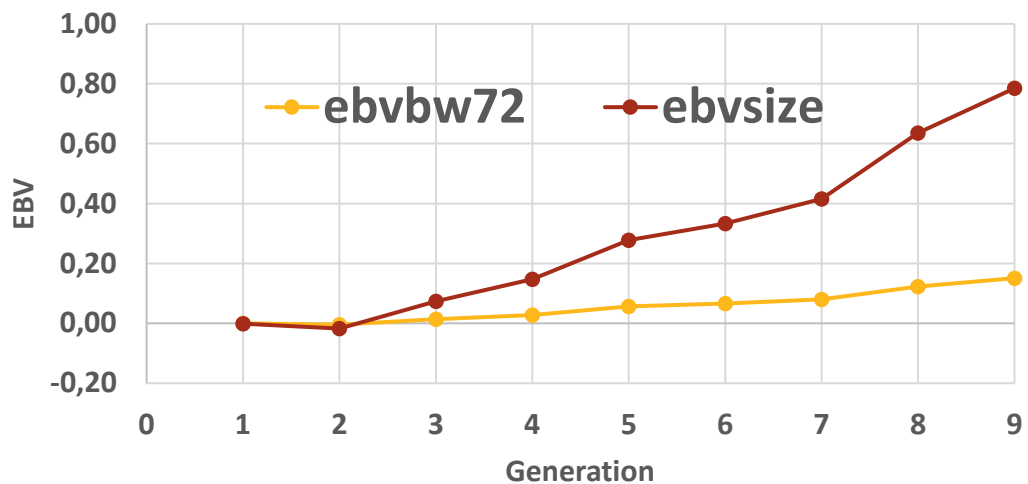
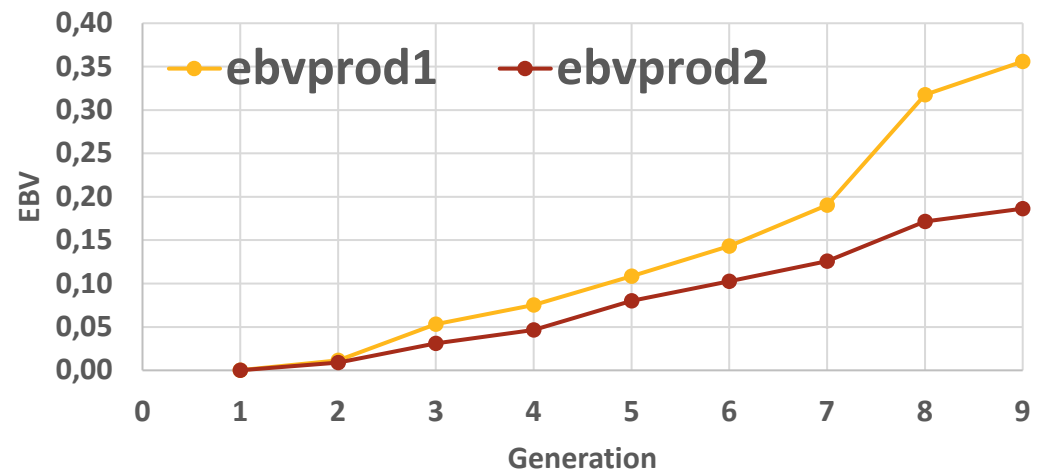


Local breeding program of locally sourced village poultry in 2016, since then in a full pedigree program in Boussé.



Local, small and effective breeding program





Consistency is key!

Improvements in CdF and PdF growth since 2017



Delivering high quality & adapted poultry genetics to rural African areas → It works!

- Understanding the value chain
- Breeds needs to be accepted (feather colour, taste, size, it all matters), local breeds or exotic breeds
- Good professional partner for implementation (vaccination & management)
- Consistency in planning & production
- Longer term horizon, investments are needed
- Everybody needs to be able to make money

If it works: impact is huge!



Reduce malnutrition by increasing the supply of eggs and chickens in rural communities. One egg per day can reduce the rate of stunting by 47%.

Improve incomes by boosting the productivity. Improved dual-purpose chickens lay 3x as many eggs as local breeds and reach marketable weight in 1/3 of the time.

Increase climate resilience by enabling farmers to diversify their incomes and food supply from rainfed agriculture.



Do you want to contribute to a sustainable breeding program?

JOIN US!

Hendrix Genetics is recruiting a
Geneticist



JOIN US!

Hendrix Genetics is recruiting a
Geneticist with a focus on Insect
Genetics

