

Availability Assets of Beef Cattle Farming in Bima Regency Post Flood Disaster in 2021

Kharismafullah¹, Siti Azizah², Agus Budiarto³

^{1, 2, 3}Master of Animal Science Study Program, Interest in Livestock Agribusiness, Faculty of Animal Husbandry Universitas Brawijaya, Malang, Indonesia

Email address: harismafullah@gmail.com; siti.azizah@ub.ac.id; agusfpt@ub.ac.id

Abstract— This study aims to determine the availability of beef cattle breeder assets in Bima District after the flood disaster. The research was conducted from September to November 2021. The method used in this study used descriptive qualitative analysis. Respondents in this study were 250 beef cattle breeders in 4 (four) sub-districts that became the research location, Head of the Livestock and Animal Health Service of Bima Regency, Animal Husbandry Technical Implementation Unit (UPT) in 4 (four) Sub-districts that became research locations, village heads in 4 (four) Districts as research locations, and Veterinarians and Artificial Insemination Officers (IB). The variables used are social resources, natural resources, economic resources, physical resources and human resources. Data were collected by means of observation and interviews using a questionnaire. The results of the research on the availability of beef cattle breeder assets in Bima Regency after the 2021 flood disaster that can be accessed by beef cattle breeders in Bima Regency after the flood disaster are social capital, natural capital, economic capital, physical capital, and natural capital.

Keywords— Flood, Asset Capital, Beef Cattle Breeders.

I. INTRODUCTION

The existence of smallholder beef cattle farming is inseparable from vulnerability due to natural disasters and non-natural disasters. This is one of the issues that must be considered by beef cattle farmers in business development so that farmers can formulate anticipatory steps from an early age to reduce the impact of vulnerability that can harm livestock business. Besides the role of farmers, the role of the government is also expected to be at the forefront to reduce the vulnerability faced by farmers and to formulate ideal rules in various aspects of development so that the formulated development can support each other with the hope of vulnerability in various businesses, especially livestock business. people's beef cattle can be anticipated early on.

The flood disaster in Bima Regency was caused by damage to the forest environment. Where community forests and state-covered forests are transferred by the community as fields or agricultural land to grow corn. Forest damage, both to community forest and state-covered forest damage, amounted to 12,000 ha (BPBD Bima district, 2021). The shift in community professions to become corn farmers is quite high in all sub-districts in Bima Regency. So that the community has the potential to continue to open the surrounding land to be used as corn farming land. Such conditions can be a threat to the sustainability of the environment and forests and the ecosystems in them. Increasing forest damage has the potential to become a threat that can directly affect the community,

especially those who work as traders and breeders. Especially for

breeders, the experience of the flood disaster that has been felt which has resulted in considerable losses and is directly proportional to the massive forest clearing carried out by the community to become agricultural land can be a reason to look for other professions besides the profession as a breeder. This can threaten the instability of food supply of animal origin and the reduction of the breeder and cattle population in Bima Regency.

The beef cattle rearing system in Bima Regency is still classified as traditional and is still carried out from generation to generation (Nianti FR, 2020). The cattle farming business in Bima Regency is still carried out by the people whose main job is as a farmer, such conditions characterize the type of rural community that has general characteristics in business, namely: a) low community skills, b) small business capital, c) not using superior seeds. , d) low productivity of livestock, e) poor use of rations, f) small scale of business, g) no need to apply for a business license, h) livestock maintenance is still traditional, i) workers still use their own power and other family members , and j) feed sources still rely on surrounding resources scattered on agricultural land, both grass and agricultural straw (Ikhsanuddin M., 2017).

The implementation of sustainable living must be a special concern for the Bima Regency government to the community, especially farmers who experience business losses, especially beef cattle business as a result of the impact of the flood disaster. The formulation of policies that favor the community engaged in the livestock business must be part of the main development priorities in the short, medium and long term of the government of Bima Regency, West Nusa Tenggara (NTB). The application of sustainable living in disaster-prone communities according to Kelman and Mather (2008) can be seen from 4 (four) aspects which include 1) understanding of communication and vulnerability management and risk perceptions of local communities regarding vulnerabilities and risks that threaten their lives, 2) maximizing community benefits from the environment without increasing their vulnerability during periods of inactivity, 3) managing crises when natural disasters occur and 4) managing reconstruction and resettlement after periods of crisis.

However, the beef cattle business in Bima Regency can be rebuilt and sustainable by utilizing the available resources around the business location. Wulandari, (2017) states that to anticipate the vulnerability of the community, utilize 5 (five)

South : Monta District
 Swest side : Bolo District
 East : Belo and Palibelo District

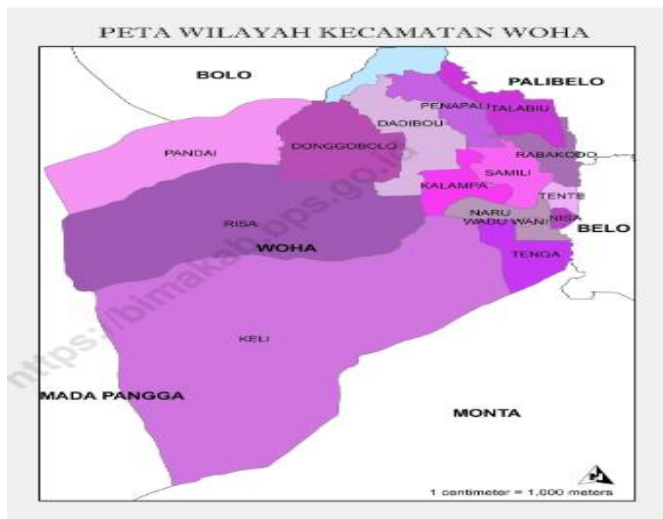


Fig. 3. Regional Map of WoHa District - Central Bureau of Statistics of Bima Regency, 2021

The Monta sub-district is divided into 12 villages with an area of 227.52 km². The administrative center of Monta District, Tangga Village, is located at a distance of 31 km from the capital of Bima Regency with a height of 41 meters above sea level. Furthermore, the composition of land use in Monta District includes rice fields of 83.8296 km², fields/gardens of 60.0161 km², buildings and yards of 30.6278 km² (Bima Regency Statistics Center, 2021).

District boundaries:

North : Donggo and Soromandi District
 South : WoHa District
 Swest side : Madapangga District
 East : Bima Bay



Fig. 4. Regional Map of Monta District - Central Bureau of Statistics of Bima Regency, 2021

2. Asset Resources for Beef Cattle Breeders after the Flood Disaster in Bima Regency that can be accessed

Social capital

Social capital are a series of interaction networks between communities, beliefs, social norms to the participation of communities and community groups in the context of sustainable business development and aims to anticipate vulnerabilities that result in losses for the community and business and to achieve the goal of a better life (Pratisthita *et al.*, 2014). Social capital that can be accessed by farmers for the sustainability of beef cattle farming after the flood disaster, namely a) Community togetherness in repairing damaged forest conditions due to the conversion of forest land as corn farming land initiated by local governments and non-governmental organizations, b) Socialization carried out by the Technical Implementation Unit (UPT) of Animal Husbandry and Animal Health at the District level regarding livestock health, housing management, and training in making compost which can be used as organic fertilizer so that farmers can sell and use it for agricultural needs, c) Social media and social networks as a means to sell and buy livestock seeds, d) Social media as a means to find out early information related to conflicts so that farmers can take steps to anticipate when an attack occurs on livestock businesses and e) Livestock groups can be a forum for interaction and the farmer network to continue to share information between farmers in terms of market information, information on purchasing seeds and other information that can provide welfare for farmers. In addition, livestock groups can be a forum to be registered in the livestock insurance program.

Natural capital

Natural capital are assets that are naturally available that are able to produce carrying capacity and benefits that can be used by the community in order to build sustainable livelihoods and deal with vulnerabilities that can disrupt the sustainability of a business (Aprilia, PD, 2020). Natural resource assets that can be accessed by beef cattle farmers in Bima Regency after the flood disaster are a) forage feed, rice straw and corn available post-harvest both from rice fields and mountains, b) In addition to water sources found in the Parado dam and their respective wells available throughout the year, c) access to forage feed and water available in the Doroncanga pasture and corn agricultural waste available around the Doroncanga pasture, d) forage feed and corn straw available around the livestock refuge location provided by the village government and e) available rice straw and corn can be processed by farmers into fermented feed so that it can become a long-term feed supply.

Financial capital

Economic capital or can be called financial capital assets are closely related to capital institutions, both private and government which can be accessed to be used in order to maintain the continuity of life or business. Capital can be in the form of loans from banks or other lending institutions that can be accessed by the public, savings, deposits, and other assets that can be commercialized or have more economic value (Aprilia, PD, 2020). Economic or financial assets that can be accessed by beef cattle farmers in Bima after the flood disaster are a) personal savings that can be used by farmers to rebuild beef cattle farming businesses that were affected by the flood

disaster and b) loan funds from banks, and government assistance in form of livestock insurance program. Three financial sources of beef cattle farmers can be used to build a business and develop a beef cattle farming business after the flood disaster.

Physical capital

Physical capital are basic facilities and facilities that can be used to support the community's livelihood processes where these physical assets can be interpreted as a set of basic infrastructure and ownership of production equipment that can produce goods or services (Aprilia, PD, 2020). Physical capital that can be accessed by farmers for the sustainability of beef cattle farming after the flood disaster is a) livestock refuge land and livestock grazing land that can be accessed by farmers to move livestock during the rainy season provided by the village government and local government, b) Slaughterhouse Animals (RPH) can help farmers to sell livestock so that livestock prices are in line with farmers' expectations.

Human capital

Human capital are the first asset that occupies the top position where humans are the most dominant subject in carrying out activities, human resource asset capital also shows a person's ability to obtain and utilize the foremost access in life and business (Aprilia, PD, 2020). Human resource capital that can be accessed by farmers as the main capital in livestock business sustainability activities, namely a) There is a livestock group that becomes a forum for discussing the development of beef cattle farming business, b) Veterinarians and AI officers can be utilized and accessed by farmers for disease management. livestock and to mate livestock by means of injection mating or IB mating, and c) animal husbandry graduates at the location of the business place can be a source of information to build a beef cattle farming business.

IV. CONCLUSIONS

Asset resources that can be accessed by beef cattle farmers in Bima District after the flood disaster are social capital, natural capital, economic capital, physical capital, and human capital.

REFERENCES

- [1] Aprilia. P., D. Dwi, 2020. Analisa Keberlangsungan Usaha Pembuatan Taoge Ditinjau Dari *Sustainable Livelihood Framework* (Studi Kasus Di Desa Penambangan, Kecamatan Balongbendo, Kabupaten Sidoarjo). Fakultas Ekonomi dan Bisnis Islam, Universitas Islam Negeri Sunan Ampel.
- [2] Badan Penanggulangan Bencana (BNPB) Daerah Kabupaten Bima, (2021). Jumlah Kerugian Masyarakat Kabupaten Bima Terdampak Bencana Banjir Tahun 2021.
- [3] Badan Pusat Statistik Kabupaten Bima, 2021. Kecamatan Bolo Dalam Angka, 2021. ISSN: 2598-3423. Nomor Publikasi : 1102001-5206020.
- [4] Badan Pusat Statistik Kabupaten Bima, 2021. Kecamatan Madapangga Dalam Angka, 2021. ISBN: 978-602-6870-06-3 Nomor Publikasi : 52060.2110.
- [5] Badan Pusat Statistik Kabupaten Bima, 2021. Kecamatan Wohu Dalam Angka, 2021. ISSN: 2598-3377 Nomor Publikasi : 52060.2112.
- [6] Badan Pusat Statistik Kabupaten Bima, 2021. Kecamatan Monta Dalam Angka, 2021. ISBN: 978-602-6870-08-7 Nomor Publikasi : 52060.2109.
- [7] Ikhsanuddin M., D. M. 2017. Universitas Islam Negeri Alauddin Makassar 2017. Penentuan Konsentrasi Optimum Selulosa Ampas Tebu (Baggase) Dalam Pembuatan Film Bioplastik(ggase) Dalam Pembuatan Film Bioplastik, 21–22.
- [8] Nianti Firda Rahma, 2020. *Jurusan Ilmu Peternakan Fakultas Sains dan Teknologi, Universitas Islam Negeri Alauddin Makassar Jl. Sultan Alauddin No. 36 Samata Gowa, 92113. i, 51–60.*
- [9] Pratisthita, R. N., Munandar, M., & Homzah, S. (2014). Peran Modal Sosial dalam Menunjang Dinamika Kelompok Peternak Sapi Perah (Studi Kasus di Kelompok 3 TPK Pulosari Pangalengan). *Jurnal Ilmu Ternak, 1*(10), 52–57.
- [10] Prista Fadilla, 2017. Analisis *Sustainable Livelihood* Petani Di Desa Ngadilangkung, Kecamatan Kepanjen Kabupaten Malang. Program Studi Agribisnis Fakultas Pertanian Universitas Brawijaya.
- [11] Wulandari Suci Paramita, 2017. Strategi Penghidupan Berkelanjutan Masyarakat Petani Berbasis Aset (Kasus Di Dusun Sumberawan, Desa Toyomarto, Kecamatan Singosari Kabupaten Malang). Fakultas Pertanian Universitas Brawijaya Malang.