

Research and Development Initiatives in Support of the Philippine Swine Industry



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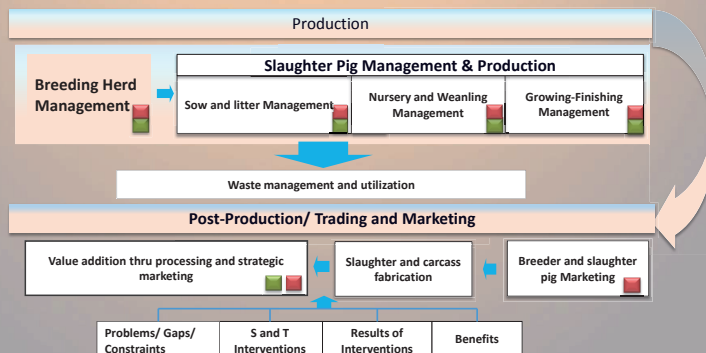
Introduction

- Swine production is becoming more knowledge and technology driven
- The adoption of state of the art technologies is no longer a choice but has become a necessity to pork producers
- The current scenario implies a deliberate and decisive information and technology generation thru R&D
- Efficiency of R&D implementation and utilization of its outputs is achieved thru collaboration and sharing of information between and among government R&D institutions and private industry players
- Public-private partnership in R&D is becoming popular in industries that are dependent on S&T

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Objectives of the presentation

This presentation aims to present the overview of the R&D programs and projects under Swine Industry Strategic S&T Program (Swine ISP)

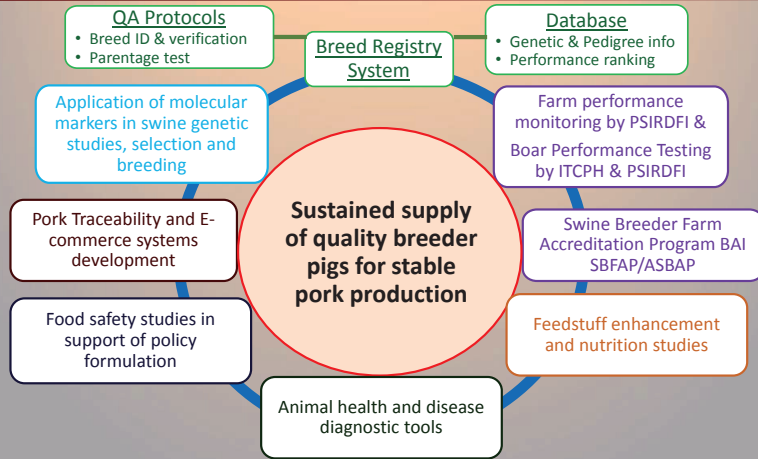


The Philippine swine industry

- 2016 swine inventory is estimated at 12.48 M hd of which 7.96 M hd (63.78%) are in backyard and 4.52 M hd (36.22%) are in large commercial farms
- 2016 volume of production is estimated at 2.2 million MT
- 2016 value of production is Php211.43 B
- Swine ranks 2nd to rice in terms of contribution to GVA in Agriculture
- 2015 per capita pork consumption is 19.39 kg (15.05kg, carcass and 4.34kg, offal)
- 2015 self sufficiency in pork is 90%
- The Philippines is FMD free

Source: <http://www.bas.gov.ph/?ids=swinesituation>

The swine ISP framework



Expected outputs of the swine R&D

R&D activities	Expected outputs
Breed information system development	Philippine swine breed registry <ul style="list-style-type: none"> – breed ID system – parentage testing protocol – genetic and pedigree info – breeder pig performance ranking
Molecular marker-aided genetic studies, selection and breeding Native pig breed development	<ul style="list-style-type: none"> • Optimized DNA markers associated to productivity, meat quality, disease resistance and genetic defects • Established a swine genetic analytical service laboratory • Developed 6 breeding true-to-type Philippine native pig breeding populations

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6 genetic groups of Philippine native pigs



Expected outputs of the swine R&D

R&D activities	Expected outputs
Pork Traceability and E-commerce systems development	<ul style="list-style-type: none"> • Fully automated pork traceability system from pen to plate • E-commerce system for breeder animals and boar semen
Food safety studies in support of policy formulation	<ul style="list-style-type: none"> • Information on anti microbial resistance of common pathogens • Info on the rate of microbial contamination of pork from the slaughter houses, transport vehicle to retail stalls

Expected outputs of the swine R&D

R&D activities	Expected outputs
Animal health and disease diagnostic tools	<ul style="list-style-type: none"> LAMP based laboratory diagnostic protocols LAMP based quick diagnostic kits (wet and dry format) for PED
Feedstuff quality enhancement and nutrition studies	<ul style="list-style-type: none"> Protein enhanced copra meal Range area enhancement protocol for free range native pig production

Expected outputs of the swine R&D

R&D activities	Expected outputs
Swine Breeder Farm Accreditation Program BAI SBFAP/ASBAP	<ul style="list-style-type: none"> 32 accredited swine breeder farms
Farm performance monitoring by PSIRDFI & Boar Performance Testing by ITCPH & PSIRDFI	<ul style="list-style-type: none"> Swine farm performance information since 1992 Boar performance testing protocol and facility Performance tested boars

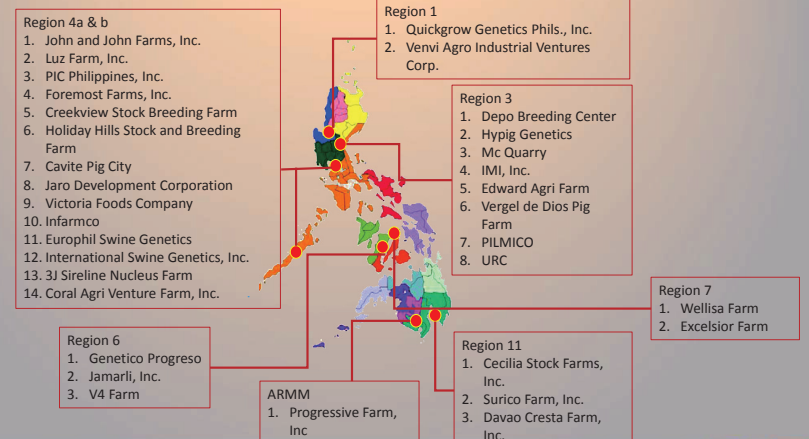
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R&D facilities and human resource capability enhancement

- Establishment of swine genetics analytical service laboratory
- Enhancement of artificial insemination laboratories of R&D institutions
- Support graduate degree scholarships for R&D personnel

The Philippine Swine Breeder Farm Accreditation Program (SBFAP)

- 33 Accredited Swine Breeder Farms as of February 2017



BCDA Taiwan Mission:
Understanding the application of molecular methods of selection in swine breeding.

Date:
March 26, 2014

Activity:
Observation of auction of breeding pigs by NAIF at TLRI.

Participants from the Philippines:

1. Dr. Synan S. Baguio, Livestock Research Division, PCAARRD
2. Dr. Amelio M. Moricon, Marinduque State College
3. Mr. Medino Gedeon N. Yebron, Jr., University of the Philippines
4. Ms. Jessica G. Manalaysay, Philippine Carabao Center
5. Ms. Laila M. Labonte, Philippine Carabao Center
6. Ms. Thiredad C. Fernando, Philippine Carabao Center
7. Ms. Michelle A. Miguel, Philippine Carabao Center

<http://www.augris.tlri.gov.tw/sew1186.htm>



2014

台菲種豬 聯合育種研討會

Empowering Technology for Pig Breeding - Philippines & Taiwan

行政院農業委員會畜產試驗所技術服務組 (TLRI)
行政院農業委員會畜產試驗所 (TLRI)
2014年3月27日 (星期四) 台灣彰化鹿港鎮112號, Taiwan, Taiwan
高大型種豬、精力獎種豬及腳蹄獎種豬頒獎會
Tall Pig Award, Semen Elite Boar Award & Hoof Elite Pig Breeder Award

臺灣行政院農業委員會畜產試驗所 (TLRI)
菲律賓畜產科學研究所 (PCARRD)
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台灣與菲律賓 種豬產業研討會

Symposium for Pig Genetic Breeding - Philippines & Taiwan

種豬育種獎頒獎會
Pig Breeding Excellence Award
2015年4月22日

行政院農業委員會畜產試驗所 (TLRI)
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台灣與菲律賓 2015年 種豬檢定創新布局研討會

Performance Test Services for Pigs Production - Philippines & Taiwan

12月11日

豬肉消費型態論壇 12月12日
Forum for Pork Consumption Pattern - Philippines & Taiwan

行政院農業委員會畜產試驗所 (TLRI)
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2015

台灣與菲律賓 2017年4月26日 種豬場無病原精液人工授精研討會

Artificial Insemination of Pathogen-free Semen in Swine Production - Philippines & Taiwan

種豬育種頒獎
Awarding Activity for Elite Pigs

2016年腳蹄獎種豬
Hoof Elite Pig Breeder Award 2016

2016年精力獎種豬
Semen Quality Elite Boar Award 2016

主辦單位: Sponsored by:
行政院農業委員會畜產試驗所 (TLRI)
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2017

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Needs on Omega-3 Pork



輔導單位: 行政院農業委員會
執行單位: 中央畜產會

Thank you for your attention!

For more information please contact:

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