Supporting the Sustainable Development Journey of Bangladesh with Folk Values in Primary Education

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Abstract

Sustainability and sustainable development are now centre-stage in economic, environmental, social and educational activities around the world. However, these are not only complex concepts, but the perspective and understanding vary in different places, time, geographical and economic conditions. What is of particular relevance to Bangladesh, is the importance of educating for sustainability while emphasising values education and responses to the current realities that have resulted from factors, such as economic development and climate change. This is particularly the case in primary education which builds the foundation for preparing children for dealing with future challenges. This paper argues that sustainability attitudes can be communicated by embedding folk values in primary education as a way to communicating complex concepts and supporting the sustainable development journey of Bangladesh which as a country has to respond to issues related to population growth, poverty, inequality and climate change. It investigates the place of values and wisdom from the country's rich folklore as a tool in formal and non-formal primary education in Bangladesh to encourage a holistic approach to sustainability which looks at the needs of people within the boundaries of the natural environment.

Keywords: Bangladesh, Challenges, Folk Values, Primary Education, Sustainability, Unsustainability.

Introduction

Sustainability is a living and dynamic concept which describes a state of fulfilment of the planet's ecosystems in a way that allows for well-being of the human population. Unsustainability can be recognized as a depleting or failing sustainability. Both sustainability and unsustainability, can be applied to bio-physical entities such as soil, water and biodiversity, as well as to non-physical aspects, such as education, health, equity and politics. The tradition of Bangladesh has inherently adopted a balance between natural resources and human needs (Hossain, 1995; 2001), however more recently under the impacts of globalization the culture in

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²Associate Professor, Department of Sociology and Anthropology, Green University of Bangladesh ³Professor, Curtin University, Western Australia the country has changed towards unsustainability by promoting only the materialistic well-being of its people. In the cultural and geo-environmental contexts of Bangladesh, sustainability refers sustainable management of land, water and other natural resources which is essential for basic physical needs in people's life (such as food, shelter and clothing), as well as upkeeping the cultural integrity that required their spiritual health to live meaningful lives and uphold the sustainability of natural resources.

Despite opinions that there is a difference between sustainability (e.g. the outcome of sustainable development) and sustainable development (e.g. the process leading to sustainability), these two terms are most commonly used interchangeably (e.g. Holden et al., 2014) as they entail the same dimensions and have similar implications for policy making, practitioners and educators. At a global level, there have been many ways of conceptualising sustainability as a development process within the boundary limits of the planet. The first and most-quoted definition of sustainability as a process is from the Brundtland Commission's report 'Our Common Future' (WCED, 1987, p. 43). As a boundary concept, sustainability emerged even earlier with the 1972 'Limits to Growth' report by the Club of Rome (Meadows et al., 1972) which discussed the planetary constraints compared to exponential economic and population growth. More recently the ecological and social dimensions were put together within the "doughnut model" (Raworth, 2017) which combines nine planetary boundaries (climate change, ocean acidification, chemical pollution, nitrogen and phosphorus loading, freshwater withdrawal, land conversion, biodiversity loss, ozone layer depletion and air pollution) and 12 social footings (water, food, health, education, income and work, peace and justice, political voice, social equity, gender equality, housing, networks and energy).

The world through the United Nations has responded to these concepts with practical approaches. They include the 2000–2015 Millennium Development Goals (MDGs), 2005–2014 Decade of Education for Sustainable Development and 2016–2030 Sustainable Development Goals (SDGs) or Agenda 2030. Sustainability, including education for sustainability, is now one of the most important agendas to across the world maintain peace and allow for a development that integrates environmental and social priorities. However, there is still a fundamental gap in developing pro-sustainability attitudes, practices and habits (Linder et al., 2022). The issue of human values is pivotal in the quest for solutions. Modernisation and industrialisation have been associated with a shift away from traditional human values which were perceived as hampering development (Tipps, 1976; Mensah, 2019). On the other hand, people are at the core of sustainable development and their knowledge, skills and values can encourage conservation and regeneration of

the natural environment as well as influence what production methods are acceptable (Mensah, 2019).

Education can influence people in developing knowledge, skills and behaviours, and for this purpose, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) has asserted the importance of re-orienting education for sustainability to be value-laden (Rhaman, 2011). Education that fosters values and attitudes and synergistically inspires students towards pro-sustainability behaviour building can instigate related sustainability practices. Different countries of the world, based on their geographical location, socio-economic, political and cultural context, are taking appropriate steps to determine the appropriate education systems and educational tools that can encourage sustainability. The challenges they face differ. There is no country in the world yet that has managed to achieve social prosperity and good life without transgressing the planetary boundaries (O'Neill et al., 2018). Countries are also differently affected by unsustainability.

Despite the small contribution to the global ecological footprint, Bangladesh is one of the biggest victims of the problems caused by industrialised wealthy countries. In fact, Bangladesh has not yet transgressed the country's biophysical boundaries (O'Neill et al., 2018) despite making significant economic and social progress and since 2015 becoming a low middle-income economy (World Bank, 2022a). Bangladesh can follow along the route of abandoning traditional values and replacing them with modern attitudes that leads towards exceeding the planetary boundaries or can aspire for a different model of development where social thresholds are achieved without compromising ecological health. We have attempted to explore the sustainability challenges that Bangladesh is dealing with from a different perspective by examining the need for an approach in primary education that motivates children to develop pro-sustainability attitudes by instilling folk values into their daily-life practices.

Materials and Methods

The study is based on a review of literature and practical experience combined with critical reflection. As a research method, the aim of critical reflection is to learn from experience with the explicit task to improve professional practice (Fook, 2011), such as primary education. Educating for sustainability provides the context, theoretical perspective and transdisciplinary approach to translate theory into practice by drawing on non-established ideas and breaking away from existing assumptions, restrictions and philosophies (Meyer and Lemaire, 2018). This is where critical reflection and other similar concepts used in qualitative research,

such as reflectivity, reflexivity and reflective practice (Fook, 2011), can assist. Reflective practices in research allow the researcher to be aware of their thoughts and the learnings that emerge from the analysis while reflexivity and critical reflection consider how these insights can influence the broader context of professional practices (Kallos, 2021).

Research in sustainability and educating for sustainability require such a critical-reflection approach in order to improve current practices. Moreover, for primary teachers to be not mere technicians in delivering basic literacy and numeracy skills, they also need to embrace reflectivity and engage in a deep way (Mortari, 2015) in the process of building sustainability values. This requires them to understand sustainable development as a complex journey with a range of interdependent dimensions as well as the specifics of Bangladesh and the wealth of opportunities that the country's folklore offers in building up sustainability values. These issues are further analysed in the remainder of the paper.

Sustainability and Sustainable Development as a Complex Journey

At the core of sustainability is integration of environmental and social priorities within an economic framework that often takes precedence over the other two sets of considerations. There have been numerous voices that humanity - that is, individuals, communities, economies, societies and cultures, is embedded in the planet's biosphere, on which it depends but which it also shapes (Folke et al, 2016). Using the case of protecting the global oceans, Pretlove and Blasiak (2018) argue that the health of the biosphere is the pre-condition for addressing societal issues and any economic development should improve people's lives without causing environmental degradation. In other words, there is a clear hierarchy with the natural environment representing the foundations for social development which in turn is the basis for economic prosperity (see Figure 1). Although complex, these three concepts can be easily conveyed at a primary school level using simple toys. What is more difficult to convey are the limits of the three rings (see Figure 1), and particularly that on the top, that is, the economy. While the biosphere is determined by the boundaries of the planet and society by the population numbers, the economy needs to be contained and justified in order not to transgress the other two rings. In fact, exactly such transgression has been happening in the wealthier countries contributing to climate change, social injustice and the overall planetary unsustainability. Let's now look closer in how to convey the concept of Sustainable Development.



Figure 1. The interconnectedness between the three aspects of sustainability

Definition

The definition of sustainable development by the Brundtland Commission (WCED, 1987, p. 43) report 'Our Common Future' is: "a development that meets the needs of the present without compromising the ability of future generations to meet their own needs." The concept of 'needs' in particular is essential in this definition. It includes the needs of the world's poor, to which overriding priority should be given. In addition, there is also the idea of limitations imposed by the state of technology and social organisation represented through the notion of ability to meet present and future needs. There is complexity right from the original definition of sustainable development. For instance:

- 1. Interpretations can vary across different economic and social development in countries (developed or developing, market-oriented or centrally planned);
- 2. There can be conflict between 'physical sustainability' or the biophysical world and the 'social-political setting' or the level of society, particularly when logically the concept is extended to equity between generations;
- 3. The discrepancy within a generation with potential divergence between the basic needs of the vast numbers of people around the globe and their aspirations for an improved quality of life and those who are wealthier and have access to larger resources. Thus, poverty and inequity are present prone to ecological, social and other crises;
- 4. The perceived needs are socially and culturally determined. Thus 'consumption' is not clear in regard to long-term sustainability as 'living standards' do not have any 'set parameters' within countries, societies and communities;
- 5. Sustainable development requires economic growth which may compromise the non-exploitation of others. In fact, 'growth' itself is not enough if it fails to meet the essential needs of people;

6. Few immediate problems can be solved by technological developments but often lead to even greater challenges. Large sections of society may be marginalized by ill-considered development.

Therefore, it appears that the economic dimension was missing from the Commission's definition (Spangenberg, 2016). Spangenberg (2016) also stresses that the complexities of the three systems, namely biosphere, society and economy, is tremendous and beyond the analytical capabilities of current economic theories and models. This requires attention to be given on the interlinkages and systems co-evolution. Whilst the theoretical status of sustainable development has remained a polemical and passionate area of research, some have argued that sustainability is not something to be defined but to be declared as an ethical guiding principle (Trisoglio, 1996). Since the 1980s, our understanding of sustainability continues to evolve as do the critiques of the concept for being vague, challenging and multifaceted (Agbedahin, 2019).

Despite the lack of a 'unified theoretical definition' (Trisoglio, 1996, p. 23), the four original primary dimensions of sustainability as outlined by the Brundtland Commission, namely: safeguarding long-term ecological sustainability, satisfying basic human needs, promoting inter- and intragenerational equity, continue to be valid (Holden et al., 2014). This remains a point of agreement among the plurality of views expressed by businesses, governments, international bodies, non-governmental organisations (NGOs), environmental groups and educators. So far, no country has managed to achieve sustainability when these four dimensions are analysed (Holden et al., 2014) and the SDGs with 169 explicit targets are concentrating the efforts across of the global community towards positive transformation. This requires collaboration and contribution from all stakeholders across society at a global, national and local level.

Stakeholders

Since 2000s, peace and partnerships for sustainability emerged as a new lens that defines the sustainability agenda (Sachs, 2012; UN 2015). Rahman (2011) explains that in terms of governance, it is a challenge to make any particular institution administratively responsible for this transformational agenda; instead, sustainability should permeate across all sectors and government structures as there is a need for fast changes that humanity has never experienced before under the current pressures of climate change, global poverty and other manifestation of unsustainable development. This is why it is important to identify the stakeholders and create meaningful and effective partnerships underpinned by the dimensions and values that define sustainable development. Education has a vital role to play in empower

ing people of all ages, and particularly young children, to take responsibility in creating a sustainable future (Agbedahin, 2019). Interestingly enough, education for sustainability so far has not been shaped by the pedagogical community but rather initiated by people, be it by well-intended policy-makers and other stakeholders, from outside the educational sector (Agbedahin, 2019).

Despite the lack of uniformity and agreement about its theoretical definition, Rahman (2011) believes, sustainability is a concept that ordinary people can easily understand. Moreover, it has a different meaning depending on their geographical, social or political context. The term itself is complicated representing a western concept to which non-westerns relate differently, mainly because their resilience is high, and they are more attuned to the natural environment. The global education for sustainability agenda has many universally applicable aspects but it needs to be grounded in the specifics of each locality and creatively use the available resources and tools, including those that people have used traditionally for millennia to support life. Most importantly it needs to make sense and be understood by the local people.

Comprehension

Defining sustainability in different realms is making it complex to be understood by the mass people and children in particular. While sustainability has come to be associated with the protection of biodiversity in biology, in economics, it is advanced by those who favour accounting for natural resources. In sociology, it involves environmental justice and in planning, the process of urban revitalization. In environmental ethics, sustainability means preservation, conversation or sustainable use of natural resources. The principles associated with sustainability, such as the futurity principle or the precautionary principle (Basiago, 1995), are also interpreted differently depending on contexts, perceptions, priorities and change with the course of time. While the wealthier countries are researching and producing new theories about biodiversity, forests, sea levels, renewable energy, global warming, climate change, human lives in countries, such as Bangladesh, Syria or Palestine, have become most vulnerable and the futurity and precautionary principles have less relevance compared to current risks.

Leading businesses, NGOs and academics are now referring to 'mega forces', such as population growth, globalisation and new work patterns (Kubik, 2012), and 'megatrends', such as the human dimension, geopolitical shifts and digitalisation (CSIRO, 2022), that influence sustainability in a way which is not fully understood. Often long-term consequences are ignored in favour of fixing one issue in a system that doesn't work (Holland & Wielgus, 2013). For example, building a school in a developing country does not necessarily lead to more educated children. Teachers are also needed, which means teachers' training. We need books and computers, which means transport and logistics. The children must be able to get to the classroom safely and their parents need to be well-off enough to send them to school instead of having them work. Children also need to be well-nourished to be able to concentrate. People are at the core of the notion of sustainability. This includes not simply ensuring that they are fed and kept in good health but that they lead purposeful and productive lives.

Demography

More than half of the world's population since 2007 has lived in urban centres. It is estimated that in 2018, 55% of the world's population resides in urban areas and this share will reach 68% by 2050 compared to 30% in 1950 (UN, 2018). Urban population is not uniform around the globe and increasing urbanization will affect differently various parts of the world. Urbanization creates new jobs and opportunities for millions of people and has contributed to poverty eradication worldwide. At the same time, rapid urbanization adds pressure to the resource base and increases demand for energy, water and sanitation, as well as for public services, education and health care. Asia and Africa are the two continents where 90% of the expected growth in urban population will occur (UN, 2018). Yet most "governments in these two continents seem woefully unprepared for the challenges they will face in providing their urban citizens with the basic services and security from poverty, environmental degradation, and crime" (Siddiqui et al., 2016, p. 1). A vast infrastructure of roads, housing, public transport, power plants, manufacturing, municipal waste collection and public open spaces will be needed for the new urban dwellers, including those residing in informal settlements. In 2018, it is estimated that 1 billion people across the globe live in slums and informal settlements with 80% of them in Asia and sub-Saharan Africa (UN DESA, 2022). Urban areas are seen as manifestation of a modern lifestyle in which traditional cultural values are gradually fading and replaced with consumerism and marketplace behaviours (Arnould& Thompson, 2005). From culture bearers, people become consumers in a society where individualism prevails over community life. This trend of increasing population poses many challenges which include growing inequality, concerns about safety and security, rising crime associated with social tensions and disparities, as well as health issues with air, water and land pollution and other environmental risks.

While carbon emissions due to fossil fuels are contributing to climate change, they also are linked to providing comfortable living in the city with the use of electricity in employment, transport, food preparation, air conditioning and

recreation. Communicating effectively about a topic like climate change can be complex, confusing, uncertain, sometimes overwhelming, often emotionally and politically loaded and overall challenging (APS, 2019). Food is another challenge for the world's population with over 800 million people going to bed hungry and more than a billion being overweight and obese (Marinova & Bogueva, 2022). It is also estimated that 32% of the total food produced globally is wasted (UN DESA, 2013, p. xii). Furthermore, livestock is consuming a staggering 50% of all grains grown in the world (Sansoucy, 1995) with this figure being even higher at 56% in Europe (Greenpeace, 2020), meaning that industrially raised, grained animals are competing directly with hungry human beings for food. Therefore, the quest for sustainable food production is also highly complex, multifaceted and site-specific with no one-size-fits-all solutions (ICSSL, 2016). It also needs to be communicated in a way that conveys these complexities.

Sustainable urbanisation is key to sustainability. To ensure that no one is left behind, urban growth needs to help maximise the benefits of population agglomeration while minimising adverse effects on the environment and providing infrastructure, food, education and services for all, including the poor, socially weak and vulnerable groups (UN, 2018).

Social

Social inequality, insecurity, and inadequate health and education services in developing or underdeveloped countries persist while the western world is struggling with providing more efficient public service. Even if global income inequality has receded slightly in recent years, inequalities within many countries have been rising (UN, n.d.). Still, the affluent 20% of the global population continue to consume 80% of the world's resources, such as water and land (Christian Aid, 2012). Since 1995, the top 1% of the world's richest people have captured 20 times more global wealth than the bottom 50% of humanity (Oxfam, 2021). Left unaddressed, these inequalities threaten sustainable development prospects in multiple ways.

According to Raphaely (2012), the economic aspect of development is embedded in the social and environmental conditions and can only be secondary to efforts of individual empowerment for sustainability. Education can contribute towards such individual empowerment for sustainability which needs to start from the very first years at school.

Within the complexity of sustainability, there are threats and theories but not that many solutions, plans and options. We are chasing after the effects rather

than stopping the causes; we are discussing and debating the consequences rather than finding the solutions. Education offers the opportunity to counteract unsustainability. However, there is neither any specific global solution nor is it possible to find one. Every nation and region must find not only specific solutions to deal with climate change and any other issues dealing with sustainability, but also ways to communicate them and develop the required level of comprehension. Common people might think it's too much to know. People who are living with \$1 or less a day can't ever think of renewable energy or solar panels. Thus, sustainability has always been complexed for millions of inhabitants of the earth! The challenges, solutions and opportunities vary from place to place and Bangladesh is no exception.

Challenges for Bangladesh

In the geo-environmental and cultural contexts of Bangladesh, sustainability means sustainable management of land and water-based natural resources as well as cultural integrity. This obligation is stipulated in Article 18A of the Constitution of the People's Republic of Bangladesh, added in 2011, as follows: "The state shall endeavour to protect and improve the environment and to preserve and safeguard the natural resources, biodiversity, wetlands, forests and wildlife for the present and future citizens" (Laws of Bangladesh, 2019, para. 1). Despite some successes in sustainable development initiatives in recent years, Bangladesh has yet to stretch the threshold in many areas. A full litany is beyond the scope of this paper and several challenges were identified for discussion to characterize the scale and seriousness of what Bangladesh is facing distinctively from the rest of the world and what measures should be taken.

Population

With 170 million population (1278 people/km2), Bangladesh is sitting as the 10th most densely populated country in 2021 (UN Population Division, 2022) and its environmental and ecological balance is under severe threat due to the over-exploitation of natural resources, deforestation, degradation, and habitat loss. Adding 700,000 Rohingya refugees who fled from Myanmar in 2017 (reaching later 850,000) has made these challenges more pressing for the environment, food security, law and order situation. Around 4,300 acres of hills and forests were cut down to make way for temporary shelters and 198 acres out of a total of 375 acres of natural forest land was invaded and around 3,000 to 4,000 acres of hilly land has been cleared of vegetation. From the remaining forest and jungles in Ukhia and Teknaf of Cox's Bazar, 6,800 tonnes of fuelwood are being collected each month (Uddin, 2018). Conversely, greenhouse gas emissions from human activities in 2020 were about 35

billion tonnes (t) of CO2 equivalent (CO2e), which equates to 4.47 t of CO2e per person, the highest per capita annual emissions being from oil-rich countries, such as Qatar at 37.02 t, Australia at 15.37 t, USA at 14.24 t, Canada at 14.2 t, and Europe at 6.61 t (Ritchie et al., 2020), being less densely populated countries. Bangladesh contributed 93 million t of CO2e in 2020 compared to 392 million by Australia, representing only 0.56 t of CO2e per person and making it one of the least polluting countries in the world (Ritchie et al., 2020). The largest geographical populations of China and India contributed 7.41 t and 1.77 t per person, respectively (Ritchie et al., 2020). In addition, the accumulated historical emissions per person per year over the period 1750-2020 show that US contributed 24.56% compared to 13.89% by China, 3.21% by India and only 0.09% by Bangladesh (Ritchie et al., 2020). These widely differing statistics raise ethical questions about the responsibility for reducing emissions and consequences from climate change. It also feeds into the challenges associated with the much higher rate of pollution to be generated by fast-industrialising nations like China and India in the short-term future. Challenges in providing necessities like energy, food and water, and essentials like health care and education, are related directly to population size in Bangladesh in the absence of necessary qualified personnel, institutional capacity, lack of awareness and education as well as extreme poverty making any law enforcement difficult in the country's setup.

Poverty

The lack of a minimum nutritionally adequate diet plus essential non-food requirements being not affordable (Townsend, 1993, p. 9) is the most obvious manifestation of poverty. It may be caused by social norms associated with the use and distribution of available resources, lack of social safety nets, political turmoil, civil unrest or war conflicts but it could also be the outcome of natural phenomena, including droughts, floods, fires, earthquakes, hurricanes and other extreme weather events and geographic phenomena. Both groups of factors – social and natural, are creating poverty in Bangladesh. Brammer (1997), for example, explains that soil or land erosion due to river migration causes poverty to hundreds of thousands of families in the Char (bar) lands of Bangladesh. This is in addition to the inherent and difficult to address poverty characteristics that exist in Bangladesh – the needy, beggars, mystics and landless poor (Hossain, 2001). Hossain (2001) also gives another example – the neo-poverty generated through foreign aid which forces rural people to take loans that they cannot repay.

In 2018, 22 million people lived below the international poverty line of US\$1.90 per day in Bangladesh (World Bank, 2018). Urban slum population is estimated at 28 million or 47% of total urban population (World Bank, 2022b). A

large number of poor people depend on agriculture and meeting the basic demands of life is their major survival and resilience concern. The Green Revolution of the 1970s was an attempt of the West to assist in poverty alleviation in Bangladesh which had very mixed results and serious environmental consequences (Shiva, 2015).

Despite of 20.5% of its population living below the national poverty line of US\$5.50 per day in 2019 (Asian Development Bank, 2022), Bangladesh has a very positive outlook at the world and its country. Its economic progress, human capacity building and resilience reduction have been extraordinary (World Bank, 2018). Between 2016 and 2019, the share of population living below the international poverty line of US\$1.90 per day decreased from 14.8% (World Bank, 2020) to 4% for those who are employed (Asian Development Bank, 2022). In 2021, Bangladesh achieved a 6.9% GDP growth (World Bank, 2022a). Even amidst the global challenges of the COVID-19 pandemic, Bangladesh moved up in the World Happiness Report 2022 to 94th place (from 101st in 2021) out of 146 countries (World Happiness Report, 2022).

Climate change

Bangladesh is one of the most vulnerable countries in the world when it comes to natural disasters whose frequency has increased in recent years due to climate change (BBS, 2022). The impact on households has increased close to tenfold during 2015–2020 compared to 2009–2014 with flooding being the biggest contributing factor (BBS, 2022). According to the 2021 Global Climate Risk Index (Eckstein et al., 2021), Bangladesh as the world's 7th most vulnerable country to extreme climate events, 9th in annual fatalities, 37th in fatalities per 100,000 inhabitants, 13th in losses and 37th in losses per unit GDP with 185 disaster events between 2000-2019. This is despite Bangladesh having a negligible impact on greenhouse gas emissions and a very low ecological footprint (Harmeling & Eckstein, 2013). The historic responsibility for global warming through carbon emissions and the resulting change in climate lies with the industrialized nations making Bangladesh one of the most vulnerable countries in the world (Carbon Brief, 2021). Indeed, the rich biodiversity of Bangladesh is under threat from climate change as well as from pollution, deforestation, river erosion, loss of soil fertility and land degradation.

In response to its vulnerability, Bangladesh is one of the first countries to develop a National Adaptation Plan of Action (NAPA) in 2005 for addressing climate change through a consultative process among government organisations, NGOs, civil society, academia, professional bodies, private sector, research organizations, thinktanks and development partners. It is also the first country in the

world to adopt a Climate Change Strategy and Action Plan (BCCSAP) in July 2009. Bangladesh has largely focused on adaptation (Pielke, 1998) and mitigation to an extent, committed to a low carbon development path endorsing a 'green development' concept that promotes a 'green economy' and provides 'green jobs' in the future. However, this must be in the context of Bangladesh's priorities for accelerating economic growth, poverty reduction, social emancipation and sustainable development. Bangladesh is now committed to achieving the SDGs. Any green development initiatives must be homegrown and country-driven, and externally imposed conditions are not acceptable. The 2030 Agenda requires a massive change in behaviours, decision making and pro-sustainability attitudes of the country's children, who will be left with the future earth.

Degradation of Traditional Values

With economic development and urbanisation, there has been a decline in traditional values (Tasnim, 2021). Education has not been able to preserve and encourage the aged-long heritage of social and traditional values of respecting others, living a simple life and serving others. This is causing a failure in social, economic and environmental sustainability. The situation also has complex historical roots. During the 1971 liberation war with Pakistan, many prominent meritorious people were killed leaving the new nation drained of intellectuals and talent. All governments formed after 1971 undervalued the education sector which was not prioritised and sacrificed in political duels.

There is a popular saying that destroying a nation does not require the use of atomic bombs or long-range missiles. It requires weakening the quality of education and allowing cheating during examinations by students seeking better grades. The results are patients dying from the hands of doctors, buildings collapsing at the hands of engineers, money being lost at the hands of economists and accountants, justice being lost at the hands of lawyers and judges, governance being lost at the hands of policy makers and legislators. Moral education emerges as a way to preserve and resurrect cultural and social values. The education system should carry human values and plans of actions, particularly as we face the challenges of sustainable development.

One of the reasons for the declining education system of Bangladesh is that the sector is entirely politically dominated. From teachers to students, officials and employees, everyone is directly involved in or influenced by politics in one way or another. There are some recognized and tested methods for destroying a nation and they begin with destroying its education system. In the aspiration for high grades, children have learned and have been allowed to be unethical. Obsession with secur ing first place in the class or scoring a perfect grade points average (GPA) of 5 causes mental stress with pressure from parents and peers. The tendency to committing suicide among children has never been so high, 70 cases from January to April 2018 (Dhaka Tribune, 2017 & 2018). Whilst children are forced to be obsessed with excellence in literacy and numeracy, we forget to sow the seeds of harmony, sense of responsibility and stewardships towards self, society and the earth. Without a balance between academic success and moral values, economic success will come at the expense of transgressing the planetary boundaries. If Bangladesh is to repeat the pitfalls of other nations, this would come at a very high cost because of its vulnerability. The problem is very complex and needs to be approached from a variety of ways. What we argue is that the sustainability journey of Bangladesh needs to be supported from the very start of the formal educational process through embedding traditional folk values and wisdom.

Folk Values in Primary Education

Gandhi once said, "Earth has enough to meet everyone's need, but not everyone's greed" (Misra, 2007, p. 352). It is important to build stewardship in young children at the primary level of education to be more eco-friendly and that by following sustainable living guidelines, they can reduce the effects of climate change, pollution and other environmental factors that harm our health and the environment. This stewardship can be introduced and instilled in them through the school curriculum as well as through informal education or after school programmes. Showcasing traditional practices and values would be a good way to live sustainably.

Education is the prerequisite to any sustainable development and when a country designs its transition plan, priority should be given to the development of primary education. According to data from Macrotrends (2022), Bangladesh has had a very significant trend of a declining education budget during 1980-2022. This compromises the ability of children to take the country forward and how we are educating them will determine whether the progress is towards development or destruction. Values education is part of the sustainability journey and responding to any types of disasters – in the form of floods, cyclones, tsunamis, earthquakes or molten lava as well as the world's response to the COVID-19 pandemic.

Folklore has been used as a tool to inculcate morals and values in children across the time in every nation. Much of folklore has been created especially for children to serve them from birth (Jaffro, 2003). 'Folklore' has been translated as 'the wisdom of a nation' (Mailybaeva, 2015) and reflects the nation's morals and manners, people's lifestyle, knowledge of life, nature, cults and beliefs. All genres of

folklore, such as fairy tales, legends, epics and shezhire were widely used as techniques in children's education (Hartwick & Brannigan, 2008) considering the level of development of imagination, mentality, and the use of visual techniques combined with imaginative, expressive language. Bangladesh inherently possesses the enormous treasure of folk genres considered a source of sustainability wisdom and a 'code of life'. The values generated from those folk genres can be used as a powerful tool to explore effective and practical ways of cultural expressions of traditional folklore that can be maintained, with their wisdom transmitted through education to create citizens who are personally honest, modest, and healthy; economically solvent and self-reliant; socially respectable and kind to nature.

Primary education needs to apply lessons of how we learn from the stock of local knowledge to build spirituality for resilience under all circumstances, including the impacts of climate change. The curriculum of the conventional educational systems has reasonably failed to address social, economic and ecological sustainability and the lack of appropriate tools and pedagogical approaches is one of the reasons. Using examples from the traditional and available practices, the values for sustainability need to be addressed and acquired for them to become mainstream culture. Acquisition of certain values can influence attitudes and therefore can promote practices towards a more sustainable way of life. Thus, it is not possible to achieve a transition towards sustainability without sustainability education being values-based, for this helps develop the spirit of environmentalism valuing local traditions, knowledge, and culture; and access to appropriate technologies to live sustainably. To do this, sustainability in education needs to be in an acceptable format, such as folk tales, poems and songs, at an early stage.

Conclusion

Bangladesh's strong track record in economic growth in the last decade was also accompanied by the achievement of the MDGs. This country is also committed to achieving the SDGs and becoming an upper middle-income country by 2031 (World Bank, 2022a). These impressive achievements need to be supported by a different model of development where traditional folk values continue to guide the Bangladeshi people's habits and practices. The analysis presented in this study shows that this should start from primary education where there are ample opportunities to bring folk stories, songs and proverbs in building pro-sustainability attitudes.

Education can be the most powerful and transformative force (Agbedahin, 2019), but it can also fail the huge expectations put on it by other sectors of society. A dry scientific curriculum may convey the right ideas but not engage properly

with the minds and hearts of the learners. This is even more important at a primary level of education. Primary school teachers can enrich their way of communicating the complex sustainability values by drawing on powerful folk stories, proverbs, songs and other texts to create a vision for a better world but also a moral compass how this can be achieved.

Bangladesh is one of the prime stakeholders to implement and achieve the UN Sustainable Development Goals by 2030. Climate change, sustainable consumption, self-reliant lifestyle and value education are considered vital in the sustainability journey. For the achievement of these goals, the reinforcement of traditional knowledge, values and lifestyles through primary education can play a key role. Almost all obstacles or challenges for sustainable development identified so far have direct human involvement. In the same way, the solution to them is largely up to the people. A new vision for education, one that seeks to empower people to assume responsibility for creating a sustainable future, can be built on the basis of the knowledge and wisdom created be those from whom we have inherited the world.

An informal/social education and formal/classroom education based on folk heritage can convey values, such as respect for nature and ecological stewardship for the young pupils. The ultimate desirable outcomes are to prepare the future generation as individually consumption conscious, socially responsible, economically self-reliant, and respectful to nature (naturalism). Sustainability can then be reinstated within the timespan of achieving the Sustainable Development Goals (SDGs).

References

- Agbedahin, A. V. (2019). Sustainable development, Education for Sustainable Development, and the 2030 Agenda for Sustainable Development: Emergence, efficacy, eminence, and future. Sustainable Development, 27(4), 669-680. https://doi.org/10.1002/sd.1931
- Arnould, E. J., & Thompson, C. J. (2005). Consumer Culture Theory (CCT): Twenty years of research. *Journal of Consumer Research*, 31(4), 868-882. https://doi.org/10.1086/426626
- Asian Development Bank. (2022). *Poverty Data: Bangladesh*. https://www.adb.org/countries/bangladesh/poverty
- Australian Psychological Society, (2019), Retrieved from https://www.psychology.org.au, viewed on Feb 2, 2019
- Bangladesh Bureau of Statistics (BBS). (2022). Bangladesh disaster-related statistics 2021: Climate change and natural disaster perspectives.

- http://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/b343a8b4_956b_45ca_872f_4cf9b2f1a6e0/2022-06-19-13-40-dd f8d0fd849e94d733a06d2d38dcd90b.pdf
- Basiago, A. D. (1995). Methods of defining sustainability. *Sustainable Development*, 3(3), 109-119. https://doi.org/10.1002/sd.3460030302
- Brammer, H. (1997). *The geography of the soils in Bangladesh*. Dhaka, Bangladesh: University Press Limited.
- Carbon Brief. (2021). *Analysis: Which countries are historically responsible for climate change?* https://www.carbonbrief.org/analysis-which-countries-are-historically-responsible-for-climate-change/
- Christian Aid. (2012). *The rich, the poor and the future of the Earth: Equity in a constrained world.* https://reliefweb.int/report/world/rich-poor-and-future-earth-equity-constrained-world
- Commonwealth Scientific and Industrial Research Organisation (CSIRO). (2022). Our future world: Global megatrends impacting the way we live over coming decades. https://www.csiro.au/en/research/technology-space/data/Our-Fu-ture-World
- Eckstein, D., Kunzel, V., & Schafer L. (2021). Global Climate Risk Index 2021: *Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2019 and* 2000-2019. Germanwatch. https://reliefweb.int/attachments/b6a6928e-214a -3398-bc01-1460f32bb3ad/Global%20Climate%20Risk%20Index-%202021_1_0.pdf
- Folke, C., Biggs, R., Norström, A. V., Reyers, B., &Rockström, J. (2016). Social-ecologicalresilience and biosphere-based sustainability science. *Ecology and Society*, 21(3):41. http://dx.doi.org/10.5751/ES-08748-210341
- Fook, J. (2011). Developing critical reflection as a research method. In J. Higgs, A. Titchen, D. Horsfall & D. Bridges (Eds.), *Creative spaces for qualitative researching: Living research* (pp. 55-64). Rotterdam, the Netherland: Sense Publishers. https://doi.org/10.1007/978-94-6091-761-5_6
- Greenpeace. (2020). False sense of security: Why European food systems lack resilience. https://www.greenpeace.org/static/planet4-eu-unit-state-less/2020/10/85cc908b-false-sense-of-security_final_en.pdf
- Harmeling, S., & Eckstein, D. (2013). Global Climate Risk Index 2013: Who suffers most from extreme weather events? Weather-related loss events in 2011 and 1992 to 2011. Germanwatch. https://www.germanwatch.org/sites/default/files/publication/7170.pdf
- Hartwick, K., & Brannigan, A. (2008). Self-control, child effects and informal social control: A direct test of primacy of sociogenic factors. *Canadian Journal of Criminology and Criminal Justice*, 50(1), 1-30. https://doi.org/10.3138/cjccj.50.1.1
- Holden, E., Linnerud, K., & Banister, D. (2014). Sustainable development: Our Common Future revisited. *Global Environmental Change*, 26, 130-139. https://

doi.org/10.1016/j.gloenvcha.2014.04.006

- Holland, P., & Wielgus, B. (2013). Sustainability: a complex world of interconnected challenges. *The Guardian*. https://www.theguardian.com/sustainable-business/sustainability-complex-world-interconnected-challenges
- Hossain, A. (1995). *Mazar (Sufi shrine) culture in Bangladesh*, PhD thesis, Murdoch University, Australia.
- Hossain, A. (2001). *Renewing self-reliance for rural Bangladesh through renewable energy technology system*, PhD thesis, Murdoch University, Australia.
- International conference on steps to sustainable livestock (ICSSL), (2016), Bristol, UK, January 12-15, 2016
- Jaffro, L. (2003). *Synthesis note for accreditation, Research on common sense, moral sense and association,* University of Paris 10-Nanterre, 2003, 104 p.
- Kallos, A. (2021). *Reflexivity in Evaluation*. Eval Academy. https://www.evalacademy.com/articles/reflexivity-in-evaluation
- Kubik, G. H. (2012). Global mega forces: Implications for the future of natural resources. In D. N. Bengston (Ed.), *Environmental futures research: Experiences, approaches, and opportunities* (pp. 25-36). Newtown Square, PA: US Department of Agriculture, Forest Service, Northern Research Station. https://www.nrs.fs.fed.us/pubs/gtr/gtr-p-107papers/05kubik-p-107.pdf
- Laws of Bangladesh. (2019). The Constitution of the People's Republic of Bangladesh (Act No. of 1972). Legislative and Parliamentary Affairs Division. Government of the People's Republic of Bangladesh. http://bdlaws.minlaw.gov-.bd/act-367/section-41505.html
- Linder, N., Giusti, M., Samuelsson, K., & Barthel, S. (2022). Pro-environmental habits: An underexplored research agenda in sustainability science. *Ambio*, 51, 546-556. https://doi.org/10.1007/s13280-021-01619-6
- Macrotrends. (2022). Bangladesh Education Spending 1980-2022.
- https://www.macrotrends.net/countries/BGD/bangladesh/education-spending
- Mailybaeva, G., Utegulov, D., Tazhinova, G., Assylova, R., &Shatyrbayeva, G. (2015). Formation of modern world view of moral values of school children through the folklore education of Kazakh people. *The Social Sciences*, 10(6), 1076-1079. https://doi.org/10.36478/sscience.2015.1076.1079
- Marinova, D., &Bogueva, D. (2022). *Food in a planetary emergency*. Singapore: Springer Nature.
- Meadows, D. H., Meadows, D. L., Randers, J., & Behrens III, W. W. (1972). *The limits to growth: A report for the club of Rome's project on the predicament of mankind*. New York, NY: Universe Books.
- Mensah, J. (2019). Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review, *Cogent Social Sciences*, 5, 1. https://doi.org/10.1080/23311886.2019.1653531

- Meyer, B., & Lemaire, C. (2018). *What Is Transdisciplinary Education?* Marin Academy. https://www.marinacademytlp.org/copy-of-td-education
- Misra, R.P. (2007), *Hind Swaraj: Gandhi's Challenge to Modern Civilisation*, Volume 1, Concept Publishing, New Delhi
- Mortari, L. (2015). Reflectivity in research practice: An overview of different perspectives. *International Journal of Qualitative Methods*, 14(5). https://doi.org/10.1177/1609406915618045
- O'Neill, D. W., Fanning, A. L., Lamb, W. F., &Stenberger, J. K. (2008). A good life for all within planetary boundaries. *Nature Sustainability*, 1, 88-95. https://doi.org/10.1038/s41893-018-0021-4
- Oxfam. (2021). The inequality virus: Bringing together a world torn apart by coronavirus through a fair, just and sustainable economy.

https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621149/bp-the-inequality-virus-250121-en.pdf

- Pielke, R. A. Jr. (1998). Rethinking the role of adaptation in climate policy. *Global Environmental Change*, 8(2), 159-170. https://doi.org/10.1016/S0959-3780(98)00 011-9
- Pretlove, B., &Blasiak, R. (2018). Mapping Ocean Governance and Regulation. Working paper for consultation for UN Global Compact Action Platform for Sustainable Ocean Business. https://www.researchgate.net/publication/327884976_-Mapping_Ocean_Governance_and_Regulation
- Raphaely, T. (2012). *The power of us: counteracting decreasing sustainability*, PhD thesis, Curtin University, Australia.
- Raworth, K. (2017). *Doughnut economics: Seven ways to think like a 21st-century economist.* London, UK: Random House Business.
- Rhaman P. H. (2011). Education for sustainability: The potential contribution of creator-centric Islamic values education, PhD thesis, Murdoch University, Australia.
- Ritchie, H., Roser, M., & Rosado, P. (2020). CO₂ and Greenhouse Gas Emissions, OurWorldInData.org.

https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions

- Sachs, J. D. (2012). From Millennium Development Goals to Sustainable Development Goals. *The Lancet*, 379(9832), 2206-2211. https://-doi.org/10.1016/S0140-6736(12)60685-0
- Sansoucy, R. (1995). *Livestock a driving force for food security and sustainable development*. https://www.fao.org/3/v8180t/v8180t07.htm
- Shiva, V. (2016). The violence of the Green Revolution: Third World agriculture, ecology, and politics. Lexington, KY: University Press of Kentucky.
- Siddiqui, K., Ahmed, J., Siddiqui, K., Huq, S., Hossain, A., Nazimud-Doula, S., &Rezawana N. (2016). Social formation in Dhaka, 1985-2005: A longitudinal study of society in a third world megacity. New York, NY: Routledge.

Spangenberg, J. H. (2016). Sustainability and the challenge of complex systems. In J.

- C. Enders & M, Remig (Eds.), *Theories of sustainable development* (pp. 89-111). London, UK: Routledge.
- Tasnim, S. (2021). Folk values for beginners: A sustainability perspective from Bangladesh. International Journal of Information Systems and Social Change, 12(1). https://doi.org/10.4018/IJISSC.2021010101
- *The Dhaka Tribune* (2018), Examining-alarming-suicide-trends-Bangladesh, Retrieved from https://archive.dhakatribune.com/opinion/ special/ 2018/05/08/ published on 8 May, 2018
- The Dhaka Tribune (2017), Four failed SSC examinees commit suicide. Dhaka: The Dhaka Tribune Retrieved from: http://www.dhakatribune.com/bangla-desh/nation/2017/05/05/four-ssc-examinees-failed-pass-commit-suicide/
- Tipps, D. (1976). *Modernization theory and the comparative study of societies: A critical perspective*. New York, NY: Free Press.
- Townsend, P. (1993). International analysis of poverty. London, UK: Harvester Wheatsheaf.
- Trisoglio, A. R. (1996). Sustainable Development in a complex world, PhD thesis, University College London, UK. https://discovery.ucl.ac.uk/id/e-print/1349006/1/338706.pdf
- Uddin, N. (2018). *Rohingya Refugees in Bangladesh: Five Challenges for the Future*. https://blogs.lse.ac.uk/southasia/2018/11/21/rohingya-refugees-in-bangladesh-five-challenges-for-the-future/
- United Nations (UN). (2015). Transforming our world: The 2030 Agenda for Sustainable Development. A/RES/70/1. New York, NY: United Nations.
- United Nations (UN). (2018). World urbanization prospects: The 2018 revision. https://population.un.org/wup/Publications/Files/WUP2018-KeyFacts.pdf
- United Nations Department of Economic and Social Affairs (UN DESA). (2013). World Economic and Social Survey 2013: Sustainable Development Challenges. https://www.un.org/en/development/desa/publications/world-economic-and-social-survey-2013-sustainable-development-challe nges.html
- United Nations (UN) Population Division. (2022). Data Portal. https://population.un.org/dataportal/
- United Nations Department of Economic and Social Affairs (UN DESA). (2022). SDG11: *Make cities and human settlements inclusive, safe, resilient and sustainable*. https://unstats.un.org/sdgs/report/2019/goal-11/
- World Bank. (2018). *Bangladesh: Reducing Poverty and Sharing Prosperity*. https://www.worldbank.org/en/results/2018/11/15/bangladesh-reducing-poverty-and-sharing-prosperity
- World Bank. (2020). *Poverty & Equity Brief South Asia: Bangladesh April* 2020. https://d a t a b a n k . w o r l d b a n k . o r g / d a t a / d o w n l o a d / p o v e r ty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Global_POVEQ_BGD.pdf

- World Bank. (2022a). Bangladesh: Overview. The World Bank in Bangladesh. https://www.worldbank.org/en/country/bangladesh/overview
- World Bank. (2022b). *Population living in slums* (% *of urban population*) *Bangladesh*. https://data.worldbank.org/indicator/EN.POP.SLUM.UR.ZS?locations=BD
- World Commission on Environment and Development (WCED). (1987). Our common future. New York, NY: Oxford University Press.
- World Happiness Report. (2022). *Happiness, benevolence, and trust during COVID-19 and beyond*. https://worldhappiness.report/ed/2022/happiness-benevolence-and-trust-during-covid-19-and-beyond /#ranking-of-happiness-2019-2021