Agropolitan Area Development Strategy Based on Corn Commodities in Malaka District East Nusa Tenggara Province

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ABSTRACT

Agropolitan area planning is one of the efforts to accelerate rural and agricultural development, where cities are the center of the region with the availability of resources, growing and developing accessing, serving, encouraging and encouraging agribusiness ventures in regional villages and surrounding villages (hinterland). The data used in this study are primary data. Primary data were obtained and collected from surveys and interviews with 6 expert respondents. Selection of expert respondents. The analysis technique used is the SWOT analysis (strengths, weaknesses, opportunities, and threats) to identify the agropolitan area development strategy and AHP (Analytical Hierarchy Process) for determining the priority of agropolitan area development strategies. The results of the analysis show that the development strategies sorted by priority are (1) Development and improvement of facilities and infrastructure for improving agriculture (STA, farm roads, irrigation, public facilities improvement), providing training for agribusiness development and strengthening institutional capital, (2) Utilize and maximize the potential advantages of existing natural resources and human resources so as to increase production to fill domestic and international markets and optimize government authority in empowering resources and partnership potential (3) Enhancing the role of government in protecting agricultural land, empowering farmer groups related to cultivation / farming and marketing that is able to increase the competitiveness of the agricultural products (4) Procurement of training for farmers related to the use of appropriate technology.

Keywords: Agropolitan Development, Corn Commodities, National Border Area Strategy

I. INTRODUCTION

The agricultural sector is still the dominant sector and is the largest livelihood of the population in Indonesia. Businesses in the agricultural sector are dominant in rural areas (including border areas), therefore discussion in the framework of developing border areas cannot be separated from the development of the agricultural sector and rural development in general (Budianta 2010). The border region is a unique area because its community activities are always influenced by other countries so it requires special handling that is more comprehensive which not only treats the border area from the aspect of defense and security but also from the economic aspect for the improvement of the welfare of the people in the border region. The approach to economic development felt by the people in the border region has so far emphasized the border region as the back region of the country, causing a development gap (Taena et al. 2010). As stated by Bappenas (2005) that development problems at the border that require handling are not only related to demarcation and delineation aspects, political, legal and security aspects but also related to aspects of development disparity both with other regions in
Indonesia and with neighboring countries. At present, the border region acts as the home veranda of a country because it can be a mirror of self that can be seen directly by the people in neighboring countries. In addition, the border area can also be a benchmark of development. This is because geographically the border area is far from the center of government, so if the condition of the border region is advanced, if viewed from its development, the government can generally be considered to have successfully leveled development (Sari dan Rahman 2019). Agropolitan area planning is one of the efforts to accelerate rural and agricultural development, where cities are the center of the region with the availability of resources, growing and developing accessing, serving, encouraging and encouraging agribusiness ventures in regional villages and surrounding villages (hinterland). Muta’ali (2004) mentioned rural development and the villages behind it will agglomerate with the surrounding area, so that in turn it can become a center of regional growth. Law No. 26 of 2007 concerning spatial planning explains the definition of an agropolitan area is an area that consists of one or more centers of activity in rural areas as a system of agricultural production and management of certain natural resources which is indicated by the existence of functional linkages and spatial hierarchies within the settlement system unit and agribusiness system. Agro-industry development has several systems including the agro-industry system that has great potential to encourage economic growth, increase community income, absorb labor, increase equitable development and accelerate regional development (Soekarwati, 1996). Meanwhile, according to the Department of Agriculture (2002) Agropolitan area development is an agriculture-based economic development in the agribusiness area, which is designed and implemented by synergizing the various potentials that exist to encourage the development of competitive, populist-based, sustainable and decentralized agribusiness systems and businesses. by the community and facilitated by the government. The development of the agropolitan area is done through the development of small cities based on superior agricultural commodities. According Bajracharya (1995) in (Martadona et al. 2014) the development of small cities is very important to do to improve the conditions of the poor in rural areas in developing countries. Arguments and considerations for developing small cities include: (1) Small cities will provide a market for consumers in urban areas, and function as a marketing center for agricultural production from rural areas; (2) Small towns make it possible to provide non-formal employment opportunities in the vicinity; and (3) Small towns are the right location to concentrate investment in infrastructure and facilities to support agricultural activities, health, education and agricultural business innovation. Malaka Regency is one of the 22 regencies / cities in East Nusa Tenggara Province, which was split from Belu Regency on January 11, 2013 according to the mandate of Law Number 3 of 2013 concerning the Establishment of Malacca District in East Nusa Tenggara Province. The district of Malacca is land bordered or directly with the State of Timor Leste and borders the sea with the State of Australia. The development of the agropolitan area in the border region has strategic value because if it is developed properly, it can improve the welfare of the community (Taena et al. 2010), this is supported by the condition of Malacca as a New Autonomous Region (DOB) with one of the basic sectors owned is agriculture (BP4D Malaka District 2017). Malaka Regency is also included in the export-oriented food storage area in the border area (LPBE-WP) as a corn center district as stated in the Decree of the Minister of Agriculture No.215/Kpts/OT.050/2/2017 so that it is expected to be able to export agricultural products to neighboring countries. The main target of the development of LPBE-WP is intended to support and provide food and welfare for the community to strengthen the resilience and security of the border region, while simultaneously developing market share to neighboring countries. Agricultural development
which is the basis of the economy will have a wide impact on the economy of the community, therefore increasing agricultural development through the agropolitan area development program strategy by developing various potentials that exist to encourage the development of agribusiness systems and businesses so that it is expected to increase production, harvested area and agricultural productivity, and can improve the economy of the people in Malacca Regency and subsequently can encourage economic growth in the region. Therefore, it is needed a strategy for developing agropolitan areas based on corn commodities in Malak Regency.

II. METHODS AND MATERIAL
This research was conducted in Malaka District, East Nusa Tenggara Province which covered 12 sub-districts in February - August 2019. The data used in this study were primary data. Primary data were obtained and collected from surveys and interviews with 6 expert respondents. The selection of expert respondents in this study was conducted purposively. The expert respondents referred to are those who are directly involved and are considered to understand the development of the agropolitan area and are competent in the development of agropolitan in Malaka Regency.

Tabel 1 Daftar responden ahli

<table>
<thead>
<tr>
<th>No</th>
<th>Agencies / Institutions</th>
<th>Number of people</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Department of Agriculture, Food Crops, Horticulture and Plantation of Malaka Regency</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Malaka Regency Regional Development Planning Agency</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Head of the Farmers Group</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Farmers</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Field Extension Officer</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Trader</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>6</td>
</tr>
</tbody>
</table>

The analysis technique used is the SWOT analysis (strengths, weaknesses, opportunities, and threats) to identify the agropolitan area development strategy and AHP (Analytical Hierarchy Process) for determining the priority of agropolitan area development strategies.

III. RESULTS AND DISCUSSION

SWOT Analysis (strengths, weaknesses, opportunities, dan threats)

Internal Factors: Strengths and Weaknesses

Strengths
Some internal factors for strength in the development of the agropolitan area in Malacca Regency are as follows;

1. The strategic location / position of the district of Malacca, which is directly adjacent to the Democratic Republic of Timor Leste (RDTL) Keadan sumber daya manusia di Kabupaten Malaka yang masih banyak bekerja di sektor pertanian. Hal ini berdasarkan jumlah penduduk berdasarkan lapangan usaha sektor pertanian merupakan yang terbesar dibandingkan dengan lapangan usaha yang lainnya
2. The state of natural resources suitable for agricultural cultivation, especially corn
3. There are quite a lot of farmer group institutions. Based on data from the number of farmer groups in Malacca Regency, there are 1,098 scattered in every region in Malaka Regency
4. Local government policies that support the development of the agropolitan area. In the Malacca Regency in the Spatial Planning there is an agropolitan area development plan and a government policy that focuses or prioritizes the agriculture sector with the Malaka Agricultural Revolution program which provides assistance to the community in the cultivation and processing of agriculture, providing agricultural production facilities and so on as well as the existence of extension workers Fields funded by the government are determined in each district. And
the construction and rehabilitation of roads and other public facilities

Weaknesses
1. The incompleteness of agricultural facilities and infrastructure. Existing facilities and infrastructure are still incomplete to support the development of agropolitan areas such as the absence of the Sub Terminal Agribinis (STA), saprotan warehouses, promotion facilities and information centers for agribisis development, inadequate farming roads, and the absence of any existing facilities. Village Unit Cooperatives (KUD).
2. The low use of appropriate technology. Appropriate technology is an attempt to make the best use of resources by solving problems that arise from the environment. Even though there are many farmers who use technology to facilitate their work, there are still farmers who choose to do traditional work, even though these actions will make the farmers miss and even lose because they are less productive due to the use of traditional methods which tend to be less effective and efficient.
3. Lack of knowledge about post-harvest processing
4. Weak bargaining position of farmers and capital institutions. The weak bargaining position of farmers is one of the obstacles in efforts to increase farmers’ incomes due to farmers who lack access to market access, market information and inadequate capital.

External Factors: Opportunities and Threats

Opportunity
1. There is regional autonomy.
   The implementation of regional autonomy which gives freedom to the regional government to develop as much as possible the potential of the region it has and gives the authority to regulate each district / city to run its own household.
   Malacca Regency is the result of the expansion of Belu Regency which was ratified in the plenary session of the Indonesian Parliament on 14 December 2012 concerning the draft of the New Autonomy Regional Law. This is expected to have a positive impact on the region through the creation of new growth areas.
2. Allows trade, exchange and distribution of various agricultural commodities between regions due to an adequate network system
3. A partnership with the private sector. With the development of the agropolitan area, it will be able to encourage the existing mainstay areas so that relations with traders or processing industries can support the development of the agropolitan area

Threats
1. Agricultural land that has the potential to be threatened by conversion to industry or settlements. Areas that become new growth centers can face the threat of converting agricultural land to settlements or developed areas so as to reduce agricultural land
2. The existence of similar products from other regions. East Nusa Tenggara Province is one of the areas included in the corn center, corn commodity which is widely cultivated by other districts is also feared to cause competition.
3. The development of the brokering process and agricultural products are sold in a wider market without going through the center of the agropolitan area so that the expected decrease in added value in the region.
Strategies for developing agropolitan areas based on SWOT analysis

Setelah mengumpulkan semua informasi yang berpengaruh terhadap pengembangan kawasan agropolitan, tahap selanjutnya adalah memanfaatkan semua infromasi tersebut dalam model-model kuantitatif perumusan strategi.

Strategy SO
Create strategies that use power to take advantage of opportunities. In this strategy, efforts can be made to utilize and maximize the potential advantages of natural resources and human resources in Malacca Regency so that it can increase agricultural production to be distributed to local and international markets and optimize government authority in empowering human resources and natural resources through various training / counseling and other developments to improve these resources.

Strategy WO
Create strategies that minimize weaknesses to take advantage of opportunities. This strategy can be done by optimizing the authority of the government in making policies so as to be able to make policies that support the development of the agropolitan area and utilize the potential of partnerships with the private sector to be able to invest in the agropolitan area. The policy can be in the form of construction and improvement of facilities and infrastructure to increase agricultural production (STA, farm roads, irrigation, improvement of public facilities) providing training for the development of agribusiness and strengthening institutional capital.

Strategy ST
Create strategies that use power to overcome threats. In this strategy can be done by increasing the role of the government in protecting agricultural land by the government overseeing the area of agricultural land so that there is no conversion of land to industry, settlements and other built-up land. Empowering farmer groups related to cultivation / farming and marketing that can increase the competitiveness of these agricultural products.

Strategy WT
Create strategies that minimize weaknesses and avoid threats. This strategy is carried out by providing training to farmers related to agribusiness development ranging from the use of appropriate technology, farming, and post-harvest processing to the marketing stage.

A. Analytic Hierarchy Process (AHP)
The explanation of the AHP structure related to determining the priority of the development strategy of the Malacca Regency agropolitan area is as follows:

Agropolitan Area Development Criteria in the District of Malaka

There are three criteria that are the focus in developing the agropolitan area, namely; building physical infrastructure, developing agribusiness and institutional actors' resources, and Agribusiness Development. The selection of the three criteria is based on that to develop an agropolitan area, physical infrastructure is needed in the agropolitan development area, then there is support for the development of agribusiness actors' resources and the development of agribusiness in the agropolitan development area. The results of the combined opinion that has been carried out on six key informants (expert respondents) can be seen that the more priority criteria in developing the agropolitan area of Malacca Regency is to build physical infrastructure to support the development of the agropolitan area with a weight of 0.466. In the development of an agropolitan area requires a relatively large initial investment so that the first agropolitan program runs is the construction of facilities that support the program. According to Downwards et al. (2004) in Rustiadi et al. (2008) there...
are three phases in agropolitan development, namely the basic building phase, the target market phase and the yield harvest phase. In the first phase, the phase of building basic aspects of agricultural conditions is still extensive with relatively low productivity. To support this phase, roads, irrigation systems and agribusiness terminal need to be built. The policy needed in these conditions is to create a process of building basic infrastructure that is running well. The role of infrastructure has been an important aspect since the initial phase of the transformation took place. This is also in accordance with the Guidelines for Spatial Management of Agropolitan Areas issued by the Director General of Spatial Planning and Regions in 2003 that the conditions that must be met for an area to be an agropolitan area are to have adequate infrastructure and infrastructure to support the development of agribusiness systems and businesses, especially food such as: road construction, facilities for irrigation / irrigation, facilities for processing agricultural products. With the construction of physical facilities and infrastructure that supports the development of agribusiness it can increase agricultural production surpluses. Rustiadi et al. (2008) explain that agropolitan floating is intended to increase agricultural production and sale of agricultural products and encourage the diversity of economic activities from the central market. All activities must be organized primarily to build linkages between companies in cities and areas supplied in rural areas and to provide facilities, services, inputs for agricultural production, and accessibility that can facilitate settlement locations in rural areas.

The second criterion chosen by expert respondents is Agribusiness Development, with a weight of 0.440. In the development of an agropolitan area also needs to be dominated by agricultural or agribusiness activities. In this study the development of agribusiness for the agropolitan area development strategy in Malacca Regency is the cultivation sub-system which includes farming, marketing subsystem and yield processing subsystem. By developing these subsystems it can increase people's income and agricultural production surpluses, this is also confirmed by Rustiadi et al. (2008) that with the development of agribusiness systems in the region, farmers' incomes have generally increased compared to before the agropolitan area was formed. Improvement and development of infrastructure conditions such as road networks, procurement and distribution of inputs, agribusiness terminals from the production area to the local markets, are expected to facilitate the population in the region more easily in obtaining production facilities and also easier in marketing their products. The income of the farming community in the agropolitan area can also be further increased by improving or improving the quality of its products. The better the quality of the product produced, it will add value to the selling price of the product. Therefore, in addition to building infrastructure and physical facilities, it is necessary to farm, process, and use appropriate post-harvest technology up to marketing as well as being an important requirement in the agropolitan area.

The third criterion included is the development of actor and institutional resources with a weight of 0.093. In agropolitan development, it is also necessary to develop the resources of agribusiness actors such as the empowerment of farmer groups, empowerment of field extension officers and institutions such as the development of supporting small and medium businesses and cooperatives. This is also in accordance with the Guidelines for Spatial Management of Agropolitan Areas issued by the Director General of Spatial Planning in 2003 that must have capable and potential human resources to develop food production centers (agropolitan) areas independently. Empowerment of these resources is needed in order to increase knowledge of agribusiness development so that the output is expected to be a qualified and competent agribusiness resource.
Agribusiness Supporting Facilities and Infrastructure Development Sub-Criteria

The sub-criterion that becomes the main priority in the construction of facilities and infrastructure is the construction of the Agribusiness Sub Terminal (STA) with a weight of 0.494. Agribusiness Sub Terminal is a marketing tool that is built to serve and carry out agricultural product distribution and marketing activities. STA as a facilitator in marketing agricultural products is expected to become an institution that is able to manage the supply of quality agricultural products, and prices of agricultural products that are suitable for farmers and consumers. STA can also be a place that can meet the various interests of agribusiness actors, such as packaging facilities, sorting grading, storage, transportation and training as well as a place to exchange information for agribusiness actors.

The second criterion in developing agribusiness supporting infrastructure and facilities is the construction of irrigation with a weight of 0.289. Irrigation is one of the infrastructures that is quite important in supporting the improvement of agricultural production. Furthermore, the procurement and distribution sub-criteria of production input become the third priority in building the facilities and infrastructure to support agribusiness with a weighting value of 0.158. Procurement and distribution of production facilities is a system that includes the planning, management and procurement of production facilities, technology and agricultural resources so that they are able to produce quality farm products. The most recent sub-criterion is a farm road with a weight of 0.59. With the improvement and construction of farm roads in the agropolitan area can facilitate mobility and agricultural machinery, transportation of production facilities to agricultural land and facilitate marketing of agricultural products.

Agribusiness and Institutional Actor Resource Development Sub-Criteria

The main priority criteria based on the results of the questionnaire from expert respondents in the development of agribusiness and institutional actors is the empowerment of farmer groups with a weight of 0.511. Empowerment of farmer groups is needed in the development of agropolitan areas such as providing counseling and training on agribusiness development so as to be able to improve its farming business, activities the empowerment is to encourage the formation of farmer institutions that are able to build synergy between farmers and between groups of farmers in order to achieve business efficiency and the training provided must be in accordance with the needs of the community by taking into account the aspects of the community’s capabilities and culture and expected outputs that can develop the agropolitan area independently.

The second sub-criterion is the empowerment of field extension officers with a weight of 0.281. Field extension officers who have the task to provide guidance and assistance to farmers and are required to have the support of quality human resources so that agricultural extension officers also need to be empowered periodically and equipped with good knowledge. The third sub-criterion is the development of small and medium enterprises with a weight of 0.135 institutions in the development of agropolitans in the form of SMEs that can process agricultural products supported by technological capabilities and innovation power and the ability of entrepreneurs to indicate an increase in the quality of agricultural products to be better and able to compete.

The last sub-criterion is the development of cooperatives with a weight of 0.072, the role of cooperatives as economic institutions in rural areas is expected. The role of cooperatives also starts from the upstream to downstream agribusiness subsystems. In the upstream agribusiness subsystem the role of cooperatives is to provide working capital for farmers,
assisting in the procurement of saprotan, in the downstream agribusiness subsystem the role of cooperatives is to help market farmers' production. This institution as an institution that can help farmers capital so it needs to be given capital assistance and management assistance that can improve the quality of cooperatives.

**Agribusiness Development Sub-Criteria**

The sub-criteria that become the priority in the development of agribusiness towards the development of the agropolitan area in Malacca Regency are the farming subsystems with a weight of 0.550. In this subsystem includes all activities related to the development and development of farming so that it can increase agricultural production such as planning the selection of locations, commodities, technology that will be used and farming business patterns. This subsystem is directed to increase production and income. The income of a farm is influenced by the area of land, capital, labor and the use of production facilities. However, there are not a few subsystems of cultivation, there are problems such as the use of low alintintan, the use of inorganic materials that are too high, the low regulation of cropping patterns and the low quality of human resources in adopting technology so that it can result in low productivity. The development of a cultivation subsystem or farming business can be done through planting patterns, agricultural mechanisms, intensification and extensification that focus on increasing yields.

The second criterion that becomes the second priority in the development of agribusiness towards the development of the agropolitan area is the yield processing system with a weight of 0.282. The goal to obtain added value. The yield processing subsystem has an important role especially in rural areas because it can improve the economy in rural areas by creating and absorbing jobs so that it can increase the income and welfare of rural communities.

The last priority criterion is marketing with a weight of 0.165. Marketing subsystem includes marketing agricultural and agro-industry products with the main activity being the monitoring and development of market information. According to Firdaus (2012) agribusiness marketing system is a unity of marketing institutions that perform marketing functions to facilitate the flow of agricultural products from initial producers to the hands of end consumers and vice versa facilitate the flow of money, product value created by productive activities in a commodity system. There is a need for good coordination between actors or institutions of this system such as between farmers and traders so that marketing efficiency can be achieved, namely the existence of a fair share of the added value of a product in the productive activities of each actor.

**Actor for the Development of the Agropolitan Region of Malaka Regency**

The most important actor / party in the development of the Malacca Regency agropolitan area is the government with a weight of 0.683. The government plays an important role in the development of an agropolitan area. Based on the Department of Agriculture (2003) the concept of agropolitan is a central government policy which is an integrated approach from several departments of the economy for rural development especially agriculture by completing infrastructure, expanding access to business credit, to increase farmers' income and encouraging industrial growth in order to increase value added the agricultural sector. This program is designed and implemented by synergizing the various potentials that exist to encourage the development of agribusiness systems and businesses that are competitive, populist-based, sustainable and decentralized. The agropolitan area development strategy starts from the preparation of the agropolitan area development masterplan which will become a regional reference by the regional government by involving the community so that the programs
arranged are more accommodating. Furthermore, the determination of agropolitan locations begins with the determination by the provincial government, then the district government proposes the agropolitan area by first identifying potentials and problems to find out the conditions and potential locations (superior commodities), among others; the potential of natural resources, institutions, regional settlement systems and so on. Then disseminating the agropolitan program to all relevant parties so that the development of the agropolitan program can be more integrated and integrated as well as various policies that can support the development of the agropolitan area.

The next priority is the farmer with a weight of 0.227. In the development of the agropolitan area the activities of most of the people in the region are dominated by agricultural activities so that farmers have an important role because the program involves farmers. Farmers are also expected to understand that the area is an agropolitan development program in order to enhance agribusiness development. Farmers must be equipped with an understanding of the subsystems contained in the development of agribusiness so that it can increase agricultural production and will also have an impact on improving the welfare of farmers.

The last sub-criteria is the trader with a weight of 0.090. Traders have a role in the development of agribusiness, especially in marketing subsystems so that agricultural products from farmers can be enjoyed by consumers. But not infrequently there is an imbalance between traders and farmers, namely the uncertain selling price of an agricultural product, traders often set a low price but on the other hand the stronger the trader, the marketing network will also expand so that the market grows. This means that farmers also have a positive impact with the development of trade, but the presence of traders can indicate marketing certainty even though there is no certainty in price. Efforts are needed to integrate traders with farmers with a view to building a complete agribusiness system by ensuring fair gains among their fellow actors.

**Priority Strategy for Agropolitan Area Development**

From the four strategies obtained from the results of the SWOT analysis it can be seen that the strategy for developing agricultural infrastructure occupies the first priority in the development of agropolitan areas in Malacca Regency with a weight of 0.442. According to Rustiadi and Dardak (2008) in the development of an agropolitan area, a large initial investment is needed for the construction of agricultural facilities and infrastructure, especially in the eastern region which has limited infrastructure availability so that the process of developing the agribusiness system from the upstream subsystem, the cultivation subsystem, the downstream subsystem to the subsystem supporters can go well. Furthermore, the second priority for the agropolitan area development strategy is the utilization of natural and human resources in Malacca Regency with a weight of 0.318. This strategy needs to be done to utilize and maximize the potential superiority of natural resources and existing human resources so as to increase agricultural productivity which can certainly have an impact on increasing farmers' incomes. The next priority strategy for agropolitan area development is to increase the role of government in protecting agricultural land with a weight of 0.153. The more developed an area will have an impact on the higher land requirements, there is still a lot of vacant land in Malacca Regency if no protection efforts are made by the government then there will be the potential for land disputes and land tenure by outsiders. To avoid this the government must provide efforts to protect agricultural land such as ensuring ownership of the vacant land. The next strategic priority is the provision of training to farmers on appropriate technology with a weight of 0.086. Farmers need to be introduced to the use of appropriate technology to support their farming
business so as to further facilitate human work and be able to increase economic value.

IV. CONCLUSION

Development strategies sorted by priority are (1) Development and improvement of facilities and infrastructure for improving agriculture (STA, farm roads, irrigation, public facilities improvement), providing training for agribusiness development and strengthening institutional capital, (2) Utilizing and maximizing potential superior natural resources and existing human resources so as to increase production to fill domestic and international markets and optimize government authority in resource empowerment and partnership potential (3) Increase the role of government in protecting agricultural land, empowering farmer groups related to cultivation / business farmers and marketing that are able to increase the competitiveness of these agricultural products (4) Procurement of training for farmers related to the use of appropriate technology and processed industries to the marketing stage.

V. REFERENCES


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