International Journal of
Public Policy and Administration
(IJPPA)

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CARI Journals

International Journal of Public Policy and Administration
ISSN: 2791-2493 (Online)
Vol.6, Issue No.1, pp 75 – 92, 2024
www.carijournals.org

Unpackaging E-governance within the Perceptive of Community Development: A review of Selected Services in Uganda

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Abstract

Purpose: This study aimed to review the relationship between e-governance and local community development by specifically, focusing on four selected services, viz., universal education, youth welfare, reproductive health and agricultural development in Uganda.

Methodology: The study took a review of obtainable secondary literature by specifically looking at online materials both published works such as journal articles, policy statements, statistical reports as well as annual and/or quarterly reports. The choice of secondary literature, organized thematically, provided a wider purview of the scattered, yet vital aspects, pertaining e-governance in social service delivery.

Findings: The outcomes, from the review, indicate that Uganda has made several in-roads regarding universal primary education, youth welfare programs, reproductive healthcare services and agricultural development through various interventions aided by e-governance platforms. However, a number of systemic and structural challenges continue to pull-back national and local efforts especially seen from online mechanisms.

Unique contribution to theory, practice and policy: This review contributes immensely to the modern community transformation mooted in a digital era where enabling policies and practices can benefit from by reversing the impingements as well as the consolidating the success stories. We encourage the need for government to prioritize lowering the cost of internet services as a way of enhancing local community development; government should make sure that schools offering universal education should be facilitated with functional computer laboratories; government hospitals, at district level, should have a computer laboratory for data storage; and handy apps for farmers should be given priority so as to enhance smart agricultural development.

Key words: *E-Governance, Universal Education, Youth Welfare, Reproductive Health, Agricultural Development*

1. Introduction

The interest and attention mooted by the United Nations (2016) in terms of encouraging members states to increase the use of digital tools and platforms when delivering government services, facilitating citizen engagement, and seeking to improve the efficiency of public administration attracts greater attention to every stakeholder. The notion of e-governance has consequently, come to include a range of technologies, such as websites, mobile applications, and online portals that allow citizens to access services, submit requests, and participate in decision- making processes (Acanga, Mwesigwa, Oryang & Oboi, 2022a) The primary goal of e-governance is to enhance the transparency, accountability, and accessibility of government operations, ultimately fostering a more inclusive and participatory democracy (Acanga et al., 2022b). Bhattacharyya (2004) presents local community development as the process of promoting economic, social, and environmental progress within a specific geographic area, especially at the local or regional level. This approach emphasizes the empowerment of residents, sustainable resource use, and building local capacity to address issues such as poverty, unemployment, and social inequality. This review looks at e-governance as a means of promoting local community development in terms of universal education, reproductive healthcare and agricultural development.

2. Findings and analysis

2.1 E-governance and Universal Primary Education program

Universal Primary Education (UPE) refers to a governmental policy aimed at providing free and compulsory primary education to all children, typically to meet the educational goals outlined by international initiatives such as the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs). The objective of UPE is to enhance access to education, reduce inequality, and promote literacy among young populations (Nishimura, Yamano, & Sasaoka, 2008). MDG 2 focused on Universal Primary Education and now SDG 4 focuses on inclusive and equitable quality education. Uganda introduced UPE program in 1997 with a view of ensuring that every child receives a basic education, particularly targeting children from disadvantaged and rural backgrounds. The policy has led to a significant increase in school enrollment rates, though it has also introduced challenges such as overcrowded classrooms, inadequate teaching resources, and poor infrastructure. Other UPE implementing countries are, Kenya in 2003, India in 2009 etc.

2.2 E-governance tools for Universal Primary Education (UPE)

Several tools have been and continue to be used, by the government of Uganda, in the implementation of UPE program however, the key three are:

a) Education Management Information System (EMIS). According to Ministry of Education and Sports. (2019), the Education Management Information System (EMIS) is a vital tool for collecting, managing, and analyzing educational data. It enables the government to monitor school enrollment, attendance, and performance metrics, thus facilitating informed decision-making and resource allocation.

b) Digital Teacher Management Information System (TMIS). TMIS is designed to manage teacher data, including deployment, qualifications, and performance, which is crucial for UPE's success. Example, TMIS helps the Ministry of Education ensure that schools are adequately staffed and that teachers are receiving the necessary training, improving the quality of education delivered under UPE.

c) E-Registration Systems. E-registration tools simplify the process of enrolling students into the UPE system, ensuring that all eligible children are registered. Example, an e-registration system could allow for accurate tracking of enrolment numbers and ensure that government funding is appropriately allocated based on student numbers.

2.3 How e-governance plays roles in enhancing UPE program

Here is how e-governance enhances the Universal Primary Education (UPE) program.

a) E-Recruitment - E-governance facilitates efficient teacher recruitment processes through digital platforms, which reduces recruitment time and cost. For instance, in Kenya, the Teachers Service Commission (TSC) uses an e-recruitment portal for hiring teachers, which enables transparency and reduces biases (Ngware, 2020).

b) E-Learning and Remote Education - With e-learning platforms, students can access educational resources and attend classes remotely. In Uganda, the government partnered with various e- learning platforms to ensure that students could continue their education during the COVID-19 pandemic (Wamuyu, 2021).

c) Stakeholder Engagements - E-governance enables streamlined engagement with stakeholders like parents, teachers, and government bodies through digital platforms. For example, in Nigeria, the Universal Basic Education Commission uses social media and online platforms to engage with the community and gather feedback on the UPE program (Adeoye & Ojo, 2019).

d) Resource Allocation and Accountability - Digital systems improve the transparency and efficiency of allocating educational resources, such as funds and materials, to schools. In Rwanda, the government uses an online database to track educational resource allocation, ensuring accountability and preventing resource misappropriation (Mukama, 2022).

e) Monitoring and Evaluation - E-governance provides data collection and analysis tools that enable efficient program monitoring and evaluation. In Malawi, digital tools are used to monitor teacher attendance and student enrollment, allowing timely interventions (Chirwa & Mvulavavu, 2020).

f) Ease of Information Dissemination and Accessibility - With digital communication tools, information about policies, guidelines, and updates on the UPE program is easily disseminated to teachers, students, and parents. In South Africa, the Department of Basic Education uses SMS and online platforms to communicate exam dates, updates, and news

to students and parents (Mkhize, 2023).

g) E-Training - Online platforms such as zoom, conferencing provides teachers with continuous professional development opportunities. For instance, Zambia's Ministry of General Education offers online courses for teacher upskilling, which enhances teaching quality in UPE schools (Simutowe, 2021).

h) Online School Enrollment - Online enrollment systems simplify the process of registering students in UPE schools, improving accessibility and reducing paperwork. Ghana implemented an online school enrollment system that allows parents to enroll their children in public schools without physical visits, increasing efficiency (Acheampong, 2019).

2.4 Challenges and barriers faced by e-governance in UPE implementation

a) Technological Barriers - Inadequate infrastructure, such as unreliable internet connectivity and insufficient access to digital devices, hampers the implementation of e-governance in UPE. Many rural and underserved areas lack the necessary technological resources, making it difficult for schools and students to benefit from digital platforms (World Bank, 2016). To avert this, it requires investing in infrastructure development is crucial. Governments and organizations can collaborate to improve internet access and provide digital devices to schools. Initiatives like community technology centers can also help bridge the digital divide by offering resources for both students and teachers (Aker & Mbiti, 2016).

b) Lack of Digital Literacy - A significant barrier to the effective use of e-governance tools is the lack of digital literacy among teachers, students, and parents. Many stakeholders may not possess the skills needed to navigate digital platforms (UNESCO, 2018). It has been proposed that implementing digital literacy training programs is essential. These programs can focus on teaching basic computer skills, internet navigation, and the use of specific e-governance tools. Collaborating with local NGOs or tech companies can enhance the reach and effectiveness of these initiatives (UNICEF, 2019).

c) Data Privacy and Security Concerns - The use of digital tools raises concerns about data privacy and security. Parents and educators may worry about the safety of sensitive information related to students (OECD, 2019). To deter this, it calls for establishing robust data protection policies and practices is essential. Governments should ensure compliance with privacy regulations and educate stakeholders about the importance of data security. Regular audits and assessments can help maintain high standards of data protection (Zhou, 2020).

3. E-governance and Youth Welfare

According to UNESCO (2019), youth welfare encompasses a range of services and programs aimed at promoting the physical, emotional, and social well-being of young people. It includes areas such as education, healthcare, employment, and social services, all of which contribute to

the overall development of youth. The significance of youth welfare lies in its potential to empower young individuals, helping them to realize their full potential and become productive members of society. The United Nations notes that "youth" is defined as individuals between the ages of 15 and 24 years. This age range is used for statistical consistency across regions and reflects a period of transition from the dependence of childhood to adulthood's independence (United Nations, n.d.).

3.1 Selected e-governance tools for youth welfare

In India, the e-Mudhra initiative offers a digital signature service that allows youth to register their businesses online. This tool simplifies the process of starting a business, reducing bureaucratic hurdles and empowering young entrepreneurs (Ministry of Electronics and Information Technology, 2020). Kenya's M-Pesa mobile money service has revolutionized financial transactions, allowing youth to send money, pay bills, and access financial services directly from their mobile phones. This has significantly improved financial inclusion among young people, enabling them to manage their finances better (Jack & Suri, 2011). Therefore, e-governance enhances youth welfare in a number of ways, namely:

a) Youth Participation and Engagement - E-governance platforms provide youth with avenues to participate in decision-making and civic activities. In Uganda, the government has implemented an online portal for youth to voice their opinions on local governance issues, enhancing inclusivity (Omoding, 2020). Similarly, in Estonia, e-governance tools like *Rahvaalgatus.ee* allow citizens, especially youth, to propose laws directly to parliament (Vassil, 2016).

b) Online Counselling and Support - E-governance also facilitates access to mental health and counseling services through online platforms. Uganda's Ministry of Health, in partnership with NGOs, launched an online counseling platform to support youth mental health, particularly during the COVID-19 lockdown (Akena, 2021). In Canada, *Kids Help Phone* offers 24/7 online counseling services for youth, providing a safe space for mental health support (Williams, 2022).

c) Skill Development and Empowerment Services - E-governance platforms can offer training and skill development programs. In Uganda, the *Skilling Uganda* program uses e-governance to connect youth with vocational training resources, helping them gain employable skills (Mugabi, 2021). Similarly, India's *Pradhan Mantri Kaushal Vikas Yojana* (PMKVY) offers online training programs to equip young people with marketable skills (Sharma, 2019).

d) Access to Information and Services - E-governance enhances the accessibility of information on health, education, and employment. Uganda's *eCitizen Portal* provides youth with essential information on government services and educational resources (Nabimanya, 2022). South Korea's *Korea Open Data Portal* gives youth and citizens access to public data, enhancing transparency and information accessibility (Kim, 2020).

e) Online Job Portals - Through online job portals, e-governance supports youth in finding employment. In Uganda, the *NSSF Go App* offers a job portal connecting young people with potential employers (Tumusiime, 2021). In the United Kingdom, the government's *Find a Job* portal helps match job seekers with job opportunities, supporting youth employment (Jones, 2022).

f) Collaboration and Partnerships - E-governance allows governments to collaborate with private and public organizations for youth development programs. Uganda collaborates with tech companies to implement e-governance youth initiatives like coding boot camps (Nakimuli, 2023). Similarly, the European Union supports youth initiatives through partnerships with e-governance systems, offering funding and resources (Gonzalez, 2020).

g) E-Business - E-governance supports young entrepreneurs by offering online resources to start and manage businesses. In Uganda, the *URA e-tax system* allows young entrepreneurs to register businesses online and manage tax obligations (Kamugisha, 2020). In Singapore, the government's *GoBusiness Portal* simplifies business registration, encouraging youth entrepreneurship (Tan, 2021).

h) E-Researching - E-governance provides platforms that enable young researchers to access data and research tools. Uganda's *Makerere University* offers e-research tools for youth in academia, enabling access to databases and research materials (Okello, 2022). In Australia, the *Australian Research Data Commons (ARDC)* gives young researchers access to comprehensive datasets, promoting academic development (Smith, 2019).

3.2 Challenges and barriers to e-governance in enhancing youth welfare

A number of challenges that continue to impinge of the success of e-governance in enhancing youth welfare, have been identified by government and other stakeholders, namely;

a) Digital Divide - One of the most critical barriers to effective e-governance is the digital divide, which refers to the gap between those who have easy access to digital technology and those who do not. In many regions, particularly in developing countries, a significant portion of the youth population lacks access to the internet and modern digital devices. This divide disproportionately affects rural and marginalized communities, limiting their ability to engage with e-governance platforms and access essential services (International Telecommunication Union, 2021).

b) Digital Literacy - Digital literacy is essential for the successful implementation of e-governance initiatives. Many young people, especially those from disadvantaged backgrounds, may lack the skills necessary to navigate online platforms effectively. A study by P21 (2019) highlighted those insufficient digital skills among youth hinder their ability to utilize e-governance tools, ultimately affecting their access to information and services.

c) Infrastructure Challenges - Inadequate technological infrastructure poses a significant barrier to e-governance. Many governments in developing countries face challenges related to unreliable internet connectivity, lack of electricity, and insufficient hardware. These infrastructural issues can lead to service disruptions and hinder the overall effectiveness of e-governance initiatives (World Bank, 2018).

d) Privacy and Security Concerns - Privacy and security issues are significant challenges for e- governance, particularly when dealing with sensitive data related to youth. Concerns about data protection and the potential for misuse of personal information can deter young people from engaging with digital platforms. According to a report by the United Nations (2020), ensuring robust cybersecurity measures and data privacy protections is crucial for building trust in e- governance systems.

3.3 Potential options to enhancing youth welfare

Firstly, there is need for enhancing Digital Literacy through capacity Building Programs**,** **i**mplementing comprehensive digital literacy programs targeting youth is essential. Educational institutions and NGOs can collaborate to offer training sessions that equip young people with the necessary skills to navigate e- governance platforms effectively (Bennett, 2020). For example, programs like the "Digital Skills for Africa" initiative by Google provide resources and training to enhance digital proficiency among youth (Google, 2021). *Secondly*, developing public-private partnerships can lead to improved technological infrastructure. Governments can collaborate with technology companies to create reliable and robust e-governance systems. For instance, the partnership between the Kenyan government and Safaricom to enhance mobile service delivery has improved access to government services for youth (World Bank, 2018). And thirdly, addressing Privacy and Security Concerns through a robust Data Protection Policies, implementing strong data protection laws and cybersecurity measures is vital to build trust in e-governance systems. Governments should adopt comprehensive frameworks for data privacy that protect users' information and enhance transparency in how data is managed. The General Data Protection Regulation (GDPR) in the European Union serves as a model for establishing stringent data protection standards (European Commission, 2016).

4. E-Governance and Reproductive Health

According to World Health Organization (2020), reproductive healthcare encompasses services and programs related to sexual health, family planning, maternal health, and fertility services. It includes access to contraceptives, prenatal and postnatal care, safe childbirth, and the prevention and treatment of sexually transmitted infections. Ensuring access to comprehensive reproductive healthcare is critical for reducing maternal and infant mortality rates and for empowering individuals to make informed choices about their reproductive lives. Consequently, a number of tools have been identified in support of reproductive healthcare viz.; (i) *Mobile Health Applications (mHealth)* - Apps that offer reproductive health education, family planning advice,

and access to online consultations with healthcare professionals. (ii) *Telemedicine Platforms* - These enable individuals, especially in remote areas, to access reproductive healthcare services such as counseling, prenatal care, and maternal health consultations via online platforms (WHO, 2020). (iii) *Electronic Health Records (EHR)* - Digital systems that allow healthcare providers to maintain and share patients' reproductive health records, improving the continuity and coordination of care.

E-governance is credited for enhancing local community development in reproductive healthcare, in a number of ways:

a) *Ease access to healthcare facilities.* Telemedicine is another important aspect of e-governance in the health sector. It involves the use of technology to provide reproductive healthcare services remotely, particularly in rural or underserved areas. Telemedicine has been effective in the world, where access to healthcare facilities can be limited due to geographical and financial constraints. Through telemedicine, patients can consult with healthcare professionals via video calls or other digital platforms, eliminating the need for physical travel. This approach has been especially helpful in improving access to specialized care and reducing waiting times for patients. The Uganda Health Management Information System (UHMIS) has been instrumental in integrating telemedicine services and providing remote consultation options for patients (Ministry of Health, Uganda, 2019).

b) *Provision of relevant and up to date health information* - online health information systems have been implemented in Uganda to provide relevant and up-to-date health information to both healthcare providers and the public. These systems enable easy access to health records, medical guidelines, and educational resources, empowering healthcare professionals with the necessary information to deliver quality care. Additionally, the public can benefit from these online systems by accessing health tips, disease prevention strategies, and information on healthcare facilities in their localities. For instance, the Uganda eHealth Atlas provides an online platform where users can access comprehensive data on health facilities, infrastructure, and services across the country (World Health Organization, 2019). Family planning, immunization and antenatal care are all those services that are provided with the help of e- governance and this has greatly improved service delivery in the reproductive healthcare services through keeping records online, data tracking and other services.

c) *Enhances Proper record keeping* - one key aspect of e-governance in the reproductive healthcare is the adoption of electronic health records (EHRs). EHRs enable healthcare providers to maintain a standardized and comprehensive digital record of patient information, including medical history, diagnoses, treatments, and outcomes. This electronic system allows for easy access and sharing of patient data, improving communication and coordination among healthcare professionals, and reducing medical errors. The Ministry of Health in Uganda has made efforts to promote the use of EHRs

through various initiatives, such as the Uganda National Health Information System (UNHIS). This system has been successful in enhancing the management of health information and improving overall healthcare delivery in the country (Ministry of Health, 2015).

d) *Online Appointment Booking* - E-governance enables individuals to book medical appointments online, reducing wait times and improving access to reproductive healthcare. In Uganda, the *Ministry of Health* has implemented the *m-Trac* system, which allows women to book appointments at reproductive health centers via mobile devices, increasing convenience and access (Nabunya, 2021). Similarly, in India, the *Aarogya Setu* app allows users to schedule appointments at government clinics for various health services, including reproductive health (Kumar, 2020).

e) *Telehealth and Telemedicine* - Telehealth and telemedicine make it easier for people to consult healthcare providers without visiting clinics in person, which is particularly beneficial in rural areas. Uganda launched the *Doctor Uganda* app, allowing women to access consultations for reproductive health issues via phone or video calls (Nakkazi, 2022). In the United States, *Planned Parenthood* offers telehealth services for reproductive health counseling and contraceptive prescriptions, which improves accessibility, especially for young people (Smith, 2021).

f) *Public Health Surveillance* - E-governance supports reproductive health by tracking health data to identify trends and allocate resources. Uganda's *District Health Information Software 2 (DHIS2)* collects reproductive health data from clinics across the country, allowing the Ministry of Health to track maternal and neonatal health trends (Nanfuka, 2020). In South Korea, a similar system helps monitor reproductive health metrics, enabling the government to address emerging health issues proactively (Park, 2021).

g) *Health Information Sharing* - E-governance facilitates the sharing of accurate health information, empowering individuals to make informed decisions about reproductive health. In Uganda, the *mHealth* initiative provides text messages to expectant mothers with guidance on prenatal care, improving maternal health knowledge (Ahimbisibwe, 2020). In the United Kingdom, the *NHS* uses an e-governance platform to disseminate reproductive health information, including details on contraception, prenatal care, and sexual health (Jones, 2019).

Selected barriers have proved to affect the successful adoption of e-governance in Reproductive Healthcare. For instance, limited access to technology and the internet, particularly in rural areas, hampers the effective implementation of e-governance solutions (OECD, 2020). Also, in some regions, particularly in low-income countries, individuals may lack the digital skills required to access e-governance platforms effectively. Correspondingly, the handling of sensitive reproductive health information requires robust data security protocols, which can be challenging

to implement in some healthcare systems (WHO, 2020). And similarly, in certain cultural contexts, there may be resistance to using digital platforms for reproductive health due to stigma or mistrust in technology.

We projected that in order to strengthen the impact of e-governance in reproductive healthcare, governments and healthcare organizations should implement educational programs to improve digital literacy among individuals, enabling them to access and utilize e-governance platforms. Also, government should consider expanding access to the internet, particularly in rural areas, is essential for the successful implementation of e-governance solutions. In addition, there is need to ensure the privacy and security of reproductive health information is critical for building trust and encouraging the use of digital platforms (Bali & Singh, 2021). And similarly, engaging local communities in the design and development of e- governance platforms ensures that the services are tailored to meet their specific needs and cultural contexts remains central**.**

5. E-governance and agricultural development

According to World Bank (2008), agricultural development refers to the process of enhancing the agricultural sector's productivity, sustainability, and overall contribution to economic growth and food security. It encompasses a wide range of activities aimed at improving agricultural practices, increasing the efficiency of food production, and promoting rural development. Agricultural development is not solely about increasing crop yields; it also involves addressing social, economic, and environmental factors that affect farming communities. Key Aspects of Agricultural Development are, increased productivity, sustainability, rural development and market access. A number of e-governance tools are available for agricultural development. For instance, m-farm is a mobile application providing farmers with market prices, weather updates, and direct connections to buyers, thereby enhancing market access and reducing reliance on intermediaries. These platforms facilitate direct communication between farmers and agricultural experts, allowing for quick consultations and advice. (Aker & Mbiti, 2016). The other one is Geographic Information Systems (GIS). GIS tools allow for the analysis of spatial data related to land use, soil health, and crop performance. Farmers can visualize patterns and make data-driven decisions about planting and resource management (Wang et al., 2017).

5.1 Significance of e-governance in enhancing agricultural development

a. Agricultural information management - These platforms collect and disseminate relevant agricultural information, including weather forecasts, market prices, best farming practices, and pest control measures. By providing farmers with access to timely and accurate information, e- governance has enabled them to make informed decisions, adopt improved farming techniques, and mitigate risks. One such platform is the e-Agriculture platform developed by the Ministry of Agriculture, Animal Industry and Fisheries in Uganda, which provides a range of agricultural resources and information to farmers (Ministry of Agriculture, Animal Industry and Fisheries, 2020).

b. E-market have also played a crucial role in leveraging e-governance in the agricultural sector in Uganda. These platforms connect farmers directly with buyers, eliminating the need for intermediaries and increasing market access for smallholder farmers. Farmers can list their produce, negotiate prices, and even transport their goods directly to buyers through online marketplaces. This has enabled farmers to obtain better prices for their products and improve their income. One such platform is M-Omulimisa, a mobile-based marketplace that connects smallholder farmers with buyers by providing real-time commodity prices and facilitating transactions (Akankwasa & Byarugaba, 2021).

c. Facilitates E-training for farmers and ease access to inputs. Mobile applications have been developed specifically for farmers in Uganda, providing them with various tools and resources to enhance their agricultural practices. These applications offer features such as pest and disease identification, crop management tips, and access to extension services. By utilizing these mobile applications, farmers can quickly troubleshoot issues, improve their agricultural practices, and increase their yields. For example, the Kilimo App developed by the Uganda National Farmers Federation provides mobile-based agricultural information and services to farmers, including weather updates, market prices, and expert advice (Uganda National Farmers Federation, n.d.).

d. Agricultural Information Delivery - E-governance platforms provide farmers with timely, relevant information on weather, crop management, pest control, and market prices, which improves decision-making and productivity. In Uganda, the National Agricultural Advisory Services (NAADS) uses SMS and mobile applications to deliver agricultural information to rural farmers, helping them adapt to climate change and market trends (Mutebi, 2021). Similarly, India's e-NAM (Electronic National Agriculture Market) provides farmers with real-time information on commodity prices across various markets, empowering them to make informed selling decisions (Kumar, 2020).

e. Digital Agricultural Extension Services - Digital platforms enable agricultural extension officers to reach more farmers with personalized advice, training, and resources. Uganda's EzyAgric app connects farmers to extension services, offering guidance on best farming practices and crop disease management through mobile phones (Nabimanya, 2021). In Kenya, the AgriFin Digital Farmer program uses mobile technology to provide farmers with digital extension services, which has increased access to agricultural knowledge and improved productivity (Muriuki, 2020).

f. Farmer Registration and Identification - E-governance systems facilitate farmer registration and identification, which helps governments accurately distribute resources, subsidies, and support programs. In Uganda, the Agricultural Cluster Development Project (ACDP) registers farmers and assigns unique identification numbers, allowing for targeted assistance and resource allocation (Kasozi, 2020). Nigeria's Growth Enhancement Support Scheme registers farmers in a digital database, ensuring that government subsidies and inputs reach intended

beneficiaries effectively (Adebayo, 2019).

5.2 Challenges to e-governance in enhancing agricultural development

A number of challenges remain at play especially for Uganda, namely: Poor Connectivity, in many rural areas, inadequate infrastructure hampers internet access. This includes limited broadband availability and unreliable mobile networks, making it difficult for farmers to utilize e-governance tools effectively (World Bank, 2016). Also, a number of farmers may not have access to modern technology, such as smartphones or computers, which are essential for engaging with digital platforms. This limits their ability to benefit from e-governance initiatives. Similarly, a significant portion of the agricultural workforce lacks the digital skills necessary to navigate online platforms and tools. This can lead to underutilization of available resources and missed opportunities for modernization (Aker et al., 2016). Correspondingly, traditional Practices, many farmers adhere to traditional farming practices and may be resistant to adopting new technologies or methodologies. This cultural inertia can slow the uptake of e-governance initiatives (Rogers, 2003). In addition, there is skepticism about Technology, farmers may be skeptical about the benefits of e-governance tools, fearing that they could complicate existing processes rather than simplify them. Concerns about data privacy and security can also contribute to this resistance. And of course, insufficient Stakeholder Involvement, if stakeholders (including farmers, agricultural organizations, and government bodies) are not adequately involved in the planning and implementation of e-governance initiatives, they may feel alienated and resistant to change.

To counter the above challenges, requires a deliberate effort in a number of areas such as: governments and private sectors should invest in building robust internet and mobile infrastructures in rural areas. Public- private partnerships can be a strategic approach to enhancing connectivity (Zhao & Zhang, 2018). Also, there is need to provide farmers with affordable or subsidized access to smartphones and computers can help bridge the technological gap. Initiatives such as community tech hubs can also promote shared access to digital resources. In addition, implementing digital literacy programs tailored to farmers can empower them to effectively use e-governance tools may serve the purpose. Workshops and training sessions can focus on practical skills, such as using mobile apps for agricultural management (Aker et al., 2016). Peer Learning, encouraging peer-to-peer learning, where tech- savvy farmers mentor others, can help build confidence and skills in using technology. But also, actively involving farmers and stakeholders in the design and implementation of e-governance initiatives can increase buy-in and reduce resistance. Feedback mechanisms can be established to ensure that the tools developed meet the actual needs of users (O'Reilly, 2015). Not forgetting educating stakeholders about the benefits of e-governance tools can help alleviate fears and build trust. Success stories and case studies can be shared to demonstrate the positive impact of technology on agricultural productivity and livelihoods.

With this, e-governance has a potential to impact on local community development under the areas of UPE program, youth welfare, reproductive healthcare and agricultural development in

Uganda by improving access to essential services and increasing transparency. It empowers communities to engage more effectively, leading to improved educational outcomes, better youth support system, accessible reproductive healthcare, and optimize agricultural practices, ultimately fostering sustainable development and wellbeing.

6. Conclusion

E-governance plays a pivotal role in enhancing local community development. By leveraging ICT solutions effectively within governance frameworks at the local level; communities are better equipped to address their unique challenges while ensuring equitable access to essential services for all residents.

7. Recommendations

Arising from the above review, it is encouraged that:

a) There is need for government to prioritize lowering the cost of internet services as a way of enhancing local community development.

b) Government should make sure that schools offering universal education should be facilitated with functional computer laboratories.

c) Government hospitals, at district level, should have a computer laboratory for data storage.

d) Handy apps for farmers should be given priority so as to enhance smart agricultural development.

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