Abstract—This study aimed to: 1) Mapping teacher needs at primary school level in Banjarmasin, and 2) Identifying problems related to the distribution and fulfillment of teachers at primary school level in Banjarmasin. This research used the mix methods approach. The population of this study includes all public primary schools in Banjarmasin. The sample was taken using purposive sample techniques as many as 52 primary schools. The data collected for the study include: 1) Secondary data related to the number of teachers in primary schools, and 2) Primary data related to problems affecting the distribution, fulfillment of needs, and funding of teachers. Quantitative descriptive analysis with percentage techniques is used to analyze the mapping of real conditions and the ideal needs of primary school teachers in Banjarmasin. Qualitative analysis is used to analyze the problems that affect the distribution, fulfillment and financing needs of teachers at primary school. The results of the study showed: 1) the number of teachers’ needs at the primary school in Banjarmasin was 2,640 people. The number of teachers with civil servants status that available was 1,742 people (65.98%), meaning that there were still a deficiency around 898 people (34.02%). 2) Some problems found related to the distribution and fulfillment of teacher needs include: a) the limitedness of government budget to improve the welfare of teachers b) the over capacity of honorary teachers in schools, c) the restrictions policy of payroll allocation for teachers, and d) the limited access of alternative permanent access to pay honorary teacher’s salary.

Keywords— the need analysis, primary school teachers, teachers

I. INTRODUCTION

The problem of the teacher distribution gap and its funding are some of the challenges that still occur in our country. All forms of policies and programs will be determined by the performance of the teachers. This means that the availability of teachers in primary schools is the main key in the ongoing teaching and learning process. In addition, efforts to empower existing teachers are felt to be less effective due to poor placement of teachers. This is reflected in the fact that there is a deficiency of teachers in an area, especially in remote areas and the surplus of teachers in other areas, such as urban areas, as well as a deficiency of teachers in certain areas of study/school, and an surplus of teachers in certain fields of study in other areas / schools [1]. The analysis of teacher needs mapping conducted so far by education units and districts / cities did not reflect a comprehensive analysis [2]

One of the Banjarmasin City Development Strategies according to the RPJMD 2016-2021 is the improvement of quality, equitable and affordable education services with policy directions including improving the welfare of education personnel. The local government establishes a priority program for improving the quality of educators and education personnel as a way to achieve the success of the policy direction. An important problem that occurs at the moment in Banjarmasin, especially in the education sector, is that there is still a deficiency of teachers, especially at the primary school level. The deficiency of teachers, especially in primary schools in Banjarmasin is very influential on the quality of basic education. From the results of the previous discussion with Educational Board of Banjarmasin, based on data in 2017 the deficiency of primary school teachers up to January 2017 was 845 people. The moratorium policy for the appointment of civil servants until 2019 further aggravates this situation. Many primary schools in Banjarmasin have the number of honorary teachers exceeding the number of government teachers. There are even some schools with only one or two government teachers left. To cover the deficiency of teachers in accordance with the Minimum Service Standards (SPM) of Primary Education, the school appoints honorary teachers with funding sources from Operational School Funding (BOS). With the large number of honorary teachers who must be provided by schools in order to fulfill the SPM, it has an impact on the high percentage of employee expenditure funds on the school budget planning. However, based on BOS Guidelines, personnel expenditure on BOS APBN is limited to a maximum of 15% of the allocation of BOS funds received by schools. While the personnel budget for BOS APBD is 30%, but specifically for the expenditure of civil servants. The lack of a budget to pay for honorary teachers while the large number of honorary teachers led to the amount of honorary received every month by very small honorary teachers far below the UMK with the amount between Rp 200,000.00 - Rp 500,000.00 per month. To help improve the welfare of honorary teachers, especially in public primary schools, they had given the temporary teacher functional allowance of Rp. 300,000. - per month by referring to Permendikbud Number 12 of 2017.

Several previous studies related to teacher needs analysis mention that budgetary problems become factors that influence the number of teachers who still do not meet expectations while another findings said that transportation and communication access factors influenced this problem [3]. Teacher needs due to factors in the number of students, school development plans, and the number of teachers entering retirement. Preliminary research on the study of primary school teacher funding in Banjarmasin shows that the achievement of Educational Minimum Services Standard (SPM) on teacher availability indicator according to the needs of new classroom reached 90.70% [4]

Educational planning is a rational application of a systematic analysis of the process of educational development in the form of a series of activities to achieve a
predetermined goal, namely that education is more effective and efficient and in accordance with the needs and objectives of the students and the community [5] [6] [7] [8]. The needs of teachers as a reflection of the demands of teachers' professional service users to provide educational services to students in teacher-use educational institutions, namely schools [9]. The law of demand and supply in addition to the economic field applies also to educators or teachers. The perfect need and supply is if the provision meets the requirements both quantitatively and qualitatively [7]. Based on the concept of demand and supply, the existence of essential factors is evident in it [9].

Referring to the Guidelines for Teacher Needs Planning, the analysis of teacher needs is based on the existence of regulatory demands including PP No. 19 of 2005 which describes the minimum standard of teacher education (S1 / D4), suitability of educational background, and certificate of educators [10]. Several other basic legal regulations that underlie the need for analysis of teacher needs include: 1) RI Law 20 2003, 2) RI32 2004 Law, 3) RI Law 14 2005, 4) PP 29 1990 as amended by PP 56 1998, 5) PP 19 2005, 6) PP 74 2008, 7) PP17 2010, 8) PP 9 2005 as amended by PP 94 2006, 9) Permendiknas 39 2009, and 10) Joint Regulation of the Minister of State for Administrative Reform and Bureaucratic Reform, Minister of National Education, Minister of Home Affairs, Minister of Finance, and Minister of Religion Number 05 / X / PB / 2011, SPB / 03 / M.PAN-RB / 10/2011, 48 Year 2011, 158 / PMK.01 / 2011, 11 Year 2011

The problems formulated in this study are: 1) How is the mapping of teacher needs at primary school level in Banjarmasin?, and 2) What problems are faced related to the distribution and fulfillment of teachers at primary school level in Banjarmasin? The aim of this study include: 1) Mapping teacher needs at primary school level in Banjarmasin, and 2) Identifying problems related to the distribution and fulfillment of teachers at primary school level in Banjarmasin.

II. METHOD

This study used the mix methods approach. The population includes all public primary schools in Banjarmasin as much as 207 primary schools. The sample in this study was taken using a purposive sampling technique for interviews and further exploration in few schools. The variables studied was mono variables: "Primary School Teacher Needs". It described in several sub-variables, include: 1) the mapping of the real number and ideal needs of teachers at primary school level, and 2) the problems that affecting the distribution and fulfillment of teachers at primary school level.

Data collected for this study include: 1) Secondary data related to the number of teachers in primary schools in the city of Banjarmasin. This data was collected through documentation studies by analyzing the Educational Main Data (Dapodik), and 2) Primary data related to problems affecting the distribution, fulfillment of needs, and funding of teachers. This data was collected through a questionnaire distributed to representatives of teachers and principals in all primary school in Banjarmasin, Educational Board of Banjarmasin, and representatives of the Banjarmasin City Government related to this study. The results of the questionnaire were then analyzed more deeply through FGD activities involving representatives from respondents who had filled out the questionnaire.

The analysis used in this study was conducted with quantitative and qualitative descriptive analysis. Quantitative descriptive analysis with percentage techniques is used to analyze the mapping of real conditions and the ideal needs of primary school teachers in Banjarmasin. The guidelines used to calculate teacher needs are based on Minister of National Education Rule Number: 053/U2001. Qualitative analysis is used to analyze the problems that affect the distribution, fulfillment and financing needs of teachers at the primary school level in Banjarmasin.

III. RESULT AND DISCUSSION

A. The Mapping of Teachers’ Need at Primary School in Banjarmasin

According to the Regulation of the Minister of State for Administrative Reform and Bureaucratic Reform Number 26 of 2011, it is stated that the calculation of the needs of Civil Servants who occupy functional positions still refers to the Decree of the Minister of Finance Number: KEP / 75 / M.PAN / 7/2004 concerning Guidelines for Calculating Employee Needs Based on Expenses Work in the Framework of Formation of Civil Servants. Based on the legal basis, to calculate the needs of primary school teachers in the city of Banjarmasin first begins by looking at the number of existing study groups. Based on data from the Banjarmasin City Education Office in 2017, there were 1,837 classroom (rombel) spread over 207 public primary schools in five sub-districts in Banjarmasin, the distribution of this number can be seen in the following figure:

![Fig. 1. The distribution of classrooms (rombel) in public primary schools in Banjarmasin, 2017](source: Educational Board of Banjarmasin, 2017)

Based on the Figure 1, we can map the real condition, the needs, also the surplus and the deficiency of the amount of school principals, classroom teachers, sport teachers, and religion teachers at the primary school level in Banjarmasin as follows:
1) The Principal

Fig. 2. The Principal profile in public primary schools in Banjarmasin, 2017.

2) Teachers (Classroom, Sport, and Religion Teachers)

Fig. 3. The Teachers profile in public primary schools in Banjarmasin, 2017.

3) Classroom Teachers

Fig. 4. The classroom teachers profile in public primary schools in Banjarmasin, 2017.

4) Sport Teachers

Fig. 5. The sport teachers profile in public primary schools in Banjarmasin, 2017.

5) Religion Teachers

Fig. 6. The religion teachers profile in public primary schools in Banjarmasin, 2017.

Geographically, the sub-district with the highest percentage of deficiency is West Banjarmasin in all types of teachers. Subsequent sub-districts that have deficiency above the general average are South Banjarmasin and Central Banjarmasin. The other two sub-districts, North Banjarmasin and East Banjarmasin, have a tendency to smaller number of teachers deficiency from three other sub-districts. The high percentage of deficiency of civil servant teachers up to 2017 which reached 34.02% of total teacher needs will increase if added with the number of teachers retiring in the next few years. To see an increase in teacher deficiency, we can see the following figure:

Fig. 7. Teacher Retirement Profile for 2017-2021 at Public Primary School in Banjarmasin.

Fig. 7. shows that by 2021, there will be a reduction in the number of civil servant teachers up to 483 people. If it is accumulated with existing teacher deficiency data, there will be an increase in the deficiency of the number until 1,293 people (54.65%) of the total needs in public primary schools throughout Banjarmasin.

Based on the documentation study from Banjarmasin Educational Board data in 2017, other problems that occur in addition to the increasing number of teacher deficiency is the standard of teacher education level for primary school. According to the Attachment to the Minister of National Education Regulation No. 16 of 2007 concerning Standards for Academic Qualification and Teacher Competence, it is stated: "Teachers in primary schools, or other equivalent forms, must have a minimum educational diploma of four (D-IV) or bachelor (S1) qualifications in the field of primary / MI education (D-IV / SI PGSD / PGMI) or psychology obtained from an accredited study program". Guided by this regulation, the suitability of teacher education level at primary schools in Banjarmasin can be seen in the following figure:
In an effort to solve the teacher deficiency problem, several schools recruit honorary teachers according to their individual needs. Based on data compiled from Educational Board of Banjarmasin in 2017, the total of honorary teachers recorded are 922 teachers. The distribution of honorary teachers according to the level of education in primary schools throughout the city of Banjarmasin can be seen in figure 9 below:

The lack of teacher numbers occurs in almost all public primary schools in the city of Banjarmasin. According to a statement from the Educational Board of Banjarmasin, they have attempted to make a breakthrough by planning for equal distribution of civil servant teachers, especially in schools with a high level of deficiency. The next problem that arises is approximately 70% of the age of civil servant teachers in primary schools in Banjarmasin are at the age of 50 years. This age factor is their consideration to transfer teachers to regions that are geographically quite difficult for the mobility of the teachers concerned. In addition, the existence of honorary teachers who have taught in schools will automatically be disrupted by their distribution because they have been appointed to fill the gaps that occur in schools that have deficiency problem.

Related to the education level of civil servant teachers that are still below standard, according to representatives from the LPMP of South Kalimantan Province, the policy of requiring primary school teachers with a minimum education level of S1 has been going on for a long time even since 2016. In practice the Educational Board itself has made efforts, among others, by facilitating scholarships to study at the Open University from the central government for teachers who still have High School and Diploma education levels. Another effort is to facilitate teachers to line up education at their own expense. Through these efforts, it is expected that existing teachers can adjust their educational qualifications in accordance with the standards set by the government so that it is expected to have an impact not only on improving teacher competencies in the interest of advancing the quality of learning as well as in ensuring the financial welfare of teachers in particular related to payroll and benefits. - relevant allowances.

Regarding the issue of the education level of honorary teachers, the results of discussions with the school said that they were in a dilemma position. The low ability of schools to guarantee proper remuneration for honorary teachers often makes them have to "pick up the ball" to find teachers who want to teach in their schools. This has the effect of not maximizing quality selection and qualifications that are able to meet the standards of government demands. The school said that most of the teachers who were appointed did not go through the test process because they needed teachers who at least "could" teach at school and would be willing to be paid a low nominal (around Rp. 300,000 to Rp. 500,000 per month). Often the school must ignore the minimum of bachelor standard as long as they want to teach and fulfill school requests.

**B. Identification of Problems Related with Distribution and Fulfillment of Teachers at Primary Schools in Banjarmasin**

The problem of distribution and fulfillment of teachers basically specifically focuses on honorary teachers, especially those appointed by schools. Some of the problems found related to the distribution and fulfillment of teachers include:

1. The limitedness of government budget to improve the welfare of honorary teachers

At the local government level, the limited funds owned by the government are the main factor to participate in the financing of honorary teachers, especially in terms of proper payroll and at least meet the standard of City Minimum Wages of Rp 2,290,000 in 2017. This limitation is mainly due to the factor of low Regional Original Income (PAD) which is still below the figure of 300 billion rupiah per year. This has an impact on the limitations of the city government to provide proper payroll, especially for honorary teachers. For example if it is calculated simply, with a total deficiency of 810 teachers multiplied by UMK standard salary of Rp 2,290,000.00; the city government must at least provide a budget of around 22.26 billion rupiahs only for primary honor teachers. This calculation is of course almost impossible to fulfilled by the local government.
The share of the local government certainly still exists even though it cannot fully meet the required budget. Data from the Educational Board of Banjarmasin shows that up to now there are 84 honorary teachers who are included in the K2 Data who receive a salary of Rp 1,500,000 per month with the Regional Budget source. To help improve the welfare of honor teachers, especially in public primary schools, they have the temporary teacher functional allowance of Rp 300,000, - per month by referring to Permendikbud Number 12 of 2017 concerning Technical Guidelines for Distribution of Professional Allowances, Special Allowances, and Additional Income for Regional Civil Servant Teachers.

2. The over capacity of honorary teachers in schools

In some schools, there were a relatively large number of honorary teachers even exceeding the number of civil servant teachers. The high number of honorary teachers is a dilemma because it has an impact on the ability of schools to pay their salaries in nominal terms. The results of interviews and instruments distributed to a number of honorary teachers in schools showed basically that honorary teachers had the same tasks as civil servant teachers. This condition is inversely proportional to the income they earn as a reward from the profession they are engaged in. Most stated that their income was very lacking and even inclined to be inhumane.

An interesting finding is that when they were presented with related questions, they still survived as an honorary teacher even with a minimum salary. Some of the reasons that arise include factors like wanting to practice their knowledge, seeking experience, as aspirations and soul calling, just as a side job, the hope of being appointed as a civil servant, and the difficulty of finding a job. Difficult factors in finding a job might be related to the situation of increasingly limited employment while there are still many unemployed workers. As a result, working in the profession as a honorary teacher is still chosen even though the income earned is very limited.

3. The restrictions policy of payroll allocation for honorary teachers

The assistance of BOS and BOSDA funds is an alternative provided by the government to pay honorary teachers. At the primary school level, BOS funds provided to schools amounted to Rp 800,000 per year, while for BOSDA Rp 200,000 per year. The problem that arises is the limited allocation of BOS and BOSDA funds. Financing at the school level is charged through BOS funds with a limit of 15% of the total BOS funds and a maximum salary of Rp 500,000 per month for each honor teacher. As for BOSDA, the honorary teacher financing is regulated in Mayor Regulation which is a “share of 70%” of total School Goods and Services Expenditures.

The allocation of BOS funds and BOSDA depends on the number of students owned by the school. The more number of students, the more funds will be received and vice versa. This would be advantageous for schools that have many students and have little (or no) honorary teachers, while in small schools with limited numbers of students, it will be difficult to pay properly. This problem is rather difficult to communicate directly by the school because it is related to the central regulations and regional regulations that have been approved by the authorities.

4. The limited of alternative permanent access to pay honorary teacher’s salary

The results of interviews and FGDs with the schools stated that schools generally did not have additional permanent funding sources to increase income for school finance outside of BOS and BOSDA sources. The limitations of school finances have an impact on the limited ability of schools to pay honorary teachers. The results of interviews and questionnaires given to principals showed that the average amount of honorary given to current honorary teachers was Rp. 546,000, with the lowest level of honor in the range of Rp. 250,000, and the highest in the range of Rp. 2,280,000. The school ability to raise funds from third parties such as CSR funds from companies in Banjarmasin are also not yet visible. Some schools only have independent businesses such as small shop and land leasing land to add income which is partly used to increase salaries for honorary teachers.

In an effort to overcome the related problems, it is still not appropriate for the salaries received by honorary teachers at the primary school in Banjarmasin, basically the local government has tried several things. The results of the FGD with the Educational Board officer of Banjarmasin informed that it was currently being drafted by a Regional Regulation or Mayor Regulation to seek the issuance of a Mayor's Decree for honorary teachers. Further information mentioning the Mayor's Decree is intended to allow temporary teachers to obtain certification allowances so that their salaries can increase even though the salaries of honorary teachers are still limited. The data collection conducted by the Educational Board of Banjarmasin shows that there are 360 teachers who have the feasibility to be granted a Mayor's Decree, while according to calculations with reference to Permendikbud No. 46 of 2016 there are likely to be 700 relevant teachers to obtain a Mayor's Decree that can be used to get certification allowances. The educational board of Banjarmasin also seeks the provision and facilitation of honor teachers in order to obtain NUPTK as a condition for teachers to propose certification funds.

IV. CONCLUSIONS

Several conclusions from study include:

A. The number of teachers' needs at the primary school in Banjarmasin was 2,640 people. The number of teachers with civil servants status that available was 1,742 people (65.98%), meaning that there were still a deficiency around 898 people (34.02%).

B. Some problems found related to the distribution and fulfillment of teacher needs include: a) the limitedness of government budget to improve the welfare of honorary teachers, 2) the over capacity of honorary teachers in schools, c) the restrictions policy of payroll allocation for honorary teachers, and d) the limited of alternative permanent access to pay honorary teacher’s salary.
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