The COVID-19 pandemic is one of the worst episodes ever faced by humankind during the last hundred years or so. Its impact on humans has threatened the existing social system, which in turn affects sustainable development of the society. India and the world today have been facing daunting challenges of managing natural hazards and climate change. As we are navigating ways to recover from this health disaster and build a resilient society, there is an opportunity to address issues of sustainable development. Foundations of building such a society must be based on bringing women to the forefront of decision-making and implementing new structural solutions. In what follows, we argue that the efforts to mitigate climate change and inequality have to consider women empowerment as the central agenda, failing which either aspect of sustainability cannot be achieved.

During the last two centuries or so, after the Industrial Revolution, we have seen that humans and social systems have significantly affected our environment and have become major drivers influencing the earth system. The earth system processes, especially carbon cycle and ocean acidification, sea-level changes, loss of biodiversity and modern agriculture-induced pollution of reactive nitrogen and phosphorus, have reached levels that have started affecting the earth system. The economic growth and technological advancement have led to environmental degradation and North–South and digital divides. Such inequalities in the social system affect human beings and ultimately sustainability.

The Brundtland report (1987) provided a basic framework for sustainability and is widely accepted among policy makers. According to the report, it “is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. This concept has been well-articulated in the Isha Upanishads, written about 3000 years ago, as well. It is mentioned that “While enjoying the fruits of creation, one should not covet for other’s possessions; one should partake the means of livelihood to the minimum and conserve the resources available in the universe for others to meet their requirements”. The social transformation of India after independence, especially after the Green Revolution in the sixties and liberalization of the economy in the nineties, were catalyst for improvement in the socio-economic conditions of the large majority, though poverty is yet to be completely eliminated. The pandemic has also exposed the need for improvement in health infrastructure in the country. The challenges of inequality, may be of gender, education or income, demand understanding of requirement of livelihood, social justice and environmental sustainability.

Addressing the impediments to sustainability

The buildling of effective resilience to natural hazards and climate change needs to be addressed at the three levels of the system – (i) global or earth system, (ii) social system or infrastructure, industry and governance structure, and (iii) human system or physical and emotional health of people and inequality in the social system. In order to support science-based risk management decisions, as well as investments in early warning systems, information is required, apart from earth system processes, on exposures and vulnerabilities of the population, and assets (e.g. agricultural production, infrastructure and homes, etc.), and socio-economic data that quantify exposure and vulnerability (for instance, casualties, migration, unemployment, crop yield reduction and water shortages). We need innovative ways to harness information to provide useful insights into predictions and impacts on society for sustainable development.

The distribution of resources in a just and fair way has to consider their historical access and consumption by the developed countries. Considering that India has diverse culture, a young population and socio-economic inequality, we require a policy for sustainable development which is based on our needs. It should focus specifically on women who are at the bottom of the ladder. The question is how we can preserve our ecosystems and environment and at the same time ensure improved quality of life of a large population. We also need to answer the question on what is more important, the well-being of present and future generations or that of all plant and animal species including humans, whether meeting sustainable development goals is sufficient or fulfills our obligation to all living beings. It is imperative that the requirements of the historically marginalized are a priority. It should have a strong bearing on the how goods and services yielded are to be distributed between the poor and rich, or the developing and developed countries. For this, demography, resource conservation and socio-economic conditions are to be structured in such a way that the gender and income equity are ensured. We also need to factor changing needs of human beings which is dynamic, while society is in transformation mode.

Women and sustainability

Gender equality is fifth among the 17 Sustainable Development Goals (SDGs). However, achieving it is also crucial to achieving other SDGs. Women are not just more severely affected by the challenges of sustainability and development, but they are also major agents of positive change in achieving sustainability. Women are at a disadvantage when it comes to receiving the benefits of development like unequal pay, access to health and education facilities. They are also more likely to be affected by natural calamities and disasters because often they have less or no income, and no land rights. In many households around the world, women are the decision-makers regarding water intake and consumption, food choices and processing, and domestic energy utilization. Therefore, the solutions to sustainable changes in lifestyle largely lie with women. Thus, if brought to the forefront of decision making for sustainable development and climate change related mitigation, women can lead transformative changes in society.

As one could predict the consequences of unequal social structure, the COVID-19 pandemic had compounded the existing gender inequality. The economic vulnerability coupled with unequal resource allocation has negatively impacted women.
The increase in unpaid care work and restriction on movements has increased the chances of domestic violence against women. All these conditions are accentuated in social structures with existing inequalities and discrimination. Thus, we must move towards not just a better health structure, but also a more equal social structure which will be resilient to future crisis. This is important not just because it caters to equal distribution of resources, but also because stronger and empowered women are the axis of social recovery from a crisis.

The potentials and solutions

In the last few years we have seen women in the forefront of diverse and inclusive movements for social change, both on the streets and in social media. Notable among many issues where women provided leadership are the stand taken against climate change, environment, air pollution or green economy, all pillars of sustainable development. However, these are mostly exceptions and only a handful. We need more concerted efforts to harness the power of women leaders by providing equal access to education, healthcare, decent work and representation in political and economic decision-making processes, for an equal, inclusive and sustainable future.

To build a just and equitable society women empowerment has to start with educating and creating opportunities for them in leadership roles. An education system that produces women scholars and leaders who can recognize and appreciate changes in earth, social and human systems and advocate a path of sustainability is needed to meet the SDGs. We must enhance our capability for education at the regional, national, institutional and individual levels. Equal access to the entire population to all levels of education is vital for inclusiveness. Human behaviour largely depends upon their ability to respond to a given situation, which is shaped by form and quality of education and socialization. A structured process of learning of inclusive education, is an essential requirement of creating a sustainable society. Ultimately balancing the agenda of protection of the environment, inclusive development will rest on building a new kind of leadership which is inclusive of women from all layers of society.

The education policy makers in India have been taking note of gender inequality. The National Education Policy 2020 (NEP 2020) has also recognized it and provided impetus to address sustainability as a part of education. Moving forward we need to actualize the centrality of women in achieving sustainability, by redefining our institutions to meet these prospects. It is imperative that this centrality must be reinforced through policies and penetrate through all forms of institution along with being cultivated amongst children and youth through education.


Shailesh Nayak* and Shalini Dixit are in the National Institute of Advanced Studies, Indian Institute of Science Campus, Bengaluru 560 012, India.
*e-mail: shailesh@nias.res.in