

LEX TERRA

Center for Environmental Law, Advocacy and Research
National Law University and Judicial Academy, Assam

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SPECIAL ISSUE ON CLIMATE CHANGE AND SUSTAINABILITY

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ABOUT CELAR

The fundamental aim of the Centre for Environmental Law, Advocacy, and Research (CELAR), National Law University and Judicial Academy, Assam, is to participate in advocacy and research on public interest environmental concerns. It endeavours to do so by holding workshops and seminars to educate and improve skills, convening conferences to encourage an exchange of ideas, conducting training programmes for capacity building in environmental law issues, undertaking legal research, and publishing newsletters and journals regularly.

The main objectives of CELAR can be elucidated as follows:

- Providing students with hands-on advocacy experience and direct exposure to the issues to inspire and educate them.
- Strengthen access to justice by conducting high-quality multi-disciplinary research on current environmental legal issues.
- Advocate for reforms in environmental law through scientifically sound legislative proposals.
- Organize training programmes for civil servants, law enforcement agencies, non-governmental organisations, and media professionals to improve their legal capacity on environmental laws and policy.
- Publish environmental law publications and bulletins on a regular basis.

Thus, to meet the last objective, Lex Terra is an initiative undertaken by CELAR. Through Lex Terra, we strive to provide a voice to various aspects of the environment, published every month, to create a community of environmentally conscious individuals from the legal and non-legal fraternity. Each issue of Lex Terra features important environmental news from across the world and from within the nation. This bulletin is meticulously compiled by CELAR members dedicated enviro-legal enthusiasts.

MESSAGE FROM THE CHIEF MENTOR

It is, unfortunately, true that inadvertently, we humans are responsible for the deterioration of this planet without recognising the negative consequences of minor things we do to contribute towards its dilapidation. Education and awareness generation can be one of the positive moves to fix the irreparable damage that we have done to our Mother Nature, and in furtherance to such moves, we as a legal institution, are continuously striving to bring environment related news and views for several environmentally sentient readers.

In this context, it delights me to note that the Centre for Environmental Law, Advocacy and Research (CELAR), National Law University and Judicial Academy Assam, is releasing a new issue of its webzine, 'Lex Terra'. Lex Terra aims to be an e-forum that involves, promotes and engages students, scholars and anyone interested in environmental law, to express and share their opinions and ideas. It is our fervent expectation that this webzine will keep providing an academic forum to bring all ecologically conscious minds together to deliberate on environment related developmental decisions.

I congratulate the entire team of CELAR for bringing out this webzine which justifies one of the significant mandates of National Law University and Judicial Academy, i.e., rendering a socially relevant legal education. I appreciate the efforts made by the student editors and peer reviewers in bringing out this webzine. I also bring on record the constant guidance being provided by CELAR teacher members to the students.

I am certain that this modest endeavour of CELAR will continue to stimulate and proliferate enviro-legal awareness.

**Prof. (Dr.) V.K. Ahuja,
Vice-Chancellor, NLUJAA**

EDITORIAL

As climate change will inevitably continue to affect humanity, a key priority of national and global institutions must be to safeguard the rights of those whose lives are most adversely affected by the phenomenon. These rights include, inter alia, the right to food, health and shelter. An examination of the existing laws and policies in place, thus, is critical in understanding the dynamics of climate change and sustainable development. It is pertinent to note that one of the universal principles of the 2030 Agenda for Sustainable Development revolves around the vision of “leaving no one behind”. With this core objective, the Lex Terra Editorial Board is pleased to present the 36th Issue, which features thought-provoking articles on a variety of contemporary issues vis-à-vis Climate Change and Sustainability.

Anusrita Ranjan, in the first piece, very efficiently discusses climate refugees and the need to protect them. She, in her paper, weighs up the risks of rapidly growing climate change and displacement of people in the form of climate refugees. She has emphasised how the problem regarding climate refugees and migration has become so widespread that it seems only suitable and practical to take a more functional and productive approach to ensure better results. She firmly believes that protecting climate refugees needs to be taken up by international bodies and should be considered a global responsibility, as there are affected people worldwide—mainly because climate change has resulted from human activities globally. She points out that the lack of protection and immunities of climate refugees stems from a lack of proper definition of climate refugees; why there is no plan to manage the overflow of climate migrants.

The second article for this issue by Krati Singhai discusses the intricate relationship between menstrual hygiene and environmental hazards. She brings to light the environmental impacts of incessant use of unsustainable and non-biodegradable sanitary products. She elaborately discusses the pertinent issue relating to disposal mechanisms of these products in a safe and environment-friendly manner. The author makes a case for sustainable menstruation, i.e., biodegradable sanitary products such as cotton pads and menstrual cups, while also addressing the socio-cultural and socio-economic sensitivities surrounding the topic. She firmly believes

that while providing sanitary products to women through various institutions, the government should also highlight the health and environmental concerns associated with its use. It will enable all women to make informed choices and pick the one option that suits them the best.

The next piece by Dr. Payal Jain discusses the relationship between Sustainable Development Goals and COVID-19. She highlights the crisis of COVID-19 in developed and developing nations and how climate changes affect infectious diseases amongst people. She brings to light the global poverty rates along with disparities and deprivation seen in the use of water and sanitation, which poses a significant challenge to the goal to eradicate poverty by 2030. The author elaborately discusses the government's approach through various large scale programmes to reduce the misuse of natural resources and rehabilitation of indigenous populations who are environmentally degraded. She strongly believes that there is an urgent need for the involvement of technology in the changing scenario to provide new goods and services from the top to the bottom. It brings forth the notion that scientific and technological knowledge should be harnessed appropriately to develop science advisory ecosystems globally and take practical steps to accomplish the SDGs.

Authored by Priyanshi Raj Mishra and Chetna Gupta, the fourth paper critically analyses the Millennium Development Goals (MDGs) vis-à-vis their limitations. They illustrate the current state of each goal and how progress has been incongruent despite great strides toward achieving the MDGs. They bring to the light that due to the economic growth in the agricultural sector, India managed to curtail its poverty rate by 50% in the mid-2000s. The paper also emphasises that progress in resolving issues is still required, notwithstanding the implementation of Article 21A of the Constitution and numerous education strategies. The paper states that India was able to eliminate gender disparities in the education sector with the support of government programmes. The authors go into great detail about the government's programmes and policies that have helped India achieve other goals such as reducing child mortality, improving maternal health, amongst other sectors.

It has been a learning and fruitful experience working on the 36th Issue, and we hope to keep contributing to the field of Environmental Law with this and the forthcoming issues of Lex Terra. We would like to thank Dr. Chiradeep Basak, Assistant Professor of Law, NLUJAA, for his assistance and encouragement at every step, which helped us complete this edition of Lex Terra. Mere words cannot do

justice to exclaim how grateful we are to him. The Editorial Board is also grateful to the peer reviewers who have taken out the time from their busy schedules to select the articles for this issue. We would like to express our gratitude to the Honourable Vice-Chancellor of NLUJAA, Prof. (Dr.) V.K. Ahuja for his keen interest and guidance, which made this issue of the webzine possible. Lastly, we thank the esteemed Registrar of NLUJAA, Dr. Indranoshee Das, for her continuous support throughout this endeavour.

Thank you.

Lex Terra Editorial Board
2021 - 2022

CLIMATE REFUGEES: THE NEED FOR PROTECTION, LEGISLATION AND CHANGE

Anusrita Ranjan*

Climate change is one of the most talked-about issues worldwide, and reasonably so. We have all been hearing enough about the perils of climate change and there is constant research being done to reduce the immense and far-reaching effects. However, it is no longer a distant threat; it is here, and we are all facing the consequences of it, some more than others. Climate change is not just limited to the degradation of our environment, it has widespread social, political, economic effects all around the globe. This paper focuses on the people who are the most deeply affected by the intense effects of climate change, the climate refugees. The paper also aims to shed light on how little international protection and legislation there really is, despite their fates constantly growing darker.

I. Who are Climate Refugees?

As the world grows warmer, with fears of the devastating impact of climate change constantly rising, the displacement of certain vulnerable populations is creating a new class of people, called the climate refugees.¹ Although there is no official international definition of who qualifies as a 'climate refugee', the term refers to people who are forced to leave their homes due to unforeseen or long-term deterioration of their environments, which can compromise their livelihoods and even their lives. Climate refugees may have to leave their own country or migrate internally within their own country.²

Climate migration is usually caused due to the most horrifying circumstances, it can be because of drought, famine, earthquakes, amongst many other catastrophes. What is worse is that the communities most deeply impacted by the consequences of climate change play the smallest role in contributing to the problem of climate change. It is always the bigger, developed countries that have been the largest greenhouse gas emitters. Due to uncertain financial conditions, huge portions of society in developing nations are prone to living in more dangerous

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¹ François Gemenne, *One Good Reason to Speak of 'Climate Refugees'*, FORCED MIGR. REV., May 2015, at 70, 70-71.

² Sujatha Byravan & Sudhir Chella Rajan, *Before the Flood*, THE NEW YORK TIMES (May 9, 2005), <https://www.nytimes.com/2005/05/09/opinion/before-the-flood.html>.

situations, such as along coastlines, steep hills, and flood-prone locations.³ A report by the World Bank has projected that 143 million people in Sub-Saharan Africa, South Asia, and Latin America, three of the most vulnerable regions, could be forced to move by 2050, due to the disastrous impacts of climate change.⁴

The issue of climate migration is clearly felt by people all over the world. Closer to home, climate change has already shown its horrific effects on the Sunderbans in India. In the last 30 years, over 80 km² of the forest has disappeared, with sea levels rising at 3.14 cm per year, much higher than the global average of 2 mm. It was predicted that around 70,000 people living in the Sunderbans would be considered homeless by 2020.⁵ Most climate migration is caused due to changing sea levels.⁶ However, displacement of people cannot simply be attributed to factors as straightforward as the melting of glaciers or the rising sea levels. As disputed as the cause may be, most authorities on the subject agree on a single trend: in this century, global warming may force millions of people—mainly in Asia and Africa—to leave their homes and migrate to other places.⁷ The ramifications of climate change on the movement of people, voluntarily or involuntarily, might not be easy to predict because each region will go through different changes “because of the variable coping capacities of the local, social, political and economic structures”.⁸ If stringent action is not planned and taken, climate change will cause large scale migrations of individuals and families from their home countries or even worse, mass extinctions of populations that could not find refuge from their debilitating conditions, in the years to come.

II. Why is “Refugee” Contested?

The concept of climate refugee is relatively new, in contrast to the traditional meaning associated with a refugee. The word “refugee” brings in a very different political aspect that might be the reason for the lack of legislation protecting them. International refugee law is

³ *Climate Refugees*, 44(1) EPW 7, 7(2009).

⁴ Kanta Kumari Rigaud et al., *Groundswell: Preparing for Internal Climate Migration*, (Washington DC: World Bank 2018), available from <https://openknowledge.worldbank.org/handle/10986/29461>.

⁵ *Supra* note 2

⁶ John Podesta, *The Climate Crisis, Migration and Refugees*, THE BROOKINGS INSTITUTION (July 25, 2019), <https://www.brookings.edu/research/the-climate-crisis-migration-and-refugees/>.

⁷ Frank Biermann & Ingrid Boas., *Protecting Climate Refugees: The Case for a Global*, 50(6) ENVIRON SCI POLICY 8, 13 (2008).

⁸ Camillo Boano, et al, *Environmentally Displaced People: Understanding The linkages between Environmental Change, Livelihoods and Forced Migration*, REFUGEE STUDIES CENTRE (November 2008), <https://www.rsc.ox.ac.uk/files/files-1/pb1-environmentally-displaced-people-2008.pdf>.

already a precarious subject. The Refugee Convention has prescribed a very limited definition of who can be granted refugee status to get asylum in another country, with a narrow legal interpretation. There are two main criteria of who can be defined as a refugee: there has to be a “well-founded fear of being persecuted”⁹ and the reasons for being persecuted only include “race, religion, nationality, membership of a particular social group or political opinion.”¹⁰ When the Refugee Convention was implemented in 1951, the world was still reeling from the aftermath of World War II and climate change was not a priority. However, the world is completely different today, climate change is only getting worse, but the Convention has still not seen any amendments. Meetings, protocols, and amendments have all been proposed to include climate refugees but to no avail. There is still no provision for a refugee created by environmental disasters, despite the staggering rate at which climate refugees are being created.

Legal scholars and academicians criticize the idea that those forced to move due to environmental disasters cannot be deemed refugees as the conventional definition does not apply to them.¹¹ Another school of thought believes that granting climate refugees the refugee status under the Convention would create widespread havoc due to the sheer magnitude of the environmental issue. It would be incredibly difficult to include climate refugees under the same umbrella as other refugees, given that in the days to come, the magnitude of climate refugees will grow manifold. The expansion of the refugee definition to include climate refugees might cause a potential devaluation of the protection given to other refugees.¹² Amidst the continuous debate of whether climate refugees should be granted refugee status, there is still no refuge or protection being extended to them. Irrespective of their current status as refugees, the predicament of the already displaced class of people and the ones who will have to move in the near future should not be ignored.

III. Is There any Adequate Protection?

The ambiguity attached to who is considered a climate refugee is probably why there is still no specific definition. The lack of a proper definition is just a precursor as to why there is no plan to manage the overflow of climate migrants either. Apart from physical environmental

⁹ Convention relating to the Status of Refugees, 189 U.N.T.S. 150, entered into force April 22, 1954, United Nations. 1951,

¹⁰ *Ibid.*

¹¹ Aurelie Lopez, *The Protection of Environmentally-Displaced Persons in International Law*, 37(2) ENV. LAW 365, 369 (2007).

¹² David Keane, *The Environmental Causes and Consequences of Migration: A Search for the Meaning of 'Environmental Refugees*, 16 GEORGET. ENVIRON. LAW. REV. 209, 217 (2004).

consequences, climate change has an immense impact on the social and human rights of people all over the world, especially those who have been displaced. Over the years, climate refugees have received little to no attention regarding concerns over their human rights. The connection between climate refugees and their rights was only prominently discussed in 2005.¹³ “The Inuit people of Alaska and Canada argued that the adverse impact on wildlife from climate change, and changes in the location and health of plant and animal species, violates their fundamental human rights to life, property”.¹⁴ Although this did not receive any legal recognition, it did spark a vital discussion on the link between human rights and climate change.

IV. What Should the International Bodies Do?

As mentioned before, developing countries are the ones who face the most dramatic and destructive effects of climate change.¹⁵ These countries already have compromised rights, with the least protection. These countries will be less likely to have the resources to prepare their citizens for the disastrous repercussions of climate change. It puts them at a disadvantage as they cannot efficiently lobby for better governmental or international action.¹⁶ This highlights the vicious circle in which poor countries find themselves: lack of access to better resources, inadequate protection of rights and defencelessness in the face of environmental disaster.

Attention must be brought to the plight of these developing nations being ravaged by environmental factors on an international stage. One of the main reasons for the lack of recognition of their social and human rights could be due to the fact that climate change and human rights have always been governed separately by different international bodies. For example, the United Nations Framework Convention on Climate Change (UNFCCC)¹⁷ oversees the environment and climate change while the International Covenant on Economic, Social and Cultural Rights (ICESCR)¹⁸ works for human rights. Only recently has there been

¹³ Agnieszka Szpak, *Arctic Athabaskan Council's petition to the Inter-American Commission on human rights and climate change—business as usual or a breakthrough?*, 162 CLIMATIC CHANGE 1575, 1589 (2020).

¹⁴ *Ibid.*

¹⁵ Fulco Ludwig et al, *Climate change impacts on Developing Countries - EU Accountability*, EUROPEAN PARLIAMENT, (November 21, 2007), [https://www.europarl.europa.eu/RegData/etudes/etudes/join/2007/393511/IPOL-ENVI_ET\(2007\)393511_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/etudes/join/2007/393511/IPOL-ENVI_ET(2007)393511_EN.pdf).

¹⁶ *Supra* note 8

¹⁷ United Nations Framework Convention on Climate Change, May 9, 1992, 1771 U.N.T.S. 107.

¹⁸ United Nations Office of the High Commissioner for Human Rights, 1966, International Covenant on Economic, Social, and Cultural Rights.

any acknowledgement of a clear causal link between climate change and human rights, although there is still a lack of legal recognition.

There have been initiatives started by more regional instruments towards the protection of the rights of climate refugees and their efforts must not be disregarded. The Organisation of African Unity Convention Governing the Specific Aspects of Refugee Problems 1969¹⁹ and the 1984 Cartagena Declaration on Refugees²⁰ are both examples of national bodies that have included climate refugees into their definitions of a refugee, extending their support and shelter to them. By providing recognition to the climate refugees, they ignited a much-needed conversation about the blatant violation of human rights and conflicts. However, any substantial change will be sparse unless it is addressed and reformed at the international stage.

Securing the immunity and safety of climate refugees will be a long drawn, gradual process that needs to start with the development of their home country. It requires extensive efforts such as large scale, long term planned resettlement for the affected people. This will have to be coupled with the mitigation programs for people who are not forced to move but still need protection from the degrading environment. International bodies like the United Nations Development Program or the World Bank will be very well equipped to handle the execution of such a longstanding and continual problem.²¹ Although the United Nations High Commissioner for Refugees only focuses on political refugees, the body can extend its legal and technical expertise while dealing with the climate refugee crisis.

On the surface, there doesn't appear to be much of a correlation between climate change conflict and violence. On the contrary, both can be intricately intertwined and symbiotic, in a sense. Natural resource shortages, as a result of slow-onset phenomena like drought, may exacerbate or cause pre-existing conflicts, eventually leading to war. Violence, on the other hand, can increase susceptibility to risk by damaging agriculture and infrastructure, as well as forcing out the people who use the land for their livelihood.²² Disasters and violence can sometimes coincide, causing resettlement and migration of previously displaced populations. Climate

¹⁹ Organization of African Unity, Convention Governing the Specific Aspects of Refugee Problems in Africa, Sep.10, 1969, 1001 U.N.T.S. 45.

²⁰ Regional Refugee Instruments & Related, Cartagena Declaration on Refugees, Colloquium on the International Protection of Refugees in Central America, Mexico and Panama, 22 November 1984.

²¹ *Supra* note 5.

²² Jon Barnett & W. Neil Adger, *Climate Change, Human Security and Violent Conflict*, 26(6) POLIT GEOGR 639, 643 (2007).

migration has more often than not resulted in conflict in the home country of the climate refugees as well as the country the refugees are trying to move into. The conflict can potentially become a threat to the peace and harmony of the country as well as affect international security. Article 39 of the United Nations Charter revolves around global security and prescribes the United Nations Security Council to intervene and respond to any such threat.²³ Although not directly contributing to the issues faced by the climate refugees, the UNSC will work to preserve peace and security in the countries involved.

It is more than evident that the onus and responsibility of protecting climate refugees and their futures cannot rest on one particular body, it has to be a combined effort with the largest, most powerful organizations and minds coming together to preserve the rights and better their living conditions.

V. Thinking Long Term

It is certain that climate change is here to stay, irrespective of the measures we take to mitigate it. The drastic effects of climate change will be seen by us and future generations to come. This paper highlights how climate refugees live in constant danger of their whole lives being uprooted due to the environment around them deteriorating. Being uprooted is not the only hardship they face; whether they can seek refuge is equally uncertain. The rights of these climate refugees have been thoroughly contested, but it is high time that international bodies recognize and work against the suffering endured by these refugees.

The problems regarding climate refugees and migration have become so widespread that it seems only suitable and practical to take a more practical and productive approach to ensure better results. It is the need of the hour to constitute a separate independent body under a "Protocol on the Recognition, Protection, and Resettlement of Climate Refugees to the United Nations Framework Convention on Climate Change".²⁴ The issue of climate refugees has reached such a stage that it is imperative for the complete, concentrated focus of a competent and specialized international body that exclusively addresses climate migration. The body would oversee the legal and political ramifications apart from protecting and resettling the refugees, requiring international aid and funding. The independent body should prioritise its

²³ U.N. Charter art. 39.

²⁴ *Supra* note 7.

goals based on time and need. In the author's opinion, the four most important objectives the body should aim to reach are:

- (i) *The separate grouping of climate refugees and recognising their needs and rights independent of any other group.* A new classification of "climate refugees" should be given due recognition, in international and domestic law. Despite being referred to as climate refugees, they should not be associated with any other kind of refugee to not take away from their protection or rights. The author believes climate refugees should have their own set of rights because of the rate at which climate change is ravaging our planet. It would also ensure no confusion about whether one is a climate change-induced refugee or a politically persecuted one.
- (ii) *The inception of a long-term plan to alleviate the descent of the at-risk nations:* Years of seeing the manifestation of climate change and its effects has allowed us to understand it better, which means we can plan ahead for it. A body that is created for the protection and preservation of climate refugees should not only work towards emergency responses and disaster relief but also for planned voluntary resettlement of compromised populations. All the countries involved, the affected home country and those accepting refugees should utilise the foreseeable nature of changes and prepare accordingly.
- (iii) *Facilitating and collecting funds towards resettlement and emergency relief from other bodies and developed nations:* It is quite commonly known that developed nations are the biggest greenhouse gas emitters due to their rate of industrialisation. The author believes now is the time for industrialised countries to step up and take responsibility for the adverse effects of their actions. Developed, industrialised countries have a moral and ethical duty to fulfil to protect fellow citizens of the earth. Sending in aid and funds to sinking islands might not be sustainable. Instead, those funds can be redirected towards the resettlement of refugees from vulnerable countries. It is critical that the countries responsible for contributing to climate change pay sufficient reparations. It should be one of the main priorities of the established body to facilitate and bring in the needed funds.
- (iv) *Implementation of carbon tax policies:* Carbon taxes may be an essential component of any cost-effective climate change mitigation strategy if they are inclusive and promote economic growth. As low-cost carbon mitigation alternatives are still within reach for many significant economies, the short-term impact of an extra tax charge is expected to be comparably minimal. Although a long-term concept, carbon taxes are likely to generate considerable funds for governments, which can then be utilised to mitigate the socioeconomic harm caused by fossil fuel combustion.

Climate change and the predicament of climate refugees have been a topic of discussion for several decades now. Climate change was first regarded as a threat only to the environment and dealt with by scientists and academics. However, as the horrendous effects kept manifesting, it became clear that climate change can present a myriad of social, economic, and political impacts affecting people in more ways than one. Climate refugees are already bearing the brunt of years of exploitation of the environment. Our indiscriminate and injudicious actions towards the planet caused climate change, an environmental tragedy. Let us learn, understand, and make a difference before it becomes an outright human rights tragedy. To allow it to get to that stage would be a flagrant violation of the human rights of the citizens of the planet and future generations to come.

SUSTAINABLE MENSTRUATION: THE IMPACT OF SANITARY NAPKINS ON THE ENVIRONMENT

Krati Singhai*

I. Introduction

With growing awareness regarding the importance of access to menstrual hygiene, Periods have been thrust into the limelight. As a result, new policies and schemes have sprung up all over the world to promote menstrual health. The majority of these efforts focus on providing free menstruation products such as pads and tampons. South Africa, New Zealand, and Victoria, Australia, for example, have vowed to provide free menstruation products in schools. According to the NFHS 2015-16 study, 78 per cent of women in India use hygienic methods to manage menstruation in urban areas, 48 per cent in rural areas, and 58 per cent overall. Nearly six out of ten Indian women use disposable sanitary products.¹ Locally prepared napkins, sanitary napkins, and tampons are considered hygienic safety measures in this survey. Single-use disposables are assumed to be hygienic based on the vocabulary used. The use of 'hygienic goods' varies greatly between states, with 90 per cent use in Tamil Nadu, Kerala, and Delhi and just 30 per cent in rural Bihar.²

Several State Governments have launched schemes for the free distribution of sanitary pads in schools, including "Odisha's Khushi Scheme (2018), Andhra Pradesh's Raksha Scheme (2018), Chhattisgarh's Suchita (2017), Maharashtra's Asmita Scheme (2018), Kerala's She Pad scheme (2017), Delhi's Udaan Scheme."³

In the State of Uttar Pradesh, one pack of 10 sanitary napkins is distributed to adolescent girls in the age group of 11 to 18 years free of charge per month. The package of six sanitary napkins in the State of Gujarat is distributed to all girls in the 10-19 age group at a subsidised rate of Rs. 1. The Government of Gujarat granted a 100 per cent tax exemption for sanitary napkins in the 2016-17 budget.⁴

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¹ International Institute for Population Sciences (IIPS) and ICF, National Family Health Survey (NFHS-4), 2015-16: India. Mumbai, (2017), <http://rchiips.org/nfhs/nfhs-4Reports/India.pdf>.

² Ibid.

³ Setu Niket v. Union of India, MANU/DE/6472/2017.

⁴ Shetty Women Welfare Foundation v. Union of India, 2018 SCC Online Bom. 1692.

In rural areas, the Government has run free sanitary pad programmes in which a girl student receives a pack of pads regularly. Via the central supply of 'Freedays' sanitary napkins, a scheme to promote menstrual hygiene has been implemented in 17 states and 1092 blocks. As per the 2020-21 Annual Report of the Ministry of Health and Family Welfare, it aims to reach 7.87 Lakhs in the upcoming year, and funds have been allocated for the procurement of sanitary napkins.⁵

The policy, however, remains silent on the reason for endorsing sanitary napkins specifically as the product for menstrual hygiene among all alternatives. It fails to give the reason as to why it found this particular product more efficient, economical or appropriate to serve the purpose of menstrual hygiene in India. There is a universalisation created in the usage of sanitary napkins at large, be it in the form of an adolescent welfare scheme or even practices of the State.

According to some studies, many health and environmental concerns are attributable to the use of sanitary napkins. In these are to be believed, the promotion and use of sanitary napkins among women through various government-sponsored schemes might be problematic and might not be a solution to the problem of poor menstrual hygiene.

II. Environmental Impact of Menstrual Waste in India

India has more than 336 million menstruating women. Assuming 36% of women use sanitary napkins regularly, they dispose of an average of eight pads a month, which counts to 1 billion pads being disposed of every month and 12 billion pads per year.

Sanitary waste is normally disposed of in dustbins in metropolitan areas, where it finally ends up in one of the many landfills. Discarded sanitary napkins in public restrooms are frequently flushed down the toilet or left in lavatory corners. The majority of women in rural areas bury their napkins. Incineration is a rare form of waste disposal.

A single non-biodegradable sanitary napkin takes approximately 500-800 years to decompose. Against this backdrop, if every woman switches to sanitary napkins for managing

⁵ Annual Report 2020-21, Ministry of Health and Family Welfare, Government of India, <https://main.mohfw.gov.in/sites/default/files/Annual%20Report%202020-21%20English.pdf>.

menstruation, as envisioned by government policies, it could be an environmental disaster. The Government needs to realise that by merely distributing sanitary napkins, neither does it ensure its usage, nor will it create awareness on menstrual hygiene.⁶ It can lead to a host of problems such as infections due to improper usage, clogging due to improper disposal, and may have a larger impact than this product might have.⁷

III. Menstrual Waste Disposal Mechanism in India

The Indian Government has been encouraging the use of mini-incinerators in sanitary complexes and schools to burn sanitary pads in a hurry to deal with menstrual waste. The Nirmal Bharat Abhiyan (NBA) released guidelines to this effect in December 2013.⁸ The principal design of the more recent Swachh Bharat Swachh Vidyalaya mission involves at least one incinerator in the girl's bathroom.⁹

Regrettably, there are no plans in place to monitor the pollution from these incinerators. There are also no credible peer-reviewed reports claiming that emissions from these incinerators have no negative impact on public health. Furthermore, biodegradable materials in disposable sheets, such as cellulose, wood pulp, and cotton, often contain furans and dioxins. These are among the most lethal toxins known to science, and even in trace amounts, they are extremely toxic.¹⁰

According to the WHO, "*when plastic polymer products, such as disposable pads, are burned at lower temperatures, they usually release asphyxiant and irritant gases into the setting.*"¹¹ As a result, it is recommended that health-related waste be incinerated only at temperatures

⁶ Setu Niket v. Union of India, MANU/DE/6472/2017.

⁷ P.C. Sharma v. Proctor and Gamble Home Products Ltd., 2017 SCC Online NGT 32.

⁸ Nirmal Bharat Abhiyan, 'CSR Guidelines for Sanitation Program' Ministry of Drinking Water and Sanitation, Government of India, (2013), https://swachhbharatmission.gov.in/sbmcms/writereaddata/Portal/Images/Guide_Line_Sanitation_CSR.pdf.

⁹ Swachh Bharat Swachh Vidyalaya Mission, 'Clean India, Clean Schools: Handbook' Ministry of Drinking Water and Sanitation, Government of India, (2014), http://103.7.128.243:8080/Eng_Swachch-Bharat-Swachch-Vidhalaya.pdf.

¹⁰ World Health Organisation, 'Dioxins and their Effects on Human Health' WHO, (2016), <https://www.who.int/news-room/fact-sheets/detail/dioxins-and-their-effects-on-human-health>.

¹¹ World Health Organisation, 'Treatment and Disposal Technologies for Health-Care Waste' WHO https://www.who.int/water_sanitation_health/medicalwaste/077to112.pdf.

above 800 degrees.¹² Even so, there are concerns about whether sanitary napkin incineration is the best option.

Given these problems in incineration technology, Kerala's State Government banned the construction of mini-incinerators in 2012, based on the findings of its technical committee, as "*they were of single-chamber working in low temperature and not complying with CPCB norms.*"¹³

Therefore, taking cognisance of the environmental concerns linked with its use, the Government of India and other State Governments should follow suit and stop using incinerators for disposing of menstrual waste. Since there is no better-known method yet for disposing of non-biodegradable menstrual waste, the only solution is to switch to alternatives and promote reusable menstrual absorbents.

In light of these concerns, it becomes relevant to take the talk about menstruation beyond sanitary napkins. The solution to ensure access to menstrual hygiene is not by ensuring a regular supply of sanitary napkins to all the women. The State needs to take an all-comprehensive approach while also keeping in mind the awareness component. There should be more research on making menstruation more sustainable and presenting solutions that are both healthy as well as efficient.

IV. Sustainable Menstruation: A Way Forward

Although many NGOs, individuals, and brands, in addition to the Government, are working to promote discussions about menstruation and to provide sanitary alternatives to those who cannot afford or are unaware of them, especially in rural areas, one of the most relevant aspects of this discussion should be how to choose sustainable, environmentally friendly options.

Menstruation that is environmentally friendly and ethical is referred to as sustainable menstruation. It is projected that the average female who menstruates would bleed for 40 years, resulting in contributing to 200 kg of menstrual waste each year. To ensure that accessibility

¹² Ibid.

¹³ Suchitwa Mission, Kerala, '*An Approach Paper for Sustainable Management of Waste*' Government of Kerala, <http://sanitation.kerala.gov.in/wp-content/uploads/2017/09/waste-book-english.pdf>.

to menstrual hygiene practises which are safe, sustainable, environment friendly, as well as cost-effective, it becomes imperative to focus on the following aspects:

1. No long-term adverse health consequences;
2. Reusable, to reduce the carbon footprint (environment friendly);
3. Promoting the use of sustainably-produced biodegradable disposable products;
4. Awareness about the advantages and disadvantages of all the available options - enable women to make informed choices.

Disposable products made of non-biodegradable materials (tampons and sanitary napkins), which generate tons of waste and take hundreds of years to decompose, are being popularly used and promoted by government agencies for managing menstruation. On the contrary, reusable menstrual product alternatives such as cotton pads and menstrual cups, which are both safe to use and have a lesser carbon footprint, are not commonly recognised.

The cloth pad is nothing new in rural areas, as women have been using layers of cloth for decades. However, because of menstrual taboos, the fabric used is frequently not thoroughly and properly sanitised. Many women wash their soiled clothes in secret and hang them to dry in filthy, damp environments, leaving them vulnerable to infection. Cloth pads have a negative connotation, and sadly, using disposable pads has become aspirational among women in both rural and urban areas.

Menstrual cups are an excellent option for women in rural areas with water scarcity, according to the majority of NGOs and educators working in rural India, since they require very little water to keep clean. A behavioural experiment on 960 rural women from 60 villages in rural Bihar quotes reasonable success (30%) with introducing menstrual cups.¹⁴

Menstrual cups, despite being well received by women across the country, especially in urban areas, have yet to gain widespread acceptance. Even if the initial cost of a cup is higher than the low-cost disposable pads, many people realise that it is more cost-effective in the long run. However, the concept of encouraging menstrual cups in India has a mixed reception, owing to cultural concerns and ambiguous notions of virginity. The use of an internal unit, such as a

¹⁴ V. Hoffman, S. Adelman, and A. Sebastian, *Learning by doing something else: Experience with alternatives and adoption of a high-barrier menstrual hygiene technology* (2014), Paper presented at Menstrual Hygiene Day, May 28, 2014.

menstrual cup, necessitates further user assistance in terms of use, maintenance, and troubleshooting, without which the transition can fail. In rural settings, whether or not to encourage the use of a menstrual cup depends on the instructor, and most take cultural sensitivities into account.

Moreover, the sustainable and reusable products which are available in the market are costly and hence not accessible to a large population. Although these products being reusable are just a one-time investment, there has to be support from the Government's end for reducing the production cost (investment in research and development) and making the products available for use at subsidised rates to the lower-income groups.

V. Conclusion

In light of the health and environmental concerns that are connected with the use of sanitary napkins, as well as the risks associated with unhygienic menstruation practices, the State needs to focus on sustainable menstruation to ensure accessibility of menstrual hygiene to all.

A non-biodegradable plastic substance with an unnaturally long life span cannot replace poor menstrual hygiene habits or the silence that surrounds menstruation. Since the State has been marketing a particular commodity on a wide scale, there is a need to raise a concern about the health and environmental effects of sanitary napkins and to identify proper alternatives which are both safe and environment friendly.

There is a general lack of awareness about the other available alternatives for managing menstruation. Although many organisations are working at the grass-root level to spread awareness about menstruation, tangible change can be brought through policy intervention and specific allocation of funds by the Government for awareness initiatives. The present policies do not discuss separate fund allocation for awareness initiatives, and the monitoring parameters for gauging the success of a particular scheme do not take into account the awareness aspect. Moreover, women come from different social and economic backgrounds and have different reservations over a specific product based on their monthly experiences. Imposing a particular product horizontally across women as a policy is denying them their comfort and autonomy. They ought to be entitled to make a well-informed choice concerning the wide variety of options available to them. This, in turn, guarantees proper usage of the product; for instance, despite knowing of the existence of sanitary napkins, a woman may choose to use cloth pads in the right way that helps her to minimise the risks for infection.

The women should be equipped with information about all the sustainable alternatives for managing menstruation so they can make an informed choice. The Anganwadi and ASHA workers should be trained to disperse all the relevant information about the menstrual absorbents which are available in the market for use, so the women can make an informed choice and pick the most feasible and comfortable option for them.

A CATASTROPHIC APPROACH IN IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT GOALS: AN EMERGING TREND

Dr. Payal Jain*

I. Introduction

To reduce inequalities and end poverty is the global aim of the 2030 Agenda to achieve the Sustainable Development Goals (SDGs). SDGs are the most important action plan for the planet, nations, people, and prosperity with an overriding principle of leaving no one behind, which sets targets for across the globe. It is important to discuss all trends in various dimensions of poverty, inequality, and policy implications for the implementation of the SDGs frame and the layout plans for India as well as all other countries. The United Nations Economic Commission for Europe (UNECE) assessed the impact of the pandemic on structural transformation and the implications for achieving the 2030 SDGs.

From an economic and health point of view, Europe stood on higher ground as compared to other western nations. Europe, one of the healthiest and wealthiest countries, also got badly affected by coronavirus as compared to Asia a year ago. The problem of COVID-19 affecting their demographic structure, with a high number of elders and children was completely underestimated. Coronavirus has gravely shaken the entire world. Its disruptive impact is unforgettable for all. Unfortunately, the novel coronavirus has hampered the growth of nations to achieve these Sustainable Development Goals.¹

An irrevocable and unprecedented challenge has become a depraved memory for all in the year 2020 especially for the European countries, including other developed and developing nations. The world has recognized that we are all at intense war with the novel coronavirus, and the various variants which cause the spread of the disease COVID-19. A study done by the United Nations Development Programme (UNDP) found that this crisis has driven many people and families into acute poverty and it could drive what could be around 1 billion people by 2030.² Moreover, at the international level, global trends such as population growth, climate change, and increased international movement of people are continuously affecting infectious diseases

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² United Nations Development Programme, *COVID-19 could push the number of people living in extreme poverty to over 1 billion by 2030, says UNDP study*, UNDP NEWS CENTRE (Dec. 3, 2020), <https://www.undp.org/press-releases/covid-19-could-push-number-people-living-extreme-poverty-over-1-billion-2030-says>.

amongst people. It has become important to strengthen all nations to effectively deal with these health risks, which includes mitigation measures that need to be developed in the most vulnerable areas. The disruptive impact of coronavirus disease (COVID-19) affecting everyday life poses unprecedented challenges for everyone.

So, it is necessary to present an opportunity for all countries to act in solidarity and turn this crisis into an impetus to achieve the Sustainable Development Goals by laying out a vision for the affected people to become stronger and better. What is required is for all nations to respond to the challenge with full and productive employment, creating decent work, as embodied in the UN SDGs. The implementation of the initiatives and plans of the 2030 agenda is a challenging task for all nations.

II. Multidimensional Approach

Even after progress and development, poverty rates are still increasing day by day in various Asian countries. Several factors are responsible for poverty such as unemployment, illiteracy, lack of opportunities, poor labour market conditions, lack of sufficient productivity, overpopulation etc. It is has become a big challenge to eradicate poverty by 2030 particularly for Asian and African Countries. This hinders the growth of the country. With the support of the UNDP, economic growth which is one of the goals of the SDGs can take place.³

Due to failure in economic policies, weak institutions, lack of proper governance system, deteriorating education, low levels of income, poor health and poverty, many families and individuals become trapped. Even though a lot of progress has taken place, we are yet to achieve the goals of sustainable development. A large number of people have limited access to basic amenities and social protection. The challenges before us are not only their upliftment but also the provision of social security and protection.

Sustainable development also focuses on quality education, lifelong learning opportunities, biodiversity conservation, and better health. But the insufficient availability of teacher training, lack of basic facilities and resources in schools, and poor infrastructure due to remote areas are

³ Esuna Dugarova & Nergis Gülasan, UNRISD, *Global Trends: Challenges and Opportunities in the Implementation of the Sustainable Development Goals*, (2017).

major challenges. As per a report of UNESCO in 2015, around 780 million adults do not have basic reading and writing skills of whom nearly 103 million were young.

Furthermore, globally, the number of children out of school was estimated to be 57 million children of primary school age, of which girls make up 53 per cent. Still, there is a large gap found in Asian Countries.⁴

Another reason for disparities and deprivation is also seen in the use of water and sanitation. In rural areas, around 16 per cent of the population worldwide are unable to use clean drinking water sources as compared to the urban population. For achieving the 2030 SDGs agenda, it has become important to eliminate inequalities in accessing clean water and adequate sanitation facilities, particularly for the rural population.

III. Trends in Income Inequalities

Another Sustainable Development Goal is to reduce income inequality worldwide. The gap between developed and developing nations is widening. The developing world's middle-class plays a vital role in socio, environmental and economic progress by increasing domestic demand and accumulating human capital. As per the World Bank, although this gap has been reduced by a convergence of income between countries' rapid growth and rise in income, in actuality, the situation of poor nations is far from equal income.⁵

Another challenge is to reduce the gender disparity that persists across the globe. It is also found that now, in the modern era, this disparity has reduced to a certain extent like in employment, political representation, education, and health. However, females are continuously facing disadvantages at the domestic front, in economic assets, access to work, and participation in private and public decisions making. To a certain extent, females are actively taking part in every field of the world and trying to reduce the gender gap. Escalating inequalities, both vertical and horizontal, have fuelled discontent in many countries, leading to an upsurge in large-scale protests and social movements around the world in recent years.

Another target of Sustainable Development is the promotion of inclusive, peaceful societies to ensure access to justice for all nations. The legal and equal environment should ensure full

⁴ *Id.* at 12.

⁵ *Id.* at 14.

colours of roles to advance social changes. For this, a strong legal foundation is required for more people and recognition of the ability, diversity, and identities, of local individuals is required for their participation in these decision-making processes to improve institutional policies.

IV. Policy Implications for SDG Implementation

SDGs are being constantly worked towards. All 17 goals are essential for all countries. It is essential for economic growth as well. The eco-social policies aim to change behaviour, provide better incentives for a sustainable environment and capacity development of individuals, ensure adaptive uses of resources, and strengthen resilience and communities. This policy can involve the support of environmentally cleaner energy for technology such as energy-efficient public transport, expansion of low carbon services sector, housing system and community-based development that draws on traditional knowledge, practices of small-scale farmers and indigenous people.

In India, at a large-scale, various programmes were launched to reduce the misuse of natural resources, especially in the North-Eastern states. The government tried to rehabilitate the indigenous population who are environmentally degraded. The developing nations, to some extent, achieved hunger targets through economic growth and better political conditions accompanied by sound social protection policies. The expansion of social protection policies in developed nations has contributed to the reduction of hunger and malnutrition by better health care plans, access to nutrition, and education. The zero-hunger programme is essential for achieving growth, reducing poverty and hunger in all developed and developing nations. It is inevitable that shocks and crises will constantly occur with serious consequences for all nations in the future. However, effective strategies at the local, national, and international levels can mitigate a myriad of risks to build resilience for ensuring the development progress attained are achieved with all possibilities.⁶

V. Disease Outbreak

The entire world continues to face important challenges in addressing health issues such as Ebola, Zika, TB, HIV and recent the biggest pandemic COVID-19. For the last one year, from March 2020 till date, nations are still suffering from coronavirus. The harmful effects of every

⁶ Hana Daoudi, UNECE, *The Impact of COVID-19 on trade and structural transformation in Georgia*, (2020).

disease on sustainable development and the global economy are troublesome for every nation and this pandemic more prominently affected the achievement of the SDGs. This pandemic has uncovered the true colours of nations across the globe, it has brought into question the growth in achieving these goals. COVID-19 doesn't just come in the way of the attainment of the SDGs but calls for a reevaluation of its timeline since the existence of this onslaught has hindered the growth of its accomplishment.⁷

This pandemic has created a closed economy with the closure of borders and international migrations. These notions have raised suspicion among nations. These factors playing out has led to the failure of multilateralism across the globe. Inevitably, the pandemic affected SDGs catastrophically and the virus has caught hold of 10,74,58,667 people who have been affected and around 23,57,475 who lost their lives.⁸ However, this pandemic has changed many things which we never thought of. The inability to get accustomed to the virtual world has led to challenges in the equity dimension of holistic development, higher levels of unemployment, poverty, deaths, crimes, hunger, conflicts amongst nations, economic slowdown and other SDGs being impacted gravely. This has hampered the growth of nations, horizontally as well as vertically, and led to the deepest recession and great depression.

On the other hand, reduced economic activity has led to nature's betterment, a big relief, emphasizing the SDGs 13, 14, and 15 (Climate Action, Life below Water and Life on Land). Jim Scheer, Head of Data and Analytics at the Sustainable Energy Authority of Ireland asserted "We're expecting to see about a 25% drop in transport for 2020" leading to a predicted 12% drop in Carbon Dioxide⁹ emissions. We have also seen the revival of many species.¹⁰ To achieve all goals of sustainable developments is very important for all countries worldwide for their peace, prosperity, betterment and development, so that the growth of the nations in every part can take place.

Moreover, the complicated challenges by supply chain disruptions are left with enterprises for their struggling survival. The UNECE in pursuit of the UN Sustainable Development Agendas

⁷ Paavani Arora, *The Impact of COVID-19 and the Sustainable Development Goals*, VOICES OF YOUTH, (May 7, 2020), <https://www.voicesofyouth.org/blog/impact-covid-19-and-sustainable-development-goals>.

⁸ Worldometers.info, *COVID Live Update*, WORLDOMETER, <https://www.worldometers.info/coronavirus> (last visited 12 August 2021).

⁹ Stephen McNeice, *Carbon dioxide emissions could fall by up to 12% this year due to COVID-19 crisis*, NEWSTALK, (May 6, 2020), <https://www.newstalk.com/news/carbon-dioxide-emissions-covid19-1010956>.

¹⁰ DUGAROVA & GÜLASAN, *supra* note 1.

2030 supports the economic relations amongst the fifty-six member states of Europe. European countries support their member states in trade and Economic Cooperation and Integration Programs for better integration into the world economy and promotion of a better financial policy, a regulatory framework environment by innovation, economic growth, sustainable development, and higher competitiveness in the UNECE region.

VI. Actions for Implementation of Sustainable Development Goals

It is imperative to reinforce strategic coordination and cooperation at the international level to enhance financial and macroeconomic stability. After facing this pandemic, various collective actions were taken to control the global financial crisis to build resilience, reduce vulnerability to international financial disruptions and, integrate macroeconomic policies with social and environmental policies. One of the reasons is that international trade affects the domestic availability, nutrition, productivity, and livelihoods of various population groups in different ways. International treaties and conventions must come up with an effective resolution and policies to tackle these challenges.

VII. Identifying Emerging Issues

The emerging issues and newness recognition means that 'emerging' is based on 'newness', but not necessarily issues that are unheard of or that come as a surprise.

*7.1 Newness Could Be the Result Of:*¹¹

- a. new scientific knowledge, which could be in the form of new data, evidence, theory or model;
- b. new technological developments;
- c. new scales or accelerated rates of impact;
- d. heightened level of awareness; and
- e. new ways of responding to a known issue.

Apart from emerging issues, other ways can also be included in the sustainable development goals. Some are social, environmental, economic processes amenable to scientific

¹¹ United Nations Department of Economic and Social Affairs, *Global Sustainable Development Report*, at 78, (2016) [hereinafter *Global Sustainable Development Report*].

understanding that may be relevant. At the UN level also, various agencies and entities are focusing on the target of emerging issues to achieve the SDGs.¹²

7.2 Emerging Issues Selected by Experts in Indicative Prioritization:

- a. Establishing governance mechanisms for the SDGs, from global (UN) to regional, national, and local levels.
- b. Political instability and social unrest from increased income and wealth inequalities.
- c. Ensuring access to affordable, sustainable, and reliable modern energy services for all.
- d. Coping with the increasing impacts of climate change.
- e. The need to protect and restore ecosystems.
- f. Strengthen and enhance the means of implementation and global partnership for sustainable development.
- g. The need to develop alternative economic models that decouple economic growth resource use and minimize environmental degradation.
- h. Enhancing social protection and environmental protection in developing countries as a means to decrease inequalities and combat environmental degradation and climate change.
- i. Depletion of ocean fish stocks and exploitation of marine resources.
- j. Migration and all forms of movement of people across borders due to changes in demographics, weather patterns, and other causes.
- k. Accelerating the implementation of environmentally friendly renewable energy.
- l. Increasing the sustainability, inclusiveness, safety, and resilience of cities and human settlements. Promotion of sustainable industrialization.
- m. Inadequate funding for health systems, especially in developing countries.
- n. Persistence of poverty globally, including the poor in rich countries.
- o. Highly unequal distribution of household wealth across and within nations.
- p. Integrated assessment of sustainable development pathways.
- q. Time lags of several decades between scientific findings and policy action.
- r. Reduction of future agricultural yields due to climate change, especially in Africa.
- s. Putting in place the blend of governance forms and approaches required for the 2030 Agenda.¹³

¹² Global Sustainable Development Report, *supra*, at 43.

¹³ Global Sustainable Development Report, *supra*, at 60.

We must look for a better opportunity and ramp up necessary actions to achieve these goals by accepting this crisis as a challenge. Every nation is continuously facing the challenges thrown by the pandemic and we cannot ignore the achievement of the SDGs.

VIII. The Changing Scenario of Financing Sustainable Development with Cooperation of the Development

Finance is one of the essential sources for the effective implementation of the 2030 SDGs agenda along with partnership, institutional coherence, technology, capacity building, and trade policy. It is vital to quantify financial resources which is a complex and wide process. Conversely, it is apparent that finance needs are vast, and the universal agenda will be needed in trillions of dollars. It is imperative to have integrated SDGs that demand a fundamental change in the international community's approach towards development cooperation and financing sustainable development.

The Copenhagen Climate Change Conference held in 2009 got the various developed countries to jointly mobilize US\$ 100 billion per year by 2020 for the needs of the developing countries from various sources- private, public, bilateral and multilateral inclusive.¹⁴ The climate finance for mitigation is largely geared towards middle-income countries.

IX. Innovations, Technology for Sustainable Development Goals

Rapidly developing technologies are reshaping the lives of individuals and communities being provided with new goods and services from top to bottom across the globe. There is a need to address emerging technologies as per the changing scenario within the confines of their safeguards, needs, privacy and security. For example, ICT tools have allowed major advances in health, infrastructure, education, agriculture but have also raised security and privacy concerns. Despite various positive impacts of the digital revolution some negative impact also exists like the contribution of inequalities. A TFC Technology Facilitation Mechanism was launched as a part of the 2030 Agenda in support of the SDGs in forums such as innovation, science, technology and online platforms which facilitate knowledge sharing and ensure emerging technology trends for more benefits and an improved business climate, good

¹⁴ UNFCCC, *Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009. Addendum. Part Two: Action taken by the Conference of the Parties at its fifteenth session*, FCCC/CP/2009/11/Add.1, 2010. UNFCCC, <https://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf>.

governance and increased investment to fully realize opportunities. Every sector needs to invest in education for all to acquire digital skills. Developing countries should focus on infrastructure, education, R&D and the health sector.

After all, it is imperative to focus on processes for scaling of efforts, deployment, and to be at the forefront of development. For this, effective engagement programs are required with local stakeholders like the government, communities, and not only the private sector but also as the creators, in determining problems and finding solutions.

X. Emerging Trends for SDGs 2030 Agenda

Technology innovation, reducing poverty and development are some of the emerging trends of the SDGs 2030 agendas. The focus should be to reduce conflict and viral outbreaks. Proactive management can potentially be shaped for positive dynamics in SDGs. Distribution of natural resources to all vulnerable nations are a better prospect at reducing poverty and gaining advantages for international trade and finances, and also for escalating growth and opportunities. This also requires substantial efforts at the national and international levels. The 2030 agenda will be integrated as the relations of different sectors are explicitly recognized. Accurate and transparent information is vital for decision-making processes, and the use of multidisciplinary teams is an insight into research by modelling or simulations of complex interactions.

For achieving the target of a win-win policy, the cooperation of others, discussion, collective action and negotiation must be there. It is mandatory to implement all vertical and horizontal level coherence at different levels. For example, local policies and the education sector must be supported by fiscal policy.¹⁵ Trust and constant efforts are also very important in moving towards mutually beneficial cooperation. In an interdependent world and open economy, no country acting solely will be able to manage the entire gamut of risk and threats to stability that exist today. Multilateral and bilateral treaties and negotiations will be able to tackle challenges that are shared from oceans to the atmosphere. The 2030 Agenda is to broaden and strengthen the participation of developing countries in the institutions of global governance which will be critical for building a truly global partnership for sustainable development goals.

¹⁵ E. William Colglazie, Response to the COVID-19 Pandemic: Catastrophic Failures of the Science-Policy Interface, Science & Diplomacy, (September 4, 2020), <https://www.sciencediplomacy.org/editorial/2020/response-covid-19-pandemic-catastrophic-failures-science-policy-interface>.

XI. Conclusion and Suggestions

In the end, the expert meeting categorized several issues. The first is the operationalization of the 2030 Agenda for sustainable development of developing countries and the establishment of institutional and governance arrangements that recognize the role of science in policy and decision making. Secondly, that key values must be protected or enhanced through greater recognition at the world level by putting more emphasis on developing countries. Thirdly, involving more novel, accelerating approaches in the critical processes of social, environmental and economic changes.

In 2015, at the Paris Climate Convention, several diplomats wisely negotiated and recognized the various goals of sustainable development as partners of the UN 2030 Agenda. They also planned the strengthening of technology at national as well as international levels. The Technology Facilitation Mechanism (TFM) was created as part of the 2030 Agenda to provide advice on how to harness better knowledge from science, technology, and innovation (STI) to achieve these 17 SDGs. The STI forum, with the help of an Interagency Task Team (IATT) of international agencies and ten members group of non-government experts appointed by the UN Secretary-General is to advise the highest bodies at the UN. It is a Science, Technology and Innovation goal for SDG roadmaps. The Technology Facilitation Mechanism (TFM) is a substantial source, whose work needs to be supported and expanded on at the United Nations. It also thinks about the impact of the pandemic on global strategies to achieve all the SDGs. It is important for all of us to accelerate their valuable efforts towards incorporating high-quality technology advancement and advisory mechanisms to utilize them to confront many global challenges.¹⁶

Now, from the current situation, this pandemic will not cause further roadblocks to building better science advisory ecosystems at the global level. It is expected from the government of developing countries that they will take effective measures to strengthen the policies at par with the international standards and fully implement them to achieve the SDGs and preserve the lives of people, the planet and the ecosystem.

¹⁶ United Nations Department of Economic and Social Affairs, *Technology Facilitation Mechanism (TFM)*, UNITED NATIONS, <https://sdgs.un.org/tfm>.

**INDIA'S QUEST FOR SUSTAINABLE DEVELOPMENT:
AN ANALYSIS OF THE MILLENNIUM DEVELOPMENT GOALS**

Priyanshi Raj Mishra* and Chetna Gupta**

“Saving our planet, lifting people out of poverty, advancing economic growth. These are one and the same fight. We must connect the dots between Climate Change, Water Scarcity, Energy Shortages, Global Health, Food Security and Women's Empowerment. Solution to one problem must be solutions for all”¹

— Ban Ki-Moon

Over the course of time there has been constant change in the way of living which has been having adversarial effects on the environment and the climate, thus finding solutions for a sustainable environment is not a mere question of politics or debate, but an ethical and societal obligation. To overcome these issues the Member States of the United Nations ('UN') had formulated and adopted a universal set of goals, i.e., the Millennium Development Goals ('MDGs') and Sustainable Development Goals ('SDGs'), which aimed to fight the socio-environmental and economic issues of the countries. This global co-operation has created one of the most fruitful anti-poverty movements ever accounted for.

I. What Are Sustainable Development and Millennium Development Goals?

The MDGs were a time-bound universal set of goals which were espoused by the members of the UN in the year 2000. These goals were adopted for the next 15 years. The goals were signed and adopted by 149 global representatives, who were resolute to combating poverty, hunger, illiteracy, and issues related to environmental degradation. The MDGs provided nations with effective and efficacious target-oriented agendas which encouraged them to devise policies and plans for better growth and development.

The creation, process and formulation of the whole MDG framework was sponsored and supported by the International Monetary Fund, World Bank and Organisation for Economic

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¹ U.N. GAOR, 66th Session, A/66/L.56 (Sept.11, 2012)

Cooperation and Development. Following are the 8 goals adopted during the September Global Summit, 2000²:

1. Eradicate extreme poverty and hunger.
2. Achieve universal primary education.
3. Promote gender equality and empower women.
4. Reduce child mortality.
5. Improve maternal health.
6. Combat HIV/AIDS, malaria, and other diseases.
7. Ensure environmental sustainability.
8. Develop a global partnership for development.

The SDGs, on the other hand, are a set of more comprehensive and interdependent global goals that focuses to improve the lives of the present and future generations within a framework of egalitarianism, inclusion, and sustainability. It was devised in the United Nations Sustainable Development Summit, 2015 on the momentum generated by MDGs. They were adopted to overcome the limitations and the uneven achievements of the MDGs and thereby these goals further added three more important aspects in addition, namely, *Climate Change (Environmental degradation)*, *Sustainable Consumption*, *Innovation and the significance of Peace and Justice for all*. According to the UN, an estimate of 250 billion dollars annually has been made for achieving these goals³:

1. No poverty;
2. Zero hunger;
3. Good health and well-being;
4. Quality education;
5. Gender equality;
6. Clean water and sanitation;
7. Affordable and clean energy;
8. Decent work and economic growth;
9. Industry, innovation, and infrastructure;
10. Reduce inequality;

² United Nations, General Assembly, *United Nations Millennium Declaration*, A/RES/55/2, (Sep. 18 2000), available at: <https://digitallibrary.un.org/record/422015?ln=en>.

³ United Nations, General Assembly, *Transforming our World: The 2030 Agenda for Sustainable Development*, A/RES/70/1, (Oct. 21 2015), available at: <https://www.un.org/en/development/desa/population/migration/general-assembly/docs/globalcompact/ARES701E.pdf>.

11. Sustainable cities and communities;
12. Responsible consumption and production;
13. Climate action;
14. Life under water;
15. Life on land;
16. Peace, justice, and strong institutions; and
17. Partnership for the goals.

II. Critical Analysis of The Millennium Development Goals

This segment of the paper analyses the MDGs on a global scale and scrutinizes the limitations of the same. Over the last 15 years, enormous progress has been made by the MDGs worldwide, as extensive work has been done to achieve the targets set forth. The above expression of view can be discerned by the following facts:⁴

1. In 1990, half of the population survived on less than \$1.25 a day,⁵ which has declined to 14% in 2015. The populace existing in extreme destitution has been alleviated by more than half in most of the countries.
2. Earlier the percentage of undernourished people was 23.3%, however, now it has fallen to 12.9%
3. The issue of gender parity in primary schools is still a big concern in the majority of the countries, despite the fact that the global literacy rate in 2015 had increased from 83% in 1990 to 91%. Furthermore, in Southern Asia, only 74 girls were enrolled for primary education for every 100 boys in 1990, as opposed to 103 girls in 2015.
4. The rate of infant mortality had declined globally from 12.7 million in 1990 to 6 million in 2015 i.e., it had reduced by nearly 50% worldwide, whereas the maternal mortality rate declined by 64% from 1990 to 2013.
5. Around 37 million people were extricated from tuberculosis via prevention and medicaments, further, over 6.2 million deaths due to malaria were averted, and HIV infection rates were brought down by around 40%.

⁴ U.N. DESA, The Millennium Development Goals Report, Working papers Id: 7222, (2015).

⁵ Shaohua Chen. and Martin Ravallion, "*The Developing World is Poorer Than We Thought but No Less Successful in the Fight Against Poverty*", Working Paper; No. 4703. Washington, DC: World Bank, (2015), available at: <https://openknowledge.worldbank.org/bitstream/handle/10986/6322/WPS4703.pdf?sequence=1&isAllowed=y>.

6. In 2015, 91% of the global population was using an improved drinking water source as compared to 76% in 1990. Improved and better sanitation facilities had been provided to the people, although there are millions of them who practice open defecation even now.
7. Around 147 countries have met the drinking water target, 95 countries have met the sanitation target and 77 countries have met both of these targets.

Official Assistance regarding development from the developed nations increased by 66% between 2000 and 2015. Also, around 95% of the world's population was covered by mobile cellular signals, as of 2015.

III. Limitations of the MDGs

Despite its rapid progression, the MDGs still had some glaring drawbacks. They were inconsistent. According to the 2015 UN report, big chasms existed between the poorest and the richest households which resulted in extensive gaps between the rural and urban areas. Gender Inequality was still a problem as women remained disadvantaged in the labour markets. Millions of people in the world were still living in extreme hunger. Dissension and strife remained major menaces to human development. For instance, conflicts had compelled almost 60 million persons to desert their homes.⁶ Around 42,000 people were unceremoniously displaced. These displacements lead to stunted human development which eventually resulted in poverty and hunger issues. It was seen that the MDGs were too narrow, and they failed to mention basic human rights. It was also unsuccessful in considering the root causes of poverty. However, in actuality, the MDGs were deemed as goals for the poverty-stricken countries which were to be accomplished from the financial aid of prosperous countries. Some critics even stated that the MDGs focussed on short-term developments. They further opined that MDGs ignored an overall sustainable development which was later on improved upon with the adoption of SDGs.

IV. Role of India in Achieving the Millennium Development Goals (MDGs)

The Millennium Declaration was adopted at the United Nations General Assembly in September 2000, to which India is also a signatory. Various steps for achieving the said goals

⁶ United Nations, High Commissioner for Refugees (UNHCR), Global Trends: Forced Displacement in 2015, (Jun.10, 2016), available at: <https://www.unhcr.org/576408cd7.pdf>.

have been set forth. It has shown significant progress in achieving them; however, its advancement had been incongruous. For instance, the country has achieved the targets of alleviating poverty by half, but it is still struggling to abate hunger. Even though it has gained headway in dispensing clean drinking water, the sanitation facilities still remain in a poor condition. Bringing the targets of the MDGs to fruition was of utmost importance for India since the country's own development goals such as ending poverty, hunger etc were in convergence with them.

The chart below shows the status of each of the millennium development goals:⁷

MDGs and Targets – Summary of Progress achieved by India	
GOAL 1: ERADICATE EXTREME POVERTY AND HUNGER	
TARGET 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	Achieved.
TARGET 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	In progress.
MDG 2: ACHIEVE UNIVERSAL PRIMARY EDUCATION	
TARGET 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	In progress.
MDG 3: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN	
TARGET 4: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	Achieved.
MDG 4: REDUCE CHILD MORTALITY	
TARGET 5: Reduce by two-thirds, between 1990 and 2015, the Under-Five Mortality Rate	Nearly achieved.
MDG 5: IMPROVE MATERNAL HEALTH	
TARGET 6: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	In progress
MDG 6: COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES	
TARGET 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	Achieved
TARGET 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	Achieved
MDG 7: ENSURE ENVIRONMENTAL SUSTAINABILITY	
TARGET 9: Integrate the principle of sustainable development into country policies and programmes and reverse the loss of environmental resources.	In progress
TARGET 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	Achieved for the indicator of drinking water. In progress for the indicator of Sanitation
TARGET 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	The pattern not statistically discernible
MDG 8: DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT	
TARGET 18: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	Achieved

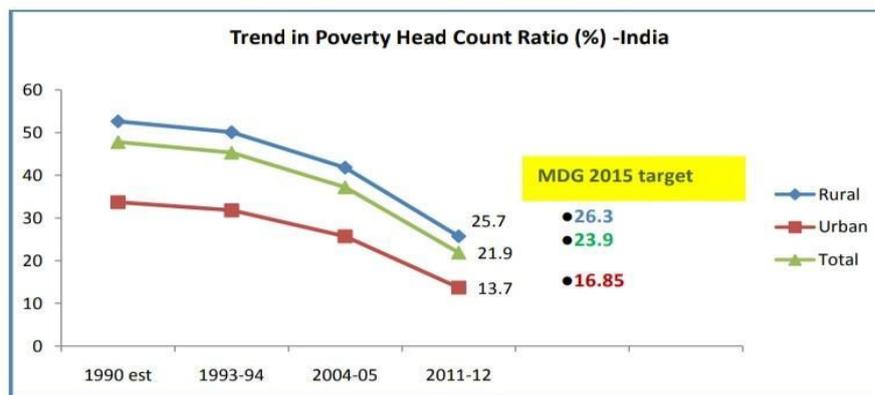
Goal 1: Eradicate Extreme Hunger and Poverty

India has to a certain extent been successful in alleviating poverty. It has achieved the targets set out by the MDGs that was to lower the percentage, by half, of people whose income is less than Rs. 14 a day. This was achieved within India by the mid-2000s wherein the country was able to curtail it by 50%. Previously in the year 1990, the Poverty Head Count Ratio (PHCR) was around 47.8%, which declined to 21.9%⁸ according to the last decennial census. Poverty Gap Ratio in 2011-2012, was 5.05% and 2.07% in the rural and urban areas, respectively.

⁷ Ministry of Statistics & Program Implementation, *Target Year Fact Sheet- India*, (Issued on Aug. 3, 2017) available at: http://mospi.nic.in/sites/default/files/publication_reports/MDG_Target_year_factsheet-India_3aug17.pdf

⁸ Ministry of Statistics and Program implementation, Central Statistics office, *India in Figures* (2018), available at: http://mospi.nic.in/sites/default/files/publication_reports/India_in_figures-2018_rev.pdf

All of this was the outcome of economic growth especially in the agriculture sector and also because of the involvement of the Government to a great extent in schemes like Mahatma Gandhi Employment Guarantee Act 2005 ('MGNREGA'), NRHM (National Rural Health Mission), Pradhan Mantri Kaushal Vikas Yojna, Pradhan Mantri Gram Sadak Yojna, etc.



Source: NITI Aayog (erstwhile Planning Commission using Tendulkar methodology²)

However, the nation is still struggling with one of the key challenges: the eradication of hunger. India is home to one-fourth of the world's undernourished⁹ populace, and almost 33% of the world's population who are starving. In 1990, when the MDGs were detailed, around 53.5% of all Indian children were viewed as malnourished. From that point forward, there has been some progress, yet it has been very sluggish. India remained at 80th place¹⁰ on the Global Hunger Index in 2015. The proportion of children under 3 years who were considered underweight had declined marginally between 1998-99 and 2005-06 to 46%. It further declined to 40% in 2015. But this was still far below the hunger-reduction target of 26%

	NFHS -2 (1998-99)			NFHS-3 (2005-06)			NFHS -4 (2015-16)
	Urban	Rural	Total	Urban	Rural	Total	Total
Children Stunted (Height for age) %	41.1	54.0	51.0	37.4	47.2	44.9	36.1
Children Wasted (Weight for height) %	16.3	20.7	19.7	19.0	24.1	22.9	23.4
Children Underweight (Weight for age)%	34.1	45.3	42.7	30.1	43.7	40.4	33.7

Source: National Family Health Survey -4, M/o Health & Family Welfare

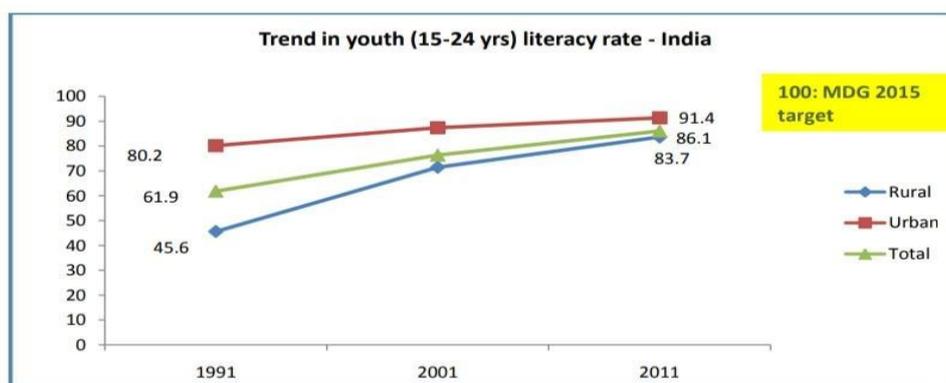
⁹ Food and Agriculture Organization, International Fund for Agricultural Development, World Food Programme, *The State of Food Insecurity in the World 2015. Meeting the 2015 international hunger targets: taking stock of uneven progress*, (Rome: FAO, 2015), available at: <https://www.fao.org/3/i4646e/i4646e.pdf>.

¹⁰ International Food Policy Research Institute, *Global Hunger Index*, (Published in October, 2015), available at: <https://www.globalhungerindex.org/pdf/en/2015.pdf>.

Goal 2: Achieve Universal Primary Education

India has advanced in the scenario of essential primary education since the last decennial census. In 2009, the country presented the *Right of Children to Free and Compulsory Education Act*, under Article 21A of the Constitution. This emphasized the significance of free and necessary schooling for children between the ages of 6 to 14. According to the Ministry of Statistics and Program Implementation, the level of net enrolment proportion in essential primary education was 87.41%, while, the enrolment in rudimentary elementary schooling was at 86.05%. The Government had been persistently, from that point forward, putting forth attempts to work on Universal Primary Education through different plans like *Sarva Shiksha Abhiyan*, *Mid-Day Meal Scheme*, *Kasturba Gandhi Balika Vidyalaya*, and others. Be that as it may, there is still some progress required in resolving issues like:

1. the nature/method of instruction;
2. children staying out of school;
3. neglect in finishing essential primary education especially, in the case of girls;
4. absence of opportunities for children in provincial regions; and
5. children from the minority communities.



Source: Population Census, Office of Registrar General of India

Goal 3: Promote Gender Equality and Empower Women

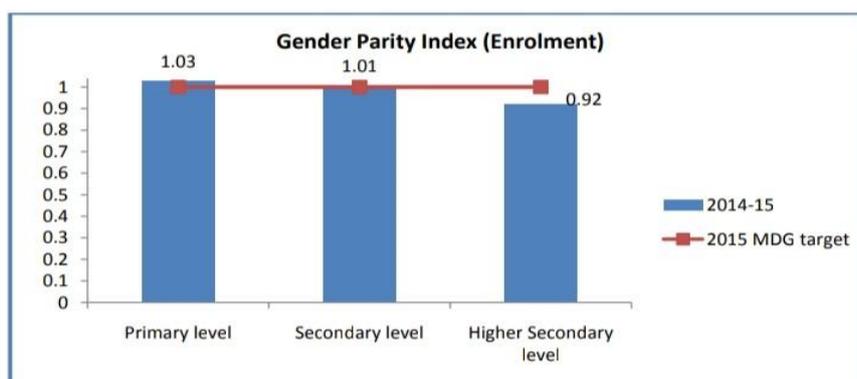
India was somewhat able to eradicate gender-related disparity in primary and secondary education by 2005 and had nearly succeeded to do the same in all levels of education by 2015. According to the National Sample Survey, 71st Round, the male literacy rate was 75.07%, whereas the female literacy rate was 62%.¹¹ Gender Parity Index in primary education and secondary education was at 1.03 and 1% in 2013-2014.¹²

¹¹ Ministry of Statistics and Program Implementation, *National Sample Survey 71st Round*, NSS KI (71/25.2) (Issued in 2015), available at: http://mospi.nic.in/sites/default/files/publication_reports/nss_71st_ki_education_30june15.pdf

¹² *Supra* note 7.

This was achieved by the incessant efforts made by the government who launched various programmes such as *Sarva Shiksha Abhiyan*, *Mahila Samakhya Program*, *Kishori Shakti Yojna*, and *Rajiv Gandhi Scheme for Empowerment for Adolescent Girls*, etc. The 11th Five-Year Plan i.e., 2007-2012 also undertook to ensure that women shall be at the centre-stage of all Economic, Social, and Political activities.

Today, the number of women representatives in the national parliament has risen to 12.24%, and more and more girls have started going to school.



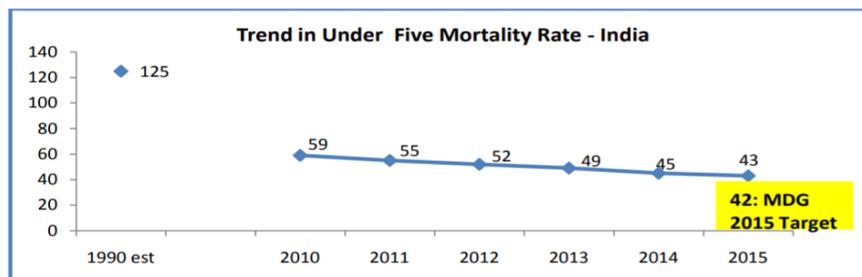
Source: M/o Human Resource Development

Goal 4: Reduce Child Mortality

This particular Millennium Development Goal proposes to lessen the demises of children under the age of five by 2/3rd. However, India had achieved this target moderately. As per 2015, Infant Mortality rates had been reduced to 43 deaths per 1000 live births whereas the mortality rates under 5 were 43 per 1000 live births. Uttar Pradesh has the highest Infant Mortality Rate while Kerala had the lowest in 2015. The proportion of 1-year-old children who were immunised against measles was 78.8 in 2014.¹³ These figures indicate that the survival of children in the country should be given prominence to and more attempts are required for its betterment.

A positive step taken by the government regarding it was the implementation of various programmes for the development of children, viz. *Rashtriya Bal Swasthya Karyakram*, *Integrated Child Development Schemes (ICDS)*, *National Policy on Children* etc.

¹³ Ministry of Home Affairs, Registrar General India, Annual Report, (2014), available at: <https://main.mohfw.gov.in/sites/default/files/4201617.pdf>

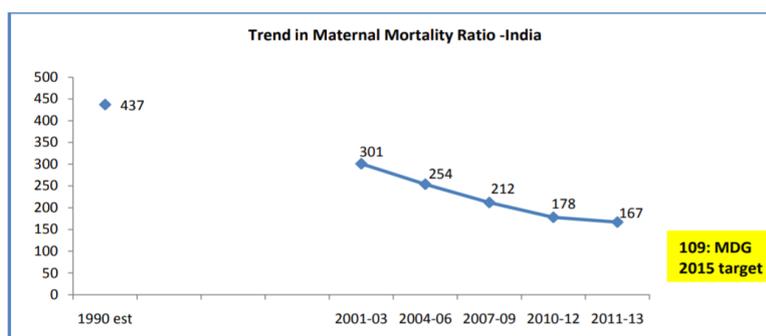


Source: Sample Registration System, Office of Registrar General of India

Goal 5: Improve Maternal Health

This objective intended to diminish the maternal mortality ratio by 3/4th by the year 2015, at the same time, India had shown progress in such a manner which was very lethargic. As indicated in 2015-16, the extent of births attended and assisted by skilled personnel was just 81.4%. The Maternal Mortality Ratio was 167 deaths per 1, 00,000 live births, as of 2011-13, as opposed to 437 in 1990. In urban areas, maternal mothers who had an ante-natal check-up in the first trimester increased to 69.1% in 2015-16.¹⁴

Though it seemed that a lot had been achieved by the country in this arena, there was still a long way to go, in order to improve the standard of maternal care. Though it seemed that a lot had been achieved by the country in this arena, there was still a long way to go, in order to improve the standard of maternal care. One of the reasons can be the poor implementation of the NHM (National Health Mission) programs that were intended to speed up the advancement of health-related MDGs.¹⁵ Government of India, in this regard had initiated numerous programmes and campaigns like Janani Suraksha Yojna, Indira Gandhi Matritva Sahyog Yojna (2010) etc., that were and still are major contributing factors.



Source: Sample Registration System, Office of Registrar General of India

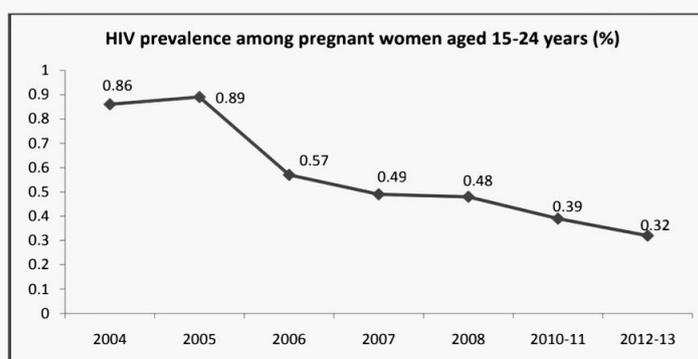
¹⁴ International Institute for Population Sciences (IIPS) and ICF, *National Family Health Survey (NFHS-4), 2015-2016*, (Issued in December, 2017), Available at: <https://dhsprogram.com/pubs/pdf/FR339/FR339.pdf>

¹⁵ J. Prachitha, et al., *India in Pursuit of Millennium Development Goals: Were the Targets Really Feasible?*, 35(1) J. Dev. Soc. 105, 125 (2019).

Goal 6: Combat HIV/AIDS, Malaria and Other Diseases

India has shown notable results in this domain. According to the factual reports of 2015, HIV pervasiveness among pregnant ladies aged 15-24 years was 0.32 %. The prevalence of Tuberculosis (including HIV) was 195 per 1, 00,000 population. Deaths due to TB had been reduced to 17 per 1, 00,000 people, as against, 43 in the year 1990. The spread of HIV had been halted by 2015.¹⁶

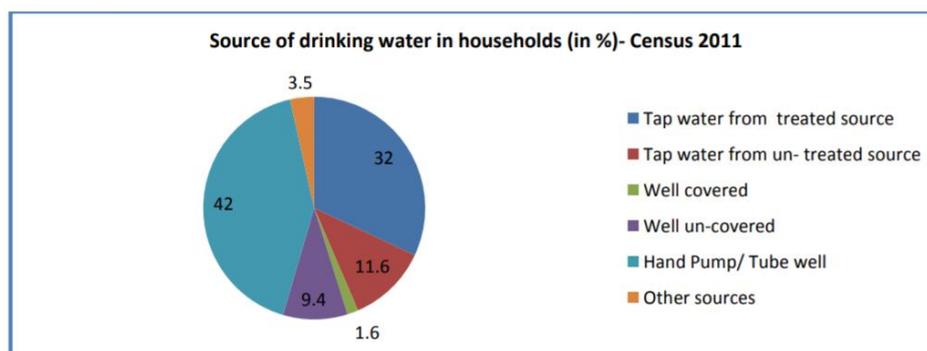
Much of these results can be attributed to the efforts made through variegated schemes like the National AIDS Control Program, National Vector-borne Diseases Control Program and Revised National TB Control Program, etc. which created greater awareness and condom use.



Source: Department of AIDS Control

Goal 7: Ensure Environmental Sustainability

India has gained serious headway in guaranteeing environmental sustainability. The ratio of the area protected to maintain biological diversity to the surface area was 4.89% in 2016, albeit, the Forest cover had increased to 21.34% in 2015, a total increase of 5871 sq. km.



Source: Office of Registrar General of India

India has also attained substantial growth in accomplishing its target of providing access to clean drinking water. As of 2012, the percentage of households with an improved source of

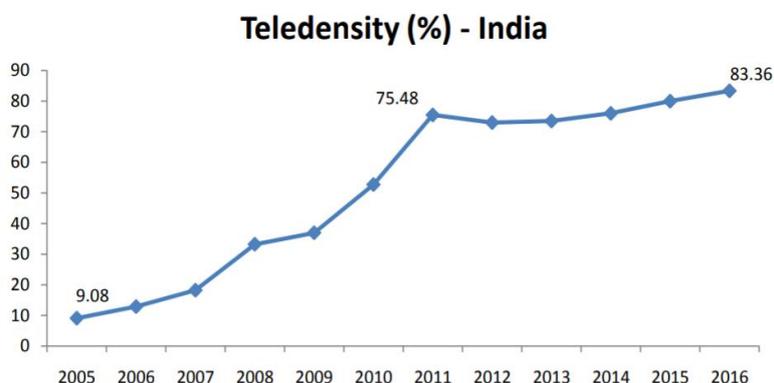
¹⁶ *Supra* note 7.

water was 90.1% in urban areas and 86.09% in rural areas.¹⁷ Despite this, the country's progress regarding its indicator of sanitation coverage had been quite sluggish and laggard since around 8.8% of households were bereft of access to sanitation in the urban areas and 59.04% in the rural areas.

Goal 8: Develop a Global Partnership for Development

This objective unites the public area and the private area in consonance with the objectives, to give the advantages of new advancements, especially information and communication to individuals. India was successful in achieving these targets, as the number of Internet subscribers per 100 population rose to 99.20 million, by the year 2015, whereas, the total number of telephone subscribers per 100 population increased to 996.49 million.

Out of this, urban telephone subscribers and rural telephone subscribers were 577.18 million and 419.31 million.¹⁸ This expression of fact shows that the goal of providing the public with newer technologies had been achieved by the country. Government Programs such as the Digital India Program, National E-Governance Plan, State-wise Area Networks helped India turn into the second biggest network on the planet.



Source: TRAI (Telecom Regulatory Authority of India)

As part of the globalization technique and mixture with the global economy, India has been prospering. Also, it has served as a guide to the specific developed and developing countries over the world. Hence, it can be said that India had, without a doubt, achieved many targets. However, a lot of issues remain that need to be tackled. Therefore, to deal with these limitations the Sustainable Development Goals were espoused by the country in 2015.

¹⁷ *Ibid.*

¹⁸ Ministry of Communications, Department of Telecommunications, *Telecom Regulatory Authority of India, Press Release No. 34/2015*, (Issued on May 12, 2015), available at: https://www.trai.gov.in/sites/default/files/PR-TSD-Mar-12_05_15.pdf.

V. Conclusion

The synopsis of this research paper displays the fact that over its duration of 15 years, the MDGs have been quite successful in their attempt of creating a world that is free of any social, economic or environmental problem. However, some of its work is still pending. When talking in the Indian context, the country has shown notable results in its performance. Issues such as poverty have been alleviated by half, more and more households have gained access to clean drinking water and problems related to gender inequality have been brought down considerably. Even so, this progress is not equivalent to the nation's economic and technological might. Therefore, much more needs to be done in this regard.

All these unfinished agendas of the MDGs have been incorporated into the blueprint and the implementation process of the SDGs. These SDGs would strive to reflect upon them and take into account the roots and interconnectedness of all the problems so that a world of dignity can be created by the year 2030 and no one is left behind dealing with an ailing environment.



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