# BENCHMARKING THE LIVESTOCK AND POULTRY INDUSTRIES

A Cross Country Analysis of the Philippines and Four Other Southeast Asian Countries

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SIKAP/STRIVE Foundation

Center for Food and Agri Business, University of Asia and the Pacific

Livestock Development Council

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## HON. PROCESO J. ALCALA Secretary DEPARTMENT OF AGRICULTURE



Ang matuwid na daan, kailangan may pupuntahan. Here at the Department of Agriculture, we know what lies at the end of all that we are struggling for with all of the dedication and devotion we can muster:

"a competitive, sustainable and technology-based agriculture and fisheries sector, driven by productive and progressive farmers and fishers, supported by efficient value chains and well-integrated in the domestic and international markets, contributing to inclusive growth and poverty reduction."

Determining how we get to that place is the first half of the struggle. The second half, of course, is actually doing what needs to be done. And throughout the process of reaching for our goal, we need to constantly take stock of what we are doing, with what resources and strategies and methods, and to what state we have brought the agriculture sector and its component sub-sectors with our efforts. Adjustments in all aspects of our planning and operations, when warranted, would then need to be effected.

And, in this day of increasingly expanding global trade, when everybody seeks to out-sell everyone else, our self-assessment needs to go beyond our national borders. We also, and sometimes more importantly, need to see what the countries with whom we compete are doing and have accomplished, and then compare ourselves with them. It is only by doing this -- by benchmarking ourselves with our competitors -- could we have a realistic and comprehensive view of what it is that we had done and what we still need to do.

It is truly noteworthy that the private sector and the academe, represented by the SIKAP Foundation and the Center for Food and Agri Business of the University of Asia and the Pacific, are helping us in this front. The expertise of both these institutions in agriculture, in general, and in the livestock and poultry sub-sectors, in particular, is recognized nationally and internationally, and their willingness to share this with us deserves our deep gratitude.

#### Maraming salamat po!

Such generosity deserves our taking to heart the findings of their study and the recommendations that they make as a result. Our efforts towards our goals and vision can only benefit from this output.

## DAVINIO P. CATBAGAN, DVM Assistant Secretary for Livestock DEPARTMENT OF AGRICULTURE



That the livestock and poultry subsector is vital to the growth and development of the agriculture sector cannot be denied. Over the past 20 or so years, it has led other subsectors in growth and has accounted for a substantial portion of the growth achieved by the agriculture and fishery sector.

The potential for this subsector to be competitive domestically and internationally, at least with our ASEAN neighbors, exists. As this study has shown, the technologies we use are generally at par with what they have. The production efficiencies we have achieved do not lag far behind. Our costs are competitive, up to a certain point, and under some assumptions. And, to boot, we are the only country in the ASEAN region that is Avian Flu- and FMD-free.

To ignore and forfeit this potential is unforgivable as it represents additional resources with which to propel the development of the agriculture and fishery sector further. The potential also represents improved well-being and livelihood for the hundreds of thousands directly dependent on the livestock and poultry subsector, as well as the corn subsector which is intimately intertwined with it.

This study contains recommendations on how we can take full advantage of the potential of the livestock and poultry subsector to increase its share in both the domestic and international markets. Well-founded on data gathered and analyzed in compliance with the stringent demands of scholarship, these recommendations must be, and will be, taken into consideration in the continuing effort of the Department of Agriculture to seek ever more efficient

and effective means of increasing the productivity and competitiveness of the subsector.

Our congratulations to the Livestock Development Council for seeing the wisdom of supporting this undertaking of the SIKAP Foundation and the Center for Food and Agri Business of the University of Asia and the Pacific.

## MANUEL R. JARMIN Executive Director LIVESTOCK DEVELOPMENT COUNCIL



With this publication, we at the Livestock Development Council continues with what we intend to be a mainstay among our strategies to identify interventions that optimize the potential of the livestock and poultry subsector to contribute to the growth of the agriculture and fishery sector and, ultimately, to the welfare of the hundreds of thousands of people whose livelihood is dependent on the subsector. This strategy consists of deep and meaningful collaboration among the Council, the academe, and the private sector. Under this collaborative scheme, both the academe and private sector play a central role in providing the Council with the expertise and experience, as well as dispassionate analysis in policy identification and formulation it needs to more appropriately appreciate the wider environment within which the livestock and poultry subsector exists. Improved appreciation of this environment leads to more relevant measures to increase the subsector's competitiveness to optimal levels.

This study has identified some of these competitiveness enhancement measures for the subsector. Most noteworthy of these recommended measures are the development of an integrated feedgrain-livestock-poultry policy framework that provides both for increasing to appropriate levels of public and private sector investments in competitiveness-enhancing interventions for the subsector as well as for the enhancement of the efficiencies of the livestock-poultry chains; the updating of industry master plans; and the piloting of a private sector-government project on the traceability of meat products. The study also recommended strengthening of the public institutions under the DA responsible for animal research, extension, regulation, and

quality standards as well as the provision of adequate support for the strengthening of unified livestock poultry industry associations.

Certainly, these recommendations find validation in the experience of the Council in supporting the growth and development of the subsector. With the publication of this study therefore comes the satisfaction on the part of the Council of again being proven correct in its faith in the value of inputs and insights from the academe and the private sector.

#### LEONARDO A. GONZALES, Ph.D.

Project Co-Leader
Founding President and Chairman
Samahang Itinataguyod ang Kakayahang Angkin
sa Pag-unlad / Society Towards Reinforcing Inherent
Viability for Enrichment (SIKAP/STRIVE, Inc.)



The SIKAP/STRIVE, Inc. finds great satisfaction in once again being able to contribute to the expansion of the knowledge resources available to policy makers and implementers on the livestock and poultry subsector. Since its creation 19 years ago, the Foundation has recognized the critical role the subsector plays in the growth of the agriculture sector. It has therefore built one of its core competencies around this subsector and has been involved in various ways in efforts at boosting the subsector's efficiencies and, consequently, its competitiveness. Its endeavors have centered on the provision of technical advice to the government, mainly to the Department of Agriculture, as well as various private sector entities, based on data gathered and analyzed using the most rigorous and up-to-date scientific methods.

This research, a collaboration between the Foundation and the Center for Food and Agri Business (CFA) of the University of Asia and the Pacific, used a most extensive battery of data analysis methods to gain as wide and comprehensive a look at the subsectors as possible. These methods include reviewing the technical and financial parameters of the industries under the subsector, using price structure analysis to determine price competitiveness of the main products of the subsector, and using the domestic resource cost approach in determining the global cost competitiveness of the industries under the subsector.

It is therefore with great confidence that we offer the set of recommendations arrived at in this study to the Department of Agriculture and its units that are charged with the development of the livestock and poultry subsector. We do so with the fervent hope that these recommendations will be considered as the Department continuously reviews its involvement in the subsector and evolves various interventions to enhance the subsector's competitiveness.

We thank Secretary Proceso Alcala of the Department of Agriculture, Assistant Secretary for Livestock Dr. Davinio Catbagan, and Livestock Development Council Executive Director Manuel Jarmin for continuing to place their trust and confidence in the Foundation and CFA as partners in their respective institutions' efforts at improving the competitiveness of the livestock and poultry, not only in domestic but also in international markets, especially in the ASEAN region. This trust was not misplaced in this undertaking. Nor shall it be misplaced in future engagements.

#### ROLANDO T. DY, Ph.D.

Project Co-Leader, Executive Director
CENTER FOR FOOD AND AGRI BUSINESS
UNIVERSITY OF ASIA AND THE PACIFIC



The book is a major contribution to the literature on livestock and poultry in Southeast Asia, one of the most dynamic regions of the world in the coming decades.

As income and population grow in the region, demand for meat, eggs and processed meat will increase proportionately. Urbanization, the rapid rise of the middle class, and the rise in the preference for eating out are among the key drivers of this growth in demand for livestock and poultry products. This demand and a significant portion of that of the world will be met by members in the region as their value chains become more competitive. Consequently, more investments and jobs will be created.

The Philippine livestock and poultry industries can become competitive and reap the benefits of this anticipated growth in demand. The value chain players, however, must play their part in achieving scale, productivity and efficiency. They must also nurture trust among segment players.

Allow me to congratulate Agriculture Secretary Proceso Alcala, Department of Agriculture Assistant Secretary for Livestock Dr. Davinio Catbagan, and Livestock Development Council Executive Director Manuel Jarmin for the generous support they have given to this endeavour to add to the wealth of knowledge that ought to guide the country's efforts at making its livestock and poultry industries competitive and thus provide better livelihood for the millions dependent on the industries. The Center for Food and Agri Business of the University of Asia and the Pacific is proud and gratified to be able to offer its expertise in this worthwhile initiative.

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### **ACRONYMS**

ACFS Agricultural Commodity and Food Standards

ADG Average Daily Gain

AFMA Agriculture and Fisheries Modernization Act

AFTA ASEAN Free Trade Area

Al Artificial Insemination/ Avian Influenza ASEAN Association of Southeast Asian Nations

AusAID Australian Agency for International Development

BAI Bureau of Animal Industry

BAFPS Bureau of Agriculture and Fisheries Product Standards

BAS Bureau of Agricultural Statistics

BLDTT Bureau of Livestock Development and Technology Transfer

CAFTA China-ASEAN Free Trade Area

CEPT Common Effective Preferential Tariff

CIF Cost Insurance Freight
CJ Cheil Jedang Feed
CP Charoen Pokphand
CPC Canadian Pork Council
DA Department of Agriculture

DGLS Directorate General of Livestock Services
DLD Department of Livestock Development

DOC Day-old-chick

DRC Domestic Resource Cost

DVS Department of Veterinary Services
ECC Environmental Compliance Certificate

EU European Union

FAO Food and Agriculture Organization FAS Foreign Agricultural Service

FCR Feed Conversion Ratio

FLFAM Federation of Livestock Farmers' Association of Malaysia

FMD Foot and Mouth Disease

FOB Free On Board

GAP Good Agricultural Practices

GAPPI Association of the Indonesian Poultry Producers

GMO Genetically Modified Organism
GMP Good Manufacturing Practice
GSO General Statistics Office

HACCP Hazard Analysis Critical Control Points
IFS International Financial Statistics

ILRI International Livestock Research Institute

ISO International Organization for Standardization

JCL Japfa Comfeed Long An

kg Kilogram

LDC Livestock Development Council

LHH Leong Hup Holdings

Ministry of Agriculture and Rural Development MARD

MARDI Malaysian Agricultural Research and Development Institute

MAW Minimum Access Volume

MDM Mechanically De-boned Meat

MFN Most Favored Nation

MOAC Ministry of Agriculture and Cooperative NAFC National Agriculture Extension Center

NAFC National Agricultural and Fishery Council

NIAH National Institute for Animal Husbandry NIVR National Institute for Veterinary Research

**NMIS** National Meat Inspection Service

National Statistics Office NSO

OFR Official Exchange Rate

Philippine Association of Broiler Integrators PABI

PPP Public Private Partnership

Porcine Respiratory and Reproductive Syndrome **PRRS** 

PS Parent Stock

RCR Resource Cost Ratio

R&D Research and development

SMPF San Miguel Pure Foods

SPS Sanitary and Phytosanitary Measures

**STRC** Statistical Research and Training Center

**TBPEA** Thai Broiler Processing Exporters Association

TBT Technical Barriers to Trade TTC **Technology Transfer Center** 

UAP-CFA University of Asia and the Pacific-Center for Food and

Agri Business

Universal Robina Corporation

URC

USDA United States Department of Agriculture USMEE **United States Meat Export Federation** 

VAT Value-added Tax

WTO World Trade Organization