

Towards Inclusive Governance: Examining And Adoption Of E-Governance In Rural Punjab

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Abstract

This research examines the circumstances surrounding the implementation of E-Governance projects in rural Punjab, providing light on the prospects and problems of implementing electronic governance systems in these locations. This paper investigates how ICT projects influence the population in Punjab. The sample size of the study is determined to be 120 participants. Kapurthala is a district in Punjab, India as technology advances, there is a greater emphasis on using digital platforms to improve governance, most delivery of services, and general development in rural communities. This research seeks to give a complete examination of the existing condition of E-Governance in rural areas of district Kapurthala, Punjab. This study is about the challenges to accomplishing e-government in areas of Kapurthala, the district of Punjab.

The research proved that somehow country side lacked a way to access e-governance and ICT services.

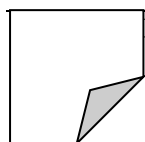
Keywords: e-governance, digital platforms, ICT projects, service delivery.

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I. Introduction

Information and communication technology (ICT) is used in "e-government," which aims to increase government effectiveness, efficiency, accountability, and transparency. In the past, communications between a company or individual and a government agency happened inside a government workplace. The development of Information and Communication Technology has made it feasible to place service centres nearer to the public. More than just operating a government online, e-governance is about governance. It is the process of using information and communication technology to change how the government interacts with its constituents, including companies, people, and its organs. Technology may be very beneficial for online monitoring, accountability, transparency, and direct public participation in government. It can also assist bridge geographic divides. Even though the general population in India is using technology more often, not all of the country's residents feel comfortable using the internet to obtain services, and not all locations are sufficiently linked (Cecchini & Raina, 2004). accordance with this worldwide trend, India has launched extensive measures to implement electronic governance at the national, state, and municipal levels. Although the sophisticated industrial nations have the most government websites, India ranks seventh globally (Norris, Pippa, 2000). Obstacles might arise throughout any phase of an e-governance project, ranging from planning to execution to acceptance. In order to guarantee perfection in citizen-centric e-governance initiatives, the processes and procedures pertaining to the conception, implementation, and acceptance of services must be completely redesigned, using the most recent frameworks and cutting-edge technology (Saxena, 2005). Though not exclusively, inclusive governance is closely linked to concepts like democratic governance, good governance, and a human rights-based approach to legitimacy and development. A key component of the transparency and accountability agenda, inclusive governance is an inherent value of governance that aims to create more equitable, wise, accountable, transparent, and inclusive governance structures and processes for making choices in public institutions. Since inclusive governance has been included in the SDGs agenda, it has become increasingly important (Annahar et al., 2023). Improving the process of negotiation space and encouraging participation are the next two tenets of inclusive governance. Involving the community involves more than just giving them the option of engaging in decision-making. In addition, the government has to provide mechanisms that allow citizens to engage more meaningfully and to make it easier for them to do so. Thus, achieving meaningful involvement in inclusive governance necessitates changing organizational, individual, and cultural norms (Gupta et al., 2015). The role of e-governance in tackling corruption in the State of Punjab has received a lot of attention in India, notably. As a result of going over a couple of projects that were implemented in this area, the power of the digital governance mechanism in reducing corrupt behaviors has become clear. The e-governance tools like online portals for citizen services,



digital payment systems, and electronic record maintenance that were adopted have highly improved the transparency and the accountability of processes in governance (Singla, 2011). due to the constant change of the government's policy it's one of the challenges we face the unstable government, shortage of the required skilled and experience human resource, and lack of available funds for the projects though this is a capital intensive project (Madon, 2004). Governments along with major public sector organizations all across the globe are being put under a mandate to redefine their public administration systems in order to provide more effective services and better information and knowledge to their addressees. Another issue is linguistic in nature. People may not feel at ease since the information is not provided in the local tongue (Dwivedi & Bharti, 2010).

II. Literature Review

(Kalsi & Kiran, 2015) This article's main purpose is to look into whether or not modern communication and information technologies can significantly help achieve the good governance goal. In order to achieve excellent governance, the research looks at the factors that go into creating an environment that is favorable for the successful deployment of e-governance as well as potential roadblocks to the uptake of e-governance applications. It offers a strategic strategy framework for effective governance in Punjab, India, based on extensive study. In terms of infrastructure and per capita income, Punjab is one of India's wealthiest states.

(Malhotra et al., 2011) In this research, Participation in e-Governance procedures fosters citizen ownership and collaboration in implementation. Few e-Governance efforts in rural regions involve public engagement, leading to a lack of consideration for contextual concerns. This project aims to develop effective tools for promoting public engagement in rural e-Governance initiatives. A Citizen Consultation Round (CCR) was done with 73 villagers from diverse Indian villages to assess their needs and expectations for Rural eGovernance initiatives (ReGI). To address local problems in ReGI, a coordinated and methodical approach is necessary Taking an inclusive approach to designing ReGI initiatives can enhance their responsiveness to context and promote rural development in developing economies.

(Naik et al., 2012) It has been determined that e-governance is an essential instrument for advancing inclusive, transparent, responsive, and participatory democracy in order to strengthen grassroots development. The implementation of e-governance in rural regions has promise for promoting equitable growth and development. One effective concept for e-governance in rural regions that promotes equitable growth is the implementation of E-Governance Embedded Rural Telecenters (EGERT) in India.

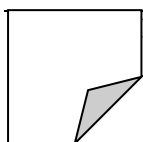
(Misra, 2009) According to the study given here, a driven by demand "citizen interface" might help make e-governance services more successful in India in conjunction with SMART governance solutions. Effective "citizen interface" in rural India relies on providing demand-driven services. Rural inhabitants in India live in villages, and their needs are not sufficiently addressed at the state or national level. Villages provide shared services, such as e governance, depending on state/national policy. To accurately assess demand for e-governance systems, it's crucial to consider individual household demands with national estimations. To provide successful e-governance services in India, it is crucial to appropriately capture and integrate rural communities' requirements into the network architecture. Rural people' livelihood views play a crucial role in establishing a durable link between "e-governance service-information supply" and "e-governance service-information demand." This study is based on preliminary findings using the framework presented. The objective is to engage all stakeholders and debate influencers and associated metrics in a broader context.

(Ranganathan & Bhatnagar, 2010) emphasized the promise of e-Governance for development in rural India, emphasizing the need of harnessing technology to meet the particular issues that rural populations confront. The authors stressed the significance of adapting e-Governance projects to meet the unique demands of rural people, guaranteeing inclusion and accessibility. This viewpoint throws attention on the opportunity that e-Government provides for bridging developmental gaps in rural India.

(Mandal, 2021) In today's globalized world, people like to get information with a single click. In industrialized countries, most people utilize e-information, indicating that they are evolved, but in developing countries, such as India, the majority of rural people use conventional information services. In contemporary India, government and commercial groups offer e-information services in rural villages. This paper defines e-information services, distinguishes between traditional and e-information services, and highlights projects undertaken by the government and private organizations to promote India's development. It also discusses the impact and barriers to e-information services in rural India. Improved access to information services in rural regions has led to changes in living standards, education, infrastructure, and demand, transforming rural villages into information villages and propelling India from a developing to a developed country.

III. E-Governance In Punjab

Punjab, which is home to around 24.4 million people, is a region in northwest India that accounts for almost 54% of the nation's total territory. Punjab has seen the greatest average rate of growth of any Indian state since gaining independence, at 10%. The region likewise takes pride in having a literacy rate of 69.95% which is



a good indicator for its dedication to education and development of human resources. In addition, Punjab becomes an acceptable place to invest as well as industrial ventures that have many advantages in terms of human resources and employment opportunities. The green revolution, which was a technological revolution in agriculture, was first brought to Punjab, which became the first state to enjoy the high yield of the harvest. The resultant massive growth in agricultural output makes Punjab a crucial pillar that determines the pace and development of the country's agricultural sector.

The Government of Punjab established the Department of Information Systems and Administrative Reforms (DISAR) on November 1, 1998, by merging the Department of Administrative Reforms, Evaluation, and the Computerization Wing of the Planning department to align with India's goal of becoming a global IT powerhouse and leader in the information revolution. The Punjab Administration's new Department of Information Technology (DoIT) aims to improve e-Governance by developing and implementing a strategy to integrate information technology at all levels.

As part of the comprehensive national objective of positioning India as a major player in the global IT arena and the leading country in the information revolution, the government of Punjab made a bold move by creating the Department of Information Systems and Administrative Reforms (DISAR). The Department of Information Technology (DoIT) was mandated to be the lead agency in implementing the IT policy in the state of Punjab, henceforth. The adoption of the Punjab IT Policy in 2001 became a vital moment which demonstrated the state's determination to be a prime industrial zone with high standard infrastructure and provide citizen-centric governance and improve the social system based on knowledge (DGRPG, Punjab , n.d.)

IV. Research Methodology

The researcher going to conduct surveys and structured interviews with the public/residents in rural areas of Kapurthala District successfully, it is crucial to select appropriate methods for obtaining accurate information. Survey Research is a method that involves gathering data from a representative sample of the population using questionnaires, thus proving to be a valuable tool for this study. This method allows the researcher to gain valuable insights into the public's perceptions, attitudes, and experiences with e-governance initiatives. Closed-ended questions play a significant role in providing quantitative data on the advantages and obstacles related to these initiatives, giving a clearer picture of the overall scenario.

Study Design: The research adopted a qualitative research design to delve deeper into the public's awareness, perceptions, and experiences regarding e-governance initiatives in Kapurthala District, Punjab. By using structured questionnaires, the researcher aimed to collect detailed information on the participants' attitudes and opinions. The participants included residents of rural Kapurthala district, selected through convenience sampling techniques to ensure a diverse range of perspectives on the topic. A total of 120 participants were recruited for the study.

Data Collection Instrument: To gather comprehensive data on various aspects of the e-governance initiatives, a structured questionnaire was developed. This questionnaire consisted of several items specifically created to assess the participants' levels of satisfaction or dissatisfaction and the effectiveness or ineffectiveness of the initiatives. Through this instrument, the researcher sought to obtain nuanced insights into how the public perceives and engages with e-governance in Kapurthala District. The data collection process involved reaching out to participants through offline and obtaining their informed consent before requesting them to complete the questionnaire.

Table 1.1: Demographic profile of Kapurthala district

S.No.	GENDER	FREQUENCY	PERCENTAGE
1.	MALE	71	59.2%
2.	FEMALE	49	40.8%
3.	OTHERS	0	0
TOTAL		120	100%

There is a total number of 120 individuals in this group, among whom there are 71 who are men, equaling to 59.2% of the group. At the time when males dominated, they were considered to be more visible among other members. On the other hand, there is the group of 49 females that represents 40.8% of the population. no one is identified with 'Others' by the group, which reveals a disregard of the non-binary or other gender identities. finally ensuring that the male and female categories have a combined total of 100% and confirming the thorough representation of all genders in the statistical breakdown.

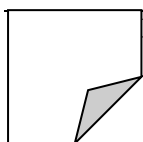


Table 1.2

S.No.	AGE	FREQUENCY	PERCENTAGE
1.	18-30	7	5.83%
2.	31-40	42	35%
3.	41-50	37	30.83%
4.	51-60	31	25.83%
5.	61-70	3	2.5%
TOTAL		120	100%

The distribution of age groups in the sample population demographic analysis shows a distinct pattern. The main age group, which consists of people between the ages of 31-40 years old, covers the largest share of the whole population of 35%, representing 42 people. age group of 41-50, with 37 people making up 30.83% of the population. This statistic implies that a considerable number of people of this age range are represented.

Moreover, the 51-60 age group has a medium presence, with 31 people accounting for 25.83% of the total population. Although a smaller number compared to the 41-50 age group, this segment is still a significant part of the demographic makeup.

However, the participants aged 18-30 have the lowest frequencies, only 7 individuals or 5.83% of the total population. This reduced representation highlights the lower proportion of young adults in the research group.

Table 2: Regarding awareness of e-governance initiatives in rural Punjab

S.No.	Awareness regarding e-governance initiatives	Frequency	Percentage
1.	Yes	78	65%
2.	No	42	35%
Total		120	100%

This table shows that 65% of the participants are aware of e-governance systems, while 35% of the participants are unaware of such systems. This classification highlights a clear divide in the understanding of e-government policies among the population surveyed. The findings suggest an urgent need to increase educational campaigns and outreach activities to increase public awareness and participation in e-government initiatives. By bridging this awareness gap, policymakers and stakeholders can affirm digital governance policies that are effective and acceptable to a broader segment of society, ultimately leading to an informed and driven society they are involved.

Table 3: which e-governance initiatives has had the most significant impact in your village

S.No.	e-governance initiatives having Significant impact in your village	Frequency	Percentage
1.	Digital literacy programs	24	20%
2.	Online healthcare services	15	12.5%
3.	Agricultural information portal	23	19.2%
4.	Others	58	48.3%
Total		120	100%

In the survey of the 120 individuals, the results show a significant understanding of the necessity of digital literacy programs among the respondents. 24 of the participants highlighted the critical importance of such actions in helping citizens to grow their understanding of technology, digital tools, and online services. Moreover, 15 people mentioned the positive influence of eHealth on the situation in remote rural areas, when they get access to medical information, telemedicine consultations, and different health resources. On top of that, 23 respondents have mentioned the great importance of the information portal for agriculture by providing farmers with real-time data on crop prices, weather forecasts, pest control methods, and agricultural practices. Furthermore, more than half (58 out of 120) of the participants pointed out the importance of different e-governance initiatives. While the exact nature of these initiatives has not been spelled out in the data, it is inferred that they cover a wide range of services including e-governance functions such as land records, social welfare and addressing grievances.

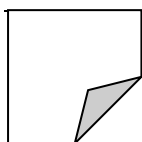


Table 4: Regarding potential growth of e-governance initiatives in rural Punjab

S.No.	Potential growth for e-governance initiative in rural Punjab	Frequency	Percentage
1.	Jagriti e-Sewa	28	23.3%
2.	Kisan call centres	36	30%
3.	SUWIDHA	23	19.2%
4.	e-Sewa	33	27.5%
	Total	120	100%

Table shows that the initiatives of e-governance may gain speed in rural Punjab because of the unveiled facts. The prominent program that has been approved to have the highest return on investment is the Kisan call centres whose mentioned frequency is 36 with a share of 30% of the total answers. This enormous rural population's interest in farm services implies that e-governance should be incorporated in order to properly attend to their agricultural needs.

Jagriti e-Sewa and e-Sewa with their frequencies of 28 and 33 carry a huge hope of the respondents with percentages of 23.3 and 27.5 respectively. It is encouraging to observe that the rural population shows great satisfaction with these initiatives, indicating a significant interest in e-services. This demonstrates that the digital interventions have effectively met the needs of this particular segment of the population.

On the other hand, SUWIDHA, which was mentioned with 23 mentions, recorded the lowest frequency of the candidate initiatives which total 19.2% of the responses. The scarcity of interest at the bottom level may imply that not enough people are aware of or are interested in this service. Conversely, the same symbol length may suggest that SUWIDHA is in the early stages yet compared to the already established e-governance initiatives in the region.

Factors which are hindering the adoption of e-governance services

A significant number of the respondents (62 of 120) acknowledged absence of knowledge as the main obstruction for e-governance adoption. This means that the e-government services should be properly communicated to citizens in rural areas on the benefits and how to access the services online.

The data illustrate that 19 respondents (out of 120) see poor connection to the Internet as a problem. In places where reliable Internet infrastructure does not exist, citizens have to deal with unavailability of government online services in rural areas.

39 of the total 120 respondents (48%) indicated language barriers to be major trouble. The language variety demands the development of multilingual e-governance services in Punjab.

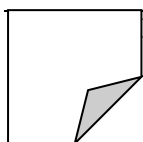
As a result, extremely poor level of information technology in Punjab creates the most complex barrier to the public adoption and approval of electronic governance. The Punjabi people should be supplied with the knowledge of information applications and the benefits of IT so as to be able to remove this challenge.

V. Discussions

In rural Punjab, which is the residence of over 70 percent of the people with low literacy and awareness about the usage of ICT, emphasizing on the ICT literacy for such people is a dire need. Thus, this strategic direction is vital to the achievement of e-government goals, and to increase the civil involvement of the citizens. One of the major problems that cause the development of e-government to go slower is the unfriendliness of the software and websites of the current e-government system. This usually results from the language barrier among the users. Now, the online platforms are in English only and thus, a big constituent of the people are deprived of these services. The most significant limiting factor appears to be the absence of multilingual supports, which makes many e-government programs to be ineffective and invisible to the targeted population. Bridging this linguistic divide is a critical step towards making sure that e-government services in the rural parts of Punjab are inclusive and efficient, and so that more members of the local communities would be involved in and work with the government.

VI. Conclusions

The current study focuses on determining the metrics for gauging the level of satisfaction among users of digital government services in the rural Kapurthala region of Punjab, the implementation of digital government services has witnessed a significant increase in adoption among residents of rural communities. It is imperative for governments to strategize the design of e-governance services by taking into consideration various factors specific to citizens, such as low literacy levels, IT literacy, and local language proficiency, all of which are fundamental for sustainable development initiatives. Furthermore, in order to enhance citizen satisfaction, governments must prioritize understanding and addressing key citizen needs, including combating corruption in service delivery, providing reliable services at affordable costs, and even offering certain services free of charge. By aligning e-governance services with these critical considerations, administrations can ensure the effective



delivery of services that meet the diverse requirements and anticipations of the populace, ultimately fostering greater citizen satisfaction and engagement in the digital governance realm.

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