

# EVOLUTION OF SOW PRODUCTIVITY IN COLOMBIA DURING THE LAST 10 YEARS

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## INTRODUCTION

A proper collection and analysis of data generated in farm has helped to the improvement in the Colombian pig sector production and competitiveness in last 10 years. The National Health Improvement Status Program (PNMES Spanish acronym), promoted by the Colombian Swine Producers Association, allows collecting, analyzing and even monitoring data from different farms distributed across the country.

The objective of this study was to analyze the evolution of sow productivity during the last 10 years in the farms attached to the program (PNMES).

## MATERIALS AND METHODS

Analysis of key performance indicators from 20 farms from Colombia. Data collected in different software packages and processed and analyzed by PigCHAMP Pro Europa.

Current number of reproductive sows in all 20 farms is about 7,600 (average inventory = 380).

### Data collected:

- Total born per farrowing (TB)
- Born alive (BA) & stillborn (SB)
- Weaned piglets per litter (WP)
- Farrowing rate (FR)
- Abortion
- Culling or deaths
- Fertility failures:
  - i. Short return to oestrus (<18 days after AI)
  - ii. Cyclic return (18-24 d or 38-44 d after AI)
  - iii. Acyclic return (25-37 d after AI)
  - iv. Late return to oestrus (45-59 d after AI)
  - v. Sow found not pregnant (60-110 after AI)

**STATISTICS:** A descriptive analysis of main variables was conducted to present evolution in last 10 years.

## RESULTS

Total born, BA, %SB and WP are presented in figure 1:

- Prolificacy showed a linear increase since 2004, reaching the maximum value in 2013 (12.7 TB and 11.7 BA).
- Percentage of SB slightly decreased since 2004.
- Number of WP also increased, in a parallel way to BA, reaching the maximum in 2013 (10.7 vs 9.2 in 2004).

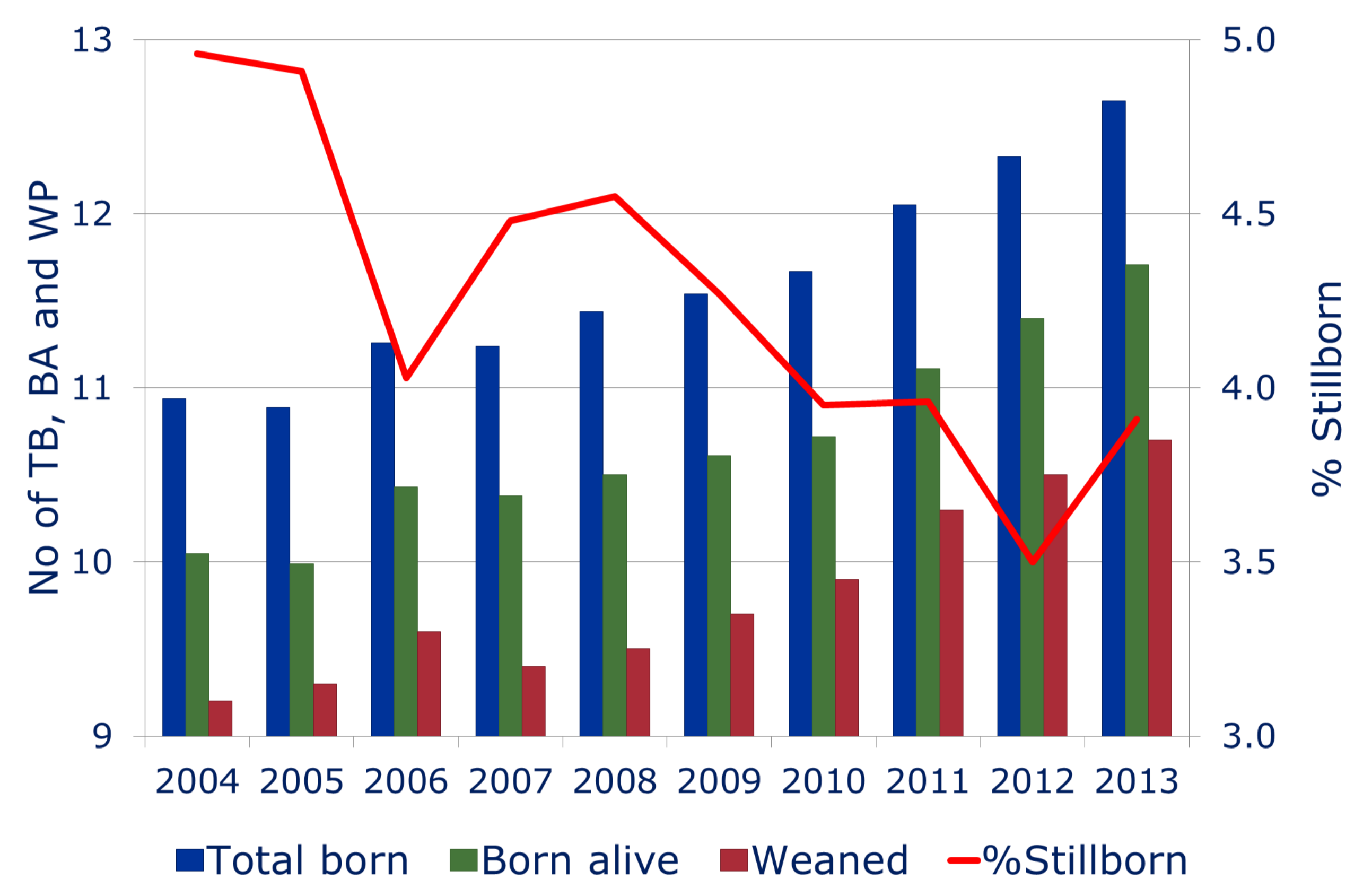


Figure 1- Evolution of TB, BA, %SB and WP in 2004-2013

Comparing FR in last two years (2012 vs 2013; figure 2), a reduction of pregnancy losses has been observed, mainly associated with a reduction in return to oestrus and in not-in-pig sows.

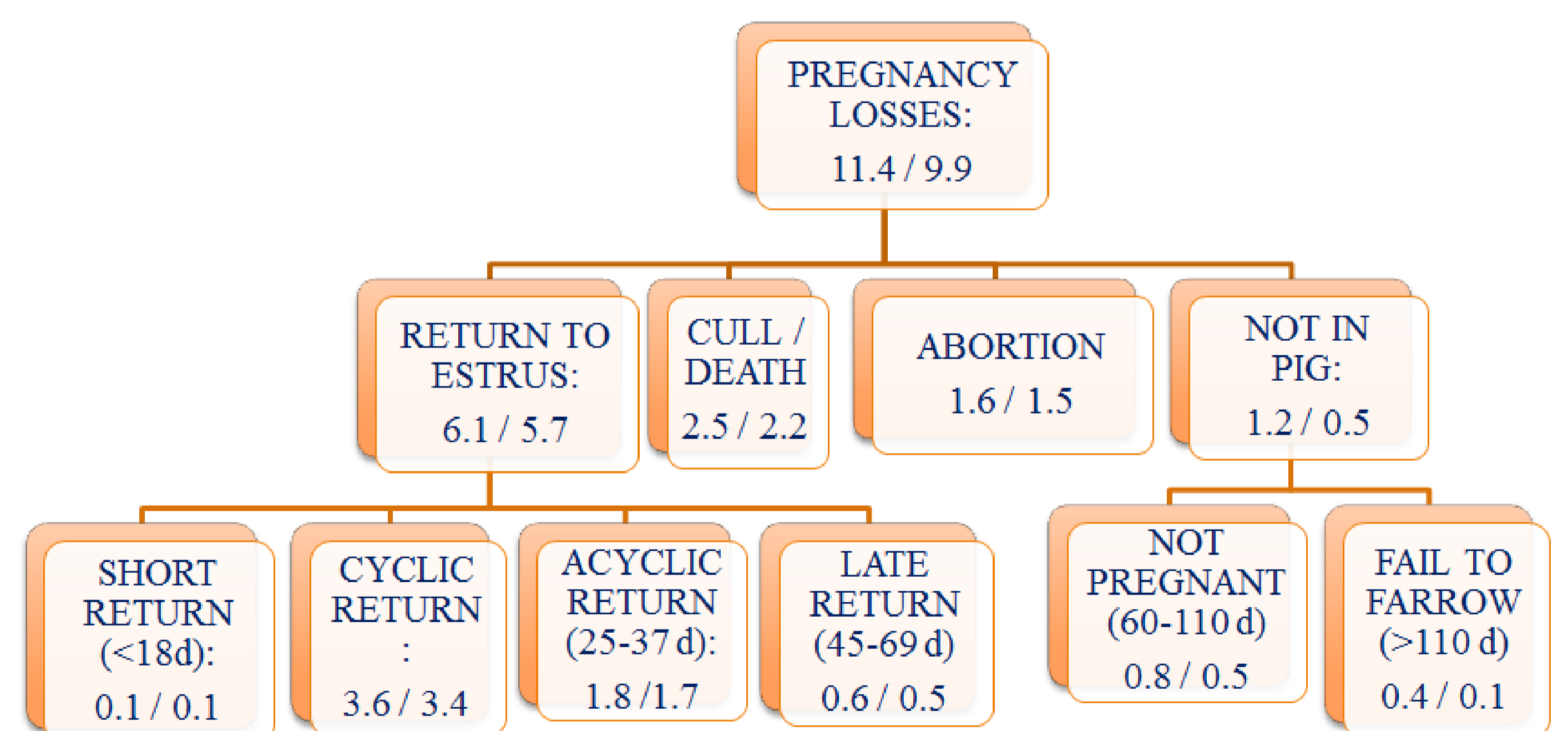


Figure 2- Productivity tree of pregnancy losses in 2012 (left) and in 2013 (right).

## CONCLUSION

The application of the PNMES in Colombian swine farms has a positive effect on the sow productivity: The strategies addressed by the PNMES toward the appropriate implementation of biosecurity, management and monitoring of disease status through laboratory diagnosis of main diseases present at farms may be associated with these results.