Effectiveness of School Operational Assistance Program Implementation at SD Inpres Dekai, Yahukimo

Evy Marlyn Saalino  
Faculty of Social Science and Political Science, Universitas Terbuka, Indonesia  
marlynevy81@gmail.com

Abstract

The objective of this study was to find out the effectiveness of the implementation and the inhibiting factors for the implementation of the School Operational Assistance (BOS) program at SD Inpres Dekai, Yahukimo Regency. The research used a mixed-method, namely using both qualitative and quantitative data. The qualitative data were obtained through in-depth interviews with informants who were members of BOS management at SD Inpres Dekai, including the person in charge and team members, teachers who were not BOS management members, education observers, community elements, and school committees. Meanwhile, the quantitative data were obtained from the Ministry of Education and Culture. The results of the research showed that the implementation of the BOS program at SD Inpres Dekai was generally considered ineffective based on input, process, and output factors. On the one hand, the results of this research showed that the objectives of the BOS program at SD Inpres Dekai had been achieved. On the other hand, however, there were still many things to be improved in terms of the process, such as involving student parents as the BOS management team members, conducting socialization, and synchronizing student data at Dapodikdasmen. The inhibiting factors for the implementation of the BOS program at SD Inpres Dekai are also shown in the results of this study.

I. Introduction

Education is an effort to build the culture and civilization of a nation (Isparwoto, 2016). Mardotillah & Zein, (2017) state that whether Indonesia is considered to have a high or low level of dignity by other nations is affected by the level of education. This way, to increase the dignity of the nation, the government of the Republic of Indonesia has made various policies aimed at allowing the entire population to able to pursue education until the highest level (Eka Cahyani, 2015). One of the government policies is school operational assistance (BOS).

Behind the claim of BOS success in facilitating the achievement of nine-year compulsory education, BOS also brings new problems for schools and education providers (Hadiyanto & Wiyono, 2019). One of the weaknesses in BOS management is the frequently delayed distribution of funds (Akbar, 2016). Based on research conducted by the International Institute for Educational Planning (IIEP) of UNESCO and the United Nations Children's Fund (UNICEF), the delayed distribution of BOS funds not only leads to administrative problems but also affect the management and running of schools (Lugaz & Grauwe, 2016). Schools are forced to adjust their expenditure; the delayed distribution can also cause the schools to be unable to pay utility bills, teacher salaries, and school supplies, or carry out essential maintenance work on buildings, classrooms, restrooms, and other areas (Lugaz & Grauwe, 2016).

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Based on data on the distribution and disbursement of BOS funds from the website bos.kemdikbud.go.id (2020), in 2020 the number of target schools receiving BOS funds in Papua Province increased significantly. Nonetheless, the percentage of schools that received BOS funds compared to the target schools decreased in each distribution and disbursement stage. Even in 2020, there were only 89 schools in stage 3 that received BOS funds from a total of 1290 target schools (6.90%). In addition, the percentage of fund disbursement also declined, meaning that many schools experienced delayed disbursement of BOS funds. Such delay could bring an impact on school operations. This also indicates a problem, i.e. ineffectiveness of the distribution and disbursement of BOS funds.

Delayed distribution of BOS funds occurred in many other provinces and regencies in Indonesia. Herdiyani et al. (2019) who examined the management of BOS funds at state elementary schools in Magelang Regency, found that there were frequent delays in the BOS fund disbursement, resulting in ineffective and inefficient reporting of BOS funds exposure, arrears, reduced operational needs of schools, and disturbed student activities. Such a thing was also found in East Java, where the delayed disbursement of BOS funds was the main challenge for all elementary schools/Islamic schools that interferes with the learning process (Pardi et al., 2019). In addition, several other researchers also found that delayed disbursement of funds is an inhibiting factor for the implementation of BOS funds in Bima City (Hidayat et al., 2019), Semarang (Pawestri et al., 2015), Kampar Regency (Hadiyanto & Wiyono, 2019), and other regions in Indonesia (Akbar, 2016; Andi et al., 2015).

In addition to the problem of delayed disbursement and distribution of funds, a funding gap is also experienced by small schools which are usually located in remote areas (Lugaz & Grauwe, 2016). The funding gap between large schools in urban areas and small schools in remote areas is a consequence of (1) a funding formula of which the allocation mechanism is based on the number of students; (2) differences in school capacity to raise additional funds, that is more significant in urban areas; and (3) higher prices in remote areas (Lugaz & Grauwe, 2016). Many school items are more expensive in remote provinces, but this is a factor that is not considered by BOS funds (Lugaz & Grauwe, 2016).

Several previous studies have revealed that BOS program implementation has been ineffective and there are various problems related to BOS program implementation. Rusli and Elmizola (2015) found that the use of BOS in Tanjungsamak schools was not in line with the amount of funds stated in the school budget plan (RKAS), there was a lack of adequate school facilities and infrastructure, and students’ parents were not involved in the formulation of BOS funds. Pawestri et al. (2015) who examined the implementation of the BOS program in Semarang City found that the ineffective implementation of the BOS program was caused by delayed disbursement of funds and the complexity of both the technical guidelines and guidelines for the implementation of BOS funds. Handayani et al. (2017) explained that the Inspectorate of Sumbawa Regency revealed several findings concerning the use of BOS funds, namely employee expenditures exceeded the specified provision of the applicable regulations, there was an overpayment, there was unnecessary procurement of goods, there was a report for the procurement of goods but the goods did not exist until the inspection, there were unpaid taxes.

School operational assistance (BOS) is school funding assistance that does not necessarily free students from school fees (Supriyadi, 2016). There are still many cost components to be incurred by schools; BOS is an assistance funding from the local government (Handayani, 2017). The expected consequence is proper management to allow for local government funds to assist the central government funds (Andi et al., 2015). In
other words, the success or failure of the implementation of the BOS program depends on the readiness of each local government (Andi et al., 2015).

Based on the Summary of Semester Audit Results (IHPS) I 2018, BPK RI conducted an audit of 30 Financial Reports (LKPD) of Provincial and Regional Government in Papua Province. The results of the audit of BPK RI found problems concerning BOS Fund in 28 LKPD (DPR RI Secretariate General Expertise Body, 2019). In general, the problems related to the management of BOS Funds in Papua Province include: 1) The regional head has not yet established a bank account for BOS; 2) The BOS Fund has not been allocated in the APBD; and 3) The accounting records mechanism has not gone through the SP3B and SP2B mechanisms (DPR RI Secretariate General Expertise Body, 2019).

More specifically in Yahukimo Regency, BPK LHP on LKPD of Yahukimo Regency in the Financial Year 2016 in finding No. 11 revealed that the management of the BOS Fund did not meet the provisions. Only 50% of BPK’s recommendations on the problems were followed up by the Government of Yahukimo Regency. The problem concerning the BOS Funds in Yahukimo Regency was once again revealed by BPK at BPK LHP on LKPD of Yahukimo Regency in 2017. This shows that the management of the BOS Funds by the Government of Yahukimo Regency has not been running properly (DPR RI Secretariate General Expertise Body, 2019).

The results of BPK’s audit of the management of the BOS Funds in 2017 revealed the following problems: (1) The BOS Team had not been established and stipulated by a Regent's Decree and this team had not performed its obligations according to the 2017 BOS Technical Guidelines; (2) The BOS funds were not allocated in the APBD in 2017; (3) The accounting records of the BOS Fund Income and Expenses in the Operational Report did not use the SP3B and SP2B mechanisms; (4) The use of the BOS funds amounting to IDR 31,282,789,117.00 was not properly accounted for, resulting in treasury cash balance and realization of BOS funds that were questionable (DPR RI Secretariate General Expertise Body, 2019). This shows that the government of Yahukimo Regency has not properly and effectively managed the BOS funds. Therefore it is necessary to study the effectiveness of the implementation of the BOS program in Yahukimo Regency.

All schools at the elementary and junior high school levels in Yahukimo Regency receive BOS funds. Monitoring and evaluation are mandatory activities during the implementation of the BOS program, to make the program run on the right track. It is crucial to conduct evaluation and monitoring activities in Yahukimo because the implementation of the BOS program at SD Inpres Dekai was found to not meet the ideal implementation of the BOS program.

Considering the abovementioned background of the problem and considering the description and several existing arguments, the researcher was interested in analyzing the effectiveness of the implementation of the BOS program in elementary schools. The study aimed to analyze the effectiveness of the implementation of the BOS program at SD Inpres Dekai, Yahukimo Regency.

II. Review of Literature

2.1 School Operational Assistance Program

According to Regulation of the Minister of Finance of the Republic of Indonesia Number 201 of 2011 concerning General Guidelines and Allocation of School Operational Assistance for the Fiscal Year 2012 article 1 paragraph (1), it is mentioned that "School Operational Assistance, hereinafter abbreviated as BOS, is a financial assistance to be used primarily for non-personnel funding for elementary educational units as the implementer of
the compulsory education program, and this financial assistance may be used to fund several other activities following the technical guidance of the Minister of Education and Culture”. The BOS program has an objective to improve community access, especially the poor ones, to quality education. Therefore, the community, especially the poor ones, do not have to pay for the full bill of the operational and educational costs because these costs have been borne by the government.

The BOS program targets all public and private elementary and junior high schools in all provinces in Indonesia. Referring to the technical manual for the use of BOS funds in 2016, schools included in the nine-year basic education and private schools that have operational permits (except international schools) are obliged to receive BOS funds.

Referring to the guidelines issued by the Director-General of Primary and Secondary Education (2011), to reduce the community's burden in terms of the payment for quality nine-year basic education, the BOS program was launched. The BOS program in particular aims to 1) Free all elementary and junior high school students (except students of RSBI and SBI schools) from the obligation to pay school operational costs; 2) Free all students (public or private schools) from low-income families from various types of costs; 3) Reduce students’ (private schools) burden in terms of school operational costs.

The main objective of the BOS program is equal distribution and expansion of access. However, the BOS program also aims at improving the quality, relevance, competitiveness, governance, accountability, and public image in the world of education to optimally achieve the quality of education (Sulaiman et al., 2020). Each school still has different perceptions in terms of the utilization of the BOS funds due to the school's inability in understanding the technical guidance, so the schools tend to be cautious in using the BOS funds (Dewi et al., 2015).

2.2 Effectiveness Concept

The term ‘effectiveness’ is etymologically derived from the word 'effect' which means influence, and the adjective of effectiveness is 'effective' which means to succeed (Echols & Shadily, 2007). Based on the economic and management perspectives, Drukker in Soewartoyo (2007: 163) defines effectiveness as "an action determination or perfection (guarantee) of the results of a job". Therefore the word ‘effectiveness’ has a meaning as the achievement of the predetermined objectives by making cooperation.

Bruns et al. (2011) describe the key components related to the effectiveness of school-based management concerning educational financing assistance and financial decision-making, including strategic planning of autonomous schools; involvement of various groups in determining the objectives; and stronger relationships with parents and the surrounding community. Lugaz and Grauwe (2016) have investigated the effectiveness of the implementation of the BOS program in Indonesia and found two key elements that might affect the effectiveness and success of policy implementation, namely participation in the policy formulation process, and policy dissemination. In addition, the contribution and effectiveness of school funding assistance policies are also influenced by the processes that take place at schools (Lugaz & Grauwe, 2016).

In terms of effectiveness in educational programs, in general, the characteristics of educational programs are not to gain profit. This way, the measurement of the effectiveness of educational programs is in terms of how the program can achieve the predetermined goals (Julia, 2010). Effectiveness shows the success that reflects the achievement of targets (Siagian, 2011). Absolute effectiveness is achieved if the activity outcome reflects the target. Therefore, the use of the BOS funds at schools is considered effective if the funds are properly targeted and managed according to the applicable rules.
and regulations (Andi et al., 2015). Program effectiveness is flexible in the sense that it adjusts to changes (additions/deletion) of a program. To evaluate the success of the BOS program, this study referred to the theory proposed by Scheerens (2000) based on evaluation at the input-process-output level.

### 2.3 Program Implementation

Many researchers pay close attention to the implementation stage to develop theories or opinions about the formulation of appropriate policy implementations (Akib, 2012). The policy implementation process is a critical point in the public policy process (Bakry, 2010). The policy program that is implemented will influence the expected goals (Winarno, 2002). The conceptual definition of implementation is the presence of correlating the determined goals to be achieved and the actions to achieve the goals. This implementation process uses various organizational (human/capital/skills) resources at the government and private (individual/group) levels (Hibrida, 2014). Public policy implementation can start when public policy objectives have been set, programs have been established, and funds have been allocated to achieve the objectives of these activities (Akib, 2012).

According to Bybee (2003: 23) “implementation involves policy, program and practice changes to be in line with standards”. Birkland (2010), based on a study by Sabatier (2007) on the factors required for the success of policy implementation, outlines five basic assumptions for a top-down implementation strategy, namely: 1) a top-down implementation strategy depends on the capacity of policy objectives to be defined clearly and consistently; 2) the policy contains clearly defined policy instruments to achieve the objectives; 3) policy is characterized by the presence of one law or other authoritative policy statements; 4) there is an implementation chain that begins with the policy message and sees the implementation that takes place in the chain, and 5) policymakers are knowledgeable of the capacity and commitment of the implementers of the policy. Bybee (2003) presents a strategic framework for the implementation of educational policies, which consists of several stages, namely the dissemination of objectives, the interpretation of objectives, implementation, the evaluation of objectives, and the revision of objectives.

### 2.4 Research Questions

Education funding is one of the components of instrumental input that is crucial in the implementation of education because both quantitative and qualitative education can be achieved by educational costs (Herdiyani et al., 2019). The BOS program could bring various benefits or impacts if it runs effectively. A study by Bahri et al. (2019) found that effective implementation of the BOS program can help improve the quantity and quality of educational facilities, thus improving the quality of the teaching and learning processes as well as reducing the financial burden borne by students. An effective BOS program could also reduce the education costs borne by households and increase educational participation, especially among those from a low-income family (Al-Samarrai, 2015).

However, there are currently still many obstacles and problems concerning the BOS program, such as delayed distribution and disbursement of BOS funds (Akbar, 2016), causing problems in school administration and management (Lugaz & Grauwe, 2016). The funding gap between schools in urban cities and remote areas is also still a problem (Lugaz & Grauwe, 2016). There are also other problems, namely improper use of funds (Rusli & Elmizola, 2015), the complexity of the technical guidelines and the guidelines for the implementation of the BOS funds (Pawestri et al., 2015), and the difficulty in conducting good and effective socialization related to the BOS program (Shaeffer, 2013).
The existence of these problems has caused the implementation of the BOS program in several schools to be ineffective. Pawestri et al. (2015) found that the implementation process of the BOS program at SMK in Semarang was ineffective due to the failure of socialization. In addition, Rusli and Elmizola (2015) also found an ineffective use of the BOS funds in Tanjungsamak because schools lack understanding about the use of the BOS funds. Several other studies also revealed the ineffective implementation of the BOS program in elementary schools (Wahab et al., 2018; Sjioen & Ludji, 2020).

Therefore, based on the findings of the previous study that there is ineffectiveness in the implementation of the BOS fund, the present study analyzes the effectiveness of the BOS program in Dekai City with research questions as follows.

Q1: How is the effectiveness of the implementation of the school operational assistance (BOS) program at SD Inpres Dekai, Yahukimo?

The ineffectiveness of the implementation of a program, particularly the BOS program, is affected by various factors. It is necessary to identify both the inhibiting and supporting factors that determine the success of program implementation to make changes in programs that run at schools (Noell & Gansle, 2009). Previous researchers have revealed some factors that cause the ineffective implementation of the BOS program. Pawestri et al. (2015) found that the failure in conducting proper socialization to parents as well as teachers' lack of understanding of the implementation instructions and technical guidelines for the BOS program serve as the factors that inhibit the implementation of the BOS program. Meanwhile, Hidayat et al. (2019), Dewi et al. (2015), and Hadiyanto and Wiyono (2019) found other factors such as delayed disbursement of funds, a budget that does not meet the school needs, the inability of the principal to distribute the boss funds, and lack of school financial administration staffs.

This is why, based on the empirical findings of previous researchers, the present research analyzes both the inhibiting and supporting factors for the implementation of the BOS program, with a research question as follows.

Q2: What are the inhibiting factors in the implementation of the School Operational Assistance (BOS) at SD Inpres Dekai, Yahukimo?

The two research questions are discussed using the following research model (Figure 1).

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**Figure 1. Research Model Framework**
III. Research Methods

To determine the effectiveness of the implementation of the BOS funds at SD Inpres Dekai, this study used a mixed-method approach, which combined qualitative and quantitative methods. According to Johnson and Onwuegbuzie (2004), a mixed-method has advantages and strengths because it offers the strengths of both qualitative and quantitative methods. The present study was carried out at SD Inpres Dekai because this location was easily accessible and relatively close to the center of government.

The qualitative data were obtained from interviews with the principals and school treasurers at SD Inpres Dekai, head of the Basic Education Division at the Education Office of Yakuimo Regency as the manager of the BOS program in the regency, officials who are responsible for matters concerning the BOS program at the Education Office, and several people who were not directly involved in the implementation of the BOS program, i.e. two teachers at SD Inpres Dekai, two student parents, one education observer, and one community member. The quantitative data were obtained from data from the Ministry of Education and Culture concerning the results of the school exams of SD Inpres Dekai in 2012 and 2018.

The effectiveness of the implementation of the BOS program at SD Inpres Dekai was analyzed based on input, process, and output analysis. The inputs analyzed were the technical guidelines for the 2016 BOS program. Then the process analysis was divided into two, namely preparation and implementation stages. The preparation stage consisted of the school management team and socialization, while the implementation stage consisted of the distribution of the BOS funds and the use of the BOS funds. The outputs were analyzed based on the objectives of the BOS program, i.e. reducing the burden of the community in terms of education financing and improving the quality of education. Then the inhibiting factors for BOS were analyzed from both internal and external factors. The dimensions and indicators of the research are described in Table 1.

The qualitative data were analyzed in the following stages: transcribing the data by changing the interview data into written data, categorizing the data, elaborating the implementation, assessing coherence by carefully investigating the conformity of the implementation of the BOS program, analyzing the factors that affect the implementation, and drawing conclusions based on the analysis. On the other hand, the quantitative data were analyzed using a Paired Sample t-Test. The paired sample t-test was used if the data were normally distributed, so the data normality was first tested using the Kolmogorov-Smirnov test.

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<thead>
<tr>
<th>Variables</th>
<th>Dimensions</th>
<th>Indicators</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness of BOS program implementation</td>
<td>Input</td>
<td>Technical guidelines for BOS program</td>
<td>Bybee (2003)</td>
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<td></td>
<td>Process</td>
<td>Preparation</td>
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<td>Implementation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Output</td>
<td>Education quality</td>
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<td>Reduced school tuition</td>
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</tr>
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<td>Inhibiting factors in the implementation of BOS program</td>
<td>Internal</td>
<td>Parents' knowledge about BOS</td>
<td>Weda (2008)</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>BOS management team</td>
<td></td>
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<td></td>
<td>BOS fund allocation</td>
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Table 1. Research Dimensions and Indicators
IV. Results and Discussion

4.1 Inputs

Based on the results of the input analysis, all the aspects related to the BOS program have been described in detail in the Technical Guidance for the School Operational Assistance 2016. In terms of preparation, school students are required to input data into the Basic Data of Primary and Secondary Basic Data (Dapodikdasmen), followed by the formation of a BOS management team of which the duties and responsibilities are also outlined, until the socialization stage. Then, in the implementation stage, the mechanism and determination of allocations, the mechanism of the distribution of the BOS funds, both quarterly and per semester mechanisms, and the details of the permitted use of the BOS data are described. It can be concluded that the technical guidelines that present a detailed explanation of the BOS program can serve as a reference for many parties who are related to the BOS program. Therefore, in terms of the input factor, it can be said to be effective.

These results are in line with a research of Pardi et al. (2019) showing that the implementation instructions and the technical guidelines for the BOS program are one of the supporting factors for the implementation of the BOS program. The technical guidelines for the BOS program have become a reference for SD Inpres Dekai and other schools in implementing the BOS program to minimize errors or improper use of funds. However, the explanation in the technical guidelines can be made clearer or simplified. This regards research by Pawestri et al. (2015) showing that the technical guidelines for the BOS program are considered complicated, so those implementing this program have to make further discussions to clarify the guidelines.

4.2 Process

In terms of the BOS program implementation, it is necessary to consider and follow up several factors in the preparation stage by the BOS management team in the regency and at the schools. Various factors that determine the implementation can be in the form of the establishment of the BOS management team in the regency in which the person in charge is the Head of the Education SKPD and the establishment of the school BOS management team in which the person in charge is the principal of the school, as well as the socialization of the BOS program at the regency/school level.

Referring to the guidelines for BOS 2016, credible student parents who are not a part of the school committee selected by the school and the school committee shall be included as a member of the BOS management team, allowing for the school BOS management to be more transparent. The composition of the school BOS management team at SD Inpres Dekai, however, did not comply with the rules specified in the technical guidelines for BOS 2016. This is because the core school BOS management team, namely the principal and treasurer, were scared of threats if they involved student parents. According to the understanding of the core management team of BOS at the school, the parents of the students at SD Inpres Dekai had a different way of thinking compared to parents in urban areas. Most of the parents/guardians in Dekai City did not have a good understanding of the BOS funds. They thought that the BOS funds allocated per student should be fully received by the students, instead of being managed by the school.

After the formation of the school BOS management team, the next step was to disseminate information to teachers, school committees, and student parents concerning the amount of funds received and the programs to be managed by the schools that are included as a component of the school BOS funds. Nevertheless, it turned out that the school did not
conduct socialization with student parents. In addition, there was no BOS socialization at the regency level due to limited funds.

In terms of the process or implementation factor, the preparation stage was considered ineffective because the school BOS program management, which should consist of a treasurer and one student parent outside the school committee, was not implemented because there were no student parents who were involved as the member. Although there was a reason for the non-involvement of student parents in the school BOS team, i.e. the parents at SD Inpres Dekai did not have a good understanding of the BOS funds, this could have been anticipated by the school by conducting socialization to create a good understanding or by selecting student parents who already had a good understanding of the BOS funds.

The non-involvement of student parents in the BOS management team occurred not only at SD Inpres Dekai but also in many other schools in Indonesia. Many schools reported that one of the most challenging components of school-based management and implementation of the BOS program is to meet the component of parent involvement and school committee management (Shaeffer, 2013). Research conducted by Akbar (2016) and Andi et al. (2015) showed that the implementation of BOS in certain regencies was ineffective due to delayed distribution, fraud by certain parties, and no deliberation involving student parents in making decisions related to the use of BOS funds in schools. Parent involvement could minimize conflicts or misunderstandings. In addition, parents can also show a higher level of support to the learning activities funded by BOS.

Student parents' lack of understanding can be because the schools did not conduct socialization concerning the BOS funds to stakeholders at the school level, including teachers, school committees, and student parents. The socialization concerning the BOS funds was only carried out to teachers, i.e. during regular teacher meetings. In addition, the socialization from the BOS team at the regency level to the school was not carried out due to limited financing. In fact, according to research by Hidayat et al. (2019), the socialization of technical guidelines is one of the key success factors for the implementation of the BOS program. Research by Rusli and Elmizola (2015) also revealed that socialization that is not optimal is one of the causes of ineffective use of BOS in the learning activities at schools.

According to research by Shaeffer (2013), the central BOS management team with support from the Government of the Netherlands through the World Bank in 2009 and 2010 conducted one-day socialization for the school BOS management team. However, this brief socialization was not sufficient to improve the knowledge and skills of the school management team, thus more detailed and systematic training is needed to disseminate knowledge and develop the competencies to manage the BOS program.

From the evaluation of the socialization program, the Australian Agency for International Development (AusAID) in partnership with the Education of Australia and Indonesia in 2010 provided funds to the Ministry of Education and Culture (Kemdikbud) to fund training for the BOS program in 2011 and 2012 for three to four days. Conducting the training requires quite much funding. The BOS program training in 2011 and 2012 cost IDR 344,000 per training participant (Shaeffer, 2013).

The amount of the training costs cannot be used as a standard because it certainly varies in each region. This is because many factors influence it, such as the location of the training, especially for Papua Province, especially Yahukimo Regency, where the schools are scattered in mountainous areas and can only be accessed by plane. Therefore, it is necessary to allocate a special budget to conduct socialization considering the importance of socialization or training for the effectiveness of the BOS program.
In terms of the implementation of the BOS funds received by SD Inpres Dekai, it did not meet the number of the existing students. Based on the exposure of the BOS management team members at the regency level, this was because schools did not synchronize data with Dapodikdasmen on time so the data taken were the old data. In addition, the distribution of the BOS funds from the Education Office was sometimes delayed because the school submitted accountability reports late. The delayed disbursement of the BOS funds was also found in other schools in Indonesia and became an obstacle to the implementation of BOS (Hidayat et al., 2019; Pawestri et al., 2015).

In terms of the use of the BOS funds, SD Inpres Dekai used the BOS funds following the 13 standard components of the BOS program. These funds were used for library development, new student admissions, learning, and extracurricular activities, test and exam activities, purchase of consumables, electricity, school maintenance and school sanitation, monthly salary payments, professional development of teachers and education personnel, subsidy for students from low-income families, school management, computer purchasing and maintenance, and other cost components. Although some of the funds were spent on things apart from the 13 specified components, the spending was stated in the financial statement of the use of funds.

In terms of the implementation process, especially the preparation stage, the findings showed that there was nonconformance between the school BOS management team with the guidelines for the BOS program, there was no socialization, the amount of the funds received did not meet the number of students, and there was a delay in the distribution of the boss funds. In other words, the BOS program implementation at SD Inpres Dekai was not quite effective, even though the use of funds already met the BOS provisions.

4.3 Output

The results of the in-depth interviews with the informants showed that the BOS program was very beneficial for both parents and schools. The BOS program was helpful for parents because they could send their children to school with a less financial burden. There was no reason for children to not go to school or drop out of school due to the education cost, thus affecting the education enrolment rate. A higher education enrolment rate in a region is better because it shows the level of community participation in education to improve the quality of human resources in the region, in this case, Papua (BPS of Papua Province, 2019).

Education enrolment also illustrates the effectiveness of educational programs in absorbing the potential of education in the community (BPS, 2016). Various indicators of education enrollment can be used to monitor the extent to which the targets of government education programs have been achieved (BPS, 2016). The higher the achievement of these indicators, the more effective the education program. The enrolment rates in Yahukimo with an indicator of Gross Enrolment Ratio (GER) and Net Enrollment Ratio (NER) (Figure 2) fluctuated but tended to increase from 2014 until 2019. NER shows the school-age population could attend school on time and it will reach 100 percent if all school-age children attend school on time (BPS of Papua Province’s, 2019).

The NER of Yahukimo Regency in 2019 was 61.67, which means that 61.67% of the people in Yahukimo Regency had attended school on time. The figure was however still far from the target of Papua province in 2019, i.e. 85.20 %, but it is said to be quite good because it tends to increase every year. Meanwhile, GER indicates the population's education enrolment in accordance with the level of education. The APK for elementary schools in Yahukimo Regency in 2019 was 80.38, which means that 80.38% of the population aged 7-12 years had attended elementary school. This can be said to be very
good because the rate had doubled from that in 2014 which was only 40.51%. The significant increase indicates an increase in education enrolment, one of which is influenced by the BOS program.

![Figure 2. Appendix: GER and NER of Yahukimo Regency in 2014-2019)
Source: BPS of Papua Province (2014-2019)](image)

The output of the BOS program which is considered very beneficial for the community is in accordance with research by Al-Samarrai (2015) showing that annual education expenditures for households with children in elementary and junior high schools declined by about six percent in the first year after the BOS program was first introduced. In addition, with an increase in the education enrolment rate in Yahukimo Regency, in terms of both the NER and GER indicators, it can be said that the BOS program is effective in absorbing the potential of education in the community. This is in accordance with previous research by Pawestri et al. (2015) which also used the GER indicator as an assessment of the level of effectiveness of the BOS program.

The quality of education at SD Inpres Dekai was considered good because it was the only accredited elementary school in Yahukimo Regency. SD Inpres Dekai obtained a final accreditation score of 72 with accreditation status B. Furthermore, the quality of education at SD Inpres Dekai can also be seen from the average UN scores of the students. Table 2 shows a comparison of the average UN scores for SD Inpres Dekai in 2012 and 2018. The data were used to compare the UN scores in 2012, i.e. before the implementation of the BOS program policies in 2016, and the UN scores in 2018 or after the BOS program policies 2016 started to be implemented at SD Inpres Dekai. In terms of the average UN score, there was an increasing trend from 2012 to 2018 by 19.47%, indicating a very good trend. However, to determine if it was a significant increase, it is necessary to conduct paired sample t-test. Before performing the paired sample t-test, the normality of the data was tested using the Kolmogorov-Smirnov test.

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Average of National Exam Score</th>
<th>Percentage of Increased Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahasa Indonesia</td>
<td>68.6</td>
<td>84.62</td>
</tr>
<tr>
<td>Mathematics</td>
<td>68.8</td>
<td>83.88</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>66.9</td>
<td>75.69</td>
</tr>
<tr>
<td><strong>Average of Percentage of Increased Score</strong></td>
<td><strong>19.47%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: DKHUN of Yahukimo Regency 2012 and 2018
Table 3. Result of the Normality Test

<table>
<thead>
<tr>
<th>Average of National Exam Score</th>
<th>2012</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>68,100</td>
<td>81,396</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1,044</td>
<td>4,955</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov</td>
<td>0.607</td>
<td>0.621</td>
</tr>
<tr>
<td>Asymp. Sig. (2 tailed)</td>
<td>0.854</td>
<td>0.835</td>
</tr>
</tbody>
</table>

The conditions of the Kolmogorov Smirnov normality test are: if the Asymp.Sig value is greater than 0.05, it can be said that the data meet the assumption of normality or the data are normally distributed (Ghozali, 2013). The results of the normality test in Table 3 show a significance of 0.835, greater than 0.05. Therefore, it can be said that the data were normally distributed. After the data met the normality test, then a difference test was carried out with the paired sample t-test. The results of the paired sample t-test in Table 4 show a probability value (Asymp.Sig) of 0.028 <0.05, indicating that there was a significant difference in the average of the UN score of SD Inpres Dekai before and after the implementation of the BOS program with the 2016 technical guidelines.

Table 4. Result Paired Sample T-Test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
</table>

In addition to being beneficial for parents or the community and improving the quality of education, the BOS program is also very useful for schools especially for the implementation of the teaching and learning processes. With the BOS funds, schools can buy supplies and consumables to support school activities and hire honorary teachers as an effort to develop teacher equity. This result can be seen from the student-teacher ratio of SD Inpres Dekai which was almost close to the ideal rate, i.e. 29.65.

This result is in line with research by Bahri et al. (2019) concluding that the implementation of the BOS program can help increase the quantity and quality of educational facilities, thereby improving the quality of the teaching and learning processes and reducing the financial burden borne by students. This way, based on the results of the analysis, it can be said that the objectives of the BOS program at SD Inpres Dekai have been achieved and in terms of output, the implementation has been very effective.

4.4 Inhibiting Factor

The inhibiting factors for the implementation of the BOS program at SD Inpres Dekai were non-conformance of funds received by the school with the number of the students. This can be resolved by updating the number of students in the Dapodikdasmens system on time. The next obstacle was delayed distribution of the BOS funds by the...
Late submission of accountability reports by schools can be caused by the fact that the technical guidelines are considered complicated and rigid, making it difficult for schools to prepare accountability reports \cite{Pawestri et al., 2015}. The problem related to complicated technical guidelines could be resolved by conducting socialization. Unfortunately, it turned out that socialization had never been carried out by the regency government, namely the Education Office, or by the school because there was no allocated socialization fund. This is what causes many schools to fail to understand the BOS fund accountability system, thus making it a mess. The next inhibiting factor was parents' lack of understanding of the BOS funds. This is because the school did not conduct socialization with parents.

Furthermore, there were still schools with not-conducive conditions to bringing up new development policies to improve their quality due to limitations. Some of these limitations are: the schools were located in an isolated area, making them difficult to keep updated on new information related to education; teachers found it difficult to make changes. This is an inhibiting factor because the areas in Papua Province, especially in Yahukimo Regency, cover mountainous areas that can only be accessed by plane. Concerning this, every school must use an information technology-based or web-based information system \cite{Hadiyanto & Wiyono, 2019}. By using technology, it is possible to conduct various activities such as socialization virtually, so they no longer need to go directly to a particular location, thus resolving the obstacle related to geographical factors.

\section*{V. Conclusion}

Based on the results of the research analysis, it can be concluded that the implementation of the BOS program at SD Inpres Dekai in general is considered quite ineffective based on the input, process, and output factors. Although the objectives of the BOS program at SD Inpres Dekai, namely an increase in the education enrolment rate in Yahukimo Regency, both NER and GER indicators, is considered to have been achieved, in terms of the process factor, several ineffective aspects need to be improved, such as parent involvement in the school BOS management team, socialization of the BOS program, and update of student data in Dapodikdasmen. The inhibiting factors for the implementation of the BOS program at SD Inpres Dekai are non-conformance of funds received with the number of students, delayed disbursement of the BOS funds by the relevant agencies, lack of socialization from the BOS management team in the regency, and parents' lack of understanding regarding the BOS funds.

This study has several limitations, so it is expected that future researchers could develop this research by improving the existing limitations. The limitations of this research are: first, the research was done in one location, namely SD Inpres Dekai so it could not represent the effectiveness of the BOS program implementation in Dekai City, Yahukimo in general. Second, this research only involved a limited number of informants, making it possible for bias or a more subjective assessment to occur.

Based on the results of the research and the abovementioned implications, this study proposes several recommendations to the government (Ministry of National Education) and schools for better implementation of BOS in the future. The BOS management team in the regency should conduct socialization to schools. If there are obstacles such as transportation costs or difficulty to conduct face-to-face socialization, there is an
alternative solution, i.e. virtual socialization. Then, the socialization by the BOS Management Team of the regency should be scheduled in a relatively long period accompanied by extensive socialization materials. Therefore, the socialization could focus not only on financial matters but also on the administrative aspects by referring to the guidelines, transparency, as well as accountability. Schools should also conduct socialization with student parents so parents could have a good understanding of BOS, making it possible to involve them as members of the BOS management team at the school level.

As standard operating procedure and policy makers, the Ministry of National Education should conduct sustainable studies (over years) on the real needs of school operations to make better targets for the use of BOS funds according to the needs of each school and the Ministry should give authority to the Regency Government to establish bureaucratic structures/management team and/or additional management mechanisms to cope with limited resources. As shown in this study, the BOS management team established by Yahukimo Regency facilitates the management of BOS. In addition, the requirement to attach a financial statement of the use of the BOS funds of the previous period in the proposal for the disbursement of funds for the next period helps improve financial accountability. Unfortunately, both provisions are not included in the guidelines for BOS 2009. For future researchers, it is possible to develop this research by using a larger sample of schools so the results could better reflect and represent the implementation of the BOS program in a particular area.

References


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