# Sustainability and folklore in primary education in Bangladesh: An empirical study of teachers

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## Abstract

The objective of this study is to investigate how sustainability aspects are currently communicated in primary education in Bangladesh and whether teachers are exploiting the synergies between folklore and learning in the curriculum and classroom. Conducted within government primary schools in 2020-2022, the study uses a mixed-methods methodology combining a survey (with 140 respondents) and interviews (12 interviewees) of primary school teachers. The interviews revealed a gap between the favourable survey results and the availability of resources to teach sustainability in primary schools. Using folklore, including childlore, is an important avenue to bridge this gap and bring together long-lasting sustainability values and delivery of school material.

*Keywords:* Bangladesh, Childlore, Folklore, Primary education, Pro-sustainability attitude, Sustainability

# 1. Introduction

Building values that encourage sustainable behaviour is essential for young people across the globe. The integration of pro-sustainability values into mainstream education can inspire them to live in a way that is sustainable, secure and respectful of the natural environment and other people (Hossain & Marinova, 2004). There are different ways to approach such a sustainability education and one of them is through exploring the use of folklore which has fascinated and captivated people for centuries. Traditional wisdom generated from the rich folklore of Bangladesh is generally sustainability-oriented and can be used in teaching young people to be pro-nature oriented and self-reliant, encouraging sustainability practices. Previous research shows that there is synergy between folklore and education as their aim is "to empower the learner and benefit the community" (Pryor & Bowman, 2016, p. 451). Based on this theoretical concept, the paper explores the use of folklore in primary education to promote sustainability. It conducts an empirical investigation among Bangladeshi primary education teachers related to educating for sustainability and the use of folklore.

<sup>1</sup>PhD Student, Curtin University, Western Australia <sup>2</sup>Professor, Curtin University, Western Australia Sustainability requires certain values and attitudes to be developed since childhood, such as kindness, resilience, simplicity, modest consumption and prudent behaviour towards nature, including land, water, air and all natural resources (Khan, Hossain & Marinova, 2015). According to Mech (2015), embedding folklore in early school education is a gateway to personal development with its benefits related to strengthening cultural heritage, inspiring simple and logical thinking while offering deep insights into life and living and stimulating creativity. Folklore also helps develop better communication skills and can help bridge the gap between home and school (Mzimela, 2016). Stories drawn from folklore contain ideas, imaginations, objectives and morals that influence children's formation as social individuals and guide their attitudes and practices (Kartikasari & Tryanasari, 2020). There have been many calls for folklore as represented by stories, proverbs, riddles, songs and folkdances, to be embedded in formal education and used as an educational tool (Bowman, 2006; Banda & Morgan, 2013; Onuora-Oguno & Nwamara, 2014).

Many Bangladeshi folklore stories, songs and proverbs deliver sustainability messages (Tasnim, 2021; Tasnim, Hossain and Marinova, 2021) but is their power used by primary school teachers to build such attitudes? How do teachers at this level engage with the complex concept of sustainability in the school curriculum? The study is set to explore these questions with the aim to understand the way sustainability is communicated by primary school teachers in Bangladesh and whether they use the richness and power of Bangladeshi folklore to build synergies between education and learning to develop pro-sustainability attitudes among children.

The study has two objectives as follows: (1) Investigate how sustainability is currently communicated in primary education in Bangladesh; and (2) Explore how folklore is used in Bangladeshi primary schools. It does this by using a mixed-methods methodology (Creswell & Plano Clark, 2017) based on a quantitative survey and qualitative interviews. Government schools were selected for the study as they provide education for the largest share of Bangladeshi children (Ministry of Primary and Mass Education, 2019). After collecting survey data about perceptions and views of the school teachers on the role of primary education in achieving sustainability, pro-sustainability attitudes and the overall state of sustainability education in the curriculum, subsequent questions searched for deeper meaning by asking what, how and why (Sinek, 2009) during interviews. With surveys, there is a chance that the respondents may select answers in a rush or without having rigorous understanding, however, during in-depth interviews people tend to become more engaged with the issues.

In the remainder of the paper, the methodology of the study is presented first followed by the empirical evidence collected through the survey and interviews. The discussion section highlights the findings of this study within the broader context of previous research. In concluding the paper, we emphasise the importance of including all aspects of sustainability, not just environmental components, in the primary education curriculum for Bangladesh, where material drawn from folklore can be a useful tool.

# 2. Methodology

A mixed-methods approach has been used for 30 years to examine the same problem from different perspectives (Greene, 2008) and provide a deeper understanding compared to what can be achieved by applying only one research method (McKim, 2016). In this particular case, we used a survey and interviews, based on convenience sampling. We explain the actual methods used as well as the sampling and recruitment process. Both research instruments, namely the survey questionnaire and the interview schedule, are given as appendices.

# Survey

Survey research is based on collecting information from a sample of individuals, i.e. the survey participants, by asking them to provide responses to a set of questions (Check & Schutt, 2012). There were in total 25 questions in the survey questionnaire to gauge the strength of the basic understanding, attitude and practice towards social, economic or environmental sustainability within the curriculum, classroom and school environment. Some of the questions in the questionnaire are used to generate quantitative data to be analysed numerically and others, to provide qualitative answers which are interpreted by the researcher. We wanted to survey primary education teachers regarding any pro-sustainability attitudes that need to be developed in children. It was also important to find out their opinions about the potential use of folklore to achieve sustainability attitudes. Survey data was used to quantify and justify the patterns and the phenomenon.

The objective of the survey was to determine the strength (degree of importance) of the attitudes held by teachers towards pro-sustainability practices in order to gauge the likelihood of them directing practices and behaviour (Rhaman, 2011). A Likert scale is a popular instrument omnipresent in contemporary surveys (Wang & Krosnick, 2020), measuring subjective phenomena such as attitudes and beliefs. A 6 points scale was used in many of the questions from "strongly agree/extremely important" to "strongly disagree/not important", including offering a "neutral/not sure" option to improve the meaningfulness of the responses (Gilljam & Granberg,

1993). An additional option "not applicable" was given to provide freedom for teachers to express their position if they think none of these are applicable for sustainability.

A simple statistical analysis of the survey responses allows for a description of the prevalent attitudes. Frequencies, percentages and variance were calculated for the relevant questions which form the basis of the discussion. The survey was self-administered and the collected data was analysed quantitatively to determine any patterns (Bamford, 2015).

All questions required the teacher to self-report their attitudes and teaching techniques used in the school environment in relation to sustainability, including how they are reflected in the students' day-to-day life. This method was chosen for being an efficient way to collect information about attitudes and beliefs as well as for providing more substantive answers from the educators, while still offering ease of completion.

The questionnaire was designed in four parts to help understand basic thoughts, ideas and practices by the primary school teachers about education for sustainability. Part 1 consisted of ten questions soliciting introductory information about the primary teacher, namely age, length of experience and training, and some basic information about the school environment. This was followed by Part 2 which consisted of 9 questions, asking about the importance of sustainability values and practices for children in the age group 5-11 years old; how the teachers personally evaluate the pro-sustainability attitudes of the younger generations and the place of sustainability aspects (social, economic and environmental) in the primary education curriculum. Part 3 consisted of 6 questions to investigate the use of folklore in primary education and how it is communicated. The final Part 4 gave the teachers the opportunity to provide their own insights about the study. Most of the questions were qualitative and structured, with some requiring open-ended responses. Participants were reassured that there was no right or wrong answer as some practices may be more important than others.

#### **Interviews**

Interviews are widely used as a tool for collecting qualitative data. They are typically applied as a strategy to gather information about the participants' experiences, views and beliefs concerning a specific research question or phenomenon of interest (Lambert & Loiselle, 2007). During an interview, in addition to the open-ended questions, the interviewer may also use probing comments to obtain more information or direct the flow of the conversation as well as request the inter-

viewee to clarify or expand on their position (Singleton & Straits, 2009). When conducted at an interviewee's settings, interviews can also be combined with non-participant observation whereby the researcher observes without taking part in the participants' activities (Laurier, 2016).

This study required in-depth interviews with the primary school teachers to properly comprehend their perceptions, understandings and views on sustainability and to investigate any gaps in developing pro-sustainability attitudes and practices in the existing primary education curriculum and education system that challenge sustainable development. The use of folklore in communicating messages to the children was also discussed with the primary school teachers and observed at the schools' premises. A semi-structured questionnaire with 7 open-ended questions was used to gain a comprehensive view of the surrounding information.

As the content of the questionnaires was largely based on experience, knowledge, opinion, views, attitudes and circumstantial, thematic analysis was deemed the most effective tool for deriving insights from the semi-structured interviews and analyse the content, using a number of techniques for synthesising the qualitative data, through coding, into a structured thematic analysis (Boyatzis & Ratti, 2009). Defined as a method for identifying, analysing and reporting patterns (themes) within data, the thematic analysis included a six-step process, namely familiarisation, coding, generating themes, reviewing themes, defining and naming themes, and writing up (Braun & Clarke, 2006).

All interview questions were designed based on conventional wisdom, put in a straightforward, clear and non-threatening way with flexible wording that facilitated a different level of language used and clarifications made by the interviewer (Lune & Berg, 2016). They also permitted the teachers to explore any spontaneous issues. It was necessary to build the rapport, so that the teachers felt comfortable. After a self-introduction and an outline of the research project, the interviewer was engaged in the conversation while taking notes.

A particular care was taken for the questions not to be suggestive or threatening and to allow a free flow and exchange of ideas. The interviews conducted with the semi-structured questionnaire included some open-ended questions allowing the researcher to test the limits of the respondent's knowledge and gauge what the participant really believes is the essence of the issues. Comments and probes were used by the interviewer for clarification and elaboration only when the interview schedule was going off track, however this was carefully managed to avoid being judgemental or biased. All interviews were audio recorded with prior consent, transcribed, coded carefully and thematically analysed.

Transcription is an essential process for the deep understanding of research data. The interviews were taken in Bangla as both the interviewer and interviewee were native Bengali speakers. Instead of a literal transcription, the key points were extracted from the interview for coding (Saldaña, 2015) with help from the notes taken during the interview.

Data collected during the interviews were hand coded to avoid misunder-standings of the word meanings and to determine significant patterns. An inductive reasoning was complimenting the thematic analysis, a process of narrowing the codes created during the open coding to condense the data into fewer analytic concepts (Bingham & Witkowsky, 2022). This helped the researchers begin summarising the data, followed by a semantic approach that involves analysing its explicit content. Finally, the themes extracted from the responses were compared to the patterns of answers from the survey to determine the degree of commonalities or differences. The coding of data was done through the experience and interpretation by the researchers. This deep understanding of the data was built up through the transcription process that required multiple listening, and helped formulate what concepts were important.

# Sampling and Recruitment

The study aimed to reach primary school teachers from both urban and rural settings from the government educational sector. Respondents for the survey were recruited through "exponential non-discriminative snowball" sampling, a widely recruiting method which does not search for a statistically representative sample (Kumar, 2014). The survey started from one school (where the first author had been previously employed) and teachers from there volunteered to complete and distribute the questionnaire to other primary school colleagues.

Convenience sampling was used to conduct the in-depth interviews combined with non-participatory observation. It is used in social sciences and education research where it is convenient to survey pre-existing groups, such as students or teachers (Kumar, 2014). Such groups are easy to reach or readily available in their normal educational settings (Neuman, 2014). Geographical proximity, availability at a given time, willingness to participate in the study were considered on selecting the schools and interviewees. A verbal advice on selecting schools and consent were taken from the District Primary Education Officer prior to the field work.

Participants were provided the questionnaire for both survey and interview along with a brief introduction of the research and a consent form to sign in advance. The questionnaire was distributed through the school headmasters in both

urban and rural settings, and 12 teachers from 4 different government primary schools voluntarily consented and were interviewed, who have been directly over viewing the changing socio-cultural conditions of Bangladesh in terms of attitudes, behaviour, customs, and inconsistency in lifestyle, environmental changes, and technological dependency. The native language Bangla (Bengali) was used during the data collection process as the researcher can speak the same language as the respondents.

Participation in the survey and interviews was entirely voluntary and confidentiality was maintained (Neuman, 2014). Care was taken for the collected information to be protected from inadvertent disclosure of individual identities. Ethics approval for the study was obtained from the Curtin University Human Research Ethics Committee.

# **Data Collection**

The survey was conducting between December 2020 and early 2022 including interruptions during the COVID-19 pandemic. Data collection for the interviews was carried out in 2022.

A total of 200 survey questionnaires were distributed and collected by meeting the teachers physically, over telephone and through email as the schools were closed during the pandemic. Overall, 140 teachers took part in the survey generating a relatively high response rate of 70%. As the survey was completed in school, this method ensured a higher rate of survey return.

There were 12 interviews conducted to collect qualitative data through conversation with the teachers. Each interview took around 40 minutes to conduct and 4-5 hours each to transcribe with repeated listening to identify the key points.

# 3. Study Results

The results from the survey and interviews are presented in this section of the paper. To do this, we follow the structure of the survey questionnaire and the interview schedule.

# Survey

Questions 1-5 provided background information about the teachers, including their age, education, work experience, trainings and skills set (see Table 1). The majority of the teachers, namely 61%, were in the age group 31-45, while 37% were

in the 46-60 years age bracket and only under 1% were in the youngest 20-30 years age group. Most participants, namely 55%, had 5-19 years of experience in teaching, 41% had more than 20 years and only 4% less than 5 years. Overall, the teachers were appropriately educated with 55% having completed a master's degree, 21% a bachelor or equivalent degree, 18% had a diploma equivalent degree in teaching and 5% with only a secondary school certificate. Although the recruitment process in the government primary schools does not require any specific qualifications or degrees in teaching, attending a one-year primary teachers' training is mandatory during the tenure. In the interim, teachers also receive training on particular subjects such as computers, mathematics or scouting. Music, arts, co-curricular events specified in the curriculum and sports are some of the few commonly listed as extracurricular activities, by the participants on an open-ended question.

|            |             | Your age group ( 20-30Y/ 31-45Y/ 46-60Y) |       |     | How many years do you have<br>in teaching? (Less than 5Y/<br>Between 5 · 19Y/ More than | 20Y)        |         |          | Your last education qualification | or training |                 |         |                      |                                | Please state your specialised | Simples to realize |                           |         |
|------------|-------------|--|-------|-----|---|-------------|---------|----------|-----------------------------------|-------------|-----------------|---------|----------------------|--------------------------------|-------------------------------|--------------------|---------------------------|---------|
|            | 20-30       | 31-45                                    | 46-60 | 5   | 519   | 20          | Masters | Graduate | ssc                               | PHD         | BED/<br>Diploma | Other D | Teachers<br>Training | Computer<br>Training<br>Course | Math<br>Trainer               | Scouting           | lecturer<br>Nibondh<br>on | Nothing |
| Frequency  | 57          | 83                                       | 2     | 5   | 55  | 58          | 77      | 29       | 7                                 | 1           | 25              | 1       | 81                   | 12                             | 19                            | 8                  | 3                         | 17      |
| Percentage | 1.429       | 61.4                                     | 37.1  | 3.6 | 55.0  | 41.4        | 55.0    | 20.7     | 5.0                               | 0.7         | 17.9            | 0.7     | 57.9                 | 8.6                            | 13.6                          | 5.7                | 2.1                       | 12.1    |
| Varience   | 0.260 0.309 |  |       |     |   | 0.242 1.374 |         |          |                                   |             |                 |         |                      |                                |                               |                    |                           |         |

Table 1: Background of the respondents (SSC- Secondary school certificate, BED-Bachelor's in education)

From the total of 140 teachers, 57 (41%) were from urban and 83 (59%) from rural areas. Questions 6-10 investigated the basic set-up in each school, including some sustainability aspects, such as the source of water and power as well as involvement in extracurricular activities such as tree planting, outing and camping (see Table 2). A large share of the participants indicated a significant time spent in the natural world and community engagement with 96% reporting tree planting events in their school's premises, 72% involved with community gardens and various field trips to nature. Less than 1% of the schools used renewable solar energy.

|                         |             | ( Urban / Rural)    |            | ou have a t<br>gramme in | (TES) NO) NOI SURE) | have outdoor a | seeing / picnic for your | SURE)     |          | the source of drir<br>in your school? ( ' | watery Tubewelly Others) |           | is the source | Š       |            |
|-------------------------|-------------|---------------------|------------|--------------------------|---------------------|----------------|--------------------------|-----------|----------|---|--------------------------|-----------|---------------|---------|------------|
|                         |             |                     |            |                          |                     |                |                          |           |          |   |                          |           |               |         |            |
|                         | Urban       | Rural               | Yes        | No                       | N/S                 | Yes            | No                       | N/S       | sw       | TW  | Other                    | PDB       | REB           | SE      | Other      |
| Frequency               |             |                     | Yes<br>134 | No<br>2                  | N/S                 |                | No<br>19                 | N/S<br>20 | SW<br>37 | TW 92                                     | Other<br>11              | PDB<br>60 |               | SE<br>1 | Other<br>0 |
| Frequency<br>Percentage | Urban       | Rural               |            |                          |                     | Yes            |                          |           |          |   |                          |           | REB           |         |            |
|                         | Urban<br>57 | Rural<br>83<br>59.3 | 134        | 2                        | 4                   | Yes<br>101     | 19                       | 20        | 37       | 92  | 11                       | 60        | REB 79        | 0.7     | 0          |

Table 2: Geographic location of the school, co-curricular activities, source of power and water

(N/S- Not sure, SW- Supply water, TW-Tube well water, PDB- Power development board, REB- Rural electrical board, SE- Solar energy)

The second part of the survey consisted of 9 questions measuring the importance of primary education for sustainability values and practices for children in the age group 5-11 years and how the teachers personally evaluated the social, economic and environmental sustainability aspects in the primary education curriculum (see Table 3). Social sustainability aspects were seen as very important with the majority of respondents indicated scores of 6 and 5 on the Likert scale. Interesting responses were also obtained when asked about the availability of resources in the school curriculum to educate children in this area.

The share of participants who rated highly the importance of the role of primary education in building the attitude of children to be kind and helpful to other children and people was 99%. However, 78% agreed that the primary curriculum had enough resources, 9% disagreed with this statement and 9% were neutral or not sure. For a deeper understanding of an extended attitude of kindness and helpfulness, the next question was about the importance of primary education to teach the children to be kind to all living and non-living beings. Although the importance was rated highly by 97% of the teachers, only 69% agreed that there were enough available resources in the curriculum with 14% staying neutral and 16% disagreeing. Participants were asked to rate the importance of primary education in teaching children respect to people of all genders, ethnicity and religion and by doing so, investigate their attitude towards equity and social harmony. Again, a large share, namely 95% rated the role of primary education as important but only 69% agreed about having enough available resource in the curriculum with 18% being unsure and 13% disagreeing with this statement. It is important for children to be responsible and accept responsibility for their actions (what they say and what they do) in order for them to become responsible citizens as they grow up. Participants were asked to rate the importance of the role of primary education in teaching children to take responsibility about their actions and 95% believed this to be important but only 74% agreed that primary education had enough resources, with 11% being neutral and 15% disagreeing with the stance.

Question 5-7 were investigating participants' understanding about the importance of the role of primary education for environmental sustainability (see Table 4). Again, a large majority of the participants, namely 93% rated important to extremely important for primary education to teach children about climate change, but only 70% agreed there was enough resource in the curriculum to do so, with 14% being unsure and 15% disagreeing with the statement. The role of primary education in teaching children about protecting the environment and the natural world when they eat, play and work was rated as high by 95% of the participants but only 72% agreed that there were enough available resources in the curriculum, while 18% were unsure and 10% disagreed with the statement. Educating primary school children about preserving natural resources, such as water, minerals, soil, plants and animals, was seen as important by 96% of the participants but only 77% agreed that the curriculum had enough recourses with 14% disagreeing and 9% being unsure.

|            |  |             | How important is the role of | children to be kind and helpful to |     |      |                   |                        | How important is the role of<br>primary education to teach the | children to be respectful to all<br>genders, ethnicity and religion? |                            |                       | How important is the role of | primary education to teach the<br>children about being kind to all | living and non-living beings<br>(including wild animals, plants)? | extremely important, do you think we have ecouch useful recourse |                                  |     |       | How important is the role of                | primary education to teach the<br>children to be responsible and | accept responsibility for their<br>actions (what they say and what | they do)?                                     |     |
|------------|--|-------------|------------------------------|------------------------------------|-----|------|-------------------|------------------------|--|--|----------------------------|-----------------------|------------------------------|--|---|--|----------------------------------|-----|-------|---|--|--|---|-----|
| Scale      | 6  | 5           | 4                            | 3                                  | 2   | 1    | 6                 | 5                      | 4  | 3  | 2                          | 1                     | 6                            | 5  | 4   | 3  | 2                                | 1   | 6     | 5   | 4  | 3  | 2   | 1   |
| Frequency  | 115  | 6 5 4 3 2 1 |                              |                                    |     | 0    | 87                | 49                     | 4  | 0  | 0                          | 0                     | 94                           | 39   | 4   | 3  | 0                                | 0   | 88    | 45  | 5  | 2  | 0   | 0   |
| Percentage | 82.1   | 17.1        | 0.71                         | 0                                  | 0   | 0    | 62.1              | 35.0                   |  | 0.0  | 0.0                        | 0.0                   | 67.1 27.9 2.9 2.1 0.0 0.0    |  |   |  |                                  | 0.0 |       |   |  |  |   | 0.0 |
| Varience   |  |             | 0                            | .167                               |     |      |                   |                        | 0.3  | 01   |                            |                       |                              |  | 0.4   | 29   |                                  |     | 0.406 |   |  |  |   |     |
|            | If your answer is important or extremely important, do you agree we have enough useful to recounces in our curculum to beach children to be kind and helpful to the other children and people? |             |                              |                                    |     |      | H vour ancease is | important or extremely | important, do you think<br>we have enough useful               | resource in our curriculum<br>to teach children about                | respectful to all genders, | modular pain (walling |                              | If your answer is important or extremely                           | important, do you think<br>we have enough useful                  | resource in our curriculum<br>to teach children about all        | living and non-living<br>beings? |     |       | If your answer is<br>important or extremely | important, do you think<br>we have enough resource               | in our curriculum to teach<br>children to be responsible           | and accept responsibility<br>for our actions? |     |
| Scale      | 6 5 4 3 2 1  |             |                              |                                    | 1   | 6    | 5                 | 4                      | 3  | 2  | 1                          | 6                     | 5                            | 4  | 3   | 2  | 1                                | 6   | 5     | 4   | 3  | 2  | 1   |     |
| Frequency  | 61 48 18 12 1 0  |             |                              |                                    |     | 60   | 37                | 19                     | 12   | 11   | 1                          | 63                    | 34                           | 25   | 15  | 3  | 0                                | 58  | 46    | 15  | 14   | 7  | 0   |     |
| Percentage | 43.6 34.3 12.9 8.57 0.714 0.0  |             |                              |                                    | 0.0 | 42.9 | 26.4              | 13.6                   | 8.6  | 7.9  | 0.7                        |                       |                              |  |   | 0.0  |                                  |     |       |   |  | 0.0  |   |     |
| Varience   | nce 0.965 1.720 1.25   |             |                              |                                    |     |      |                   |                        | 59   |  | 1.379                      |                       |                              |  |   |  |                                  |     |       |   |  |  |   |     |

Table 3: Participants' views on the role of primary education for social sustainability

Aspects of economic sustainability were covered in Questions 8 and 9 in relation to waste generation when children eat, play and work and the practice towards using everything in moderation or using what we need (see Table 5). In relation to waste, 99% of the respondents believed that primary education plays an important role, however, only 72% agreed that curriculum has enough resources, with17% being unsure and 10% disagreeing with this position. A relatively substantial percentage, namely 94%, of the surveyed teachers saw the role of primary teach

ers in educating for moderate consumption as important with 68% agreeing that there are enough resources available, 10% being unsure and 21% disagreeing with the statement.

|                    |   |                  | How important is<br>the role of primary | og og                             |                                   |               |                     | How important is<br>the role of primary     | education to teach<br>the children about | protecting the<br>environment and<br>the natural world     | when they eat,<br>play and work?                  |           |      | How important is<br>the role of primary<br>education to teach | the children to<br>keep/save natural |                                 | etc) for future<br>generations?     |     |
|--------------------|---|------------------|---|-----------------------------------|-----------------------------------|---------------|---------------------|---|--|--|---|-----------|------|---|--------------------------------------|---------------------------------|-------------------------------------|-----|
| Scale              | 6 5 4 3 2 1   |                  |   |                                   | 1                                 | 6             | 5                   | 4   | 3  | 2  | 1   | 6         | 5    | 4   | 3                                    | 2                               | 1                                   |     |
| Frequency          | 73  | 57               | 6                                       | 4                                 | 0                                 | 0             | 66                  | 67  | 6  | 0  | 1   | 0         | 100  | 35  | 5                                    | 0                               | 0                                   | 0   |
| Percentage         | 52.1  | 40.7             | 4.3                                     | 2.9                               | 0.0                               | 0.0           | 47.1                | 47.9  | 4.3                                      | 0.0  | 0.7   | 0.0       | 71.4 | 25.0  | 3.6                                  | 0.0                             | 0.0                                 | 0.0 |
| Varience           |   |                  | 0.5                                     | 05                                |                                   |               |                     |   | 0.4                                      | 416  |   |           |      |   | 2                                    |                                 |                                     |     |
|                    | answer is<br>remely<br>int, do you we have<br>resource in<br>riculum to<br>idren about<br>e change? |                  |   |                                   |                                   |               | .12                 | - B   | . <del>.</del>                           | m to<br>about<br>the                                       | world<br>t, play                                  |           |      | .e _  | o you<br>ave                         | m to                            | 26 JG                               |     |
|                    |   | If your answer   | rtant o<br>emely<br>nt, do<br>ue ha     | enough resource<br>our curriculum | teach children a<br>climate chang |               | If your answer      | important or<br>extremely<br>important do v | 2 8.                                     | our curriculum to<br>teach children abor<br>protecting the | environment a<br>the natural wo<br>when we eat, p | sork<br>S |      | If your answer<br>important o<br>extremely                    | important, do you<br>think we have   | iculu<br>dren                   | keeping/saving<br>natural resources |     |
| Scale              | 6   | o If your answer | 9 de 1                                  | enough resource<br>our curriculum | teach children a                  | 1             | o<br>If your answer | 들을  | think we have                            | our curriculum teach children ak protecting th             | al w  | sork<br>S | 6    | If your answer important o extremely                          | think we have                        | iculu<br>dren                   | keeping/savi<br>natural resour      | 1   |
| Scale<br>Frequency | 6 53  | =                | extremely<br>important, do              | enon                              | d ig                              | 1 0           |                     | extremely important do                      | think we har<br>enough resour            | our curriculu<br>teach children<br>protecting              | environment<br>the natural w<br>when we eat,      | sork<br>S | 6 65 | =   | think                                | our curriculu<br>teach children | =                                   | 1 0 |
|                    | _   | 5                | extremely important of important, do    | one 3                             | tead<br>2                         | 1<br>0<br>0.0 | 6                   | important o extremely important do          | think we ha                              | our curriculu<br>teach children<br>protecting              | environment the natural w                         | and work  |      | <b>±</b><br>5   | think                                | our curriculu                   | 2                                   |     |

Table 4: Participants' view on the role of primary education for environmental sustainability

|            |                                   | How important is        | the role of primary<br>education to teach<br>the children to | produce less waste<br>when you eat, play    | allow mile                     |       |                               | How important is                              | the role of primary<br>education to teach<br>the children to use | everytning in<br>moderation (what<br>we need) so that<br>there is some left | for others?                        |         |  |  |  |
|------------|-----------------------------------|-------------------------|--|---|--------------------------------|-------|-------------------------------|---|--|---|------------------------------------|---------|--|--|--|
| Scale      | 6                                 | 5                       | 4  | 3   | 2                              | 1     | 6                             | 5   | 4  | 3   | 2                                  | 1       |  |  |  |
| Frequency  | 93                                | 46                      | 1  | 0   | 0                              | 0     | 71                            | 60  | 5  | 3   | 0                                  | 0       |  |  |  |
| Percentage | 66.4                              | 32.9                    | 0.7  | 0.0   | 0.0                            | 0.0   | 50.7                          | 42.9  | 3.6  | 2.1   | 0.0                                | 0.0     |  |  |  |
| Varience   |                                   |                         | 0.24   | 1   |                                |       | 0.538                         |   |  |   |                                    |         |  |  |  |
|            | If your answer<br>is important or | extremely important, do | you think we<br>have enough<br>resource in our               | curriculum to<br>teach children<br>about to | produce less<br>waste when you | work? | lf your answer                | is important or<br>extremely<br>important, do | have enough<br>resource in our<br>curriculum to                  | teach children<br>to use<br>everything in                                   | (what we need)<br>so that there is | others? |  |  |  |
| Scale      | 6                                 | 5                       | 4  | 3   | 2                              | 1     | 6                             | 5   | 4  | 3   | 2                                  | 1       |  |  |  |
| Frequency  | 62                                | 39                      | 24   | 12  | 2                              | 1     | 54                            | 41  | 14   | 21  | 9                                  | 1       |  |  |  |
| Percentage | 44.3                              | 27.9                    | 17.1   | 8.6   | 1.4                            | 0.7   | 7 38.6 29.3 10.0 15.0 6.4 0.7 |   |  |   |                                    |         |  |  |  |
| Varience   | 1.208                             |                         |  |   |                                |       | 1.735                         |   |  |   |                                    |         |  |  |  |

Table 5: Participants' views on the role of primary education for economic sustainability

Part 3 consisted of six questions (Questions 10-15) aimed at investigating participants' views about the importance of folklore in educating for sustainability in primary schools as well as the state of folklore in the way they work and how they communicate complex concepts (see Table 6). Not everybody agreed about the importance of keeping and using orally transmitted traditional values and wisdom, however a large share of 92% of the participants saw this as important. Childlore or children-friendly elements of Bangladeshi folklore were seen as helping to enhance the morals, values and wisdom of children by 89% of the surveyed teachers. This includes aged-long proverbs, maxims, idioms, legends, fairy tales from Thakur Maa'r Jhuli and others, Ishop's story, folk songs, Palagaan, folk literature among

many others. Only 7% were unsure and less than 4% did not agree with this. Folklore being able to offer a way to teach kindness, self-reliance, honesty, resilience and other sustainability attitudes in children was appreciated by 90% of the participants. Furthermore, 80% agreed to using childlore in the classroom as a tool of teaching sustainability and 84% already use different folkloric genres in the classroom while16% do not do so. A large share, namely 81% of the participants agreed that primary curriculum does not make proper use or have enough folklore/childlore resources, with 9% being unsure and only 9% disagreeing with this.

|            | ow much do you agree that it is impo | and wisdom which are orally transmitted | demonstration to demonstration | e.g., our aged long proverbs, maxims,<br>idioms, , legends, fairy tales from Thakur | Maa'r Jhuli , Rupkathar golpo, ishop er<br>golpo, folk songs, Palagaan, folk literature |     | do you agree that the CH | or children-friendly elements of our folklore<br>help enhance the morals, values and wisdom | in our children? | our aged long prove<br>i, , legends, fairy tals | Maa'r Jhuli , Rupkathar golpo, Ishop er<br>golpo, folk songs, Palagaan, folk literature |     |      |      | How much do you agree that our aged-long FOLKLORE offers a way to teach kindness. | e, honesty, resilience |     |     |      | How much do you agree that teachers | use different ge | the classroom to teach sustainability to |        |     | g. our aged long proverbs, m.<br>ms, , legends, fairy tales from | Maa'r Jhuli , Rupkathar golpo, ishop er<br>golpo, folk songs, Palagaan, folk literature | etc.) |      | you a | ion curriculum | s, , legends,<br>r Jhuli , Rup | golpo, folk songs, Palagaan, folk literature<br>etc.) |     |
|------------|--------------------------------------|---|--------------------------------|---|---|-----|--------------------------|---|------------------|---|---|-----|------|------|---|------------------------|-----|-----|------|-------------------------------------|------------------|--|--------|-----|--|---|-------|------|-------|----------------|--------------------------------|---|-----|
| Scale      | 6                                    | 5                                       | 4                              | 3   | 2   | 1   | 6                        | 5   | 4                | 3   | 2   | 1   | 6    | 5    | 4   | 3                      | 2   | 1   | 6    | 5                                   | 4                | 3  | 2 1    | Yes | No   | N/S   | N/A   | 6    | 5     | 4              | 3                              | 2   | 1   |
| Frequency  | 81                                   | 48                                      | 6                              | 1   | 4   | 0   | 75                       | 50  | 10               | 2   | 3   | 0   | 77   | 49   | 5   | 3                      | 6   | 0   | 56   | 56                                  | 15               | 4  | 9 0    | 117 | 23   | 0   | 0     | 48   | 66    | 13             | 10                             | 3   | 0   |
| Percentage | 57.9                                 | 34.3                                    | 4.3                            | 0.7   | 2.9   | 0.0 | 53.6                     | 35.7  | 7.1              | 1.4   | 2.1   | 0.0 | 55.0 | 35.0 | 3.6   | 2.1                    | 4.3 | 0.0 | 40.0 | 40.0                                | 10.7             | 2.9                                      | 6.4 0. | 83. | 16.4   | 0.0   | 0.0   | 34.3 | 47.1  | 9.3            | 7.1                            | 2.1   | 0.0 |
| Varience   |                                      |   | 0.7                            | 22  |   |     |                          |   | 0.7              | 24  |   |     |      |      | 0.9   | 946                    |     |     |      |                                     | 1.20             | 7  |        |     | 0.13   | 8   |       |      |       | 0.9            | 19                             |   |     |

Table 6: Participants' views on the importance of folklore and its status in primary curriculum.

Two open-ended questions formed Part 4 of the survey. The participants were requested to list the challenges in teaching sustainability in the classroom and their feedback on this study, including anything that the survey did not cover. These questions wanted to also elicit the supposition of the factors that primarily determined the prevalent ratings given by the participants. The list below summarises the challenges stated by the participants:

- School and classroom environment: The abnormal teacher-student ratio (1:70), long school hours and the high number of classes to attend each day, insufficient practical educational material, classroom learning environment being not child-friendly;
- Socio-economic factors: Students in government primary schools being mostly from lower income sections of society who need to deal with poverty and malnutrition; teachers being poorly paid compared to the needs for a basic living standard;
- Socio-cultural: Impertinence to own tradition and culture, and overwhelming effect and impact of western culture (or satellite culture), consumerism and materialistic lifestyle;
- Curriculum: Resources being textbook-based failing to attract children with

pleasant learning experience and failing to reconcile with reality; focus on memorising material for exams; educational materials being insufficient and not up-to-date;

- Political and administrative domination: Teachers being strictly obliged to
  follow the structured and scheduled classroom program developed by the
  National Academy of Primary Education (NAPE), restricted teachers' creativity and freedom to use unconventional strategies to demonstrate sustainability
  to the students; pressure to complete the syllabus in a limited timeframe; teachers mandatory involvement in other non-teaching activities, such as collecting
  and updating voter lists, arrange rallies for other government events;
- Sustainability perspective: Teachers not being trained on educating for sustainability, having limited knowledge and understanding as well as negligence and/or not being obligated to discuss sustainability in the classroom.

### **Interviews**

During the interviews, the teachers were asked whether they faced any challenges in teaching sustainability in the classroom while following the existing curriculum. We use italics when quoting from their answers. The most common response was: "children are too young to understand about sustainability". Some also believed sustainability should only be discussed within subjects, such as science, religious studies and social sciences, not in subjects such as English or mathematics. A commonly expressed opinion was that it is difficult to talk about sustainability in the classroom as students cannot relate this concept with their real lifestyle and their materialistic life in particular. However, some stressed that "we only teach what is stipulated within the lesson plan, or the chapter, we don't feel accountable to relate sustainability with the lesson delivered".

When questioned as to why the teachers would think of sustainability as challenging, the participants answered that textbook-based resources, teaching methods used, pressure of deadlines for completion of the syllabus material and preparation for examination, inadequate practical materials, the socio-economic and socio-cultural background of the students, combined with an abnormally high teacher-student ratio, all played part in the way they relate to this issue. "We follow the textbook. We neither have the time nor opportunity, nor the obligation, to incorporate sustainability into it. Because the teacher is responsible for completing the syllabus and students passing the exam", said one of the participants. In response to the question to list down the subjects or chapters they find related with any sustainability aspect, only a few responded naming Bangladesh O Bishwa Porichoy in class 3 and 4, climate change in class 5, soil pollution in class 5, Eid in class 4, Opochoy (misuse/waste) and in religion as a subject. Regarding students' reactions towards

sustainability issues, all participants stressed that students responded well to informal discussion complemented with practical materials.

Sustainability depends on the choices we make in our daily life, e.g. what and how much we eat, what and how we use, how we travel, what waste we generate etc. The participants were asked how they prepare students to learn to keep a balance between "need" and "demand", the role of the classroom and traditional values in this regard. Some teachers explained that they use oral sayings to remind children about the consequences from their actions, others draw examples from real-life stories. Most teachers monitor the daily habits of the students, such as whether they are overspending on tiffin and encourage them to be mindful of other students who cannot afford much. They also advise students to be happy with whatever food is provided by their parents and not to compare themselves with others. "One day I saw one student brought 50 taka for tiffin. So, I told him, you have three other siblings, if everyone brings 50 taka every day, this would really be a burden for your father as he is a day labourer. I would suggest you spend 10 taka each day, so that 50 taka can go for more days. See I bought a very healthy snack, which costs only 10 taka", explained one interviewee. Another shared: "One day I saw a student brought a very expensive toy in the classroom. Then I discretely told him, not everyone in the class can afford such toys, they will be upset. You better play with this at home and not at school to be more respectful to your classmates". The teachers try to involve parents into the process of not allowing their children outweigh demand over need. Some lead by example, recycling cloths, bringing simple and healthy food, showing sympathy to other students.

The participants are aware that the students in the government primary schools are largely from poor socio-economic backgrounds and have limited or no learning opportunities in their home environment. Therefore, the responsibility lies on primary schools and on the teachers there to help children grow responsible. The participants also believe that bringing the traditional values of Bangladesh into daily practice will help building simplicity, kindness, compassion and empathy in the students. Regarding the curriculum, all respondents felt that only textbook-based resources cannot help the children to be empathetic to all living creatures, refrain from wasting resources, and look after the environment.

A question was asked on how the teachers communicate existing social issues, such as consumerism, corruption, degradation of cultural and moral values, adverse behaviours, such as suicide, rape, drugs, copying in exam etc. The teachers explained that they discuss such issues in the classroom by telling stories, following current events and news. At least one social issue is discussed during the assembly every day followed by analysing the consequences and people's duties as responsi

ble citizens. Positive quotes encouraging good citizen behaviour are displayed on the classrooms' walls. It was probed about the role of primary education in addressing these issues and how our traditional values and wisdom can contribute in this respect. The interviewees affirmatively suggested that primary education inevitably plays an important role; "children learn the dos and don'ts from the school environment". One teacher said: "Children can learn how to be respectful to other religions by sharing food, greet and celebrate each other's festivals, this will bring harmony in our social life and we, the teachers should practice this first for them to see and learn". Projects, such as the "honesty store" and the "wall of greatness" were helping students to practice honesty and kindness; however, they have been stopped since the school's reopening after the COVID-19 pandemic. One teacher also stressed that some of the values students conquered at primary level, gradually decline as they grow up, due to the effects of globalisation, socio-economic and political influences, the attractiveness of the western materialistic life and we could have protected them by practicing Bangladesh's very own traditional values that guide people to be liberal (non-sectarian) and respectful to all religions, casts, creeds; building social harmony and maintaining family bonding.

The participants were asked about the aged-long traditional values and wisdom transmitted orally from generation to generation in Bangladesh and how well today's students understand this oral folklore. Most reported that the students do not contemplate the cultural values of the oral tradition when delivered in the classroom as they do not observe this practice neither in their family nor in society nor in the form of entertainment in the media. They also added that the curriculum does not have enough resources on folklore and school events do not portray traditional Bangladeshi music or any form of art. "Students these days think traditional music is backdated and western music is a symbol of modernism. They arrange class parties with western music on their last day of school", said one respondent. However, some participants use proverbs, moral quotes, riddles, rhymes and stories in their classroom to create a joyful learning environment. "I often use the story of Unity is Strength in my class", said one interviewee and another explained: "In an overcrowded classroom, I told them the Bengali proverb 'Jodi hou su-jon, tetul patay no-jon' (like-minded people can accommodate even in a tiny place)". One interviewee also excitedly described how there was a pin-drop silence when she was telling a story one day and once she finished, students were very curious and interacting with questions. "I sometimes bribe them that if they finish this maths exercise, I will tell them a story", said another teacher.

Another interview question investigated teachers' perceptions about the importance of establishing traditional values in children. "Gone are those days, when we used to respect our teachers, the most after parents", said one participant

and with a big sigh he continued: "... and today, students are not hesitant to even physically humiliate their teachers". Most stated it is of high importance to establish the traditional values in the next generation, for them to be living in harmony and sustainably. "A generation without traditional values, is a citizen without a passport", said one participant, "no matter now modern and technologically developed Japan is today, they never fail to display their culture, their values, their tradition", she continued. When asked, what values they consider timely and should be established in children that support building pro-sustainability attitude, the participants stated stewardship, respect to others, kindness, simplicity/non-consumptive lifestyle, honesty, resilience, patriotism, accepting right or wrong in decision making. "We want to live well alone, succeed alone. But one of the mantras of sustainable development is Living No One Behind, and so now it's time to establish 'WE' values instead", added one participant. The role of primary education in order to sustain our oral tradition was probed along and one of the teachers said: "stop for a moment, if you sneeze; don't touch books or pillows with your feet, use your right hand to give away something, these are some customs we have learned orally from our ancestors". They concluded that oral tradition is necessary for both establishing and practice of values. The class will end, the chapter will end, but the oral tradition will continue to be practiced. However, many good customs of our heritage have been lost or are going away. Oral tradition at the elementary level, will have a long-lasting impact on children and for society.

The final area of investigation was the changes in the primary education system or curricular they are suggesting for teaching sustainability more effectively in the classroom and in the school environment. A widely shared opinion was that the length of the school time and the number of classes per day should be reduced. In addition, a life-oriented learning system or curriculum should be provided with ample practical materials, as the learning process remains incomplete in a classroom-based education system. "I can't teach students how to plant a tree and nurture it until I go out with them and show them practically", said one teacher. Other teachers also added, there should be an informal class every day, children will learn through free participation in various social, economic and environmental issues, hands-on learning, there will be no pressure of the conventional learning method or lesson plan, children will have opportunities to develop the sense of their own culture through stories, songs, rhymes, drawing, creativity and other cultural activities. They should be rewarded for practicing and displaying pro-sustainability attitudes. "If one school can produce 250 good citizens, 60,000 schools can produce 15 million good citizens and this requires a holistic and long-term plan involving everyone. Again, it is not enough to make a policy, its proper implementation should be ensured. We are pressured by the local office and they are pressured by the district office, and the district office is pressured by the Director Genera (DG)

office. The syllabus may be completed by imposition, but not the teaching–learning process", said one participant.

## 4. Discussion

To the best of our knowledge, this study is the first to tackle the synergies between folklore and primary education within the context of sustainability. Using the mixed-methods methodology allowed us to go deeper into the issues and reveal the gaps between on one hand, the impressions obtained from the quantitative results in most cases overwhelming supporting the importance of sustainability and possible synergies from using folklore as a tool in the primary school curriculum, and on the other, the challenges and barriers teachers have.

The study's first objective was to investigate how sustainability aspects are currently communicated in primary education in Bangladesh. The participants rated over 90% the importance of every indicator – social, economic and environmental sustainability aspects, that was asking about the role of primary education in teaching children sustainability attitudes, such as simplicity, kindness, resilience, consumption in moderation and stewardship. These are quantitative results that support the importance of educating for sustainability in primary education, considered as an essential prerequisite in achieving a more sustainable development and in particular the UN Sustainable Development Goals.

A second aspect of the first objective was to investigate the status of sustainability in primary education in Bangladesh by exploring the resources in the curriculum that support teaching all three aspects of sustainability. There was overall agreement that the curriculum has resources to teach the social aspects of sustainability, including kindness, respect for all other living beings and resource stewardship, with the shares of teachers who agree being respectfully 78%, 69% and 74%. However, what the interviews revealed is that the teachers adhere mainly to the prescribed curriculum where sustainability does not feature in a prominent way and where more practical issues, such as student-teacher ratio and socio-economic background of the students require more urgent attention. This explains that behind the surface of positive attitudes, there is a dearth of consideration for sustainability. The shares of those who are unable to judge about the availability of resources or consider them inadequate are very revealing as they cover between a third and a quarter of the teaching population. Despite all participants acknowledging the importance of educating for sustainability at a primary school level, the task at hand seems often unsurmountable. External influences on students, such as the effect of globalisation, socio-economic and political influences and the attractiveness of a western materialistic lifestyle which focusses on the individual, rather than the

community, contribute towards unsustainable behaviours, even when the primary school teachers are successful in developing certain sustainability values. These tendencies are unduly presented as being a value-neutral expression of development, however, they embody assumptions that lead towards overexploitation of the Earth's resources and do not support a sustainability ethics (Hussaini, 2021).

It was interesting to see from the interviews that sustainability values, such as kindness, honesty, respectfulness and stewardship, are demonstrated and practiced outside the walls of the classroom during the daily assembly, in the "honesty store" or informal discussions. Although the environmental and economic indicators also show an average of 70% ratings in favour of available resource in the curriculum that teach children about climate change, protecting environment and saving natural resources, building prudent attitudes in children when it comes to consumption leaves a lot to be desired. These results are consistent with the assertion found in the interviews with all participants feeling that only textbook-based resources cannot help the children to be empathetic to all the creatures, refrain from wasting resources, and look after the natural environment.

There was a tension between the results from the survey which rated highly on having sufficient resources for the sustainability aspects in the curriculum, and the interviews that argued the curriculum was not well equipped for children's education and failed to achieve the sustainability perspective. The study did not ask specifically whether the teachers perceived their school as being green but instead inquired about practices that express environmental practices, such as planting trees and using renewable energy. Although most schools believe that sustainability is important, they are faced with limited resources (Veronese & Kensler, 2013) and budget concerns are a limiting factor (Rahman & Ali, 2004). While planting trees is a common educational activity for 95% of the respondents, access to renewable energy is very limited. The primary education curriculum of Bangladesh emphasises achievable competencies and learning outcomes significantly determined by the student's reading, writing and listening competencies (Chowdhury et el., 2019). There is no requirement for the schools to embed greening practices or encourage more sustainable practices, such as recycling or ecological transportation. This explains another observation from the interviews that teachers do not have a clear idea how to relate sustainability to subject teaching and do not feel obligated to bring this aspect into the classroom.

Engagement with sustainability issues can occur with proper communication that leaves a long-lasting impact on children's learning. The second objective of the study was to explore whether the use of folklore in the curriculum can deliver this. There was a widespread agreement with 90% of the teachers concurring that

folklore offers a way to teach kindness, self-reliance, honesty, resilience and other sustainability attitudes to our children. Furthermore, 89% agreed that childlore helps enhance the morals, values and wisdom of children. Some teachers already use different genres of childlore in the classroom as a tool of teaching sustainability (e.g. proverbs, maxims, idioms, legends, fairy tales from Thakur Maa'r Jhuli, Ishop's story, folk songs, Palagaan, folk literature etc) to which children respond well. Maintaining the oral tradition in transmitting values and wisdom was seen as important by 92% of the teachers and further supported by the interview material. The hallmarks of the Bengali culture based on peace loving, social harmony, sympathy, family ties, love for language and country, loyalty to parents among others, have survived over the centuries through the oral tradition. Folklore in primary education can engage children in the classroom and at home (Gasouka & Arvanitidou, 2014) and make this oral culture a part of their daily life supporting social, economic and environmental sustainability in Bangladesh. It can make students stronger and more resilient to western influences (Nguen et al., 2016).

Changes in how teachers teach, not just what they are teach (Hasan et el., 2011), are essential and folklore offers such an opportunity. Student backgrounds also matter, especially in government schools. Teachers may find teaching children from poor backgrounds difficult and unrewarding, particularly if they are untrained for the challenges of reaching first generation learners, and if the system is under-resourced, or designed on the assumption that children come from backgrounds where learning is prized and supported (Hossain et el., 2017). Childlore can be a way to reach out and communicate with children in a caring way that builds confidence and understanding. The study revealed other problems that humper the educational environment and delivering of primary education - poor physical environment in schools, the shift system, with short contact hours, lack of support materials and inadequate number of trained teachers, traditional classroom teaching and learning practices. One of the most commonly addressed issues by the participants was, teachers engaging in non-teaching tasks. This includes voter lists, celebrations, maintaining different registers (e.g. wheat distribution register and inspection register (Chowdhury et al., 2019; Rahman and Ali, 2004). This affects the delivery of primary education and with sustainability seen as an add-on to the curriculum, it often is pushed aside.

Sustainability is now a global priority to which the entire world, including Bangladesh is responding respond and primary education is part of this journey of transformation and renewal. A Bengali proverb says: "Let's get together in a group and do the job, then there is no shame whether we win or lose". In the case of sustainability, we need to get in a group as a global humanity including the weakest and most vulnerable; otherwise future generation will shame us.

# 5. Conclusion

The study emphasised the role of primary education in sustainability and pro-sustainability behaviours which require to be developed from childhood, such as kindness, resilience, simplicity, modest consumption and prudent behaviour to nature (land, water, air and all natural resources). A way of building those habits by using folklore could help develop those attitudes unifying the past and the present for better future outcomes. Folklore opens doors to teaching and learning that other educational tools cannot deliver (Bowman, 2006).

The insights from this research display some positive results about the educators' responses regarding their understanding of the importance of sustainability education. Folk values and childlore can become a tool to enrich the currently available primary school curriculum as well as in motivating students in developing pro-sustainable attitudes and behaviours. This will create synergistic effects to empower the students and benefit the community in Bangladesh and across the world. We hope that these findings can assist in developing more fine-tuned, efficacious sustainability education programs. Future sustainability education curriculum would benefit from embedding folklore in the sustainability agenda for primary schools. The children whom we are educating now will be the ones who will shame us if the job is poorly done.

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# Appendix 1

# Interview questionnaire



Integrating Folk values in Primary Education in Bangladesh: Sustainability

#### In-depth interview questionnaire for the teachers:

Are there any challenges in teaching sustainability in the classroom following the existing curriculum and why?

#### Probe

- Do you teach sustainability messages in your class? Give examples.
   How do the students respond to sustainability issues?
- Sustainability depends on the choices we make in our daily life e.g. what and how much we eat, what and how we use, how we travel etc. How do we prepare our children to learn to keep a balance between need and demand?

- What is the role of the classroom in primary education in this regard?
- What role can our traditional values or folklore play in this regard?

  Do you think there are sufficient elements present in our textbooks that provide teach children to be empathetic to all the creatures, refrain from wasting resources, look after the environment etc.?
- How do you communicate issues related to social problems within the Bangladeshi community, such as poverty, consumerism, unemployment, corruption and adverse behaviour?

#### Probe

- is there a role for primary education in relation to this? Can traditional values and wisdom contribute in this re
- 4. Bangladesh is rich with aged-long traditional values and wisdom that are transmitted orally from generation to generation. How well do today's students understand this oral folklore?

#### Probe

- Do you use genres from folldore to teach sustainability in your class? What are the forms or genres that you use mostly in your class? How do students respond to Bangladesh's folldoric tradition?

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- 5. As a teacher how important is for you to establish traditional values in children? Probe
  - What values do you consider timely and should be established in children in relation to sustainability?
  - What role can primary education play in order to sustain this oral tradition?
- Do you think any contents should be included or changed in our primary education curriculum to make it more effective in teaching sustainability in the classroom and school environment? Why?
- If you have any comment, feedback, advice, input regarding this interview and the project, please feel free to discuss.

# Appendix 2

# Survey Questionnaire



#### Some information about this survey:

First of all thank you for your consent and time for taking part in this survey to help me in the project. I used to be a teacher in a Govt primary school and currently I am doing my phD in Curtin University in Western Australia. The topic of my research is Integrating folk values in primary education in Bangladesh: Sustainability perspective.

The survey is designed in four parts:

- First part is about you and your school;
- Second part is about sustainability;
- Third part is about Bangladesh's traditional folklore and
- Fourth part allows you to give your open input and thoughts about this project.

There is no right or wrong answer and some practices may be more important to you than others. There is no need to write your name. Therefore, no one will know your answers. However, it is important to give *honest* answers based on how you truly feel about what is asked in each question. You can even skip any question if you feel you do not want to answer. Please use the following guideline to rate your answers.

Strongly agree / extremely important Agree / Important Neutral / not sure Disagree / of little importance Strongly disagree / Not important Not applicable

- If you believe that a practice is very important, circle a high number (for example very important/ agree
- or extremely important/ strongly agree).

  If you believe a particular practice is not very important, then circle a low number (for example of somewhat important /disagree or not important /strongly disagree).
- If you are unsure about any of the question and do not want to respond, then circle (for example,
- If the question is not relevant to you and your work, circle not applicable.



#### Part 1: You and your school

| 1  | Where is your school located?  | Urban area Rural area                                       |
|----|--|---|
| 2  | Your age group   | ☐ 20 – 35<br>☐ 36 – 50<br>☐ 51 – 60                         |
| 3  | How many years do you have in teaching?  | Less than 5 years Between 5 and 19 years More than 20 years |
| 4  | Your last education qualification or training  |   |
| 5  | Please state your specialised area / subject of teaching (if any)                              |   |
| 6  | Please list the extra curriculum activities you perform in your school (if any)                |   |
| 7  | Do you have a tree plantation programme in your school?  | Yes No Not sure   |
| 8  | Do you have outdoor activities (such as, excursions / sight-seeing / picnic for your students? | ☐ Yes<br>☐ No<br>☐ Not sure                                 |
| 9  | What is the source of drinking water in your school?   | Tap water Tube well Other                                   |
| 10 | What is the source of power in your school?  | ☐ National greed ☐ Polli Bidyuth ☐ Solar ☐ Other            |



### Part 2: Sustainability values

In this part I will ask you about the importance of sustainability values and practices for children in the age group 5-11 years. How do you personally evaluate, as a teacher, the importance of the sustainability aspects (social, economic and environmental) in our primary education curriculum?

| Soc | ial sustainability  |  |
|-----|---|--|
| 1   | How important is the role of primary education to teach children to be kind and helpful to the other children and people?   | □ Extremely important     □ Important     □ Neutral / not sure     □ Of little importance     □ Not important     □ Not applicable |
|     | If your answer is important or extremely important, do you agree we have enough useful resources in our curriculum to teach children to be kind and helpful to the other children and people? | Strongly agree Agree Neutral / not sure Disagree Strongly disagree Not applicable  |
| 2   | How important is the role of primary education to teach the children to be <b>respectful to all genders</b> , <b>ethnicity and religion?</b>  | □ Extremely important     □ Important     □ Neutral / not sure     □ Of little importance     □ Not important     □ Not applicable |
|     | If your answer is important or extremely important, do you think we have enough useful resource in our curriculum to teach children about respectful to all genders, ethnicity and religion?  | Strongly agree Agree Neutral / not sure Disagree Strongly disagree Not applicable  |
| 3   | How important is the role of primary education to teach the children about <b>being kind to all living and non-living beings</b> (including wild animals, plants)?                            | □ Extremely important     □ Important     □ Neutral / not sure     □ Of little importance     □ Not important     □ Not applicable |
|     | If your answer is important or extremely important, do you think we have enough useful resource in our curriculum to teach children about all living and non-living beings?                   |  |
| 4   | How important is the role of primary education to teach the children to be responsible and accept responsibility for their actions (what they say and what they do)?                          | Extremely important Important Neutral / not sure Of little importance Not important Not applicable                                 |
|     | If your answer is important or extremely important, do you think we have enough resource in our curriculum to teach children to be responsible and accept responsibility for our actions?     | Strongly agree Agree Neutral / not sure Disagree Strongly disagree Not applicable  |

| Env | ironmental sustainability:  | arem ombersing   |
|-----|---|--|
| 5   | How important is the role of primary education to teach the children about <i>climate change</i> ?  | Extremely important Important Neutral / not sure Of little importance Not important Not applicable |
|     | If your answer is important or extremely important, do you think we<br>have enough resource in our curriculum to teach children about<br>climate change?  | Strongly agree Agree Neutral / not sure Disagree Strongly disagree Not applicable                  |
| 6   | How important is the role of primary education to teach the children<br>about protecting the environment and the natural world when<br>they eat, play and work?   | Extremely important Important Neutral / not sure Of little importance Not important Not applicable |
|     | If your answer is important or extremely important, do you think we<br>have enough resource in our curriculum to teach children about<br>protecting the environment and the natural world when we eat, play<br>and work?    | Strongly agree Agree Neutral / not sure Disagree Strongly disagree Not applicable                  |
| 7   | How important is the role of primary education to teach the children to keep/save natural resources (water, minerals, soil, plants, animals etc) for future generations?  | Extremely important Important Neutral / not sure Of little importance Not important Not applicable |
|     | If your answer is important or extremely important, do you think we<br>have enough resource in our curriculum to teach children about<br>keeping/saving natural resources?  | Strongly agree Agree Neutral / not sure Disagree Strongly disagree Not applicable                  |
| Eco | nomic sustainability  |  |
| 8   | How important is the role of primary education to teach the children to produce less waste when you eat, play and work?   | Extremely important Important Neutral / not sure Of little importance Not important Not applicable |
|     | If your answer is important or extremely important, do you think we have enough resource in our curriculum to teach children to produce less waste when you eat, play and work?   | Strongly agree Agree Neutral / not sure Disagree Strongly disagree Nt surplicable Not applicable   |
|     |   |  |
|     | <u>.</u> €  | urtin University   |
| 9   | How important is the role of primary education to teach the children to use everything in moderation (what we need) so that there is some left for others?  | Extremely important Important Neutral / not sure Of little importance Not important Not applicable |
|     | If your answer is important or extremely important, do you think we<br>have enough resource in our curriculum to teach children to use<br>everything in moderation (what we need) so that there is some left<br>for others? | Strongly agree Agree Neutral / not sure Disagree Strongly disagree Not applicable                  |

### Part 3: Folklore

| 10 | How much do you agree that it is important to retain our aged-long<br>TRADITIONAL values and wisdom which are orally transmitted<br>from generation to generation?<br>e.g., our aged long proverbs, maxims, idioms, , legends, fairy tales<br>from Thakur Maa'r Jhuli , Rupkathar golpo, Ishop er golpo, folk<br>songs, Palagaan, folk literature etc | Strongly agree  |
|----|---|---|
| 11 | How much do you agree that the CHILDLORE or children-friendly elements of our folklore help enhance the morals, values and wisdom in our children?  (e.g. our aged long proverbs, maxims, idioms, , legends, fairy tales from Thakur Maa'r Jhuli , Rupkathar golpo, Ishop er golpo, folk songs, Palagaan, folk literature etc.)                       | Strongly agree Agree Neutral / not sure Disagree Strongly disagree Not applicable |
| 12 | How much do you agree that our aged-long FOLKLORE offers a<br>way to teach kindness, self-reliance, honesty, resilience and other<br>sustainability attitudes to our children?  | Strongly agree Agree Neutral / not sure Disagree Strongly disagree Not applicable |
| 13 | How much do you agree that teachers <b>SHOULD</b> use different genres of folklore in the classroom to teach sustainability to children?  | Strongly agree Agree Neutral / not sure Disagree Strongly disagree Not applicable |
| 14 | Do you use genres of folklore in your class?  | Yes No Don't know / not sure  |
|    | If your answer is yes, what are the genres or elements of folklore you normally use in your classroom? Please list the genres you use the most.   |   |

|    | <b>₩</b> C  | urtin University   |
|----|---|--|
| 15 | How much do you agree that FOLKLORE IS NOT USED<br>PROPERLY in the primary education curriculum?  | Strongly agree Agree   |
|    | (e.g. our aged long proverbs, maxims, idioms, , legends, fairy tales from Thakur Maa'r Jhuli , Rupkathar golpo, Ishop er golpo, folk songs, Palagaan, folk literature etc.) | Neutral / not sure Disagree Strongly disagree Not applicable |

# Part 4: Open question:

 What do you find challenging about teaching sustainability in the classroom following the existing curriculum.

 If you have any comment, feedback, advice, input regarding this survey and the project, please add them in the black nade attached.