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## Contribution of women in India's eco-friendly sustainable economic development in future

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### Abstract

Understanding the relationship of women and men with the environment is essential for policy making for sustainable economic development and sustainable use of natural resources. In the current global economic scenario, the issue before India is not only of rapid economic growth but also of inclusive and sustainable economic development. India is the most populous country in the world where women are not only helpful in economic development as human resources but also helpful in environment-friendly economic development due to their connection with nature and ecosystem. Today, the work of women is not limited to household chores only. At present, the participation of women in all types of economic and commercial activities along with agriculture is increasing rapidly. On the one side, women are emerging as the carriers of sustainable agriculture in the agricultural sector, on the other side, women are engaged in many such economic activities which are essential for environmental protection in the present circumstances. Emphasizing women empowerment, emphasis is also being laid on economic participation of women in government schemes/programs. Due to the spread of education and awareness, participation of women in all types of economic activities is sure to increase in future. To take advantage of demographic dividend in future, it is necessary that more and more women should be connected to the mainstream of economic development. This will not only help in increasing the national income but will also make environment friendly economic development possible. In this research paper, on the one hand the issues and challenges related to the future sustainable economic development of India have been discussed, on the other hand an attempt has been made to look at the contribution of women in sustainable economic development from a socio-economic perspective.

**Keywords:** Yucatec maya, traditional medicine, plant use, herbalist

### Introduction

Today the issue before India and the entire world is not of development but of quality of development. A qualitative rapid economic development is the need of present time. Under qualitative economic development, the most important thing is that economic development should be sustainable. Sustainable economic development means environment and ecology friendly economic development which maintains the possibility of healthy and happy human life on earth for a long time and takes care of the needs of our future generation. United Nation and in various global summits held on environment and sustainable development, the responsibilities of developed and developing countries have been decided to ensure sustainable economic development. At present, the Indian economy is not only the fourth largest economy of the world but is also the fastest growing economy of the world. In the 90s, the policies of liberalization, globalization and privatization have played an important role in increasing the economic growth rate. But in the future, India will have to keep in mind that with rapid economic development, there should be no decrease in the total availability of natural resources so that our future generations can also fulfil their needs and the possibilities of development remain in the future. For this, it is necessary to understand the relationship of women and men with the environment and ecosystem. In this context, the concept of ecofeminism is important. In ecofeminism, on one side we keep patriarchal system (male dominance) and capitalism and on the other side women and nature. According to ecofeminism, both patriarchal forces and capitalism exploit women and nature. Frederick Engels says in his article "The Origin of the Family, Private Property and the State" published in 1884 that both capitalism and patriarchal system support each other.

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According to Engels, the patriarchal system emerged with the development of private property where men began to develop private property in animals, tools and land and tried to gain more control over the surplus. To ensure the legitimacy of their heirs, men established their dominance within the home and society and reduced women to slavery and a means for the production of children. Just as capitalism exploits workers through the theory of surplus value, the patriarchal system exploits women by limiting them to household chores and child rearing. Just as capitalism and the patriarchal system fostered by it are the basis of women's exploitation, it is also the basis of exploitation of nature. According to Karl Marx, capitalism gives rise to a blind race for profit. The desire to earn more and more profit gives rise to the ruthless exploitation of nature and the environment. In this context, Karl Marx says that-

.....All progress in capitalistic agricultural is a progress in the art, not only of robbing the labourer, but of robbing the soil; all progress in increasing the fertility of the soil for a given time, is a progress towards ruining the lasting sources of that fertility.

- Karl Marx, Capital voll

Therefore, participation of women in economic development will eliminate the ills of capitalism and ensure nature-friendly economic development with equality. In India, the world's most populous country, women are on the one hand human resources for economic growth and on the other hand are helpful in environment-friendly sustainable economic development.

### **Women as human resource**

Economic development depends on two major resources, capital and labour. Human resources play an important role in the economic development of India, the world's most populous country. This human resource includes both men and women. But social and cultural ill-practices and historical stereotypes limited the role of women to only household chores and child rearing. For a long time, women remained away from the mainstream of economic development. The household work done by them is not counted in the national income. But at present, women are being seen as human resources for economic development. According to the World Bank, if the share of women in the workforce doubles, India's growth rate will increase from 7.5 percent to 9 percent and by 2025, the country's GDP will also increase to 700 billion US dollars. At present, there are 432 million women of working-age in India, out of which 343 million are employed in the unorganized sector. A report by McKinsey Global Institute has estimated that just by offering equal opportunities to women, India could add US\$ 770 billion to its GDP by 2025. At present, the participation of women in India's GDP is 17%, while in China it is 40% and globally it is 37%. Including women in the mainstream of economic development as human resources will not only promote economic growth but will also ensure inequality-free economic development. This will not only reduce rural poverty but will also reduce cases of women exploitation. It is worth mentioning that an important reason for exploitation and injustice towards women is women not being economically independent.

Therefore, participation of women in economic development as human resources will ensure "economic development with equality and social justice" which will be in accordance with the constitutional spirit of India.

### **Women and environment ecological conservation**

According to the United Nations, to achieve rapid and sustainable economic development, involving women in the production process will develop a sense of balance between human and earth's resources. Women have a multi-faceted role in environmental conservation and ecosystem protection. This role is more clearly seen in rural women than in urban women. In countries like India, women are engaged in farming, gardening, animal husbandry, fisheries etc. on a large scale. In India, as housewives, women have to take up responsibilities like collecting wood for fuel, arranging food, fodder, water. Hence, women are closer to the environment and ecosystem. Women are the primary consumers and managers of natural resources like land, forest, water. Due to their close relationship with nature, women are more affected by ecological disasters than men. This is the reason why their role has been prominent in movements against environmental degradation. Women have always played an important role in global environmental movements. In India, Chipko Movement, Narmada Bachao Andolan, Khejarli Movement etc, were run by women. In Indian civilization and culture, the subject of worship of women has mainly been things related to nature, such as Indian women have always worshipped Tulsi, Peepal, Banana etc. Considering the contribution of women in environmental protection, gender equality has been included in the 17 Sustainable Development Goals (SDG) by the United Nations (UNO). Climate research organization 'Project Drawdown' published a report in 2020. According to this report, global warming can be reduced to 2 degrees Celsius by empowering women and girls in developing countries. The Rio Declaration also recognizes that women have played an important role in environmental management and development. Efforts and policies for sustainable development have also provided new means of employment and livelihood to women. At present, many women are engaged in activities such as organic farming, making earthen pots, jute bags, leaf plates, agarbatti made from cow dung. The government is also making many efforts to encourage women's contribution in environmental protection, such as women have been given priority in environmental protection works under MNREGA. In the context of environmental friendly economic development, we can see the role of women in every economic sector, be it agriculture or industrial sector.

### **Sustainable Indian agriculture and women**

In our country, 70 percent of the population still lives in rural areas. More than 85 percent of rural families are dependent on agriculture for their livelihood. Today, the contribution of women in agriculture is 65 to 70 percent. According to the famous agricultural scientist Dr. Swaminathan, women were the ones who started farming in the world and scientific development in agriculture. In Indian society, it is often assumed that the primary work of women is household work, which includes cooking and child rearing. However, sometimes women have to come forward to handle farming related work as well. Women who do not have their own farms either do farming on

leased land or work as agricultural labourers in other's fields. This is the reason why women farmers and women labourers are found on a large scale in India. Rural women, along with working in the fields, also handle their household responsibilities. Therefore, women in rural areas have a double burden of work. According to the information collected in the Agriculture Census 2015-16, about 11.72% of the total cultivable land in the country is operated by female agricultural holders. According to Oxfam, about 75% of the full-time working women in India are farmers and this number is increasing as men are migrating to work in factories and construction sites. Agriculture in India employs about 80 percent of rural women. According to a research, in the Indian Himalayan region, a pair of oxen works 1064 hours, a man 1212 hours and a woman 3485 hours in a year on one hectare of land. According to NSS data, the number of men in agriculture has been continuously decreasing for the last three decades. This can be called the feminization of Indian agriculture. The more men are inclined towards non-agricultural sectors like industry and service sector, the more women's participation in agriculture will increase. According to former Irish President and UN Human Rights Commissioner Mary Robinson, the agriculture sector has the unique potential to empower women which is the need of the hour for Indian society and economy. Half of India's population depends on agriculture as the primary source of income. Therefore, empowering women in agriculture and providing them opportunities can bring a big change in Indian agriculture. Women involved in farming contribute in two ways towards nature-friendly and sustainable agricultural development-

1. Less use of chemicals and pesticides in traditional agriculture and economical and scientific use of irrigation.
2. Nature friendly and economically profitable farming through agricultural diversification.

In the agricultural work done by women, decisions related to irrigation, selection of seeds, fertilizers, pesticides etc. and management are taken by the women farmers themselves. Since women farmers are primarily housewives, they are well aware of the importance and utility of water. Therefore, they use irrigation water economically. For example, in 1999, a movement was organized by tribal women in Plachimada of Palakkad district of Kerala against the unwise use of water by the Coca-Cola multinational company. In fact, water crisis prevailed in this area due to the Coca-Cola company setting up its plant in this already water-scarce area. Along with this, the chemicals released by the Coca-Cola company made the surrounding land barren and the water sources poisonous. Women had to walk 8 to 10 miles to collect water. Children and pregnant mothers were forced to drink contaminated water. Ultimately, this movement of women was successful and the plant was closed. Like Chipko, women participated enthusiastically in the Plachimada movement. This movement clearly reflects women's dependence on nature. According to the United Nations, women play an important role in water, land conservation, rainwater harvesting and watershed management. According to the United Nations, studies of 45 developing countries show that in 76 percent of the houses, the primary responsibility of water collection lies with women and children. In 1992, the United Nations Conference on Environment and Development emphasized

the important role of women in the provision, management and conservation of water resources. In India, women have been collecting water from wells for centuries. For this, they had to travel long distances. Although the invention of tube wells and electric pumps has worked to solve this problem of women, even today women are well aware of the economical and scientific importance of water. Therefore, for the economical use of irrigation water in Indian agriculture, it is necessary that women farmers should be encouraged by the government and they should be given ownership rights on agricultural land.

A major problem of Indian agriculture is the use of excessive chemicals and pesticides in agriculture. According to the report of the Central Ministry of Chemicals and Fertilizers, in 1950-51, Indian farmers used only 7 lakh tons of chemical fertilizers, which has now increased manifold to 310 lakh tons. Out of this, 70 lakh tons are imported from abroad. Certainly, the use of chemical fertilizers has increased the production, but it has had serious adverse effects on the environment and ecosystem. This is the reason why the government is promoting the use of organic fertilizers like cow dung manure, compost manure, vermicompost, poultry manure etc. in place of chemical fertilizers and pesticides. Most of the women in India are engaged in child rearing and household work. Therefore, they are well acquainted with the household use of trees, plants and herbs. This fact also applies to the agricultural sector. Women are well acquainted with the ill effects of toxic chemicals and pesticides in the agricultural sector. Women are the first to feel any change in the environment and ecosystem, because they are very close to nature. For example, a movement was organized by women for environmental protection in Kasargod district of Kerala. This movement was against the chemical Endosulfan. A chemical pesticide Endosulfan was sprayed in cashew plantations by the Plantation Corporation of Kerala for 20 years. This not only had a serious impact on biodiversity but also led to the emergence of many new diseases among pregnant women and children. Along with their household chores, women play a major role in taking care of disabled and sick children in the family, which is a double burden for them. Hence, a massive movement was organized by women against the chemical Endosulfan under the leadership of Leela Kumari. Ultimately, the government banned the use of Endosulfan.

Women in India are not only involved in farming on a large scale but also do animal husbandry on a large scale. Globally, India ranks first in milk production, third in egg production and fifth in chicken production. Women play many roles in animal husbandry such as cleaning cattle sheds, caring for animals and milking them, collecting and storing fodder, cleaning milk vessels, etc. According to the Employment and Unemployment Survey of 2011-12, 12 million rural women were engaged in animal husbandry. Whereas according to the data of the National Time Use Survey in the year 2019, the number of women actually engaged in the livestock economy was four times more than the official estimate, i.e. about 48 million. The rapidly increasing demand for livestock products creates opportunities for women's empowerment. There are many opportunities available for women in the market from dairy products to animal waste. In the year 2015-16, there were five million women members in dairy cooperatives, which increased to 5.4 million in the year 2020-21. It is known that

in the year 2020-21, women accounted for 31% of all members of dairy producer cooperatives. The number of women dairy cooperatives in India has increased from 18,954 in the year 2012 to 32,092 in the year 2015-16. However, despite widespread participation in dairy cooperatives, the role of women in the livestock economy is not widely known nor is there any special discussion on it. Apart from dairy products, women are engaged in the production of cow dung and products made from it. Cow dung is used the most in the agricultural sector. Cow dung manure provides good growth to the crop. The cost of making manure from cow dung is very low and its consumption in the agricultural sector is very high. Women are manufacturing not only manure from cow dung but also many other useful products for daily life such as cow dung cakes, herbal incense sticks, paper, natural paint and putty etc. Therefore, in India, cow dung is not only providing employment to women on a large scale but the dream of sustainable agricultural development is also being realised. In India, along with animal husbandry, women also have an important role in poultry farming. This role starts from feeding and managing the birds and ends with the purchase of eggs and birds. Therefore, poultry is considered to be a woman's field which provides nutrition and income to the family. Similarly, women also play an important role in goat rearing in rural families.

#### **Sustainable industrial development and women**

According to a study by the National Sample Survey Organisation, 14% of businesses in India are run by women. These businesses include sectors such as textiles, cosmetics, healthcare and food and beverages. Companies such as Carmesi, Clan Earth, Ruby Organics which make organic, eco-friendly and sustainable products, are run by women in India. According to a research paper by the Indian Development Review, the Indian textile and apparel industry employs 45 million people, of which 60 per cent are women. A large part of women is also working in promoting the sustainable fashion industry. Through sustainable fashion, women are contributing to the efforts to ensure that both environment and fashion go hand in hand through their art. For some time now, there has been a tremendous increase in the production of clothes year after year. This increase has been seen to be almost double. Due to this, in the era of fast fashion, the fashion industry is also becoming a threat to the environment. This threat inspired the fashion industry to change, the alternative of which is in front of us in the form of sustainable fashion products. This step taken for environmental protection may be new for the market, but women have been working in this direction since the beginning. Sustainable fashion means to manufacture such clothes which have very little negative impact on the environment. In this, natural materials are used instead of chemicals and less waste is emitted from its manufacture. In simple terms, it is such fashion which is created, produced and distributed in such a way that there is no harm to the environment. These are long lasting fabrics and can be recycled. The concept of sustainable fashion market is still in its infancy in India but despite this, it is progressing very fast. If we look at our history, we come to know that women have always been working in the world of sustainable fashion. Handmade clothes and weaving of clothes is one of the 'women's professions'. This also includes small-cottage industries of Khadi and cotton, which

are compatible with the sustainable fashion industry. The work of hand embroidery is almost always assigned to domestic female workers. According to an article published in News on Air.com, 80 percent of the 4 lakh 90 thousand artisans of Khadi Village Industry are women. The market of sustainable fashion is constantly growing to reduce the threat of climate change looming over the earth. According to a report by the Times of India, many Indian designers and brands have taken steps towards sustainable development due to environmental issues. The sustainable fashion market in India is expected to grow at a CAGR (Compounded Annual Growth Rate) of 10.6% during 2021-2026. A report by Research and Markets states that the growth rate of the sustainable fashion market has increased due to consumer awareness, steps taken by the government and availability of raw materials. Through information technology, women are selling eco-friendly handicrafts and clothing at their own level under cottage industries. Small and cottage industries have been working towards sustainable products for a long time. Small industries are those industries in which manufacturing, production and services are produced on a small scale. These industries have always been promoting sustainable products. These industries produce eco-friendly and recyclable items. These industries often use local resources and have low emission levels. Their production process causes less harm to the environment. Women have always been associated with small and cottage industries. 20% of the total cottage industries in India are owned by women. 24% of the workers employed in small, cottage and medium enterprises are women. But women working in small and cottage industries are able to carry forward their work only to a limited level. Big companies easily drive small and cottage industries out of the market through advertising and marketing activities. Big companies are establishing their brands on the products of women who produce sustainable fashion in every household in a traditional way. These brands earn many times the profit. Whereas women working in these big industries get only a few percent of their hard work. In big industries, women are used as an alternative to cheap labor.

At present, social media has helped in increasing the contribution of women in the sustainable product industry. Through online marketing platforms like Amazon, Flipkart and social media, women are selling many small eco-friendly products. Such as household items made from coconut shells, handmade chemical-free soaps and shampoos, herbal gulal, products made from cow urine and cow dung, etc. After the ban on plastic, many women self-help groups are manufacturing jute bags, water bottles made from bamboo, leaf plates and bowls made from tree leaves, etc. Prerna Mahila Self-Help Group of Chhuri Kala in Korba district of Chhattisgarh is working in the field of environmental protection and is manufacturing leaf plates using mahul leaves as an alternative to plastic. Pashmina shawls handmade by Kashmiri women in Srinagar are famous all over the world. Many women run their household expenses by taking contracts for sewing, embroidery and weaving from factories. Such as making baskets, making mats, making hand fans made from leaves, etc. Recently during corona pandemic some women were making different types of designer masks at home. Jute handicrafts are the source of livelihood for thousands of women artisans in states like West Bengal, Assam and Bihar. Women living in coastal areas are making different

types of items from seashells like bangles, lockets, spoons, decorative items, statues etc. These products are popular not only in domestic market but also abroad.

### **Role of women in clean and green energy**

Women face energy-related problems in all household tasks, from cooking to household chores. According to a UN Women report, in households that cook with solid fuel, girls spend an average of 18 hours per week collecting fuel. Currently, to ensure environmentally friendly economic development, emphasis is being laid on such sources of energy that have minimal impact on the environment and ecosystem. Women are playing an important role in developing biogas plants, solar cookers/panels and other clean energy technologies under renewable energy policies in rural areas. Through government-implemented programs like Ujjwala Yojana, Solar Atta Chakki Yojana, Free Solar Chulha Yojana, etc., women are joining the clean and green energy mission on a large scale. Women are being trained by the government in this direction. In future, women can play an important role in producing clean energy at the local level. Since women in India are associated with agriculture, animal husbandry and cleanliness campaign on a large scale, women can play an important role in producing energy from agricultural waste, cow dung and garbage. According to the report of Down to earth. A 2018 global online survey titled Mapping the status of women in the global waste management sector conducted by Women of Waste (WOW), an initiative led by women in the waste sector and supported by the International Solid Waste Association, revealed that women contribute massively to the global waste management sector, in a variety of roles across the waste management hierarchy, and through a diversity of organisations, even though they are not very 'visible' in society. In his 'Mann Ki Baat program', the Prime Minister of India Narendra Modi talked about many such efforts of women where women have achieved significant success in producing energy from vegetable residues, animal waste, garbage, etc. Therefore, it is clear that by connecting women with Clean and Green Energy Mission, economic development can be made possible with clean and sustainable energy sources.

### **Government Efforts**

In India, the 73<sup>rd</sup> and 74<sup>th</sup> Amendment Acts have given 33% reservation to women in local decision making bodies in both rural and urban areas. Women members have been made compulsory in Panchayats, Forest Protection Committees, Water User Associations. Women's Self Help Groups (SHGs) spread across the country provide a big platform for implementing policies on environment. The National Forest Policy 1988 and the Joint Forest Management (JFM) program implemented in the 1990s have made it mandatory to include 33% women members in the Forest Protection Committees. Through MNREGA, women have been involved in works related to environmental protection like production of cow dung manure and vermicompost, water conservation, drought prevention etc. It is worth mentioning that women have been given 33 percent reservation in the works done under MNREGA. In 2013, the government launched the National Rural Livelihood Mission, which provides for reducing poverty among rural women by forming women's self-help groups. Under this mission, many women's self-help groups

have started environmentally friendly businesses such as poultry farming, dairy, jute bag making, pottery making. In Uttar Pradesh, under the National Rural Livelihood Mission, many women's self-help groups are manufacturing reusable environmentally friendly sanitary pads. To increase the income of rural women associated with self-help groups by linking them to self-employment, the Uttar Pradesh State Rural Livelihood Mission has now planned organic farming. Under this, 20400 women farmers are being linked to organic farming. Along with training these women in organic farming, the product produced by them will also be provided a market. Chhattisgarh State Government has launched 'Mahatma Gandhi Rural Industrial Park Scheme' for industrial development in rural areas and has planned to build 300 rural industrial parks in various districts of the state. Units for processing of vermicompost, poultry, goat rearing, agricultural and horticultural crops and minor forest produce are being set up in these industrial parks. This is providing employment and good means of income to a large number of women and youth of self-help groups in rural areas. This is not only increasing the participation of women in economic development but is also paving the way for environment-friendly economic development. Eco-friendly rakhis are being sold by TRIFED, an autonomous organization of the Ministry of Tribal Affairs. These rakhis are available at TRIFED retail stores, all branches of Tribes India and the web portal of the Ministry as well as e-commerce portals like Amazon, Snapdeal, Pay-TM and Flipkart. Apart from rakhis, special traditional apparels are also being sold on these e-commerce portals on the occasion of Raksha Bandhan. These rakhis have been made by Sahriya tribal women of Orchha in Madhya Pradesh. Tulsi and marigold seeds have been used in these. Women are being linked to bamboo cultivation through the 'Deendayal Antyodaya Yojana' implemented by the government. The scheme aims to empower 10 lakh rural women as 'Lakhpati Didi' (women earning more than Rs 100,000 in a year) through bamboo cultivation, thereby promoting economic independence and sustainable development across the country. The Swachh Bharat Mission launched in 2014 has seen large-scale participation of women. Under the Swachh Bharat Mission, women are playing an important role in the construction of toilets, solid and liquid waste management, water conservation, community sanitation, etc. In this context, women self-help groups have been formed in many states such as 'Swachhata Kitty Group' of 60 women in Madhya Pradesh, 'Mission Shakti Group' of 60 lakh women in Odisha, 'Vaini Sena (Army of Sisters)' of Uttarakhand, 'Waste to Compost' self-help group of Shillong, etc. Under the Swachh Bharat Mission, the government has employed more than 8 lakh sanitation workers on honorarium basis, which mainly comprise women. The industry has also taken several steps to involve women in the cleanliness campaign, such as the 'India Sanitation Coalition' started by FICCI has helped in connecting self-help groups run by women for sanitation needs with micro-finance facilities.

### **Suggestion**

Political, economic and social empowerment of women is essential for rapid and sustainable economic development so that women can get adequate representation in the policies and decision making process related to environmental and development issues at local, national and international levels. First of all, emphasis should be laid on education,

training and skills of women so that they can actively participate in the process of economic development. Along with this, the government will also have to take many steps at the policy level. For example, the facilities and subsidies given by the government in the agricultural sector should be focused on women farmers. Women farmers usually do not get this type of subsidy because they do not have ownership rights over the land. It is noteworthy that despite having a large number of women farmers in India, only 9% of the land is controlled by women, while 60% of women do not have any valuable property like land or housing in their name. Therefore, it is also necessary that they be given ownership rights on agricultural land. India has a large number of women farmers, but most of the women are unable to adopt new technologies and take advantage of modern scientific methods and attend formal training courses. They remain entangled in their household responsibilities. Therefore, it is necessary that the government should provide training in modern agricultural technology to women farmers. Under the industrial sector, micro, small and medium enterprises run by women should be provided adequate government support. Today, India is the third largest ecosystem in terms of startups in the world and also the third largest ecosystem in the unicorn community. However, only 10% of them are led by women founders. The need of the hour is to mobilize more support for women entrepreneurs mentally and financially and help them start their journey. The government should identify some areas in the economy where environmental protection can be ensured along with economic growth. For example, forestry is an enterprise which includes activities like plantation, care of plantation, collection of forest produce etc. By taking the help of women in these activities, not only employment can be generated for women but the environment can also be cleaned. Women should be given priority in the government programs related to forest conservation and water conservation etc.

### Conclusion

In conclusion, women have an important role in the future sustainable economic development of India. This role is seen in two forms, first as human resources in economic development and second as making economic development sustainable and environment friendly. In the last few years, women's participation in economic activities has increased, women today are not limited to only household chores. Due to the migration of men from rural areas to cities and the increasing participation of men in the development of industry and service sector, women's participation in agriculture has increased. Since women have more connection with nature and ecosystem, they can make a significant contribution to sustainable agriculture. Women's participation is increasing not only in agriculture but also in industrial and other business activities. Women in India are achieving new heights every day. Despite social and family exclusion, women have claimed their right to economic independence and have set up such businesses which are in line with the timely sustainable, economic and industrial development. Currently, organic products are being produced in many micro and small industries run by women. Many of these products are also being exported abroad. The government system is also involving women in environment-friendly economic activities through schemes like National Rural Livelihood Mission, Deendayal

Antyodaya Yojana, Mahatma Gandhi Rural Industrial Park Scheme, MNREGA, Swachh Bharat Mission etc. There are many self-help groups of women supported by the government which are engaged in the production of environment-friendly products. The government is providing financial assistance to many such startups run by women which are not only related to women's skills and abilities but are also related to environment-ecology friendly business activities. Providing reservation to women in Panchayats has increased the involvement of women in government economic policies. In the coming time, the government plans to promote clean and green energy in place of traditional and fossil fuels. Women can play an important role in this. Women have always been playing an important role in energy management at the local level. In India, women have an important role in producing energy from cow dung, agricultural waste and garbage. In recent years, women are being trained by the government for solar energy production. Therefore, it is clear that in order to realize the dream of a developed India and to promote sustainable economic development in the future, it is necessary to connect women with the mainstream of economic development. For this, it is necessary that both men and women be given equal economic rights and women should be given special attention in economic policies.

### References

1. The Food and Agriculture Organization of the United Nations. The role of women in agriculture. Agricultural Development Economics Division (ESA) Working Paper No. 11-02; c2011.
2. Neumayer E, Plümper T. The gendered nature of natural disasters: The impact of catastrophic events on the gender gap in life expectancy, 1981–2002. *Ann Assoc Am Geogr.* 2007;97(3):551-566. DOI:10.1111/j.1467-8306.2007.00563.x.
3. Mago P, Gunwal I. Role of women in environment conservation [Internet]; c2019. Available from: <https://ssrn.com/abstract=3368066>. DOI:10.2139/ssrn.3368066.
4. International Union for Conservation of Nature (IUCN). Gender and the environment: What are the barriers to gender equality in sustainable ecosystem management? [Internet]; c2020. Available from: <https://www.iucn.org/news/gender/202001/gender-and-environment-what-are-barriers-gender-equality-sustainable-ecosystem-management>. Accessed December 18, 2022.
5. Boserup E, Kanji N, Su Fei Tan, Toulmin C. Woman's role in economic development [Internet]; c2007. DOI:10.4324/9781315065892.
6. Jain S. Women and people's ecological movement: A case study of women's role in the Chipko movement in Uttar Pradesh. *Econ Polit Wkly.* 1984;19(41):1788-1794.
7. United Nations Conference on Environment and Development (UNCED). Rio de Janeiro, Brazil, 3-14 June 1992, Conferences Environment and Sustainable Development. Available from: <https://www.un.org/en/conferences/environment/rio1992>. Accessed November 16, 2022.
8. United Nations Climate Change. Five reasons why climate action needs women [Internet]; c2023. Available from: <https://unfccc.int/news/five-reasons->

- why-climate-action-needs-women.
9. United Nations Climate Action. Why women are key to climate action [Internet]. Available from: <https://www.un.org/en/climatechange/science/climate-issues/women>.
  10. UN Women. Women and the environment: An Asia-Pacific snapshot.
  11. Lal Bahadur Shastri Research Centre for Public Policy and Social Change (LBSRC). Report of National Seminar on Role of Women in Environmental Sustainability. Sponsored by National Commission for Women. Lal Bahadur Shastri Institute of Management (LBSIM), New Delhi.
  12. UN Women. Women and the Sustainable Development Goals (SDGs) [Internet]. Available from: <https://www.unwomen.org/en/news/in-focus/women-and-the-sdgs>.
  13. Confederation of Indian Industry. The role of women in India's economic growth [Internet]. Available from: <https://ciiblog.in/the-role-of-women-in-indias-economic-growth-story/>.
  14. Siddiqua A. Advancing women's role in India's economic progress. Observer Research Foundation. 2023 Oct 5.
  15. Ogunbiyi D. Gender equality as the plank of sustainable development. The Hindu [Internet]. 2024 Mar 9. Available from: <https://www.thehindu.com/opinion/op-ed/gender-equality-as-the-plank-of-sustainable-development/article67929769.ece>.
  16. Integral role of women in waste management [Internet]. Down to Earth. Available from: <https://www.downtoearth.org.in/waste/integral-role-of-women-in-waste-management-93886>.
  17. अक्षय ऊर्जा में महिला सशक्तिकरण. नवीन और नवीकरणीय ऊर्जा मंत्रालय, भारत सरकार।
  18. UN Women. SDG 7: Ensure access to affordable, reliable, sustainable, and modern energy for all [Internet]. Available from: <https://www.unwomen.org/en/news/in-focus/women-and-the-sdgs/sdg-7-affordable-clean-energy>.
  19. शहरी स्वच्छता को सशक्त बनाती 'नारी शक्ति'. आवासन एवं शहरी कार्य मंत्रालय, भारत सरकार [Internet]. Available from: <https://sbmurban.org/naari-shakti-swachhata>.
  20. Government of India. Annual report to the people on employment. Ministry of Labour and Employment. New Delhi; c2010.
  21. Shrivastava K. Role of women empowerment in economic growth in India. Int J Recent Trends Eng Res. 2016;2(11):177-179.
  22. Gupta R, Gupta BK. Role of women in economic development. Yojana. 1987;31(18):28-32.
  23. विश्वनाथन वृंदा, शर्मा संजना. समावेशी विकास और महिलाएं. योजना, सूचना एवं प्रसारण मंत्रालय, भारत सरकार. अक्टूबर 2018.
  24. Gopinath G. Women's economic empowerment and inclusive global economic growth: COVID-19 and beyond. Keynote Speech at the Inaugural Dr. Hansa Mehta Lecture. International Monetary Fund; c2021 Mar 8.
  25. Jhabvala R, Pandey S, Mohanty S, Dey N, Rahut DB, Seetha Ram KE. Women's economic empowerment as a pathway toward sustainable and inclusive development in India. Policy Brief, Sewa Bharat. Asian Development Bank; c2023 Oct.
  26. Duflo E. Women empowerment and economic development. J Econ Lit. 2012;50(4):1051-1079.
  27. Government of India. Annual report 2021-2022. Ministry of Micro, Small and Medium Enterprises.
  28. Ministry of Micro, Small and Medium Enterprises, Government of India. MSMEs are engines of our economy to achieve sustainable development [Internet]. Available from: <https://msme.gov.in/msmes-are-engines-our-economy-achieve-sustainable-development>.
  29. राय वीके. रसायनिक उर्वरकों के प्रयोग से बंजर हो रही जमीन. दैनिक जागरण [Internet]. 2015 नवम्बर 28. Available from: <https://www.jagran.com/bihar/katihar-13225960.html>.
  30. Mani KAS. Water conserving groundwater: Role of women crucial in bringing about significant change. Down to Earth [Internet]; c2021 Aug 30. Available from: <https://www.downtoearth.org.in/water/conserving-groundwater-role-of-women-crucial-in-bringing-about-significant-change-78711>.
  31. International Commission on Irrigation & Drainage. Webinar on empowerment and capacity development of women in water resources management [Internet]; c2023 May 3. Available from: [https://icid-ciid.org/inner\\_page/234](https://icid-ciid.org/inner_page/234).
  32. Njie NI, Ndiaye T. Women and agricultural water resource management. UN Chronicle; c2013 Apr;50(1). Available from: <https://www.un.org/en/chronicle/article/women-and-agricultural-water-resource-management>.
  33. The Economic Times. India's 'invisible' women hope for recognition at farmers protests. Available from: [https://economictimes.indiatimes.com/news/politics-and-nation/indias-invisible-women-hope-for-recognition-at-farmers-protests/articleshow/79764673.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](https://economictimes.indiatimes.com/news/politics-and-nation/indias-invisible-women-hope-for-recognition-at-farmers-protests/articleshow/79764673.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst).