Cost Benefit Analysis of Village Fund Management for Improving Education in Sukomulyo Village, Jombang Regency

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Abstract. This research aims to analyze the use of village funds to improve children's education and reading parks in Sukomulyo Village, Jombang Regency. The collection technique involves collecting existing documents in the village and interviews. After the data is collected, interactive analysis is carried out to test the validity of the data and discuss the data with the theory used. The research results show that the village fund program in Sukomulyo Village has been used to build facilities and infrastructure for Early Childhood Education, Kindergarten, and Reading Park buildings. Second, developing children's education facilities and infrastructure has involved all village officials, the community, religious leaders, and other stakeholders from planning to accountability. Third, the cost and benefit analysis results show that all stakeholders agree that the benefits of the children's education development program are higher than the losses. The implication is that the Sukomulyo village government is obliged to prioritize education programs funded by village funds every year so that children's education interests become a priority program.

Keywords: Village fund programs, Cost-benefit analysis, Children's education, Development implementing actors

1. Introduction

Education is a fundamental basis the government provides to improve its ability to manage state resources. If a nation's capabilities increase, then society will increase its welfare. Theoretically, education aims to increase knowledge and competence in various activities, develop potential, and achieve maximum results [1]. Various studies show that the higher the community's ability, competence, and skills in managing the nation's resources, the faster development will be achieved. This condition occurs in several areas where the education possessed by the people in an area or village is still relatively low, so development programs cannot compete with regions and villages with relatively high abilities, competencies, and skills [2].

On average, the education of the people of Sukomulyo Village is still low; therefore, the village government is trying to improve the quality of education of the village community by allocating village funds. Normatively, village funds are used to finance the implementation of village government, starting from implementing development, community development, and community strengthening [3]. The community in Sukomulyo Village needs a higher level of awareness of education. That is because people still find it difficult to obtain access and justice in obtaining education [4]. The government in Sukomulyo village is looking for a solution to community education problems by allocating village funds for early childhood education, kindergartens, and building reading parks.

The government prioritizes village funds for children in early childhood because it believes that changing society's mindset must start with the most basic education. Primary education is essential for children's growth and development, and education means optimizing all the natural abilities that exist in children so that they can be honed to achieve a society with high abilities [5]. The higher the quality of education, the more advanced society will be. Students are not human machines that can be controlled at will but are a generation that needs to be helped and cared for in every reaction towards change towards maturity so that they can form independent, critical thinking and have noble morals.
In real terms, low people's income causes people's motivation to send children to school at an early age to be low [6]. Meanwhile, before the village government of Sukomulyo had village funds, village funds needed to be higher. Hence, the government's ability to provide educational facilities for children at an early age was not a priority. After the government obtains village funds with added government awareness to improve community abilities from an early age, the government allocates village funds for early childhood education costs. Apart from that, the government is building reading parks so that more people can become literate.

Along with providing financing for early childhood and building a reading park, the Sukomulyo village government always reaches out to the community. Some of these efforts require a study of cost-benefit analysis related to village funds that have been used for the education program. Several previous studies show that the management of village funds is used for community welfare [7], the contribution of village funds to improving the community's economy [8], the management of village funds and its impact on increasing village community income [9], and [10]. Based on several studies on the use and management of village funds and education studies, then state of the art. This research analyzes the cost benefits of Village Funds to improve the quality of community education.

1.1 Education Improvement

Improving the quality of education in an educational unit is the action taken by an educational unit to improve the results of educational implementation so that it follows the direction of educational policy that has been determined through increasing the effectiveness and efficiency of the educational processes and activities carried out. Educational advancement is a recognition given to employees who have completed higher education following the provisions. Education is a theory applied to teaching and learning [11]. The increasingly large village fund budget provided by the central government each year requires human resources in the village to be more qualified and wiser in managing these funds. These funds are used for village development, such as infrastructure and facilities, but also for developing quality human resources.

The excellent education that the nation's children receive will be used to make this nation a strong nation and a nation capable of solving its problems. The government increases the level of education by providing scholarships to underprivileged and high-achieving students, equalizing the development of educational facilities, providing training for teachers so they can develop better learning, and providing school operational assistance funds to complete school supporting facilities. Education funding assistance for educational institutions is used to educate several educational theories. The theory is the opposite of practice. Educational theory, as applied to education, is a collection of methodical rational explanations that address important aspects of education as a system [12].

Educational theory is a set of views or opinions about education presented within a conceptual framework. Education as a system means at least a particular group of people who have unique relationships and information with each other [13]. Education is a conceptual system that integrates, explains, and predicts educational events. Some educational theories function as premises for educational thinking, while others function as definitions that explain meaning [14]. The central premise of education is that education is realistic, meaning that education starts from the actual learning situation and environment of the individual studying and that education is prescriptive; that is, education aims to achieve goodness. Goals mean that education is in the form of a series of activities. We aim for individual outcomes expected from actual situations and individual learning [15]. This educational theory is divided into technological education, classical education, personal education, and interaction education [12]. They are designing an individual curriculum that creates a society following the objectives of the four educational theories. Based on four educational theories: (i) classical education based on classical philosophy, (ii) Individual education. This educational theory starts from the idea that children have potential specific from birth, (iii) Technology Education Technology Education, and (iv) Interactive Education.

1.2 Cost-Benefit Analysis

Experts often use the cost-benefit analysis (CBA) approach to provide a basis for frameworks and analyze complex problems using real options or multi-objective comparative approaches so that the problems can be better understood [16]. Cost-benefit analysis can also be used to evaluate various programs in terms of direct costs and benefits as well as externalities [17]. The application of CBA is also often used in the context of risk management, especially hydrogeological risk [18]. In economics, the CBA approach is used to analyze the economic feasibility of several activities in the economic field by considering capital investment, operating costs, total benefits, and net profit [19].

CBA is widely used to support government management decisions in transportation infrastructure, health care, flood protection, and energy system development [20]. CBA is a tool to help make public, private, and
community decisions to resolve some of the existing problems. CBA policy analysis determines the policies and utilities that will be issued or accepted based on the proposed principles or provisions. Cost and Benefit Analysis is a method for assessing whether solving the problem being analyzed requires more significant costs or is comparable to the benefits obtained [21]. This approach does not solely focus on a legal process but requires interdisciplinary scientific methods, such as aspects of economics, sociology, and technical matters at the implementation level. This analysis can also measure the level of stakeholder evaluation of the management of village funds towards improving village education implemented by the Sukomulyo Village Government, Jombang District.

On the other hand, the CBA approach helps the government formulate policies and regulations to obtain the best policy alternatives [22]. The detailed steps that the government must take are that the government must be able to identify various possible positive and negative impacts that are assumed to arise from the policies or regulations it establishes. Furthermore, the government is obliged to socialize the established policies with all stakeholders. The CBA approach to the study of village funds will produce a value of the benefits and losses incurred for a policy managing village funds for education. If the benefits are more significant than the evaluation results for stakeholders, then this program is determined as a feasible program. On the other hand, if the losses are more significant than the benefit value, then the program being implemented is not feasible.

2. Method

This research was conducted in Sukomulyo Village, Mojowarno District, Jombang City. Scientific work requires research to pose and analyzed problems. After that, the research was analyzed and explained, and conclusions were drawn according to the original objectives [23]. Researchers use the method of Cost-Benefit Analysis, which discusses identification, benefits, implementation results, and conclusions, along with principles. According to Mardiasmo, three principles take into account planning, implementation, and accountability: transparency, accountability, and value for money. The data collection technique used in this research, field research, is a qualitative data collection method that aims to observe, interact, and understand humans in their natural environment [24].

This research uses a research focus that aims to be implemented so that it stays consistent and follows the discussion; therefore, the researcher uses limitations in the research. Research limitations lie in the impact of village fund management on improving village education. The benefits of village funds will be distributed in the education sector so that educational development in the village can be evenly distributed. Apart from that, researchers can also learn about how education develops in the village. In field research, social scientists interview people or observe them from a distance to understand how people behave in social environments and how they react to those environments. That is done to obtain solid and accurate data for further research analysis. To obtain the data above, researchers used three data collection techniques, namely observation, interviews, and collection of village fund materials.

3. Result and Discussion

3.1 Implementation of The Use of Village Funds

Implementation of the use of village funds is divided into three stages, namely, planning, implementation, and accountability.

3.1.1 Planning

Management of the implementation of the Village Fund in Sukomulyo Village is managed by the Village Head, whom the village secretary assists. Village Funds are intended for Sukomulyo Village, which has an area of 7.96 Km², a population of 2,635 people, and 356 heads of families. Sukomulyo Village has 4 (four) hamlets that received Village Fund assistance amounting to IDR 855,917,000.00. The project planning process funded by the Village Fund program in Sukomulyo Village goes through a deliberation process between village officials and community leaders to convey the wishes of the village community. Next, the program implementer determines the program and financing to be funded by village funds. The amount of Village Funds used to finance these programs is as in Table 1:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Village Development Program</td>
<td>473,949,534,25</td>
</tr>
<tr>
<td>2.</td>
<td>Community Empowerment Program</td>
<td>16,600,000,00</td>
</tr>
</tbody>
</table>
Based on the data in Table 1, it shows that the amount of village funds in Sukomulyo village, which will be managed by village officials and used for development programs, is divided into three programs. Most development program financing from the three development programs that have been determined is intended for the Village Development program, namely Rp. 473,949,534.25. Meanwhile, the rest is used for other programs, namely the Community Empowerment program and the Disaster, Emergency, and Urgent Situation Management program.

After the major program has been agreed upon, the next meeting is held through meetings led by the village consultative body involving the village government, community, community leaders, women, youth, and community empowerment organizations. Determination of development programs from Village Funds According to Mr. Hakim (one of the community leaders), "The village government always invites the community to all activities in the village, starting from information on receiving funds to meetings to decide on the allocation of funds for implementing development programs and other empowerment activities" (interview, 21 August 2023). Based on these data, it shows that the determination of development programs is carried out democratically while always considering the community's aspirations.

The final result of the deliberation on planning development programs from village funds is the determination of development activities from the development program, which are priorities, namely the village development program. The village development program was then divided into several activities in 5 areas, namely: health, education, public works, spatial planning, residential areas, and information communications. Several selected fields and their budget allocations can be described in Table 2. As follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Health</td>
<td>76,655,000.00</td>
</tr>
<tr>
<td>2.</td>
<td>Education field</td>
<td>8,600,000.00</td>
</tr>
<tr>
<td>3.</td>
<td>Field of public works and spatial planning</td>
<td>374,194,534.25</td>
</tr>
<tr>
<td>4.</td>
<td>Residential Area Sector</td>
<td>6,500,000.00</td>
</tr>
<tr>
<td>5.</td>
<td>Transportation and Informatics Sector</td>
<td>8,000,000.00</td>
</tr>
<tr>
<td></td>
<td><strong>Amount</strong></td>
<td><strong>473,949,534.25</strong></td>
</tr>
</tbody>
</table>

Data source: Sukomulyo Village Office, 2022

Based on the results of Table 2, planned activities in public works and spatial planning are the activities that consume the most significant amount of funds. However, there are activities to improve education for children attending Early Childhood Education, Kindergarten, and Reading Park Buildings. The idea of determining development programs in education for children who participate in Early Childhood Education, Kindergarten, and Reading Park Buildings is aimed at every child getting better education costs and facilities from an early age.

Planning to improve learning programs for children at an early age in Sukomulyo Village has been established in collaboration with the village head, village officials, community leaders, and residents. The distribution of finances for education for early childhood aims to improve learning for children in Sukomulyo Village. The planning process for distributing village funds for educational activities is carried out in collaboration between the village government and all elements of village society that influence the village, including traditional community leaders, religious leaders, Neighborhood Associations, and village residents—decisions on the allocation of education funds as in table 3. Decisions on the allocation of education funds as in table 3.

<table>
<thead>
<tr>
<th>Education provision</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Childhood Education Programs</td>
<td>3,000,000.00</td>
<td>34.88%</td>
</tr>
<tr>
<td>Kindergarten Education</td>
<td>3,000,000.00</td>
<td>34.88%</td>
</tr>
<tr>
<td>Reading Garden Building</td>
<td>2,600,000.00</td>
<td>30.23%</td>
</tr>
<tr>
<td><strong>Amount</strong></td>
<td><strong>8,600,000.00</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>
Based on the data in Table 3, it shows that the involvement of the village government in supporting the quality of early childhood education in Sukomulyo village has been proven. For educational programs, including educational facilities and infrastructure at the Early Childhood Education and Kindergarten levels, respectively, it is 34.88%, and for reading park buildings, it is 30.23%. The allocation of village funds for early childhood education is important because, so far, the education assistance program has been for elementary to upper secondary school children.

3.1.2 Implementation

Based on the results of observations at the research location, "the Sukomulyo Village government has provided support for educational infrastructure for Early Childhood Education and Kindergarten, as well as providing learning opportunities for the community outside of school in the form of reading parks“ (Observation data, 22 August 2023). That shows that the village government is committed to helping improve the quality of education in Sukomulyo Village by organizing and developing educational facilities and infrastructure [25]. Researchers also found that several educational infrastructure facilities and infrastructure were developed and built using the village budget. Furthermore, these educational facilities and infrastructure can be used by the community for learning at school and outside school [26].

The village government is the implementing organ of the village government, which carries out the mandate of the community as outlined in the Village's medium-term development plan. Village development programs, including the use of village funds, have been included in the village budget implementation documents and are listed in the village income and expenditure budget documents. Various kinds of development programs, which are the result of village deliberations, must be notified to the community via the Village office information board. During the implementation stage, the Village Government informs the community who actively participate as workers in the development project. Mr. Strisno (head of Sukomulyo Village services) said, "We explained the various information needed, including construction and accepting registration as workers for development projects” (interview, 22 August 2023). Based on this data, it shows that the village government has implemented development programs following the community mandate [27].

When carrying out development activities, village officials always adhere to the principles of transparency and accountability to ensure that the implementation budget and activity funding are known to the community. Information related to development implementation is posted on the project information bulletin board at the activity site. According to the results of an interview with Mr. Parman (project implementation), "information related to development is always advertised near the construction site of the Reading Garden" (Interview, 23 August 2023). Then Mr. Parman, when responding to the researcher’s question about the transparency of development practices in 2023, answered: "Yes, by the way, the development project carried out by this village is not far from my house. The development activities and information are my own” (Interview 23 August 2023). This data shows that project implementers have provided transparent information about development projects in the education sector funded by village funds, as stated by Polutu et al. (2022).

3.1.3 Accountability

The implementation of development is a testament to the Sukomulyo village government to the entire community. It should be remembered that not everyone can directly monitor the implementation of development at each construction site. For this reason, the village government provides space for the community to carry out activities through pictures. The village government, as the person responsible for all implementation of village activities, is fully aware of its obligation to report to the government and community on all actions taken, especially the use of private funds [10]. Reporting on development activities and the granting of rights follows the village financial reporting structure following Mayor Regulation Permendaguri Number 37 of 2007 concerning village financial management [29].

The village government reports the use of village funds and the results of its implementation to residents in report meetings held by the Village, and administrative reports are submitted through the Community Improvement Office and Organization in Jombang Village. At each deliberation, the village government receives evaluations, suggestions, and even criticism submitted by the community, which is stated in the minutes of the deliberation and provides input for improving the implementation of development activities at the next level [30].

The village head is responsible for managing village finances, which are funded by village funds, as well as other village revenues and cash such as original village income, village funds, and sharing of taxes and levies between the Village and the Regency government. Village finances, including village funds, are managed by the Village Financial Management Committee. Peniti is a village organization with a head, village secretary, and
treasurer, each with different authority, duties, and responsibilities. The aim of city financial management is for village finances to be managed by a team with corruption-free governance.

Village funds are used for village development and providing general welfare. Existing regulations function as directions, corridors, and guidelines for the Village. Village development programs are always discussed and decided by the village community, taking into account capabilities every year according to needs through village meetings and reviewing village development plans. Following the information expressed by Mr. Wijaya, when asked about community involvement in planning village development activities, he answered: "The community is asked to convey our demands to the hamlet meeting in each Village. "All these proposals have been outlined in the Village Medium Term Development Plan, outlined in the Village Deliberation. Then the program proposals are included in the village development budget plan." (Interview dated 24 August 2023. Based on this data, it shows that all village development programs funded by village funds have been prepared following development mechanisms in the Village. Thus, development in the Village has been following development procedures that are following the rules as stated by Baihaqi et.al., (2019).

3.2 Cost Benefit Analysis
Cost Benefit Analysis is the process of using theory, data, and models to examine a phenomenon and activity to reassess relevant objectives and alternative solutions for managing village funds toward improving education in the Village. The cost-benefit analysis aims to assess the benefits and disadvantages of children's education development programs funded by village fund programs in villages Sukumolyo Jombang Regency needs to be assessed from the stakeholders' perspective as beneficiaries. In the current era, whether a government program is good or not cannot be assessed by government stakeholders [32]. The results of interviews with stakeholders regarding the benefits and disadvantages of the program are presented in Table 4 below:

<table>
<thead>
<tr>
<th>STAKEHOLDER</th>
<th>BENEFIT</th>
<th>COST</th>
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<tbody>
<tr>
<td>STUDENT</td>
<td>Teach children from an early age the importance of learning. Introduce and improve children's ability to socialize with children of the same age as them. Make new friends in a new environment. Instill in children the importance of being polite towards older people. Introducing children to various new activities so they don't get addicted to smartphones, remembering that in the modern era, many children are addicted to smartphones.</td>
<td>Children will feel that they have less time to play because of demands from parents that their children often go to the reading park building to study various kinds of books in the children's reading park. Children feel bored because they feel burdened by their parents' requests to often go to the children's reading park to study all the books there.</td>
</tr>
</tbody>
</table>
Based on Table 4, researchers can describe the benefits and disadvantages that stakeholders get from educational development whose costs come from village funds, namely:

a) The benefit that students receive from this program is that children can experience or receive education from an early age, which is very important for children's emotional, mental, and intelligent growth.

b) The benefit that parents receive is that they can enroll their children in Early Childhood Education / Kindergarten because the allocation of village funds in the education system is beneficial for parents who have economic difficulties in sending their children to school their children to Early Childhood Education / Kindergarten.

c) The benefit for teachers is that they no longer worry too much about their teaching wages because, in this program, the village government has allocated a portion of village funds to increase teaching wages for Early Childhood Education/Kindergarten teachers.

d) The benefit for the village government is that by carrying out the village education improvement program, which the village funds fund, it is hoped that it will improve Early Children's Education and
reduce the number of children who cannot experience education from an early age because the parents of these children are less than economic aspect. The cost experienced by stakeholders due to the ongoing allocation of village funds towards improving education:

a) Students with this program miss out on playing with their friends in their home environment because after the Early Childhood Education / Kindergarten hours are over, they do not go straight home. However, they must go to the reading park building to study the books there.

b) Parents will lose much time providing education to their children because many parents think that their children already got it when their children were in Early Childhood Education / Kindergarten.

c) Their teachers will find it difficult to control the number of children sent to Early Childhood Education because, with the help of village fund allocations from the village government, many parents previously needed help sending their children to Early Childhood Education / Kindergarten cost reasons no longer have such reasons.

d) Village government: if the program breaks down midway, then the planning that the village government has set for efforts to improve the quality of education, which is taken from village funds, will be in vain.

The impact of this program initiated by the village government is that there are many benefits, especially for students, parents, and teachers. It can be seen in the table above that the program that is being initiated by the village government, which aims to improve the quality of education funded by village funds, is excellent for achieving the village government's plan to improve Early Childhood Education / Kindergarten in Sukomulyo Village, District. Mojowarno, Jombang Regency.

4. Conclusion

Determining the management of village funds in Sukomulyo Village to improve Early Childhood Education/Kindergarten education and building a reading park for children in Sukomulyo Village is essential. Meanwhile, the district government needs to pay attention to education for children before primary school age. Meanwhile, early childhood education is the starting point for developing children's intelligence. Therefore, the Sukomulyo village government is trying to improve the quality of children's education through facilities and infrastructure financed by village funds. Infrastructure construction can motivate and increase the public's understanding that education is important and continues to be applied in everyday life. In addition, villagers will better monitor or educate children that education is essential for their future. The benefits of allocating village funds to develop children's education in Sukomulyo village are more beneficial than the disadvantages. The implication is that the village government must seriously monitor the running of the Early Childhood Education, Kindergarten, and Reading Garden Education programs so that they do not stop in the middle of the road, which would result in huge losses if this program stops in the middle.

References


