

THE IMPACT OF IMPORTED BEEF BOXED TO FEEDLOT BUSINESS DEVELOPMENT IN INDONESIA

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Abstract

In Indonesia, total populations of beef cattle comprise around 11.8 millions head. Generally, the cattle are kept by small holder business feedlot and only few of them are raised by feedlot companies. The main problems are breed quality, the feedlots are small size and low feed quality (roughage and concentrate). Production performance indicated that average daily gain reached 0.5-0.9 kg/day/head in small holder farms and 1.2-1.5 kg/day/head in feedlot companies. During several years, Indonesian beef farmers were interested to run crossbreeding (Simmental and Limousine cross with local cattle) and crossing with Ongole Cross (local breed), in order to achieve better performance. According the Meat and Livestock Australia report (2009), live cattle and carcass export to Indonesia grew up rapidly during the last four years. In 2007-08 the live cattle to Indonesia counted 547,000 heads, while in 2006-07 was of 452,000 heads, carcass export reached 46,100 tones in 2007-08 increasing thus twice from 28,000 tones in 2006-07. Whole value of live cattle traded export to Indonesia reached around US \$ 341 million during 2007-08, compared to last year-only US \$ 99 millions. This was the third market level after USA and Japan markets, and was developed very rapidly. It is predicted to increase around 12% in 2009, and to keep increasing in the next few years. Actually there is disparity beef price in Indonesia between local and imported beef. Thus the retail price for Australia beef is only Rp. 42,500/kg (around US \$ 4.00), compared to local beef, around Rp. 55,000/kg or US \$ 5.00. It will be impact to Australia beef cattle breeders which sold the heavy cattle directly to slaughter house. On the other side, this disparity has impact to short time on the beef price in Indonesia and will have negative impact on the small scale farmers and feedlot companies, because the production cost will not covered by beef market price. Therefore, if beef imports from Australia will be continued over long term, the feedlot business companies in Indonesia will be collapsed. In anticipation for long term, Australia should export the feeder cattle (steer or heifer) to Indonesia at competitive price. The price disparity between Australia imported boxed beef and Indonesian beef has distorted the local beef market price and influenced the feedlot industries in Indonesia, decreasing also the price of the live cattle imported from Australia. This condition is not conducive to the cattle farmers in North area in Australia and feedlot business in Indonesia.

Key words: Imports, Boxed beef, Feedlot

INTRODUCTION

In Indonesia, total populations of beef cattle around 11.8 millions heads. Generally, the cattle are kept by small holder business feedlot, of them are raised by feedlot companies. The main problems are breed quality, the feedlots are small size and low feed quality (roughage and concentrate). Production performance indicated that average daily gain reached 0.5-0.9 kg/day/head in small holder farms and 1.2-1.5 kg/day/head in feedlot companies

The average weight gain local cattle, reported by Talib (1991) on Sunandar (2005) that daily weight gain local cattle are 0.64

kg/head/day. Furthermore Sitepu et.al (1996) on Sunandar (2005) reported that, daily weight Frisian Holstein feeder is 1.03 kg/head/day, Brahman Cross is 0.91 kg/head/day and local cattle is 0.75 kg/head/day. While according to Tawaf R. et.al (2007) that the Australia Commercial Cross cattle on intensive feedlot companies the weight gain around between 1.47 – 1.63 kg/head/day.

In the feedlot center farmers West Java, generally used imported feeder cattle from Australia and cross breed or local feeder cattle source from another area (province or district), seen on table below.

Table 1. Breed and Source of Feeder Cattle in Feedlot Center West Java

No	Breed	District					
		Ciamis	Tasikmalaya	Garut	Sumedang	Bandung	Sukabumi
1	ACC	-	Import	Import	Import	Import	Import
2	local cattle	West Java	Central/ west Java	Central/ west Java	East/central/ west java	Central/ west Java	East/ central/ west java
3	LX/SX	West Java	West Java	Central/ west Java	East/west Java	Central/ west Java	East/West Java

Note: ACC: Australia Commercial Cross
 LX/SX: Limousine Cross / Simmental Cross with local cattle
 Local Cattle: Ongole Cross and Frisian Holstein (male)

Those local cattle breeds are the Ongole Cross and Frisian Holstein. Generally the feeder cattle come from Central and East Java, Limousine and Simmental Cross are the result from artificial insemination program. In the future, small holder beef farmers will use cross-breed (Simmental or Limousine cross) because it is more profitable than the local cattle.

The development of Feedlot Company in Indonesia began in the introduce system of feedlot conducted held at PT Karyana Gita Utama Sukabumi West Java in 1987. Afterwards in 1993, it has also been conducted in PT Great Giant Livestock

Company Lampung Province. This company is business branch from pineapple canning industry PT Great Giant Pineapple Company. In 1994, PT GGLC having trouble getting local feeder cattle. Since this year the feedlot companies growing rapidly, in the year 1997 the total number member of APFINDO are 55 companies. This business development was supported by a conducive business climate, especially the availability of feed as by-product agricultural industry.

Description of the performance of Feedlot Company shown in the table below.

Table 2. Performans Feedlot Business Companies

No.	Description	Items	Note
1	Feeder Cattle	ACC (Autralia Commercial Cross)	From Australia
2	Ration	Concentrate	Made it self
3	Days on feed	(60 – 100) days	-
4	Daily Gain	(1.2 – 1.6) kg/head/day	Average 1.35 kg/head/day
5	Scale of Business	(4,000 – 12,500) heads System Colony	production (12,500 – 50,000) heads/year
6	Target Market	Beef Retailer	-
7	Source of Capital	Bank	Comercial rate

After the economic crisis in 1988, the feedlot company feedlot has changed very significant. These changes caused by the weakening of rupiah exchange rate against USD. The current situation, that the number of members APFINDO only 14 companies and 6 companies operating in West Java.

STUDY METHOD

This research is the study of literature, the data and research information that have been published, performed with *meta-analysis method*. In addition, also conducted in-depth interviews of business actors, like

owner feedlot companies, trader and personal representative Australia cattle exporter in Jakarta. The business actors were determined by purposive sampling. Of data collected, using descriptive analysis to conclude.

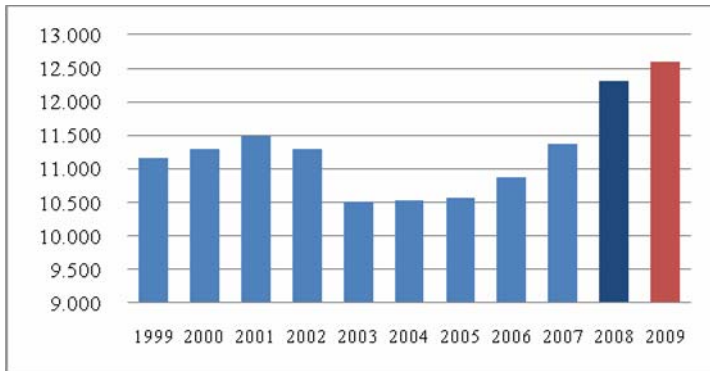
RESULTS AND DISCUSSIONS

Population and Beef Cattle Distribution

The national of beef cattle population in Indonesia around 11.8 million heads, which spread in Java 41%, 24% sumatera and other islands 35%. In Java Island, concentrated in East Java Province 56. 95% and Central Java 31.39 % while in West Java and DIY reach

6.03% and 5.63%. Based on these data, it was on the island of Java is densely populated, has a population of cattle that are too. While on the island of Java, the cattle population in the Java populous eastern and central Java. West

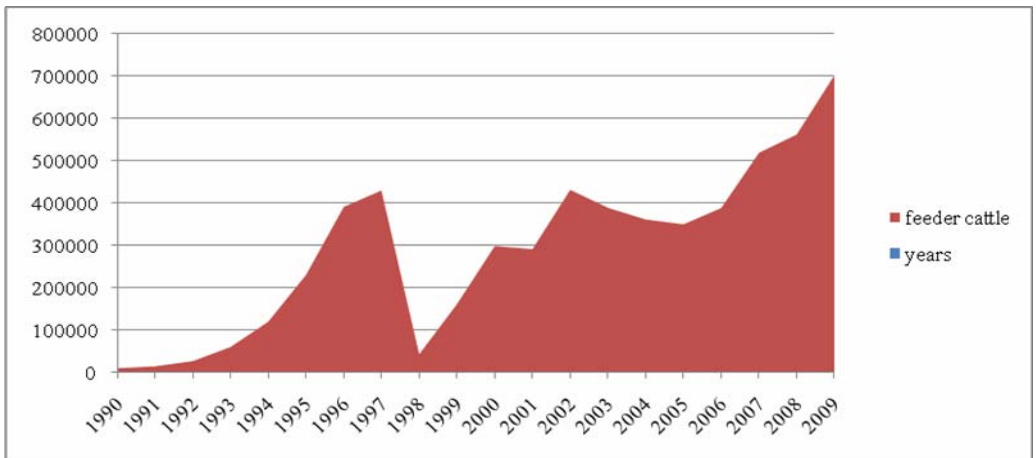
Java as the center of consumers of beef, also have an opportunity for the development of cattle production, especially in the feedlot business. Population growth of beef cattle 1999-2009 can be seen in Graph 1.



Source : Directorate General of Livestock Services (2009)
Graph 1. Beef Cattle Population Growth 1999-2009

Based on the table above, it appears that the increase of cattle population began to appear since 2005. This indication shows the government's has been succeeding in raising

beef cattle production in Indonesia. However, the import of Australian beef it has been an increase also. (See Graph below)



Source: ABS in MLA (2009)
Graph 2. The Imported live cattle from Australia to Indonesia 1990-2009

The development of live cattle imports from Australia to Indonesia after the economic crisis is not without cause, which can be explained as follows:

1. Period (1997-2000): post-economic crisis, most of the cattle exported from Australia to the Middle East. The cattle

exported to the Middle East, generally heavy weight around 500-600 kg / heads, while the beef cattle were sold to Indonesia under the weight of 500 kg/head with a very low price, so that feedlot companies in Indonesia are able to import feeder cattle from Australia.

2. During outbreak of BSE in 2001 and Drought Session in 2002. BSE outbreak occurred in Canada and Europe, this has led to a reduction of the world beef consumption is very significant. The effects also occurred to live cattle exports decreased from Australia to various countries in the world. So that the price of live cattle in Australia, there is a very drastic decline. In these conditions, even in Indonesia is still considered the economic crisis that has not been recovered, the feedlot companies able to import feeder cattle from Australia because the price is relatively cheap (the price around 0.6 USD/Kg live weight CIF). Furthermore in 2002, Australia hit by droughts, the impact for the cattle farmers in Australia are not able to feed the cattle. So, they sold the cattle at a low price.

3. United States invasion to Iraq (in 2003). In 2003, has been the gulf war the USA invaded Iraq. This condition has been bothering cattle trade from Australia to the Middle East. So that the price of cattle in Australia fell dawn drastically. This condition is very beneficial for small holder feedlot business and Feedlot Companies in Indonesia is able to buy at a cheap price.

4. Market Situation during Outbreak BSE Period (2003-2005): in December 2003 and June 2005 has occurred outbreak BSE (mad cow) in the USA. Impact on world beef consumption declined very sharply. These conditions, causing beef exports from Australia to other countries also declined; due to continued price of live cattle in Australia was decreased. This condition is very beneficial for Feedlot Company in Indonesia.

5. National Economic Stability Condition: since 2006-2009, the economic condition in Indonesia is relatively stable. Shown by the development of the Rupiah exchange rate against US Dollar is conducive. This condition is shown by the purchasing power of consumers of beef in Indonesia in doing increas live cattle imported from Australia.

Beef Demand

Beef demand is the beef number that required fulfilling consumption need. Beef in domestic demand is divided into two based on real condition and nutrient norm standard. It is based on total national beef consumption; while other refers to Food and Nutrient National "Widyakarya seminar" that established protein consumption comes from livestock animal is 10.5 gram/capita/day.

Based on consumption data and trends in beef purchases contribute to the total expenditures of 0.195 meats, beef consumption is lower than the consumption of chicken meat, as well as community trends in spending income (Illustration 1).

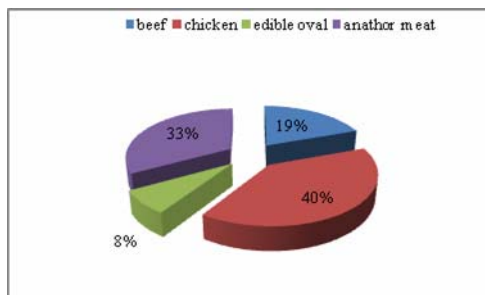


Illustration 1. Expenditure share of Meat Commodities

The trend has become a logical connection is a commodity chicken meat substitutes for meat commodities especially beef. Theoretically, if beef prices rise so will reduce the volume of consumer purchases and to buy chicken that cost is relatively cheaper with higher numbers of conditions prior to the increase in the price of beef.

Beef consumption is factually to increase from year to year. The growth rate of beef consumption during the last 10 years (1998 to 2007) average of 5.62% or increase the quantity of 19,037.06 tons / year. The level of average consumption in that time the average 338,728 tons / year.

Beef Consumption Standard

Nutritional standards become a reference in determining the needs of national beef consumption. National Nutrition Standards on *Widyakarya National Nutrition Seminar* (2004) determined that the optimal consumption of 60 grams of protein per capita per day and the minimum 52 grams per capita per day. Animal Protein Consumption set up at 10.5 grams per capita per day. Animal protein consumption in 2006 reached only 5.15 grams /capita/day derived from beef, goats, sheep and pigs around 1.56 kg /capita/ year, equivalent to 0.81 grams protein /capita /day. Decreasing of meat consumption will was caused by purchasing power is still relatively low. The ability to buy the beef is still far below the ideal consumption of 6.4 grams / capita / day which is equivalent to boneless meat of about 2.34 kg / capita / year or 3.12 kg / capita / day in the carcass (see Table).

Tabel 3. Ideal Meat Consumption from kind of Livestock and edible oval base on ratio, protein distribution and Conversion rate

No.	Kind of Livestock	Ratio Protein Consumption	Protein Consumption Distribution*	Protein Conversion	carcas (%)	Beef Demand		carcas (kg/cap/yeras)
						(gr/cap/ days)	(kg/cap/years)	
1	Cattle	0.20	1.204	0.188	0.749	6.403	2.337	3.119
2	Buffalo	0.02	0.104	0.187	0.703	0.554	0.202	0.288
3	Goat	0.02	0.127	0.166	0.678	0.766	0.279	0.412
4	Sheep	0.02	0.129	0.171	0.684	0.755	0.276	0.403
5	Pig	0.07	0.390	0.130	0.675	2.996	1.094	1.621
6	Horse	0.00	0.004	0.181	0.723	0.024	0.009	0.012
7	Native chicken	0.12	0.708	0.182	0.580	3.890	1.420	2.448
8	Broiler	0.36	2.112	0.182	0.580	11.602	4.235	7.301
9	Duck	0.01	0.046	0.160	0.600	0.288	0.105	0.175
10	Edibel Oval	0.18	1.089	0.157		6.939	2.533	2.533
Total						34.22	12.49	18.31

Source: Central Statistic Biro and Livestock Statistic 2005 - 2007

Note:

* = The ratio of meat protein consumption based on average consumption of protein 2004 – 2006

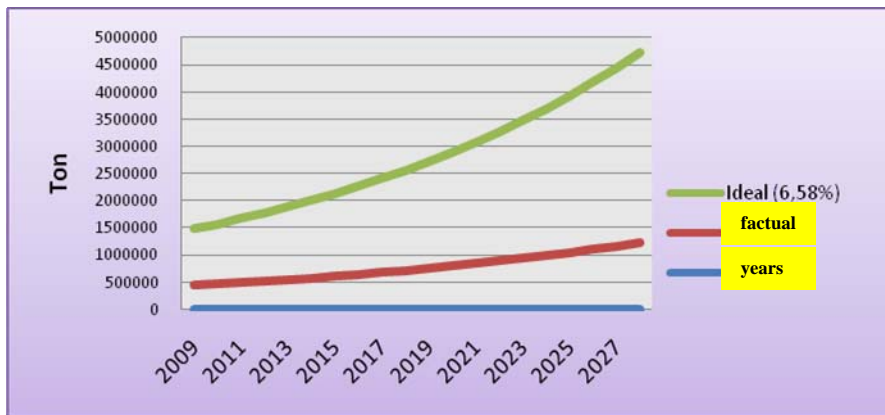
** = Distribution of standard consumption of animal protein nutrition Norm 10.5 grams / capita / day based on the proportion of meat consumption for 0.56 of the total consumption of animal protein

The number of beef consumption to meet the ideal norms of nutrition standards is greater than the real consumption, for the year 2007 the real consumption of beef for 389.71 thousand tons, whereas ideally the needs of the range 709.87 thousand tons. The ideal demand of beef for year 2008 of 759.96 thousand tons. In line with the cattle population growth rate and the growth rate of meat consumption, the consumption of beef

was ideal from 2003 to 2007 showed increasing numbers.

Beef demand Trend

Beef demand projections for the years 2009 to 2008 are presented in the graph below. In the graph, it appears that the farther the gap to reach the ideal level of consumption of meat, without innovation of beef cattle production system in Indonesia.



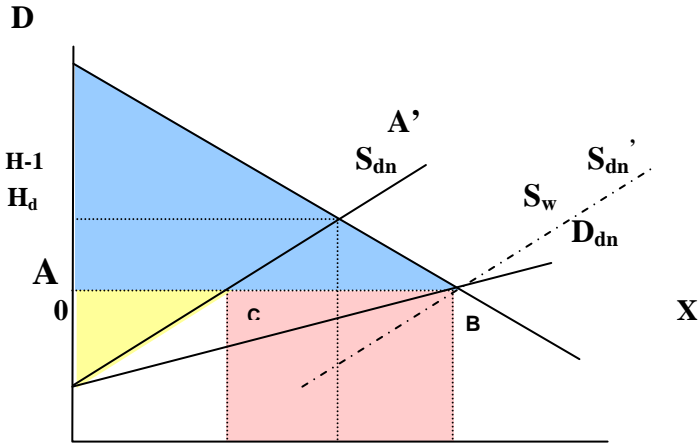
Graph 3. Trend of Beef Demand (Analysis)

Achieving food consumption from livestock in the future will be increasingly difficult to achieve, due to population growth affect the availability of food, because the land as a primary supporter of the subsystems enable many converted to housing and other physical development, the supply side of beef growth rate far below the growth rate of consumption. While on the other hand, the macro changes people's purchasing power as the impact of an uncertain global economic recession, even the issue of energy crisis and global warming reducing people's purchasing power.

Local to global Market

To determine the influence of imported beef boxed into the domestic market, and the benefits the impact can be seen in the illustration below. In the illustration it appears that under normal conditions before the imported beef come to the domestic

market, the price equilibrium (H-1) formed at point A'. In this condition has occurred balance, the economic surplus obtained by consumers (H-1A'D) and cattle farmers (H-1A'A). Then, with beef boxed imports into the domestic market (Sw), will decline /shift the price of the H-1 to H_d at point B (new balance). This importation policy does not provide a theoretical stimulus for beef cattle farmers in the country, because the economic surplus obtained smaller the beef cattle farmer (ACH_d) than the consumer for (HdBD). If there is no protection from the various government policies attempt feared most popular the beef cattle feedlot business going bankrupt. Theoretically, the problem is how to shift the curve to the right S_{dn} be S_{dn}'. Various efforts must be made towards this to be stated as follows, in various studies have revealed the existence of a positive influence on the market appeal of domestic beef cattle farm productivity improvement.



Graph 4. Beef Imports influence on livestock business and Consumers in Indonesia (Source: Model Hirsleifer, 1985)

The Impact of Beef Boxed Import from Australia

In general, beef cattle raising system in Australia aimed to meet the demand in its domestic beef and live cattle exports. Most of the cattle business is directed to export live cattle located in the north (Northern Territory, Queensland and Western Australia in part). Cattle population in this area range from 3 million head, or only about 10% of the total population in the Australian beef. Based on MLA report (2009) has occurred the development of cattle and beef exports to Indonesia during the last four years with significant growth. In the year 2007-08 exports of live cattle to Indonesia around 547,000 heads, previously in the year 2006-07 only 452,000 heads. While beef exports during 2007-08 amounted to 46,100 tons carcass, rose nearly doubled from 28,000 tons in 2006-07.

Total value of live cattle trade to Indonesia is \$ 341 million during 2007-08, more than \$ 303 million from the previous year, while beef is only worth \$ 99 million, up from \$ 73 million in 2006-07. This amount is the third largest market after the Japanese market and the United States. In the year 2007 - 2008, the market in Indonesia has grown very rapidly for the Australian beef market in South East Asia region. Beef exported to this market predicted to increase

by more than 23% at the end of 2008 and 12% in 2009. Indonesia is expected to remain dominant in the live cattle export market and will develop further in the short term to medium term, primarily associated with the feedlot enterprise investment growth in Indonesia.

The development of imports of beef cattle and beef to Indonesia is strongly influenced by changes in the exchange rate and the USD and other factors such as season and climate change and government policy. This can be explained as follows:

- a. Global financial crisis has contributed to the tightening of bank liquidity in the last two years and also have an impact also on the weak purchasing power. Will occur due to continued decline in investment and the dismissal of workers that will happen unemployment labor.
- b. The weak purchasing power, especially for Australian beef export market to the United States, Japan and Korea have resulted in accumulated stock of beef and cattle in Australia. Beef cattle rancher in northern Australia is more like selling heavy weight cattle (500-600) kg / fish as a source of meat, because they get better prices than selling feeder cattle with conditions 300 kg body weight. This condition is supported by the climate (rainfall) is

adequate to beef cattle breeding in this area easy to provides fodder of grass and cereals.

- c. These conditions have led to export beef (boneless) into the market in Indonesia. Export price of Australian beef averaging Rp.42.500, 00/kg boneless retail level, apparently imported beef prices this has distorted the price of beef in the country. While the price of boneless beef in Indonesia, ranging in price Rp. 55.000.00 / Kg.
- d. On the impact of meat exporter from Australia, was Australia's beef export price of Rp. 42,500.00 /kg in the retail level in Indonesia is a short term solution, because the exporters can sell the stock at a price advantageous to Indonesia. However, the exporter is actually earns a profit only in the short term. Its could save Australia's stock of beef was not sold to the United States, Japan and Korea as the impact of the global financial crisis. While in the long-term export of beef at that price would be problematic, because the price of beef cattle came from Australia in the future will be increase.
- e. In the short term, distorted prices in the domestic beef have an impact on small holder beef cattle farm business and companies feedlot are losses. Because, high production costs could not be paid by the selling price of beef very cheaper. If the introduction of imported beef boxed from Australia continues, it is possible to cover beef cattle fattening business in Indonesia. So that in the long run will not stimulate the growth of feedlot industry in Australia to Indonesia as a result of cattle exports to Indonesia with a relatively cheap price. This condition also known as a negative investment, because of the large feedlot company's investment will not be returned by the business that is not conducive.

CONCLUSIONS

1. Disparities prices of imported beef boxed from Australia and the price of local

beef in Indonesia has distorted the price of beef in Indonesia. This causes the feedlot business climate is not conducive and negative investment impact.

2. These conditions will also affect the price decline in imports of live cattle from Australia; in the long run will not develop a cattle farmer business in northern Australia and Indonesia.

REFERENCES

- [1] Apfindo, (2008). Realization of Feeder Cattle Imports in 2007 and Capacity of Pen. Secretariat Apfindo Jakarta.
- [2] Australian Lot Feeders Association (2007), The Feedlot Industry; <http://www.feedlots.com.au/> accessed on 3 June 2008
- [3] Government Livestock Services West Java Province (2007). Opportunity and Preparation Facing West Java 2010 Self sufficiency of Beef.
- [4] -----(2007). Road Map of Livestock Development in West Java, Cooperation between the Faculty of Animal Husbandry Unpad and Livestock Government West Java
- [5] Directorate General of Processing and Marketing of Agricultural Products Dep. Agriculture Republic of Indonesia (2004). Protection Policy and Promotion Agriculture. Grasindo. PT Gramedia Widiasarana Indonesia. Jakarta.
- [6] Direcotrate General of Livestock Services, (2004). Hought the main points of Livestock Development 2005-2009. Directorate General of Livestock Production, as the formulation of Strategic Plan for discussion, Renop, Medium-Term Livestock Development Jakarta in July 2004
- [7] Direcotrate General of Livestock Services (2007) Indonesia Livstock Statistics 2007.
- [8] Diwyanto Kusumo, Sjamsul Bahri, Budi Haryanto, I.W Rusastra, Atien Priyanti dan Hasanatun Hasinah (2005) Prospects and Cattle Business Development; Research and Development Agency Ministry of Agriculture Jakarta
- [9] Firman, Achmad, Sondi Kuswaryan, dan Sri Rahayu. (2004). Livestock Investment Impact On the Economy of West Java Province (Analysis Input - Output). Padjadjaran University. Bandung
- [10] Food And Agricultural Policy Research Institute/FAPRI (2001), World Agriculture Outlook. Center for Agriculture and Rural Development. Iowa State University. Iowa USA
- [11] Hirshleifer, Jack (1985) Price Theory and Applications; Translated by Kusnedi. Publisher Jakarta.

- [12] Ilham, Nyak. (2006) Economic and social analysis of achievement strategy self sufficiency of beef 2010. Presented; on the technical coordination meetings Ruminansia the Directorate of Livestock Services, DGLS, dated 27 April 2006. Bogor.
- [13] Kotler, Philip, Swee Hoon Ang, dan Siew Meng Liong (2000) Asia Marketing Management Perspective. Pearson Education Asia Pte. Ltd. Penerbit ANDI Yogyakarta.
- [14] Meat and Livestock Australia (2008) Annual Operating Plan 2007-2008.
- [15] Perdana, Tomy (2005) Level of Competitiveness and Business Efficiency of Feedlot Business in West Java, Bandung regency; The Policy Analysis Matrix Application in Agriculture Indonesia, p. 240-253. Yayasan Obor Indonesia, Jakarta.
- [16] PPSKI DPP(2005) Contribution of Livestock Beef Cattle and Dairy Cattle to National Development and Welfare of the People's Farmers, Public Hearings Meeting DPR-RI.
- [17] Prayogo U. Hadi dan Nyak Ilham (2002) Problem and Prospect Development of Beef Cattle Breeding efforts in Indonesia. Journal of Agricultural research and development; Center for Research and Socio-Economic Development of Agriculture, Bogor.
- [18] PSP IPB-APFINDO (2003) The impact of feeder cattle imports, the Central Research Institute of Development Studies Bogor Agriculture Intitute
- [19] Samariyanto (2004) Breeding Policy Alternative of Beef Cattle In era of Regional Autonomy. National Workshop Beef Cattle. Directorate General of Livestock Services.
- [20] Simatupang, P. and I. W. Rusastra, (1990). Comparative Advantage and Policy Incentive of Production in Java and East Nusa Tenggara. in F. Kasryno and P Simatupang (Eds), Comparative Advantage and Protection Structures of the Livestock and Feedstuff Sub Sector in Indonesia. Center For Agro Economic Research, Bogor.
- [21] Soedjana, D Tjeppey (2005) Prevalence of Traditional Cattle Enterprises in the Perspective of the National Livestock Production Improvement, Livestock Research Center of Bogor, Journal of Agriculture Research and Development
- [22] -----(2006) Strategies and Policies Achieving Sufficiency Beef Program 2010, the Directorate General of Animal Husbandry, Bukit Tinggi May 18, 2006.
- [23] Sumanto, Santoso, K. Diwyanto dan B. Wibowo (1995). Business of Beef Cattle (PO) Breeding Small Farms as Agribusiness Support Activities in Central Lampung (Product Reviews). Proceeding of National Seminar on Science and Technology. Livestock Research Center, Ciawi-Bogor.
- [24] Sunandar, U. Kusnadi, dan D. Sugandi, (1994). Family Labor Absorption on Livestock Farmers by Feedlot Business. Proceeding Scientific Research Results Meeting. Livestock Research Center, Ciawi-Bogor.
- [25] ----- (2005). Economic Incentive Analysis, Comparative advantage and Competitive Advantage Beef Cattle Business in Gunung Kidul Regency., Dissertation. Study Program of Agricultural Economics, business Agricultural Sciences. Doctoral Education Program, University of Gajah Mada.
- [26] Tawaf, Rochadi., dan Sri Rahayu. (2003) The Feasibility Analysis Partnership Beef cattle, dairy cattle and Poultry Business. Cooperation Livestock Department of West Java and Fapet Unpad
- [27] ----- (2005). The Influence Beef And Edible Offal (Illegal) Import to Business Development And Beef Cattle Industry in Indonesia. Paper on research and development Livestock centre Department, Bogor.
- [28] ----- (2007). Feedlot Industry Perspective in Indonesia. Symposium of The Culture Indonesia - Malaysia X, Padjadjaran University Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia 29 May-1 June 2007
- [29] Yusdja, Yusmichad dan Nyak Ilham (2004) Agribusiness Development policy reviews of Beef cattle., Center for Research and Socio-Economic Development of Agriculture, Bogor. AKP. Vol. 2 No.2 June 2004