

DETERMINATION OF PEGAGAN DUCK AGROINDUSTRY POLICIES PRIORITY AND DEVELOPMENT STRATEGIES (CONSERVATION OF NATIVE PEGAGAN DUCK INDONESIA)

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**DETERMINATION OF PEGAGAN DUCK AGROINDUSTRY POLICIES
PRIORITY AND DEVELOPMENT STRATEGIES (CONSERVATION OF NATIVE
PEGAGAN DUCK INDONESIA)**

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ABSTRACT: *The objective of this research is to arrange Pegagan duck agroindustry policies and its development strategies. Pegagan Duck is a local germplasm native to Ogan Ilir District with a prospect of being developed into local superior commodity. However, its population continues to decline. This research applied Expert Choice in Analytical hierarchy process (AHP) Application in order to determine policy priorities in Pegagan Duck agroindustry development in Ogan Ilir Sub-district. The result of this research showed that Pegagan Duck development can be present by implementing Good Farming Practice. Determination of alternative strategies in developing Pegagan duck Agroindustry was done by SWOT analysis whereas strategy priority determination was applied on Quantitative Strategy Planning Matrix (QSPM). It is concluded that, revitalization on local Pegagan duck stockbreeding center based on local resources through regulation and implementation of appropriate technology was the chosen strategy.*

KEYWORD: Pegagan Duck, AHP, Expert Choice, SWOT Analysis, QSPM

INTRODUCTION

Ogan Ilir district has vast sub-optimum land in the form of peat land, with acidity reaching 6.0 pH suitable for Pegagan duck Production. The main potential of sub-optimum land is the considerably vast water natural resources (35% of 266,607 ha) in Ogan Ilir District, which is considerably advantage for Pegagan Duck agroindustry development. Duck breeding business is available businesses for families, in the form of meat, egg, and DOD (Day Old Duck) product.

Pegagan duck population has been declines and recently, the population of this duck is only around 10% of total duck population in South Sumatra, whose center of population is in Ogan Ilir District region. Based on the Production and consumption data revealed that for Ogan Ilir District, duck meat and egg production are still inadequate in fulfilling local needs. To fulfill the requirement of duck meat and egg, they were transported from out of Ogan Ilir district, with Palembang City, Ogan Komering Ilir District, and Lampung province as the port of entry. To increase Pegagan duck contribution in economy sector and also to conserve germplasm, there is a need to arrange Pegagan duck agroindustry development strategy while still considering economy, ecosystem, and social system aspects. Reports and studies on Pegagan duck production are very limited and this study were aimed to report the efforts to extent the local genetic resources linked with the strategies to enhance the farmer welfare which also can be multiplied in other area especially as part of small enterprises agroindustries.

LITERATURE/THEORETICAL UNDERPINNING

Ogan Ilir district has vast sub-optimum land in the form of peat land, with acidity reaching 6.0 pH suitable for Pegagan duck business. Ogan Ilir District northern part consist of Pemulutan Sub-district, West Pemulutan sub-district, South Pemulutan sub-district, up to South Indralaya Sub-district. Part of the peat land in Tanjung Batu, Payaraman, Lubuk Keliat, Rambang Kuang, and Muara Kuang sub-districts are areas with flat to wavy terrain with altitude up to 14 meters above sea level. Ogan Ilir district is passed by one big river, Ogan River flowing by Muara Kuang, Lubuk Keliat, Rantau Alai, Kandis, Sungai Pinang, Tanjung Raja, Rantau Panjang, Indralaya, South Pemulutan, West Pemulutan, and Pemulutan which ended in Musi river. Small rivers in the districts are Kelekar River, Rambang River, Kuang River, Randu River, Kandis River, Kumbang River—all of which ended in Ogan River—and Keramasan River, which ended in Musi River.

The main potential of sub-optimum land is the considerably big water natural resources (35% of 266,607 ha) in Ogan Ilir District, which is conducive for Pegagan Duck agroindustry development. Duck breeding business is one of cheap and easily available businesses for families, in the form of meat, egg, and DOD (Day Old Duck) business. Pegagan duck has advantages compared to other local duck. The average weight of adult Pegagan duck may reach over 2 kg with its eggs on average weighting over 70 grams (Sari et al. 2012). Based on researches, genetic characteristics of Pegagan duck is indicated by A lalel in Transferin locust (Tf^A), Post transferin-1 ($Ptf-1^A$), and post tranferin-2 ($Ptf-2^A$) within their blood protein. Genetic diversity based on blood protein has gene frequency range between 0.11 to 0.94 and high heterogenicity value of 0.62%, which makes pegagan duck potential for breed selection through structurized and directed selective breeding program (Sari et al. 2011). Pegagagn duck, through Ministry directives in SK Mentan RI Nomor 699/Kpts/pD.410/2/2013 has been determined as new breed of native germplasm of Ogan Ilir District.

Ogan Ilir district has the following administration boundaries: (1) north against Palembang City and Banyuasin district, (2) East with Ogan Komering Ilir District and East Ogan Komering Ulu District, (3) South with Ogan Komering Ulu District, and (4) West with Muara Enim District and Prabumulih City. Geographically, Ogan Ilir District is located in $3^{\circ}02'$ to $3^{\circ}48'$ of South Latitude and $104^{\circ}20'$ to $104^{\circ}48'$ East Longitude. Ogan Ilir's spanned for 2,666.07 km² or 266.607 hectare.

Land use in Ogan Ilir District on 2015 consist of cultivated land reaching 223,015.10 hectares (83.66%), uncultivated for 13.24%, and others for 2.08%. Cultivated land consisted of: 1) settlements for 5,434.07 ha (2.04%), 2) irrigated rice field for 31,535 ha (11.83%), 3) peat land rice field for 24,720.60 ha (9.27%), 4) for 78,460.43 ha (29.43%), 5) mixed farm for 20,555.08 ha (7.71%), 6) plantation for 22,241 ha (8.34%), and 7) local people plantation for 40,150.92 ha (15.06%). Soil type is dominated by Alluvial dan podsolic which constitute all area, characterized by grey or brownish color with clayey, sandy, and humid texture that hardens in dry season. Alluvial soil has humus structure filled with organic material from sedimentation of river water runoff, with acidity between 4.0 pH to 6.5 pH.

The potential of livestock sub-sector based agroindustry development in Ogan Ilir is quite big. This is supported by the availability of natural resources, human resources, and strategic geographical position. The largest poultly population is meat chicken by 480,000 heads followed by duck and broilers 35,000 heads. The main contribution of livestock commodity, other than giving income as an occopution, but also importantly to fulfill nutritious needs of

families. From 2015 data, animal protein consumption of Ogan Ilir District per capita still showed gap between the nutritional standard for meat of 10.30 kg/cap/year and consumption level with 4.51 kg/cap/year, and between nutritional standard for egg of 6.50 kg/cap/year and egg consumption level with 5.17 kg/cap/year.

Based on economical aspect, Pegagan duck cultivation has period of one cycle for 10 months, gave income surplus of 10,099,361 rupiahs or 1,009,936 rupiahs per month with R/C ratio of 1.4789, Payback period of 0.4241 (4 months), egg production BEP of 11,100 eggs, and egg price BEP 1,427 rupiahs/egg. Pegagan duck hatchery business profit run by hatchery businessman for one hatching cycle of 1 months, gave income profit of 10,175,800 rupiahs, with R/C ratio of 2.41494, pay back period of 6.761 (7 months), DOD production BEP of 652 heads, and DOD price BEP 4,547 rupiahs/head. Pegagan duck post harvest processing business run by businessman for one processing cycle of 1 week, gave income of 4,4686,782 rupiah or 18,747,140 rupiahs per month, with R/C ratio of 1.2595, pay back period of 10,318 (7.5 months), *Bebek Ungkep* production BEP of 301, and *Bebek Ungkep* price BEP of 5 3.593 rupiah/item.

All three businesses related to Pegagan duck commodity apparently profitable and contribute to poverty eradication in villages. Pegagan duck for local people acts as life savings and secondary income to complement rice cultivation business. During hard time or lack of funding for rice cultivation, Pegagan duck is the fastest solution for income. Pegagan duck commodity cultivation business is complementary to peat land rice field cultivation business. This is in line with the statement from Priyanto et al. (2010) that said livestock hold techno-cultural position as complementary role in cultivation business.

On ecological aspect, Pegagan duck is a domestication of wild duck that has undergone natural selection and adapted to peat land environment after a long period of time. A research by Sari et al. (2012) showed that Pegagan duck has unique genetic characteristic different from other local duck. This adaptation can be seen from Pegagan Duck's ability to make use of natural food source available in surrounding peatland habitat, such as *riamur*, water hyacinth, etc. to fulfill its basic needs and production. Yosi et al. (2016) research showed that use of local raw material without fermentation can increase pegagan duck digestability.

By performance, pegagan duck has adapted to low quality feedstock (Sandy et al. 2016). Pegagan duck holds an important position in peat land ecosystem chain as natural consumer of weed and rice pest such as water hyacinth. Peat land rice cultivation without pegagan duck cultivation will increase additional cost for weeds and rice pest control. Farmer choice is usually through poisoning, which can harm environment. Integration of Pegagan duck into rice field cultivation may begets mutual symbiosis which is advantageous to both business. The by product of agricultural activity can be used as Pegagan Duck feed while duck's manure, feed leftover, and undecomposed harvesting byproduct can be used as compost to enhance the fertility of peat land rice field. According to Sandi et al. (2015), the availability of land and agricultural and agroindustry waste as local feed source showed good potential in Pegagan duck development as germplasm that needs to be preserved.

From sociology aspect, Pegagan duck husbandry is an inseparable part of rawa lebak rice cultivation and there was no resistance it. In villagers's culture such as during celebration, Pegagan duck is often become a tool of mutual cooperation and weaving relationship though *antar-antaran* culture, which serves social supplementary role. Priyanto et al. (2010) stated that livestock existence in agricultural people's social life is divided into two position:

complementary (supporting plant cultivation activity) and supplementary (supplementing technical part of plant cultivation activity). These positions work like a pendulum which move to the position or role needed by local social system. Pegagan duck production of meat and egg is important in increasing local people's nutrition intake with its relatively affordable price and for being easy to obtain. Meat and egg production and consumption data released by Ogan Ilir District Livestock and Fishery Official on Year 2015 showed that duck meat and egg contribution in local consumption per year were 106,920 kg and 467,576 kg, respectively. Based on the three aspects mentioned above, it can be concluded that in the perspective of regional development, this commodity is feasible to be developed, supporting Pegagan duck agroindustry in Ogan Ilir District.

METHODOLOGY

This research was conducted in Ogan Ilir District region, South Sumatera. Research object was focusing on stakeholders of Pegagan duck agroindustry and livestock commodity around the region of research object. Data taken included primary and secondary data with Focus Group Discussion (Krueger et al. 2000 and Irwanto 2006).

This research is a study with survey method. Locations were determined by purposive sampling. Location and research sample determination was based on the population of Pegagan duck farmer and the potential of Pegagan duck husbandry based on data obtained from Livestock and Fishery Official of Ogan Ilir District. Respondents were 119 farmers, with 84 from Sejangko Village of Rantau Panjang sub-district, 21 from Sungai Ondok Village of South Pemulutan sub-district, 11 from Pelabuhan Dalam village of Pemulutan sub-district and 3 from Kota Daro II village of Rantau Panjang sub-district. Hatchery Respondents were 2 owners, 1 from Kota Daro II Village Rantau Panjang sub-district and 1 from Sakatiga village of Indralaya sub-district. Post-Harvest Respondent was 1 businessman from Tanjung Raja Village of Tanjung Raja sub-district. Expert Respondent were 6 people of 2 researchers, 2 academics, and 2 officers.

Data analysis included economy aspect, which were profitability analysis through investment criteria approach which consist of Revenue Cost Ratio (R/C), Pay Back Period (PP), and Break Even Point (BEP) (Sjarkowi 2010, Supranto 2009, and Pasaribu 2012). System analysis approach was used to obtain data and information on factors concerning Pegagan duck agroindustry development, studied in FGD. Hierarchy form was modified from Chaidir (2007), to formulate and analyze Pegagan agroindustry sub-system during policy determination through analysis Hierarchy Process (AHP) (Saaty 1993 and Syaifullah 2010) by using Expert Choice 11 software. In formulating and analyzing Pegagan duck agroindustry sub-system performance in strategy determination, SWOT analysis, Matrix IE analysis (Rangkuti 2013), and QSPM (David 2006), were used.

RESULT/FINDINGS

Tactical Policy Studies of Pegagan duck Agroindustry (PDA) Development

The first step of arranging policy is identifying factors that influencing Pegagan duck agroindustry development. In this identification process, system analysis approach is used to

identify parties related to development, expected goal, influencing factor, and alternative policy. The result is arranged into hierarchy and scored by experts competent in animal husbandry agroindustry.

Requirement Analysis of Pegagan Duck Agroindustry (PDA) Development

Requirement analysis was used to identify and elaborate the needs of every party related to Pegagan duck agroindustry system. Each party has different interests, though some may have related similar interest. These interests may be direct or indirect. Parties related to Pegagan duck agroindustry in Ogan Ilir District are Cultivation business owner, hatchery business owner, post harvest processing owner, and local government.

Local government have interest in (1) workfield provision, (2) increasing people's income and local revenue, (3) avoiding over supply, (4) increasing access to capital funding and market information, (5) formation of new developing centers based on local resources, (6) Pegagan duck agroindustrial development, (7) increase cultivation, hatchery, and post harvesting efficiency and productivity, and (8) protecting environment and Pegagan duck germplasm.

Cultivation business owner has interest in (1) increasing cultivation production and having stable price, (2) availability of good quality DOD and duckling, (3) availability of production input (feed and medicines), (4) business certainty (funding and disease), and (5) water availability and protection of swamps environment.

Hatchery business owner has interest in (1) increasing hatchery production and having stable price, (2) availability of good quality hatching egg at all times, (3) availability of cheap and stable energy, (4) environmentally friendly hatchery technology, (4) business certainty (funding and disease).

Post Harvest processing business owner has interest in (1) increasing post harvest production and stable price, (2) availability of good quality culled duck at all times, (3) availability of cheap and safe energy, (3) optimize production through processing technology, (4) safe and profitable marketing facility (working contract), (5) business certainty (funding and market information), and (6) availability of other supplementary raw materials.

Problem Formulation of Pegagan Duck Agroindustry (PDA) Development

Problem arises from conflict of interest between parties related to Pegagan duck agroindustry system. However, there are also problems similarly faced by every party. Based on needs analysis, conflicts concerning Pegagan duck agroindustry development in Ogan Ilir districts are as follow:

1. Business conflict between husbandry and rice farming in utilizing the land during certain period, which is during planting season and pest control by poisoning (appropriate technology)
2. During dry season, conflict between farmers and local government concerning the regulation of *lebak lebung* usage and public water resource management (appropriate technology)
3. Disease outbreak (Mortality).
4. the coming of livestock from outside of Ogan Ilir District (market access and capital)

5. Decreasing genetic resources and living environments of Pegagan duck (appropriate technology)
6. Inavailability of capital access for Pegagan duck agroindustry (market access and capital funding)
7. Inavailability of cheap and safe alternative energy (appropriate funding)
8. Conventional cultivation pattern of Pegagan duck cultivation (appropriate technology)
9. Low fertile hatching egg produced by farmers (hatching egg fertility)
10. High number of death during hatching which affect hatchery productivity (hatchability)
11. The long resting period between egg laying which lower egg production (egg laying period)
12. Unsuitable demand and supply meets caused by limited production capacity and raw material (market access and capital funding)
13. No safe and conducive synergy between business owners (market access and capital funding)
14. Disruption of swamp hydrologic function caused by global climate change and regional development/land conversion (appropriate technology)
15. Ineffective local government role/limited funding (market access and capital funding)

DISCUSSION

Program Priority Analysis of Pegagan Duck Agroindustry Development (PDA)

To obtain development policy, Analytic Hierarchy Process (AHP) method was used by using information obtained from animal husbandry agroindustry experts. Data processing used expert choice. Hierarchy structure of Pegagan duck farming agroindustry development was group based on focus, actor, goal, factors, and modified policy from Chaidir (2007).

Pegagan duck agroindustry development policy becomes a focused goal. Actors involved in it consist of cultivation business owner, hatchery business owner, post harvest business owner, and Ogan Ilir District local government. Each actors had interest they aim for, which were (1) increasing breeding productivity of Pegagan duck, (2) increasing Pegagan duck cultivating productivity, (3) increasing Pegagan duck post harvest productivity, and (4) increasing income and business certainty. Fulfillment of actor interest will be broken down in technical factors. The fulfillment of increasing Pegagan Duck breeding productivity interest is influenced by morality, appropriate technology, market access, and capital funding. Alternative policy was taken from policy that has been developed by the government and the result of development based on needs in the field, which are (1) development of superior parentstock and fledglings, (2) development of artificial food, (3) drugs, (4) certification of parent stock/fledgling, (5) environmental awareness coaching, (6) village coaching, (7) GFP implementation, (8) capital funding and farming insurance, and (9) market information development.

Objective assessment from experts was obtained on the comparison of interest level and the role of every actor in Pegagan duck Industry, comparison of interest level in every goal of actor's interest, comparison of interest factor with goal, and policy comparison against each factor. Obtained processed data were presented in pairing comparison matrix on every level.

a. Pegagan Duck Agroindustry Development Actor

Expert choice processing result shown that the weight of each actor, which are cultivation owner, hatchery owner, post-harvest processing owner, and local government, which had 0.360 or 36%, 0.338 or 33.8%, 0.171 or 17.1 %, and 0.131 or 13.1% respectively. Inconsistency level was 0.00573 which made the expert's fillings to be consistent. The goal achievements in Pegagan duck agroindustry development in Ogan Ilir District based of its importance level are as followed: 1) hatchery owners, 2) cultivation owners, and 3) post harvest owners. Hatchery and cultivation owners had the highest priority in Pegagan duck agroindustry development policy. This tied to provision of agroindustry raw material which are duck meat and egg. This indicated that more attention must be directed on on farm sector, as an effort to protect the continuity of Pegagan duck product.

b. Goal of Pegagan Duck Agroindustry (PDA) development

From expert choice processing it can be known that the weight of each goal which are increasing nursery productivity, increasing cultivation productivity, increasing post harvest, and increasing income and business certainty being 0.393 or 39%, 0.303 or 30.3%, 0.177 or 17.7%, and 0.126 or 12.6%, respectively, with inconsistency level of 0.00728 which means the experts' fillings were consistent. In achieving pegagan duck agroindustry development program goals, the objectives taken based on its importance are as follows: (1) increasing nursery productivity, (2) increasing cultivation productivity, (3) increasing post harvest productivity, and (4) increasing income and business certainty.

Pegagan duck nursery problem still has not be able to be resolved, which is also a problem for almost all of local livestock. This is in line with the statement of YUSDJA et al. (2006) who stated that almost all of domestic livestock did not receive intensive breeding technology and livestock quality turns increasingly worse for the best seed is always chosen for culling. Small scale researches on breeding are often conducted, however still has not been socialized in large scale activity for there are miscommunication between researches done by both Research and Development Body and Universities with the policy maker of Animal Husbandry Directorates. Diwyanto et al. (2005) stated that duck potential and its development direction are emphasized on seedling's improvement, which creates differences between duck used for breeding and duck for production.

c. Pegagan duck Agroindustry Development Factors

From expert choice processing result, it is known that the weight of each factors to achieve the goal of Pegagan Duck breeding productivity increase which must be considered are as follow: (1) hatching egg fertility with 0.368 or 36.8%, (2) hatchability with 0.327 or 32.7%, (3) appropriate technology with 0.142 or 14.2%, (4) mortality with 0.092 or 9.2%, and (5) egg laying period with 0.070 or 7% with inconsistency level of 0.04.

Based on observation in farmer and hatchery business level, Pegagan duck fertility on average is 45% with 75% hatchability. This is still way below the optimum productivity potential of Pegagan duck. Research by Pramudyati (2013) stated that egg hatchability is 90% and egg

fertility is 99%. Thus, egg fertility and hatchability factors needed to receive serious attention and solutive policy must be found so that the goal of Pegagan duck nursery productivity increase can be achieved.

d. Pegagan Duck Agroindustry Development (PDA) Policy

Expert choice processing result showed that the weight of each policy were as follow: (1) GFP implementation 0.165 (16.5%), (2) superior sires and seeds improvement 0.145 (14.5%), (3) feed improvement 0.110 (11.0%), (4) hatchery coaching 0.105 (10.5%), (5) farmer capital funding and insurance 0.101 (10.1%), (6) environmental coaching 0.100 (10.0%), (7) sires/seed certification 0.099 (9.9%), (8) market information improvements 0.098 (9.8%), and medicine 0.076 (7.6%). This showed that the main policy on Pegagan duck agroindustry development that must be taken is Good Farming Practice (GFP) implementation and sires and seed improvement of Pegagan duck.

GFP implementation is important in supporting Pegagan duck agroindustry in protecting the availability of raw material, which are rejected Pegagan meat and egg, increasing income, conserving environment, and food safety. GFP key implementation rests on counseling, coaching, supervising, and monitoring of Pegagan duck agroindustry business owners especially hatchery and cultivation. Just as stated by Gustiani (2009), information provided is hoped to give understanding and increase awareness about the importance of producing good quality livestock product, nutritious, halal by Islamic law, and safe to be consumed through implementation of food safety system in every production process, from cultivation (good farming practices), post harvest (good handling practices), processing (good manufacturing practices), until food is served on the table.

According to Ministry of Agriculture Regulation number 36/Permentan/OT.140/3/2007, the objective of duck GFP are (1) increasing population, production, and duck productivity, (2) increasing duck product quality, (3) supporting duck derived food availability nationally and pushing export from livestock commodity especially duck meat, (4) creating environmentally friendly cultivation, (5) creating workfield, (6) increasing farmers' income.

SWOT Matrix Analysis

To arrange strategic factor of Pegagan Duck agroindustry in Ogon Ilir District so that it could illustrate clearly the chances and external threat faced, adjusted with current strength and weaknesses, SWOT matrix was arranged (Rangkuti 2013).

Based on SWOT analysis, 8 alternative strategies that must be implemented for Pegagan duck agroindustry development in Ogon Ilir District were generated, which are:

1. Increasing the number of Pegagan duck agroindustry entrepreneurs who are adept in technology to catch and create market chances (SO-1)
2. Strengthening Pegagan duck food safety position through improvement of village people businesses in increasing people income and welfare (SO-2)
3. Strengthening market share through improvement of product quality and diversification correlating with supervisor's agency (ST-1)

4. Establishing Pegagan duck as superior local commodity icon, supported by regulation by local government on land conversion, livestock traffic, organic agriculture, and security coordination (ST-2)
5. Capital funding facilitation and insurance, partnership, and managerial supervisor in increasing farmer ability and independence in village (WO-1)
6. People nursery system revitalization by local government in pegagan duck market center which based on local resources through regulation and innovative technologies implementation (WO-2)
7. Pegagan duck agroindustry institutional restructurization strengthening farmer capacity and business protection (WT-1)
8. Development of business partnership and structurized supervising by local government and structuring linkage of supply chain management (WT-2).

Quantitative Strategic Planning Matrix (QSPM) Analysis

To determine strategy from various alternative obtained from SWOT analysis, QSPM analysis can be used. In this analysis, the most attractive strategy for every alternative strategy was analyzed. In this phase, analyzed alternative was chosen as those that directly correlated with internal weakness, with consideration that technically it would be easier to solve internal factor compared to external factor and thus will have higher success. Analyzed alternative strategies are:

1. Capital funding, insurance, linkages, and managerial supervising support to increase ability and independence of village farmers (WO-1)
2. Revitalization of conventional nursery system by local government in pegagan duck farming center which based on local resources through regulation (WO-2)
3. Restructurization of Pegagan duck agroindustry institution to strengthen business owner/farmer capacity and business protection (WT-1)
4. Improvement of business partnership and structurized supervising by local government and arrangement of supply chain links (WT-2).

From QSPM analysis based on Pegagan duck agroindustry in Ogan Ilir District, highest total attractiveness score (TAS) is gained in alternative strategy WO-2 with 6.05. The QSPM result indicated that in Pegagan duck agroindustry development in Ogan Ilir District, the problem rest on upstream sub-system, which is responsibility in providing raw materials of egg and meat from Pegagan duck. The logical consequences of this result is for Ogan Ilir District to conduct revitalization of local people's nursery system by local government in Pegagan duck livestock center which based on local resouces through regulation and use of appropriate technology. This is in line with what was recommended by Pramudyati (2014) that Pegagan duck livestock area is hoped to be the seed of billage breeding center (VBC) in Ogan Ilir District. Based on the report by Gunawan et al (1995) in Pramudyati (2013), VBC implementation in South Kalimantan was able to increase average egg production up to 6.17% and feed efficiency to 0.63 in 9 months. Village Breeding Center is a region of livestock improvement which based on local people breeding program in a breeding farmers group. Breeding is a cultivation activity of producing good quality fledging for own use or to be sold. Selection is an activity of selecting

sires to produce offsprings through examinations and tests under a given purpose and criteria, by using a certain method or technology (Directorate of Animal Husbandry, 2008).

IMPLICATION TO RESEARCH AND PRACTICE

Implementation the result of SWOT and QSPM analysis would increase the number of pegagan duck farmers due to the opportunity to increase the economic activities even from house hold or small enterprises of Pegagan duck production. Research and innovations related to the components of Pegagan duck agroindustry may increase as well. Response and impact development of Pegagan duck agroindustry will be the next research topics and may encourage multiplier effects on the development of Ogan Ilir District.

CONCLUSION

- (1) The result of policy priority determination on Pegagan duck farming agroindustry development, are the chosen actors as follow: hatchery business owners (52.5%), in the goal of increasing Pegagan duck seed productivity (39.3%) against hatching egg fertility (36.8%). Prioritized policy in Pegagan duck farming agroindustry development in Ogan Ilir District is the implementation of Good Farming Practice (16.5%).
- (2) From SWOT matrix analysis result, eight strategies that must be conducted in agroindustry development in Ogan Ilir District are: (1) increasing the number of Pegagan duck agroindustry entrepreneur that are technology-adept who can catch and create market opportunities (SO-1), (2) strengthening Pegagan duck's position through development of village entrepreneurship in increasing income and people's welfare (SO-2), (3) strengthening market share to improvement of product unique quality and product diversification which involve supervising (ST-1), (4) establishing Pegagan duck and local superior commodity icon, supported by local government regulation on land conversion, livestock traffic, organic farming, and security coordination (ST-2), facilitating capital funding and insurance, shared partnership, and managerial supervising to improve capability and independence of village farmers (WO-1), (6) revitalization of local people breeding system by local government in Pegagan duck livestock center which based on local resources through regulation and TTG implementation (WO-2), (7) restructurization of Pegagan duck agroindustry institutions to strengthen the capacity of farmers and protect businesses, (8) Development of Business Partnership and structured supervising by local government and arrangement of supply chain link (WT-2).
- (3) QSPM analysis result of Pegagan duck agroindustry in Ogan Ilir District showed that total attractiveness score (TAS) is 6.05 in WO-2 alternative strategy, which is revitalization of local people breeding system by local government in Pegagan duck livestock center based on local resources through regulation and TTG implementation.

FUTURE RESEARCH

Impact of the policy implementation of Pegagan duck agroindustry would be the part of Ogan Ilir district development. Studies and research related to extension of duck production technology would also increase.

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