



TRAINING FOR THE PREPARATION OF CLOSED DRAINAGE CHANNEL WORK BUDGET PLANS IN BENDUNG KELURAHAN, KASEMEN DISTRICT, SERANG CITY

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Abstract

In every planning of construction work, both facilities and infrastructure, of course requires budget planning, quality and time. Mastery of civil engineering knowledge in calculating budget requirements and costs correctly in its implementation needs to be supported by the competence of the experts who plan it, especially the estimator who calculates it. There are many cases where the budget value and the cost of the proposed work are not in accordance with the engineering drawing plans, building material specifications, and the ability of the workforce in the field. Therefore, the planning of the Budget and Cost Plan (RAB) for closed drainage canal works in the neighborhood around Kelurahan Bendung, Kecamatan Kasemen, Kota Serang needs to be carried out accurately, and more adequately, according to the purpose of the construction of the work. In order for the community to have the ability to effectively and efficiently prepare the RAB for the Regional Government, the FTSP PKM Team of Trisakti University took the initiative to organize socialization activities for the preparation of the RAB as a basis for submitting a budget for the construction of a closed drainage canal project in the neighborhood around the office of Kelurahan Bendung. This activity is intended to be able to provide technical knowledge on how to make cost estimates in accordance with the guidelines of the Indonesian National Standard (SNI), in accordance with the analysis of work unit prices, and in accordance with the Domestic Component Level (TKDN), so that the calculation results are expected to be effective, efficient, and close to the actual implementation. This technical knowledge is very useful for people who want to make, or/and supervise the implementation of drainage canal works around their own homes.

Keywords: Plan, Budget, Cost, Channel, Drainage

INTRODUCTION

In accordance with Law No. 32 of 2007 concerning the formation of the city of Serang on August 10, 2007, the city of Serang was made the seventh part of the Banten province. Spatial division and development trends are influenced by factors of regional potential, regional homogeneity, accessibility and physical limitations of the region. Kasemen sub-district is a development area to the north of the city of Serang, which is a sub-district with an area of 56.36 km² which has 10 sub-districts.

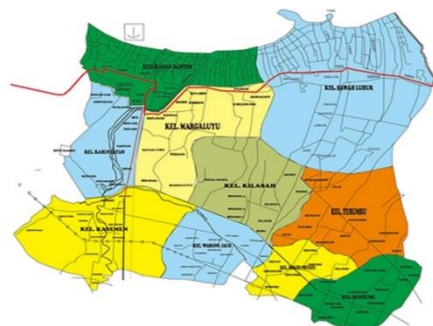


Figure 1 Kelurahan

ig Banten City

Bendung Village is part of the Kasemen sub-district area, with an area of 4.3 km², which is 7.63% of the entire Kasemen sub-district area. The situation of facilities and infrastructure in the Kelurahan

environment is still inadequate. The condition of the water in the area is brackish water and there are no adequate clean water supply facilities so that people need to buy clean water. The environmental road situation is also not good, many are damaged and have potholes. Damage to environmental roads is inseparable from the poor environmental drainage system. Some places have poor drainage channels as shown in Figure 2, some even have no drainage at all. Rainwater stagnates and flows to lower places without control, and causes damage to environmental roads in various places as seen in Figure 3.

The livelihoods of the people in Bendung Kelurahan are mostly farmers, market workers, casual daily laborers, and traditional cake makers with uncertain incomes. The most recent level of education is junior high school, followed by senior high school. With such a population character in this region, PKM activity partners have the main problem, namely inadequate environmental infrastructure, especially in terms of the availability of drainage channels, in addition to the problem of limited employment opportunities. The existing human resources do not have sufficient knowledge and technical skills, especially in terms of technical knowledge in making facilities and infrastructure, including how to prepare a RAB to the management of physical development and the environment that supports it. This community service activity is expected to open opportunities to fill jobs, especially labor-intensive jobs, while also being able to improve the surrounding environment.



Figure 2. Poor Drainage Figure



3. Environmental Road Damage

The justification for proposing community service together with partners, in accordance with the needs of partners, namely stipulating that community service activities begin by providing technical knowledge for making a Budget Plan (RAB) or improving environmental drainage around the Bendung Village office. This Budget Plan is the basis for proposing the preparation of a budget for the manufacture or/and repair of facilities and infrastructure in this Village for the current fiscal year. After that, the proposal approved by the budget is realized into a work program that can be carried out in a labour-intensive manner by the local community.

The problems that occur in the Bendung urban village community require jobs to be able to improve their economic level. Meanwhile, the condition of facilities and infrastructure in the

surrounding environment is not good, it needs to be built or repaired. One that is urgently needed is the creation or improvement of environmental drainage. To be able to realize a labour-intensive work program that provides jobs needed by the community, partners must first make a budget proposal for urban village facilities and infrastructure to be submitted to the Regional Government of Banten. The proposed budget must be based on a good and accountable cost estimate. The proposed community service program is expected to be able to provide this technical knowledge to partners, so that partner problems can be resolved.

Problem Solving Approach

Currently, there are no drainage channels in the neighborhood around the Bendung Village office. The knowledge gained from the PKM Budget Plan for Closed Drainage Canals Around the Bendung Village Office, Kasemen District, Serang, Banten, which is in accordance with the SNI (Indonesian National Standard) unit price analysis standard and a book of building material price lists and current price catalogs, can be used by the sub-district apparatus as a basis for submitting a budget for the costs of making the required drainage channels. For residents who live in Bendung Village, the knowledge gained can be applied and applied to make drainage channels in their respective homes, which generally also do not exist or are inadequate. The local community is first given general knowledge which includes the main principles, benefits, and procedures for making cost estimates. Thus, the community can prepare the funds, materials, equipment and labor needed if they want to make drainage around their own residence. Knowledge is also given regarding the stages of the implementation method for making drainage channels so that implementation can be carried out effectively and efficiently. Furthermore, the residents were given pilot training and consultancy, namely a Pilot Budget Plan (RAB) for the Work of Closed Drainage Channels with Precast Concrete Around the Bendung Village Office, Kasemen District, Serang, which is in accordance with the standard unit price analysis of SNI (Indonesian National Standard) and a list book prices of building materials as well as current price catalogs.

Target Audience and Implementers of PKM

The intended target audience for this training and counseling are the community and partners who live in Bendung Village, Kasemen District, including Kelurahan officials, heads of RT and RW heads, fathers of households and young people.



Figure 4. PKM Implementation Team

It is hoped that all communities and partners who are targeted by this PKM can understand how to make a budget plan for the costs of closed drainage channels in the vicinity in accordance with the SNI (Indonesian National Standard) unit price analysis standard and the latest building material price list book. PKM executors consist of the Team Leader who coordinates, provides directions and instructions in implementing PKM, as well as in preparing PKM materials. Meanwhile, team members conducted surveys, conducted literature studies, made presentation materials, and prepared equipment, consumption and other things needed for the implementation of PKM.

IMPLEMENTATION OF ACTIVITIES

1. Activity Preparation

Preparation for activities begins with a survey and measurement of work in the field, as well as digging up information on technical implementation constraints related to procurement of materials, distribution and mobilization of materials to the field, and procurement of manpower in the field. Then, search for and study material literature for PKM debriefing, as well as material related to central issues in preparing the RAB. Next, discuss with the Team members what materials should be presented in the RAB preparation training for the physical work of making closed drainage channels with concrete material. make material for the final presentation on the implementation of PKM. These materials are prepared in a sequential manner, which is always linked to the process of implementing the construction stages in the field, adjusted to the value of the Domestic Component Level (TKDN), as well as the readiness/availability of materials on the market and market place.

2. Implementation Method

The method for implementing PKM activities entitled Budget Plan for Closed Drainage Channels Around the Bendung Village Office, Kasemen District, Serang, Banten consists of 5 activities, namely: Literature Study, Preparation of PKM Proposals, Location Survey, Implementation of PKM, and Evaluation and Preparation of PKM Reports .

- a. Literature Study: Conducted to ensure that the PKM material to be provided has a knowledge and technical basis that is in accordance with scientific principles, and is based on the latest data and information.
- b. Making PKM Proposals: The data that forms the basis for making PKM proposals is taken from information that has been obtained by the PKM Team since the previous PKM activities, because the collaboration with Bendung Kelurahan has been going on for several semesters. In making this proposal, it was also identified what data needed to be obtained in field survey activities.
- c. Location Survey: In this stage the PKM team sends representatives to survey locations around the Bendung Village office and take the necessary measurements. During the survey, interaction with the community was also carried out.
- d. Implementation of PKM: Implementation of PKM in the form of presentations as outreach and/or training to the target community was carried out together with 5 other PKM Teams from the Department of Civil Engineering, FTSP, Trisakti University who presented various materials that were also needed by the Bendung Village community.
- e. Evaluation and Preparation of PKM Reports: Evaluation of PKM implementation is very much needed for further PKM plans, and PKM Reports are a form of accountability for the PKM program.

RESULTS AND DISCUSSION ACHIEVED

1. Results Achieved

The results achieved by the training participants (target community) are that they acquire appropriate and up-to-date knowledge and skills regarding how to make a Closed Drainage Canal Cost Budget Plan Around the Bendung Village Office, Kasemen District, Serang, Banten which is in accordance with the theory and standard unit price analysis of SNI (Indonesian National Standard) and a book of building material price lists and current price catalogues. The results achieved by the PKM team as executors were able to apply theory and develop ways of making a Closed Drainage Channel Cost Budget Plan in accordance with the real situation in the field, using standard unit price analysis of SNI (Indonesian National Standard), building material price list book and the latest price catalog , and later can provide these results to students as lecture material.

2. Level of Achievement of Results

To measure the level of achievement of PKM results, it is done by filling out a questionnaire. Measuring the impact of the implementation of PKM on the real conditions in the target partner environment has not been carried out. The benefits of the activity, apart from providing knowledge about making estimates of the work budget, also give a sense of certainty about the costs that must be provided for carrying out the work of making drainage channels. For village officials, the knowledge of making a budget plan for the construction of drainage works can be used as a basis for

submitting proposals to the regional government so that the village can receive project funds which in turn can open jobs for local residents.

3. Supporting and Inhibiting Factors

Factors that really support the implementation of this PKM are partners who are very cooperative so they can rally a large number of participating communities to attend or take part via Media Zoom. Other conditions that support it are a fairly good internet network and electricity that continues to be on throughout the implementation. The factor hindering the activity was the Covid-19 pandemic situation which limited the number of direct attendance of the PKM implementation team and participating communities, so that some of the implementing teams and participating communities had to participate via Media Zoom.

4. Outputs Produced

The output of the PKM program entitled Budget Plan for Closed Drainage Channels Around the Bendung Village Office, Kasemen District, Serang, Banten is Copyright IPR for the presentation material (ppt) provided. Another output is in the form of coverage of PKM activities by the national TV mass media, Banten TV. Proof of Document - URL Output Mass Media News Banten TV for Community Service (PKM) Civil Engineering Department, FTSP, Trisakti University - Even Semester 2020-2021.

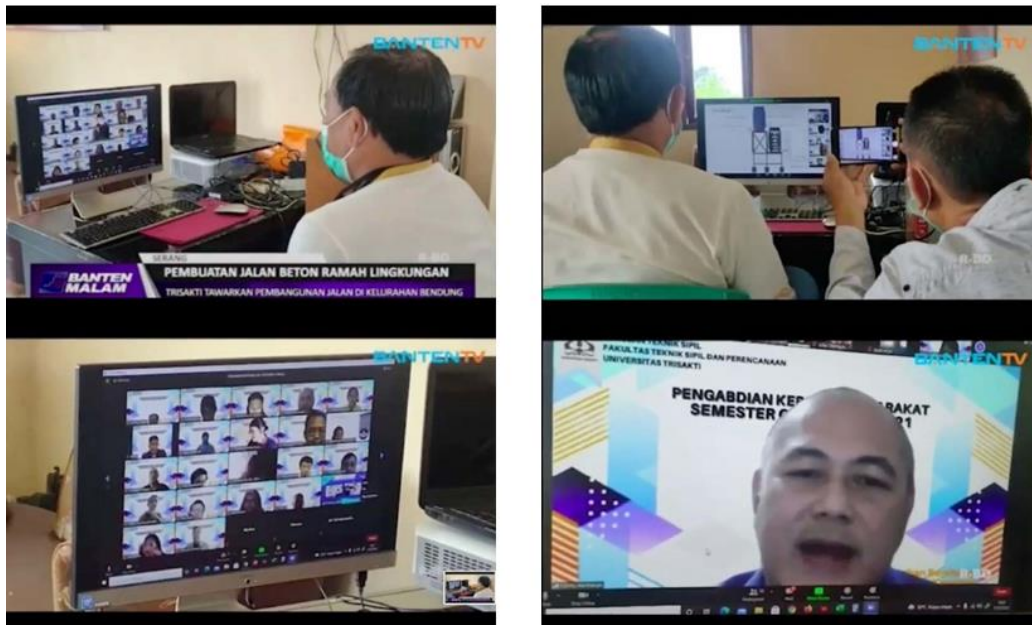


Figure 5. News Mass Media Output

5. Integration with Research, Education and Student Creativity Programs

The PKM material regarding the Budget Plan for Closed Drainage Canals around the Bendung Village Office, Kasemen District, Serang, Banten is one of the main materials discussed in lectures (Dikjar) in the Project Planning and Construction Control course. The integration with Research activities and Student Creativity Programs has not been developed further.

CONCLUSION

The conclusion that can be drawn from the implementation of the PKM Pilot Budget Plan (RAB) for closed drainage canal work with precast concrete around the Bendung Village Office, Kasemen District, Serang, Banten is that this program provides significant benefits because it has fulfilled the needs of the target community who have identified through previous surveys.

However, to increase the effectiveness of this program, it is recommended to carry out an impact evaluation on the target community after the completion of the PKM implementation. This evaluation should include measuring the time and performance of the projects that have been carried out. Thus, it can be seen more clearly to what extent this program has provided significant benefits to the target community. This evaluation can also assist in identifying weaknesses or areas that need improvement for similar programs in the future. By conducting a comprehensive evaluation, you can increase the efficiency and effectiveness of similar PKM programs in the future, and ensure that the needs of the target community are properly met.

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