

## IMPLEMENTATION OF THE GEOSPATIAL-BASED DISABILITY CARD PROGRAMME (KAPAL SI GEO) IN BONTANG CITY

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**Abstract.** This research aims to analyse the Geospatial-based Disability Card (KPD) Distribution Programme in Bontang City. This programme not only serves as an identity for people with disabilities but is also integrated with public programmes, services, and policies to provide greater benefits. This research employed qualitative research methodology focusing on communication, resources, disposition, and bureaucratic structure. Data collection was conducted through field surveys, interviews with relevant parties, and primary and secondary data analyses. The results showed several main findings. First, communication in the implementation of the Kapal Si Geo programme was effective from the planning stage to the socialisation stage, with the information conveyed being well understood by all relevant parties, thus facilitating the efficient implementation of the programme. Second, the role of volunteers was considered necessary in supporting the smooth running of the programme despite limited facilities and infrastructure. Third, the facilitators' positive disposition and the government's strong commitment guaranteed the continuity of the programme, ensuring sustainable benefits for the community. Fourth, despite technical constraints, such as technological issues and the need for increased awareness from Regional Apparatus Organizations (OPD), the existing bureaucratic structure supported policy implementation as a whole.

**Keywords:** *implementation, disability, card, Bontang City*

### Introduction

Every individual in Indonesia, including people with disabilities, has equal rights and is protected by the state. According to BPS (Central Bureau of Statistics) data, in 2020, there were 22.5 million people with disabilities in Indonesia. The Indonesian government, based on Pancasila and the 1945 Constitution, respects and protects human rights, which are the fundamental rights of every individual. However, people with disabilities often experience discrimination that results in their rights not being fulfilled. Law Number 4 of 1997 on People with Disabilities has not paid attention to the perspective of human rights yet focuseup to datecompassion. The policies implemented are only in social security, social assistance, social rehabilitation, and social welfare improvement. People with disabilities should have the same opportunities for self-development as humans in general. Law Number 8 of 2016 emphasises the importance of verifying and validating data on people with disabilities linked to geospatial information. Geospatial data include information about the position and location of an object on earth, which is important for policy and decision-making. With accurate geospatial information, assistance programmes are delivered more effectively. The East Kalimantan Provincial Government and other regions in Indonesia have shown concern for people with disabilities through local regulations. Based on data from the Ministry of Social Affairs of the Republic of Indonesia in 2018, there were 2,470 people with

disabilities in East Kalimantan. In Bontang City, data from 2021 show 962 people with disabilities. In 2018 Bontang City Government issued Perwali (Mayor Regulation) Number 27 of 2018 on the Implementation of Regional Geospatial Information Network to ensure complete and accurate geospatial data and information management.

The term "Penyandang cacat" development planning and effective development control, it is necessary to have complete, accurate, up to date, integrated, accountable, easily accessible and sustainable data and information management in Bontang City. This is enshrined in Bontang City Government Regulation Number 27 of 2018 concerning the Implementation of Regional Geospatial Information Networks. Furthermore, the management of disability data from the geospatial-based survey results is adjusted to Presidential Regulation Number 39 of 2019 concerning One Data Indonesia will cut data overlap that often occurs between government agencies, both central and regional. As a result, the Bontang City Government designed a new program called "Kapal Si Geo". "Kapal Si Geo" is a geospatial-based disability card (KPD) system that integrates data on people with disabilities with programmes, services, and public policies. This KPD card is not only an identity but also ensures access to services for people with disabilities. With Kapal Si Geo, policy interventions are better targeted, and people with disabilities get greater benefits. This programme supports Presidential Regulation Number 39 of 2019 on One Data Indonesia and Bontang City Regulation Number 27 of 2018 on the Implementation of Regional Geospatial Information Network. Kapal Si Geo is expected to be able to overcome the problem of data validity of people with disabilities, implement the mandate of Indonesian Number 8 of 2016, and integrate data on people with disabilities in a thematic geospatial information system connected to the coordinates of their residence. Thus, assistance programmes and services are delivered more effectively and on target. Finally, the implementation of KPD in Bontang makes it easier for People with Disabilities to access their rights to state facilities.

### ***Theoretical framework***

#### ***Literature review***

Previous studies work as references and comparison to avoid any similarities with this study. Therefore, the researchers list several previous studies which are considered to be correlated with this research as: (1) Neven and Ectors (2023) worked on an article titled "I am dependent on others to get there": Mobility barriers and solutions for societal participation by persons with disabilities". This research built on the previous literature on the transportation of people with disabilities by not only mapping in detail the mobility barriers felt by people with different types of disabilities and for different modes of travel, but also investigating their own solutions to lower these barriers and examining the impact of increased mobility on participation. (2) Egger et al. (2022) in their article titled "The Experiences and Needs of Persons with Disabilities in Using Paratransit Services" aimed to identify the experiences of people with disabilities with paratransit in Switzerland, explored their needs and verified facilitators and barriers to the use of paratransit services. Furthermore, the perceived experience of how barriers and transportation facilitators affect participation in different areas of people's lives was examined. (3) Greiman et al. (2022) published their research titled "A useable home: A qualitative investigation of the relationship between home usability and community participation for people with disabilities". The purpose of this study was to understand

the perception of people with mobility disabilities on the relationship between community participation and home use. (4) Herpamudji (2022) wrote an article titled "Assistance for the Pre-Employment Card Program to be Disability-Friendly in the Perspective of Innovation Diffusion". This study aimed to look at the government's efforts in the context of assisting the Pre-Employment Card program for people with disabilities by using the library research method.

(5) Arisanto and Pratiwi (2022) collaborated on an article titled "Utilization of Geospatial Technology in Indonesia during the Covid-19 Pandemic". This research looked at the role of Esri Indonesia as a private institution as well as a provider of GIS-based geospatial technology, namely ArcGIS. Furthermore, it explored how to use ArcGIS as a form of GIS-based geospatial technology in various fields such as economy, social and health both by the Government of Indonesia and other related parties, especially during the pandemic. (6) Hestiantini (2020) in their journal titled "Implementation of the Policy for the Fulfillment of the Rights of Persons with Disabilities in the Field of Social Welfare (Social Security) in Gunung Kidul Regency in 2018" analyzed and saw the extent to which the rights of persons with disabilities had been fulfilled, especially in social welfare in the form of social security. This was related to public service policies in the welfare of the community, especially people with disabilities. (7) Haryani and Frinaldi (2020) in their article titled "Implementation of Computerized Geospatial Systems in Orderly Efforts of Land Administration at the National Land Agency of Padang City" found out how the implementation of the computerized geospatial application system (GeoKKP) in the National Land Agency of Padang City was related to the orderly land administration. (8) Baturangka et al. (2019) published their research titled "The Role of the Manado City Social Service in Empowering People with Disabilities". This paper aimed to find out the role of the Manado City Social Service in empowering people with disabilities. (9) Utami (2019) wrote an article titled "Social Protection Model for Persons with Disabilities in Cianjur Regency Studied in the Perspective of Human Rights". The purpose of this study was to objectively see the condition of people with disabilities in Cianjur Regency and how the implementation of social protection programs and activities in the area was running.

### ***Defining people with disabilities***

The term "Penyandang Cacat" has been replaced with "Penyandang Disabilitas" by the National Commission on Human Rights (Komnas HAM) and the Ministry of Social Affairs to avoid negative stigma and respect the principles of human rights. The 1945 Constitution affirms that everyone is entitled to facilities and special treatment to achieve equality and justice. People with disabilities are individuals with physical, intellectual, mental or sensory limitations who require assistance to interact with their surroundings and society. They often face discrimination and lack attention, especially in legal matters (Hidayatullah and Pranowo, 2018). Constitutionally, people with disabilities have the same rights to live in prosperity and obtain decent work and fair treatment in the workplace (1945 Constitution Article 28A, Article 27 Paragraph 2, and Article 28D Paragraph 2). However, they still face various problems, such as lack of access to information, inadequate public facilities, and difficulties in finding employment and health services (Sugiyono, 2017). Law Number 4 of 1997 on People with Disabilities was updated to Law Number 19 of 2011, which adopted the Convention on the Rights of People with Disabilities. Law Number 8 of 2016

recognises people with disabilities as subjects who have the same dignity and rights as other citizens.

Article 42 of Law Number 39 of 1999 on Human Rights states that people with disabilities are entitled to special care, education, training, and assistance to ensure a life of dignity. Still, a lot of people with disabilities have not been accepted in the community (Karim, 2018). The government through Social Service is responsible for fighting for the rights of people with disabilities so that they are valued as equal human beings (Baturangka et al., 2019). Coleridge classified the various types of limitations of people with disabilities into physical, sensory, and intellectual limitations. According to WHO, disability is divided into three categories: impairment (loss or abnormality of function), disability (inability to perform activities), and handicap (difficulties in personal and social life).

### ***Disability card system***

Regulation of the Minister of Social Affairs of the Republic of Indonesia Number 2 of 2021 regulates Kartu Penyandang Disabilitas (KPD), which is an identity card for people with disabilities registered in national database. KPD makes it easier for people with disabilities to access services according to applicable regulations. KPD recipients are those who have been verified and validated by the ministry, with data updated every two years and based on technology.

### ***Utilisation of the disability card system***

KPD is regulated under Law Number 8 of 2016, which entitles people with disabilities to obtain KPD after being registered in the national database. KPD contains information about a person's disability status, enabling access to facilities and services without detailed explanations. KPD is important because disability information is not included in ID cards, and public awareness is still low. The KPD serves as an identification tool to improve data collection with regards to people with disabilities in population administration.

### ***Geospatial system***

Geospatial system is an informational system related to a specific area, which is used for development planning, implementation, and evaluation. Geospatial Information (GI) includes data on the position and location of objects used for map-making and spatial design. Law Number 4 of 2011 explains that GI is an accurate fact for project planning related to earth space. GI is divided into Basic Geospatial Information (valid and stable data) and Thematic Geospatial Information (data with a specific theme). Data format in Geographic Information Systems (GIS) include Shapefile (SHP) for non-topological vector data and Geodatabase (GDB) for spatial data management complete with its attributes.

## **Materials and Methods**

This research employed a descriptive qualitative approach with reference to Creswell model to describe the policy implementation of the geospatial-based disability card system in Bontang City, using George Edwards III implementation model involving communication factors, resources, implementer disposition, and bureaucratic structure.

Primary data was collected through interviews with key informants, such as Social Service officials and people with disabilities, observations, and documentation. The data analysis technique used Miles and Huberman model which includes data reduction, data presentation, and conclusion drawing. The researcher acted as the main instrument, assisted by interview guidance, observation, and documentation to deeply understand the implementation of this card system.

## **Results and Discussion**

This research analyses the implementation of the Geospatial-Based Disability Card System (Kapal Si Geo) in Bontang City, which is an important innovation in order to support social inclusion and empowerment of people with disabilities. Using indicators from Edward III, this research deeply explores the aspects of Communication, Resources, Disposition/Attitude, and Bureaucratic Structure that play a role in the effectiveness of this policy implementation. Each indicator provides a critical view of the policy.

### ***Implementation of geospatial-based disability card system in Bontang City***

#### ***Communication***

Communication is a key element in the successful implementation of such public policy. In this process, there are three main factors that must be considered, namely transmission, clarity, and consistency of communication. Each factor plays an important role in ensuring that information relating to the policy is conveyed in an effective manner and understood by all parties involved.

#### ***Transmission***

Transmission is the process of delivering effective information between policy makers and policy implementers, as well as between policy implementers and policy targets. The Social Service and Community Empowerment Agency (DSPM) of Bontang City has implemented communication transmission through various socialisation and trainings. One concrete example of this effort is the socialisation held on 4 June 2021 at the Balai Pertemuan Umum (BPU) Building in Loktuan Village, North Bontang. During the event, volunteers who served as surveyors were given training on how to input data. This activity demonstrates DSPM's commitment to ensure that all parties involved have a clear understanding of their roles and responsibilities. This transmission process plays a pivotal role since without clear and timely information, policy implementation may face obstacles. Information must flow smoothly from policy makers to policy implementers and then to policy targets, in this case people with disabilities. Thus, each party involved to work in sync and harmony in order to reduce the risk of miscommunication and increase the effectiveness of policy implementation.

#### ***Clarity***

Clarity of communication is also a crucial factor so that the objectives and rules in the policy are well understood by each implementer. DSPM of Bontang City is responsible for providing clear information to all people with disabilities through various socialisation. The interview results show that the communication carried out by

DSPM and the Planning, Research, and Development Agency (Bappelitbang) of Bontang City is very good, without any significant miscommunication. Information conveyed to people with disabilities about the benefits, objectives, and mechanisms of Kapal Si Geo is clearly received by the policy targets. Clarity of information is essential to ensure that there is no ambiguity that could lead to errors in policy implementation. In this case, DSPM Bontang City has succeeded in ensuring that each party involved understands their roles and responsibilities well. The information conveyed also includes a detailed explanation about the benefits of the programme, the objectives to be achieved, and the implementation mechanism. Thus, people with disabilities as beneficiaries fully understand how the programme impacts them and what is expected from them.

### ***Consistency***

Consistency is the third factor that ensures that the information conveyed remains consistent and unchangeable to avoid confusion. DSPM of Bontang City through various channels continues to disseminate information related to the Kapal Si Geo programme consistently. Evidence to this is the positive assessment of the beneficiaries who stated that the information they received was always clear and unchanging. Consistency in information delivery is essential to maintain trust and credibility among beneficiaries and policy implementers. If information changes frequently or inconsistently, confusion and uncertainty are inevitable, which in turn hinder policy implementation. DSPM of Bontang City has successfully ensured that information delivered to people with disabilities and volunteers remains consistent over time, reducing the risk of misunderstandings and ensuring that all parties have the same understanding of the programme. These three factors, i.e. transmission, clarity, and consistency have been well implemented by DSPM and Bappelitbang. Through these effective communication efforts, Kapal Si Geo programme is implemented more smoothly, ensuring that the benefits of this programme are felt by all people with disabilities in Bontang City. Not only does this improve social inclusion but also empowers people with disabilities by giving them better access to the resources and services they need.

### ***Resources***

Adequate resources are crucial in the implementation of public policies, including the Kapal Si Geo programme in Bontang City. These resources include various aspects, namely human resources, facilities, and infrastructure. The success of the programme is highly dependent on how each of these resource elements is optimised and managed properly.

### ***Human resources***

Human resource is one of the most vital components in the implementation of the Kapal Si Geo programme. The main person in charge of this programme is the Head of Rehabilitation of People with Disabilities of DSPM of Bontang City. However, the day-to-day implementation of the programme relies heavily on volunteers or assistants working in the field. These volunteers play a key role in registering people with disabilities, providing socialisation, and assisting in the use of technology required for the programme. While the number of volunteers is considered sufficient, there are

significant shortcomings in terms of the technical guidance and training provided to them. Many volunteers stated that there were no clear manuals or technical instructions, and directions were often given verbally. Lack of adequate training and guidance led to uncertainty and confusion in carrying out tasks, which in turn affected data quality and programme effectiveness. To address this issue, it is important for DSPM of Bontang City to provide more structured and comprehensive trainings for volunteers. These trainings should cover all technical and procedural aspects of the programme, as well as provide volunteers with the tools and resources they need to do their jobs effectively. In addition, the provision of clear and easy-to-understand guidebooks or operational manuals will ensure that all volunteers have a common understanding of the processes and procedures to be followed.

### ***Facilities and infrastructure***

Facilities and infrastructure are also important factors that support the success of policy implementation. In the context of the Kapal Si Geo programme, the means used are mainly information and communication technology. The programme utilises existing technology, such as smartphones, to collect data on people with disabilities. The use of smartphones allows volunteers to input data in real-time, reducing the need for many physical facilities and making the programme more efficient. However, while the use of this technology brings many benefits, there are also some challenges to face. For example, not all volunteers have sufficient technology skills, particularly older volunteers or those less familiar with technology. Therefore, in addition to training in programme procedures and techniques, special training on the use of technology should also be provided to ensure that all volunteers can use the tools provided effectively.

### ***Budget***

An adequate budget is also an important aspect of supporting policy implementation. However, the Kapal Si Geo programme in Bontang City faces significant budget constraints. The limited budget is an obstacle, especially in providing physical cards for people with disabilities and honorarium or reward for volunteers. This budget limitation hinders the smooth operation of the programme and affects the motivation of volunteers in carrying out their duties. To overcome budget constraints, there is an urge to find additional sources of funding, both from the local government and central government, as well as from the private sector through Corporate Social Responsibility (CSR) programmes. Cooperation with various parties can help reduce the budget burden and ensure that the programme run smoothly and sustainably. In addition, more efficient and transparent budget management is also required to ensure that any available funds are used to support the programme objectives best.

### ***Volunteer dedication***

Despite the obstacles faced, the dedication of the volunteers is one of the primary keys to the success of the Kapal Si Geo programme. Volunteers involved in this programme show a high commitment to helping people with disabilities and ensuring that the data collected are accurate and complete. This dedication can be seen in how they remain enthusiastic despite limited facilities and support. The programme's success is also gained from moral support and recognition of the volunteers' hard work. Providing appreciation and rewards to volunteers will increase their motivation and

encourage more people to get involved in the programme. Therefore, the DSPM of Kota Bontang needs to consider ways to provide proper support and recognition to the volunteers, either through non-financial incentives such as certificates of appreciation or through advanced skill-development programmes.

### ***Disposition/attitude***

The disposition or attitude of policy actors is one of the crucial factors influencing the success of public policy implementation. A good, honest, and fair attitude from policy actors support effective policy implementation and have a positive impact on policy targets. In the context of the implementation of the Geospatial-Based Disability Card System (Kapal Si Geo) in Bontang City, the attitudes shown by policy actors, both from the Social Service and Community Empowerment Agency (DSPM) of Bontang City and volunteers determine the success of this programme.

### ***Positive attitudes of policy actors***

Based on interviews with beneficiaries, the attitudes and services provided by DSPM of Kota Bontang and volunteers are very positive. The policy actors demonstrate a high level of honesty, commitment, and fairness in providing services to people with disabilities. This positive attitude creates a relationship of trust between programme implementers and beneficiaries, which is crucial in ensuring successful policy implementation. Honesty in service includes transparency in conveying information, accuracy in collecting the data, and consistency in providing assistance. This ensures that every eligible person with disabilities receives benefits from the programme without discrimination or bias. In addition, programme implementers also demonstrate fairness by ensuring that all people with disabilities are treated equally and have equal access to the services provided.

### ***High commitment to programme implementation***

The high commitment of programme implementers is another important element in the success of Kapal Si Geo. The programme implementers, including DSPM of Kota Bontang and the volunteers, showed strong dedication and commitment to continue the programme. Not only did they carry out their duties in accordance with established procedures, but they also strove to improve the quality of services and expand the reach of the programme. This commitment was reflected in various concrete actions taken by programme implementers. For example, they actively conducted socialisation and training to ensure that all parties involved had a good understanding of the programme's objectives and mechanisms. They also endeavoured to continuously update and improve data on people with disabilities, ensuring the information was always accurate and relevant.

### ***Adoption by the East Kalimantan Provincial social service***

One indication of the success and recognition of the high commitment of the Kapal Si Geo programme implementers is the adoption of the programme by the East Kalimantan Provincial Social Service named "Sida Berbagi." This adoption shows that Kapal Si Geo programme is recognised as an effective model that can be implemented at the provincial level. This success shows that the programme is working well in

Bontang City and inspires other regions to implement similar policies. The adoption by the East Kalimantan Provincial Social Service also provides a moral boost for programme implementers in Bontang City. It shows that higher levels of government recognise and appreciate their efforts and dedication. In addition, the adoption also opens opportunities for further support, both in terms of resources and budget, which can help strengthen and expand the programme.

### ***Positive impacts for communities with disabilities***

The commitment and positive attitude of programme implementers have significantly impacted people with disabilities in Bontang City. The Kapal Si Geo programme not only assists in the data collection of people with disabilities but also provides better access to the various services and aids they need. The programme also helps raise community awareness of social inclusion and empowerment of people with disabilities. With a strong commitment from programme implementers, it is hoped that the Kapal Si Geo programme can continue to grow. The sustainability of the programme is important to ensure that people with disabilities continue to receive support and services they need. Furthermore, with recognition and adoption from the provincial level, the programme has the potential to be scaled up and implemented in other areas, providing wider benefits to people with disabilities across East Kalimantan.

### ***Bureaucratic structure***

An efficient and less lengthy bureaucratic structure is a key element in supporting effective policy implementation. In the context of the Kapal Si Geo programme in Bontang City, the bureaucratic structure involves various organisational units that work together to achieve the program's objectives. These units include the Social Service and Community Empowerment Agency (DSPM), the Planning, Research, and Development Agency (Bappelitbang), and volunteers involved in data collection and service providers for people with disabilities.

### ***Efficiency of bureaucratic structure***

Efficiency in bureaucratic structure is achieved by avoiding overly long hierarchies and convoluted procedures. In the Kapal Si Geo programme, the various organisational units work harmoniously with a clear division of tasks. DSPM is the main coordinator, managing and supervising the programme's overall implementation. Bappelitbang plays a role in the planning and development, ensuring that the data collected is accurate and can be used for further planning. Volunteers, consisting of members of the public and various communities, spearhead the data collection and direct interaction with people with disabilities.

### ***Standard Operating Procedure (SOP)***

The Standard Operating Procedure (SOP) is an important policy implementation guide. The SOPs are designed to ensure that all processes and steps required in programme implementation are carried out consistently and efficiently. The SOPs cover various aspects, ranging from how to collect data and input data into the system to the procedures for assisting people with disabilities. Although not all volunteers know the written SOPs, programme implementation continues to run by the established standards.

This shows that the training and socialisation provided have effectively conveyed the procedures that must be followed.

### ***Fragmentation in bureaucratic structure***

Fragmentation, which is the dispersal of policy responsibilities across different bureaucratic units, also occurs in implementing this programme. Fragmentation causes difficulties because it hinders policy oversight and creates pressure from outside the bureaucratic unit. However, in the Kapal Si Geo programme context, this fragmentation is well managed through close collaboration between DSPM, Bappelitbang, and the volunteers. This collaboration allows various units to share responsibilities and work together to achieve programme goals. Good coordination between the units involved is essential to overcome obstacles that may arise due to fragmentation. In the Kapal Si Geo programme, coordination is done through regular meetings, joint training, and constant communication between all parties involved. This ensures that all units work with the same goals and understand their respective roles in programme implementation. In addition, the existence of clear SOPs helps reduce confusion and ensure that all units follow the same procedures.

### ***Inter-unit collaboration***

Good collaboration between DSPM, Bappelitbang and volunteers is the key to overcoming the obstacles posed by fragmentation. DSPM, as the main coordinator, ensures that all unit's function properly and according to their roles. Bappelitbang, with its expertise in planning and development, supports DSPM by providing accurate and relevant data. Volunteers who interact directly with people with disabilities provide important information for the customisation and further development of the programme. This collaboration also includes sharing resources and information. For example, training provided to volunteers often involves experts from various units so that volunteers gain a comprehensive understanding of the programme. In addition, information technology allows all units to share data and communicate more efficiently. The information system used in the Kapal Si Geo programme allows real-time data reporting, which helps with better decision-making and supervision.

### ***Challenges and solutions in bureaucratic structures***

Although good collaboration has managed to overcome many obstacles, there are still challenges to be faced within the bureaucratic structure of the Kapal Si Geo programme. One of the main challenges is ensuring that all volunteers understand and follow the established SOPs. To overcome this challenge, it is necessary to conduct periodic training and refreshments of SOPs for all volunteers. In addition, information technology can be improved to provide easy access to SOPs and other implementation guidelines. Another challenge is ensuring that all units cooperate well despite fragmentation. This requires effective communication and strong leadership from DSPM. By organising regular coordination meetings and providing open communication channels, DSPM can ensure that all units are working towards the same goal and can overcome any possible obstacles. In addition, there are also supporting and inhibiting factors. Supporting and inhibiting factors for the implementation of Kapal Si Geo in Bontang City are as (1) Supporting Factors. Cooperation from various sectors is a significant factor that supports the success of the Kapal Si Geo programme. Social

volunteers, private companies, government agencies, and communities of people with disabilities all play an active role in implementing this programme. This collaboration shows that all elements of society welcome the programme. In addition, the minimal use of facilities and infrastructure is also an advantage. The programme only requires smartphones already owned by the volunteers so that it can run efficiently within minimal budget. (2) Inhibiting Factors. Some inhibiting factors in implementing the Kapal Si Geo programme in Bontang City are technical problems in the field, limited volunteer capacity, and the lack of budget. Technical issues such as network constraints and inaccuracies in data entry often occur, causing the data collection process to be repeated. The capacity and skills of volunteers are also an issue, especially as many of them are old and less familiar with the use of technology. Moreover, the minimal budget allocation means that the programme has to run on limited resources, so not all needs are met.

## **Conclusion**

Based on data analysis through literature, field observations, and interviews, implementing the Geospatial-Based Disability Card Programme (Kapal Si Geo) in Bontang City runs optimally with several supporting and inhibiting factors. The four main factors that influence the success of this programme include communication, resources, disposition, and bureaucratic structure. The programme has successfully communicated the benefits, objectives, and mechanisms to people with disabilities, as evidenced by the beneficiaries' good understanding. The availability of human resources and budget support, although limited, is adequate, but it is necessary to increase the capacity for assistants every year. An attitude of commitment and honesty from implementers and policymakers strongly supports this programme, which has received appreciation from the Mayor of Bontang. Although there is no specific Standard Operating Procedure (SOP), the existing bureaucratic structure is sufficient to support the programme's implementation well. Supporting factors for the programme include support from various sectors, such as social volunteers, private companies, and communities of people with disabilities. The inhibiting factors include technical constraints, such as network, accuracy in data entry, lack of translators, and limited budget. To improve the programme's success, the government needs to provide uniform facilities for assistants, such as smartphones with standard specifications, to ensure the quality of programme implementation. Through the Social Service and Planning, Research, and Development Agency (Bappelitbang), the government should regularly check the data to minimise errors and hire experienced surveyors, even if it requires more budget. They can involve kin or relatives to assist as translators. Moreover, the Social Affairs Office must also provide expert translators, particularly sign language for the deaf and the dumb. Finally, the Social Service and Community Empowerment Agency should utilise support from stakeholders, such as companies and amil zakat agencies, and communicate and coordinate with the central and provincial governments to obtain additional budget support.

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### **Conflict of interest**

The authors confirm that there is no conflict of interest involve with any parties in this research study.

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