

The Role of Audio Visual Contents on the Economic Development of Bangladesh: A Systematic Review

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Abstract

Background: Information is defined as any written audio-visual contents that convey knowledge about a novel person, place, item, circumstance, or environment and communication is the act of transmitting a message to another person. To do so, a sender and a recipient are required as well as a medium, coherent message, and conversation. In this digital age, audio-visual digital contents are playing a significant role on the sustainable economic development of the world. **Objectives:** The aim of this current review article was to identify the role of audio visual contents on the economic development of Bangladesh. **Methodology:** An electronic literature search was conducted for the data databases of the study. The data of this study were retrieved from Scopus and Google scholar published from 2004 to 2022. The reference lists of all included studies and relevant systematic reviews were also evaluated to identify additional research. All searches were restricted to English-language and research on humans only. The PRISMA standards were followed to perform this systematic review. **Results:** Wider use of audio-visual contents can build-up technological knowledge, attitude and practice in cultivation among the rural farmers. As a result, agricultural productivity is being improved. At the same time, Audio-visual digital contents are playing a potential role to promote teaching-learning process of Bangladesh and simultaneously which can strongly claim that audio-visual contents have a positive contribution to the promotion of GDP of Bangladesh economy. **Conclusion:** After reviewing the articles it was identified that there are certain role of audio visual contents in agricultural sector and increase knowledge, attitude and practice which has certain impact in other sector like health care, and education. Further project and study required to know the audio-visual concept in-depth contribution of the society.

Keywords: Role, audio-visual contents, economic, development, Bangladesh.

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Introduction

Information is defined as any written, aural, visual, or audio-visual communication that conveys knowledge about a novel person, place, item, circumstance, or environment. Similar to that, communication is the act of transmitting a message to another person¹. To do so, a sender and a receiver are required as well as a medium, coherent message, and conversation. Information and communication refers to the use of modern technology to facilitate the gathering, processing, storing, and exchanging of information, whether it takes the form of numerical data, text, voice, or images². The main elements of poverty-reduction strategies are information and knowledge, and ICTs which provide instant access to large amounts of data may benefit the underprivileged. A large number of developing countries, particularly low-income ones, have struggled to adopt new digital technologies, although there is a vast "digital gap" between developed and developing countries. In contrast to industrialized nations, which have been gradually benefited from the quick speed of audiovisual impact, developing countries have generally been slower to adopt new technologies.³ To mitigate this digital gap, Bangladesh has taken a numerous initiatives to develop its economy through digital audio visual contents over a period of three decades and all TV channels including BTV, BTV World, Channel(i) and ATN Bangla telecast varieties of programs to promote its economy in the field of health and sanitation, education, women entrepreneurship, agriculture and small and cottage industries.⁴ At the same time, since the access to internet in Bangladesh, social media face book, you tube ,twitter etc. have become the boon to the mass people of Bangladesh to improve their skills. Now, they have the access to world class audio visual contents at the palm of their hands. Within a nano-second, they can have the access to the audio visual contents to improve their skills whatever they like. However, at present, the government of Bangladesh as well as some national and international NGOs are also performing a number of audio visual contents on e-learning, e-library, e-farming e-entrepreneurships development, tele-medicine and health care etc. using digital platform to promote the economy of Bangladesh.

Objectives

The aim of this study is to determine the role of audio visual contents on the economic development of Bangladesh.

Research Question

What is the role of audio visual contents on the economic development of Bangladesh?

Methodology

Search strategy

An electronic literature search was conducted. The databases of this study were retrieved from: Scopus and Google scholar published from 2008 to 2022. The following keywords and index terms were used: “Audio visual contents” OR “Economic development”. The reference lists of all included studies and relevant systematic reviews were evaluated to identify additional research. All searches were restricted to English-language and research on humans only. The PRISMA standards were followed to perform this systematic review, and the checklist was completed (fig-1).

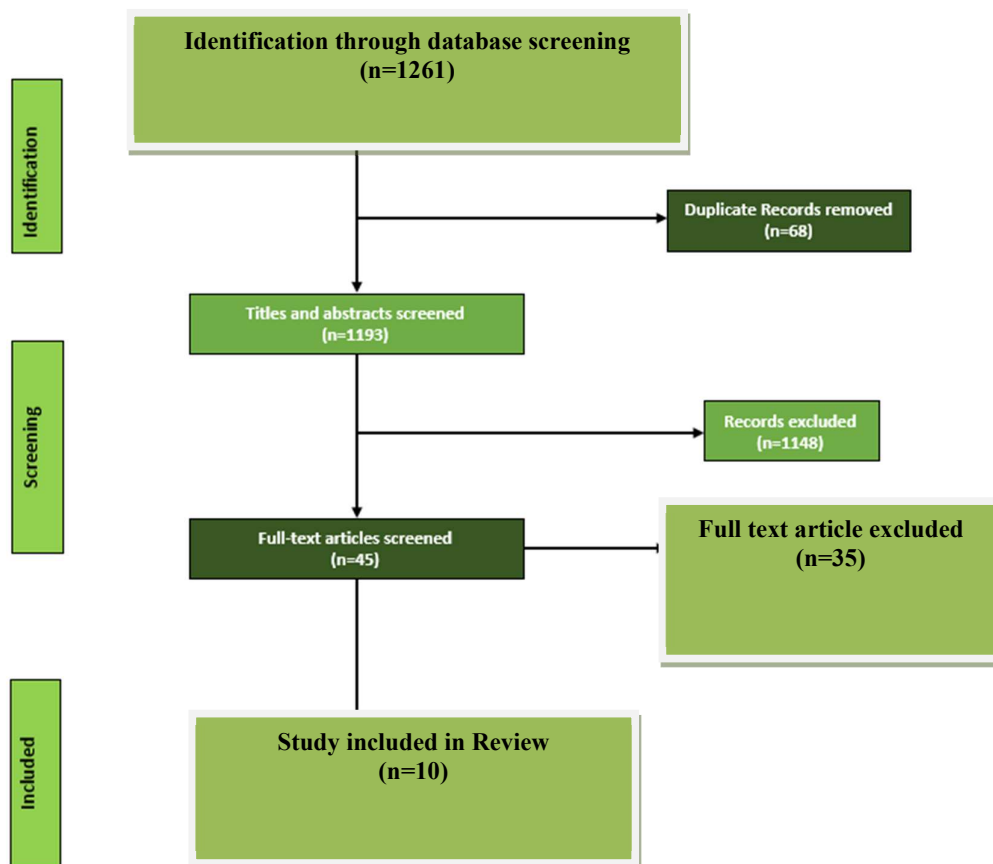


Fig 1: PRISMA Flowchart was selected for the current study.

RESULTS

Title	Author and Year	Research Questions	Methodology	Findings	Recommendations
Farmers' perception of audio visual aids on technology dissemination by agricultural development programme in delta state, nigeria	Ofuoku A.U., Agumagu A.C., 2008 ⁵	What do farmers think of audiovisual tools used by agricultural development programmes to disseminate technology?	Data were collected from 289 (20%) of all randomly chosen contact farmers. A systematic interview schedule was used to acquire information from respondents. Using descriptive statistics such as frequencies, percentages, and means, the data were analysed. The Chi-square test was used to examine the link between media mix and efficacy.	The efficient use and successful blending of the different audio and visual media assets and resources they have access to determine how well the DTADP's information or technology delivery system functions. Due to the need for intensification in the use of television programmes, movies, and video playback, this has important implications for the delivery of extension services. Using suitable or a mix of media materials and resources, method result demonstrations, and group meetings need to be intensified as well.	For the reason that knowledge is dynamic rather than static, extension agents should be provided with in-service training, workshops, and seminars. All extension teaching processes should be supplemented with suitable and relevant visual aids. The Delta State Agricultural Development Program's extension programmes should be well funded and encouraged with the provision of audio-visual aids to facilitate extension services. Through this, extension officers will improve their knowledge in order to be abreast of and able to cope with changing communication technologies.
Role of Information & Communication Technology (ICT) in Rural Poverty Alleviation	Muhammad Atiqur Rahman 2008 ⁶	How does Pallitathya Kendra (PK) help the underprivileged get information from various media? How do they support them in their attempts to reduce poverty?	In the current study, the researcher employed the pure recall approach to determine Pallitathya Kendra's (PK) contribution to the reduction of rural poverty. For an in-depth interview that included both quantitative and qualitative information, the researcher employed a questionnaire. Descriptive statistics were employed to interpret and analyse the questionnaires in part to get over the constraints of the qualitative approach of analysis and in part to accurately explain certain key elements of the research.	The respondents' income increased as a result of using the services provided by Pallitathya Kendra (PK). The majority of responders had modest incomes prior to utilising the programme. As a result of their usage of the PK's knowledge, the situation became better.	The research suggests that many additional PKs should be established in rural regions using the Babrijhar paradigm based on its outcomes. To establish such a PK that would considerably aid in reducing poverty, the necessary government authorities, NGOs like BRAC and ASA, and local government institutions may cooperate.
Localization of Digital Content for use in Secondary Schools of Bangladesh	Chowdhury October 2013 ⁷	The main objective of the study is to Localization of Digital Content for use in Secondary Schools of Bangladesh	The research was undertaken between December 2010 and July 2011 with the financial and administrative assistance of the Bangladeshi government. The study's approach included sampling, the creation of data gathering tools, data collection, and data analysis methods. The study team visited the schools many times to gather data, and there were four review sessions attended by researchers and participating instructors.	<ul style="list-style-type: none"> • Teachers now have the tools they need to create engaging PowerPoint presentations for their classrooms. • Mathematics, social science, Islamic religion, and science courses all have engaged students. • The analytical and creative skills of students are improved. • The use of participative and student-centered methods in math, social studies, science, and Islamic religion classes has increased. • The development of teachers' preparedness to use ICTs as teaching and learning instruments. • Students may now be exposed to using ICT and the Internet as a learning tool. 	<p>The results strongly advise secondary instructors in Bangladesh to make digital information more accessible since some pupils find it difficult to do so.</p> <ul style="list-style-type: none"> • It is also advised that while utilising digital information as a teaching tool in the classroom, secondary instructors should put more of an emphasis on interactive methods. • In addition to these, the Ministry of Education may increase the availability of LDC facilities in the majority of Bangladeshi educational institutions since studying digital content makes students pleased with their course materials.

Title	Author and Year	Research Questions	Methodology	Findings	Recommendations
Information and communication technology adoption for development: A case study of Bangladesh's small and medium-sized businesses	MD. Rakibul Haque March 2015 ⁸	This study's goal is to determine how ICTs affect SMEs in Bangladesh's rural regions and what variables affect their adoption of ICTs.	Based on a case study and well-structured questionnaires, this work used both qualitative and quantitative research methods.	The regression study revealed that key factors influencing the adoption of ICTs in rural SMEs in Bangladesh include knowledge of the advantages, government assistance, top management support, and financial support. The restrictions that SMEs face while using ICTs are also highlighted in this article.	To make even more changes, the government should use ICT.
Factor Contribution towards the Effectiveness of TV Programmes for Sustainable Agricultural Development in Bangladesh	M. Nazrul Islam December 2015 ⁹	The goal of the research was to determine the factors that contributed to Bangladesh's TV programmes' success in promoting sustainable agricultural development.	The study was conducted in Bangladesh's Kurigram district. 187 farmers who owned TVs and watched programmes were randomly selected from 6 villages in this district's Upazilla, including KurigramSadar and Ulipur, for the data collection. A pre-tested interview schedule was used to gather data from respondents between January and June 2011. When evaluating the efficacy of a TV programme for sustainable agricultural development, four psychological traits of the respondents—cognitive effectiveness, emotional effectiveness, attitudinal effectiveness, and behavioural effectiveness—were taken into account.	With 68.45% of respondents reporting medium effectiveness, 13.90 % reporting low effectiveness, and just 17.65 % reporting high effectiveness, the data revealed that medium effectiveness was found in the greatest proportion of cases. The Pearson correlation test revealed a substantial link between 14 of the 21 parameters and the value of TV programming for long-term agricultural development. Six factors, including innovativeness, training, education, knowledge of sustainable agriculture, peer relationships, and agricultural knowledge, were found to significantly contribute to the effectiveness of TV programmes and accounted for 68.50 percent of the total variation, according to stepwise multiple regression analysis.	It is conceivable to conclude that effectiveness variations in many areas will not be addressed unless effective efforts are taken to enhance innovativeness and literacy. In order to boost the inventiveness and literacy rate of farmers who watch television, the government and non-governmental groups should strive to set up certain training programmes.
Awareness of audiovisual aids in education	R. Nivethitha R. Gayathri, V. Vishnu Priya 2018 ¹⁰	This research aims to raise awareness of audiovisual tools in school.	This research is a survey based on a questionnaire. The questionnaire includes questions on audiovisual tools in education. The participants were given access to this survey through the survey planet link. The acquired result was statistically examined. The survey was administered to 122 students.	Analysis of the data indicates that 94.3% of students think that audiovisual aids assist in the clarity of course material and inspire students to study, whereas 5.7% of students disagree.	More audiovisual material is required in schooling.
Role of Radio and Television in Agricultural Development	SyedaTasnim Jannat, 2018 ¹¹	What is the role of radio and television in Agricultural Development	The relevant information for the review article has been gathered from secondary sources.	Numerous studies carried out by various academics revealed that the degree to which farmers in various nations utilised radio and television varied. Numerous studies have shown that farmers saw both radio and television as useful forms of media.	Through its usage in conjunction with other agricultural extension techniques and integration with other technology, radio and television programmes may be more beneficial for agricultural growth.

Title	Author and Year	Research Questions	Methodology	Findings	Recommendations
A Multimodal Saliency Model for Videos With High Audio-Visual Correspondence	Xiongkuo Min January 2020 ¹²	Finding a new multi-modal saliency (MMS) model for films with scenes that have a strong audio-visual relationship is the goal of this work. The research also made a ground-breaking suggestion for the first time in the literature: by localising the moving-sounding objects using cross-modal kernel canonical correlation analysis, one may identify the audio saliency map from both auditory and visual modalities.	The paper is based on review articles. In both aural and visual modalities, demonstrate three views of visual attention. In the visual modality, spatial saliency is calculated in single frames based on a free energy concept inspired by brain theory, whereas temporal saliency is computed by detecting inter-frame motion. Identify audio saliency in both auditory and visual modalities using cross-modal kernel canonical correlation analysis (CCA) by localising moving-sounding objects and utilising the localization result as the audio saliency.	An average performance enhancement of 5% is identified. According to experimental results on audio-visual attention databases, the presented models incorporating audio cues outperform the most advanced image and video saliency models that employ a single visual modality.	The MMS model incorporates the influence of audio, which is absent from deep saliency models, leading in considerable performance improvements. Extensive experiments on audio-visual attention databases have validated the effectiveness of the offered audio-visual saliency modelling, and the contributions of multimodal analysis have also been carefully investigated.
Perception of Farmers on the Impact of Television Programme in Sustainable Agricultural Development of Bangladesh: A Case Study on Hridoye Mati O Manush	Sheikh Mohammad Shafiqul March 2020 ¹³	The purpose of the research was to determine how farmers perceive the influence of the HMOM programme on Bangladesh's sustainable agricultural growth.	Quantitative and qualitative data were collected using a variety of techniques, including a questionnaire survey of HMOM listeners, Focus Group Discussion (FGD), and Key Informant Interviews (KII), as well as a content analysis of the programme.	The study found that HMOM assisted 97% of farmers in gaining access to agricultural data. A little more than all of them (93.7 percent) profited from the initiative's agricultural expertise, which was employed by more than three-quarters of farmers. The campaign had a discernible impact on 69.6% of farmers' agricultural practises. The way in which farmers were able to obtain and use agricultural information, as well as the benefits and outcomes they experienced, were determined by their socio-demographic factors. Farmers who are women, those with low levels of education or illiteracy, and those who are bankrupt all fall behind in these processes. Farmers felt more confident after having their voices heard at HMOM's "Farmer's Budget" series meetings with decision-makers.	The long-standing need for the establishment of an agriculture-focused TV station in the nation has not yet been fulfilled. The government should implement an integrated strategy for sharing agricultural information with the commercial television networks, using HMOM as an example.
Communication Media Mix for Rural Development	Sree JA Kumar 2022 ¹⁴	What are the communication media mix for rural development	Secondary sources	The audio-aids, such as radio and audio cassettes, will be very useful in promoting awareness of innovations and development programmes.	A comprehensive communication plan for any rural development initiative includes a sufficient number of different media. We also reviewed developing information technologies for rural development.

Key findings

The results of selected 10 studies indicate that wider use of audio-visual contents can build-up technological knowledge, attitude and practice in agriculture, health care, education as well as all aspects of economy of Bangladesh. In this study, it is specially observed, audio-visual contents contributed to the agricultural productivity of Bangladesh. At the same time, audio-visual digital contents promoted the teaching-learning process of Bangladesh and simultaneously this can strongly claim that audio-visual contents have a positive contribution to the promotion of GDP of Bangladesh economy.

Research Gap

In Bangladesh from 2008, there are very few studies that focus on audio-visual contents and use of ICT in agricultural development and SME in Bangladesh but there is no study that discussed about the direct impact of audio-visual impact on economic development of Bangladesh. Therefore, further study is required to identify the contribution of audio visual contents in other economic development sector of Bangladesh.

Discussion

In our study out of the selected ten studies highest 04 (40%) studies discussed about audio-visual contents and its

impact on agricultural development in Bangladesh. Similarly, four studies (40%) explored the influence of ICT on poverty reduction, SME development, and education awareness. 01 (10%) of the studies addressed the localization of digital content for use in secondary schools in Bangladesh, and one research addressed the farmers' perceptions of the influence of the HMOM programme on Bangladesh's sustainable agricultural development. Despite a progressive decrease in its contribution to the country's Gross Domestic Product, agriculture continues to be Bangladesh's primary economic activity (GDP). Bangladesh is blessed with a climate that is conducive to the production of a diverse range of tropical and temperate plant species. Agriculture in which around one hundred different types of crops are produced. Rice is the most important of them. It may be harvested throughout each of the year's three growing seasons and accounts for over 79 percent of the total area the all of the land that is farmed. The country's agricultural production is undergoing a continual shift as it moves away from its single-crop reliance and toward diversified cropping systems. Agricultural practices that are both environmentally responsible and sustainable are required for success. Food safety for the country's constantly expanding population. Despite a slow but steady move toward industrial operations, Bangladesh's multifaceted agricultural activities continue to be a driving force in the country's overall economic development. Agriculture, just like other industries, requires efficient circulation of knowledge on better seed types and environmentally responsible fertilizers and insecticides; lucrative and innovative new types of agricultural goods; and the sub-industries that support them, such as the production of poultry, cattle, and fisheries, as well as fruit, as well as information about market sufficiency of the prices of the agricultural goods; conversation and advice with industry professionals. Television, or TV for short, is a potent kind of electronic mass media that has the ability to information, education, entertainment, and even medical care may be sent to the most inaccessible areas. Persuasion, In the context of Bangladesh, television serves as an efficient means of communication and is of great assistance to the 36.4% of the population¹⁵ that is economically disadvantaged. Education. Conversations take place simultaneously with the transmission of messages through television, which use visual images. As well as music, people are able to readily communicate with one other and comprehend these forms of art who are incapable of reading or writing. Television, as one of the most influential forms of mass communication, plays an essential part in make contact with the farmers and provides them with the appropriate and correct information on the numerous elements of agricultural methods. The farmers value television because of the acoustic and visual content it provides. Visual display of knowledge that is even intelligible to a significant portion of the target audience those who, in general, have a limited or nonexistent educational background. One of the most fascinating aspects of the agricultural sector in Bangladesh is the observation of a downward trend for the total agricultural land area of the nation, which can be translated as a reduction is shown to have decreased from 91.83% in the year 1976 to 87.69% and 83.53% in the years 2000 and 2010 respectively. During this time period, the total amount of agricultural land was reduced by 561,380 hectares. 1976-2000, and then again between 2000 and 2010, when the total was expanded to 565,370 hectares. The annual average loss of agricultural land was 23,391 ha between the years 1976-2000 and 56,537 ha during the same time period. Specifically, the years 2000-2010 each.¹⁶ To put it into perspective, total population increased by more than a factor of two, from 75 million in the year 1972 to more than 164 million at the present day. When compared to the quickening rate of population growth and the quickening rate of population decline, agricultural area, the output of agriculture, and most importantly food grains, has seen a significant increase raised by many orders of magnitude. Throughout this period of change, the distribution of agricultural knowledge among the farmers is considered one of the most influential agents of change. Particularly to the agriculturalists. Audio-visual communication of relevant information for those with no formal educational background. It is often believed that agricultural information provided by television networks has a significant influence on the economy of Bangladesh.

Limitations of the study

Very few relevant published articles identified on impact of audio-visual contents in the economic development of Bangladesh which was a major limitation.

Conclusion

This is the age of supersonic technology. Technology plays a vital role in all aspects of economic activities such as agriculture, education, health and sanitation, self-employment, women entrepreneurship, fishing as well as cottage and small industries all over the world. In this age of science, technology and internet, how does the economy of Bangladesh is influenced by audio visual contents is needed to be evaluated to take proper steps for the achievement of sustainable development in Bangladesh. After reviewing the article it was identified that there are certain role of audio visual contents in agricultural sector as well as different economic sector in Bangladesh. Further project and study required to know the audio-visual concept in-depth contribution of the society.

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