Government support for the development of the UPSUS SIWAB program in Soppeng Regency

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Abstract. The special effort program for pregnant cattle breeders is aimed at increasing the population of cattle continuously by maximizing the potential of broodstock cattle in producing children, improving the quality / genetic of Bali cattle to realize the government's commitment in pursuing beef self-sufficiency in Indonesia. This study aimed to determine the form of Soppeng district government support for the SIWAB UPSUS Program. This research was conducted in Soppeng Regency. The study was conducted in March to April 2019 in Soppeng District, Liliriaja District. The types of data that will be used in this study are secondary and primary data. Data analysis is statistically descriptive. The results showed that the local government supported the implementation of SIWAB UPSUS but the incentives for inseminators were still low.

1. Introduction

The system of raising cattle through marriage in Indonesia is known to have several methods, but there are only two ways that are often applied, namely through artificial insemination (IB) and natural mating (KA). Artificial insemination is one of the choices in breeding livestock because it can carry out male maintenance efficiency. In principle, the IB program is one of the livestock development programs that has many advantages, both in increasing the rate of increase in livestock populations and in raising livestock income [1,2].

To increase the population, UPSUS SIWAB was conducted. Special Efforts for Obligatory Breeding Cattle (UPSUS SIWAB) are integrated activities using an active role approach of the community by optimizing the utilization of livestock resources. To oversee the development of UPSUS SIWAB's performance, a basis for implementing activities in the form of regulations and decrees of the Minister of Agriculture has been issued, each of which regulates the operation of UPSUS SIWAB, including the implementation of IB activities [3]. One of the districts in South Sulawesi Province that is developing UPSUS SIWAB is Soppeng Regency. The program is outlined in Minister of Agriculture regulation No. 48 / Permentan / PK. 210 / 10/2016 concerning Special Efforts to Accelerate the Increased Population of Cattle and Buffaloes signed by the Minister of Agriculture on October 3, 2016. Therefore, the local Government will support and active role in the development of SIWAB UPSUS, one of Local Government support maximizes the potential of brood stock cows in Soppeng Regency to be able to
continue to produce calves and produce meat productivity by providing information to farmers about cross breeding in increasing beef productivity [4].

The local government of Soppeng Regency in supporting the development of the SIWAB UPSUS plays an active role in following, implementing and overseeing the activities of the SIWAB UPSUS program. Siwab Upsus Activities Include:

1. Implementation of IB activities
2. Provision and distribution of frozen semen, Liquid Nitrogen (N2) and Containers
3. Feed Forging Fulfillment
4. Management of Reproductive Disorders
5. Control of Productive Female Cutting

Implementation of SIWAB UPSUS:

1. Each breeder of cattle aged 2-8 years is identified by the cattle breeding and animal health reproduction status of cattle
2. Normal broodstock cattle are registered as IB acceptors
3. Cattle that experience reproductive disorders are handled medically by the nearest veterinarian reproduction, whereas cattle that have permanent reproductive disorders are recommended for slaughter
4. Cattle that have been IB or cattle that have been mated by nature do pregnancy pregnancy at the earliest 2 months after mating
5. Every calf birth results from IB or natural marriage are reported immediately through national animal health system

The main program is an effort to implement a good reproductive management system including: checking reproductive status and gangrep (reproductive disorders), IB services and natural mating, fulfillment of frozen semen and liquid N2, control of productive females, and fulfillment of animal feed and concentrate. This activity is integrated using the approach of the active role of the community by optimizing the use of livestock resources to achieve pregnancy. Livestock and veterinary technology innovations implemented in support of the SIWAB UPSUS program primarily at the Demfarm site are:

a) Additional feed or additives (Bioplus for calves and Minoxvit for males and mothers),
b) Hormones for lust synchronization (Estrunak),
c) Vaccines for the prevention of calf diarrhea (ETEC + VTEC vaccine),
d) Surra disease detection kit and several other strategic diseases (Surelisa Kit-Te and Felisavet),
e) Early pregnancy detection kit (Immunodotbloting),
f) Forage of high quality animal feed (*Indigofera* sp)

With this technological innovation, it is expected that the problems of cattle production and reproduction can be overcome, so that an increase in productivity and cattle population in general [4] In the guidelines for implementation of the SIWAB UPSUS [3] gives instructions and responsibilities to all local governments to play an active role in realizing and developing the SIPSAB UPSUS program in the regions. In the development of a sustainable SIWAB UPSUS with the Government's enthusiasm to pursue meat self-sufficiency in 2026. The Regional Government of Soppeng Regency is planning for the upstream to downstream sub-systems to achieve the target of beef self-sufficiency. The development of beef cattle farms is carried out jointly by the government, community (small scale farmers), and private. The government sets rules, facilitates and oversees the flow and availability of products, both in quantity and quality, to meet the requirements of halal, safe, nutritious and healthy. The private sector and the community play a role in realizing the adequacy of livestock products through the activities of production, import, processing, marketing and distribution of beef products [5].
2. Materials and methods

This research was conducted in Soppeng Regency. The study was conducted in March to April 2019 in Soppeng District, Liliriaja District. The type of data that will be used in this study are secondary and primary data. Primary data is a direct interview conducted using questionnaires from several informants. Data is taken from direct interviews with the relevant Dinas or local Government officials in the Animal Husbandry sector. For secondary data obtained by collecting document data in reports from several related agencies, such as the Soppeng District Agricultural Service (Animal Husbandry Department), the Central Statistics Agency, and the UPSUS Implementation Team SIWAB South Sulawesi Province Animal and Animal Health Service. The sample was part of the local government, namely the head of the sector and inseminator, amounting to 6 people in Soppeng Regency. The analysis was carried out, namely the method of interviewing stakeholders qualitatively about the development of UPSUS SIWAB in Soppeng Regency, including support for beef cattle breeding infrastructure (Upstream Sub-System) and a system of strengthening facilities, downstream of beef cattle. Planning for the upstream and downstream systems is a government effort to realize beef cattle business, it needs to be supported by the role of the central and district / city governments [6].

3. Results and discussions

3.1. Support of beef cattle sub-system in Soppeng Regency

The efforts of the Regional Government to realize the UPSUS SIWAB program, by providing counseling to farmers about the UPSUS SIWAB program, which includes intensification of natural marriage and artificial insemination. On intensification of natural mating the local government emphasizes breeders to sort superior or suitable males to be mated by broodstock and provide information on beef cattle maintenance management including counseling about intensive marriages (individual cages), semi-intensive marriages (group cages / umbaran) and extensive marriages (extant marriages) pasture). Good feed management for the growth of good parent weights productivity for proper mating. According to [7] and [8] counseling will give farmers the impetus to use effective and efficient ways by practicing what is called the Five Farmer Enterprises so that their welfare is expected to increase.

In addition to conducting extension services on natural mating, the main priority is to socialize massively about the use of artificial insemination technology because the technology is one of the superior programs of the SIWAB UPSUS program in increasing beef cattle production and productivity by providing understanding to breeders. Artificial insemination technology has advantages and percentage of births and good productivity in improving the welfare of beef cattle breeders. Local government efforts to innovate so that farmers are willing to mate broodstock with Artificial Insemination systems, and none other than the male is still lacking and also prevents inbreeding and prevents contamination of diseases that can thwart pregnant and beef cattle births. Soppeng District Government Support for Artificial Insemination UPSUS SIWAB program, facilitating insinuator operational vehicles, training and regenerating Insiminator staff from agencies and breeder groups so that when there is heat on the breeders, Insiminator workers are able to move quickly to hold Artificial Insenilation. The government targets each village / village to have a minimum of 2 inseminator personnel. The plan to increase the honorarium of Inseminator employees apart from UPSUS SIWAB is also carried out to budget in the APBD in increasing the welfare of Inseminator personnel. To support the increase in regional government beef cattle population, every year budgeting in the government budget and regional expenditure for cattle breeding assistance for breeders who succeed in achieving beef cattle target, support This is to motivate farmers to focus on the development of beef cattle farms, especially in Soppeng district [4].

In addition to beef cattle breeding assistance each year for outstanding breeders, regional government negotiates with banks, village cooperatives and private institutions to provide facilities for capital assistance for beef cattle breeders. Supporting infrastructure for supporting beef cattle farms in the form of a cage clamp for each group of livestock is provided by the government and assistance in equipment
to support the maintenance of beef cattle, such as grass cutters / chopper to meet the availability of feed and pasture location that can be used by farmers to grow elephant grass. In support of maintenance management downstream, the government provides animal health center facilities or poultry health for livestock to prevent disease and treatment for livestock. One of the local government's routine assistance is vaccines that are given regularly by veterinarians and medicines as well as consulates related to diseases in farmers. Until 2019 the local government has realized 4 animal health center units in 7 Sub-districts, and henceforth the government is targeting that each district be built by the animal health center [4]. To support the success of Upsus SIWAB, several activities will be carried out, including: planting grass and legume covering an area of 13,000 ha, providing reservoirs (water sources), and supplying medicines and vaccines to improve animal health status [9]. Local government support in developing beef cattle farms in accordance with the opinion [10]. The upstream off-farm agribusiness subsystem includes the provision of livestock production facilities, beef cattle breeding, feed businesses / industries, the pharmaceutical industry, artificial insemination industry, along with its trading activities and the beef cattle cultivation subsystem is part of the on agribusiness farm.

3.2. Support for Beef Cattle Downstreaming System in Soppeng Regency

In supporting the sustainability of the downstream system of beef cattle farming, the local government cooperates with universities and the private sector to provide counseling and assistance for waste management into added value raising for income, routine counseling is carried out for the management of straw fermented feed, utilization of cow dung into organic fertilizer, and converting dung cattle become alternative gas or biogas. Particularly for the creation of biogas, the government has provided gradual assistance for group scale, and has provided pilots in 2 villages in the liliriaja sub-district namely timusu and jennae villages. The government's goal is to stimulate livestock actors to increase the potential of beef cattle breeding in improving welfare. RPH infrastructure planning (Slaughterhouse) becomes the government's priority program in supporting the marketing system of beef cattle and prevents slaughter of productive cows and bulls with suboptimal body weights to prevent depletion of local cattle populations.

Prevention can be done by buying cattle in the intention of the animal market and abattoirs (RPH) for further development in breeding centers. The livestock weighing facility is one of the government's efforts to measure the sale value of cattle, so as to create transparency of breeders and prospective cattle buyers. For the selling price, the government gives full authority to the farmers to determine the price [4]. According to [11] Four downstream strategic steps that must be taken by the government are: (1) Treating livestock as a resource, in the sense that livestock can become extinct and cannot be restored if used up. Therefore, the government needs to continuously strive to maintain and develop livestock resources as a source of growth in the production of meat, milk and eggs. Livestock are genetic resources that can be derived and developed for the benefit of humans. In this case, livestock resources function to produce commodity livestock and livestock products. 2) Providing livestock industry infrastructure through the provision of land and irrigation to produce forage forage (HMT). Provision of infrastructure should be in the form of public investment as the construction of irrigation for food crops. Infrastructure for land and water use is a major obstacle in the development of livestock. Without this service, livestock investment is difficult to develop and the livestock business will remain traditional. 3) Carry out disease control, among others by maintaining the health of livestock and preventing transmission of disease between livestock and humans, including the production of food from livestock that is healthy and safe. Control of livestock diseases in the future is a very important issue in the trade of livestock products on the international market. 4) Prevent slaughter of productive cows and bulls with suboptimal body weights to prevent depletion of local cattle populations. Prevention can be done by buying cattle in the intention of the animal market and abattoirs for further development in breeding centers.

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References

[1] Sirajuddin S N, Asnawi A, Rasyid I and Mangalisu A 2016 Competitiveness of Beef Cattle fattening in Kulo Subdistrict, Sidrap District South Sulawesi Adv. Environ. Biol. 10 171–5

[2] Sirajuddin S N, Sudirman I, Bahar L D and Al-Tawaha A R 2018 Social economic factors that affect cattle farmer’s willingness to pay for artificial insemination programs Bulg. J. Agric. Sci. 24 574–80

[3] Direktorat Jenderal Peternakan dan Kesehatan Hewan K P 2016 Pedoman Pelaksanaan Upaya Khusus Sapi Induk Wajib Bunting (Upsus SIWAB 2017) (Jakarta: Kementerian Pertanian)

[4] Dinas Peternakan dan Kesehatan Hewan Pemerintah Provinsi Sulawesi Selatan. Makassar 2017 Data UPSUS SIWAB Sapi Potong di Sulawesi Selatan (Makassar)

[5] Bamualim A and Wirdahayati R B 2003 Nutrition and management strategies to improve Bali cattle productivity in Nusa Tenggara ACIAR Proceedings (ACIAR; 1998) pp 17–22

[6] Rusdiana S and Soeharsono S 2017 Farmer group performance Bali Cattle In Luwu District East : The Economic Analysis Int. J. Trop. Vet. Biomed. Res. 2 18–29

[7] Mardikanto T 1993 Penyuluhan Pembangunan Pertanian (Surakarta: Sebelas Maret University Press)

[8] Bahar L D, Sudirman I and Sirajuddin S N 2017 The Farmers willingness to pay on artificial insemination in Bali Cattle Entomol. Appl. Lett. 4 34–7

[9] Sugjarti T and Siregar S B 1998 Dampak pelaksanaan Inseminasi Buatan (IB) terhadap peningkatan pendapatan peternak Sapi Perah di daerah Jawa Barat J. Ilmu Ternak dan Vet. 4 1–6

[10] Wiyatna M F 2007 Perbandingan indek perdagingan sapi-sapi Indonesia (Sapi Bali, Madura, PO) dengan sapi Australian Commercial Cross (ACC) J. Ilmu Ternak 7 22–5

[11] Ilham N 2007 Alternatif kebijakan peningkatan ertumbuhan PDB subsektor peternakan di indonesia Anal. Kebijak. Pertan. 5 335–57