



A Systematic Literature Review on Smart City Project Initiatives for Rural Community Participation

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Abstract: Most democratic governments have prioritized offering people more significant input in government decision-making and promoting public participation in policy creation. People and governments may now effectively integrate formerly unsurmountable gaps in their relationships thanks to advances in digital and information technologies. "Smart City" technologies are not a new term in today's urbanization development field; however, this "Smart City" technologies term is likely unfamiliar with the rural area, as the rural area is sometimes assumed to perform poorly in the development of innovative city initiatives, which are mostly being pioneered by the local government authority with a focus on a city or urban region. Citizens can now participate in decision-making and policy-making due to the smart city project initiative, which cannot be disregarded entirely; unfortunately, rural population participation remains limited. This conceptual research aims to examine smart city project aspirations for the rural community public participation framework. The author comprehends the importance of including significant public participation in all parts of the planning process. The methodology behind this research is based on a detailed study of the scholarly literature that has already been done. The conclusions of the research were derived from a number of different reading materials, such as books, journals, and other sources on smart city programs for public participation in rural areas.

Keywords: Smart city, technology, rural community, participation

1. Introduction

Implementing smart city initiatives might be an effective technique for achieving a balance between urban and rural development in a way that fulfills the demand for sustainability and considers everyone [1, 2]. Whereas a foundation of this research, as new technologies, mainly contemporary digital technology, are introduced, the concept of a "smart city" arises as a method to make cities more accessible and sustainable. Cities must become smarter, but not in ways that make everyday jobs simpler. Instead, they must establish methods for the public to monitor, gather, analyses, and organize information about the city to make it more efficient and effective. Smart cities differentiate from digital-only concepts in that they emphasize natural and social capital. This gives them a comprehensive understanding of cities. If cities want to be smart, they must give people a more excellent standard of living, make the economy more competitive, promote community stability and environmental sustainability, and provide them with better employment.

Citizen participation in smart city project activities determines the public's ability to influence new policies. This is because the public will accept new policies relying mainly on citizen participation in such activities. To successfully represent all groups' interests in decision-making, it is critical to go beyond consultation and toward "co-creation," which incorporates social and essential stakeholders (representing the urban and rural people equally). Citizens should actively participate in neighborhood and local planning and policymaking as part of a smart city initiative, not just be passive consumers of improved local government services and administration. As the city is the central focus of everything, it deserves the most significant consideration and attention. Rural regions should not be overlooked while developing smart

city projects. This is a remarkable discovery because it emphasizes how crucial it is for rural residents to exercise their freedoms and rights to have their voices heard and their opinions respected when policies affect their areas. This study was carried out because there is limited data on rural regions' low levels of digital participation and the need for smart city designs in such locations.

2. Related Works

2.1 Smart City

Because it is so well-known worldwide, the word "smart city" may refer to a wide variety of things depending on the context in which it is used; it also goes by many other names. The meaning of the phrase may be understood in various ways, depending on the context in which it is used concerning other concepts [3]. In addition, the idea of "smart cities" will never be established due to the substantial research gaps in urbanization and digitalization [4, 5, 6]. On top of that, the term "smart cities" should not be restricted to the world's most populous city areas. It has not been discovered that whatever elements of the city are responsible for its status as a "smart" place. In response to the findings, concerns that call the city's status as a smart city into doubt may be raised anytime analyzed from a diverse range of perspectives, including a variety of locations, educational levels, socioeconomic backgrounds, and other characteristics [7].

Before defining a "smart city," [8] tried to figure out what "smart" meant in the context of ICT. They discovered the 'smart' notation on the smart city is not always a direction to the meaning of user must being smart enough in the first place. It must be 'user-friendly,' or compatible with what the user can accomplish. According to [8] definition, a smart city must tailor its systems to the demands of its residents instead of relying on those citizens' intelligence to utilize and modify the systems. A smart city's classification of "smart" is likewise a challenging idea to comprehend. As per [9], the concepts have been criticized for being too technical and ignoring a variety of concerns, such as the existence of the political sphere and the participation of citizens. In the research conducted by [10] and [11], the ensuing definitions of the "smart city" were discussed, along with the authors' contributions to each study shown within the (Table 1) below:

Table 1 - Definitions of smart city

Author(s)	Definition
[12]	A city where the government, transportation, ecology, and life quality all excel thanks to a strategic combination of socially responsible gifts and citizen efforts by conscientious, independent, and self-directed locals.
[5]	The metropolitan that controls as well as incorporates its fundamental facilities, such as bridges, underpasses, railroads, metro stations, terminals, maritime transport, connectivity, water, as well as electricity—will have made cost - effective use of its resources, planned preventative maintenance, and provided the best services possible to its citizens. There are also many significant buildings.
[13]	A city where the social, commercial, technology, and physical infrastructures are all interconnected in order to maximise the city's collective intelligence.
[14]	A city with "smart" aspirations (economically effective, reliable, inclusive, as well as manageable).
[15]	Sustainable and liveable urban settings are established by combining new technology and web-based resources alongside administrative, configuration, including making preparations strategies to clear and accelerates administrative operations as well as provide creative solutions to city management issues.
[16]	Application of smart technology improves the intelligence, interconnectedness, and cost-effectiveness of the city's essential services as well as infrastructures, such as municipal government, education, health, public security, housing, mobility, and energy.
Setis-Eu as cited in [11]	A smart city can integrate technology like communications technology, improved energy grids, and sewage treatment to lessen its ecological footprint and improve the lives of its residents.
[17]	A smart city is an identified geographical region where advanced technologies, including ICT, supply chain, electricity production, and others, work together to benefit the community in well-being, participation and inclusion, protection of the

	environment, and smart innovation. It has to be run by a well-defined group of people who can make the rules for the city's governance and progress.
[18]	Uses of pervasive technology to seamlessly link people, things, utilities, and so on to improve modern urban living conditions.
[19]	Roads, bridges, underpasses, trains, subway systems, airport terminals, shipping ports, ICT, water, and electricity are all examples of city infrastructure that can benefit from constant monitoring and integration in order to better manage resources, develop strategies maintenance processes, and keep an eye on security while maximising services to residents.
[20]	Smart City and Internet of Things (IoT) work together to create Digital City.
[21]	A city that makes use of ICT to recognise, analyse, and combine the valuable data of important components into running the city.
California Institute as cited in [11]	Smart neighbourhood deliberately decided to utilise digital technologies that significantly and genuinely, as opposed to incrementally, change lives and work in the area.

The smart city idea also presupposes that a city needs to be an innovative, resilient location that raises its residents' standard of living. It cultivates a more welcoming climate with better chances for growth in the economy [22]. A "smart city" is resourceful and innovative in its use of technology and other tools to improve its residents' standard of living, the effectiveness of municipal services, economic vitality, and safety and security [23]. The term "smart cities" refers to urbanization projects implemented at the city's regional scale and include technology in various amenities for the city's residents [7]. Therefore, despite the embrace of better access to ICT tools in this today's context of public participation, what can synergies public participation via e-participation implementation mechanism that might can increase the level of public participation among the rural communities with a more significant role of e-government systems via Web 2.0 such as social media platform, official governmental apps, and the other smart devices [24].

2.2 Public Participation

As per [25], citizen participation may be summed up as any event organized during which a person takes part voluntarily to pursue a shared objective. Subsequently, [26] distinguished comprehensive public participation as the practice involving discussing and including citizens in government institutions and organizations responsible for designing local policy, including agenda-setting, decision-making, and policy-forming. Because the public may participate (in policy formulation, etc.) in many ways or at various levels, as others have remarked, this notion may be vast and open to other ambiguous meanings [27]. The possibility of people and groups having an impact on decision-makers via the liberation to access information or access to it, the liberation to respond to a decision by the organization making it, and the liberation, through courts, changes public agencies and businesses responsible for their environmental actions and activities. After that, [28] denotes it as public participation practices again from the context of the United States.

Various studies examine public participation's literary parameters and restrictions. Diverse scholars may present distinct viewpoints on public participation, considering different frameworks, scopes, demonstrations, ranges, measurements, techniques, preparation, forms, procedures, and improvements. Every study helps reveal e-participation concepts. This section discusses major public participation components based on earlier work for better understanding. Citizens should have numerous opportunities to voice their ideas and concerns about government and how they are represented. This includes having one's voice heard in policy-creation processes, having elected officials and executives answer questions, and expressing ideas and objectives technologically. This concept of public participation seems to be recent and not widely understood. This structure works in most countries. Developed and developing countries without the administrative frameworks and operational processes to operate "e-government" systems correctly might begin modest public participation projects. These literature reviews offered a quick summary of smart city project initiatives for rural public participation, which may give recommendations for rural public participation strategies.

2.3 The Elements of Smart City for Rural Community Participation

Just before to engaging in public participation in rural areas, we need to first acquire an understanding of the characteristics that drive the smart city project as a constructive attempt to improve public participation in a rural community. This will prepare us to engage in public participation in rural areas. As per [29] from the works of [30, 31, 32], they highlighted that a smart city encompasses the following components (see Figure 1):

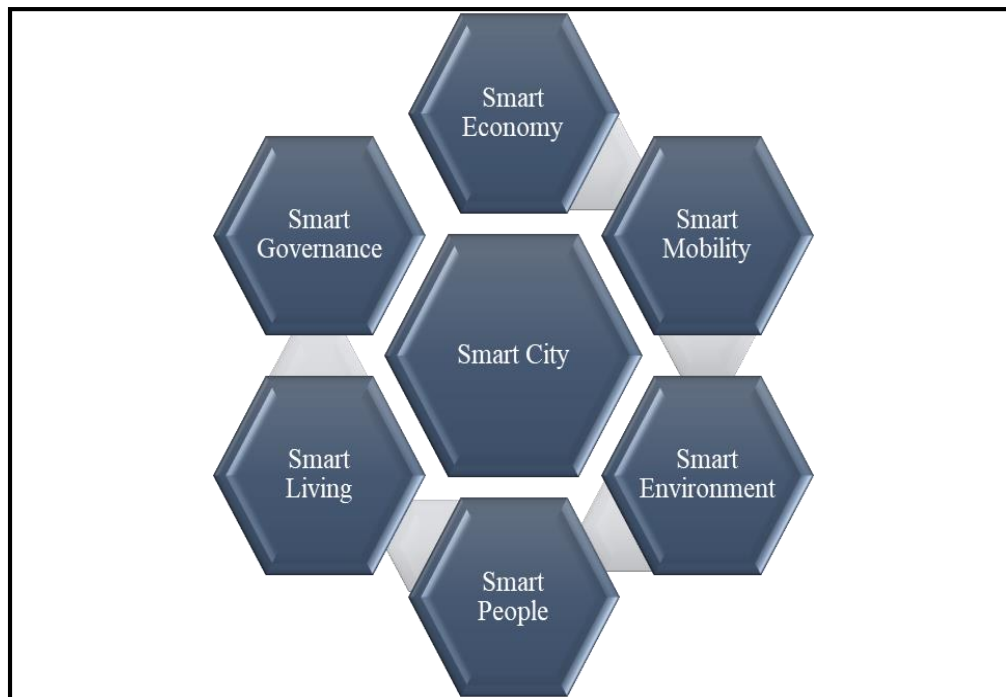


Fig. 1 - The elements of smart city

A smart economy in the city is one that is productive, flexible, able to adapt to changes in the job market, and appears to work with other countries [30, 31, 32]. To get more individuals to participate in rural communities, the government's smart economy initiative needs to help small and medium-sized businesses (SME) become self-sufficient so they don't have to rely on government subsidies [33]. To get people in rural areas participating in the economy, the government needs to set up small- to medium-sized entrepreneurship programs that can help individuals increase their earnings while also breaking the "vicious cycle of poverty." When it comes to giving people more power, the main goal of every government, especially in rural areas, is to end poverty. The first Sustainable Development Goal (SDG) of the United Nations 2030 Agenda is to end poverty around the world. To get eradicate poverty, which keeps people from getting involved and gives power to the vulnerable, the government and the people must work together.

Secondly, smart mobility is seen as the progress made in creating environmentally friendly, technologically advanced, and risk-free modes of transportation [30, 31, 32]. The government may be able to come up with comprehensive and systematic public transportation and good road access for rural areas. In this element, to encourage and facilitate more participation from the rural population throughout the policy-making procedures, smart access to road and transportation connectivity between their home and essential places such as hospitals, government institutions, and other vital industries is prominent for increasing public participation in rural areas. For instance, some villagers might be unable to voice out some crucial demands due to a lack of mobility access to informing government authorities. With access to good smart mobility systems, the villagers might come up front to the nearest communication access such as one-stop telecentres to enable themselves to voice out and participate to government authorities on the needs of the rural communities and provide some beneficial views for the betterment of rural communities.

Next, when evaluating the "smart environment," factors such as the aesthetics of the surrounding area, the levels of pollution, environmental protection initiatives, and resource management approaches are taken into consideration [30, 31, 32]. Some rural communities, especially native people, are very likely reluctant to change the development infrastructure in their places due to preserving their sacred mother nature beliefs and tradition. However, this caused the government to face the dilemma of their goals in strengthening their democratic principles to include the majority of public people in the policy-creation process. Several of the surrounding rural areas demand better connectivity and socio-economic development by introducing infrastructures and industries in rural areas. However, some are reluctant to change due to their social and cultural factors in preserving the environment of their mother natures. This requires full participation and collaboration between government, private stakeholders, environmentalist NGOs, and the local people to discuss the rationale and best approaches in conducting smart environment research analysis with proper initiatives for rural development.

Also, the level of education, continuous learning, ethnic and social variety, creative thinking, flexibility, and involvement in public life are traits of smart people [30, 31, 32]. Of the various elements mentioned above, being a smart person is the most prominent for better development towards good public participation. Moreover, to be more inclusive, smart people must be included in every decision-making process and be realistic in every angle of policy creation and execution. Smart individuals are commonly evaluated using the "Human Development Index" (HDI), which encourages

excellent local people participation in rural areas [34]. The graduate enrollment ratio is the second-most significant characteristic. The degree of qualification is the following most crucial characteristic. There should be ethnic and social diversity, and smart individuals should be lifelong learners. Some other trait of smart people is their open-mindedness, as well as their adaptability to environmental changes and their ingenuity in contributing to education. Smart individuals tend to be progressive and greatly involve themselves in public life.

Besides that, the existence of cultural attractions, living standards (health, safety, housing), educational institutions, tourism attractions, and community stability are all used to assess the quality of smart living [30, 31, 32]. The provision of a wide range of cultural events to people of all faiths, regardless of the size of the community, is another feature that sets it from smart living, as highlighted from [34]. Building reputable universities are essential for delivering educational support. In addition, the cultural variety of rural areas should be made accessible and visible to tourists. The availability of state-of-the-art medical facilities means that people of all socio-economic backgrounds may maintain a healthy lifestyle. There is a considerable need in rural regions for enhanced chances for social integration and access to high-quality, systematized housing. Rural areas can be anything they want them to be with the help of adequately established, excellent educational institutions and socio-empowered communities.

Openness, social interaction, the excellence of government services, as well as the manner in which progressive plans are carried out are all indications of smart governance, according to [30, 31, 32]. Rural smart city projects are unachievable without a transparent, clear, and accountable government. The community's development is city-centric. Smart governance has evolved to improve governance. E-government and e-governance are examples of virtualization approaches within government to increase public service delivery performance while preserving or enhancing quality. Without public participation and recommendations, the government would not know what is driving certain inefficient everyday government activities. Smart governance requires public transparency, which relates to information accessibility. It would be best if you had everything about rural resources, prospects, expenditures, plans, production, tourism, and others [35]. Public transparency includes informational freedom and financial openness as accordance with the study of [36]. In smart village administration, the village chief makes decisions. The leader's village chief was responsible for promoting local interaction and working with stakeholders and government agencies [35].

2.4 Economic Development Perspective Via Smart City for Rural Community Participation

From an economic development perspective, the rural community area has experienced several economic development strategic plans initiated by the government via the smart city project initiative to enhance the capability and improve the majority of the low-medium income that came from the rural community. All government levels, from federal, state, and local governments, always aim to empower the rural regions' economic development. For instance, several European countries have initiated some strategic plans for rural development via smart city project initiatives with the relocation of several public organizations and primary private industries into the rural regions. As a result, rural populations' occupational patterns have changed, mainly favoring the tertiary services sector rather than the primary and secondary sectors, as was formerly the case in the aspiration of increasing the level of rural community participation in government affairs and empowering the rural community's socio-economic development. These responsibilities of government intervention to balance the socio-economic proposition across urban and rural populations discern smart city project ideas for rural community development. As per [37], the rural development objectives are:

- reducing a non-unionised and low-paying workforce in rural areas;
- decreasing individuals relocating from rural to metropolitan places as a response to the urban manufacturing crisis, excessive urbanisation, and the excellent accessibility of transportation between urban and rural, which contributes to the stabilisation of the rural employment market;
- creating a more systematic organisational structure for small and medium businesses as well as creating a competitive culture of entrepreneurship that creates the conditions for rapid rural economic transformation;
- the significance number of governmental assistance for agricultural production has been reflected in good real estate values; this assistance has also provided rural landlords with supplies of lines of credit for investments in brand-new businesses, in addition to the provision of support systems that are aimed at promoting diversification among farmers and rural landlords;
- because of better ICT and transportation connectivity, remote areas will be more accessible;
- the implementation of a diverse variety of innovative and cutting-edge technologies, including biotechnology and modern ICT, has led to significant improvements in rural regions in terms of agriculture and manufacturing production;
- the high expectations that wealthy and influential groups within society place on non-material and strategic products place a growing emphasis on the options that rural places provide for conducive housing, leisure, the satisfaction of facilities and amenities and nature, and a positive and healthy environment.

Nonetheless, despite all the smart city project efforts that the governments have initiated, there are still some blank spaces for this project to encourage more rural public participation in governmental affairs. Despite the efforts in includes

rural participation via smart city project initiatives, the equilibrium of public participation between the city and rural communities still can be able to be a dispute with the absence of empirical studies and substantial evidence concerning the level of public participation in governmental affairs from the context of the rural community today. Within that context, public participation entails using rural residents' assistance and resources as an initiative toward a government plan with the hope that doing so would increase the government's performance, transparency, accountability, and effectiveness [37]. Initiatives for rural people empowerment strategies are usually believed to include promoting local participation via the use of smart cities in order to accomplish developmental and environmental objectives.

Rural participation, nevertheless, may also serve as a means within itself, with the ultimate goal being to increase residents' capability to participate, either in the political or economic spheres or both, as this is the sole proven method for ending their own "dependency syndrome" towards the government [37]. As per [37] also, as a result, there has been a shift in emphasis toward the need for "capacity-building", and official support for ground-up initiatives should be initiated via smart city programs that might enhance the level of public participation among the rural community. Input from the public might advance ecological sustainability and aid in integrating social and ecological factors into the top-level decision [38]. Increased public participation may promote transparency and legitimacy of good environmental policymaking [39]. This might lead to fewer litigation, fewer delays, and better grass-roots rural decision-making.

3. Challenges and Solutions in Smart City Project for Rural Community Public Participation

The technological shifts toward innovation are inevitable in our current digital era since many organizations, both governmental and commercial attempting to fully leverage contact with public people as their strategies of comprehending the requirements of the public or their customers. Nevertheless, like cities, towns and villages face a complex spectrum of regionally specific challenges based on geography, economics, culture, and environment [40]. From the standpoint of government administration, the government's goal was to increase public participation in smart cities to achieve the application of democratic, transparent, and accountable principles of good governance. These principles, along with the presence of a public interest agenda at the focus of all consideration, as well as good policy creation by the government, have been incorporated into every step of the policy creation and decision-making process [41]. Despite this, any government that attempts will inevitably have to face the difficulties and obstacles of enforcing smart city efforts to enhance the level of participation among rural residents.

Adopting modern digital technology is part of smart cities, but they might not always correspond with town characteristics [40]. In addition, [42] argued that towns and villages face distinct future issues than cities since they lack vital infrastructure. It generates logistical, transportation, educational, and socioeconomic concerns. Understanding the rural perspective is crucial. Cities have more complex systems for including diverse professions in smart projects [3]. As per [40] noted that although towns and villages have lower inhabitants and smaller areas, cities may benefit more from scale economies and commercial opportunity models owing to the interconnectedness of numerous players and stakeholders [43]. Instead, starting with a city's "smart" component, as some imagine, smart city projects should start with the town by itself [44]. Cities and towns are varied and inventive in size and shape. The following part contains a few literary works on obstacles and limitations the government must overcome while implementing the smart city framework for rural community participation.

3.1 Low Acceptance by Villagers towards Online Transactions and Services

The villagers are still hesitant and in a dilemma about using some particular online transactions and services. Despite all the government efforts in providing one-stop online services for rural communities to participate in government affairs, there is still a barrier for them to apply it. For instance, [45] discovered in the case of Malaysia that despite attempts to introduce the Rural Transformation Centre (RTC) to introduce villagers to technology, acceptance of modern technology was still in its early stages. The villagers are still reluctant to utilize it, especially in buying and selling online. This is the same phenomenon with the introduction of e-government online services to rural communities. As we know, most of the villagers are old folks and some communities with below-than-average educational backgrounds. They are low-empowered due to isolation, physical weakness, vulnerability, poverty and powerlessness [46]. When low-empowered, there are reluctant to expose themselves to the new digital online platform, yet sometimes unaware of public participation online compared with the cities and regions where most utilize online transactions.

Additionally, they expressed concern that other individuals would use their accounts illegally since they were not adequately secure. Their hesitation in utilizing online payment via technology was further worsened by rising online fraud [45], the same with the government's online affairs. To curb this barrier, the government must be able to create more multi-layer cyber security systems for any broadband that has been placed in rural communities. The government may assist in introducing internet banking by making investments in infrastructure, including fiber optic cable to boost online transactions. As per [47], in countries like Japan, Malaysia and Singapore, the government has invested heavily in the country's digital infrastructure. Along with infrastructural assistance and advertising, the government's involvement in establishing cyber law will increase customers' confidence in digital banking [48], especially by deliberately informed towards the villagers that the online transaction for public participation is safe enough to be used with the assist of cyber-security information description that able to be understood by the local villagers easily.

3.2 Lack of Infrastructures

The capacity for participation and expansion of rural communities in smart city initiatives was limited in these regions because there was a lack of physical infrastructure. Connectivity with existing networks is required in order for it to be possible to provide high-speed internet to rural places. Before smart city efforts can be launched for rural villages, several problems need to be solved first. These considerations include the availability of power for telecommunication towers and internet connectivity, as well as road access for the construction of communications infrastructure. The government, the public sector, and the private sector need to work together in order for the government to be able to create the essential infrastructure. Before the government can promote smart city initiatives for rural community participation, it must first promote the development of rural areas by continuing to expand access to electricity, clean water, and roads; empowering rural residents by investing in formal education; and combating rural unemployment and poverty by boosting rural employment through small-scale businesses. Continued the government's work with several notable parties is required [49]. Investment is required from the government, businesses, and non-profit organizations in order to make improvements to the infrastructure of rural areas via smart city programs.

3.3 Possible Exploitation of Technology Among Youth

As per [45] argued most people tend to favor technology adoption. However, the large percentage consists of millennials, who are members of the youth population. Young people are interested in exploring the Internet. The Internet provides many genres for various purposes, including learning, playing games, seeing interactive films, and enhancing creativity. Sadly, some youths want even more material. They often see unnecessary and explicit content, such as illegal fighting, online transactions, gambling and entertainment, pornographies, and other unlawful internet activities. Notwithstanding the government's cybersecurity, these youths are often more tech-savvy and may override or breach the security system to get unauthorized access to private or sensitive information. When this was introduced, most internet exploitation was caused by excessive video game playing rather than safe online activity [45]. Youth generations will be exposed to crime, violence, rape, and other severe crimes if this trend continues. When exploitation occurs, this scenario is far from the smart city's intention to promote public participation in rural areas.

As for the solution, [50] has discussed that raising children's understanding of the concerns that arise from interactions with internet technology is among the most effective strategies to keep them out of dangerous circumstances. It is also a good idea to educate kids on how seemingly innocuous and inadvertent behaviour may be abused and how individuals with bad intentions might hurt or deceive them if such activities go unreported. Because ICTs and their uses are rapidly changing, the effect of these applications and devices is not always expected or recognized. Teachers in all nations must encourage their pupils to resist contacting outsiders by not publishing personal info, preventing sexually explicit material and violent material, not agreeing to meet in person with a stranger they met online, and not exchanging sensitive photographs. In increasing the public participation among youth, the government can provide their views from the local youth village communities that, on this occasion, one might have a deeper grasp of the demands of the youth.

3.4 Social and Cultural Factors

The social and cultural characteristics are most likely the most significant and major societal challenges to expanding the public participation of rural people in efforts to implement smart cities [51]. This is related to the culturally embedded and historically rooted dependence mentality of specific individuals living in rural areas. Local governing organizations and the state have influenced rural communities in many developing countries for years. They have relied on these organizations and the state to determine what is best for them. As a consequence of this, poor rural communities have begun to place their reliance on the "leaders" of their communities to make choices and take decisions. According to leadership standards, most people who live in rural areas cannot fulfil the requirements for public participation because their communities lack the leadership and organizational skills necessary to run projects or organizations. As a result, they are also incompetent at running projects and organizations.

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Villages and rural areas have a lot of different cultures, traditions, and histories, and outsiders could never take taboos for granted. Outsiders must be extra careful when going into remote villages, like the area where native people live because they have long-standing traditions and taboos. As for possible solutions, if the government or private

companies want to develop on their sacred land, they need to stay in touch with the local communities to find out what they can and cannot do. As for building a smart city, the authorities seem to find it challenging and complicated to develop the rural land needed because the land is owned by the natives and is very sacred. Also, their culture is well-known for being close to nature and not wanting to move forward with modern technology. This makes it difficult for the government and private companies to construct the telecommunications center, which is supposed to encourage public participation in rural communities and give other areas more capacity for ICT development.

As per [52] studies of rural community participation in some Indonesian villages, social and cultural factors that restrained public participation and are reluctant to change, such as marginalization, overreliance, mistreatment, and a silent culture of expressing out for participation, create an obstacle for government to carry out digital rural communities' public participation via smart city projects. Sensitivity, fear of disagreement, and indifference to outsiders are further constraints. [33] found mismanagement and insufficient implementation by rural committees that may not meet with the government for public participation. Caused smart city development is hampered. Educating them on the smart city project's value for community participation seems to be another alternative. In the early phases, it is likely back-breaking; nevertheless, the government must put more persuasion and common understanding to guarantee that the smart city project operates smoothly not for older people but for young generations who will be the country's future leaders. Young people, predominantly rural, must feel more motivated for the nation's future.

4. Conclusion

In order for smart city rural development programs to be successful, the participation of rural communities is very important. Because of the political, economic, and social disparities between urban and rural areas, the notion of a "smart city" has been thoroughly investigated. Every government is working for a balance of urban and rural growth in its policies and programs. The city's socioeconomic growth has resulted in a decent amount of public participation in local decision-making. Rural communities must be included in creating policies that the government implements to have good governance that includes democracy, transparency, accountability, and smart governance that is both efficient and effective. It is indeed possible that smart city programs are the most effective way for rural communities to improve their information and communication technology use. Because of globalization and increased complexity, rural communities must use information and communication technology. Participation techniques can help bring the people and the government closer together by informing the government about the local community's concerns. The government has to improve the infrastructure in rural areas to connect with the people who live there and expand the range of opportunities for public participation. It is necessary to conduct comprehensive research to design a public participation strategy and activities that are comprehensive and more systematic and that may benefit the government and other stakeholders, not to mention the people themselves.

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