



CONSTRAINTS TO SWINE PRODUCTION AND MARKETING IN  
KANGINIMA SUB-COUNTY, PALLISA DISTRICT

BY

MULABBI EMMANUEL

BU/UP/2012/300

0772057521

[Mulabbi20@gmail.com](mailto:Mulabbi20@gmail.com)

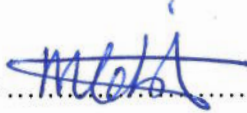


ADSSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND ANIMAL  
SCIENCES IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR THE AWARD OF A  
BACHELORS DEGREE OF ANIMAL PRODUCTION AND MANAGEMENT OF  
BUSITEMA UNIVERSITY

JUNE, 2015

**DECLARATION**

I MULABBI EMMANUEL hereby declares that this dissertation is my work and has never been submitted to any other university or any other institution of learning for any award.

Signature .....  ..... Date..... ~~31/07/2015~~ <sup>31/07/2015</sup> ~~2015~~

**APPROVAL**


This dissertation has also been supervised and submitted with the approval of my supervisor.

**Ms. Akurut Immaculate**

Msc. PH ,BAPTM (Makerere University)

Head of Department Animal Production and management,

Busitema University

Signature .....  ..... Date..... 17/08/15



## **DEDICATION**

This dissertation is dedicated to all people who love improving and modernizing Agriculture through research and extension services, May the Almighty God Bless you in the Struggle to Modernize Agriculture.

## **ACKNOWLEDGEMENT**

I do extend my sincere appreciation to my supervisor Ms. Akurut Immaculate for the generous help that she has given me in the various aspects and guidance throughout the research.

Sincere thanks go to Kanginima farmers for their cooperation during data collection for you contributed to success of this research.

## TABLE OF CONTENTS

DECLARATION.....	i
DEDICATION.....	ii
ACKNOWLEDGEMENT.....	iii
TABLE OF CONTENTS.....	iv
LIST OF FIGURES.....	vi
LIST OF TABLES.....	vi
LIST OF ABBREVIATIONS.....	vii
ABSTRACT.....	viii
CHAPTER ONE.....	1
1.1 Background.....	1
1.2 Problem statement.....	2
1.3 Main objective.....	2
1.4 Specific objectives.....	2
1.5 Research questions.....	2
1.6 Justification of the study.....	3
1.7 Scope of study.....	3
1.8 Significance of the study.....	3
CHAPTER TWO: LITRITURE REVIEW.....	4
2.0 Introduction.....	4
2.1 Importance of pigs.....	4
2.2 Production and the population of pigs in Uganda.....	4
2.3 Market.....	5
2.4 Production systems.....	5
2.4.1 Intensive pig-production system.....	5
2.4.2 Extensive/tethered/small scale pig-production system.....	6

2.2.3 Semi-intensive pig-production system .....	6
2.5 Constraints to swine production .....	6
2.6 Opportunities for pig production.....	7
2.7 Threats.....	7
3.0 CHAPTER THREE: METHODOLOGY .....	8
3.1 Study area.....	8
3.2 Research Approach .....	8
3.3 Sampling design.....	8
3.4 Sample size determination .....	8
3.5 Operational Design.....	8
3.6 Data analysis and result presentation .....	9
3.7 Environmental and Ethical consideration .....	9
CHAPTER FOUR: RESULTS .....	10
4.1 Respondents' Bio data.....	10
4.2 Management constraints to swine production.....	12
4.4 Improvement strategies for swine marketing and production.....	16
CHAPTER SIX: CONCLUSION.....	22
REFERENCES .....	23
APPENDICES .....	26

## **LIST OF FIGURES**

Figure 1: Showing respondents marital status.....	10
Figure 2: Showing Socio-economic constraints swine production .....	11
Figure 3: showing the categories of breeds reared by the farmers .....	12
Figure 4: Showing the types of housing used by the respondents.....	13
Figure 5: illustrating the frequency of giving supplement to pigs by the respondents.....	13
Figure 6: illustrating accessibility of extension services.....	14
Figure 7: showing problems faced in marketing pigs .....	16
Figure 8: Showing Improvement strategies for swine marketing and production .....	16

## **LIST OF TABLES**

Table 1: Showing the statistical impact of Socio-economic constraint to swine production.....	11
Table 2: Showing the litter size of various respondents' pigs.....	12
Table 3: Showing statistical impact of management constraints to swine production.....	14
Table 4: showing the marketing age structure .....	15

## **LIST OF ABBREVIATIONS**

ASF	:	African swine fever
DRC	:	Democratic Republic Of Congo
FAO	:	Food and Agricultural Organisation
MAAIF	:	Ministry of Agriculture Animal industry and Fisheries
NGO	:	None Governmental Organisation
NAADS	:	National Agriculture Advisory Services
SDA	:	Seventh Day Adventist
UBOS	:	Uganda National Bureau of Statistics
WHO	:	World Health Organisation



## ABSTRACT

Across sectional survey was carried out to unearth the constraints to swine production and marketing with emphasis on socio-Economic, management and general constraints to marketing of pigs and improvement strategies for pig production and marketing. Both quantitative and qualitative data was collected using structured questionnaires and interview guide. Statistical Package for Social Scientists (SPSS) version 16 was employed for the data analysis. The results were presented in form of tables, pie charts, and graphs. The study found out that; insufficient capital (17%), expensive feeds (84%), socioeconomic constraints such religious criticism from the Muslim and neighbours (100%) were noted as major socio economic constraints while lack of pig housing facility (64%) , inaccessibility to extension services (66%) , disease and parasite (17%), rearing of less productive local breeds (41%) were the major management constraints cited. Poor infrastructure (33%), irregularities in pig price (64%), low demand for the mature pigs of a big size (1%), religion (98%), competition from other livestock sectors like cattle (1%) were cited as problems affecting marketing of pigs. Improvement strategies identified included government provision of subsidies on animal feeds (80%), provision of feeds processing plants (14%), putting in place a regulation to reduce on killing of pigs by people whose culture or religion taboo pigs (3%), and bringing veterinary service close to the people (36%). There was request for timely availing of movement permits for pigs to ease marketing (100%) and pig farmers forming farmers association to easily access government aid and also market pigs as a group (6%), use of social media to provide market information (71%) among other strategies

The study concluded that insufficient capital, expensive feeds, culture and religions that taboo pigs were the major socio economic constraints to swine production, while lack of housing facilities, inaccessibility to extension services, disease and parasites were the major management constraints that restricted swine production.

It was therefore recommended that:- the district production department should develop an appropriate package that can be used by extension staff to sensitise the local community about modern farming practice like up grading of the pig breeds and also convince farmers that piggery is a highly productive enterprise that can help to alleviate poverty. Government should also come up with policies that aim at availing credit service to farmers so that they can adopt commercial farming.

## CHAPTER ONE

### 1.1 Background

Pigs just as other livestock play a big role to the livelihoods of majority of the poor people in the developing world (Perry and Sones, 2007), pork consumption has continued to register strong growth, partly due to rising incomes and a growing human population (Trostle, 2010). Pig farming has been found to be more popular in the peri-urban farming than rural (Perry, 2002); because the pigs can be managed on a small land area (Brown *et al.*, 2001). Pigs have higher turnover rate due to large litter sizes, shorter gestation period and lower feed conversion ratio, as compared to most livestock species. As a result the pigs are more profitable livestock farming venture, since more meat is produced and sold during the life span of a pig, as compared to other domestic animals (Owen *et al.*, 2005) The rising demand for livestock products in Africa has resulted in an increased use of intensive pig production systems across the continent. The world livestock sector globally is highly dynamic that in developing countries it is evolving in response to rapidly increasing demand for livestock (Thornton, 2010). Pigs are not only sold as pigs but they are also marketed as pork or fried. According to (VAN CAMPENHOUT *et al.*, 2012.), the average household budget share for pork reduced slightly from 6.26% in 2005/06 to 5.77% in 2009/10. In Uganda, consumption of pork increased by 21.2% annually from 1980 to 1990 and by 3% annually from 1990 to 2000 (FAO and 2005.) By 2011, Uganda had one of the highest per capita consumption of pork in sub-Saharan Africa, reaching 3.4 kg/person/year (Ballantyne, 2012). According to the 2008 livestock census report, Uganda's pig population was estimated to be about 3.2 million pigs and out of this, about 33% were located in northern and eastern Uganda (UBOS and 2009 ). Pig production is popular in these regions following the loss of a large cattle and goat population during the time of civil unrest, which left many households poorer (FAO *et al.*, 2004). Aware of this and the contribution of pig farming towards poverty alleviation, the government of Uganda, through the National Agricultural Advisory Services (NAADS) and the development partners, actively promoted pig production in Uganda. A recent study by (Muhanguzi *et al.*, 2012) describe pig production in urban areas of Uganda, such as Kampala, as being predominantly intensive and semi-intensive with the predominant breeds being the exotics (Landrace and Large White) and their crosses. Livestock production is a major component of the agriculture industry in Uganda contributing 9% of Gross Domestic Product and 17% of Agricultural Gross Domestic Product (UBOS, 2009). Pig production is a viable livestock system in East Africa, playing an important role in pork production either for home

## REFERENCES

- Agunbiade, J.A., Akeula, I.O and Awojobi, H.A. (2001). An assessment of pig production system. A case study of Lagos and Ogun state, Nigeria. *Ogun J. Agric. Sci.* 1: 108-115.
- Adejoba O.R., Adu, A.O., Meduna, A.J. and Adekunle, R.F. (2004.) Participation, prospects and problems of piggery Business in selected local government areas in Ibadan Metropolis. *Trop. J. Ani. Sci.* Vol 7(1) 155-159.
- Bailey D., Barrett C.B., Little P.D., Chabari F. (1999) Livestock markets and risk management among East African pastoralists: A review and research agenda. Available at SSRN 258370.
- Chiduwa G.C., M Halimani, TEChisambara, S R Dzama, K. (2008) Herd dynamics and contribution of indigenous pigs to the livelihoods of rural farmers in a semi-arid area of Zimbabwe. *Tropical Animal Health and Production* 40:125-136.
- Chikwanha O.C. (2006) Evaluation of the feed resources and analysis of body condition scores of local pigs in a semi-arid smallholder farming area of Zimbabwe, University of Zimbabwe.
- Development I.F.f.A. (2001) Rural Poverty Report 2001: The Challenge of Ending Rural Poverty Oxford University Press.
- Dietze K. (2011) Pigs for prosperity FAO.
- FAO, . (2005.) Livestock Sector Brief, Uganda. Food and Agricultural Organization of the United Nations (FAO); Livestock Information, Sector Analysis and Policy Branch. AGAL
- FAO, , . (2004) Food and Agricultural Organization. State of the World's Animal Genetic Resource Report. A copy of the Uganda Country Report.
- FAO. (2012.) Pig Sector Kenya. FAO Animal Production and Health Livestock Country Reviews. No. 3. Rome .
- Fenberg L. (2012) Evaluation of physical properties of leftover foods collected from hotles and restaurants as feed fo pigs in urban and per-urban areas of Kampala. Swidish University of Agriculture .ScienceFaculty of Veterinary Medicine and animal Science. Department ofAnimal nutrition andManagement,Sveriges Lantbruksuniversity (SLU).
- Ishagi N., Ossiya S., Aliguma L., Aisu C. (2002) Urban and peri-urban livestock keeping among the poor in Kampala City. Ibaren Konsultants, Kampala, Uganda:97.
- Katongole C.B., Nambi-Kasozi J., Lumu R., Bareeba F., Presto M., Ivarsson E., Lindberg J.E. (2013) Strategies for coping with feed scarcity among urban and peri-urban livestock farmers in Kampala, Uganda. *Journal of Agriculture and Rural Development in the Tropics and Subtropics (JARTS)* 113:165-174.

- Lekule F.P., Kyvsgaard N.C. (2003) Improving pig husbandry in tropical resource-poor communities and its potential to reduce risk of porcine cysticercosis. *Acta Tropica* 87:111-117.
- MARKELOVA H., MEINZEN-DICK, R., HELLIN, J. & DOHRN, S. . . (2009) Collective action for smallholder market access. *Food Policy*, 34, 1-7.
- Masembe C., Michuki G., Onyango M., Rumberia C., Norling M., Bishop R.P., Djikeng A., Kemp S.J., Orth A., Skilton R.A. (2012) Viral metagenomics demonstrates that domestic pigs are a potential reservoir for Ndumu virus. *Virology journal* 9:218.
- Muhanguzi D., Lutwama V., Mwiine F.N. (2012) Factors that influence pig production in Central Uganda-Case study of Nangabo Sub-County, Wakiso district. *Veterinary World* 5:346-351.
- Mutetikka D. (2009) A guide to pig production at farm level, Makerere University, Kampala, Uganda, Fountain Publishers, Kampala.
- Ndindana W., Dzama K., Ndiweni P., Maswaure S., Chimonyo M. (2002) Digestibility of high fibre diets and performance of growing Zimbabwean indigenous Mukota pigs and exotic Large White pigs fed maize based diets with graded levels of maize cobs. *Animal Feed Science and Technology* 97:199-208.
- Nwafor C.U. (2004) Small ruminant livestock marketing in The Gambia: a socio-economic perspective. *Livestock Research for Rural Development*. Retrieved March 24:2010.
- Owen E., Kitalyi A., Jayasuriya N., Smith T. (2005) *Livestock and wealth creation: improving the husbandry of animals kept by resource-poor people in developing countries* Nottingham University Press.
- Perry B., Sones K. (2007) *Science for development: poverty reduction through animal health*. Perry B.D. (2002) Investing in animal health research to alleviate poverty ILRI (aka ILCA and ILRAD).
- Petrus N., Mpofo I., Schneider M., Nepembe M. (2011) The constraints and potentials of pig production among communal farmers in Etayi Constituency of Namibia. *Livestock Research for Rural Development* 23:2011.
- Pezo D., Waiswa C. (2012) Farming systems perspectives: Lessons for managing health risks in smallholder pig systems.
- Riedel S., Schiborra A., Huelsebusch C., Huanming M., Schlecht E. (2012) Opportunities and challenges for smallholder pig production systems in a mountainous region of Xishuangbanna, Yunnan Province, China. *Tropical Animal Health and Production* 44:1971-1980.
- Tatwangire, . (2012) *The Conditions within which the Smallholder Pig Value Chains Operate in Uganda:*