Introduction

Livestock development carried out by the Indonesian government is a part of agricultural development activities to improve beef production and distribution throughout Indonesia. Although beef is one of the popular commodities in Indonesia, its production and distribution remain unbalanced as shown in the Fig. 1.

The success of the implementation of beef cattle breeding development requires government policies that guide the implementation of the development through various programs (Suharto, 2010). Carl Friedrich defines policy as a set of actions/activities proposed by a person or a group of persons or government within a given environment (Carl Friedrich in Agustino, 2007). While Ervin (2000) believes it is a blueprint for any action that will drive and influence the behavior of the people affected by the decision.

The development of animal husbandry in particular beef cattle in Indonesia started in the 18th century. The Indonesian government has encouraged the farming and development of this commodity due to its imbalance availability or shortage throughout the country. Examples of such a shortage occurred in 2015, in some big cities such as Jakarta where the price of a kilogram of beef dramatically increased from Rp. 100,000.00 (about 7 USD) to Rp. 130,000.00 (about 9 USD). This condition has not only put less meat on the plates of the Indonesian population but has also put many people in the meat industry out of business. One of the reasons for the beef cattle shortage is the enactment of a policy that put a stop to beef imports from Australia to allow national production to meet demand. Although this policy seems reasonable, it failed to meet expectations as beef cattle production centers are located far from the demand areas, hence making distribution very difficult (Indonesian Ministry of Agriculture). Therefore, this study aimed to formulate policy solutions to overcome the beef production and distribution problems in Indonesia.
Fig. 1: Projection of the Shortage of cows in Indonesia

Methods

This is descriptive research relying on secondary data obtained from various agencies and a review of previous related and relevant studies. The focus of the discussion in this study includes the nature of the policy, policy for beef cattle farms development in Indonesia, previous empirical studies; alternative development policy for beef cattle farms in Indonesia. The data analysis technique used is a descriptive qualitative analysis using the analytical synthesis method, while the data matrix tool was used to present the data (Miles and Huberman, 1992).

Discussion

The Essence of the Policies

Policy and development are two interrelated concepts. Development is the context in which the policy operates. Meanwhile, the policy development framework guides the implementation of development goals in various programs and projects (Suharto, 2010). According to Ealau, a policy is a determination that has a consistent and repetitive characteristic (Suharto, 2010). According to Carl Friedrich in (Agustino, 2007) policy is a series of actions/activities proposed by a person or a group of persons or a government within a given environment where obstacles exist and for which the policy is proposed to overcome. According to (Marzali, 2012), a policy is a tool or instrument to regulate the population from the top down. While (Ervin, 2000) defines policy as a blueprint for action that will drive and influence the behavior of people affected by the decision.

Public policy is a series of events that have a specific purpose to be followed and implemented by an actor or group of actors dealing with a problem (Anderson, 1984).

According to (Bridgman and Davis, 2004), public policy is whatever the government is trying to do or not to do. Hogwood and Gunn (1990) argue that public policy is a set of government actions designed to achieve certain results. Public policy decisions are characterized by consistency and repeatability behavior of those who make and those who obey the decision (Agustino, 2007). According to (Young and Quinn, 2002), the understanding of public policy helps discuss some of its key concepts such as:

1. The government authorities according to which a public policy is an action that is made and implemented by government agencies that have the legal authority, political and financial authority to do so
2. The reaction to the needs and problems faced by the population
3. A set of goal-oriented actions

Bridgman and Davis (2004) observe that public policy has three interlocked dimensions, namely: A destination, a lawful course of action and a hypothesis. From what precedes, it can be said that public policy has several main characteristics (Agustino, 2007):

1. Policy demands
2. Goal-oriented decisions
3. Policy statement: Formal expression or articulation of political decisions such as statutes, decrees and executive orders, administrative regulations, etc.
4. Policy outputs and outcomes

Beef Cattle Development Policies in Indonesia

Chronologically, efforts made by the government regarding the development of beef cattle can be seen in the Table 1.
Livestock development policies from 2010 to 2014 was a popular beef self-sufficiency program. To achieve the program objectives, (Priyanto, 2011) recommends three strategies, namely: (a) undertake the development of livestock production centers and quarrying cheap feed resources; (b) to control import beef and cattle to protect people’s farms; (c) create a good coordination between the institutions of the central level and the regions to assist the implementation of policies in the field.

In 2002, the government made a policy on central areas of cattle production by cattle integrated with rice (Program Rice-Livestock Systems Integration/SIPT). The purpose of this policy is to help meet feed cattle in the central areas of cattle breeding. However, this program was so small in size that it failed to improve production. It was suitable for rice farmers, not cattle farmers (Nuras and Hidayat, 2005).

According to (Yusdja and Ilham, 2004), so far, the livestock development policy implemented by the government has failed to improve the availability of beef cattle and meat. Restructuring livestock needs a development policy that allocates resources equitably to all provinces, not just prioritizing areas of beef cattle production centers such as East Java, Central Java, South Sulawesi, Bali, East Nusa Tenggara, Lampung and West Nusa Tenggara. Governments should facilitate market infrastructure in the form of animal functioning markets, slaughterhouses and strict rules and market information. The role of government is needed to support each pattern in the form of policies, such as (1) Synchronization regional agribusiness development with other agri-commodities (farm, food and fisheries);
(2) Determine the priority development of beef cattle in certain areas corresponding to the adaptability of livestock, such as Sumbawa with no grazing land into agricultural areas and forest industry.

Beef cattle farm development in Indonesia can be achieved by formulating a parent program. The livestock development master program is consistent with problem-solving and strategy development. As stated earlier, in 2015, the Indonesian government prioritized policies supporting the development of animal husbandry in Indonesia. Some of these policies include: (a) An increase in the quantity and quality of seeds and breeding stock, (b) increased production of livestock, (c) an increase in the production of fodders, (d) the control and prevention of animal diseases, (e) guaranteeing beef cattle productivity and competitiveness, (f) providing management and technical support.

To achieve beef cattle farms development goals formulated by the government, it is important to learn from countries that have been able to overcome difficulties to become the world’s largest beef exporters, as illustrated in the following Table 2.

The success of the countries above in becoming the world’s biggest beef cattle producers and exporters cannot be separated from the role of the government in implementing efficient beef cattle development policies along with modern technology supported by farmers’ motivation and determination to achieve beef cattle breeding development goals (Table 2). One of the most attractive livestock policies in the United States is the agricultural insurance aimed at protecting agriculture and farmers. The role of the United States government in protecting the agricultural sector can be seen in the Farm Security and Rural Investment (FSRIA) Act of 2002, which consists of soil conservation programs and agricultural environment. This regulation stipulates that matters concerning land administration and the distribution of agricultural products between the states and the Federal Government, as well as the export of agricultural commodities shall be supervised and regulated by the US Government. The program supports loans and regulates agricultural investments. The government also provides program credits that guarantee exports for farmers to remain productive. The regulation also provides farmers with health insurance and direct subsidies for agricultural commodities and access to foreign agricultural trade (export aid of several commodities).

**Table 2: World’s largest beef cattle producing Countries**

<table>
<thead>
<tr>
<th>No</th>
<th>Countries</th>
<th>Production quantity (ton)</th>
<th>Export quantity(ton)</th>
<th>Cow population</th>
<th>Total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USA</td>
<td>11.230</td>
<td>1.141tn</td>
<td>87.730</td>
<td>321.034.355</td>
</tr>
<tr>
<td>2</td>
<td>Brazil</td>
<td>9.920</td>
<td>2.030</td>
<td>207.960</td>
<td>204.451.000</td>
</tr>
<tr>
<td>3</td>
<td>China</td>
<td>5.760</td>
<td>550.000</td>
<td>104.188</td>
<td>1.353.821.000</td>
</tr>
<tr>
<td>4</td>
<td>Indian</td>
<td>4.000</td>
<td>1.875</td>
<td>329.700</td>
<td>1.276.267.000</td>
</tr>
<tr>
<td>5</td>
<td>Argentina</td>
<td>2.900</td>
<td>200.000</td>
<td>51.745</td>
<td>43.417.000</td>
</tr>
<tr>
<td>6</td>
<td>Australia</td>
<td>2.240</td>
<td>1.560</td>
<td>28.250</td>
<td>23.892.000</td>
</tr>
</tbody>
</table>

Source: http://bisniskeuangan.kompas.com

**Alternative Beef Cattle Development Policies**

By 2015, the government has formulated several priority activities to achieve goals beef cattle farms development goals in Indonesia, these include (a) an increase in the quantity and quality of seeds and breeding stock, (b) increased production of livestock production, (c) an increase in the production of feeds, (d) the control and prevention of animal diseases, (e) guaranteeing animal productivity and competitiveness, (f) providing management and technical support. As pointed out at the outset of this paper, the biggest problem faced by beef cattle development in Indonesia is the unbalanced availability of beef cattle throughout Indonesia which is due to a lack of efficient beef cattle distribution channels from the producing areas to the demanding ones.

Bahri et al. (2005) believe that the Indonesia beef cattle trade and marketing system has been inefficient due to the concentration of production in limited areas such as East and West Nusa Tenggara, Bali, Lampung, Central Java, East Java and Sulawesi. Highly populated areas such as Jakarta and West Java remain the big importers followed by Riau, East Kalimantan, West Kalimantan, North Sulawesi (Table 1).

Taking into consideration the problems mentioned above and the government’s response, we may say that the policies put in place have been unsuccessful because they fail to target the right problem i.e., the distribution problem. Therefore, new alternatives policies to overcome these problems must be sought that would include:

1. Formulating beef cattle regulations reflecting the Indonesian marketing system from production centers to areas with high demand
2. Creating a system of institutional marketing aimed at organizing coordination, collecting data, coaching, developing, empowering, monitoring and evaluating related beef cattle marketing activities in Indonesia
3. Establishing effective transportation patterns and infrastructure for marketing and distribution nationwide
4. Creating an online communication network that can help governments, businesses and the population to have updated information about beef cattle availability and demand condition
Conclusion

Indonesia has abundant resources to create an adequate agricultural sector, especially the livestock sector. For many the government has focused its effort to improve this vital sector on policies that failed to address the core problem of beef cattle development i.e., the high concentration of beef cattle production in areas with low population density and therefore low demand in meat, these areas include East Java, Central Java, South Sulawesi, Bali, East Nusa Tenggara, Lampung and West Nusa Tenggara. While areas with high population density and therefore high demand for meat consumption such as Jakarta and West Java, Riau, East Kalimantan, West Kalimantan and North Sulawesi were left behind. In conclusion, we believe that the policies put in place have not been successful as they fail to target the right problem i.e., the distribution problem. Therefore, alternative policies must be issued by the government that consists of creating a system relying on regulations, institutions, transportation and communication to overcome the problem. We believe that the success of beef production and distribution largely depends on the formulation and enactment of policies considering the role of the government, the needs of farmers and livestock technology. However, these variables alone are not the sole ingredients for the development of the cattle business in Indonesia. More studies are needed to identify other difficulties faced by this vital sector.

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Author’s Contributions

All the authors equally contributed in this paper.

Ethics

This study was approved by Andalas University Scientific Research Committee of Ethics.

References


