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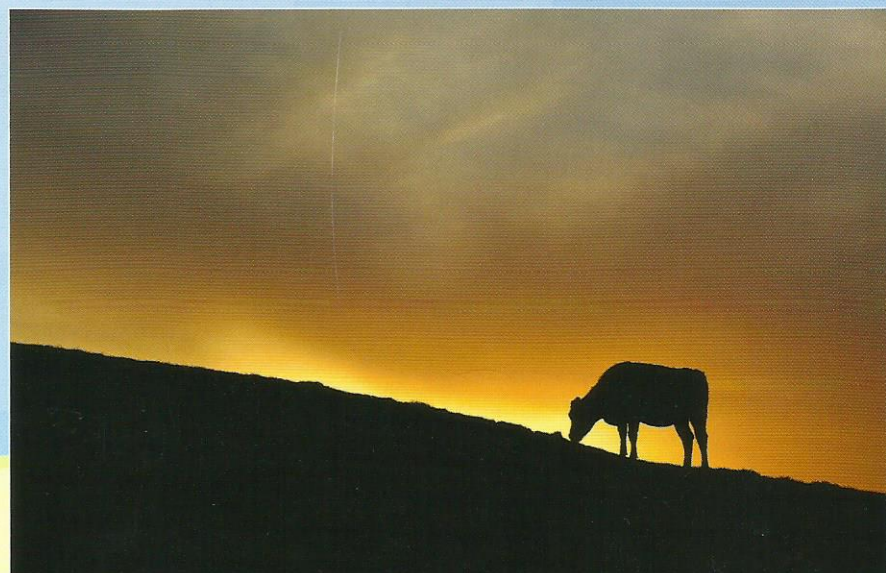
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PO-05-49 Analysis of acceleration data on the neck band around the calving in dairy cows

Yasushi Chida^{1,2}, Yoshitaka Deguchi³, Toshihiko Takahashi⁴, Shizu Koshikawa⁵, Takahiro Ito⁵, Toshitaka Fujiwara⁵, Hiroyoshi Chiba⁶, Keiji Okada⁶

¹Bycen Inc., ²Konan University FRONT, ³Iwate University Department of Animal Science,

⁴Iwate Agricultural Research Center Animal Industry Research Institute,

⁵Rakuno Gakuen University Department of Sustainable Agriculture,

⁶Department of Sustainable Agriculture Department of Veterinary Medicine

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Helena Dasilva

East Nusa Tenggara Assessment Institute for Agricultural Technology

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Femi Elly¹, Artise HS Salendu¹, Charles L Kaunang¹, Indriana Indriana², Syarifuddin Syarifuddin³, Zulkam Pohuntu⁴, Syarifudin Pontoh⁴

¹University of Sam Ratulangi, Faculty of Animal Husbandry, ²University of Ichsan, Indonesia,

³BP3K, Indonesia, ⁴PEMDA, Indonesia

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Jolanda Kalangi, TFD Lumy, JC Loing, LS Kalangi, J Kalele

Faculty of Animal Husbandry University of Sam Ratulangi

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Faculty of Animal Husbandry University of Sam Ratulangi

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Takeshi Yamazaki¹, Koichi Hagiya², Hisato Takeda³, Shigeki Yamaguchi⁴, Takefumi Osawa⁵, Yoshitaka Nagamine⁶

¹Hokkaido Agricultural Research Center, NARO, ²Obihiro University of Agriculture and Veterinary Medicine,

³Institute of Livestock and Grassland Science, NARO, ⁴Livestock Improvement Association of Japan,

⁵National Livestock Breeding Center, ⁶Nihon University

PO-05-55 DEVELOPMENT FOR CATTLE UNDER COCONUT TREE BASED ON THE ENVIRONMENT IN THE DISTRICT OF SOUTH KOTAMOBAGU

AHS Salendu, IDR Lumenta, FSG Oley, RFEM Osak

Faculty of Animal Husbandry University of Sam Ratulangi

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Faculty of Animal Husbandry University of Sam Ratulangi

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IDR Lumenta^{1,2}, I Wahyuni¹, FH Elly¹, Syarifuddin Syarifuddin², SJK Umboh¹

¹Faculty of Animal Husbandry University of Sam Ratulangi, ²BP3K, Indonesia

PO-05-58 Free-Grazing spent layer duck value chains in Vietnam: Implication for Avian Influenza control

Tung Dinh Xuan¹, Tuan Han Anh¹, Duc Do Van¹, Thu Nhu Van¹, Meyer Anne², Vergne Timothée²

¹National Institute of Animal Sciences, Vietnam,

²Royal Veterinary College (RVC) in London, United Kingdom

PO-05-52**DEVELOPMENT OF AGRIBUSINESS FOR FARMING OF NATIVE CHICKEN IN THE SUBDISTRICT OF SOUTH KOTAMOBAGU**

Jolanda Kalangi, TFD Lumy, JC Loing, LS Kalangi, J Kalele

Faculty of Animal Husbandry University of Sam Ratulangi

Native chicken is one alternative to businesses that do not require a lot of capital and a large area. Products of native chicken (eggs and meat) is favored by the people. In fact, most people, in the subdistrict of South Kotamobagu (about 65%) have a native chicken. The problem is, the development of the native chicken by society to do with the traditional system. The purpose of research that has been done, is to determine the extent of the role of chicken farming village, in providing benefits to farmers. This study was conducted using a survey method with direct observation in the study site. Results of research have shown the breeds of native chicken, are not yet available continuously. Breeds of native chicken obtained by incubation naturally. Native chicken reared in the home page and consuming feed from the remains of the kitchen, so the productivity is low. Feed, purchased from Poultry Shop at a price of about Rp 8,000 per kg. South Kotamobagu a district, which has, the largest irrigated land, among four other districts in the City of Kotamobagu, which is an area of 2143.50 ha (55.24%) of the total irrigated land in this area. The indication, that the chicken feed is not a problem if farmers take advantage of available resources. Prices of native chicken per head Rp 50,000. The value of R/C ratio greater one, thus it provides adequate reception for farmers. In conclusion, sub system of agribusiness native chicken has not been integrated. This is show business carried on not business oriented. Suggestions, need government intervention in developing the agribusiness of native chicken, with sustained.

KEYWORD: Native, Chicken, Agribusiness, Sustainable

PO-05-54**Effect of days from calving to first insemination on conception rate during the first three lactations of Japanese Holstein cows**Takeshi Yamazaki¹, Koichi Hagiya², Hisato Takeda³, Shigeki Yamaguchi⁴, Takefumi Osawa⁵, Yoshitaka Nagamine⁶¹ Hokkaido Agricultural Research Center, NARO,² Obihiro University of Agriculture and Veterinary Medicine,³ Institute of Livestock and Grassland Science, NARO,⁴ Livestock Improvement Association of Japan,⁵ National Livestock Breeding Center,⁶ Nihon University

[Objectives] The effects of days from calving to first insemination (DCF) on the conception rate (CR) for first insemination in Japanese Holstein cows were predicted for the first three lactations. [Methods] Insemination and lactation records (first lactation: 475,446 cows; second lactation: 379,483 cows; third lactation: 266,652 cows) were obtained through the Dairy Herd Improvement program in Japan. DCF ranged from 21 to 200 days. CR was defined as a binary trait of 0 or 1, where 1 indicated that the first insemination achieved pregnancy, and 0 indicated otherwise. The CR data were analyzed within each lactation by using a single-trait linear animal model. Included in the model were fixed effects of herd-year, month, and age group for the first insemination; random effect of service sire at the first insemination; and random additive animal effect were included in the model. The CRs at various DCF were predicted by including the fixed effect of DCF group in the model; DCF groups were created by subdividing the overall range of DCF into consecutive 10-day intervals (18 levels). [Results] Within each lactation, the CRs of the groups for which DCF was 60 days or less were lower than those of the remaining DCF groups. The difference in CR between 21–30 days and 61–70 days of DCF were -0.14 in the first lactation, -0.12 in the second, and -0.12 in the third, respectively. The differences among CRs from 61 to 200 days of DCF were at most 0.03 in the first lactation, 0.09 in the second, and 0.09 in the third, respectively. These results suggest that, for the first three lactations, insemination during the first 60 days after calving decreases CR, but especially for the first lactation, delaying the first insemination beyond this point hardly influences CR in Japanese Holstein cows.

KEYWORD: Holstein, Conception rate, Days from calving to first insemination

PO-05-53**BENEFIT OF INTEGRATION CATTLE-CORN FARMING IN SANGKUB SUBDISTRICT**

ML Rundengan, B Rorimpandey, EKM Endoh, SOB Lombogia, MAV Manese

Faculty of Animal Husbandry University of Sam Ratulangi

Corn is known as the dominant commodity in the Sangkub Subdistrict. The corn crop was developed in this district in supporting the development of cattle. Cattle have a comparative advantage to be developed in this area. The problem is, how the benefits of the integration of cattle corn in Sangkub Subdistrict. Based on these problems, this research has been done with the aim of analyzing the benefits of the integration of cattle corn. The research method that has been used is survey method, with the source of data is the primary data. Sample of respondents was determined by purposive sampling, namely corn farmers who develop cattle. The number of respondents as many as 30 farmers. Analysis of the data used is descriptive analysis. The results showed that the age of majority respondents considered productive (93 percent), with the highest levels of education, is a graduate (3.33 percent). Farmers plant corn, then the waste is utilized by cattle as feed. The results of the analysis of R/C ratio is greater than one, which indicates that the integration of cattle and corn farming provide higher revenue for farmers. Based on the results of this study concluded that the integration of cattle corn, providing benefits to the development of cattle. Waste of corn used as cattle feed, so in this concept no waste is disposed of. Based on the research suggested, it is necessary for the introduction of feed technology, from waste corn in order to feed continuously available and sustainable.

KEYWORD: Integration, Cattle, Corn, Sustainable

PO-05-55**DEVELOPMENT FOR CATTLE UNDER COCONUT TREE BASED ON THE ENVIRONMENT IN THE DISTRICT OF SOUTH KOTAMOBAGU**

AHS Salendu, IDR Lumenta, FSG Oley, RFEM Osak

Faculty of Animal Husbandry University of Sam Ratulangi

South Kotamobagu is one of the areas that develop cattle to utilize the land under coconut trees. This condition is done because of the coconut, is a plant that predominate in the region. The problem, as far as the potential of land under coconut trees, in supporting the development of cattle, which are oriented environment. This research has been conducted in order to analyze the potential of land resources, in the District of South Kotamobagu. This study was conducted using a survey method. Village samples were determined by purposive sampling, the village that has the largest cattle population. Data analysis was performed using analysis of Livestock Development Potential Effective for dry land and analysis carrying capacity for land under coconut. The results showed that the value PMSL to dry land of 71,000.00 AU, KPPT (SL) 70,403.91 AU, PMKK 24,831.00 AU, KPPT (KK) 24,234.51 AU. The value of the carrying capacity for land under coconut is 7.65, which indicates that the area of land available coconut, then the real population may be increased to 7.65 times. In conclusion, the land under a coconut tree in the District of South Kotamobagu has the potential for the development of cattle, if the land is used as a source of forage. Suggestions that need to be addressed, this potential can be expanded through the approach integrasi cattle, environmentally friendly and sustainable.

KEYWORD: Cattle, Coconut, Environment

DEVELOPMENT OF AGRIBUSINESS FOR FARMING OF NATIVE CHICKEN IN THE SUBDISTRICT OF SOUTH KOTAMOBAGU

J. K.J. Kalangi, T.F.D. Lumy, J.C. Loing, L.S. Kalangi and J. Kalele

*Department of Social Economics, Faculty of Animal Husbandry,
University of Sam Ratulangi,
Jl. Campus Bahu Kleak Manado 95115, North Sulawesi, Indonesia
Email: jolandakalangi_unsrat@yahoo.com*

Abstract

Native chicken is one alternative to businesses that do not require a lot of capital and a large area. Products of native chicken (eggs and meat) is favored by the people. In fact, most people, in the subdistrict of South Kotamobagu (about 65%) have a native chicken. The problem is, the development of the native chicken by society to do with the traditional system. The purpose of research that has been done, is to determine the extent of the role of chicken farming village, in providing benefits to farmers. This study was conducted using a survey method with direct observation in the study site. Results of research have shown the breeds of native chicken, are not yet available continuously. Breeds of native chicken obtained by incubation naturally. Native chicken reared in the home page and consuming feed from the remains of the kitchen, so the productivity is low. Feed, purchased from Poultry Shop at a price of about Rp 8,000 per kg. South Kotamobagu a district, which has, the largest irrigated land, among four other districts in the City of Kotamobagu, which is an area of 2143.50 ha (55.24%) of the total irrigated land in this area. The indication, that the chicken feed is not a problem if farmers take advantage of available resources. Prices of native chicken per head Rp 50,000. The value of R / C ratio greater one, thus it provides adequate reception for farmers. In conclusion, sub system of agribusiness native chicken has not been integrated. This is show business carried on not business oriented. Suggestions, need government intervention in developing the agribusiness of native chicken, with sustained.

1. Introduction

Native chicken, to date, still has an important role in supporting needs of meat and eggs. The indication, development native chicken, according Hidayat (2012), it is located in a national livestock development in future. Siahaan et al (2013) suggested native chicken, is supporting development of poultry farm in countryside. Native chicken has an important role in development of animal husbandry (Melviyanti et al. 2013). It is mainly in supply of meat has a distinctive flavor and texture than broilers.

The demand for native chicken tend to increase due to an increase in population, income and awareness of importance of nutrition. This phenomenon indicates product native chicken important in supporting needs of consumption of animal protein. The government should encourage poultry industry in an effort to supply products native

chicken. Wulyono and Daroini (2013) suggests that poultry industry in that it has a strategic value, especially in supply of animal protein.

In fact most societies South Kotamobagu Districts (about 65%) have a native chicken. The problem is development of native chicken by society, is still traditionally. Although, reality native chicken have better resistance to disease (Nataamijaya, 2010). Cultivation local poultry has opportunity to be developed mainly native chicken (Dewi et al. 2012). Based on these ideas, has done research on development of agribusiness farming native chicken. The purpose of this study to determine extent of role native chicken farming in providing benefits to farmers.

2. Methods of Research

This study was conducted using a survey method with direct observation. The data collected is a cross section taken over last month. South Kotamobagu villages in district have been determined by purposive sampling Village Poyowa Besar Dua with consideration of this village has highest number native chicken farmers. Respondents of 8 people who have been determined based on farmers who are members of a group native chickens. Analysis of data used is descriptive analysis.

3. Results and Discussion

The village Poyowa Besar Dua, according to results of research, most earn income sourced from agriculture, including food crops (rice, maize), coconuts and livestock. Most societies (70%) are farmers. Farmers in question is owning farmers, sharecroppers and agricultural laborers.

Research results showed feed purchased from Poultry Shop at a price of Rp8,000/kg. South Kotamobagu is a district that has largest irrigated land among other districts in city Kotamobagu ie covering 2143.50 ha (55.24%) of total irrigated land in this area. The indication, native chicken feed is not a problem if farmers utilize available resources. Abun et al (2007) suggested cost of feed is largest production cost in native chicken farming intensively. The indication is required effort to find alternative feed is cheap, easy to obtain, quality is good, and does not compete with food. Wulandari et al (2012) suggest chicken of any kind requires a good rations with adequate nutrient content. Feed is largest expenditure at around 70% of total production costs (Magdalena et al., 2013). According Aryanti et al (2013), if feed consumption is good then weight gain would

also be good. Singarimbun et al (2013) state feed protein has an important role in improving quality of chicken carcasses.

Research results showed sales native chicken that has been done is still limited in area of research with price of Rp50,000/head. Value of RC ratio is 1.5 (greater than study of Yuwono and Prasetyo, 2013), thus it is still profitable for farmers. These results indicate development native chicken as food products complement in supply of poultry meat today has good prospects (Yuwono et al. 2012). The role native chicken can not be ignored because it is supporting efforts to increase contribution of local livestock in order to strengthen food security programs (Suthama et al. 2012). Farmers can determine strategy to support development of native chicken. David (2013) argues should farmers focus on strategies to reduce impact and probability of source of risk of disease.

Research results showed native chicken development in study area have not been oriented agribusiness. Agribusiness according Mappigau and Ezzo (2011) includes a upstream agribusiness subsystem, farming subsystem (technical production), downstream agribusiness subsystem and subsystems of supporting services. Activity in agribusiness sector include any one or a whole chain of production inputs, farming, processing and marketing including native chicken breeders (Kurniawan et al. 2013). Subsystems of production inputs focused on activities of procurement and distribution of production inputs, especially breed and feed. Research results showed native chicken breed is not available continuously. Breeds of native chicken have been produced by means of hatch naturally. This causes a slow increase in population. Breeding farm that produces eggs for incubation and hatching eggs is needed in this area, as stated Yuwono and Prasetyo (2013).

Subsystem of farming includes farming agro-climate physical condition of production, producers breeder structure and scale of business, performance and production constraints. In fact, native chickens were left in yard, not grounded. In fact, maintenance technology is a determining factor in overall native chicken farming (Suryana and Hasbianto, 2008). An important aspect in building a system of agribusiness, among others, to build a system of competitive livestock farming.

Processing subsystems, which play a role in initiatives forms and types of processed products, difficulties in processing, processing capacity, volume processed, and product prices. Farmers' knowledge about aspects of processing is still low. In this process added value native chicken products will be increased so that increase farmers' income. Livestock processed products needed to support food diversification program today and in future. Agribusiness development can improve availability, distribution and

competitiveness native chicken products for industrial cake or bread (Saptana and Sartika, 2014).

Marketing subsystem includes a chain of domestic marketing and export (primary or processed products), composition of perpetrators of marketing and product marketing constraints. In fact, marketing of native chicken have been done only in area of research. In fact, domestic poultry have large market opportunities. Farmers can increase market share through improving quality and quantity of products, improve competitiveness, and cooperation with relevant parties (Kurniawan et al. 2013).

Supporting institutional subsystem includes a means trading system (infrastructure), banking services or credit and other supporting institutions. Cooperation with institutional support yet, so farmers do not have capital for business development toward agribusiness. Funding limitations is weakness of agribusiness development in Kurniawan et al (2013). The concept of native chicken agribusiness can be developed with reference to Elly (2012) as shown in Figure 1.

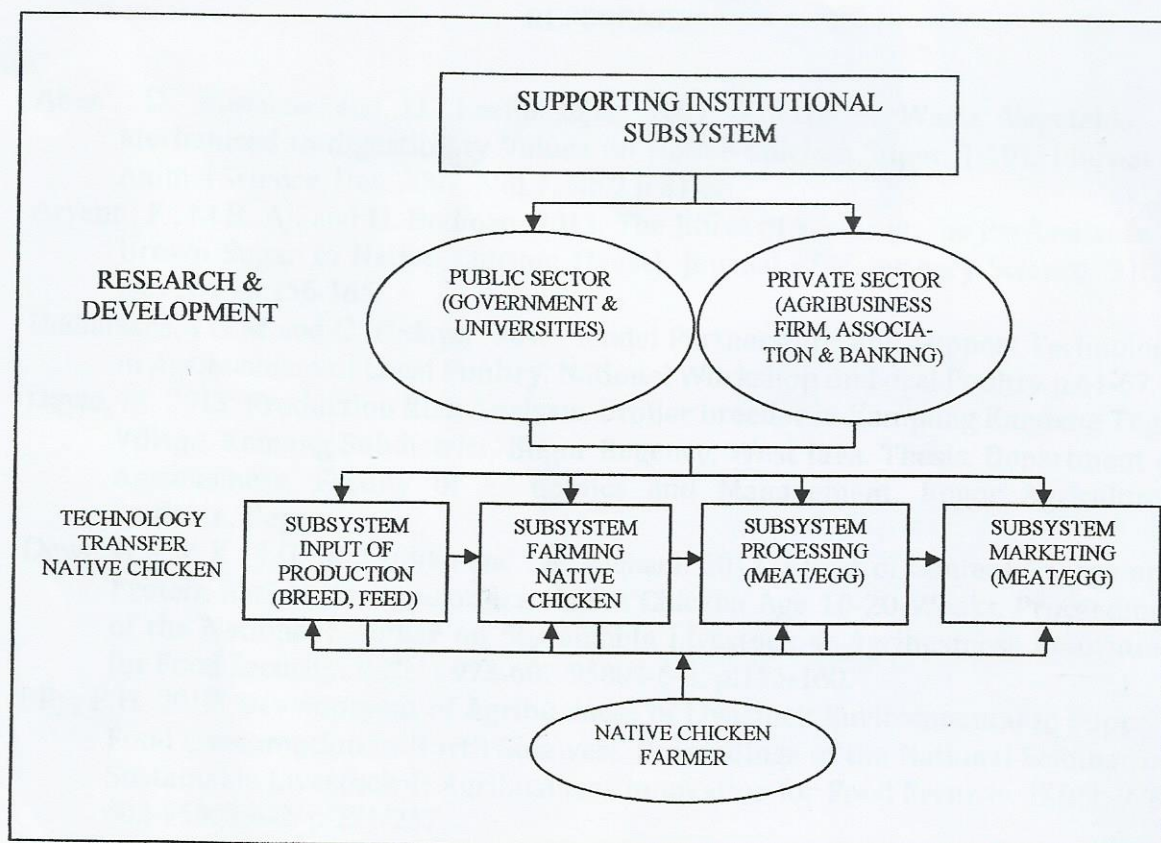


Figure 1. Agribusiness of Native Chicken

Figure 1 shows development of agribusiness, in this case not only development of farming subsystem (on farm agribusiness) but also includes up stream agribusiness subsystem and down stream agribusiness subsystem. Role between subsystems in agribusiness are interrelated and determine (Budiarsana and Hidayat, 2012). Native chicken agribusiness development provides opportunities in employment and income generation.

4. Conclusion and Suggestion

Based on results of this study concluded, sub system of agribusiness native chicken has not been integrated. This is show business carried on not business oriented.

Based on research results suggested, need government intervention in developing the agribusiness of native chicken, with sustained.

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