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SUSTAINABLE DEVELOPMENT OF RURAL AREAS IN BANGLADESH

Jahirul Islam Khan ANU, Vytautas Magnus University Agriculture Academy, Faculty of Bioeconomy Development, e-mail: md.anu@vdu.lt

Summary

At a glance, Bangladesh is a developing country. Around 80% people live in rural areas. It is clearly visible that, for their sustainable development. There are some Parameter involved in this issue. Such as, private organization in Bangladesh, renewable energy sources, disaster preparedness management, etc. Amongst them, renewable energy is more important to gain sustainable development in rural areas. It is cheap and easily Affordable forrural people. End of this article, it is clearly found some parameter to gain sustainable development in rural areas. But to achieve this sustainable development in rural areas they need a good leader with highly administrative skill.

Keywords: NGOs, sustainable development, renewable energy, disaster preparedness, Bangladesh, rural areas.

Introduction

Sustainable development of rural areas in Bangladesh is a critical issue that needs urgent attention. Bangladesh is a country with a predominantly rural population, with around 70% of the population residing in rural areas. Therefore, sustainable development of rural areas is critical to the overall development of the country. Here are some strategies for sustainable development in rural areas of Bangladesh. Such as, agriculture and livelihoods, education and health, infrastructure and connectivity, natural resource management, climate change adaptation etc.

To achieve sustainable development in rural areas, the government of Bangladesh must prioritize investment in rural infrastructure development. Infrastructure development such as roads, bridges and water supply systems will enhance transportation and communication, increase access to markets and improve the livelihoods of rural communities. Besides, the government must invest in renewable energy sources such as solar and wind energy to provide sustainable and reliable energy sources for rural areas. There are some non-government agencies available in Bangladesh, who are directly involved in developing rural areas along side with government. Their role also vital to sustainable development in rural areas in Bangladesh. Natural resource management, such as water, forests and fisheries are critical to the livelihoods of rural communities. Promoting sustainable management of these resources can help ensure their long-term availability and sustainability.

Research aim: to identify, what kinds of challenges are face by the rural areas for sustainable development in Bangladesh?

The following **objectives** have been set to achieve the aim of this research and to explore the unknown and unlock new possibilities in solving the research question and sub questions, which are:

1. What is the role of NGOs in sustainable development in Bangladesh?

2. What energy is the key to achieving sustainable development in rural Bangladesh?

Research object and methods

The nature of this research study is both descriptive and suggestive. The methodology used in this research is clear and easy to comprehend. The research question is "What is the role of NGOs in sustainable development in Bangladesh? In attempting to answer the research question, the first approach to be used in this research is the qualitative theory. This approach will be based on words and meanings. The reason for this approach is because both the topic and research question are not statistically related issues, and the best approach to get good and convincing results is by following a qualitative theory. Under this theory, primary and secondary sources of sustainable development are used for analysis. The sources will include textbooks, academic journals, articles, and other relevant publications. These sources were gotten mainly from the library and online databases.

The second approach to be used in this article is the analysis of the collected data will be content-based. The discoveries of the review are written in a more subjective way as opposed to in quantitative terms.

Research results and discussion

The role of NGOs in the sustainable development in Bangladesh. Azizul Hasan and Ahmed Forhed (2013) observed that, at present, parts of non-governmental organizations (NGOs) and government organizations are getting to

be far from being obviously true issues. These are moreover becoming subject things for more extensive talks and audits within the developing country perspectives. Bangladesh may be a part of the world's slightest created countries, having expanded populace thickness, unemployment, lack of education, child mortality, socio-communal distress and numerous more. The nation has moreover been confronting massive challenges of nourishing the quickly expanding populace or indeed to bolster their livelihood in a feasible way. In expansion, the proceeding weight of urbanization with decreased cultivable areas are making weights on the government and the complete financial set up. Since the conventional agricultural sector has fizzled to completely back the national economy. In common, Agriculture has recently become the biggest source of job for more than half of the entire population of the nation. But this division has seemingly fizzled to form ground, sustainable advancement. More importantly, the non-governmental organizations (NGOs) have been playing steady parts with the government. In a few cases, they are considered as more successful to induce joined with the grass-root-level developmental initiatives. The parts and activities played by the NGOs in Bangladesh have been considered as having positive impacts on destitution lightening among the country's poor population. In ranges where the destitution circumstance remains serious, exercises of the NGOs regularly get more vital. The target bunches for these activities are mostly difficult centre destitute who have exceptionally small get to and openings for improving their living status and measures.

The Bangladesh Country Progression Committee (BRAC) is the world's largest non-legislative organization (NGO). It began working in 1972 with Sir Fazle Hasan Abed as the business visionary. Considering this organization as the case, this think about has been planned to fundamentally diagram the parts of a chosen non-governmental organization (BRAC) in feasible improvement. With this particular point, this paper has sketched out the patterns of current destitution circumstances in Bangladesh and the affect investigation that BRAC is having through its sustainable development activities.

After reviewing those articles it was found that NGOs have been playing a crucial role in promoting sustainable development in rural areas in Bangladesh. Many NGOs have been working in various fields, such as agriculture, to improve the livelihood of rural communities. Their interventions have included capacity building, awareness raising, and the provision of survives and resources.

Renewable energy, the key to achieving sustainable development of rural Bangladesh. M.S. Islam, A.M. H.R. Khan (2011) observed that Bangladesh has big issues with energy crisis for development. It is also directly involved with rural areas. Without electricity it is not possible to gain sustainable development for rural areas. So, this the vital role for sustainable development of rural areas in Bangladesh. That is why, renewable energy can solve energy issues for a country as well as for rural areas. Renewable shapes of energy transmit distant littler sums of greenhouse gasses compared with fossil powers and increased vitality preservation encourages the diminishment of primary fossil fuel utilization, hence moderating climate change impacts, whereas contributing to the arrangement of energy services and improving security of vitality supply. Usable biomass including dairy animals fertilizer, human excreta, poultry litter, natural waste, oceanic plants and weeds of a town in Bangladesh can create the sum of biogas that villagers require for cooking. The fermented slurry from biogas digester is improved with nitrogen, potassium and other supplements. It is, hence, best for soil, natural wellbeing and agrarian productivity management. In this article, the mention some energy sources and some proposal for renewable energy. Such as,

- Rural energy needs.
- Solar system.
- Biogas technology.
- Improving cooking stove.

It is visible that, renewable energy has immense potential to contribute to sustainable development in rural areas in Bangladesh. With over 80% of the population living in rural areas, access to reliable and affordable energy is a major challenge. Renewable energy sources such as solar, wind and biomass can help to meet the energy needs of rural communities while also reducing greenhouse gas emission and promoting environmental sustainability. In this article, renewable energy is given more attention. There are more reasons behind this this. Such as,

- In Bangladesh, most of people live in rural areas and without electrification sustainable development is not possible. For this reason, renewable energy can be important factor for sustainable development in rural areas.
- Renewable energy is very cheap, it will be helpful for rural people to gain sustainable development.

Bangladesh is a country of South Asia. Total area of this country is 147570 sq. m. Bangladesh has a huge amount of population - around 160 million. Bangladesh is 8th in the world on the list of most densely populated countries. Bangladesh has very few natural resources. However, it has limitations but its growing rapidly day by day. Renewable can be the game changer of this country as well as for rural areas sustainable development.

Natural gas is the main source to generated electricity in Bangladesh. According to the report (BPDB), Bangladesh produced 68 percent of electricity from Natural gas (Figure 2). Bangladesh also depends on other fossil fuel such as, furnace oil, coal, hydro and few renewable sources. It is very clear that, Bangladesh produces 0.5% electricity from natural gas. Which is not healthy for sustainable development for rural areas.

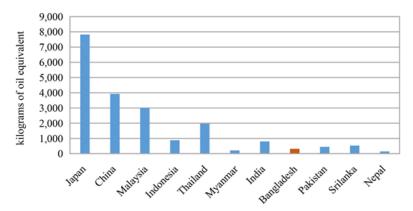


Figure 1. Energy consumption per capita in different countries of Asia (Source: world Bank 2014)

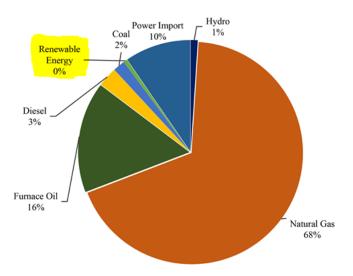


Figure 2. Fuel type contributions on electricity generation of Bangladesh. (Source: Bangladesh power development board, BPDB 2019)

Due to its sustainability, reduced carbon emissions, and nearly cheaper manufacturing costs, the usage of renewable energy has recently attracted a lot of attention. Because of their infinite capacity, they can be used again and again. Bangladesh is extremely lucky to have a wealth of renewable energy resources, which can be used to help the nation's energy needs today and in the future. Solar, wind, biomass, hydropower, biogas, and geothermal energy are some of Bangladesh's renewable energy resources. The government of Bangladesh intends to generate 4190 Megawatts of power from these renewable resources by the year 2030. The government's year-by-year aim for producing power from various renewable energy sources is shown in Table 1. This is the good sign for Bangladesh as well for people from rural areas for their sustainable development.

Year	Solar	Wind	Hydro	Biomass	Biogas	Others (Tidal, Wave)	Total
Until 2018	350	2.9	230	0	1.08	0	583.98
2019	84	0	0	0	1	0	85
2020	100	38	0	0	2	0	140
2021	120	80	0	15	3	0	218
2022	150	120	0	15	4	0	289
2023	165	170	0	15	4	0	354
2024	165	170	0	15	4	0	354
2025	165	170	0	15	4	2	356
2026	165	170	0	15	4	4	358
2027	165	170	0	15	4	6	360
2028	165	170	0	15	4	8	362
2029	165	170	0	15	5	10	365
2030	165	170	0	15	5	10	365
Total	2124	1600.9	230	150	45.08	40	4189.98

Table 1: Government's year-wise target of electricity production from different renewable energy sources (MW) (Source: Sustainable and Renewable Energy Development Authority, SREDA, Bangladesh.)

Disaster preparedness for sustainable development in Bangladesh. M. Shah Alam Khan (2008) mentioned that, sustainable development in Bangladesh is closely linked with deserter preparedness. Bangladesh is prone to various natural disasters, including floods, cyclones and earthquakes, which can have devastating effects on the country's economy, environment and people. To achieve sustainable development, the article argues that Bangladesh needs to prioritize disaster preparedness and resilience-building efforts. This can involve investing in early warning systems, improving infrastructure, strengthening emergency response capabilities and promoting community based disaster management initiatives. Bangladesh need to ensure that, development progress is sustainable and equitable, even in the face of natural hazards.

Thirdly, we found that disaster preparedness and management is a critical issue in rural areas in Bangladesh. The country is highly vulnerable to natural disasters such as floods, cyclones and landslides, which can have devastating impacts on rural communities. Effective disaster preparedness and management requires a comprehensive approach that includes early warning systems, evacuation plans, community mobilization and post disaster recovery and reconstruction.

Conclusion

Overall, this article underscores the importance of addressing these areas: NGOs interventions, renewable energy and disaster preparedness and management - in order to promote sustainable development in rural areas in Bangladesh. There are few parameter directly involved in gaining sustainable development for rural areas. Non-government organization are playing a very important role to achieve sustainable development in rural areas. They are doing different king of activities, such as, financial, education, education, health, etc. It helps to gain sustainable development in rural areas of Bangladesh. In Bangladesh, people from rural areas are not familiar in renewable energy sources. In Bangladesh, more than 70 percent people live rural areas. It is clearly visible in this article, that for sustainable development in rural areas, renewable energy is a must. By working together and adopting a holistic approach, we can create a more resilient and sustainable for future for rural communities in the country.

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