

Crowdfunding: An Alternative to Infrastructure Fund (Public Perception Study in Pekalongan Regency)

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Abstract

Infrastructure development is a crucial component of economic growth in a region. A significant issue in infrastructure development is the limited capital or high costs associated. This study aims to identify public perceptions of crowdfunding as an alternative funding source, particularly for infrastructure projects. This study uses a qualitative method with purposive sampling, and respondents were selected from two villages in Pekalongan Regency, taking into account the geographical conditions and characteristics of the area, specifically coastal and rural/mountainous regions. To enhance of study coverage, a survey/interview was conducted using snowball sampling across ten areas targeting traditional markets. From the in-depth case studies in the two areas, distinctions in community characteristics and funding types can be identified. Jeruksari Village, a coastal area, has challenges with RTLH (uninhabitable houses) and environmental infrastructure conditions. Crowdfunding is prioritized for road construction. The residents of Jeruksari Village generally support a joint fund for financing infrastructure, focusing on road and bridge infrastructure, sanitation facilities, and RTLH. Krandon Village, as a rural area, prioritizes road and bridge construction to facilitate the distribution of goods and people due to its proximity to the district capital. The village community supports crowdfunding, predominantly of labour as cooperation. The survey results show that the infrastructure prioritized health support facilities and clean water irrigation systems. The survey conducted at various market points in Pekalongan Regency indicates that the residents are inclined to participate in crowdfunding for physical development in their area by contributing as labour. However, the community is willing to donate money, materials or food for those with limited time or lacking village consensus. The infrastructure most in demand for assistance includes educational facilities, uninhabitable houses (RTLH) and roads/bridges. The recommended approach is establishing an institution that can effectively bridge the interests and needs of infrastructure funding within the community, ensuring trust and clear accountability.

Keywords: Crowdfunding, Regional Infrastructure, Regional Development

1. Introduction

Infrastructure development is an essential aspect of the economic growth of a region. Economic growth is influenced by several things, including natural resources, human resources, natural resources, and capital accumulation in infrastructure (Suriani and Cut Nada Keusuma, 2015; Maqin, 2011). Kustanto's research (2020) indicates that infrastructure has a positive relationship with economic growth, with the infrastructure variables including roads, electricity, and clean water. Although infrastructure is crucial and has been shown to impact economic growth positively, its development in Indonesia remains suboptimal (Arifin & Wisudanto, 2017). A well-developed infrastructure can enhance investment attractiveness, improve regional accessibility, and lower

transaction costs (Shkarlet et al., 2021). Infrastructure development must consider both backward and forward linkages and eliminate existing barriers to promote regional integration (Joshua, 2019).

Based on the Regional Regulation (PERDA) of Pekalongan Regency Number 5 of 2021 regarding the Medium-Term Development Plan of Pekalongan Regency for 2021-2026, the Pekalongan Regency Government has commenced the optimization of road infrastructure development at various locations. This aims to ensure that infrastructure development is uniformly experienced in lower areas (coastal plains) and upper areas (mountains). There are three priority programs: free education, health services, and the provision of equitable public infrastructure. The issue of limited funding for infrastructure in regional development is complex and influenced by multiple factors. Suwana & Setyobudi (2020) highlighted the suboptimal performance of local governments in infrastructure development, particularly in road and drainage systems. Efraty Kandiyoh et al. (2022) added the perspective of affected communities, who generally view infrastructure development positively but also emphasized the necessity for cultural considerations in regional development, as noted by Ola (2021). These studies collectively underscore the need for a more effective and culturally sensitive approach to infrastructure funding and development in regional areas. Budget constraints in regional infrastructure development can be addressed through several strategies, including the Government and Business Entity Cooperation mechanism or Public-Private Partnership (Hidayat Djabbari & Husain Tamrin, 2022) and support mechanisms from the Corporate Social Responsibility (CSR) budget (Artiningsih et al., 2019).

In this context, the aim of this study is to explore public perceptions of crowdfunding as a means of financing infrastructure, thereby reducing reliance on the APBD and alleviating the burden on the Government Budget.

The first online crowdfunding project is believed to have occurred in 1997 when fans of the British band Marillion raised US\$60,000 to help finance a North American tour (Zhao et al., 2020), while the term "crowdfunding" itself was first introduced by Michael Sullivan in 2006 when he launched a project in the form of a video blog portal "fundavlog" "reciprocity, transparency, common interest, and public funding" is a description of the simple financial system used in the project. (Gobble, 2012) In 2009 after the success of Kickstarter.com, the term became popular and was used in American media.

Crowdfunding is a method of raising funds from a large number of individuals and has become popular due to its potential to overcome difficulties faced by entrepreneurs or start-up companies (InfoDev, 2013). There are various types of crowdfunding, including donation-based, equity-based, debt-based, and reward-based (Miglo, 2021). Government participation in crowdfunding can increase trust, provide better information, and reduce project risks. The implementation of equity crowdfunding, a type of crowdfunding similar to an IPO, presents several legal issues, especially those related to the use of copyright, debt repayment, and sales security (Horváthová, 2018).

Referring to Sullivan's idea, public funding or crowdfunding can be defined as a fundraising initiative proposed by individuals, teams, organizations, or communities to support the implementation of a project. The collection of small and medium-sized funds from many people for a purpose that usually attracts many people is known as crowdfunding (Ordanini et al., 2011). Anton Miglo defines Crowdfunding as a form of funding or collection. According to him, crowdfunding is a way to get funds from many investors with small contributions to support projects offered by businesses (Lenart-Gansiniec, 2021)

The history of crowdfunding in Indonesia is relatively recent and has developed rapidly. The emergence of various crowdfunding platforms has fueled this growth.. Initially, crowdfunding was primarily used for creative projects such as films, music albums, and art performances. After gaining popularity, this concept expanded into other areas, including social initiatives, startups, and small businesses. Advances in technology and social media platforms also play a crucial role in driving crowdfunding and broadening its user base (Abdullah & Danial, 2015)

When capital crowdfunding was introduced in 2015, it marked a significant milestone in the evolution of crowdfunding in Indonesia. This development allowed investors and entrepreneurs to invest in startups and small businesses in exchange for equity sharing. Over the years, crowdfunding has transformed into an alternative method for raising funds for individuals and organizations that may need help to secure financing from traditional sources. Additionally, crowdfunding has enhanced investment equity by enabling small investors to engage in projects they believe in. However, there are still aspects that require further research and analysis to ensure crowdfunding can effectively contribute to development in Indonesia.

In several prior studies, the relationship between infrastructure and the potential of crowdfunding as an alternative funding source has been explored, including research by Arifin and Wisudanto (2017), which reviewed website content related to crowdfunding and analyzed the types of infrastructure funding and the funding obtained. The findings indicate that the current level of fundraising remains low compared to the total need for infrastructure development, and social capital in crowdfunding plays a crucial role in determining the success or failure of a project submitted for crowdfunding. Research by Efraty Kandiyoh et al. (2022) suggests that public perception of infrastructure development tends to be positive if the public is aware of the benefits derived from such development. Furthermore, research by Rodriguez-Ricardo et al. (2018) examines interpersonal relationships that encourage participation in crowdfunding activities, emphasizing social identification within the community. The results demonstrate that the social identification of the crowdfunding community and the innovations implemented

positively influence the desire to participate; in other words, the attitude of helping others and direct connections will enhance interest in participation.

This study assesses public perception of infrastructure funding, particularly through crowdfunding. By understanding how public perception influences funding, we can identify the types of infrastructure that may be supported by crowdfunding mechanisms. Additionally, it recognizes the potential for addressing other development needs outside of infrastructure that continue to face funding challenges.

2. Research Methods

This study employs a qualitative method utilizing purposive sampling. Respondents were selected from two villages in Pekalongan Regency considering the geographical conditions and characteristics of the area: coastal and rural/mountainous regions. Jeruksari Village in Tirta District represents the coastal area, while Krandon Village in Kesesi District represents the mountainous area. Interviews were conducted using snowball sampling, aligned with the problem issues and research framework previously established at several traditional market locations.

3. Results and Discussion

3.1. Infrastructure Type Analysis

Infrastructure is a key indicator for assessing the economic growth of the local community. Enhancements in infrastructure quality lead to significant social changes within the community. For instance, constructing roads in mountainous regions, where accessibility is often challenging due to rug terrain, significantly improves community access to other areas. Following the road construction, the movement within the area increases, accompanied by the establishment of additional supporting facilities and infrastructure, such as transportation networks, stopping points, and fuel stations. In line with strategic issues and regional development plans for Pekalongan Regency, several infrastructure development priorities have been identified, including roads and bridges, RTLH, clean water, sanitation, health improvements, and education. Below are the types of infrastructure in the Pekalongan Regency, along with initial condition data and performance targets set for the conclusion of the Pekalongan Regency RPJMD.

The Government's and civil society's implementation of infrastructure financing is tailored to the volume of investment allocated for infrastructure. Most financial instruments can be utilized for infrastructure projects with medium to high investment costs. However, several non-government funding instruments, such as corporate social responsibility and philanthropy, can be applied to infrastructure projects with lower investment values (Artiningsih et al., 2019).

Table 1. Infrastructure Financing Based on Investment Value

Num.	Characteristics	examples of infrastructure types	Investment amount		
			High (> 100 B)	Medium (20 M-100 B)	Low (<20 M)
1	economically unviable	roads and bridges	APBN/APBD	APBN/APBD	APBN/APBD
2	Economically feasible and financially viable	clean/drinking water, paid road (toll), hospital	KPBU	KPBU	KPBU
3	economically feasible but not financially viable	waste	APBN/APBD/C SR	APBN/APBD/C SR	APBN/APBD/CSR /Private/ Filantropi
4	social	RTLH, Educational facilities, health facilities	APBN/APBD/C SR	APBN/APBD/C SR	APBN/APBD/CSR /Private/ Filantropi

3.2. Infrastructure financing analysis based on case studies

Based on a case study of the two surveyed areas, the results are as follows:

3.2.1. Jeruksari Village, Tirta District

Jeruksari Village carries out infrastructure development through the Village Budget (APBDes). In addition to using the Village budget, Jeruksari Village carries out various forms of involvement in infrastructure development in its area, such as monetary contributions, donating building materials, labour participation and providing food and drinks. The community's enthusiasm in participating in infrastructure development is relatively high, and they want to provide assistance. In this case, there is no coercion, and it is done voluntarily, such as monetary contributions for development funding will only be made under certain conditions, such as when the aid funds are deemed insufficient. Even in some facility developments, the community voluntarily initiates development and works together without involving the local Government. However, the Jeruksari community cannot always walk alone. The involvement of the government and the private sector is very important.

3.2.1.1. Infrastructure Needs Analysis

Jeruksari Village is one of the villages located in the coastal area, so the most dominant infrastructure needs are roads and bridges. due to the tidal flood that always hits Jeruksari Village, the community's access to the surrounding area is cut off. This is a special concern for the village government and the community living in Jeruksari Village because a financing scheme must be issued every year to ensure that Jeruksari Village is not cut off due to water entering the residential area.

The development priorities planned to be built by Jeruksari Village in 2023 are developing and improving infrastructure quality, especially road networks and RTLH.

The focus of the road construction locations includes RT 1 RW 5, RT 3 RW 3, RT 1, RT 3, RT 6 and RT 7 RW 7. The activities carried out include focusing on road filling for areas most affected by tidal flooding, as well as road casting. Road filling is done using a crowdfunding scheme where residents help fill the road and build road foundations. In addition, the community also participates in the form of providing food to people who do crowdfunding by donating labour.

Development activities are carried out incidentally, where crowdfunding will be carried out every time there is development to be carried out or a situation that requires the community to carry out crowdfunding quickly.

The next development priority in Jeruksari Village is handling RTLH (Uninhabitable Houses). Jeruksari Village is one of the villages with a high poverty rate in Pekalongan Regency and is a priority 1 Village for poverty alleviation where the welfare level of heads of households in Jeruksari Village does not reach 10%, and individuals with the lowest 50% welfare status reach 5,231 people. Compared to the total Population of Jeruksari Village, which is 6,928 in 2020, the poor Population in Jeruksari Village reaches 75% and 25% of them are not included among individuals with the lowest 50% welfare status.

This is exacerbated by environmental conditions where sanitation could be better. Some houses still use toilets that do not have final drainage channels, resulting in the environment becoming dirty and having a slum impression. The RTLH in Jeruksari Village is caused by slum environmental conditions due to less than optimal environmental maintenance, thus adding to the slum area. In addition, the waste disposal facilities that are not yet further processed are exacerbated by the condition of the community still litter (garbage is thrown into the river with the assumption that the garbage will be swept away with the river current), resulting in slums in the Jeruksari Village area. The garbage produced by the community and some small and medium industries in Jeruksari Village is still processed traditionally, without any sorting. It is directly burned at the TPS with the aim of reducing the amount of garbage that continues to increase every day.

3.2.1.2 Analysis of Village Infrastructure Financing Sources

In building infrastructure in a region, of course there is a separate financing scheme budgeted for the development. The budget allocation carried out by the Jeruksari Village Government to build regional infrastructure in its Village uses 3 funding sources consisting of the Government budget (APBN, Provincial APBD, Regency APBD, Village APBD) CSR or its partners and Crowdfunding carried out by the community. For road and bridge networks, the budget allocation is adjusted to the class of road

that crosses the Jeruksari Village area. For district roads, financing is carried out using the Pekalongan Regency APBD scheme. Meanwhile, for neighbourhood roads or roads that require fast handling (such as roads cut off due to access), the community carries out Crowdfunding as an initial stage to evacuate the community and ensure that community accessibility is not hampered. Crowdfunding carried out by the community is in the form of landfilling to build and raise existing roads. Crowdfunding in the community comes from community aspirations is collected when village meeting or emergency conditions require the activity to be executed immediately.

3.2.1.3 Analysis of Public Interest in Crowdfunding Schemes

Based on the results of the survey that has been conducted, the people of Jeruksari Village tend to agree to joint funding for infrastructure. This is due to public awareness of the importance of working together in infrastructure development and not relying on the local Government. Because the location of Jeruksari Village is a tidal flood area, it always experiences tidal flood disasters at any time. So, there needs to be an increase or development of infrastructure intended as a mitigation step for the community against the tidal flood disaster that occurred in Jeruksari Village.

Community participation in the form of labour is a crowdfunding scheme highly sought after by the people of Jeruksari Village compared to other crowdfunding schemes. This is related to the income level of the community, most of whom work as fishermen with uncertain incomes. In addition, Jeruksari Village is included in the coastal underdeveloped villages based on the IDM (Independent Village Indicator) status. Jeruksari Village is also included in priority 1 for poverty alleviation. The Village is in decile one and decile two above the maximum limit, so participation in the form of labour in Jeruksari Village is the most sought-after. The form of labour participation provided by the community is during infrastructure development, where the community will work together to build infrastructure that is a priority for village handling according to the needs and urgency of the problems that occur in Jeruksari Village.

The Jeruksari Village community conducts crowdfunding for voluntary infrastructure financing, where there is no uniformity in the nominal amount of money spent to carry out infrastructure development in the Jeruksari Village area. The crowdfunding carried out is adjusted community's income level in Jeruksari Village. Although paying is mandatory, the nominal amount charged is not same. The most significant amount ever spent by the community was IDR 600,000, used to build a road affected by tidal flood in Jeruksari Village in RW 7 because access was cut off. Crowdfunding what is done in Jeruksari Village is incidental only when construction occurs.

Meanwhile, the nominal crowdfunding tend by the community ranges from IDR 20,000 to IDR 200,000, which is adjusted to the financial capabilities of the Jeruksari Village community. Most respondents are those who have family members of more than 3-4 people, so the nominal amount of money spent on crowdfunding cannot be more than IDR 200,000. In addition, it is influenced by the level of community income, which is less than IDR 2,000,000 per month, at the same time population expenditure based on Susenas statistical data in 2022 is IDR 1,028,896, so the people of Jeruksari Village can only save around IDR 971,104, each month (not including costs for education, emergency funds, and so on).

In the crowdfunding scheme in Jeruksari Village, the community tends to pool their funds for infrastructure development in the form of roads and bridges. This is due to the tidal flood disaster that occurs at any time, so it is necessary to raise the road and improve accessibility to ensure that community access in Jeruksari Village is not cut off due to tidal floods, which results in a decrease in activity intensity, difficulty for the community in accessing other areas, and also hampered distribution of goods for the community in Jeruksari Village. The cut-off road access during tidal floods is why the community is willing to pool their funds for the construction and raising of roads and bridges. In addition, the choice of roads and bridges is the most popular among the community because the burden on the community in improving accessibility in Jeruksari Village is increasingly helped. It is recorded that almost every year Jeruksari Village carries out landfilling, repairs to road and bridge access, and road raising in order to mitigate tidal flood disasters. Because the community no longer has the option to live in a place unaffected by tidal floods due to limited funds, the community of Jeruksari Village tends to have a high level of resilience compared to other areas in the Pekalongan Regency.

In addition to the tidal flood, the people of Jeruksari Village also have difficulty accessing clean water, not only during tidal floods but also on daily. Access to clean water in Jeruksari Village is limited due to the batik industry, whose waste flows into the Jeruksari Village river, polluting the water sources in Jeruksari Village. As a result, not only is clean water difficult to obtain because it is polluted, but the emergence of diseases caused by the use of water contaminated with batik industry waste causes the community to allocate funds for treatment. Jeruksari Village is included in the disadvantaged based on the IDM (Independent Village Indicator) with a value of 0.5827 in 2022 and is one of 4 disadvantaged villages in Tirto District. However, the level of cooperation in the Jeruksari Village community tends to be higher because most of the community is only able to contribute labour rather than money.

Sanitation problems in Jeruksari Village are also why the community chose to build sanitation related to the planned crowdfunding scheme. Poor sanitation conditions are caused by only a few communities having their IPAL. This is exacerbated by the absence of water channels or drainage networks that channel gray water which has an impact on increasing slums in Jeruksari Village. The RTLH problem in Jeruksari Village is not only caused by limited individual financing in meeting housing needs, but also by a decline in environmental quality caused by several things.

The tidal flood disaster causes people to have to raise their houses every year, impacts on people who lack funds to repair and improve the quality of their houses and local residential areas. The absence of

communal IPAL channels and domestic waste disposal, resulted in the area becoming a slum. Limited waste disposal facilities cause many people to throw their waste in the surrounding environment without further processing. The result is a dirty environment and adds to the impression of a slum area.

3.2.2 Krandon Village, Kesesi District

3.2.2.1 Infrastructure Needs Analysis

Krandon Village in 2023 has a priority for developing of educational facilities in the form of the construction of roads and bridges in the form of concreting. This aims to ensure that community access is not disrupted and that distribution of goods and people from Krandon Village to other areas is not disrupted. This area is one of the closest areas to the urban centre in Kajen, with a radius of approximately 6 km, it requires good access for the community. roads and bridges which are in good condition will affect the pull. Citizens received the area that could increase the activity.

In addition to constructing of roads and bridges, supporting facilities for educational activities is also one of the priorities for infrastructure development needs in Krandon Village. Where educational facilities such as kindergartens are available, TPQ is still considered inadequate for the people of Krandon Village. The construction of buildings for kindergartens and TPQ is needed to accommodate the needs of the community for access to primary education for children.

The following infrastructure need is improving the quality of RTLH. Although the urgency of handling RTLH in Krandon Village is not as high as in Jeruksari Village, cases of RTLH are still found in the area. Holistic and comprehensive handling is needed to ensure that the community receiving assistance to improve the quality of RTLH in Krandon Village is the right people.

3.2.2.2 Analysis of Village Infrastructure Financing Sources

Infrastructure financing in Krandon Village consists of funding from Village funds, APBD, and aspiration funds the community received every year. The allocation of physical development that can be carried out by financing through Village funds is not that large, so it is necessary to supply additional funds through stimulus funds in the form of aspiration funds from the council as a form of participation given by representatives of the people. The aspiration funds issued by the council for infrastructure development in Krandon Village are adjusted to the needs of development priorities in Krandon Village as well as the vision and mission of development owned by each political party and adjusted to the vision and mission of regional development in Pekalongan Regency.

3.2.2.3 Analysis of Public Interest in Crowdfunding/ Joint Venture Schemes

Based on the results of the survey that has been conducted, the people of Krandon Village tend to agree to joint funding for infrastructure financing. However, compared to other areas, Krandon Village has a dominant community that tends to be agree less to infrastructure development with the Crowdfunding scheme than other villages. The representative's role council is one reasons why 60% of the people of Krandon Village agreed to crowdfunding for infrastructure development. This is one of the potential funding opportunities for infrastructure development in Krandon Village because of the amount source of funding needed to increase infrastructure financing.

Community participation in infrastructure development provide assistance in the form of labour, because there is no need to spend money to help with development. According to the Krandon Village community, assisting in the form of labour can also foster a sense of cooperation in the community so that this value is not lost along with the times. The Krandon Village community realizes that the value of cooperation in the area where they live is starting to decrease, so donating labour is the greatest participation that can be done to contribute to development. In addition, the Krandon Village community also chooses other assistance options because this assistance is usually rarely seen and is counted as assistance. So that the community can carry out crowdfunding in other forms such as providing food and drinks for workers, providing shelter, and other forms of participation.

Providing money for the crowdfunding scheme is the following popular crowdfunding scheme. Flexibility is one of the reasons why giving money in the crowdfunding scheme is popular with the Krandon Village community. Because the community does not need to spend energy and time during the infrastructure development process. The Krandon Village community has previously conducted crowdfunding for religious activities such as religious studies with a participation of Rp 20,000, which was withdrawn during the social gathering event. Meanwhile, the most significant participation ever issued was for road concreting where the amount of money was adjusted to the financial ability of each KK in Krandon Village and saw the condition of the house of each KK. Whether the community is able or not and if the community is not, they will not be required to conduct Crowdfunding and for people who are able are required to participate. If the community is unable to participate in the form of money, the community can contribute in other forms such as providing labour or giving in other forms such as providing food or drinks when infrastructure development is carried out. The money participation desired by the Krandon Village community is at most between IDR 20,000 and IDR 50,000 per head

of family. If accumulated with the total number of families in Krandon Village, the amount can reach IDR 19 million for a single fund withdrawal if the entire community contributes IDR 20,000 per family. This amount can add funds for physical infrastructure development which usually comes from the APBD funds, Village funds, or aspiration funds received by the Krandon Village community. The funds collected can be allocated in the form of infrastructure development such as the development of health support facilities, the development of educational facilities managed by the private sector (in this case, it can be individuals, it can be in the form of foundations that are part of certain institutions), or stored in the form of Village cash and if at any time needed for highly urgent activities can use the funds that have been collected.

The Krandon Village community tends to allocate funds collected from the Crowdfunding mechanism for the needs of developing educational facilities, starting from building the facilities or completing the available facilities. because many people entrust their children to private educational institutions that are not directly under the auspices of the education office so the community is aware of the need for complete educational facilities and buildings.

In addition to infrastructure development for education, the people of Krandon Village have a tendency to build infrastructure on roads and bridges. This is related to the access owned by the people in Krandon Village, where this area has a reasonably close relationship with the urban service centre in Kajen. So to ensure that the distribution of goods and people is carried out without obstacles, qualified road access is provided, in this case, through the construction and improvement of the quality of roads and bridges in Krandon Village.

Supporting health facilities in Krandon Village is also one of the priorities for the community to be accelerated. The supporting facilities in question are the providing nutritional supplementary food, purchasing medical devices, and ensuring that the community's nutrition is sufficient. The Krandon Village community still needs to have the urgency to build health facilities due to the radius of reach to the Kesesi health centre that can be reached by the Krandon Village community (approximately 3-5 km from the distance of the residential area).

The tendency of other infrastructure development, namely the provision of clean water, is also the community's desire to be accelerated. Clean water in Krandon Village is used for daily activities, and for irrigation needs of rice fields that dominate land cover in Krandon Village. Water stability determines the harvest that can be done by farmers in Krandon Village so a qualified water source is one of the indicators for maintaining agricultural productivity in Krandon Village.

3.3 Analysis of Crowdfunding Potential from Community Philanthropy

Pekalongan Regency has different community characteristics, depending on the geographical conditions and typology of the people living in the area. The characteristics of people living in mountainous areas will differ from those living in coastal or urban areas. Several values are still upheld by coastal and mountainous communities that are starting to disappear in urban communities, namely the spirit of cooperation and concern for the surrounding environment. Although not all urban communities, only some have more financial ability to provide additional funding for development in their environment.

The survey was conducted at several market points in Pekalongan Regency incidentally. Based on the Population of Pekalongan Regency in 2023 of 986,455 people, using the sample calculation technique using the Isaac and Michael method (Yusuf, 2017), it was found that the sample used was 389 samples with a 5% error rate. The set of respondent data from the survey results is as follows.

Tabel 2. Distribution of respondents

No.	Kecamatan	Jumlah Responden
1	Wiradesa	59
2	Bojong	42
3	Tirto	33
4	Doro	28
5	Karanganyar	32
6	Kajen	62
7	Kesesi	30
8	Siwalan	37
9	Petungkriyono	31
10	Wonokerto	35
Total		389

Based on survey results, the people of Pekalongan Regency tend to participate in Crowdfunding for physical development in their area. This is because they do not need to spend money to fund physical development in their area. Participation in the form of providing labour can also increase the spirit of cooperation in the community and a sense of concern for the surrounding environment. In carrying out physical development, the village government can save money on paying workers to work on the development. Simply by initiating the community to participate in the development being carried out, the government is able to save the budget allocated for

development. Given the limited Village funds owned by the Village government, which are then partitioned into several priority areas for handling problems, this form of labour participation is an alternative solution as well as a potential owned by the people of Pekalongan Regency.

In addition to participation in the form of labour, the people of Pekalongan Regency are also willing to do crowdfunding in the form of giving money. This is due to the limitations of those who choose to give money compared to other funding schemes. The limitations in question are being busy working, or the village government having given a mandate to donate money to the physical development that will be carried out. The problem found in the Crowdfunding scheme of giving money is that not all people can to participate in giving money in nominal amounts that are sometimes not small (because physical development requires quite large funds so that to cover the funds that are not achieved, Crowdfunding is carried out in the form of money participation) where some of the people who enter this money- giving scheme have limitations in financing themselves.

Tabel 3. Forms of Community Participation in Infrastructure Financing Crowdfunding

Num.	Distric	Crowdfunding participation form			
		giving as labour	giving money	giving material	others
1	Wiradesa	31	13	5	10
2	Bojong	19	15	3	5
3	Tirto	15	11	1	6
4	Doro	11	8	3	6
5	Karanganyar	13	10	4	5
6	Kajen	30	27	2	3
7	Kesesi	16	10	1	3
8	Siwalan	14	12	4	7
9	Petungkriyono	12	10	2	7
10	Wonokerto	18	15	0	2
	Total	179	131	25	54

Other forms of participation are also found in the Pekalongan Regency community. Most of the people who choose other forms of participation are women who cannot to participate in the form of labour, so they choose other forms of participation, such as providing food when physical construction is being carried out or providing a place to rest for workers or people who are participating in the physical construction being carried out. This participation is sometimes difficult to track (bookkeeping and data collection) because it is voluntary, and there are no special provisions for contributing to the crowdfunding scheme being carried out.

The people of Pekalongan Regency still have a crowdfunding system in the form of providing materials, where if there are people who will carry out construction or there is physical construction to be carried out (for example, construction and improving the quality of RTLH) they will donate materials to be replaced with materials in an equivalent amount. The provision of materials is also widely carried out by people in their residential areas who have role models who are followed (kyai, ustadz, etc.) who also influence contribution of physical development in their area. The role of these figures is crucial, especially for communities whose educational areas are educational (Islamic boarding schools, etc.)

The priority of physical development undertaken by the people of Pekalongan Regency focuses on social, educational, and health aspects. In social physical development, efforts include enhancing the quality of RTLH for individuals from lower middle-class economic backgrounds. Since the house renovation assistance provided to the community often falls short of covering the full financing needs, the community engages in Crowdfunding to support those receiving aid for home renovations. This support can come in various forms, such as donating labour, providing food for workers, contributing materials, or giving as much money as possible. Recipients of home renovation assistance, who are prioritized for handling, typically do not receive complete physical development support, meaning that the authorities fund all development activities until the house renovations are completed. To address the remaining development costs, Crowdfunding is utilized to help the community finance the ongoing home renovations.

Tabel 4. Forms of Crowdfunding Activities in Infrastructure Financing in Pekalongan Regency

Num.	District	Form of crowdfunding activities					
		Road and Bridge	RTLH	clean water	sanitation	Health	Education
1	Wiradesa	9	15	9	8	11	7
2	Bojong	5	12	5	5	9	6
3	Tirto	8	8	3	4	6	4
4	Doro	3	5	2	2	8	
5	Karanganyar	4	5	4	4	7	5
6	Kajen						
7	Kesesi	4	7	7	4	4	4
8	Siwalan	3	10	8	7	4	5
9	Petungkriyono	7	6	2	1	8	7
10	Wonokerto	2	13		5	4	4
	Total	51	110	7 54	49	69	57

The development of educational facilities is the most sought after by the public when conducting crowdfunding. The role of influential figures is crucial in organizing crowdfunding for educational initiatives. For educational facilities still owned by the Government, there is typically a financing and budgeting scheme for repairing or enhancing the quality of these facilities. In contrast, for educational facilities owned by the private sector or community groups, crowdfunding efforts are often necessary to support development activities. For instance, educational facilities like Quran Reading Parks (TPQ) generally lack permanent buildings for their activities.

As a result, the community has initiated the construction of a TPQ that can meet these needs, as many parents entrust their children to these parks. This concern has led to increased contributions toward the development of the desired educational facilities. Health facilities, particularly for rural communities, are essential components of daily needs. However, since the allocation of Village funds can only cover the activities and operations of health facilities—such as purchasing medical equipment and paying health workers' honorariums—the community has taken the initiative to conduct crowdfunding to provide nutritional supplementary food, aiming to reduce stunting rates while improving public health.

4. Conclusion

The public perception of crowdfunding is that it is an activity based on the principle of cooperation or carried out together or in collaboration between the government and non-government funds.

The collaboration, must of course, be balanced with a regulatory system that is certain in order to avoid illegal crowdfunding practices. The infrastructure financing strategy through crowdfunding is carried out through three approaches, starting from substance, by compiling supporting regulations, structure, namely forming institutions, especially at the district and Village levels, and culture, which directs the habits of the community and the private sector to utilize digital technology in their contribution activities in infrastructure development. This is then able to make crowdfunding an alternative with certain legality.

The results of a survey conducted at several market points in Pekalongan Regency incidentally it show that the people of Pekalongan Regency have a tendency to participate in crowdfunding for physical development in their area by donating labour. However, for those who have limited time or agreement from the Village, the community is willing to donate money, materials or food. The infrastructure that is most in demand for assistance is educational facilities, uninhabitable houses (RTLH), and roads/bridges.

From the in-depth study of the cases in the two regions, differences in community characteristics and types of funding can be distinguished. Jeruksari Village as a coastal village has problems with RTLH and environmental infrastructure conditions. Crowdfunding is prioritized for building and raising roads. The residents of Jeruksari Village tend to agree to hold a joint venture in infrastructure financing with a tendency towards road and bridge infrastructure, sanitation facilities and RTLH. Krandon Village is a rural area that prioritizes in building roads and bridges in the context of distributing goods and people because it is close to the district capital. The Village community also agrees to hold crowdfunding with the majority in the form of labour as a form of cooperation. The infrastructure that is a priority, according to the survey results, is health support facilities, clean water/sanitation/ agricultural irrigation facilities.

References

- Abdillah, F., & Danial, E. (2015). Crowdfunding: Democratizing Financial Access in Supporting Student Social Action. *Scientific Journal of Democracy Forum*, 15(1), 1–16. <https://doi.org/10.21009/jimd.v15i1.9108>
- Arifin, SR, & Wisudanto, W. (2017). Crowdfunding as an Alternative for Financing Infrastructure Development. *Symposium II UNIID 2017*, 2(1), 309–314. <https://conference.unsri.ac.id/index.php/uniid/article/view/618>
- Artiningsih, A., Putri, NC, Muktiali, M., & Ma'rif, S. (2019). Non-Conventional Infrastructure Development Financing Scheme in Semarang City. *Riptek Journal*, 13(2), 92–100. <https://doi.org/10.35475/RIPTEK.V13I2.61>
- Efraty Kandiyoh, G., Slat, VB, Tenda, J., & Sumajouw, JA (2022). Community Perspective in the Development of the Manado-Bitung Toll Road. *Journal of Applied Civil Engineering*, 4(1), 11–17. <http://jurnal.polimdo.ac.id/>
- Gobble, M. M. (2012). Everyone Is a Venture Capitalist: The New Age of Crowdfunding. *Research-Technology Management*, 55, 4.
- Hidayat Djabbari, M., & Husain Tamrin, S. (2022). Implementation of Public Private Partnership in Tourism Development in North Toraja Regency. *JAKPP (Journal of Policy Analysis & Public Service)*, 7(1), 1–13. <https://doi.org/10.31947/JAKPP.V7I1.13203>
- Horváthová, A. A. (2018). Crowdfunding: Business and Regulatory Perspectives. *The Oxford Handbook of IPOs*, 720–745. <https://doi.org/10.1093/OXFORDHB/9780190614577.013.34>
- InfoDev, F. and PSDD (2013). Crowdfunding's potential for the developing world.
- Joshua, J. O. (2019). The Development of Infrastructure and Economic Growth. *The Belt and Road Initiative and the Global Economy*. <https://api.semanticscholar.org/CorpusID:211460907>
- Kustanto, A. (2020). Regional Economic Growth in Indonesia: The Role of Infrastructure, Human Capital and Trade Openness. *Bulletin of Economic Studies*, 25(1), 80–98. <https://doi.org/10.24843/BSE.2020.V25.I01.P05>
- Lenart-Gansniec, R. (2021). Crowdfunding in the Public Sector: Theory and Best Practices. In *Contributions to Finance and Accounting: Vol. Part F216*. https://doi.org/10.1007/978-3-030-77841-5_2
- Maqin, R. (2011). The Influence of Infrastructure Conditions on Economic Growth in West Java. *Trichonomics*, 10, 10–18.
- Miglo, A. (2021). Crowdfunding: Definitions, Foundations and Framework. In JC Regina Lenart, Gansinie (Ed.), *Crowdfunding in the Public Sector, Theory and Best Practices* (1st ed., pp. 1–20). Springer. <https://api.semanticscholar.org/CorpusID:233752929>
- Ola, S. (2021). Culture and Regional Development (A Reflection of the Revival of Values). *Lazuardi Journal*, 4(2), 1–7. <https://doi.org/10.53441/JL.VOL4.ISS2.58>
- Ordanini, A., Miceli, L., Pizzetti, M., & Parasuraman, A. (2011). Crowd-funding: Transforming customers into investors through innovative service platforms. *Journal of Service Management*, 22(4), 443–470. <https://doi.org/10.1108/09564231111155079/FULL/XML>
- Regional Regulation (PERDA) of Pekalongan Regency Number 5 of 2021 concerning the Medium-Term Development Plan of Pekalongan Regency for 2021-2026, Pekalongan
- Regency Government (2021). <https://peraturan.bpk.go.id/Details/225231/perda-kab-pekalongan-no-5-tahun-2021>
- Rodriguez-Ricardo, Y., Sicilia, M., & López, M. (2018). What drives crowdfunding participation? The influence of personal and social traits. *Spanish Journal of Marketing - ESIC*, 22(2), 163–182. <https://doi.org/10.1108/SJME-03-2018-004>
- Shkarlet, S., Ivanova, N., Popelo, O., Dubyna, M. V., & Zhuk, O. (2021). Infrastructure and Regional Development: Theoretical Aspects and Practical Issues. <https://api.semanticscholar.org/CorpusID:233926238>
- Suriani and Cut Nada Keusuma. (2015). The Impact of Basic Infrastructure Development on Economic Growth in Indonesia. *Ecosains: Scientific Journal of Economics and Development*, 4(1), 1–18. <https://doi.org/10.24036/ECOSAINS.10962757.00>
- Suwana, A., & Setyobudi, Y. Farid. (2020). Village Government Performance in Development Road and Drainage Infrastructure in Parit Village, Karimun District in 2018. *TRIAS POLITIKA JOURNAL*, 4(1), 100–109. <https://doi.org/10.33373/JTP.V4I1.2594>
- Yusuf, AM (2017). Qualitative Research Methods and Combined Research. In Kencana (4th ed., Vol. 1999, Issue December). Kencana. <http://unanda.ac.id/perpustakaan/index.php?p=fstream&fid=15&bid=6643>
- Zhao, Y., Harris, P., & Lam, W. (2020). Crowdfunding. *The Palgrave Encyclopedia of Interests Groups, Lobbying and Public Affairs*, 1–12. https://doi.org/10.1007/978-3-030-13895-0_3-1