Original Article

Open and Distance Learning as a Way of Achieving Sustainable Development Goals in Tanzania

Herry Zacharia Matinda[1]*

[1] The Mwalimu Nyerere Memorial Academy, P. O. Box 307, Zanzibar, Tanzania.
* Author's Email: hmatinda@gmail.com

ABSTRACT

Achievement of Sustainable Development Goals (SDGs) depends on how the community is filled with knowledge and skills that will help them to fasten the development process. In this paper, the contribution of Open and Distance Learning (ODL) as a way of achieving SDGs in Tanzania has been presented. The paper has focused on five SDGs, namely, No Poverty, Good Health and Wellbeing, Affordable and Clean Energy, Decent Work and Economic Growth and Gender Equality. A cross-sectional research design was adopted, whereby purposive and simple random sampling techniques were used to obtain a sample of 85 respondents. Both primary and secondary data were collected through interviews, questionnaires and literature review. Descriptive analysis was done through SPSS and Microsoft Excel for quantitative data and content analysis was done for qualitative data. The results revealed that 91% of the respondents agreed that, ODL is the right way of achieving SDGs in Tanzania. On the other side, the finding shows that if ODL is improved and executed well, many people will be reached and get knowledge and skills that will help them and the government to achieve the SDGs on time. The paper concluded that, in order to unlock sustainable education and achieve the Sustainable Development Goals in Tanzania, ODL should be part and parcel of this movement.

INTRODUCTION

The role of unlocking sustainable education through ODL is not a one-day process. In order to reach the sustainable development goals, there is a need to open the doors for community members to understand how sustainable development goals can be achieved through open and distance learning (ODL) in Tanzania. By knowing the importance of open and distance learning towards the achievement of sustainable development goals (SDGs), the aim of this paper is to explore the contribution of open and distance learning (ODL) as a way of achieving sustainable development goals in Tanzania.

Why Tanzania and not other countries? It is true that many researchers have done their studies in different angles of ODL and SDGs in many countries, but still little is known on the significance of ODL towards the achievement of SDGs in Tanzania. Through this paper, policymakers, researchers, planners, academic institutions and other stakeholders, will get something to learn on ODL systems and hence lead to the achievement of SDGs.

In order to open the mind and focus of the readers, on the issues related to open and distance learning (ODL) and the achievement of sustainable development goals (SDGs) in Tanzania, this paper has been broken down into sections and sub-sections. These sections have been developed in a way that the reader can understand easily the sequence of information covered in the paper. The paper presents the background information of ODL and SDGs, methods, results, discussions and conclusion.

Background Information

This part of the paper presents an overview of Open and Distance Learning (ODL) and the background information of Sustainable Development Goals (SDGs).

Overview of Open and Distance Learning (ODL)

Open and Distance Learning is a general term used in academics and social life to enhance learning in society. Different scholars defined ODL based on their context and field of specialization, but the meaning remains the same. According to the Commonwealth of Learning (2019), ODL refers to a way of providing learning opportunities that is characterized by the separation of teacher and learner in time, place or both time and place; it is a learning that is certified in some way by an institution or agency.

On the other hand, Chew (2019), defines ODL as a system, which combines the methodology of distance education with the concepts of open learning and flexible learning. In this chapter, ODL means transfer of skills, knowledge and innovative ideas by teaching, facilitating or training community members to meet the learning demand while a facilitator and learners are not in the same place.

In the past, distance learning was viewed as inferior by much of the traditional academic community because it tended to have lower graduation rates and less direct interaction between the facilitators and the learners (Saint, 1999). Nowadays ODL is applicable in many countries. However, in most of the developing countries whose technology is still low, open and distance learning is still facing some challenges.

Due to worldwide challenges of higher education, ODL was established during the 17th century as a vital strategy to resolving problems of access, quality and equity in higher education (Willis, 1993). Currently, all over the world, distance mode of education is gaining momentum and becoming more popular than conventional education (Attri, 2012).

Due to its importance, ODL is growing faster, and many higher learning institutions have started and continue to provide ODL from different angles. In recent years, over 914 colleges and universities offered ODL (Allen & Seaman, 2017). Based on its significance and the community needs, Niwagila (2014) states, that a 20% growth rate is estimated for ODL enrollments.

Despite ODL being very important to increase access, quality and equity to higher education, in Tanzania, there is only one stand-alone ODL university and a few other higher learning institutions that provide distance learning (URT, 2018). To clarify the fact, the government of Tanzania acknowledged ODL through the establishment of the Open University of Tanzania (OUT) using the Act of Parliament No. 17 of 1992 as an important element of the Nation's education initiative (Ngoboka et al., 2017). The OUT is a fully fledged public higher education institution, it operates in many regions within the country and with 27 regional centres in Tanzania (OUT, 2020).

By knowing the importance of ODL, the OUT has adopted online learning into its teaching and learning activities and provision of academic support to students in various locations. Since 2016, OUT has been using Moodle and Zoom meetings to strengthen online learning in Tanzania (OUT, 2020). Nevertheless, since online systems' operations depend mainly on access to and availability of electricity and internet services, the quality of rural students' online learning experiences remains an area of research curiosity (Rotas & Cahapay, 2020).

Overview of Sustainable Development Goals (SDGs)

The year 2015 marked the end of the Millennium Development Goals (MDGs). Targets for many of the goals were not reached by developing countries, including Tanzania. Scholars in the global South claimed that failing to achieve the MDGs is due to the fact that some targets and indicators were not realistic for developing countries (REPOA, 2016). Due to the failure of MDGs in 2015, the 193 member states of the United Nations agreed on the 2030 Agenda for Sustainable Development, consisting of 17 Sustainable Development Goals (SDGs) and 169 targets. The new agenda builds on the progress achieved towards the Millennium Development Goals between 2000 and 2015 (UNICEF, 2019).

The SDGs, also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. The 17 SDGs are integrated they recognize that action in one area will affect outcomes in others. The development must balance social, economic and environmental sustainability (UNDP, 2024).

According to UNICEF (2019), Tanzania actively participated in the formulation of SDGs by hosting two rounds of national consultations on what the focus should be on the post-2015 development agenda and its implementation. The Government of the United Republic of Tanzania also made contributions to the inter-governmental discussions on SDGs, the means of implementation and measuring SDGs.

In September 2015, the United Republic of Tanzania was among the 193 United Nations member states that endorsed the 2030 Agenda for Sustainable Development and its accompanying 17 SDGs. The SDGs reflect the call for shared action "for people, planet and prosperity" as well as for "partnerships and peace" to be implemented by all countries (UNICEF, 2019). In recognition of significant advancements in ODL in Tanzania, this paper presents how ODL unlocks sustainable educational opportunities by ensuring the achievement of SDGs in Tanzania.

Comparison of Tanzania's ODL with other African Countries

In African countries, the spatial diffusion of ICT coupled with the need for lifelong learning opportunities has enabled ODL to move from the margins to the mainstream of university education policy and practice (Kaliisa & Picard, 2017). Comparable to other African countries, Tanzania embraces open and distance learning. According to OUT (2009), in 1992 the Parliament of Tanzania endorsed the establishment of the Open University of Tanzania (OUT) which opened the door to higher education through distance education in 1994.

In comparison, many African countries are facing the same challenges in delivering open and distance learning. A study conducted in Mozambique and Cape Verde by Ramos et al. (2011) revealed that students based in rural areas experienced poor access to ICT support, poor communication, and unavailability of reliable electricity. Another study conducted by Mutatana (2019) in Zimbabwe, the study identified students' challenges such as lack of physical resources, inflexible study schedules, financial and cultural hurdles.

On the other side of the coin, Mahai (2022) in the study entitled "*Overcoming the Odds: Online Learning Experiences from Open University of Tanzania's Regional Centre Rural-based Students*" found that, rural-based students in Tanzania faced numerous challenges including poor and uneven distribution of internet services, poor financial capacity to cope with infrastructural challenges and the cost of buying devices such as phones and laptops. Similarly, Mwaniki et al (2020) identified key technical challenges faced by both students and staff at Kenyatta University are insufficient exposure to computers and ICT technology, lack of finances to buy ICT gadgets and lack of internet connectivity.

METHODS

This paper was developed in the context of Tanzania. The focus of this paper was on ODL and SDGs, where the information on ODL and the achievement of SDGs in Tanzania were collected, analyzed and presented. In developing this paper, qualitative and quantitative approaches were adopted in gathering data in order to capture the views on ODL towards the achievement of SDGs in Tanzania. A cross-sectional research design was adopted whereby purposive and simple random sampling techniques were used. Cited in Bekele and Ago (2022), Morse (2000) suggested that if the subject under investigation is easily noticeable and clear, and the information is easily obtained in the interview, fewer research participants are required compared to the study where the subject under investigation is complex and tough to understand. Since this study is noticeable and clear the sample size used was 85 respondents who are aware of ODL and SDGs in the context of Tanzania. The population of the study were the staff members of The Mwalimu Nyerere Memorial Academy who are aware of ODL and SDGs in Tanzania. These respondents were selected due to the fact that they have enough knowledge and experience on ODL and SDGs due to the nature of their work, educational backgrounds and level of education they have. Both primary and secondary data were collected through interviews, Google form, questionnaires, social media and literature review. Descriptive analysis was done through SPSS and Microsoft Excel for quantitative data and content analysis was done for qualitative data, whereby feelings, perspectives and lived experiences from a natural context were analyzed.

RESULTS AND DISCUSSIONS

In this part, major findings were presented and discussed. The section has been divided into subsections, namely, ODL and achievement of SDGs in Tanzania, ODL and achievement of no poverty in Tanzania, ODL and achievement of good health and wellbeing in Tanzania, ODL and achievement of affordable and clean energy in Tanzania, ODL and achievement of decent work and economic growth in Tanzania and the last

subsection in this part is ODL and achievement of gender equality in Tanzania. The statements were measured by using closed-ended questions and a five-point Likert scale, whose results are as follows.

ODL and Achievement of SDGs in Tanzania

The respondents were asked if Open and Distance Learning (ODL) is the right way of achieving Sustainable Development Goals (SDGs) in Tanzania. The results presented in Figure 1 revealed that 91% of the respondents said yes and 9% of the respondents said no. These results imply that the majority of the respondents agreed that through ODL Tanzania can achieve SDGs though there are some measures that are supposed to be taken so as to make it possible.

Figure 1: ODL and Achievement of SDGs in Tanzania
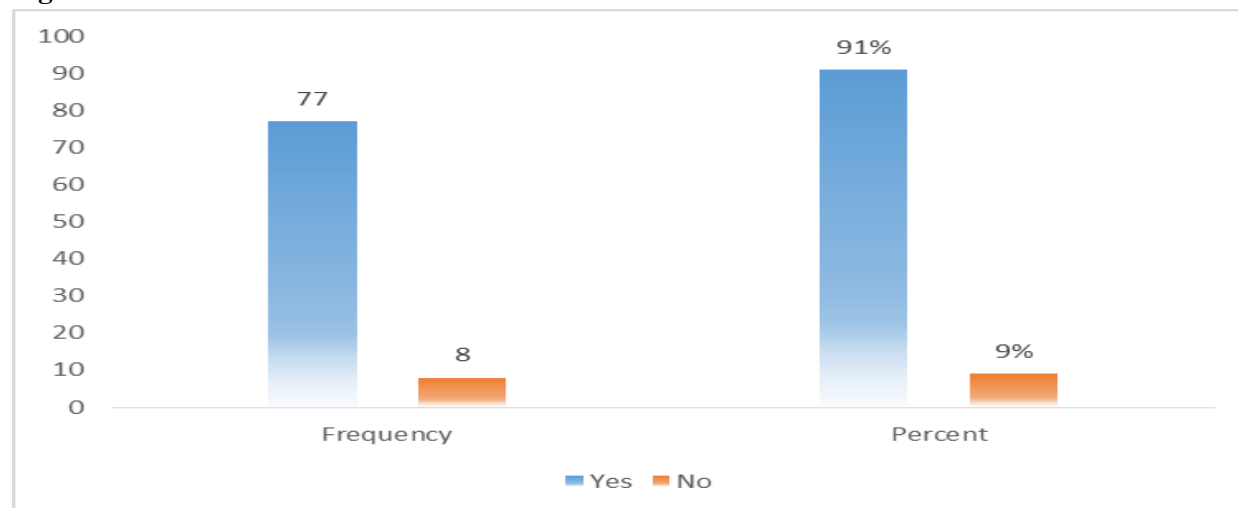
ODL and Achievement of No Poverty in Tanzania

The findings presented in Table 1 show that 47% of the respondents agreed that through ODL, Tanzania can achieve SDGs by eliminating poverty in the country. On the other hand, 28% strongly agreed, 22% were neutral, and 3% disagreed that ODL cannot be used as a way of eliminating poverty in Tanzania.

These results imply that the majority of the respondents agreed that, through ODL Tanzania can achieve the SDGs by eliminating poverty. This implication means that the community needs more education on issues related to poverty so that they can get new knowledge and skills that will help them to come out of poverty and hence, help the government to achieve the SDGs. During the interview, one of the respondents witnessed that, ODL Tanzania can achieve SDGs by eliminating poverty by saying;

"Through open and distance learning, people can learn at home and get new knowledge and skills that will help them to improve their living standards and come out of poverty and hunger".

These findings collaborate with findings by Chuanjin et al., (2021), who argued that Open and Distance Education (ODE) is an effective way to improve residents' education and skills, which can help them get rid of poverty. In addition, Ndhlovu et al., (2015) found that, through distance learning, societies can acquire the right knowledge, skills, values and attitudes that are oriented to transforming their socio-economic lives and hence solve the problem of poverty within the society.

To cement these findings, we can take the example of China, whereby many people have successfully got rid of poverty after completing their training or study with the Open University of China (OUC). A sample survey of 500 learners has been conducted

by the OUC and the results show that about 30% of the respondents have taken the post of village leaders guiding other residents to find a job; 11% have successfully run their own business in the field of agriculture, fishery, forestry and grown into farm businessmen and 20% of the respondents have found a job in big cities with the knowledge and skills learned from the programs offered by the OUC (OUC, 2021).

By focusing on these facts from China, it is true that, through ODL, Tanzania can achieve the SDGs by eliminating poverty. What is needed is more effort and commitment to invest and improve the ODL systems to ensure that, all people are reached and get the quality education that will help them to fight against poverty.

Table 1: ODL and Achievement of No Poverty in Tanzania

	Frequency	Percent
Strongly Agree	24	28
Agree	40	47
Neutral	19	22
Disagree	2	3
Total	**85**	**100**

ODL and Achievement of Good Health and Well-being in Tanzania

Findings from Table 2 indicate that 59% of the respondents agreed that, through ODL, Tanzania can achieve the SDGs by ensuring good health and well-being. In addition, 33% of the respondents strongly agreed, 6% were neutral and 2% disagreed. This implies that respondents believed that through ODL, people can get health education more easily. Through online learning platforms, community members, have improved their knowledge of health issues and hence led to good health and well-being in the society. During an interview session, one of the respondents added that,

> *"I agree that, through ODL, people can learn different issues and improve their health status, and at the same time, through ODL the number of health workers will increase and help rural and urban people to get good health services on time".*

In response to the importance of ODL in health services, globally, skilled birth attendance rose from 80% in 2015 to 86% in 2023. Mixed progress is observed towards the target of ending communicable diseases. There were an estimated 1.3 million new HIV infections in 2022, which is 27% fewer than in 2015, and 38% fewer than in 2010. In addition, the increased access to HIV treatments and provision of education, have prevented almost 20.8 million AIDS-related deaths in the past three decades (UN, 2024).

On the other hand, despite the challenges reported by REPOA (2016), such as limited access to quality health services, maternal and infant mortality, outbreak of diseases, inadequate enforcement of health policies, such as free health services and corruption in the health sector, but still ODL has played a great role to reach the communities and educate the population on different matters related to health and wellbeing of the society.

Table 2: ODL and Achievement of Good Health and Well-being

	Frequency	Percent
Strongly Agree	28	33
Agree	50	59
Neutral	5	6
Disagree	2	2
Total	**85**	**100**

ODL and Achievement of Affordable and Clean Energy in Tanzania

Results from Table 3 show that 57% of the respondents agreed that, through ODL, Tanzania can achieve SDGs by ensuring affordable and clean energy. In addition, 28% of the respondents strongly agreed, 12% were neutral, 2% of the respondents disagreed and 1% strongly disagreed. From these findings, we can get a picture of how ODL is needed for the betterment of restoring clean energy in Tanzania. The results imply that, through ODL, people can learn and acquire knowledge that will help them to understand and utilize the available resources properly and ensure the affordability of clean energy in the country. In addition to this, one of the respondents said,

> *"If the Government through its learning institutions, will put more effort on ODL, many people will get education on the effects of using charcoal, firewood and other materials that lead to air pollution and instead of it, the community will learn on the importance of using clean energy and they will start using clean energy for cooking and other uses".*

By knowing the importance of using clean energy, the government of the United Republic of Tanzanian under the leadership of President Dr. Samia Suluhu Hassan is committed to fulfilling the SDG number 7 by providing affordable, reliable, sustainable, and modern energy for all Tanzanians by 2030. However, to achieve this goal, investments are required in the generation, transmission, and distribution of energy infrastructure (ESI Africa, 2016).

Despite the improvements in energy intensity and renewable energy growth, international financial flows for clean energy in developing countries remain insufficient. At the current rate, 660 million people will still lack electricity and 1.8 billion will not have access to clean cooking energy by 2030. To achieve universal access to energy by 2030, we need to speed up electrification efforts, boost investments in renewable energy, enhance energy efficiency and establish supportive policies and regulatory frameworks (UN, 2024).

On the other side, more campaigns on using clean energy are needed to ensure that, the majority of the population are reached and starts using clean energy for their daily uses. In fact, in order to achieve this goal, ODL should be improved to make sure that all people are reached, especially those who are living in rural areas.

Table 3: ODL and Achievement of Affordable and Clean Energy

	Frequency	Percent
Strongly Agree	24	28
Agree	48	57
Neutral	10	12
Disagree	2	2
Strongly Disagree	1	1
Total	**85**	**100**

ODL and Achievement of Decent Work and Economic Growth

Data from Table 4 depicts that, 45% of the respondents agreed that through ODL, Tanzania can achieve sustainable development goals by ensuring decent work and economic growth. On the other hand, 33% of the respondents strongly agreed, 15% were neutral and 7% disagreed by holding that, Tanzania cannot ensure decent work and economic growth through ODL. This implies that through ODL, people can learn and after studies, they can get employment, either as self-employed or employed by the government or private organizations. On the other side, through ODL, people can learn different ways of improving their economic status in the community. This has been clarified by one of the respondents by saying that,

"In my view, ODL is the best mode of education. I can witness this by myself, because several years back, I completed my studies at OUT and now I'm a public servant. At the same time, I'm doing other businesses that help me to increase my daily income".

These findings are not far from results from other scholars, such as Besong (2014) who revealed that ODL serves as an instrument or tool of mass instruction geared towards balancing development in terms of manpower development, productivity and job enrichment of the beneficiaries and also the society in terms of education for all.

Despite the UN's report (2024), on the progress towards SDG number 8 to face challenges from COVID-19 consequences, trade tensions, rising debts in developing nations, conflicts and collectively threatening global economic growth, but still, Tanzanians can still use ODL to learn and strengthen their skills and knowledge on using the existing opportunities for job creation and hence economic growth.

Table 4: ODL and Achievement of Decent Work and Economic Growth

	Frequency	Percent
Strongly Disagree	28	33
Agree	38	45
Neutral	13	15
Disagree	6	7
Total	**85**	**100**

ODL and Achievement of Gender Equality in Tanzania

The findings from Table 5 indicate that 46% of the respondents agreed that through ODL, Tanzania can achieve SDGs by ensuring gender equality in the country, 39% strongly agreed, 11% were neutral, 2% disagreed and only 2% of the respondents strongly disagreed that through ODL, Tanzania

cannot achieve sustainable development goals by ensuring gender equality. These findings imply that, if ODL is used effectively, it will help to reduce all forms of gender inequalities in the country. During an interview, one of the respondents said,

> *"The only way of ensuring gender equality is through education. For many decades, women have been left behind in many things in our societies. But through ODL, women can learn and get equal chances in decision making and even in the economic and political arena".*

Another respondent cemented this by saying,

> *"Through ODL, both women and men will get equal chances in education, something that will promote gender equality and strengthen the development process in all sectors in the country".*

Parallel to these findings, Afolayan (2015) gives us a good example from Nigeria by revealing that, ODL, evidence shows, is a better approach in Nigeria in the empowerment of the marginalized groups, especially women. On the other side, Njaya (2015) found that a significant number of respondents were working married women with children, who found ODL framework more compatible with their multiple tasks. This proves the facts that, through ODL achievement of gender equality can be reached and stimulate the development process in the country.

Table 5: ODL and Achievement of Gender Equality

	Frequency	Percent
Strongly Agree	33	39
Agree	39	46
Neutral	9	11
Disagree	2	2
Strongly Disagree	2	2
Total	**85**	**100**

CONCLUSION

The study concluded that from the perspective of a country's development, education is the heart of any country. But in this era of science and technology, ODL systems are the veins and arteries that can stimulate and push the development process to accelerate smoothly in the achievement of SDGs. In general, the findings and arguments in this paper show that ODL is needed as a way of achieving SGDs in Tanzania. Based on the facts from the findings, it has been seen that, through ODL, community members can get time to learn and adopt new innovative ideas that will help them to face different challenges and hence lead to the achievement of SDGs in Tanzania. On the other side, there is a need to improve the existing policies in education systems so as to strengthen the performance of ODL in Tanzania. As a country, in order to unlock sustainable education and achieve the Sustainable Development Goals (SDGs) in Tanzania, Open and Distance Learning (ODL) should be part and parcel of this movement.

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