

ENHANCEMENT UTILIZATION OF REPRODUCTIVE TECHNOLOGY IN PIG HERDS OF VIETNAM TO MEET THE INDUSTRY DEVELOPMENT POLICY

Kim Dung Pham Thi¹ and Thanh Van Hoang²

¹Planning and Finance Division, Department of Livestock Production, MARD, Vietnam

²Department of Livestock Production, MARD, Vietnam

Pig production accounts for 60% of the value of the Vietnamese livestock industry. Pig population are 29 million heads, ranked first in ASEAN, ranked second in Asia, in the top 15 countries with the largest pig population in the world. Growth rate of pig population by the period from 2007 to 2017 is 0.91% per year. It is estimated that there are 3 million pig farms in the country and about 500,000 breeding households. Pig Farm with big scale is account for 75% of pig production. The percentage of livestock using industrial bran is about 70%. The productivity of Vietnamese pigs is low, ranging from 17 to 24 weans/sow per year. The output of animal feed Industrial changed from 400,000 tons in 1993 to 23.15 million tons in 2016 (of which 20.15 million tons of animal feed and 3 million tons of aquatic feed).

Many supplying companies with the most famous pig breeds in the world have developed in Vietnam. The number of pigs imported in 2016 is 9,521 pigs (Landrace, Duroc, Yorkshire and Pietrain Breed) from the United States, Canada, Denmark, Taiwan, France, England and Belgium. Modern technologies have been transferred and Vietnamese farmers have accessed technology of breeding, gene selection, and artificial insemination in order to improve reproductive performance of sows. Selected research to improve meat yield and reproductive performance has been carried out with proper housing design to minimize environmental pollution and to adapt climate change. However, 8 main difficulties of pork production are identified as 1)Production of markets is lack of connection and overall management, many intermediaries, production costs are high; 2)infectious diseases are difficult to control, especially blue ear disease and FMD; 3)Restructuring livestock production is still low, slow to change, low investment accumulation; 4)Slaughter processing is not well managed and well planned; 5)Production organization is weak, reducing the competitiveness of products; 6)Support policy is not synchronous; 7)Institutional deficiencies are related to land, credit, insurance ...; 8)The chain linkage is unspecified, fragmented, unconnected ...etc. In the next 10 years, 1) the number of large farms increased, pork production in farms will account for more than 70% by 2027; 2) small-scale production fell sharply (5-7% per year), equivalent to less than 30% of small household; 3) pig farming is primarily a "game" of business and "professional" ranchers; 4) a strong chain linkage between famers, slaughterhouses and distributors. By 2027, livestock registration nationwide and strongly developing traceable food chain will be required. Developing many types of organic pig production and industrial slaughter density will increase with branded processed pork products to export. In general, the pig industry in Vietnam has many advantages, but will face great challenges due to increasing competition. Vietnamese pork is not only competitive with American pork, Danube, Brazil, Holland, but also China and Russia; high cost of livestock production and difficulties in controlling the environment. To overcome these challenges, core solutions need to be developed as the state develops the overall management strategy for the livestock sector. In conclusion, Application of pig reproduction science and biotechnology on breed development, quality control of feeds, and breeding technology to reduce product costs, to improve the meat quality, and to increase the competitiveness of pork products.