MEDIA, INNOVATION AND SUSTAINABLE NATIONAL DEVELOPMENT

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Abstract: This study examined media, innovation and sustainable national development. Other objectives include ascertaining the impact of media education and sustainable national development, to determine the role of mass media in education and to explore the role of media in sustainable development and gross national happiness. The extensive structural outlay of the media and its diverse coverage has made it a powerful agent of change in any socio-political set up. Shehu (1990) quoted "Economic and societal development in a country involves fundamental changes of habit, change of domestic living" in economic terms, this means better hygiene and nutrition, improvement in housing and home management. This study adopted qualitative research design. Sustainable development must be integrated into education and education must be integrated into sustainable development (UNESCO 2019) ESD is holistic and transformational education and concerns learning content and outcomes, pedagogy and learning environment. Education must therefore address key Issues, such as climate change, poverty and sustainable production. The media should be consistently used in planning and executing the media campaign magazines to elicit the responses needed by the stakeholders in public and private sector.

IndexTerms - **Media, Innovations and Sustainable National Development**

INTRODUCTION

The raise in living standards of the mass of the population occurred in developed countries in the past 100 years. This has been happening in most developing countries in the last half century, or, in the context of Bhutan, mainly in the past three decades. This raise in living standards has many positive effects, such as: better access to health care resulting in increase in life expectancy and reduction in child and infant mortality; better access to educational facilities rising literacy and improving economic opportunities; improved infrastructure; increased availability of consumer goods; and increased access to modern media. As expressed in Bhutan's Vision 2020 (Planning Commission Secretariat 1999: 11-17): 30 Years ago Bhutan had little of the infrastructure associated with a modern nation state and the life for the vast majority of the people was both harsh and short. In the past three decades Bhutan has undergone a major transformation (and seen) progress unmatched by other developing countries. More social and economic development has happened in the past 30 years than compared to the previous 300 years.

But, at the same time, increased development, rising living standards, and increased consumption and production result in increased pressure on the environment, threatening the long-term sustainability of the earth's life-support systems. Vision 2020 phrases it as follows (Planning Commission Secretariat 1999: 36): "Although the natural heritage is still largely intact, we cannot take it for granted (as) it is subject to increasing pressures. Ecological systems are particularly vulnerable, and pressures will certainly mount in the years ahead." In the presentation on the State of Bhutan's Environment by the Deputy Minister of the National Environment Commission to the National Assembly in 2005, it was stated that although Bhutan's natural environment is still largely intact, growing population and development activities, especially in urban areas, reduce the air quality in urban areas and lead to localised water pollution and land pollution in the form of deforestation and waste (N.n. 2005). So despite recognition of the problem and a well-planned vision for the year 2020, including government policies directed at environmental preservation besides economic and social development, there is a danger that when the behaviour of people does not change towards a more sustainable way of living, Bhutan might face future environmental problems not much different from those faced by other (developing) countries.

Thus, even in Bhutan, there are obvious links between poverty, environmental degradation, and economic development. The precursor for all later developments was the United Nations Conference on the Human Environment (UNCHE, United Nations 1972) in Stockholm in 1972, where the then Indian Prime Minister Indira Gandhi already said that "the environment cannot be improved in conditions of poverty". It is often thought that economic development alone will alleviate poverty through increasing income levels of the population. This unfortunately passes by the fact that the resulting environmental degradation can also lead to increased poverty. For example, large-scale commercial harvest of valuable tree species will contribute to the economy and can thus contribute to poverty alleviation. If not properly managed however the resulting deforestation can lead to soil erosion, nutrient loss, loss of biodiversity, and loss of ecological services such as maintenance of the water balance. This in return will affect rural populations depending on the forests directly through decreased availability of forest products but also indirectly, for example through decreased agricultural production as a result of decreased soil fertility.

Development according to Nwabueze (2011:35) is a process that activates the right conditions for man to better his life and his environment. Effective development encompasses the material, human realms geared towards advancing qualitative life among a people. The interest of any institution is to foster sustainable development. This is the kind that will stand the test of time and be beneficial to the citizenry. Education and its ancillary sector is one of the viable strategies towards truly sustainable development in any nation.

The mass media play crucial roles in the development of any nation. Onwuka (1988) defines education as the continual process by which learners acquire knowledge, skills, habits, sentiments and values which enable them live usefully and happily in their society. In this case, education involves knowledge and skill acquisition with its diverse principles and application templates.

1.1 Statement of the Problem

It was this realisation of the links between environment, economic development, and poverty which resulted in the coining of the term 'sustainable development' by the United Nation's Brundtland Commission in 1987. It is generally defined as development "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland 1987), with as basic pillars economic development, social development, and environmental protection at the local, national, regional, and global levels (United Nations 2002). In other words, sustainable development strives to achieve economic development that can be maintained well into the future and for all human beings. The Brundtland Report describes the common challenges facing the earth, namely: growing populations; securing food security; threats to and conservation of species and ecosystems; energy use and depletion of energy sources; industrial development; increasing urbanization; and the relationship between poverty and environmental degradation and inequality between the developed and developing world.

The goal of sustainable development has been generally described as to achieve a sustainable society. This means a society in which economy and population size are managed in such a way that they do not do irreparable harm to the environment by overloading the planet's ability to absorb waste and pollution, replenish its resources, and sustain human and other forms of life over a specified period of time. In a sustainable society the needs of people are satisfied without depleting natural resources and thereby reducing the prospects of current and future generations of humans and other species. The objectives of sustainable development often are mentioned as: reviving growth; changing the quality of growth; meeting essential needs for jobs, food, energy, water, and sanitation; ensuring a sustainable level of population; conserving and enhancing the resource base; reorienting technology and managing risk; and merging environment and economics in decision-making. Since 1987, the term has seen a mass distribution and popularisation to the extent that now practically every nation has adopted sustainable development as one of the official policy objectives. In 1992, the United Nations Conference on the Environment and Development (UNCED) in Rio de Janeiro, Brazil resulted in the adoption or signing by more than 178 nations of Agenda 21 (a 300-page plan for achieving sustainable development in the 21st century) and the Rio Declaration on Environment and Development (UNCED 1992). Principle 8 and 10 of this declaration state that "to achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies" (Principle 8); and there has to be "participation of all concerned citizens…each individual shall have appropriate access to information concerning the environment…and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available…" (Principle 10).

As will be shown later, these two principles are important since they provide a direct link between sustainable development, media, and democracy.

In 2002 the Rio Conference was followed up by the World Summit on Sustainable Development in Johannesburg, South Africa, where states recommitted themselves to the Rio Declaration Principles; more concrete measures and targets for better implementation of the Agenda 21 and the Millennium Development Goals were discussed (United Nations 2002). Article 11 of the Report states: "We recognise that poverty eradication, changing consumption and production patterns and protecting and managing the natural resource base for economic and social development are overarching objectives of and essential requirements for sustainable development." Thus from economic development alone as the solution to problems of poverty and environmental degradation, we have now reached a general consensus that arriving at a sustainable society includes achieving both economical, social, as well as environmental sustainability.

This study examines media innovation and sustainable national development. Other objectives include:

1. To ascertain the impact of media education and sustainable national development
2. To determine the role of mass media in education
3. To explore the role of media in sustainable development and gross national happiness

1.2 Sustainable Development Goals

The Sustainable Development Goals are a global agenda adopted by countries in 2015 with a vision of ending poverty, protecting the planet and ensuring that all people enjoy peace and prosperity. There are seventeen in number

- No poverty
- Zero hunger
- Good health and well being
- Quality education
- Gender equality
- Clean water and sanitation
- Affordable and clean energy
- Decent work and economic growth
- Industry, innovation and infrastructure
- Reduced inequality
- Sustainable cities and communities
- Responsible consumption and production
- Climate action
- Life below water
- Life on land
- Peace and justice strong institutions **17.**

Partnership to achieve the goal. Each of the 17 SDGs has specific targets to be achieved in 2030. The goal and targets are universal meaning they apply to all countries around the World not just the poor countries. Reaching the goal requires actions on all fronts – government, business, civil society and people everywhere all have a role to play.
The key messages to achieve SDGs are:

- The decision of public and private sector actors must incorporate sustainable development considerations. Doing so, however requires the ability to model the same considerations as well as the impacts of a particular policy or project.
- The design and choice of these models in crucial and must bring together the various actors and interests involved.
- These models must also be able to meet decision makers need and informed decision that contribute to sustainable development. –

1.3 Role of mass media in sustainable development in nigeria overview of nigeria education system

Nigeria's education system structure encompasses three different sectors: basic education (Nine) 9 years post basic education/senior secondary education (3years) and tertiary education (four to six years) depending on the programme of study. Academic year runs from Sept to July with 18 to 20 weaks. It is envisaged that all SSD attributes must take place in all sectors in our educational levels.

1.4 Role of media

A Professor of Law at Lake University, Harold Lasswell, has enunciated the roles of Mass Media as follows:

• Surveillance: This is the provision of constant stream of information about events in the society and about the society itself. Barran J. (2006) says "the surveillance function involves the process of combining and going from one place to another as well as observing other happenings in the society or community. Here, the journalist aims at catching the newsworthy events and informing the public about them. It involves monitoring of other broadcast station and news agencies for gathering reports of other societies in order to keep the environment informed about happenings elsewhere it suffices to say that mass media as a subsystem cut across other subsystems and transmits information among and between them. The sustainable development agenda is a global one which requires consistent becoming of its objectives by the media to enable both the governments, private sector to cue into the realisation of this global agenda come 2030. The mass media can do this through creating programmes in the mass media principal channels of radio, TV, Newspapers where experts and important members of society can be interviewed on sustainable development goals and their views published thereby providing informed analysis and comments that can guide public and private actions.

• Information: Action plan Agenda 21 for Sustainable Development identified information, integration and participation as key building blocks to help countries achieve development that recognizes these interdependent pillars. It emphasizes that in sustainable development, everybody is a user and provider of information it stresses the need to change from old sector centered ways of doing business to new approaches that involves cross-sectional coordination and the integration of environmental and social concerns into development processes. The mass media through correlation functions interprets every information concerning sustainable development, explaining them to the audience for proper understanding and making suggestions to guide them as well. Using the channels of mass media, emphasis the basis of education which tends to modify behavior and development of personality. The media will use agenda setting function in preparing the public mind and structure their thinking towards contemporary issues in sustainable development.

• Education: The mass media help to instruct, educate and socialize the members of the society. It provides a form of knowledge, expertise and skills that enable people to operate as effective member of the society. It also creates awareness, gives direction and opportunity to audience through positive impact of mass media. Kiran, Prasad (2009) opined that through educational function of the mass media there have been transmission of heritage, common social norms, values and collective experience from one generation to the extreme.   Through the educational programmes of the mass media, there have been major transformation in both formal and informal education, agricultural production, healthcare delivery, voters, education, skill acquisition, entrepreneurial development etc.

• Interpretation: The modern society with its growing complexity also imposes on the media the role of interpreting events, actions and developments as they concern the society. Thus the media not only survey events of the day and make them the focus of public and private attention, they also interpret their meaning, put them into context and make specifications about their outcomes.
Similarly, Nwosu (1990) noted that in addition to performing the traditional function, the media are more useful in providing better interpreted in-depth development stories that place developmental issues and facts in greater perspective.

• Socialization: Socialization is a process across the life span through which individuals acquire and interact with values and social standard of a specific society and culture. Media is considered a powerful agent of socialization, responsible for shaping an individual's socialization process.
Effects of media on socialization processes traditionally focusses on mass media channels such as television, radio and printed (books, newspapers and magazines)

1.5 Agents of change

The extensive structural outlay of the media and its diverse coverage have made it a powerful agent of change in any socio-political set up. Shehu (1990) quoted "Economic and societal development in a country involves fundamental changes of habit, change of domestic living". In economic terms, this means better hygiene and nutrition, improvement in housing and home management, judging by this list of desirable changes in any numerous formal and informal instructional programmes.

METHODOLOGY

This study adopted qualitative research design. The field of qualitative research is characterized by the use of many different theoretical perspectives. A theory encompasses a particular world view and provides a lens through which to analyse research problems. It shapes the questions a researcher addresses and the research design, interpretation of data and explanations that follow. Reeves (2008) illustrate how different theories would highlight different facets of a specific research problem. The data of this research work was drawn from secondary sources.   That is a body of information or data that are already in existence or which have been published already for instance, journals, magazine, textbooks, news papers, articles etc. The researcher made use of internet source, PDF files, news papers books, chapters in books and journals in data collection.

2.1 Data Presentation and Analysis

2.1.1 Impact of media education and sustainable national development

UNESCO (2018) on issues and trends in education for sustainable development defined education as action that encourages changes in knowledge, skills, values and attitudes to enable a more sustainable and equitable society. Education is the process of facilitating or acquisition of knowledge, skills, values, beliefs and habits. En.m.wikipedia.org – definition of Education – 24/8/019. Education for sustainable development aims to empower and equip current and future generation to meet the needs using a balanced and integrated approach to the economic, social and environment dimension of sustainable development.
UNESCO (2018), the concept of ESD was born from the need for education to address the growing and changing environmental challenges facing the planet. In order to do this, education must change to provide knowledge, skills, values and attitudes that empowers learners to contribute to sustainable development at the same time, education must strengthened in all agendas, programmes and activities that promote sustainable development.

Sustainable development must be integrated into education and education must be integrated into sustainable development (UNESCO 2019) ESD is holistic and transformational education and concerns learning content and outcomes, pedagogy and learning environment. Education must therefore address key Issues, such as climate change, poverty and sustainable production.
ESD promotes integration of these critical sustainability issues in local and global contents into the curriculum to prepare learners to understand and respond to the changing World. ESD aims to produce learning outcomes that include core-competences such as critical and systematic thinking collaborative decision making and taking responsibility for the present and future generation. In order to deliver such diverse and evolving issues ESD uses innovative pedagogy encouraging teaching and learning in interactive, learner – centered way that enables exploratory, action oriented and transformation basis. Learners are systematically develop values and ESD applies to all level of formal non-formal and informal education as an integral part of lifelong learning.
The learning environment must adopt and apply a whole institution approach to subject the philosophy of sustainable development. Building capacity of educators and policy support at international, regional, national and local levels helps drive changes in learning institutions. Empowered youth and local communities interacting with education institutions become key actors in advancing sustainable development.

2.1.2 The role of mass media in education

One of the sacrosanct function of the media is that of education. It is therefore significant that the mass media play crucial roles in sustainable development in the education sector. It provides, solicited, formal and informal education to the teeming audience of the traditional, print, electronic, new media and the ancillary media platforms. In capturing the level of media engineering in the educational sector, Ndolo (2005:24) notes that through books, newspapers, magazines, journals, radio, Television, video, cables, and individuals acquire both formal And informal education. Many academic programmes are put out in the airwaves.

The print media which are an integral part of the traditional mass media form play essential role in public education. Many Newspapers and Magazines feature regular columns that discuss educational issues. It has become a common feature in most Nigerian dailies such as the Sun Newspaper, the Guardian Newspaper, the Punch Newspaper and the Nation Newspaper among others to devote special pages to Education Review or news on education. Some also have pull outs containing lesson notes on subjects taught in formal educational institutions, comments and feedback columns on issues that thrives on educational development.

The mass media either in print or electronic such as television and Radio stations engage in personality interviews involving professionals in fields of education to inspire, actuate or motivate learning and scholarship. The regular feature of Newspaper reviews and some dwelling on education themes are also ways of the mass media playing a pivotal role in sustainable development in the critical education sector.

The Electronic Media particularly the Radio and Television are now given operational licenses to run educational broadcast stations solely for training and learning in educational institutions in Nigeria. With University of Lagos, Federal Polytechnic Oko, Rhema University of Nigeria among others blazes the trail in this media morphosis for sustainable education.

Infact, as put by Nwabueze (2011:42), most Nigerian Universities now have formal education programmes aired by radio and television houses to complement what is studied in formal educational institutions in this respect. They are more of instructional Radio and Television Programmes. The broadcast media has indeed been supportive to sustainable education and the efforts made by the National Universities Commission (NUC), National Board for Technical Education (NBTE) and other education regulatory bodies in Nigeria.

The broadcast media have also adopted the use of serialized drama programmes which commands large viewership to address educational matters. They deal on topical educational issues presented in interesting story line and dramatization while gaining sustainable development in that direction.

The consideration of linguistic peculiarities and audience response assessment, programmes using radio and television station are aired in local dialects with local content narration to impact knowledge and skill with a familiar subject. The programmes also involve discussion, phone in programmes which are interactive in nature and even the use of Pidgin English to attract and command the interest of the audience.

The outdoor media such as billboards and posters are also involved in the integrated mass media approach of ensuring sustainable development in the education sector. They serve reminder roles in communication to further buttress educational content and why people should acquire such knowledge. This is more or less a reinforcement, promotional strategies and catalyst that provides new approaches to existing knowledge.

The broadcast media has achieved great and exceptional feats in the areas of political education, social education, cultural education, health education, technological education, environmental education, religious education among others. Every broadcast programme aired has a direct or indirect value for the broadcast audiences. It has even become so penetrating and globalized as the media with its channels have wide coverage and reach to its audience in both local and urban areas, cutting across literate and non-literate audience adopting different strategies, respecting cultural and dialectic idionsycracies and the synergy of these underscores the crucial nature of the mass media in achieving sustainable educational goals.

2.1.3 Sustainable development and gross national happiness

As mentioned, Bhutan is currently undergoing a fast transformation from one of the least developed countries in the world to a country where many of the usual features of a developing country belong to the past. In this development process, with its ultimate goal to maintain Bhutan's independence, sovereignty, and security, Bhutan is guided by six main principles, namely: identity; unity and harmony; stability; self-reliance; sustainability; and flexibility (Planning Commission Secretariat 1999). However these six main principles are not sufficient and a single unifying concept of development has been chosen to complement these principles and identify future directions that are preferred above all others. This concept has been propounded in the 1980s by His Majesty King Jigme Singye Wangchuck. It is the uniquely Bhutanese concept of 'Gross National Happiness.' Although the concept has been made popular by His Majesty, many of the underlying ideas and principles have guided Bhutan's development for a much longer time. The starting point for the concept is that happiness is the ultimate desire of all human beings and that all else is a means for achieving happiness. The traditional development concept of Gross National Product, stressing a maximisation of economic growth, does not take this happiness into account. Neither does it take environmental degradation nor increase in social problems into account, which might be the results of a narrow striving for economic growth and prosperity (Planning Commission Secretariat 1992). In that way, the concept of GNH is directly linked to pursuing sustainable development, in which economic, social, and environmental sustainability are equal components of development. GNH places the individual at the centre of all development efforts and recognises that an individual, besides material needs, also has spiritual and emotional needs. Finding a careful balance between material and nonmaterial components of development is the main aim of GNH as a development concept.

The concept of GNH has been translated into more easily quantifiable objectives for the long-term development of Bhutan. The five most important priorities, or pillars, of GNH have been selected as: human development; culture and heritage; balanced and equitable development; governance; and environmental conservation (Planning Commission Secretariat 1999). These five pillars not only serve as objectives to be achieved when GNH is to be maximised, but they also are of decisive importance to maintain Bhutan's future sovereignty, independence, and security. The global significance of Bhutan's environment warrants a development process that conserves this rich environment for all times to come, whilst at the same time using this environment in a sustainable way to maximise GNH. This means a careful balance has to be found between use and conservation of environmental resources, and between economic growth and social stability. Thus, if GNH is taken as the ultimate policy objective, sustainable development is required.

This is reiterated in the Draft Constitution of Bhutan (Royal Government of Bhutan, 2005), in which Article 5(1) defines the role of every Bhutanese towards the environment: "every Bhutanese is a trustee of the Kingdom's natural resources and environment for the benefit of the present and future generations…through the adoption of environmentally friendly practices and ethos." The role of the government is defined in Article 5(2): "The Royal Government shall secure ecologically balanced sustainable development while promoting justifiable economic and social development." Regarding the roles of the State, Article 9(20) furthermore states that the State shall "strive to create conditions that will enable the true and sustainable development of a good and compassionate society rooted in Buddhist ethos and universal human values".

Thus, the entire Bhutanese development policy has been, is, and will be directly based upon the concept of sustainable development. But how sustainable development can be achieved in practice is a more difficult question to answer. Government policies alone will not be sufficient to achieve a sustainable society. It is the people who matter and make the change.

2.1.4 Sustainable Development requires Behavioural Change

According to Agenda 21, achieving sustainable development requires "recognition of the challenge, collective responsibility and constructive partnership, acting with determination and indivisibility of human dignity" (UNCED 1992). However, trying to achieve GNH and a sustainable society implicitly implies a change of behaviour and action from environmentally, socially, and culturally unsustainable to sustainable behaviour.

Although some research is available on behavioural change for sustainable development, this research is mainly on the theoretical and academic level (social and psychological theories on human behaviour) and there are very few practical examples (Warburton 2005). There are several theories explaining how behavioural change in humans takes place. Examples are *learning theories* that emphasize that learning a new, complex pattern of behaviour, like changing from unsustainable to sustainable behaviour, normally requires modifying many of the small behaviours that compose an overall complex behaviour. The *theory of reasoned action* states that individual performance of a given behaviour is primarily determined by a person's intention to perform that behaviour. The *social learning theory*, later renamed *social cognitive theory*, proposes that behaviour change is affected by environmental influences, personal factors, and attributes of the behaviour itself. Examples on behavioural change towards conservation are more widely available, such as the Conservation, Education and Communication Programme of WWF-Nepal, where positive changes in attitude and behaviour in support of sustainable development have been observed (Shrestha 2005).

One model which seems very applicable to the behavioural changes necessary to move from unsustainable to sustainable behaviour is the *Trans-theoretical Model*, or *Stages of Change* (Prochaska et al. 1997). This model, which is widely applied in health education and promotion, is based on several key insights that radically shifted the way that psychologists and others understand and support the process of behavioural change. Although the model in essence focuses on individual behavioural changes, it is all these behavioural changes together that finally contribute to societal change, and as will be discussed, individual change cannot occur seen separate from the wider societal developments.

The main insight of the model is that behaviour change is a process rather than an event. Before the advent of *Stages of Change*, it was common to assume that a certain period of education and support might lead someone to change an entrenched behaviour. This older approach has several implications. One is the assumption that every person will react similarly to new information and guidance. It was assumed that once people realise there is a problem, they will change their ways, and if they don't then it's because of a lack of motivation and willpower. Warburton (2005) however also indicated that the assumption that people don't change because they have a lack of information is not sufficient, because: people don't always trust the message (scientific data) or the messenger (government institutions); there is a value/action gap (people know there is a problem and they have to do something about it, but they don't); people don't have sufficient time and resources; and because people don't think that what they'll do will make a difference.

The *Trans-theoretical Model,* however, is based on the insight that the behaviour change process unfolds over months and years and is characterized by six distinct stages of change. Each change corresponds to an individual's readiness to change, which will vary over time. By matching an intervention to the appropriate stage (or readiness) the chances of success increase. Success, moreover, is defined not just by changing the behaviour but by any movement toward change, such as a shift from one stage of readiness to another. Barrow and Condon (2002) also recognised that change from an economically driven to a sustainability driven society will be made in small steps. Another important and innovative contribution of *Stages of Change* is its emphasis on *maintaining* change. The model recognizes that relapse is common. But instead of viewing relapse as a failure (i.e., the behaviour change didn't last), the Stages of Change model sees relapse as an opportunity to learn how to sustain change more effectively in the future. The six stages in the *Trans-theoretical Model* are precontemplation, contemplation, preparation, action, maintenance, and termination (adapted from Prochaska et al., 1997).

In the pre-contemplation stage, people have not yet thought about changing their behaviour. Some may be truly unaware of the consequences of their behaviour (e.g. "Plastics are not bad for the environment so throwing them away is no problem"). Others may be aware of the consequences but don't see any relevance to themselves personally (e.g. "I know waste is polluting our environment, but as a single person I don't produce much waste anyway"). A shorter term for this situation is 'denial'.

In the contemplation stage, the first steps are taken towards behavioural change. There is a greater and more accurate understanding of the advantages and disadvantages of changing the behaviour but since the advantages are still considered to outweigh the disadvantages, there is no readiness to change yet (e.g. "I know I should reduce my waste, but I wouldn't know how").

In the preparation stage, a person gets ready to take action relatively soon (e.g. "I have learnt a bit about composting, recycling and waste management so I know what I should do").

Now the advantages of changing behaviour are outweighing the disadvantages, and the next stage implies taking actual action to change the behaviour (e.g. "I have dug a waste pit and a compost pit and contacted a recycling agent").

The following stage, the maintenance stage, might last forever and is related to possible relapses into the old behaviour. In this stage the behaviour should be more firmly and thoroughly adopted (e.g. "I used the waste and compost pits but it is difficult and time-consuming to separate the waste").

In the last stage, the termination stage, there is complete confidence that the behavioural change can be maintained forever in any situation (e.g. "I always separate and recycle all the waste I produce"). Sometimes, this phase is never achieved and the maintenance stage might last forever.

So in this model, any person changing his or her behaviour from unsustainable to sustainable has to move through at least five different stages in order to achieve a behavioural pattern which is compatible to the behavioural pattern required in a sustainable society. The moving from one stage of the model to the next is being encouraged by several processes Prochaska et al., (1997):

Consciousness-raising-finding and learning new facts and suggestions supporting the change (e.g. through education, by accessing different kinds of media, or communication with other people). This process is most effective in the pre-contemplation stage, when awareness has to be created regarding the lack of sustainability in current behaviour. After initial awareness and consciousness is raised, as Warburton (2005) mentions, further awareness raising and telling people what to do becomes less effective and can better be replaced by other processes such as the following processes.

Environmental re-evaluation—assessing how one's problem affects the environment (e.g. realizing that producing and indiscriminately dumping waste is harmful to the environment as well as human health). This process also applies mostly to the pre-contemplation stage, as it raises consciousness of the effects of behaviour.

Self re-evaluation—realizing that the behavioural change is part of one's identity (e.g. seeing oneself as an environmentally and socially conscious person). This process is most effective in urging the move from the precontemplation to the contemplation stage as it projects a more positive image of oneself as the goal of the change process.

Self liberation—choosing and committing to act on the belief that change is possible (e.g. making a New Year's resolution). This is most efficient in the preparation stage as it makes a person mentally ready for taking actual action.

Counter-conditioning—substituting more sustainable alternatives for unsustainable behaviours (e.g. recycling instead of dumping of tin cans). This process is most effective in the step from maintenance to termination behaviour. It makes relapse into more unsustainable behaviour less attractive and less possible and is closely related to implementing more sustainable actions.

Stimulus control—avoiding triggers and cues (e.g. buying less single packed chewing gum and other sweets which are easily thrown into the environment). This process also works best in the step from maintenance to termination.

Contingency management—increasing the rewards of positive behavioural change and decreasing the rewards of the unsustainable behaviour (e.g. providing a deposit for returning bottles and cans to the producer for recycling or a tax on each kilo of waste produced). This process also works best in the step from maintenance to termination as it reinforces the positive behaviour thus preventing relapse into unsustainable behaviour.

Social liberation—this is receiving societal support for more sustainable behaviours (e.g. discussions about waste management, community action in constructing compost pits). This process is applicable throughout all stages of the model. It can assist in raising awareness and consciousness, but also in making the taking of decisions and of actions easier. According to Warburton (2005), this focus on practical support for sustainable behaviour, and linking this up with wider societal changes and building up a critical mass to make changes mainstream, are most important since individual behaviour is based on individual values and attitudes shaped by collective and social norms, expectations habits, and situations. One of the most important factors is a democratic and decentralised society with freedom of expression.

As the model shows, for people to make the change from unsustainable to sustainable behaviour it is first of all necessary to have sufficient and well-balanced information regarding current issues and policies. They should also have the capacity to evaluate this information within their personal context in order to make the right decisions, especially since many of these issues involve their every day life as well as the lives of future generations. Later on in the model, societal support and a conductive social environment become more and more important. One of the important implications of this model is that a society moving towards sustainability should have a sufficient level of participation of people in decision making, as well as sufficient access to information.

CONCLUSION AND RECOMMENDATIONS

3.1 Conclusion

Sustainable development is a global clarion call for development not only for the poor nations but also for developed countries to eradicate poverty, conflict, climate change, bio-diversity loss and resources scarcity for the present and future generations.

Sustainable development started with presentation of natural system but later metamorphosis to issues in political, social, economic, environmental and cultural development of the wide world to create a peaceful universe.

It is widely accepted that the mass media with its capacity to create awareness and publicity of the issues in most suitable and appropriate to enlighten, educate and inform the populace of the sustainable development goal through its programmes using the radio, TV, newspaper, magazines and posters. Education is most essential ingredients for all ages and stages of the life of an individual, society as well as the nation education can be a total panacea for all social evil when properly planned and executed in formal, non-formal and informal manner.

3.2 RECOMMENDATIONS

- The media should be consistently used in planning and executing the media campaign magazines to elicit the responses needed by the stakeholders in public and private sector.
- The poor countries that are already battling with poverty, corruption, wars and crisis should be supported by richer countries sthrough aids and other financial assistance to ensure conformity.
- Proper evaluation of the programme should be consistently carried out to determine the work ability before the duly date.
- UNESCO has a major role, along with its partners in bringing about key achievements to ensure the principles of education. Sustainable developments are promoted through formal, non-formal and informal education.
- In conclusion, Sustainable education through mass media is imperative in achieving sustainable development goals as supported by the Nigerian government and other developing economies.

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