

## **SOCIALIZATION OF THE USE OF APC (LIGHT REFLECTING DEVICES) ON FREIGHT CARS IN THE KINTAMANI-BALI TOURIST AREA**

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### **ABSTRACT**

Safety when driving can be improved by fulfilling complete roadworthiness requirements. One example of additional equipment for freight vehicles is a light-reflecting device that functions to indicate the presence of a vehicle if the driver of another vehicle flashes its lights. In field conditions carried out in the Kintamani tourist area, many drivers were found not to install additional equipment, which is very useful when the road conditions are dark or the installation was not in accordance with the provisions. In this community service activity, the Bali Land Transportation Polytechnic provided outreach regarding the use of light-reflecting devices in freight vehicles, which was carried out in Kintamani. Apart from discussing the use of light-reflecting devices on freight vehicles, the participants also actively participated in the process of installing light-reflecting devices on freight vehicles. The results of socialization also showed positive results based on an increase in post-test results from pre-test results.

Keywords: kintamani; roadworthy; safety

### **INTRODUCTION**

A vehicle is a means that helps support the movement of a person between different places. Based on Government Regulation Number: 55 Year (2012) concerning Vehicles, a vehicle is a means of transportation on the road, both motorized and non-motorized vehicles. In accordance with the definition literally motorized vehicles the main driver is the engine, while non-motorized vehicles the main driver is human or animal. Vehicles that have been operating on the road certainly need to be checked both administratively and technically, a form of technical checking is generally carried out periodic testing of motorized vehicles every six months. This periodic test activity aims to check the physical condition of a motor vehicle to comply with established standards and regulations, so that it can help to reduce the factors of road accidents. Improving traffic safety and road transportation is regulated in the Regulation of the Minister of Transportation of the Republic of Indonesia Number PM 74 of 2015 concerning Motor Vehicle Safety Equipment, where there are various additional safety equipment that must be installed on each motor vehicle.

The form of additional motor vehicle safety equipment is always adjusted again with various regulations that have been set, which aims to improve the safety of motorized vehicles in operation. For example, based on the rules in the Ministerial Regulation of the Republic of Indonesia number 74 of 2021, the installation of light reflective devices is mandatory. Light-reflecting devices are stickers that are reflectors and can reflect incoming light. This light-reflecting device must be installed on freight cars that have an axis configuration of 1.2 or a minimum allowable weight (JBB) of 7,500 kg. Goods cars that meet these characteristics include open and closed cargo trucks, tank cars, handcarts and attached carts. The purpose of installing light-reflecting devices is to ensure visibility for other road users and improve visibility, because many accidents occur at night or under certain weather conditions.

However, in the Kintamani tourist area, where there are many freight cars transporting vegetables, fruit and sand, there are still procedural errors in the correct installation and

placement of APCs. Errors that often occur are the placement of APCs in relation to APC colors, and mixing APC colors, APC modifications. This has violated the rules which can reduce the function of the APC itself. Based on the above, a community service was held with the theme Socialization of APC Use on Goods Cars in the Kintamani-Bali Tourism Area.

## METHOD

This community service activity was carried out on November 16, 2023. In general, this community service activity has two series of events, namely socialization and direct installation of APC on the cars of socialization participants. Socialization activities were held in the meeting room of the Kintamani Village office while the direct installation of APC was carried out in front of the Kintamani Village office. This community service activity is a collaboration between the D-III Automotive Technology study program at the Poltrada Bali campus with the local Village Head and the Bangli Regency Police. The number of socialization participants was 11 people consisting of drivers and owners of freight cars. On this occasion, cadets were given to deliver material to the participants by giving presentation material and providing question and answer sessions to participants regarding material that had not been understood so that the participants heard and understood what was conveyed. In addition to getting the material, participants are also required to carry out pre-test and post-test as an instrument to determine the success of socialization. After the socialization activity was completed, it was continued with the provision and installation of APC directly to the owner of the freight car.

## RESULTS AND DISCUSSION

Socialization activities related to the use of APC on freight cars in Kintamani in the framework of safety campaign activities and with the improvement of human resources which became the level of achievement, namely:

### Program Success

This community service activity is able to provide knowledge and understanding to freight car drivers so that they can become anticipatory and safe drivers for the realization of a safe, comfortable and safe driving climate. By providing knowledge and direct practice to drivers, it is hoped that freight car drivers can understand the importance of being anticipatory and safe drivers, especially awareness of the use of APC. The success of socialization is measured by the results of pre-test and post-test. The results of pre-test and post-test can be seen in the following graph.

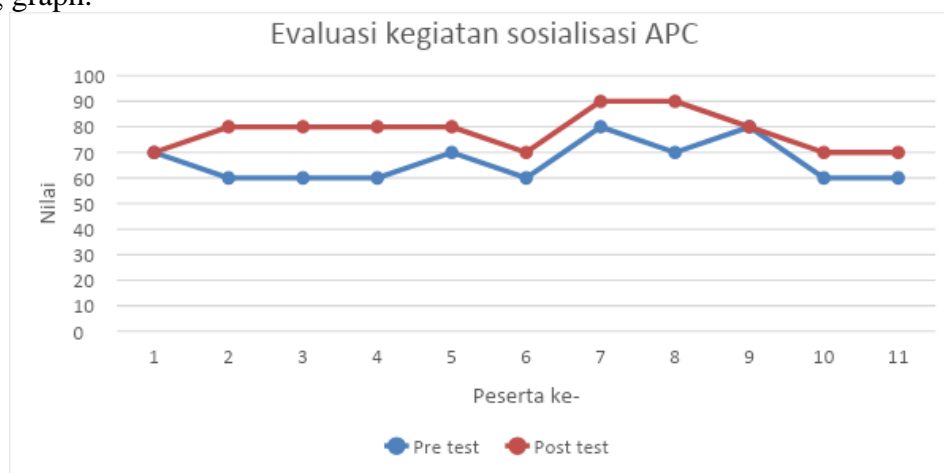


Figure 1. Graph of pre-test and post-test results

From the graph above, it can be seen that eight out of 10 people experienced an increase in knowledge about the socialized theme. While two people had the same pre-test and post-test scores. From this description, we can know that the socialization was successful because more than 70% of participants experienced an increase (Magdalena, et al., 2021).

### **Supporting Factors**

The supporting factors for this community service activity are the participation of very enthusiastic participants and the cooperation of the Kintamani Village Head who provided a place and supporting equipment. In addition, the cooperation of the entire Land Transportation Polytechnic team involved.

### **Inhibiting Factors**

During the community service activities, there were no inhibiting factors that disrupted the course of the event. The socialization participants were very enthusiastic and even actively asked questions related to several things that the participants did not understand, both the provision of material carried out in the room and practice in the field.

### **Stages of activity implementation**

#### **Preparation Stage**

Community service activities begin with previsit. This activity was attended by representatives of the Bali Land Transportation Polytechnic Research and Community Service Center (P3M), lecturer representatives, and representatives of cadets from the Automotive Technology study program. The meeting agenda is the planning and presentation of activity plans, socialization materials, and the location of extension activities. the results obtained through this meeting are the results of the material to be socialized during the extension, the division of the team and the explanation of each part, checking the items according to the list that has been prepared, directing the place of implementation of community service activities.

### **Implementation Stage**

#### **Preparation for socialization**

Before carrying out community service activities, the P3M and the lecturers briefed the cadets. after conducting a briefing from the lecturer, the cadets carried out activities to prepare the place and equipment in the community service area, the activities carried out were the installation of banners, installation of banners, arrangement of chairs, and preparation of equipment for presentations.



Picture 1. Preparation of community service equipment

### **Main activities**

After completing the preparation of equipment, the activity continued with the presentation of material from cadets located in the meeting room of the Kintamani Village Head Office, Bali. The activity began with a joint prayer, singing the Indonesia Raya song and remarks from the P3M Party and the Head of Kintamani Village, then the presentation of material on the use of APC on freight cars. At the end of the presentation of the material held question and answer to the participants regarding the material that has not been understood and continued the submission of goodie bag and voucher shopping to participants with the highest post-test value. After completing the activity, the participants and the community service committee practiced installing a good and correct APC to the owner of the freight car. Here are some documentation of related activities.



Figure 2. Material Presentation



Figure 3. Distribution of pre-test and post-test to participants



Figur 4. prize distribution to active participants and those with the highest post-test scores.



Figur 5. Group photo session



Figure 6. Installation APC

## **CONCLUSION**

Community service activities in the D-III Automotive Technology Study Program, Bali Land Transportation Polytechnic have been carried out, the target of this activity is the driver of a freight car in the Kintamani tourist area. It is hoped that after the participants are given material about the use of APC (light reflecting device) on freight cars, participants will gain new knowledge about the importance of using additional safety equipment on freight cars. The success of this socialization is measured by the results of post-test which is higher than pre-test after socialization.

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