



SUSTAINABILITY AND EMPLOYABILITY: AN ANALYSIS IN THE CIRCULAR ECONOMIC FRAMEWORK WITH REFERENCE TO SDG 12

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1. ABSTRACT

Sustainability and employment are two Achilles' Hills of every policy framework now-a-days. These bones of contention construct the foundation of the debate on how far sustainable development contributes to employment generation. The United Nations (UN), while adopting the resolution of the Sustainable Development Goals (SDGs), having 17 goals and 169 targets takes cognisance of various pressing global problems, of which employability is one of the most important segments of policy framework. The 12th goal, stating the necessities of responsible production and consumption reiterates the employability enhancement through optimal utilisation of resources in the backdrop of the waste minimization. The circular economic framework, considered deemed fit for recycling and reusing wastes for further accommodating these into

economies for creating values gives ample room for resource utilisation and reinstates the importance of a viable alternative employment opportunities for making production and consumption process gainful.

The present paper seeks to re-read the possibility of viable employment opportunities as an important dimension of sustainable development. Moreover, it attempts to evaluate how sustainable development under the 12th goal of the SDG resolution contributes to alternative viable employment opportunities in the circular economic framework.

Keywords: Sustainability, Employability, Viable, Optimal, Recycle, Circular economic framework, Values, Gainful.

2. Introduction

Sustainable development is a buzzword now. Any development attempt needs to be sustainable if it is to stand out. More often than not, development faces a stiff challenge when the issues of environment come to the fore. Frankly speaking, the development, if continued unbridled and rapaciously, will bear on environment. The aspects of environment take centre-stage because the interests of environment affect one and all. The dimension of environment should be in the upper hand of mind in order to protect everyone from the curses unleashed by the unbridled development activities. Invariably, the damaged environment is key to exposing all demerits of development activities undertaken. When the United Nations takes up the issue of environment in its stride, it does not forget to touch upon a co-ordinated way of conducting various economic activities among all stakeholders. One such important activity happens to be employment. The basic question that is being continuously raised now-a-days is on how sustainable development leads to employment.

The Sustainable Development Goals (SDGs), having 17 goals and 169 targets are framed by the United Nations to address certain specific problems plaguing the world. Specifically, the SDG 12 or the 12th goal of the SDGs speaks for inducing responsibilities in production and consumption. In other words, the processes of production and consumption must be made gainful, side-stepping the wasteful practices with it. The SDG 12

entails how resources available can be used judiciously for arresting wastage and making production and consumption processes economical.

This attempt obviously demands some innovative and state-of-the-art techniques which are markedly deviated from the traditional methods of production and consumption. In fact, a technique is must be in place to reduce wastages out of the processes of production and consumption. The reduction of wastes, in one way or the other must be associated with recycling and reusing of these into economic systems. Moreover, wastes, when being recycled and reused, can have extended life-cycles. Such a 'waste-to-wealth' perspective of waste management in order to produce less wastage has tremendous job potential. The two-edged consequences of putting such a system in place, where new products are produced out of wastages and new alternative job opportunities are created are now considered by many. The circular economic framework, which is closed-loop, offers this construct of reducing wastes through recycling. It facilitates reusing by transforming into new products.

The juncture of the century, where the entire world is grappling with a crisis of employment needs an alternative framework for providing job. With the room for such an alternative job provision, the importance of the embrace of the circular economy can never be taken for granted. Besides, the environmental concern is also being addressed by means of this alternative framework.

Making the development process sustainable as well as generating alternative job opportunities to address the problem of unemployment are two important ends of adopting circular economic framework. Attempts must be made to make the SDG 12 a reality in the backdrop of the circular economy where the above twin objectives are properly addressed.

3. Historical background

The most pertinent aspect, which has prompted the researcher to take up the Baluchari sari industry and the wastes generated out of it for the study of the application of the circular economic framework and its subsequent benefits. The historically glorious past of this Baluchari sari has made the researcher conduct the concerned case study in those wards of the Bishnupur municipality, where people are predominantly associated with the weaving of the sari.

However, historical evidences illustrate that the sari was originally produced in Decca (the capital of Bangladesh). It earned its fame for its smoothness and aesthetics. Historically speaking, Murshidkuli Khan, the

18th century Nawab of Bengal brought it to Murshidabad, West Bengal. But over time, the legacy of it has not bothered the test of time and gradually moved to Bishnupur, which is located in the southern part of West Bengal. Bishnupur is now famous for its Baluchari. The Malla kings of Bishnupur used it as a symbol of royal glory and aristocracy. Tourists across the globe come to Bishnupur to witness to the legacy of it. It has now become a reliable source of income for a handsome number of weavers.

The researcher is well aware of the legacy of this sari and that is why, he has chosen people, exclusively associated with it by any means for earning livelihood. Apart from it, the wastes out of it also a source of income to many, when it comes to applying circular economic framework to recycling wastes into wealth.

4. Literature reviews

Robert Smith and Scott Vaughn (2018) extol the role of the circular economic framework in creating and encouraging alternative employment opportunities. They attempt to estimate the employment effects of the circular economic framework. Being a marked deviation from the conventional 'take-make-dispose' framework of the linear economic system, where employment opportunities are limited and wastes are hardly recycled, the circular economic framework, according to them, offers a pedestal, where employment can be generated. However, the authors, despite estimating the employment opportunities of the circular economic framework, fall short of analyzing and assessing the extent of sustainability in employment generation by means of SDG 12.

Hennis Wilts (2017), in an article published in the International Journal of Waste Resources has delved into the trajectory of transformation of the linear economy into the circular economy. He makes sure how different social, economic and political factors come in the way of implementing circular economy. While discussing the factors, impeding the growth of the circular economy, he does not forget to explain its benefits. Though a comprehensive review on the nitty-gritty of the circular economy, the employment potential of it or the extent of sustainability has not been touched upon by him. How the circular economy, with its employment potential contributes to the sustainable development is not elucidated.

Julie Elizabeth Hill (2014) discusses various facets of the circular economy and elucidates how its application helps in resource stewardship from wastes. Wastes are recycled in the circular economic framework to create values from these. The resource management is elucidated and illustrated by him but he misses on how

sustainability, under the SDG 12 can be maintained by means of employment generation through transforming 'wastes' into 'wealth'.

Hobson and Lynch (2016) have raised the aspect of radical social transformation by means of circular economy and sustainability is ensured. They have categorically explained how the transformation, ensured by the proper application of the circular economic framework leads to the well-being of environment and resources can be used judiciously through it. However, they fail to capture the sustainability in the light of the SDG 12 and the subsequent employability of the circular economic framework.

Zofia Wysokinska (2021) dwells on the trajectory of development and how it differs from the conventional development landscape. The conventional development landscape, as discussed by the author is devoid of any facility of re-cycling the wastes to re-use these. The transformation, which turns turtle the conventional approach, embraces the change in behaviours of stakeholders. But she misses on the potential employment opportunities of the circular economy and how sustainability can be maintained throughout in the light of SDG 12.

Winans and Kendall (2017) lay bare the history and evaluation of the circular economy. In course of the discussion of the origin and evolution of it, he does not forget to elucidate how important the circular economic framework is to develop an alternative construct, where resources are to be utilized judiciously. The demerits of the conventional system have been elaborated whereas the advantages of taking up circular economic framework are underpinned. He pins hope on applying circular economic framework to recycling wastes for extending the life-cycle of products. Despite being a comprehensive account of the circular economy and its application, the paper does not take cognizance of the employment potential of it, together with the sustainability in the light of SDG 12.

For the above gaps, the researcher takes up the issue of employment aspect of the circular economic framework in the light of SDG 12 and attempts to evaluate its importance in the present society to combat the wastefulness of the existing production and consumption patterns.

5. Case study

The researcher conducts to understand how the adoption of a circular economic framework makes differences in terms of creation of employment opportunities. The researcher also attempts to analyse how circular

economic framework ensures responsibilities in production and consumption processes as well as how this creates employment opportunities.

5.1. Survey area:

The researcher has chosen Bishnupur, a municipality in the district of Bankura. Bankura is a district of West Bengal, a state of India. Bishnupur, popularly known as 'Temple Town' for many historical temples dotting the city is also famous for its Baluchari sari, having a historical glorious past. It has also a royal tradition. Bishnupur is 177.6 km from Kolkata, the capital of West Bengal through NH 19 and 204 km through NH 16 and NH 14 from Kolkata. Bishnupur has an area of 22 km². It is a population of 75,000 with a population density of 34,000/km². The Bishnupur municipality has 15 wards in totality. The researcher has chosen the wards 7 and 8 out of 15 wards. These two wards are dominated by weaver families and that is why, these are called 'Tantubay Para' (Locality of weaver). In totality, there are 150 families, combining two wards. Out of 150 families, the researcher has chosen 85 families randomly. The 85 families consist of people from different occupations, mostly engaged in weaving activities.

5.2. Methodology:

The researcher has adopted the method of focused group discussion and unstructured interview conducted among the families. One head and one breadwinner (if not head) of each family have been selected. The information collected through focus group discussion among the head and the principal breadwinner of each family is used here. The information is also collected from the unstructured interview among them. The unstructured interview is a method, where no close-ended question is raised. The open-ended questions have helped immensely find out their minds. The focus group discussion is a qualitative method where participants are questioned on random issues to elicit their views. The researcher tries to view it both theoretically and empirically.

5.3. Description:

The researcher has taken up the concerned area of study for its historical importance as well as its grandeur in Baluchori Sari weaving and exporting to even foreign countries. The researcher attempts to investigate how people involving the weaving earn livelihood from it. Apart from it, attempts are also made to evaluate how wastes out of weaving create large potential for employment opportunities. An

effort has been sincerely made to realize how much wastes are produced on average daily and how these wastes are processed to create values from it. It is also to be considered how wastes, once discarded, could be absorbed in the economic structure and in this manner, how circular economic framework applied. The researcher is also interested in exploring how the application of the circular economy diversifies occupations, which helps people weather any unprecedented situation. In short, the researcher makes an effort to find out how 'waste-to-wealth' approach ensures employment, technical innovation and above all, makes sustainable development happen.

The researcher has chosen 85 families out of 150 ones, straddling both the wards of 7 and 8 under the Bishnupur Municipality. The 85 families represent occupations of varied categories, although most of the families embrace weaving, the traditional occupation. 65 families out of 85 ones (almost 76%) are directly dependent on weaving traditionally. The rest 24 % families are either indirectly related to weaving or dependent on occupations other than weaving (such as, domestic helps, migrant workers, worshipping etc.). Out of 24 % families, almost 15 % families are indirectly dependent on weaving specifically for eking out livelihood but the mere 9 % families are associated with professions other than weaving.

The 76% of the families, directly dependent on weaving have mostly switched over to power looms from handlooms in anticipation of more profits. What is more significant in this connection, the amount of wastes generated in the power-looms is lower than that of in the handlooms. Earlier, the handlooms generated wastes, which could not be processed or recycled for re-using these. With the introduction of power-looms, waste generation has witness a sharp fall from 2000 kilograms per family per month on an average to 1500 kilograms per family per month. Earlier the wastes were not recycled but when the process of recycling begins, it produces amazing results. The recycling of wastes not only creates new products out of it, but also paves the way for alternative employment. This alternative employment stands out especially, when pandemic strikes the nation, in general and the area, in particular.

The wastes are usually processed for recycle with the help of machines, where a section of people is employed. These people are from the neighbouring areas of thee two wards, who, otherwise, work as domestic helps or rag-pickers. Even if they continue to work as rag-pickers or domestic helps, their sons or daughters are employed as workers with this recycling process through machines. The recycling process, thus, creates a unique opportunity for employment.

Now comes the question of waste collection, where there is no direct access to recycling in case of the small weavers. Wastes are collected from each household by some people from the same wards as well as the neighbouring areas. They collect wastes from families, which sell it around Rs.20 a kilogram on an average, posing to be another potent source of income of the families. Now those, who collect wastages out of weaving also sell these at around Rs. 50 a kilogram to families who are engaged in preparing various products out of wastes, such as towels, handkerchiefs, soft toys etc. Such products have a high demand in local markets, especially for tourists. The products are sold at Rs.150 – 250 (Initial price) and it varies depending on the products. Large weavers, often employ small weavers for this selling activity, which give them employment. The people, who are engaged in producing various products out of wastes are often from occupations other than weaving. Mostly, migrant workers are associated with it. Some priests, who earlier worshipped door-to-door, are also involved in it.

The waste management, which did not earlier draw much attention, is now a point in discussion. The recycling and reusing techniques, when applied successfully, gives us a number of significant takeaways:

- The traditional weaving activities get diversified into many small activities, paving the way for alternative employment opportunities.
- People (accounting for almost 76%) engaged in traditional weaving activities are using wastes for recycling to produce new products like handkerchiefs, coverings and other aesthetic goods directly, diversifying production activities.
- 18% of the families, which are not directly associated with weaving, are engaged in producing products out of wastes directly.
- Almost 7-8% of people from the areas are involved in supplying the products out of wastes to markets, where these are sold to tourists and local people, among whom these products have high demand.
- Almost 20 % of people are engaged in directly selling of products to consumers on different occasions or the other, paving the way for employment.
- The new entrants to this profession has significant other opportunities for employment and in a way, the entire community has been included in employment. So, in a way, inclusive growth is possible.

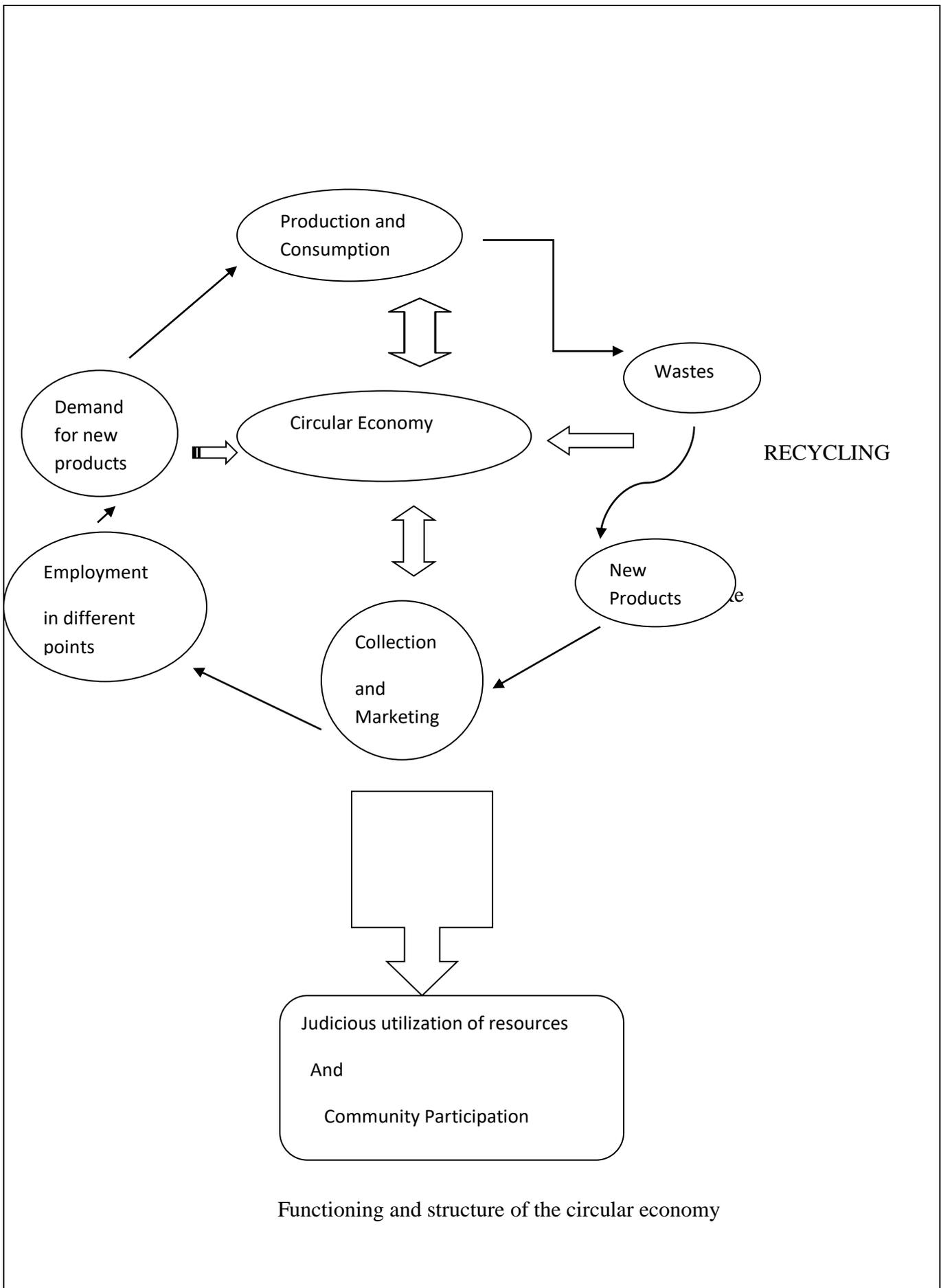
- Different nodes of production and supply provide employment opportunities.
- The waste-to-wealth has been made possible by the use of recycling and reusing.

In a nutshell, the circular economic framework facilitates recycling of wastes and creates values out of these. The waste recycling not only reduces the volume of wastes, but also generates alternative employment opportunities for people from diverse backgrounds in multiple ways. The ‘waste-to-wealth’ dimension of the circular economic framework is actually resilient, in many ways, to employment vulnerabilities.

The circular economic framework has been amazingly helpful in weathering the loss employment in these areas. Migrant workers are left high and dry owing to job loss for pandemic. Also the most important dimension for small weavers and people with petty activities is that they find certain specific employment opportunities in the practice of turning wastes into wealth. In multiple points of activities, people get employment activities from the beginning to the end products. In a way or other, it helps diversify employment opportunities and opens up various employment rooms. In this manner, the development process becomes sustainable as well as employment gets diversified. The people of these wards are almost unaffected because of the alternative employment opportunities created by the circular economic framework. The twin objectives of waste minimization and employment diversification are achieved through the framework of the circular economy.

Using a flowchart the researcher tries to demonstrate the framework of the circular economy:





6. Conclusion:

The categorical study of the 'waste-to-wealth', where recycling wastes out of weaving not only creates new avenues for employment through generation of alternative employment opportunities, but also enhances possibilities of generation of more revenues by modifying the existing products. The researcher, while conducting the focus group discussion among the respondents has found that the alternative employment opportunities, necessitated for enhancing income in the backdrop of the COVID-19 induced lockdown, works wonders for sustenance. The diversification of occupations because of application of the circular economy helps people in the two wards of the Bishnupur municipality under study, weather any unforeseen event, associated with livelihoods of people. The products produced out of wastes through recycling creates different ways to new occupations for livelihood in different channels, right from the purchase of wastes to recycling these into new products, facilitating transactions in markets to create values.

The recycling of wastes facilitates reusing these into various new products. The traditional linear economic system, where wastes are disposed untreated, leads to environmental pollution. The recycling of these wastes into new products to create values, considered technique to transform wastes into wealth, is not only economically viable, but also environmentally sustainable. Wastes, earlier discarded, are used to create new products helps in judicious utilization of the stocks of resources as resource exhaustion is sharply declined.

The application of circular economy to recycling wastes leads to community participation and a holistic development of the community concerned. In a community, where different people rely on diverse activities in order to eke out living are equally benefited from recycling wastes. Some are benefited from new arenas of livelihood through new product generation, whereas others are content to enhancing income opportunities from the extended form of existing livelihood opportunities. While people, relying on weaving exclusively experience a greater opportunity for it to earn some more income, others, not directly relying upon, categorically are witness to extended livelihood opportunities alongside the traditional ones. Such a paradigm shift is instrumental in developing community solidarity and community integration, which has tremendous economic benefits in terms of resource usage, inclusive growth and above all, an umbrella approach to protecting environment.

It is very relevant to point out that the application of circular economy, while protecting environment to keep pace with the development activities, paves the way for employment opportunities alternatively. It works wonders when economies grapple with the seemingly insurmountable problem of unemployment.

In a nutshell, the circular economic framework is not only economically judicious and feasible but also enhances opportunities for sustenance in a sustainable manner.

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