MASS MEDIA, SCIENCE AND TECHNOLOGY, AND SUSTAINABLE DEVELOPMENT IN NIGERIA: THE A.R.I.S.E PERSPECTIVE

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Abstract

The paper on mass media, science and technology and sustainable development in Nigeria; the A.R.I.S.E perspective sought practical ways of harnessing communication and media strategies to drive home sustainable development in line with the Akwa Ibom State A.R.I.S.E Agenda. This is predicated on the fact that no development initiative meant for the people could achieve its objective if the would-be beneficiaries are not properly and adequately informed and government getting immediate feedback. Anchored on the development media and technological determinism theories, the desk and qualitative analytical methods were adopted using the interview technique. The author identifies media channels, strategies and utilizing science and technology to reach the populace. The paper concludes that the A.R.I.S.E Agenda is a panacea for myriads of economic and social woes in Akwa Ibom and Nigeria. It advocates constant training of media personnel who are the drivers of the agenda and provision of modern media equipment to meet current trends in information dissemination even as the re-introduction of community viewing centres to capture ruralites.

Keywords: Mass media, Science, Technology, Sustainable development, A.R.I.S.E Agenda

1.0 Introduction

In recent years, the promotion of sustainable development worldwide has been greatly aided by the mass media, science, and technology. Like in other nations, Nigeria can benefit from these instruments in terms of economic expansion, better social conditions, and increased citizen well-being. Thus, through the A.R.I.S.E. agenda, this study seeks to investigate how science, technology, and the media contribute to Akwa Ibom and Nigeria's sustainable development.

The mass media plays a critical role in influencing public opinion and distributing knowledge about sustainable development initiatives. The public can be informed about development initiatives through a variety of media, including radio, newspapers, television, social media, and other online platforms. In addition, the media plays an advocacy role by making legislators answerable for their deeds or inactions. Media, science, and technology are crucial for accomplishing sustainable development goals because they spur creative solutions to problems facing sustainable development.

Nwabuize (2011, p. 35) defines sustainable development as development plans, projects, policies, and programs that are intended to last over time and benefit present and future generations. Uduak (2005) characterises it as a similar process of carrying out projects that have a good effect on the economy and are resilient enough to endure over time.

This concept aligns with the Akwa Ibom State Government's A.R.I.S.E agenda, which stands for Agricultural Revolution, Rural Development, Infrastructural Maintenance and Advancement, Security Management, and Educational Advancement. Governor Umo Eno emphasised that the A.R.I.S.E agenda was thoughtfully crafted to address the state's challenges while promoting sustainable development, which he believes will drive socioeconomic growth and improve the lives of the citizens.

Nevertheless, no matter how well-meaning this policy is, without the media's participation, the public might not be aware of current projects, and the government might not receive the input it needs to meet its goals. Young and

McCornas (2016) emphasised that journalists play a crucial role in achieving sustainable development goals in developing nations such as Pakistan. They do this by disseminating information that empowers the public to actively engage in discussions and decision-making that could improve their quality of life. As noted by Gillmor (2004), inclusive development depends on informed citizens.

However, the fascinating effects of science and technology on contemporary society cannot be ignored. Apart from advocating for sustainable development, they have also led to advancements in achieving specific goals, like the media's function in development. In order to solve problems related to sustainable development, implement those solutions successfully, and create partnerships both domestically and internationally to accomplish development objectives, the government is under constant pressure from the media. With reference to Nwabueze (2011), Umoren (2022, p. 15) observes that "Theentire human existence and mutual coexistence in any society are to a large extent, shaped by scientific activities or technology in the world." This study is necessary because, despite the programme's claimed focus on

This study is necessary because, despite the programme's claimed focus on people, it is unclear how the public will be informed and what strategies will be employed to guarantee that the right information reaches the right audience at the right time.

1.1 Statement of the Problem

The Akwa Ibom State Government under Governor Umo Eno, at its inception in 2023, launched a policy tagged A.R.I.S.E agenda, an initiative meant to propel the state's socio-economic growth and transform the lives of its citizens. The programme is believed to be people oriented, but what is not known is through which channel(s) will the people be informed and the strategies to be adopted to ensure the right information gets to the right target and at the right time. Thus, such necessitated the study.

1.2 Objectives of the Study

The study had the following objectives:

- (i) Identity media channel(s) through which Akwa Ibom people get information on A.R.I.S.E Agenda.
- (ii) Determine the strategy (ies) that could create that needed awareness on A.R.I.S.E Agenda in the State.

(iii) Establish the relationship between mass media, science and technology and sustainable development.

1.3 Research Questions

The following probing questions guided the study

- (i) Which media channel(s) do Akwa Ibom people get information on A.R.I.S.E Agenda?
- (ii) What media strategy(ies) could create needed awareness on the A.R.I.S.E Agenda in the State?
- (iii) What is the relationship between Mass Media, Science and Technology and Sustainable Development?

2.0 Conceptual Clarifications

Mass Media

Mass media refers to the various channels through which information is disseminated to a large and heterogeneous audience. These channels include television, radio, newspapers, and digital platforms. In Nigeria, mass media plays a critical role in shaping public opinion, educating citizens, and promoting cultural integration. Okunna and Omenugha (2012) highlight that the Nigerian mass media has a dual responsibility of entertaining and educating the public, making it a pivotal tool for national development. The influence of mass media extends to advocacy for democratic governance and mobilization for social change.

2.1 Science and Technology

Science and technology involve the systematic study of the natural world and the application of scientific knowledge for practical purposes. They are essential drivers of innovation, industrialisation, and modernisation. According to Oyewale (2017), science and technology in Nigeria are crucial for addressing socio-economic challenges such as poverty and unemployment. However, the nation faces barriers like inadequate funding, poor infrastructure, and limited capacity building, which impede their effective utilisation.

2.2 Sustainable Development

Sustainable development refers to development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Oyewale, 2017). In the Nigerian context, this concept encompasses economic growth, social inclusion, and environmental sustainability. Eneh (2011) argues that achieving sustainable development in Nigeria requires addressing critical issues such as resource management, environmental conservation, and equitable distribution of wealth. The integration of science, technology, and mass media is essential in achieving these goals by fostering awareness, innovation, and public participation.

2.3 A.R.I.S.E Agenda

Under the direction of Governor Umo Eno, the Akwa Ibom State Government introduced the A.R.I.S.E. Agenda in July 2024, an initiative designed to improve the socioeconomic growth of the state and improve the lives of its people. During the function, the governor said that the Agenda was a comprehensive economic plan, designed to solve the problems the state was facing and promote sustainable growth.

The Agricultural Revolution, Rural Development, Infrastructure, Security Management, and Educational Advancement are the five main pillars upon which the initiative is built. According to Mrs. Uduakobong Inam, the Governor's Economic Advisor, the government hopes that this move will support ongoing economic initiatives while promoting a more dynamic, inclusive, diversified, and highly industrialised economy for Akwa Ibom State.

The Governor asserts that the campaign's achievement depends on the combined efforts and commitment of individuals, including A.R.I.S.E. ambassadors, public servants, individuals who might benefit, and media representatives.

3.0 Literature Review

Overview of the relationship between mass media, science and technology and sustainable development

Mass media are technologically driven information-transmission platforms that strive to virtually simultaneously reach a variety of audiences. They included but were not limited to, newspapers, radio, television, books, and social media. It is common knowledge that leaders and leaders have a big influence on society and can be effective forces for advancement when used properly. Tsegyu (2015) asserts that the mass media is recognised as both a vital tool for inspiring the nation as a whole to pursue national development and as a major contributor to Nigeria's attainment of sustainable development.

To say that the mass media create awareness is an understatement when viewed from overwhelming evidences which abound everywhere they are employed for such purpose. The presence of mass media suggests that both rural and urban communities have access to information. The A.R.I.S.E Agenda, a policy aimed at advancing the state's socioeconomic development and improving the lives of its citizens, was introduced by the Akwa Ibom State Government, led by Governor Umo Eno, upon the inauguration of the administration in 2023.

According to Akinyooye and Aransi (2020), the mass media raised awareness of the different development projects implemented in Ogun State communities, which required community stakeholders to lend support to projects pertaining to poverty. Therefore, it appears from the above that these change agents not only raised awareness, but also inspired people to participate in such development initiatives. Once more, Akinyooye and Aransi (2020) believe that the media plays a significant role in raising public awareness of development initiatives.

Because of the established role that mass media play in the socio-political and economic development of a nation, Tsegyu (2015) and Umoren (2022) contend that modern politics would be virtually impossible without sufficient media coverage. According to Ochonogor and Omego (2012), the ability of candidates to communicate with voters more directly and swiftly has allowed

the mass media to completely transform political campaigns. There is a chance that other development goals could be served in a similar way if the media can do this for politics. This also explains why, conscious of its prominence in development, development partners have recently contributed enormous sums of money to media initiatives.

Science and technology are like Siamese twins which difference is quite infinitesimal, but its output is indeed phenomenal through their relationship. As noted by ITEA (2000), science studies the natural world, while technology increases humankind's capacity to alter it, thereby influencing human existence and harmonious coexistence in all societies. Thus, it should come as no surprise that people are constantly curious to learn and hear about new advancements in science and technology.

By stimulating innovation and developing solutions to environmental problems, science and technology play a critical role in promoting sustainable development. These solutions have the potential to reduce pollution, slow the depletion of natural resources, and pave the way for a more sustainable future. The development of renewable energy sources is another way that science and technology can promote sustainable development. As noted by Kammen, Blok, and Nijkamp (2005), advances in solar and wind energy technology have reduced the cost and increased the efficiency of these clean, sustainable energy sources, improved efficiency and decrease waste. It makes sense that Pretty (2008) notes that agricultural innovations like precision farming methods and cutting-edge irrigation systems are contributing to higher crop yields. Additionally, they are making it possible to build smart cities, which use technology and data to increase infrastructure efficiency and lower resource consumption (Chourabi et al., 2012).

In order to ensure that people everywhere have a better standard of living in the face of the current social and economic realities, efforts are made on a global scale. A society that places little emphasis on development is already preparing for extinction. Sustainable development is the norm where it occurs. As a result, strategic planning for development projects that last longer than the present is becoming increasingly important in the context of sustainable development.

According to Uduak (2005), sustainable development is the process of starting initiatives that have a positive economic impact and are viable in the long term. This kind of development, in these terms, improves the capacity to meet human needs both now and in the future. To benefit both the present and the future generations, it is the "Totality of development plans, projects, programmes, and policies being able to endure for a long time, to be of benefit to today's and tomorrow's generations" (Nwabueze 2011, p. 35).

Therefore, it makes sense to assume that the mass media have the tendency to reach all sectors of the society, both Nigeria and globally when effectively combined with modern information and communication technology, would impact sustainable development, the very essence of Akwa Ibom State Government socio-economic and political policy, the A.R.I.S.E Agenda.

4.0 Theoretical Foundation

The study was anchored on two theories; Development media and Technology determinism.

4.1 Development Media Theory

According to Asemah, Nwammuo, and Nkwam-Uwaoma (2017, P. 57), McQuail developed this theory in 1987. Since the media is seen as a social force and an agent of development in any community, the theory suggests that the media should support government initiatives by implementing initiatives that will encourage positive behavioural modifications among the populace. To promote development in this case, the media shouldn't be at odds with the political establishment.

4.2 Technological Determinism Theory

According to Asemah, Nwammou, and Nkwam-Uwaoma (2017), this theory was initially coined by Thorstein Veblen in the 19th century. Marshal Mcluhan further developed the theory in 1964. It implies that as society transits from one technological era to the next, media technology affects people's thoughts, feelings, and behaviours. As per the theory, the advancement of a society's social framework and cultural values is influenced by its technology.

Since the A.R.I.S.E. Agenda seeks to develop the state for the general benefit of the populace, including Nigeria, the two theories implicitly advance the concept of the agenda.

5.0 Methodology

For the study, desk research and qualitative research methods were employed. The desk research method, also known as the secondary source of data, is a technique where the researcher gathers information from previously collected data from other sources, such as data published in books, academic literature, the internet, scientific reports, and other publications (Ajayi 2023). Six (6) media representatives, A.R.I.S.E. Agenda stakeholders, and twelve (12) randomly selected individuals from each of the state's three senatorial districts—four from Ikot Ekpene, Eket, and Uyo—were also interviewed. A descriptive analysis was done.

5.1 Interview Analysis

Q1: What media channel do you receive information on AkwaIbom State A.R.I.S.E Agenda?

All of the respondents acknowledged having heard about the initiative, albeit to differing degrees and via various media outlets. Few, well-educated and well-informed people mentioned that they obtained their information from a variety of media sources, including radio, newspapers, billboards, and social media. On the day of the inauguration, some people claimed to have been able to watch and listen live. Four of them mentioned that the only sources of information they had access to were the radio and television. They had seen billboards, but they were never sure what they meant.

Many of them claimed that their Android phones served as their primary information sources, and that they were also able to learn about the agenda via Facebook, Twitter, TikTok, WhatsApp, and other social media platforms. Very few of them cited print media like newspapers.

Q2: What media strategies would you use to create public awareness on the A.R.I.S.E Agenda of government?

The question was primarily intended to enquire about how media representatives and agenda stakeholders plan to or have already reached a sizable number of people to join the initiative.

The majority of respondents agreed tho programmes, including drama, press releases, documentaries, musicals, jingles, and interviews, can raise awareness because most people have access to it. Radio in particular has the power to transcend boundaries and reach rural areas.

They added that watching television shows is another way to connect with people. They noted that while the majority of people do not own televisions, a small percentage do, and that is because of the television's ability to produce interest in shows due to its sound, motion, and visual elements. In the same way that radio, theatre, talk shows, documentaries, interviews, and similar media are crucial for drawing in viewers.

Respondents stated that since social networking is now a marketing tool and the majority of respondents use it for business, using it is essential if the A.R.I.S.E Agenda is to be successful. They noticed that audiovisual media, such as radio, has evolved into a personnel medium in which users receive personalised attention and are able to provide prompt feedback.

Due to the apparent decline in the reading culture and the fact that newspapers are only read by the literate—those who can afford to read—people do not view them or other printed materials as particularly effective strategies. They should not only not neglect it, but also not spend a significant amount of money and effort on the print.

Q3: What is the relationship between mass media, science and technology and sustainable development?

This question was intended to demonstrate how science, technology, and the media have affected the government's efforts to realise the ARISE agenda. The respondents shared what they knew about the potential applications of the mass media. They view the media as genuine socialisation facilitators that unite all parties involved in development. They argued that regardless of how excellent a project is, nobody would be aware of it if not for the media, who also spread awareness of the ARISE agenda.

The respondents hold the belief that media technology, which arises from scientific and technological advancements, is a guaranteed path to

sustainable development. This is because sustainability can only occur when development is able to persist. News media, science, and technology are therefore intertwined in the context of sustainable development.

6.0 Result and Discussion of Findings

RQ.1 Which media channel(s) do Akwa Ibom people get information on ARISE Agenda?

The respondents to the above question have reiterated the significance of mass media in enlightening and educating people about events occurring in their surroundings. The respondents listed a variety of mass media sources including but not limited to radio, television, social media (Facebook, Twitter, WhatsApp, and TikTok), through which they learnt about the A.R.I.S.E agenda. The aforementioned supports Tsegyu's (2015) assertion that the mass media is a crucial tool for inspiring a country to take action towards development.he mass media plays a significant role in raising public awareness of development projects, this cannot be applied to all media platforms equally. For example, respondents felt that print media, particularly newspapers, did a poor job of raising awareness of the ARISE agenda. This is likely due to the fact that a large number of people lack formal education, and even those who do may find it difficult to obtain due to cost. They believe that the print is only for the privileged, while ARISE is intended for all state residents. Social media seems to be one of the best because so many people can now access phones through quickly spreading, viral content that reaches everyone nearly instantly.

RQ II: What media strategy(ies) could create needed awareness on the ARISE agenda in the state?

Based on the findings, respondents maintained that information administrators must constantly come up with new strategies to inform the public about government actions in a diverse society like Akwa Ibom State, which has many dialectal variations. These strategies must be tailored to the specific circumstances at hand, as one may not work for every situation.

Media professionals and stakeholders who were part of the respondents identified several media strategies for the ARISE Agenda with the aim of piquing public interest in the project. These include the use of drama on radio and television, documentaries, talk shows, jingles, interviews, musical programmes, and social media, which has evolved into a private platform where users create forums and group chats. This is consistent with the findings of Osatuji (2013) and Rapada *et al.* (2021), who have observed that social media has been utilised by governmental and non-governmental organisations as a means of disseminating information and promoting awareness.

When used correctly and strategically, radio and television can be powerful tools for raising awareness. The observation made by Ochongor and Omego (2012) that the mass media has revolutionised political campaigns by facilitating candidates' access to the public suggests that these candidates were able to devise specific strategies for reaching their target audience in order to persuade them to vote for their candidatures.

RQ3 What is the relationship between mass media, science and technology and sustainable development?

Getting the people of Akwa Ibom State involved in the effort to improve a good society where life is simple and affordable is the main goal of the ARISE agenda. As per the State Governor, the agenda's five principal pillars were meticulously designed to address the present issues faced by the populace concerning education, security, infrastructure, rural development, and food-producing agriculture.

The media could certainly assist in informing the public about agenda items that benefit them if they could get people to vote and participate in other random activities. Effective information, mobilisation, and educational efforts require science and technology, potentially leading to better media hardware. ARISE is more widely known now that media technology has advanced. To improve sustainable development, the two work in concert as a result (Uduak, 2005; Nwabueze, 2011; Jamil, 2017).

7.0 Conclusion

Every project, whether undertaken by a government agency or an individual, is designed to accomplish a specific objective and, as such, must be carried out following the original creator's wishes. This may be the reason that if the public should be kept informed about policies, science and technology in the mass media would be essential.

By identifying the media outlets and implementing the necessary techniques to emphasise the initiative, the paper has successfully defended its goal. People learn about the policy through mass media, which includes billboards, radio, television, and other media. Documentaries, talk shows, dramas, as well as jingles on the radio and television are examples of tactics used to reach the audience that is being targeted.

Additionally, since technological advancement is a magic bullet for raising human well-being, it has been noted that science, the media, and technology all directly relate to sustainable development.

8.0 Recommendations

The following recommendations are made to further the awareness of the ARISE by citizens:

- * If a large population must be reached, alternate forms of interpersonal communication should be used in addition to the mass media.
- Establishing and utilising viewing centres would be a good idea, particularly in rural areas.
- * To attract more rural dwellers, it would be beneficial to include indigenous forms of communication like the marketplace and traditional town criers.
- * To connect the past with the present and work towards a better tomorrow, the library needs to be designed to store information for simple retrieval.

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