EVALUATION OF THE PROVISION OF PEDESTRIAN PATHS FOR PERSONS WITH DISABILITIES IN TEMANGGUNG REGENCY

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Abstract

This study aims to determine the application of the Regulation of the Minister of Public Works of the Republic of Indonesia Number 30 / PRT / M / 2006 concerning Facilities and Accessibility in Buildings and Environment (construction of pedestrian paths) for persons with disabilities in Temanggung Regency. The number of respondents used was 98 people. The analytical tool used in this research is Gap Analysis. The results of the gap analysis research show that the percentage of the provision of pedestrian paths for people with disabilities in Temanggung Regency is 33.33%, which means that the implementation of the provision of pedestrian paths for people with disabilities in Temanggung district has been poor.

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INTRODUCTION

About 15 out of 100 people in the world have a disability. Between 2 - 4 out of 100 people have severe disabilities (World Report on Disability, WHO 2011). With increasing life expectancy, there is a tendency for people with disabilities to increase. Therefore, to increase public awareness of persons with disabilities, and provide support in efforts to improve the dignity, rights and welfare of persons with disabilities, December 3 was declared the International Day of Persons with Disabilities (IDPWD) in 1992 by the General Assembly. UN. The IDPWD commemoration aims to raise awareness of the benefits of integrating
persons with disabilities in every aspect of political, social, economic and cultural life.

One of the strategic options for implementing good governance in Indonesia is through the delivery of public services. Public services are a benchmark for the success of implementing tasks and measuring government performance through the bureaucracy (Maryam, 2016). The type of public service that people are entitled to is accessibility services. One of the provision of accessibility is physical access, namely public road accessibility by providing pedestrian paths (sidewalks) for persons with disabilities.

According to Sembor (2016), the pedestrian path is one of the urban public open spaces that must be accessible to all people, including the blind (people with disabilities). Disability is not a mere disability but is the result of the interaction of limitations experienced by a person with their environment, not just physical or mental, but is a multi-dimensional phenomenon consisting of bodily functions, activity limitations, barriers to participation and environmental factors (Kemenkes RI, 2016).

In general, every regency / city has built pedestrian lane facilities and infrastructure. Indonesia has Law Number 8 of 2016 concerning Persons with Disabilities which replaces Law Number 4 of 1997 concerning Persons with Disabilities who are deemed not to have a human rights perspective, are more compassionate in nature and fulfillment of the rights of persons with disabilities is still considered a social problem whose rights fulfillment policies new in the form of social security, social rehabilitation, social assistance, and improvement of social welfare. Persons with disabilities should have equal opportunities in efforts to develop themselves through self-reliance as human beings with dignity.

Every citizen has the same right to get the maximum services provided by the government without exception. Public space is an access to socialize and exchange opinions between one community and another. Accessibility is the convenience provided for people with disabilities in order to realize equality and opportunity and all aspects of life and livelihood as an ease of moving through and using buildings and the environment by paying attention to smoothness and feasibility (Hadi, 2019).

The accessibility of sidewalks for persons with disabilities refers to the Regulation of the Minister of Public Works of the Republic of Indonesia Number 30 / PRT / M / 2006 concerning Technical Guidelines for Facilities and Accessibility in Buildings and the Environment. The regulation explains that on the sidewalk there must be tiles with a guide texture for people with visual impairments, also known as guiding blocks. Pedestrian path users are not only blind persons with disabilities, but all types of people with disabilities are also entitled to enjoy the available public facilities.

Ladner (2014) states that diffability may occur because of congenital nature, accidents, war, disease or due to careless medical procedures. They need special attention and a special place that makes it easier for them to move around in public places. Pedestrian paths should be able to meet the criteria used by community groups, including elderly residents, people with disabilities, women (who are currently pregnant) and children.

Central Java Province in 2019 was awarded the most integrity province in Indonesia by the Corruption Eradication Commission (KPK). According to the Governor of Central Java, Ganjar Pranowo, this success was due to system reform and the continued process of digitizing the system. Namely, the application of e-government, e-budgeting, management of gratuities, reporting of LHKPN (State Administration Service Assets Report) to community services through social media. This means that the government system in Central Java is very well structured and well cared for, especially in terms of the need for facilities and infrastructure as well as public services. Almost all of the facilities and infrastructure in districts / cities throughout Central Java have been good and understood by the government, however not all districts / cities have become disability-friendly areas.

Regarding policy regulations for persons with disabilities in Central Java, there is already a Central Java Governor Regulation Number 11 of 2014 concerning Fulfillment of the Rights
of Persons with Disabilities in Article 79 paragraph (1), (2), (3), (4), there are regulations stating that the Government Regency / City / Agency, builds / implements public facilities and infrastructure as well as an environment that must be equipped with the provision of accessibility for persons with disabilities. With regard to the Regulation of the Minister of Public Works of the Republic of Indonesia Number 30 / PRT / M / 2006 and Regulation of the Governor of Central Java Number 11 of 2014 concerning persons with disabilities, it is very appropriate for persons with disabilities to be given access to take advantage of public facilities, by providing elements of supporting facilities. for those with disabilities such as pedestrian paths, guide lines, special parking areas for disabilities, ram, handrails for persons with disabilities, seats with disabilities and special markers for persons with disabilities. In addition, policy interpretation activities are also followed by activities to communicate policies (socialization) so that all stakeholders can know and understand what are the directions, goals, targets (target groups) and more importantly they will accept, support and even secure the implementation of the policy. (Hasanah, 2017).

SAKERNAS (National Employment Survey) published by the Central Statistics Agency (BPS) in 2016 estimated that the number of people with disabilities in Indonesia was 12.5% of the approximately 266 million Indonesian citizens. 12.5% is a number capable of affecting the stability of state administration. The results of the 2016 survey recapitulation of persons with disabilities, the Central Java Province Social Service, stated that Central Java has approximately 92 thousand people with disabilities who are spread across all districts / cities in Central Java.

Central Java is a province with quite complete facilities and infrastructure but not all regions have implemented diffable-friendly public facilities. Persons with disabilities also need public facilities to support their activities and easy-to-reach facilities, namely pedestrian paths. Of the 35 districts / cities that exist, there are 29 districts and 6 cities with different numbers of people with disabilities in each region. Here are 5 regions with the highest disabilities in Central Java.

### Table 1. Number of Persons with Disabilities in Central Java Province in 2016

<table>
<thead>
<tr>
<th>No</th>
<th>Regency</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Temanggung</td>
<td>8,204 people</td>
</tr>
<tr>
<td>2.</td>
<td>Magelang</td>
<td>7,380 people</td>
</tr>
<tr>
<td>3.</td>
<td>Wonogiri</td>
<td>5,274 people</td>
</tr>
<tr>
<td>4.</td>
<td>Banyumas</td>
<td>5,106 people</td>
</tr>
<tr>
<td>5.</td>
<td>Banjarnegara</td>
<td>4,859 people</td>
</tr>
</tbody>
</table>

Source: Central Java Province Social Service, 2016

Based on table 1, explaining the highest number of people with disabilities in Central Java is located in Temanggung Regency. Therefore, it should be the obligation of the Temanggung Regency government to provide facilities and infrastructure that are proportional to the number of persons with disabilities and adequate or according to standardization so that the rights of the people with disabilities are also properly fulfilled. An area can be said to be an inclusive region, seen from how sensitive the government is to minorities and how the government tries to involve them in all government, economic, and other activities.

According to the Integrated Social Welfare Data (DTKS) of Temanggung Regency in the period of October 2019, the number of people with disabilities reached 5,473 people. The data consists of the number of persons with disabilities with types of physical disabilities / disabilities of 1,469 people, blind / blind 528 people, 382 deaf people, 251 deaf people, 251 deaf and speech deaf people, 73 blind and disabled people, deaf and speech blind 40 souls, deaf speech and bodily disabilities 95 people, blind speech and bodily disabilities 52 souls, mentally retarded 1,281 people, former mental disorders 429 people, physical and mental disabilities 622 people (District Social Service Temanggung, Year 2019).

In accordance with the Regional Long-Term Development Plan (RPJPD) of Temanggung Regency 2005-2025, in Chapter II of the General Conditions of the Region, the Social points stated that "Social development
includes handling neglect of children and the elderly, disabilities, social disabilities, natural disasters and social disasters. Facilitation of poverty reduction. The challenge in social development is that there are still quite a lot of poor people and the handling of Persons with Social Welfare Problems (PMKS) has not been optimal”.

In addition, in the 6 Missions of Temanggung Regency, which are contained in the RPJPD of Temanggung Regency, one of them is in point number 4 which reads "Realizing the availability and equity of basic service facilities and infrastructure in order to increase accessibility and economic and non-economic mobility, regional development and reduce inequality between regions, which are characterized by the following:

1. The increasingly stable quantity and quality of the provision, development and maintenance of various public infrastructure and facilities, particularly basic public service infrastructure and facilities, which have an impact on improving the quality of human resources.

2. The strengthening of regional capacities is supported by the increasing participation of the private sector and the community in the provision and development of public infrastructure and facilities.

3. The more stable development of infrastructure and facilities at economic centers to encourage the acceleration of regional economic growth, increase accessibility and economic mobility of the community, which has an impact on reducing the level of inequality between regions.

One of the facilities built to support community activities, including persons with disabilities, is the pedestrian route where the allocation of funds is obtained from the regional revenue budget (APBD), where APBD funds are also obtained through tax collection from the community. The local budget budgeted by the Temanggung Regency government for the construction of pedestrian paths in 2019 is IDR 105,778,965,000.00 (DPUPKP, Temanggung Regency). With a large enough budget, it is hoped that the government can provide good and fair services in the arrangement and construction of pedestrian paths which will later have an impact on the economic activities of the community in their daily lives, besides that the realization of equality and equality as fellow citizens can be achieved.

The construction of pedestrian paths on several roads in Temanggung Regency is still not according to standardization because of the basic size of the space (length, width, height), there are still many damaged pedestrian paths. Parking areas for people with disabilities are also very rarely seen, the signs used for the convenience of people with disabilities are not all up to standard, street lights in some areas are still not suitable for people with disabilities so there are many black spots in some places, trash bins for people with disabilities are still not suitable standard, there are still many street vendors who sell and park their vehicles on the pedestrian lane (survey, 27 December 2019).

This is of course very disruptive to mobility activities for pedestrians, especially persons with disabilities in the safety and comfort of public facilities. Access to public services is limited and has implications for inhibiting the participation of persons with disabilities, which in turn can have an impact in the social and economic fields. The low level of participation affects the high poverty rate which in turn increases the risk of persons with disabilities.

Persons with disabilities are among the poorest and most vulnerable in developing countries. Poverty is a cause and consequence of disability and is in the vicious cycle of economic loss and social exclusion faced by many persons with disabilities, creating a greater risk of further damage due to limited access to land, health care, healthy food, shelter, education and safe work (Yeo 2001, EDF 2002). Most studies emphasize the importance of recognizing that the relationship between disability and poverty is complex and varies by country and context (Metts 2000, EDF 2002, Mitra et al 2011).

According to Metts (2000), there are significant economic benefits associated with increasing the accessibility of the built environment. Metts states that existing research on the relative costs and benefits of accessible design has shown that research to evaluate the impact of increasing the accessibility of the built
environment is valuable and easy to do. According to Amartya Sen (2004) it is useful to understand why the main schools of thought in the theory of justice tend to ignore this central issue, and how this neglect, in turn, tends to bias practical policies towards inaction, and has even contributed to suppressing the sense of inadequacy that is can reasonably accompany failure to take a responsible view of the social obligations to persons with disabilities. Sen (2004) suggests extending the existing equity theory of income distribution to include income disability and disability conversions from people with disabilities. In accordance with what is stipulated by the Central Java Governor Regulation Number 11 of 2014, it is necessary to know how to implement pedestrian paths for people with disabilities in Temanggung Regency.

METHOD RESEARCH

The research method used in this research is quantitative descriptive research method. According to Wahyudin (2015) the descriptive research method is research conducted to describe or describe a particular concept, variable or object in more depth with a view to developing the quality of a concept, variable or object to be better. Quantitative research is research that is used to examine a specific population or sample. This study seeks to provide a systematic and accurate description of the evaluation of the provision of pedestrian paths for persons with disabilities in Temanggung Regency.

The type of data used in this study is secondary data. Secondary data is data obtained from graphic documents such as tables, notes, photos, recordings, videos and others that can strengthen primary data (Arikunto, 2010). Secondary data in this study data on the number of people with disabilities in Central Java obtained from the Social Service of Central Java Province and the Social Service of Temanggung Regency. The sampling technique to answer the first research question. Gap analysis in this study used purposive sampling. This sampling is to determine what fits the criteria required by the researcher. The determination of the number of samples in this study used the Slovin formula with a 10% estimation tool with a total population of 5,473 consisting of various types of people with disabilities:

\[ n = \frac{N}{1 + Ne^2} \]

Information:
- \( n \) = sample size
- \( N \) = population size
- \( e \) = margin of error / error tolerance

\[ n = \frac{N}{1 + Ne^2} = \frac{5473}{1 + (5473)(0.1)^2} = 98.20 \approx 98 \text{ persons} \]

The data analysis technique used in this research is gap analysis. Gap analysis is an analysis method with a bottom up opinion that can be used as an analysis technique for a type of formal evaluation where there is already a formal document regarding a policy or program so that the gap (disparity) between factual conditions and planned conditions can be assessed and can be recommended a action changes to the next policy to improve the previous policy. In this research, Gap Analysis is used to provide an evaluation of the implementation of the Minister of Public Works Regulation No. 30 / PRT / M / 2006 concerning Technical Guidelines for Facilities and Accessibility in Buildings and the Environment which includes the provision of facilities and pedestrian access for persons with disabilities in Temanggung Regency. In addition, Gap Analysis is also used to determine the perceptions of pedestrian lane users, especially persons with disabilities, regarding the application of the Minister of Public Works Regulation No. 30 / PRT / M / 2006 concerning Technical Guidelines for Facilities and Accessibility in Buildings and the Environment.

RESULT AND DISCUSSION

Gap analysis in this study was used to determine how far the achievement and gaps in the application of the Minister of Public Works Regulation No. 30 / PRT / M / 2006 concerning Technical Guidelines for Facilities and Accessibility in Buildings and Environment (construction of pedestrian paths) for persons with disabilities in Temanggung

Regency. Gap analysis is carried out by calculating the perceptions of people with disabilities on the conditions and developments in the implementation of the construction of pedestrian paths for persons with disabilities in Temanggung Regency, which consists of basic space sizes, pedestrian paths, guide lines, parking areas, RAM, signs and markers in Temanggung Regency.

Having obtained the magnitude of the perception of people with disabilities is then performed comparing the actual condition of the construction of pedestrian path for persons with disabilities in Temanggung district with ideal conditions in accordance with the Regulation of the Minister of Public Works No. 30 / PRT / M / 2006 on Technical Guidelines for Facilities and Accessibility in Buildings and Environment.

Efforts to realize the implementation of the provision of pedestrian paths for persons with disabilities are listed in the Temanggung Regency RPJPD 2005-2025. The RPJPD contains the mission of Temanggung Regency, one of which is "Realizing the availability and equity of basic service facilities and infrastructure in order to increase accessibility and mobility of economy and non-economy, regional development and reduction of disparities between regions". This mission implies that development in Temanggung Regency is prioritized on the ability of the region to carry out mutually beneficial cooperation in the development, provision, development and maintenance of various public infrastructure and facilities, especially infrastructure and basic public service facilities that have an impact on improving the quality of human resources. The more stable development of infrastructure and facilities at economic centers to encourage the acceleration of regional economic growth, which has an impact on reducing the level of disparity between regions. Therefore service is provided to all people without exception. To realize this mission, Bappeda of Temanggung Regency formulated several strategies which were included in the RPJPD of Temanggung Regency for 2005-2025.

The provision of pedestrian paths is intended for all types of persons with disabilities without exception so that they can move safely and comfortably from one place to another without worrying about their safety. The results of the gap analysis of all indicators of implementing pedestrian paths for persons with disabilities based on the Minister of Public Works Regulation Number 30 / PRT / M / 2006 concerning Technical Guidelines for Facilities and Accessibility in Buildings and the Environment show that the implementation of providing pedestrian paths for persons with disabilities in Temanggung Regency so far it has not been implemented according to the standards applied in other words, the provision of pedestrian paths is still poor, the funds budgeted by the Temanggung Regency government from the Regional Budget are quite large for the construction of pedestrian paths, these funds are also obtained from taxes and public levies that should be able to provide services that are in accordance with the expectations of the community so that later economic activities or public activities of the community without exception, people with disabilities can be realized in accordance with their rights as citizens, besides that the realization of equality and equal rights can be achieved, but in fact, not all people with disabilities can feel / carry out public activities independently without worrying about accidents or roadblocks.

This is not in line with public economic theory, according to Sen (2004) in his speech stating "I think it is useful to understand why the main schools of thought in the theory of justice tend to ignore this central issue, and how this neglect, in turn, tends to bias practical policies towards the direction of indolence, and has even contributed to suppressing the sense of inadequacy that can naturally accompany failure to take a responsible view of the social obligations to persons with disabilities ". Sen (2004) suggests extending the existing equity theory of income distribution to include income disability and disability conversion of disabled people. Therefore, it is necessary to improve public facilities for people with disabilities so that all people can experience policies fairly from the government and evenly without any exceptions to certain areas and certain communities. The availability of pedestrian
path infrastructure and facilities is not sufficient both in quality and quantity. There is no pedestrian leveling in each area. The use of pedestrian paths has not been optimal it is often used outside the interests of road users.

The assessment of each indicator is carried out by the scoring method of indicators from the 2006 Minister of Public Works which is focused on 6 aspects, namely the basic size of space, pedestrian paths, guide lines, parking areas, RAM, signs and markers. The next step in the indicator assessment is to calculate the percentage of pedestrian paths based on the results of the assessment of the six indicators. After obtaining the percentage value of the pedestrian path implementation indicator, the criteria for the percentage value are determined to determine how successful the implementation of the Minister of Public Works Regulation No. 30 / PRT / M / 2006 concerning Technical Guidelines for Facilities and Accessibility in Buildings and the Environment (construction of pedestrian paths) for persons with disabilities in Temanggung Regency. The following are the results of the research on the magnitude of the perceptions of people with disabilities on the actual conditions of the construction of pedestrian paths for persons with disabilities in Temanggung Regency:

**Figure 1. Perceptions of People with Disabilities on Basic Size of Space**

Source: Primary data processed, 2020

Space is a container (space) for people to do activities. An area, both rural and urban, from year to year always develops in line with the increasing activity of its population. The fact shows that efforts to provide space often become a problem because space is a limited natural resource, so it demands an efficient and optimal use of it. This certainly has an impact on the size of the pedestrian lane construction which causes the pedestrian building to have a narrow size so that it is far from the standards that should be applied, therefore it is necessary to make efforts to expand the basic size of the space so that people, especially persons with disabilities, do not feel that there are obstacles or difficulties when walking around sidewalk.

This is in line with the results of previous research conducted by Sembor, Pingkan, Judy, and Waani (2016) which states that the basic size of the sidewalk is widened again so that a special place for blind people can carry out their daily tasks and make it easier for them to be there. this is because blind pedestrians often collide with other pedestrians besides that flower pots placed on the sidewalk often interfere with activities on the sidewalk. The formulation of building and environmental plans is aimed at controlling development documents in the management of building and environmental arrangements for a certain environment / area in order to meet the criteria for sustainable building and environmental planning, including meeting building and environmental requirements, improving the quality of life of the community through improving environmental quality and public space, embodiment of environmental protection and increase the vitality of the environmental economy.

Based on the results of distributing questionnaires to people with disabilities who need a wide space for activities in public places, the perception of people with disabilities on the average performance of the basic size of space in Temanggung Regency is still quite good, with a value of 44.55%. This indicates that the development of the basic size of the space as a whole is not yet maximal and is still below 50%. This is due to limited land, and the number of buildings that are close to or adjacent to the main road, making it difficult to construct a basic size of space that meets the standards for persons with disabilities.

The existing pedestrian path in Temanggung Regency is one of the important elements in the city that supports the mobility of the population and cannot be separated from road users, especially pedestrians, both those
Pedestrians with poor physical conditions and not yet fully in accordance with the standard requirements are considered unable to provide a special space for pedestrians that is humane, safe and comfortable to pass and accessibility for pedestrians with special needs or physical limitations such as children, pregnant women, elderly people and people with disabilities. Therefore, to support community activities, it is necessary to provide pedestrian paths that are friendly to persons with disabilities and in accordance with applicable facilities and accessibility. This is in line with the results of previous research conducted by Sary and Kamil (2018) which also state that the pedestrian paths in the research object have not met the applicable standard requirements, it is still necessary to repair pedestrian paths for disabilities.

Based on the results of distributing questionnaires to people with disabilities in Temanggung Regency, the perception of people with disabilities on the average performance of pedestrian paths is quite good, with a value of 43.31%. This indicates that the development of pedestrian paths as a whole has not been maximal and is still below 50%. The low level of performance is due to the fact that the provision of pedestrian paths is not friendly to persons with disabilities because the construction has not been optimal and is not in accordance with the standards that should be applied, so that the community, especially persons with disabilities, feel uncomfortable and less safe in using these facilities, as well as the construction of pedestrian paths that are not evenly distributed in all areas, also causing limited space for people with disabilities to use facilities and accessibility of public open spaces.

The yellow line on the side of the road or people usually call it a guiding block / guide lane is a facility for people with disabilities, especially the blind. The dot pattern is for the stop warning, and the line pattern is for directions to keep going. This guiding block is not made carelessly. There are standard contours that are applied so that it is easily recognized by persons with disabilities. Thus, they are expected to be able to walk side by side with pedestrians in general. Nearly all of the construction of guide lines in Temanggung Regency use yellow / orange tiles, but not all yellow tiles are easily understood by people with disabilities, especially blind people because of the damage / quality of the tiles that are not good enough, besides that they become places for street vendors (street vendors) five) to trade.

This is in line with previous research conducted by Hasanah (2017) which states that public road accessibility services (pedestrian) for people with disabilities are still not good, this can be seen that there are many pedestrians (guide paths) being built which should function for pedestrians with disabilities but many change functions such as places for street vendors (PKL) to sell, as parking lots for motorbikes, both two-wheeled and four-wheeled, and there are still many damaged pedestrian paths and their construction is not in accordance with standards.
Based on the results of distributing questionnaires to people with disabilities in Temanggung Regency, users' perceptions of the average performance of the guide line in Temanggung Regency were classified as poor with a value of 39.92%. This indicates that the development of the guide route as a whole has not been maximized and is still below 50%. The low level of performance of the guide lane is due to the construction of a guide lane adjacent to electric poles, trees, the general public who park their motorbikes in the middle of the lane, and there are still people selling in the middle of the route so that people find it difficult to use the guide lane let alone add it. With eyes that cannot see, in addition to that, the damage in several points of the road segment also makes it difficult for users of the guide route, especially people with visual impairments.

**Figure 4. Perceptions of People with Disabilities on Parking Areas**

Source: Primary data processed, 2020

The parking area is a parking area for vehicles driven by persons with disabilities, so that a larger space is needed to get on and off the wheelchair, than the usual parking space. Meanwhile, the area for loading and disembarking passengers (Passenger Loading Zones) is a place for all passengers, including people with disabilities, to get on or off the vehicle. The disabled parking is located on the closest route to the intended building / facility, with a maximum distance of 60 meters.

The minimum depth of the passenger boarding area from the road or busy traffic lane is 360 cm and with a minimum length of 600 cm. With the size of a parking lot like this, wheelchairs can get in and out safely and comfortably. To make it easier for users whether the parking area they use is for people with disabilities or not, a dillable symbol is used, right in the middle of the parking lot. In Temanggung Regency, it is still very rare to find special parking areas for people with disabilities, most of which are still mixed with parking lots for normal people, of course this also makes it difficult for people with disabilities to park their vehicles. This is in line with previous research conducted by Widanan, Linggasani, and Wicaksana (2018) which states that the parking lot is still using the road or on the side of the road and there is no special parking for the disabled is not yet available.

Based on the results of distributing questionnaires to people with disabilities in Temanggung Regency, it was found that the community's perception of the average parking area performance in Temanggung Regency was classified as bad with a value of 21.12%. This indicates that the development of the parking area as a whole has not been maximized and is still below 50%. The low level of performance of the parking area is because it is still very rare to find special parking areas for people with disabilities in Temanggung Regency, both in the city square, market, open space park areas, or other public places in Temanggung Regency. Therefore, it is very difficult for people with disabilities who usually use private vehicles, they have to park their vehicles together with the community in general, which certainly makes it difficult for them (people with disabilities).

**Figure 5. Perceptions of People with Disabilities on RAM**

Source: Primary data processed, 2020

RAM is a circulation path that has a certain slope as an alternative for people who cannot use the stairs. The first requirement is that the slope of a ram inside the building must not exceed 7 degrees, the slope calculation does not include the crub ramps / landing, while the slope of a ram outside the building is a
maximum of 6 degrees. Second, the horizontal length of one ram at an inclination of 7 degrees) should not be more than 900 cm. The length of the ram with the lower slope may be longer. Third, the minimum length of the ram is 95 cm without a safety edge, and 120 cm with a safety edge. The conditions and developments in the application of RAM in Temanggung Regency have not all complied with the determined standards because not all places have a handle that should make it easier for people with disabilities to walk in public places. This is in line with the results of previous research conducted by Pratama (2016) which states that the two pedestrian paths, namely (on Jalan Pahlawan and Pemuda) cannot be said to be suitable for people with disabilities due to the lack of quality of the two pedestrian paths, besides RAM is not feasible because there is grip and separation with the vehicle. The results of previous research conducted by Therawati (2019) stated that the ramp still has many shortcomings which initially aimed to make it easier for people with disabilities to use Trans Semarang facilities but in fact disabled people have difficulty climbing the ramp.

Based on the results of distributing questionnaires to people with disabilities in Temanggung Regency, the perception of people with disabilities on the average RAM performance in Temanggung Regency was classified as bad with a value of 32.75%. This indicates that the overall RAM development is not maximal and is still below 50%. The low level of RAM performance is due to the construction of RAM not all according to the specified standards, this makes people with disabilities, especially wheelchair users, find it difficult to use RAM because RAM construction is too steep and some are slippery so that people feel worried about their safety.

Signs and markers are facilities and building elements that are used to provide information, direction of markers or directions, including multimedia information and communication devices for persons with disabilities. The types of signs and markers that can be used include those that can be used by people with disabilities, namely deaf emergency light alarms, audio for the deaf, teletext facilities for the deaf, light signs (information boards), tv text facilities for the deaf, sign language facilities (sign language), however, in Temanggung Regency, the facilities for signs and markers needed for people with disabilities are not yet fully available. This is in line with previous research conducted by Syafi’ie (2014) which states that for people with visual disabilities, what is most needed is an audio system, such as talking lifts, architecture that has braille on the handle of the stairs, warning blocks on public roads. Based on the results of distributing questionnaires to people with disabilities in Temanggung Regency, the perception of people with disabilities on the average performance of signs and markers in Temanggung Regency was classified as bad with a value of 34.62%. This indicates that the development of signs and markers as a whole is not maximal and is still below 50%. The low level of performance in the provision of signs and markers is due to the lack of provision of symbol facilities and accessibility of existing signs and markers, and the lack of socialization and communication from the government to people with disabilities regarding the function or use of these signs and markers.

From the results of the assessment of the perceptions of the people with disabilities on the performance of the implementation of the six indicators of the provision of pedestrian paths for persons with disabilities and from direct observation, an assessment of each indicator is obtained using the scoring method as follows:

Percentage of Provision of Pedestrian Paths for Persons with Disabilities = $\frac{8}{24} \times 100\% = 33.33\%$

Figure 6. Perceptions of people with disabilities on signs and markers

Source: Primary data processed, 2020
From the above calculations, the percentage of the provision of pedestrian paths for people with disabilities in Temanggung district is 33.33%, which means that the implementation of the provision of pedestrian paths for people with disabilities in Temanggung district has been poor.

**CONCLUSION**

Based on the results of research that has been conducted on gap analysis of pedestrian paths for persons with disabilities in Temanggung Regency, it can be concluded that the Implementation of the Regulation of the Minister of Public Works of the Republic of Indonesia Number 30 / PRT / M / 2006 concerning Technical Guidelines for Facilities and Accessibility in Buildings and the environment (pedestrian path development) for persons with disabilities in Temanggung Regency according to the perception of persons with disabilities, shows a percentage of 33.33% which means that it is still bad.

Based on the results, discussion and conclusions in this study, the suggestions that can be given are the implementation of pedestrian lane facilities for persons with disabilities must be met and according to standards by paying attention to the regulation of the minister of public works of the Republic of Indonesia Number 30 / PRT / M / 2006 by revitalizing the existence of sidewalk elements. such as the basic size of space, trees, electric poles, trash cans, certain signs or markings, downhill roads and so on, as well as the provision of special parking areas for people with disabilities to make it easier for pedestrians, especially for persons with disabilities, to take advantage of these public facilities.

**REFERENCES**


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### Table 2. Criteria Pedestrian Path Application

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 20%</td>
<td>Very bad</td>
</tr>
<tr>
<td>21 – 40%</td>
<td>Bad</td>
</tr>
<tr>
<td>41 – 60%</td>
<td>Pretty good</td>
</tr>
<tr>
<td>61 – 80%</td>
<td>Good</td>
</tr>
<tr>
<td>81 – 100%</td>
<td>Very good</td>
</tr>
</tbody>
</table>

Source: Brotodewo, 2010

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Peraturan Gubernur Jawa Tengah Nomor 11 Tahun 2014 Tentang Pemenuhan Hak Penyandang Disabilitas


