

CHRONICLE – VI

JULY 2021-FEB 2022



From Editors Desk



Dear **J**almitra,

It gives me great pleasure to present the chronicle with highlights of our last six months. In these unprecedented times of Corona, I hope all of you are safe and healthy. The pandemic has created a moment for change. Recovery is our chance to shape a better future and the Sustainable Development Goals are our roadmap. We are at a pivotal time – for people, societies, economies, and our planet and need all-inclusive sustainable solutions. Let’s find them with cooperation, cohesion and collaboration. To conclude I thank my team because I believe teamwork is the ability to work together toward a common vision. The ability to direct individual accomplishment toward organizational objectives. It is the fuel that allows common people to attain uncommon results. It is about finding your unique blueprint and expressing that courageously and confidently”

Thankyou

A handwritten signature in blue ink, appearing to read 'Arvind Kumar', with a horizontal line underneath.

Dr. Arvind Kumar

INDEX

S.No.	Title	P. No.
1	Editorial: Universal Health Coverage- A Clarion Call for All!	4
2	Interview: Dr. Conrad K. Sangma (Model State: Meghalaya)	7
3	Update: Marseille Diaries	12
4	Perspective: Impact of COVID-19 on SMEs – A Global Perspective	18
5	Update: Scotland Diaries	23
6	Report: Special Report on G20 Ministerial Meetings	27
7	Agenda: PM Modi's Multipurpose Visit	31
8	Report: G20 Summit – A Preliminary Assessment	35
9	Review: COP 26 – A Balance Sheet	39
10	Prioritizing Natural Farming	45
11	Feature: Is our FASHION Sustainable??	47
12	Making Cities as Main Bulwark of Development	50
13	Gender Equality and Inclusion key to Achieve Agenda 2030	53
14	Rural Development: A National Priority	57
15	Urban Ecological Restoration	60
16	Water – The Elixir of life	62
17	The Harbingers of Climate Change....	64
18	Water: A Precious Resource	66
19	Miscellaneous Activities	70

Editorial

Universal Health Coverage- A Clarion Call for All!

By Dr. Arvind Kumar*

Universal Health Coverage (UHC), Is it adequate for a country like India? Can India under its economic constraints achieve UHC by 2030? Universal Health Coverage (UHC) is a critical yardstick for countries to measure and track progress toward their Sustainable Development Goals (SDGs). UHC entails ensuring all people have access to quality health services – including prevention, promotion, treatment, rehabilitation, and palliative care – without incurring financial hardship. The concept covers three key elements- access, quality, and financial protection.

In recent years, Universal Health Coverage has gained global momentum, with the first-ever UN High-Level



Meeting on UHC held in September, 2019, under the theme “Universal Health Coverage: Moving Together to Build a Healthier World”. During the meeting, the world leaders came together and endorsed the “Political Declaration on Universal Health Coverage (UHC)”, the most comprehensive international health agreement in history. The declaration aimed to protect people from suffering financial ruin due to health costs; implement high-impact health interventions to combat diseases and protect women’s and children’s health; strengthen the health workforce and infrastructure; and reinforce governance capacity to achieve these

goals. A strengthened health system under UHC will result in better health literacy for Indians through improved health promotion, healthier behavior, and lifestyles. A healthy population in turn can contribute to economic growth through increased productivity and higher earnings. India’s commitment towards achieving UHC by 2030 is clearly reflected in its policies and institutional mechanism, which are directed towards increasing coverage and access to health services. India in 2018, launched a national health protection scheme known as Ayushman Bharat, to achieve UHC. The mission, through its Pradhan Mantri Jan Arogya Yojana (PMJAY) initiative, helped in providing insurance cover to the poorest 40 percent of the population. Over 50 crore Indians are covered under the scheme with an insurance cover of Rs 5 lakhs per family. In Late 2021, PM Modi launched the Ayushman Bharat Health Infrastructure Mission; one of the largest pan-India schemes for strengthening healthcare infrastructure, and also launched the Ayushman Bharat Digital Mission, which will play a big role in eliminating problems in the medical treatment of the poor and middle class.

The Corona virus has caused millions of people to face untold miseries that are still with them till this day. New evidence by the World Bank and World Health Organization shows that the COVID-19 pandemic is likely to halt two decades of global progress towards Universal Health Coverage.

The Coronavirus pandemic has shown us a new world; one where the status quo no longer exists. The virus has caused millions of people to face untold miseries that are still with them till this day. New evidence by the World Bank and World Health Organization shows that the COVID-19 pandemic is likely to halt two decades of global progress towards Universal Health Coverage. The organizations also reveal that already before the pandemic more than half a billion people were pushed or further pushed into extreme poverty because they have to pay for health services out of their own pockets, and that the pandemic is likely to make the situation worse.

With the emergence of a new very transmissible variant of the virus known as Omicron, countries around the world are gearing up for another wave of the virus. The Omicron variant has an unusually large number of mutations which has led to concerns regarding its high transmissibility, immune system evasion, and vaccine resistance. However, a growing body of evidence indicates the Omicron variant is less virulent than previous strains, especially compared to the Delta variant. India is currently showing increasing COVID-19 cases with experts saying that the country is entering the third wave of the virus but also noting that the Omicron variant will be much less severe than the Delta variant which devastated the country.

The variant is spreading through the country at a time when the whole country is yet to receive the second or even the first dose of the Covid-19 vaccine. More than 91% adults have been partially vaccinated so far, while 66% have received both doses till now. But experts say that still leaves millions of unvaccinated people- many with underlying health problems which could put them at risk. The government has begun administering vaccines to 15-18 year olds from 3rd January onward this year and has said that 31% of Indians in this age group have been given the first dose so far. PM Modi also said that "precautionary doses", or booster dose of Covid-19 vaccine, would be administered to healthcare and frontline workers and people above 60 years of age with co-morbidities from January 10.

As the world is facing this crisis together, and we have already seen that no nation is adept to deal with it alone and as the threat of Omicron variant is emerging, these times call for global solidarity and support, particularly for the most vulnerable in our societies, especially those in developing countries as they lack proper resources and Universal Health Coverage is one key way we can achieve that.

In order to reach the goal of UHC and improve human capital outcomes worldwide, mental health programs must be integrated into community-level service delivery and covered under financial protection arrangements. Mental health, often overlooked, is also an important component of UHC, as it is vital for people's ability to lead productive lives and as COVID-19 can lead to emotional and psychological problems, such as depression, dizziness, and strokes, on the other hand, People with pre-existing mental disorders, mood swings or substance abuse are also at greater risk of the virus and may be more prone to depression, risk of side effects and even death. At the same time loss, isolation, loss of income and fear causes mental health conditions or exacerbates existing ones. Faced with the new realities of homework, temporary unemployment, home schooling, and lack of physical contact with other family members, friends and colleagues, it is important that we take care of our mind, and our physical health.

According to the Policy Brief issued by the Secretary-General of the United Nations, we must seize this opportunity to rebuild better. He called for everyone to draw hard lessons from the pandemic and he urged all to step up investment in UHC and in stronger health systems. In order to reach the Sustainable Development Goals, we must commit to pooling our expertise and experience to support countries as they implement crisis response measures. In order to address the challenges the health and food sectors face, we need long-term, sustainable strategies. It is important to focus on addressing underlying challenges such as health, food security, and malnutrition, addressing rural poverty, especially by creating more and better jobs in the rural economy, offering social protection to all, permitting safe migration and promoting the formalization of the informal economy. Moreover, we must rethink the future of our environment and respond to climate change with both ambition and urgency. Only then will we be able to protect the health, livelihoods, food security and nutrition of all people, and ensure a better 'new normal' for all.

Policy narratives pertaining to health, especially in accordance with the targets of SDG-3, seemingly look very attractive on paper, and the real test lies in their sincere implementation in letter and spirit. The role of civil society in engendering health-related awareness among the people is often ignored by policy-implementation machinery to earn brownie points, and such a callous attitude is an anathema to realize the desired objective. Global experience is a testimony to the fact that role of civil society is indispensable in making UHC a grand success within the stipulated period.

INTERVIEW

DR. CONRAD K. SANGMA

Chief Minister
Government of Meghalaya

Born on 27th January 1978, Dr. Conrad K. Sangma is the 12th Chief Minister of Meghalaya. His vision for Meghalaya was shaped extensively by the ideals of his late father in national and state politics. A leader with vision and farsightedness, he embarked on a mission to take Meghalaya forward soon after assuming the office of the Chief Minister in March 2018.



Dr Conrad K. Sangma

A Graduate from Wharton School of Business and Imperial College, University of London, Conrad Sangma's tryst in active politics began at the age of 28. At the age of 30, he contested from Selsella constituency for the Meghalaya legislative assembly and won the election. In his stint as finance minister of Meghalaya (2008 – 2009), he earned a lot of appreciation. As leader of opposition from 2009 -2013, he made a mark within and outside the assembly with his incisive, daring challenges, fact-laden arguments and ability to connect with both the young and old. In 2015, he ensured victory of his party in the Garo Hills Autonomous District Council Election. In the untimely demise of his father in March 2016, the onus to lead the party was bestowed in his shoulder as the National President of the party.

He was elected as the National President of the National People's Party (NPP) in March 2016, following his father's demise earlier that year. He represented the prestigious Tura Lok Sabha constituency from 2016-2018 as Member of Parliament. Conrad represents the National People's Party, the only recognised National Party from Northeast India founded by his father (L) Purno Agitok Sangma.

Starting out his career as a young, aspiring entrepreneur of the region, it is no surprise that entrepreneurship is close to Conrad's heart. Conrad believes entrepreneurship will not only foster economic growth but also uplift young people and strengthen a sustainable model of employment in Meghalaya without the dependency of government jobs. To ensure accelerated growth and development and to take the State on a fast-track mode, he formulated a structured policy of governance with emphasis on education, health, sports, entrepreneurship and environment. His government introduced several interventions to help entrepreneurs and young people of the State particularly to handhold and support them through mentorship and market linkages to promote and boost their business.

With a vision to transform Meghalaya, Conrad Sangma has initiated innovative programs in the sector of Health, Education, Agriculture, Sports and Tourism. He has envisaged a short and long term development programme for the overall growth and development of the State.

Dubbed as the “People’s Chief Minister”, Conrad Sangma believes in understanding the concerns and issues of the people. In the last three years, he has demonstrated the vision of the State by formulating policies that accommodates the aspirations of the people. Under his dynamic leadership, the State has embarked on various flagship interventions that would take Meghalaya on the path of progress and prosperity. True to his belief in a ‘people first government’, Conrad introduced several initiatives for the welfare of the people including setting up of different infrastructure projects in the State. He also introduced measures to benefit the rural sector by initiating tangible missions like — the Lakadong Turmeric Mission, Piggery Mission, Diary Mission, Aroma Mission, Organic Mission, Api-culture Mission, upgradation of rural health infrastructure and schools, etc. Conrad believes in an accountable and outcome-driven government and in order to ensure efficient delivery and implementation of different centre and state Government schemes, he introduced monthly reviews with DCs of all the districts via videoconferencing. He is also the first Chief Minister in India to have a direct helpline for the public to address their grievances.

Starting out his career as a young, aspiring entrepreneur of the region, it is no surprise that entrepreneurship is close to Conrad’s heart. Conrad believes entrepreneurship will not only foster economic growth but also uplift young people and strengthen a sustainable model of employment in Meghalaya without the dependency of government jobs. His government introduced several interventions to help entrepreneurs and young people of the State particularly to handhold and support them through mentorship and market linkages to promote and boost their business. The ‘Entrepreneur of the Month Award’ introduced in 2018 empowers budding entrepreneurs in the State through financial and publicity support. His government also launched the ‘Chief Minister’s E-Champion Challenge’ in 2019 to invite entrepreneurs to share their ideas and support their vision, making their dream a reality. A special policy on Start-Ups to facilitate financing of viable projects was recently approved by the cabinet, which will be adopted in the state soon.

Another ambitious initiative taken by the government is the ‘Smart Village’ Movement, wherein 100 villages in the State will be adopted for implementation of digital enabled services. He launched the ‘Meghalaya Plastic Challenge’, an initiative that brings the community together to collect plastic wastes to build plastic waste roads in rural Meghalaya, supporting the state’s mission since 2018. Through this mission, the collected plastic waste was also used as an alternate source of fuel in cement plants in the State.

A mechanism to directly reach out to the grassroot administration has been initiated by deputing a Minister to every district once in three months on a rotation basis to review and take stock of the ongoing programmes of the State and Central Government. He introduced the ‘Cabinet on the Move’ where he and his Cabinet of Ministers travel to different districts to review ongoing projects and address public grievances.

Under his leadership, the ‘CM’s Public Grievances Redress Mechanism’ was introduced in January 2019 which is a system that addresses public grievances through WhatsApp. The most recent initiative of his Government is the Meghalaya Outcomes oriented Transformation in Health, nutrition, Education and Rural

development (MOTHER) App which is an intervention to reduce infant and maternal mortality rate in Meghalaya

In an endeavor to create an equitable environment and an ecosystem for growth, Conrad Sangma has envisioned a society that provides equal opportunities for different sections of the society. Recently, Conrad K. Sangma approved the reservation of seats for women in grassroot governance through the Village Employment Council (VEC), wherein 50 per cent of the leadership role is reserved. Indeed, this is historic as this will go a long way in demonstrating empowerment of our women folks.

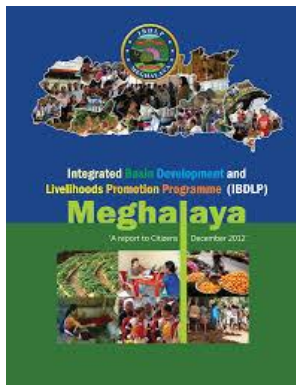
Conrad Sangma has envisioned holistic development of the State with particular focus on the rural areas. He has also envisioned an ambitious mission to take Jowai and Tura, two important towns of the State on the growth trajectory by accelerating development projects through the “Smart Town” initiative of the Government.

He personifies a leader, who is committed to the cause and is ever willing to champion and be the voice of the people.

He was conferred the Honorary Degree ‘Honoris Causa’ by Sharda University, Greater Noida at its 4th Convocation in the presence of Hon’ble Union Education Minister, Dr. Ramesh Pokhriyal on the 19th of November 2020.

Q: Meghalaya has been riding strides since last few years witnessed by Meghalaya development model under Integrated Basin Development Livelihood programme model, Meghalaya Water Policy 2019 and recently adjudged the 2nd Best Governed small state under Public Affairs Index 2020 under your stewardship. What are your views regarding these successful endeavors?

We have always aspired for a wholesome, sustainable and inclusive development that would enable us in achieving our vision of ‘10 in 10’, wherein we aim for Meghalaya to be among the Top 10 states in terms of Per Capita Income and SDG Goals within the next ten years. In line with the success of the IBDLP Program, the state undertook the M-LAMP and the CLLMP programs under the aegis of the MBDA. These have been funded by IFAD and the World Bank respectively and are aimed at Natural Resource Management, Supply Chain Development, Land-Scape Management, Livelihood Generation and Improving Access to Finance.



We were the first state in India to come up with a State Water Policy to emphasize on activities that would help us preserve, protect and augment the water resources in the state.

Meghalaya being adjudged the 2nd Best Governed small state under Public Affairs Index 2020 was just a recognition and validation of the efforts that everyone has been putting in. We will keep working hard in our endeavor for growth and development across the state.

Q:With ‘vocal for local’, how is Meghalaya steering efforts towards realizing the Prime Minister of India’s dream of AtmaNirbhar Bharat?

Given the limitations of Geography, Connectivity & Resources, attracting private investments and creating jobs have always been a challenge. Taking cognizance of these constraints, the state government has been taking consistent steps to support businesses and entrepreneurs over the last few years.

We have recently launched a program to Support Small Businesses in the state. Programs for those in the Food Processing and the Arts/Crafts Sectors have also been launched. We are also actively working with the banks in the state to improve the ease of accessing credit. The State Piggery Mission has also been launched to make the state self-sufficient in pork production.

We are optimistic that by making the necessary interventions across the key sectors, we will be able to transform our state into ‘Atma Nirbhar Meghalaya’ and contribute towards making India a ‘Atma Nirbhar Bharat’.

Q: The success of Integrated Basin Development Livelihood programme model has earned global admiration and accolades for its partnership-based and citizen-centric model. Can you highlight recent initiatives under this model?

The learnings and experience from the much appreciated IBDLP program have helped us immensely in the ongoing MLAMP and CLLMP programs wherein we have undertaken programs for Natural Resource Management, Supply Chain Development, Land-Scape Management, Livelihood Generation and Improving Access to Finance.

We have activated the Supply Chain Fund to support Farmers’ Groups and for the creation of Farm Gate Infrastructure. 300 Integrated Village Cooperative Societies have also been set up and have enabled improved access to finance.

We will soon be launching the Community Based Forest Management project under MBDA which is being funded by JICA.

Q: Localization of SDGs must be devoted for focus development of deprived sectors and sections of the society. Do you agree with the statement?

The Sustainable Development Goals were set in 2015 by the United Nations General Assembly and are intended to be achieved by the year 2030. These are the successors to the Millennium Development Goals (2000-2015).

Taking cognizance of the statement that localization of SDGs must be devoted for focus development of deprived sectors and sections of the society, our state initiated the process in the beginning of 2019. The State SDG framework has been finalized with 16 Goals and 169 Indicators. The Data Collection exercise at Department level has more or less been completed. The next endeavor is to go ahead with the District and Block level data collection on each indicator under the SDGs.



Picture Credit: Business Standard

The rationale is to understand the deprived sectors/sections of the society and monitor various parameters at the ground level using real time data and consequently design appropriate interventions.

Q: Sustainability is a new developmental paradigm encompassing socio-economic-environmental pillars. Can you brief about interventions taken by the Government of Meghalaya taken to ensure inclusive growth and sustainable development, especially in the post COVID-19 world?

Being a mountain-state with over 75% of the state being covered with forests, sustainability encompassing the trinity of socio-economic-environmental pillars has been the way forward for Meghalaya. We take every effort to harmonize our schemes and programs to protect and preserve our ecology.

Despite all the disruptions that were caused by the COVID 19 pandemic, it has also given us the opportunity to rethink and realign our growth strategy. Inclusive Growth is the pivot for achieving our vision of '10 in 10' stated earlier. And we have been making interventions across all sectors - agriculture, small business, food processing, arts & crafts, youth, livestock etc. to ensure that our growth path is as equitable as possible.

Update

Marseille Dairies

By Dr. Arvind Kumar*

“We are facing huge challenges. We are seeing the climate changing and impacting hugely our societies. We are seeing biodiversity disappearing and the pandemic hitting our economies, our families, our health,” said IUCN chief Bruno Oberle.

The IUCN World Conservation Congress, the world’s largest and most inclusive environmental decision-making forum concluded in Marseille, France, with an address by the President of France, Emmanuel Macron. The IUCN Congress focused on three main themes: the post-2020 biodiversity conservation framework, to be adopted by the parties to the UN Biodiversity Convention; the role of nature in the global recovery from the COVID-19 pandemic; the need to transform the global financial system and direct investments into projects that benefit nature and to elect the President, Treasurer, Regional Councillors and Chairs of Commissions, who will make up the IUCN Council. This is the body responsible for the oversight and general control of all the affairs of IUCN. With this year’s elected President and the elected IUCN Councillor for South and East Asia being from Asian countries, it is an advent of new possibilities for Asian countries and there are many expectations from the elected officials especially from India.

Advent of the Asian leadership at IUCN



Figure 1- Razan Al Mubarak

Razan Al Mubarak was elected President of the International Union for Conservation of Nature (IUCN) by the members of the IUCN. She is the first woman from an Arab country and only the second ever woman to lead the 73-year-old organisation.

Razan Al Mubarak is the managing director of both the Environment Agency – Abu Dhabi and the Mohamed bin Zayed Species Conservation Fund. She started her conservation activities in 2001 and She went on to build and run the Mohamed bin Zayed Species Conservation Fund (MBZ Fund), which has distributed to more than 2,250 conservation projects in over 180 countries since 2008, and served as the youngest Secretary General of the Environment Agency – Abu Dhabi (EAD), a government agency.

Ms. Mubarak said that she was honoured to be elected President saying, “I am truly honoured to have been elected as the 15th President of the IUCN, especially in this critical moment when we need to elevate nature conservation to the forefront of the global sustainability agenda”.

Vivek Menon Elected IUCN Councillor for South and East Asia

As a cherry on the cake for Asia was the election of Vivek Menon, Executive Director of the Wildlife Trust of India as IUCN councillor for South and East Asia. He is a wildlife conservationist, environmental commentator, author and photographer with a passion for elephants. He has been part of the founding of five environmental & nature conservation organizations in India. The winner of the 2001 Rufford Award for International Conservation, the 2018 Whitley Continuation Award and the 2019 Clark R Bavin award for his work to save the Asian elephant, Menon is the Founder and Executive Director of the Wildlife Trust of India as well as Senior Advisor to the International Fund for Animal Welfare. In India, he plays a role in advising the government on natural heritage conservation as a part of several national committees as well as having been part of the Indian delegations to CITES, UNESCO and CMS.



Mr. Vivek Menon

Twenty-eight Regional Councillors were elected for the Africa, Meso and South America, North America and the Caribbean, South and East Asia, West Asia, Oceania, East Europe, North and Central Asia and West Europe regions. Regional Councillors act as IUCN ambassadors, working to serve the interests and mission of IUCN, and inform the Council on the interests, priorities and needs of IUCN Members in their regions.

Highlights of the Congress

The IUCN World Conservation Congress took place from 3rd September to 11th September, 2021. The IUCN World Conservation Congress is an event that happens once in 4 years. The event, originally scheduled for June 2020, was postponed due to the COVID-19 pandemic. It was the first hybrid in-person and virtual environmental event since the pandemic began. The Congress brought together leaders from IUCN's 1500+ government, civil society, Indigenous peoples' organizations, business, and academia with over 9000 participants to determine the world's most pressing environmental and development challenges, and actions to address them. IUCN's unique and inclusive membership gives the Congress a powerful mandate as it is not solely government or non-government, but both together.



French President
Emmanuel Macron

Indigenous peoples' organizations, business, and academia with over 9000 participants to determine the world's most pressing environmental and development challenges, and actions to address them. IUCN's unique and inclusive

"There is no vaccine for a sick planet. The battle for the climate, against climate change, is twinned with the battle to preserve and restore biodiversity," said French President Emmanuel Macron

membership gives the Congress a powerful mandate as it is not solely government or non-government, but both together.

"The battle for the climate, against climate change, is twinned with the battle to preserve and restore biodiversity," said French President Emmanuel Macron. The French President spoke at the opening event, and he stressed that, "There is no vaccine for a sick planet". He stated that the world needs to phase out pesticide use, end plastic pollution and eradicating raw materials linked to deforestation of rainforests from

supply chains around the world. He also mentioned that he would push for the Earth's Polar Regions to be recognised as common global assets and that the world economies should agree to goals and make financial commitments for nature similar to the climate goals.

Hollywood actor and active environmentalist Harrison Ford, who is a passionate campaigner for the protection of the Amazon, highlighted the role of indigenous communities in protecting nature spoke at the opening ceremony on behalf of Conservation International. He paid tribute to the young generation of environmentalists in protecting nature and battling against climate change. He said that they are sitting in lecture halls, venturing into the field for the first time, writing their thesis, they're leading marches, organising communities, are learning to turn passionate into progress and potential into power and that in a few years they will be sitting here. He also said that "We are ambitious for perfect solutions, perfect policies, nobody has got that luxury anymore, we got to get to work and got to make things happen, we got to make it happen now!".



Chinese Premier Li Keqiang spoke at the opening ceremony via a video link and urged the major powers of the world to "show responsibility" and play a leading role in improving global environmental governance to create a "clean and beautiful world" highlighting the enormous journey of a herd of Asian elephants in Yunnan as an example of China's growing success with conservation efforts. He said that countries should use the United Nations to frame global rules and create a governance system that is fair, reasonable and benefit sharing.

Resolutions and Recommendations Passed

IUCN members are given the opportunity to submit motions on a variety of critical issues for conservation and sustainability. Between 7 May and 28 August 2019, IUCN Members and Council submitted over 200 motions and the submitted motions underwent a technical review to assess their scientific and technical content which will then be put up for online discussions and finally for electronic voting. The Motions are the mechanism by which IUCN Members can influence third parties and guide the policy and Programme of IUCN. Members vote to approve motions, and once adopted, they become Resolutions and Recommendations, and therefore the body of IUCN's general policy.

For the motions process of the World Conservation Congress 2020, Members were asked to vote on **109 Motions, including 15 with amendments**. The voting took place on October 2020 with 729 IUCN Members participated in the electronic voting process and **all 109 Motions were adopted** continuing a trend from previous Congresses that the majority of motions that reach the vote are ultimately adopted. Some of the motions adopted are Strengthened institutional inclusion concerning indigenous peoples, transforming global food systems through sustainable land management that is aligned to the UN SDGs, to name a few.

Under normal circumstances, the motions adopted by electronic vote prior to a Congress would be recorded en bloc during the Members' Assembly, at which point they would enter into force as Resolutions

and Recommendations, thereby becoming part of IUCN's general policy. However, due to Covid-19 and the postponement of the Congress, the 109 motions that Members adopted by electronic vote had already entered into force as IUCN policy as of late October, 2020, and have been renumbered and reclassified as Resolutions and Recommendations. Of the 109 approved motions, 96 have been classified as Resolutions, while 13 have been classified as Recommendations.

Launches during the Event

Launch of Declaration by World Water Council

Under the aegis of World Water Council and on the side lines the declaration of **“No water security without ecological security / No ecological security without water security”** of which India Water Foundation is a proud signatory along with INBO, The Nature Conservancy (TNC) and few more for an enhanced dialogue between the water and conservation communities was launched. It was overwhelming to be part of one of its kind of declarations.



This historic declaration mentions **seven strong commitments** for which each signatory organizations commits to work for **“a better integration of ecosystems and biodiversity in the activities of the water sector”**. They will work to develop and promote integrated projects and appropriate public policies at global, national, local and river and lake basin levels. In a second phase, the declaration will be accompanied by concrete actions that will be presented at the **9th World Water Forum in Dakar**, Senegal, from 21 to 26 March 2022.

Global Indigenous Agenda

“Our global goals to protect the earth and conserve biodiversity cannot succeed without the leadership, support and partnership of Indigenous Peoples,” said **Dr Bruno Oberle, IUCN Director General**. *“The landmark Global Indigenous Agenda presented today breaks ground on Indigenous self-determined nature conservation and natural resource governance. It was made possible by IUCN's unique convening power as a union of Indigenous peoples, governments and civil society.”*



In 2016, members of the IUCN voted to include Indigenous Peoples' Organisation as a new constituency. The IUCN's Indigenous Peoples Organisation Members spanning six continents developed the *Global Indigenous Agenda for the Governance of Indigenous Lands, Territories, Waters, Coastal Seas and Natural Resources* and launched it at the IUCN World Summit of Indigenous Peoples and Nature which was a first-ever event of its kind set within the context of the IUCN World Conservation Congress.

The Global Indigenous agenda lays out an ambitious vision for indigenous led conservation and calls for recognition of policies and laws to respect and secure the right of Indigenous Peoples over their lands, territories and resources. The solutions to biodiversity loss and climate change mitigation efforts should include traditional indigenous knowledge and practices.

The *Global Indigenous Agenda* lays out 10 high-level proposals and outcomes relating to five themes: Indigenous governance; biodiversity conservation; climate action; post-COVID 19 recovery efforts and food security; and global policy setting.

Sustainable Tourism Initiative

“Protected areas play a crucial role in maintaining the health of the planet and our health as a species, and are critically important in conserving biodiversity, ecosystem services and mitigating impacts of natural disasters and climate change. Through this project, IUCN provides a lifeline to local communities who are unable to finance their vital nature conservation operations after decades of reliance on ecotourism ventures to supplement meagre budgets,” says James Hardcastle, Associate Director, Global Protected Areas Programme, IUCN.

The IUCN and the German development agency GIZ announced a new programme to strengthen the resilience of community-based tourism in and around protected and conserved areas worldwide. The programme, which is funded by the German Federal Ministry of Economic Cooperation and Development (BMZ), will invest up to 17 million Euros to boost the recovery from the impacts of COVID-19 on people and nature. The initiative will use tourism as an instrument to contribute to sustainable development in developing and emerging countries.



IUCN will initially work with two World Heritage sites and five other protected areas in Peru and Vietnam to increase the resilience of the community-based tourism sector to future disruptions. The activities will include engaging local communities and indigenous people in developing community-based ecotourism action plans, and revising site management plans to include detailed tourism destination and visitor management protocols and guidance.

Local people who are dependent on nature tourism will be able to earn an additional income for example, by restoring trails or other infrastructure or by collecting marine plastic, from the dedicated ‘cash for work’ scheme under the initiative. IUCN will also provide training for protected area managers and local entrepreneurs on tourism recovery measures, One Health principles, safeguards and strategies post-COVID-19, itinerary and product development and promotion for small-scale visitor management.

Experiences gathered in the pilot sites will help to form better decision and inform further action for community-based tourism solutions and the role of community-based tourism in pandemic recovery and prevention in and around protected areas on a global scale.

Collaborative Certification Scheme for Nature-Based Solutions and Great Blue Wall Initiative

IUCN unveiled a plan to develop a collaborative certification system to ensure sustainable benefits from Nature-based Solutions for Societal Challenges (NbS). The certification-based system will be launched in 2022. Businesses that developed their Nature-based Solutions interventions in accordance with the IUCN Global Standard for Nature-based Solutions and are interested in obtaining certification will be able to apply for certification through one of several existing sustainability certification schemes recognised by IUCN. Upon obtaining certification, they will then be able to use IUCN's NbS logo in addition to the relevant third-party certification scheme's logo.

The initiative aims to promote the adoption of Nature-based solutions as a proven sustainable development approach across sectors, and to encourage their delivery at the scale and quality necessary to meet global climate, conservation and development targets by 2030. The Facility will help catalyse financing and investment for NbS, assist implementers in identifying and making use of policy levers at global, regional, national and sub-national levels as well as facilitate knowledge across the globe

Under the leadership of Western Indian Ocean states, IUCN and partners committed to support the Great Blue Wall Initiative, the first regionally connected network to develop a regenerative blue economy to the benefit of 70 million people, while conserving and restoring marine and coastal biodiversity.

IUCN Red List of Threatened Species

Today's IUCN Red List update is a powerful sign that, despite increasing pressures on our oceans, species can recover if states truly commit to sustainable practices," said Dr Bruno Oberle, IUCN Director General. "States and others now gathered at the IUCN World Conservation Congress in Marseille must seize the opportunity to boost ambition on biodiversity conservation, and work towards binding targets based on sound scientific data. These Red List assessments demonstrate just how closely our lives and livelihoods are intertwined with biodiversity."

The IUCN released the updated Red List of Threatened Species which shows that some 902 species are officially extinct and that 30 per cent of the species that it assessed face the threat of extinction. The updated list shows that four of the seven most commercially fished tuna species have shown signs of recovery, the IUCN said in a press statement.

The bold step taken by French government to invite participants from all over the world especially in times of Corona deserves applaud. The event is jointly organized by the French Ministry for the Ecological and Inclusive Transition and the International Union for Conservation of Nature. With nearly 6,000 registered participants on site and more than 3,500 online participants, this hybrid event brought together leaders from government, civil society, indigenous, faith and spiritual communities, the private sector, and academia, to collectively decide on actions to address the most pressing conservation and sustainable development challenges. To conclude we can say it is an all inclusive roadmap for sustainable conservation recovery.

Impact of Covid-19 on SMEs-A Global Perspective

Dr Arvind Kumar*

B y providing more than 70 per cent of jobs worldwide and contributing to more than 50% of developing countries' GDPs, small and medium enterprises (SMEs) constitute the backbone of the global economy. Nevertheless, the outbreak of the Covid-19 pandemic since early 2020 and its subsequent spread in the variant forms of Delta and Omicron, this pandemic continues to haunt humankind even in early 2022. SMEs have been most vulnerable to these pandemic crises, especially in developing countries.

The first wave of Covid-19 in early 2020 along with the second wave of this pandemic in March-May 2021, and the ensuing lockdowns and social distancing measures not only proved instrumental in shuddering the global economy but also made huge distractions to life and livelihoods as well as socio-economic systems in the world, and has been touted as the most horrible global crisis since Second World War. Covid-19 has thus far proved to be a massive health crisis triggering systemic shock entailing profound implications, both in the short- and medium- to long-term. It has also been instrumental in engendering a massive short-term economic contraction, shuttering many firms – whether big or small – throwing tens of millions out of work and having other effects on business activities.

In view of the paucity of authentic data about the impacts of the second wave of the Covid-19 worldwide caused by the Delta variant in March-May 2021, the analysis in this article has relied on data available for the first wave of Covid-19 for February to April 2020 along with projections for subsequent periods. The first wave of the Covid-19 pandemic, apart from causing substantial loss of life and severe human suffering worldwide, also proved to be the largest public health crisis in living memory, engendering a severe economic crisis, cessation of production in affected countries, a collapse in consumption and confidence, with uncertainty pervading the market.

In the wake of reports about a diminution in the number of infected cases and the resultant ease in lockdown and containment measures, economic forecasts started pouring in, especially in OECD countries. The OECD's June 2020 Economic Outlook projected a 6% drop in global GDP, and a 7.6% decline in the case of a second pandemic wave by the end-2020, with a double-digit decline in some of the most hit countries, followed by a modest recovery of 2.8% in 2021. The IMF June 2020 Economic Outlook update anticipated a decline in global GDP by 4.9% in 2020, followed by partial recovery, with growth at 5.4 percent in 2021. UNCTAD in its June 2020 World Investment Report projected a decline in global investment by up to 40% in 2020, with a further decrease by 5-10% in 2021. Similarly, the ILO projections estimated the impact of Covid-19 to result in a growth in global unemployment of between 5.3 million in a "low" scenario and 24.7 million in a "high" scenario, indicating that sustaining business operations would be particularly cumbersome for SMEs.

Impact on SMEs in the US

Construed in a broad perspective, 99.9% of all businesses in the US fall under the category of small businesses, providing employment collectively to almost 47.3% of the American private workforce. These small businesses have been one of the hardest-hit sectors of the US economy amid the Covid-19 pandemic. On the basis of a survey conducted by NBER of about 6,000 small businesses in the US, it was ascertained that about 43% of small firms were expected to be shut down by December 2020. Small business enterprises in hospitality, retail, personal services, entertainment, and the arts sectors were worst affected. According to one study, temporary layoffs and furloughs accounted for 77% of gross staffing reductions in the early months of the pandemic crises in the US. According to American media reports, the number of Americans filing for first-time unemployment benefits that stood at 3 million during the first week of May 2020 had increased to 33.5 million for the first three months of the lockdown.

It is further revealed that the number of working business owners in the US plummeted from 15.0 million in February 2020 to 11.7 million in April 2020. As one expert has opined, the Covid-19 pandemic is expected to become a cleansing process and a large reallocation shock for businesses of different sizes and industries.

Impact on SMEs in Europe

SMEs were badly hit all over Europe during the first wave of the Covid-19 pandemic. As per European media reports of that period, about 90% of SMEs were reported to be economically affected, and the most affected sectors were services (70%), construction and production. The impact of the pandemic on the food sector in Europe was to the tune of 10%-15%. France reported about 90% SMEs being affected whereas in Spain approximately 95% the SMEs were impacted. Furthermore, 30% of SMEs in Europe reported that their turnover was incurring at least 80% loss. Belgium, France, Spain and Germany reported loss in turnover of their respective SMEs.

In the absence of reliable detailed information in unemployment on account of the Covid-19 pandemic, SMEs in Europe expected an increase in the unemployment rate in a range between 3% and 5% points. According to rough estimates, the number of workers who suffered a layoff during the first wave of the pandemic stood at 760, 000 in Spain, 200, 000 in Austria, 10, 000 in Germany, and 12, 000 in Finland. Nevertheless, Belgium reported a 32% increase in unemployment in the private sector. A survey of more than 5016 SMEs in Europe conducted by Connected Commerce Council in November-December 2020, revealed that practically all SMEs were affected, with an average 20% decrease in sales and a 16% decrease in customer base.

Impact on SMEs in the Least Developed Countries

SMEs play an immensely pivotal role in the economies of the Least Developed Countries (LDCs). However, the paucity of data is a big hindrance in portraying a big picture of the impact of the first wave of the Covid-19 pandemic on LDCs. There are 46 LDCs, and UNIDO's Index of Industrial Production (IIP) is thus far available for four LDCs. This IIP data showed a dramatic drop in the early part of 2020, followed by a sharp rise in early 2021. The IIP data is available about Mozambique, Senegal, Bangladesh and Rwanda, While Mozambique and Senegal witnessed little impact of the pandemic whereas Bangladesh and Rwanda felt stronger shocks. In view of the fact that low-tech industries are predominant within the LDCs, the food industry benefitted from the pandemic while other sectors like textiles, clothing, and leather were specifically hit.

Undeniably, SMEs constitute the bulk of industries in LDC economies, and having been faced with hurdles like limited access to financial and government support measures, the SME sector in LDCs could have been less successful in dealing with exigencies arising out of Covid-19-related lockdowns and the decline in supply and demand. These inferences find support from the findings of two reports - one published by the UN on the impact of Covid-19 on LDCs and another by the World Trade Organization (WTO) on trade impacts of LDC graduation. According to a World Bank study published in late 2020, Covid-19 had affected SMEs in multiple ways, including smaller enterprises witnessing their sales dwindling faster comparable to large enterprises in the same sector and country, thereby exerting a larger drain on cash flows. According to a report by the International Trade Centre (ITC), in Africa, which is home to 33 LDCs, two out of three smaller businesses had been strongly impacted by Covid-19 in the early months of 2020.



Position of SMEs in countries located in fragile and conflict-prone regions had become more critical in the wake of the outbreak of the Covid-19 pandemic. A study by the International Finance Corporation (IFC) found that the compounded impact of demand crises, disruption to transportation and value chain, and limited availability of credit had been forcing the SMEs to halt operations, which increased the number of non-performing bank loans and even endangered the stability of the financial systems in those countries. In the wake of the Covid-19 pandemic, economies of LDCs had been badly hit due to resultant sharp fall in external demand, sinking commodity prices, a dramatic fall in tourism, rising debt, lower remittances and a severe cut in foreign direct investment, thereby causing the worst recession in the past three decades in LDCs, leaving governments of these countries more indebted and fiscally weaker.

War Forward

Recently, McKinsey & Company, an international firm of consultants, in collaboration with ILO, has been instrumental in creating a comprehensive framework of initiatives that entail the potential of rendering help to small firms in developing countries navigate crises and build resilience. This framework envisages guidance on multiple challenges that are being or to be confronted by SMEs, including liquidity bolstering mechanisms, ways to preserve employment and support an organization's day-to-day operations, and more. According to Tarek Rida, a McKinsey partner based in Dubai: "Financial support measures are not always available to governments of developing countries but they also not the only way governments can help. In response to Covid-19, governments of many developing countries came up with innovative operating levers, from helping small businesses embrace e-commerce, to striking deals with small hotels to host people in need of quarantine."

Referring to multiple examples of such measures throughout the developing world, Tarek further adds that many of these were created to support countries in their response to Covid-19 – and were built on learnings from past crises, such as the 2007-2008 global financial crisis, the Ebola epidemics, and the recent Haiti earthquake. Articulating identical views, Nina Probst, a Geneva-based partner of McKinsey, says: "While many measures can help alleviate the impact of crises on small firms, there is no one-size-fits-all solution. Each government would ultimately define and tailor their support in the way that best suits their local realities. And they would often benefit from engaging a broader ecosystem, from NGOs and donors, to employer organizations and supply chain leaders to amplify their impact."

In the opinion of Dragan Radic, head of the ILO's Small and Medium Enterprises unit, the strategic role of governments in coordinating support is considered in this framework as within an integrated approach of broader ecosystems and that helps both complement resources and tailor and deploy measures that are the right fit to small firm specificities. Asserting that crises do not affect SMEs in the same way, nor are they all equally equipped to respond, one expert has stated that informal firms employ more than 60 percent of people worldwide especially in developing countries, "And they are a particularly vulnerable, and difficult to reach group. Informal firms, women entrepreneurs, young firm owners, people with disabilities and multiple other, often country-specific groups, may need to be addressed through special measures, for the support to be truly equitable."

It has been given to understand that ILO-McKinsey framework goes beyond crisis-response approaches, and also includes measures that can help small organizations build resilience ahead of future challenges by enhancing their risk-management capabilities. Besides, most of the measures envisaged in this framework can also serve as a starting point for the sustainable transformation of small businesses, whether via increased use of technology or opportunities to transition to more environment-friendly operations, facilitating a step forward in economic and social development in affected and vulnerable countries.

Specific emphasis needs to be focused on LDCs where the local or national governments are called upon to walk a fine line between taking action to save existing industrial firms and putting in place long-term measures that build back better with more resilient industries that are capable of resisting shocks such as pandemics. In the 2022-23 budget the Indian government allocated Rs 6,000- crore Raising and Accelerating MSME Performance (RAMP) programme for MSMEs which will be rolled out in the coming five years. Whether it will have a multiplier effect and provide impetus to drive growth is what needs to be seen. Calling upon the private sector to be able to adapt to the new post-Covid-19 reality, some experts opine that efforts of private sector ought to be focused on finding new markets and developing higher-value products. Emphasis also needs to be focused on directing finance to develop technology and encourage business development. Equal emphasis also needs to be stressed on the role of civil society organizations in the post-pandemic period to help the SMEs to resume their path to sustainable growth.

Article published in SME World February 2022 Issue

Update

Scotland Diaries

Dr. Arvind Kumar*

The rugged landscapes and dramatic scenery, striking landmarks and freezing weather are what gives Scotland its particular charm. Staying at Edinburgh and commuting to Glasgow to attend the UNFCCC COP 26 along with Mr. Donald Wahlang Additional Chief Secretary, Environment and Forest Department Government of Meghalaya afforded me an opportunity to witness this picturesque frame daily. While, Edinburgh – the capital of Scotland – is known for its historic ambience, cobbled streets and hidden alleyways, Glasgow is actually the biggest city in

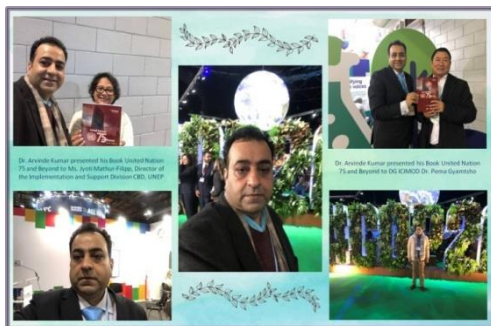


Courtesy, Credit: India Water Foundation

Scotland and is a bustling, cultural metropolis. The number of people registered to attend COP26 has doubled from the last UN climate conference in 2019 to almost 40,000 people. The enthusiasm of participants was worth noticing.

In the blue zone

The World leaders gathered in Glasgow in a “Last, best hope” to tackle the climate crisis and avert a looming global disaster. British naturalist and COP’s People’s Advocate Sir David Attenborough urged the COP delegates to turn tragedy into triumph and tackle climate change and the greatest problem solvers to have ever existed on Earth” is the youth. Also had an opportunity to present my book on ‘United Nations at 75 and Beyond’ to Ms. Jyoti Mathur-Filipp, Director of the Implementation and Support Division, CBD and to Mr. Pema Gyamtsho, Secretary General ICIMOD.



Courtesy, Credit: India Water Foundation

Prime Minister Narendra Modi surprised the delegates with bold new five-fold strategy to show the world India’s determination to act decisively to mitigate the climate crisis. He termed the promises as ‘Panch-amrita’ saying that “These five elixirs will be an unprecedented contribution by India towards climate action.” The promises include-

Page 23 of 76

- India will take its non-fossil energy capacity to 500 GW by 2030.
- India will meet 50 percent of its energy requirements from renewable energy by 2030.
- India will reduce the total projected carbon emissions by one billion tonnes from now till 2030.
- India will reduce the carbon intensity of its economy by less than 45 percent by 2030.
- India will achieve the target of Net Zero by the year 2070.



The UN Environment Programme (UNEP) and India signed a Host Country Agreement on the sidelines of the UN Climate Change Conference (COP26) in Glasgow. India was represented by Shri Bhupender Yadav, Minister for Environment, Forest and Climate Change, Government of India, while Ms. Inger Andersen, Executive Director, UNEP, signed the Agreement on UNEP's behalf. The Host Country Agreement comes as Prime Minister Narendra Modi announced his commitment to climate change by presenting his 5 key agendas at the COP26 key climate summit on 1 November 2021.



Image Courtesy, Credit: @andersen inger Twitter

Outside the blue Zone

Several programmes were being organized at all levels outside the blue zone as well and one of them was the high-level luncheon: "Carbon Negative Food Systems Hold the Key to a Sustainable Planet" organized by the Global Alliance for sustainable planet at Marriot Glasgow.

Launch of Initiative for the Resilient Island States

PM Modi congratulated the Coalition for Disaster Resilient Infrastructure (CDRI) for the initiative and said "It is the collective responsibility of all of us towards mankind. It is, in a way, a shared atonement for our sins". British Prime Minister Johnson said that it is incredibly cruel that vulnerable, small island states are right in the frontline of loss and damage that is caused by global warming and that they have done virtually nothing to cause global warming. He said that the UK will financially help the initiative.

Launch of the One Sun One World One Grid (OSOWOG) project

Another coalition between India and the UK has led to the launch of a 'green grids' initiative-the One Sun One World One Grid (OSOWOG) project. The project aims to connect grids from across borders to facilitate a faster transition to the use of renewable energy. PM Modi spoke about the project said that, "If the world has to move to a clean and green future, these interconnected transnational grids are going to be critical solutions and energy cost but also opens a new avenue for cooperation between different countries and regions".



Image Courtesy, Credit: ukcop26.org

Glasgow Leaders' Declaration on Forest and Land Use

This historic declaration aims to halt and reverse forest loss and land degradation by 2030 which was signed by 105 countries, including 24 African countries.

The Global Methane Pledge

105 Countries led by the United States and European Union signed the voluntary and non binding Global Methane Pledge. The countries pledged to cut their methane emissions by at least 30 percent by 2030.

Pledge to Phase Out Coal

More than 40 countries signed to phase out coal, UK, Poland, Canada, South Korea, Ukraine, Indonesia and Vietnam all pledged to quit coal between 2030 and 2040.

What's next?

The COP26 summit could have had stronger outcomes but we should not lose sight of the fact that much has been achieved and progress has been made. Alok Sharma acknowledged the scale of the task remaining, saying "We can now say with credibility that we have kept 1.5°C alive. But, its pulse is weak and it will only survive if we keep our promises and translate



Image Courtesy, Credit : UNEP

commitments into rapid action”. António Guterres, the UN secretary-general, also warned that further urgent work was needed, saying, “Our fragile planet is hanging by a thread. We are still knocking on the door of climate catastrophe. It is time to go into emergency mode or our chance of reaching net zero will itself be zero”. Ultimately, the Glasgow Climate Pact will accelerate the pace of energy transition which will affect all the sectors of the global economy. But more needs to be done, if the pledges announced at the COP meeting are implemented, temperatures are still projected to rise 2.4°C by 2100, well above the 1.5°C target agreed at the 2015 Paris climate summit. The next few years will be critical in limiting the Earth’s temperature below 1.5°C or even below 2°C and countries need to deliver on their promises and make revised bold pledges ahead the next COP to be held in Egypt.

* President, India Water Foundation attended UNFCCC COP 26 at UK as part of delegation from India Water Foundation, an observer organization with UNFCCC

Link:

COP 26: India Leads the Climate Charge -<https://www.focusglobalreporter.org/cop26-india-leads-the-climate-charge/>

COP 26: A Balance Sheet:<https://www.focusglobalreporter.org/cop26-a-balance-sheet/>

India and COP 26: <https://www.focusglobalreporter.org/india-and-cop-26/>

COP 26: Challenges and Opportunities: <https://www.focusglobalreporter.org/cop-26-challenges-and-opportunities/>

How India surprised the world at COP 26: https://youtu.be/FFz_pPSWlxc

Live from COP 26: <https://www.facebook.com/indiawaterfoundation/videos/3187686438129066>

Report

Special Report on G20 Ministerial Meetings

By Dr. Arvind Kumar*

The G20 recently held Ministerial Meetings at the end of July, 2021. Italy currently holds the Presidency of the G20. Italy's Presidency's agenda rotates around three pillars- People Planet and Prosperity. The G20 will culminate in Rome on October 30th and 31st, 2021, in the Leaders' Summit. Over the course of the year long Presidency, there will be many events that will take place, from institutional meetings which consist of ministerial meetings and a final summit, to special events that are dedicated to the main issues of the global agenda, such as health, environment, women's empowerment, research and innovation and anti-corruption.

India at the G20 Ministerial Meetings

India virtually participated in the Ministerial Meetings. At the Environment Ministerial Meeting, Union



Figure-Union Environment Minister Bhupender Yadav spoke virtually at the Environment Ministerial Meeting (Courtesy: MOEFCC, GOI)

Environment Minister Bhupender Yadav urged the G20 that they must respond to the call of science for urgent global climate action in this decade. The minister informed that under the leadership of Prime Minister Narendra Modi, India has exhibited exemplary resolve by achieving its voluntary commitment of reducing emission intensity. He also emphasized the need to cut emissions while also keeping in mind the Paris Agreement, which emphasised on respective historical responsibilities, delivery of promised climate finance and technologies at low cost keeping in perspective per capita emissions, differences in per capita GDP and the unfinished agenda for sustainable development. Minister Yadav said that

the fight against climate change can be accelerated only when there is enough financial and technological support to developing nations. Yadav spoke about India's Urban Climate actions and also stated that India remains steadfast in its commitments to join and lead efforts to combat climate change within the multilaterally agreed convention and its Paris Agreement.

The fight against climate change can be accelerated only when there is enough financial and technological support to developing nations

At the G20 Energy and Climate Joint Ministerial Meeting, Union Minister of Power and new and Renewable Energy, R K Singh addressed the meeting virtually. He urged the G20 nations which have per capita GHG emissions higher than to world average to bring down their emissions on par with the world average which will vacate the carbon space to some extent and support the developmental aspirations of the developing nations. Mr. Singh appraised the delegated about the

progress that India has made towards its NDC targets while staying committed to meeting its climate goals under the Paris Agreement. Against the targeted emission reduction of 33-35 % by 2030, India has already achieved emission reduction of 28% over 2005 levels and at this pace, it is all set to exceed its NDC commitments before 2030, the minister spoke. The minister also stated that the installed capacity in India



Figure - Union Minister of Power and new and Renewable Energy, R K Singh addressed the meeting virtually (Courtesy: MNRE, GOI)

from renewables is way above the commitments made under the Paris Agreement. The Minister encouraged the G20 nations to take immediate steps in this direction so that the world community stays on the right track to leave a better planet for our future generations.

At the G20 Culture Ministers' Meeting, Minister of state (MoS) for External Affairs Meenakshi Lekhi addressed participants of the meeting and presented India's perspective on the topic 'Culture and Creative Sectors as drivers for growth'. Smt Lekhi stressed on the significance of culture and creative sectors in providing employment and economic growth. She emphasized that culture and creative sectors can drive growth through generating employment, reducing inequalities, promoting development in a sustainable manner and providing distinct identity to people. Culture also has potential to give more opportunities to women, youth and to local communities which have very rich and diverse cultural traditions and practices. They can also help to promote environmentally friendly production and consumption practices such as the production of handlooms, handicrafts and khadi etc. and its importance and relevance for India.

Smt Lekhi also highlighted the many schemes taken by the Government of India to develop the culture and creative sectors like the One District One Product scheme of Government of Uttar Pradesh, Tourism circuits, promotion of Yoga and Ayurveda etc. She also emphasized that there should be a need for international dialogue and collaboration to tackle common issues connected to the cultural and creative sectors and to suitably inform and adapt public policies. She reiterated India's commitment to international cultural cooperation and collaboration in efforts to support and facilitate the cultural and creative sectors of societies.



Figure - Meenakshi Lekhi, Minister of State for External Affairs spoke during the meeting. (Courtesy: Ministry of External Affairs, GOI)

The G20 Ministerial Meeting on Environment, Climate and Energy

The G20 Ministerial Meeting on Environment, Climate and Energy took place in Naples on 22nd and 23rd July, 2021. UN Secretary-General **António Guterres** spoke at the Meeting saying that the world urgently needs a clear and unambiguous commitment to the 1.5 degree goal of the Paris Agreement from all G20 nations. There is no pathway to this goal without the leadership of the G20. This signal is desperately needed by the billions of people already on the frontlines of the climate crisis and by markets, investors and industry who require certainty that a net zero climate resilient future is inevitable. The delegates discussed many topics like combating climate change, accelerating ecological transition, making financial flows in accordance with the Paris Agreement, building smart cities etc. For the first time, the G20 adopted a '**Joint Final Communiqué**' which will help to contribute to the G20 Countries mission to fight climate change and ensure a clean and inclusive green transition.



Figure- G20 Ministerial Meeting on Environment, Climate and Energy held in Naples. (Courtesy: G20 website)

The document is based on three macro areas-

The document is based on three macro areas-

- **Biodiversity:** The document contains ways on using nature based solutions for restoring ecosystems and protecting nature, protection against soil degradation, protection of water resources, oceans and seas including the prevention and reduction of marine plastic litter.
- **Efficient use of resources and circular economy:** G20 vision on circular economy with a focus on sustainable textiles and fashion, circular cities, education and training. The G20 for the first time recognizes results of the recent IPBES and IPCC report on the link between biodiversity and climate change.
- **Sustainable finance:** The document focuses on specific financing needs for the protection and restoration of ecosystems as a contribution to the G20 work on the future shape of the global financial system.

G20 Culture Ministers' Meeting

The first G20 Culture Ministers' Meeting was held in Rome on 29th and 30th July, 2021, where the group of the world's largest economies agreed for the first time that culture is a major engine for sustainable socio-economic recovery in the wake of the Covid-19 pandemic. This led to the adoption of the "**Rome Declaration of the G20 Culture Ministers**". The declaration on Culture recognizes that culture has intrinsic value but also plays an essential role for the regeneration of our economies and our societies, which have been heavily affected by the pandemic.

At the meeting, Italy took steps to permanently integrate culture into the G20 agenda, including formalizing the Culture Working Group to build consensus among Members that contributes to the G20 Meeting of Ministers of Culture and the G20 Summit of Heads of State and Government. The declaration includes five key priorities which are- The protection of Cultural heritage; Culture and climate change; Culture and education; Cultural creative industries; Culture in the digital transformation.



Figure 3- The Ministers of Culture of the G20 at the Colosseum, Rome. (Courtesy: G20 website)

Third Meeting of the Development Working Group

The two-day long meeting which took place on July 27th and 28th was the third meeting of the Development Working Group (DWG). It gave the G20 members the opportunity to discuss the outcomes of the Ministerial Sessions which were held at the end of June and the state of play on the key priority areas in the field of sustainable development, including: 1) Financing for Sustainable Development, 2) Territorial Development and SDG Localisation and 3) The 2021 Rome Update and the Accountability process.

The Third Meeting of the Sustainable Finance Working Group (SFWG)

On 27 July 2021, the third meeting of the Sustainable Finance Working Group (SFWG) was held online. The meeting was divided into two sessions. During the first session, the Group discussed the first draft of the **Sustainable Finance Synthesis Report**. The SFWG delegates analyzed the recommendations proposed by the Co-chairs and the Presidency regarding the three deliverables for 2021: improving the comparability, compatibility, and interoperability of approaches to align investments with sustainability goals; overcoming information challenges by improving sustainability reporting and disclosure; and enhancing the role of International Financial Institutions in supporting the goals of the Paris Agreement and Agenda 2030. During the second session, the Group examined the **G20 Sustainable Finance Roadmap**, which will be submitted to Ministers and Governors ahead of their October meeting and will guide future G20 work on climate change and sustainable finance.

Outcomes

The Ministerial Meetings of the G20 reaffirms the essential role of culture for the sustainable development of our societies and the need to promote and protect it, particularly in the context of the global pandemic, along with the '**Joint Final Communiqué**' which will help to contribute to the G20 Countries mission to fight climate change and ensure a clean and inclusive green transition. The G20 Meetings were acknowledged as a decisive step in the right direction. This landmark meeting will now be followed by the Summit of the G20 Heads of State and Government that is going to be held in Rome on October 30th and 31st, 2021. The summit will include participants from the Members of the G20, guest from countries, and representatives of major International and Regional Organizations, along with the Ministers of Economy and Finance that are traditionally invited to attend the event and the Summit will be chaired by President of the Council of Ministers.

Agenda

PM Modi's Multipurpose Visit

By Dr. Arvind Kumar*

On the basis of democratic values, Quad with positive ideas and a positive approach is determined to move forward. Whether it is supply chain, security, climate action, Covid response, or technology cooperation, I am happy to discuss them with our friends.” said PM Modi at the summit.

In the 'New Normal' that has come to prevail in the wake of subsiding of the adverse impacts of COVID-19, the virtual meetings at national, regional and global levels are gradually being replaced by in-person meetings. Recent months have witnessed flurry of activity gaining momentum nationally and internationally. Accordingly, PM Modi's visit to the United States on 22-25 September served three-pronged purpose – participation in the in-person Quad meeting convened in Washington, addressing the 76th session of the UN General Assembly; and exchange of views with leaders of the United States – and, it can be said that PM Modi's visit proved instrumental in serving multipurpose objectives for India. Owing to the awe and fear of the global pandemic, India's interaction with the international community and the United States, though carried out through virtual meetings, had somewhat been lacking in momentum that could only be galvanized through in-person meetings and live exchange of views across the table.

Quad In-Person Meeting

Quad comprises four countries – Australia, India, Japan and the United States; and on 24 September 2021, President Biden of the US had convened a meeting of Quad member countries at the White House that was said to be the first-ever in-person Leaders' Summit of the Quad. At this summit, the leaders put forth ambitious initiatives that could further ties between the member countries of the Quad and advance practical cooperation on 21st-century challenges that interalia included ending the COVID-19 pandemic, including by increasing production and access to safe and effective vaccines; promoting high-standards infrastructure; combating the climate crisis; partnering on emerging technologies, space, and cyber security; and cultivating next-generation talent in all of member countries.



Figure 4- PM Modi at Quad Summit
(Photo Curtsey: Twitter)

In his opening remarks at the Quad Summit, PM Modi said that four member countries of the present Quad had first come together to help the Indo-Pacific region in the aftermath of the 2004 tsunami; and currently, when the entire world is fighting the COVID-19 pandemic, the Quad member countries have once again joined hands together in the larger interest of the humankind. He hoped that Quad vaccine initiative will be of tremendous help to Indo-

Pacific countries. Asserting that Quad, based on its shared democratic values, had decided to move forward

with positive thinking and positive approach, PM Modi said that he would be happy to discuss with his counterparts to discuss on issues whether it is supply chain or global security, climate change or COVID-19 or cooperation in technology. Hoping that Quad will work in a way in the role of ‘force for global good’, PM Modi expressed his confidence that mutual cooperation in Quad would ensure peace and prosperity in Indo-Pacific and the world.

Joint Statement issued at the end of the summit reiterated commitment of the Quad for the rule of law, freedom of navigation and over flight, resolution of disputes, democratic values and territorial integrity of states. It emphasized on the rules-based behaviour in a region where China has been trying to flex its muscles. While voicing support for small island states, especially those in the Pacific in order to augment their economic and environmental resilience, the joint statement also called upon North Korea to engage in diplomacy over its nuclear weapons and ballistic missile programme, which North Korea has declined to accede to unless international sanctions against it were dropped.

Address to UN General Assembly



Figure 5- PM Modi addressing the 76th session of the UN General Assembly (Courtesy: Twitter).

Occasion of the visit of PM Modi to the United States took place at a time when the 76th session of the UN General Assembly was in session. In his address to the UN General Assembly (UNGA) on 24 September 2021, PM Modi cited inspirational quotes from Indian saints, leaders and men of literature to bring home his message to the members of international community. Quoting Acharya Chanakya, who had said, “When the right action is not taken at the right time, then it is time itself that causes the action to fail”, the Indian PM cautioned that if the UN has to keep itself relevant, then it is essential for it to improve its effectiveness and enhance its reliability. Emphasizing on the need of strengthening

the UN to safeguard the global order, global laws and global values, Modi alluded to various types of questions being raised about the United Nations that often pertained to climate crisis and role of the world body during the COVID-19 pandemic.

Referring to the opprobrium being heaped on World Health Organization (WHO) since the COVID-19 outbreak that first surfaced in China in December 2019 and subsequent handling of the global pandemic by WHO, PM Modi also expressed concern over the proxy wars going on in many parts of the world, terrorism and the ongoing crisis in Afghanistan and said these and other related issues had highlighted the seriousness of question confronting the world body. With regard to the origin of COVID-19 pandemic and ease of doing business, PM Modi told the General Assembly that institutions of global governance had almost eroded

“When the right action is not taken at the right time, then it is time itself that causes the action to fail”, added PM Modi

their credibility they had been to build after decades of hard work. He also referred to the World Bank's recent move of discontinuing flagship Doing Business publication, alluding to 'data irregularities' in recent editions of the global business climate index, because the decision was taken in the aftermath of a probe by the World Bank with regard to data irregularities allegedly owing to pressure from some top bank officials to boost China's ranking in 2017.

Emphasizing on the essentiality of constantly strengthening the UN for the protection of global order, global laws and global values, Prime Minister Modi concluded his address to the UN General Assembly with the words of Gurudev Rabindranath Tagore in Bangla that said, "Move forward fearlessly on your auspicious path of action. May all weaknesses and doubted be eliminated," and added that this message is as relevant to the UN in today's context as it is to every responsible country: "I am confident that all of us will strive to enhance peace and harmony in the world, make the world healthy, safe and prosperous."

Strengthening Indo-US Relations

During his visit to the United States, PM Modi had meetings with US President, Joe Biden, Vice-President Kamala Harris and other officials of Biden Administration, business leaders and others. In his meetings with the US President and Vice-President, PM Modi exchanged views on bilateral, regional and global issues. Remarks by President Biden before the bilateral meeting explicitly demonstrated that for the US the focus issues of the meeting were the COVID-19 pandemic, climate change and the situation in the Indo-Pacific region. Nevertheless, remarks by the Indian Prime Minister indicated that for India the big focus was on India's anxiety to become a technology and trade partner, playing a complimentary role. In his meeting with the US Vice-President Kamala Harris on 24 September 2021, PM Modi exchanged views on bilateral, regional and global issues. Speaking to the media persons after Modi-Harris meeting, India's Foreign Secretary informed that the focus was also on the issue of Pakistan's role in terrorism and the need for Islamabad to check itself.



Figure - PM Narendra Modi and President Joe Biden at White House (Photo Curtsey: MEA, India).

on bilateral, regional and global issues. Speaking to the media persons after Modi-Harris meeting, India's Foreign Secretary informed that the focus was also on the issue of Pakistan's role in terrorism and the need for Islamabad to check itself.

The Joint Statement issued after Modi-Biden meeting on 24 September articulated the affirmation of clear vision of India and the US that would guide the US-India relationship forward through building a strategic partnership and working together with regional groupings, including ASEAN and Quad members; promoting shared interests in the Indo-Pacific region and beyond; developing a trade and investment partnership that increases prosperity for working families in both countries; finishing the fight against the COVID-19 and other health challenges; galvanizing global efforts to scale up climate action; strengthening democratic values and institutions in support of people in two countries; and enhancing people-to-people ties that have made both the US and India stronger. The Joint Statement also reflected the resolve of both countries

to advance the US-India Comprehensive Global Strategic Partnership and looked forward to what the United States and India will achieve.

Way Forward

PM Modi's visit to the US has been very fruitful in promoting bilateral relations in different fields and renewing India's desire to continue to foster closer cooperation with Washington under the Biden Administration. Cooperation between New Delhi and Washington has already been an ongoing process in different fields like, health, counter-terrorism, trade and investment and other areas of mutual interests. However, some critics lament that no major breakthrough agreement either in defence sector or trade could be signed during this visit; nonetheless, with the passage of time such agreements are likely to see the light of the day if both countries continue to improve their relations.

Report

G20 Summit-A Preliminary Assessment

By Dr. Arvind Kumar*

Group of Twenty or G20 is an intergovernmental forum comprising 19 countries and the European Union that aims at improving international economic status by coordinating important global financial institutions like IMF, World Bank and the World Trade Organization (WTO). G20 members, inter alia, include: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, the Republic of Korea, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States and the European Union. Established on 26th September 1999, the G20 is accountable for planning strategies to tackle global issues like the economy, financial stability, climate change mitigation and sustainable development. The G20 member countries meet annually to discuss the critical issues facing the global economy.

The final communique also demonstrated that it was for the first time that G20 member countries acknowledged the use of carbon pricing mechanism and incentives as a possible tool against climate change



Figure 6- The G20 leaders for the sixteenth meeting of the G20 held in Rome, Italy. (Photo Courtesy: ANI).

A two-day summit meeting of the G20 member countries was hosted by Italy at its capital, Rome, on 30-31 October 2021 and it was the first in-person meeting after two years with the overarching theme encompassing three pillars – people, planet and prosperity – and that was reflected in the full agenda of the meeting that comprised climate change, the COVID-19 pandemic, taxation and

global economic issues.

The Rome summit of G20 mainly focused on major issues like climate change, COVID-19 vaccines, taxation, global economy and development aid.

Climate Change

While committing to the key Paris Agreement goal of limiting global warming to 1.5 degrees Celsius above pre-industrial levels, the summit leaders pledged action against dirty coal plants. The final communique of the G20 reiterated that keeping 1.5^o C would require meaningful and effective actions and commitment by all countries, taking into consideration different approaches. It also articulated the pledge of G20 member countries to reach a target of net zero carbon emissions “by or around mid-century” instead of setting a clear 2050 date, as many climate campaigners and experts were hoping for. Articulating the agreement of the G20 member countries to stop funding new dirty coal plants abroad by the end of 2021, the final

communiqué also reaffirmed the so far unmet commitment of mobilizing \$100 billion for developing countries for climate adaptation costs.

The final communiqué also demonstrated that it was for the first time that G20 member countries acknowledged the use of carbon pricing mechanism and incentives as a possible tool against climate change, just as the IMF has been calling on the most polluting countries to follow the path by setting a minimum carbon price. While reflecting the pledge of the G20 leaders to work collectively to ensure a successful COP26 scheduled to commence from the day the G20 summit concludes, the final communiqué reaffirmed commitment of the G20 leaders to the full and effective implementation of the Paris Agreement. It also reaffirmed the commitment to taking further action during this decade and to framing, implementing, adapting, where necessary enhancing 2030 nationally determined contributions (NDCs).

Other commitments by G20 leaders to address aspects of climate change are as follow:

- Strengthening actions to halt and reverse biodiversity loss by 2030;
- Ensuring at least 30% of global land and at least 30 % of the global ocean and seas are conserved or protected by 2030; and
- Calling upon other countries to join forces with G20 to reach the aspirational goal of planting one trillion trees by 2030, with the involvement of the private sector and civil society.

Taxation

A seal of approval was affixed by G20 leaders on an agreement that would subject multinational corporations to a minimum 15% tax as part of an endeavour to build a strong, stable and fairer international tax system. The particular targets of this new global tax regulation are American Internet giants like Amazon, Google parent Alphabet, Facebook, now rechristened as Metaverse, and Apple Inc., that have benefited from basing their offices in low-tax countries to minimize their tax bills. As per media reports, these reforms were reportedly brokered by the Organization for Economic Cooperation and Development (OECD) and supported by 136 countries that accounted for more than 90% of the global GDP, and this reform that has been in the offing is likely to come into force in 2023. Nevertheless, some observers feel that it may miss the deadline. Each country participating in this worldwide agreement is called upon to enact national legislation in this regard, and as per media reports, American President Joe Biden is among those facing domestic opposition to this reform.

COVID-19

In the wake of the worldwide havoc wreaked by the COVID-19 pandemic, G20 leaders reaffirmed their determination to support the WHO's goal of vaccinating at least 40% of the global population against COVID-19 by the close of 2021, and 70% by the middle of 2022 along with taking measures to boost the supply of vaccines in developing countries and doing away with supply and fiscal hindrances. The joint communiqué also envisaged the promise of G20 leaders to work together towards the recognition of

COVID-19 vaccines deemed safe and effective by the WHO. Other measures with regard to COVID-19 and global health related issues as envisaged in the joint communique, inter alia, included:

- Ensuring swift and equitable vaccine distribution worldwide;
- Reaffirming commitment to the Rome Declaration, adopted at the Global Health Summit in May 2021, as a “compass for collective action.”
- Establishment of a G20 Joint Finance-Health Task Force for providing adequate, sustainable and better coordinated financing; and
- Moving towards an international treaty on pandemics.

Global Economic Issues

The Rome G20 Summit 2021 took place at a time when the world was dealing with the problem of rising inflation exacerbated by spike in energy prices, and supply chain bottlenecks exerting pressure on global economy that is still struggling hard to recover from COVID-19 related disruptions, and in the wake of these and other related developments, the G20 leaders affirmed to take following measures, as envisaged in the joint communique:

- No hasty removal of national stimulus measures;
- Continue to sustain the recovery, avoiding any premature withdrawal of support measures; and
- To remain vigilant to the global challenges impacting economies, such as disruption in supply chains.

Development Aid

A new target of channelizing \$100 billion towards the poorest countries was set by G20 leaders, and this was to come from a corpus fund of \$650 billion made available by International Monetary Fund (IMF) through a recent issuance of its Special Drawing Rights (SDRs), which is not a currency; however, these SDRs can be utilized by developing countries either as a reserve currency that stabilizes the value of their domestic currency or can be converted into stronger currencies to finance their development projects.

India at G20

India was represented at the 2021 Rome G20 Summit by Prime Minister Narendra Modi. While addressing the G20 Leaders’ Summit in Rome on October 30, PM Modi conveyed that India is ready to produce 5 billion Covid-19 vaccine doses



Figure 7- Prime Minister Narendra Modi with several world leaders assemble for ‘family photo’ at Roma Convention Center (Photo Courtesy: ANI)

by 2022 end which will be available for the world. PM Modi invited G20 countries to make India their partner in economic recovery and supply chain diversification.

While briefing media persons on October 30, India's foreign secretary Harsh Vardhan Shringla said that India's Prime Minister highlighted India's contribution to the fight against COVID-19 pandemic and also mentioned India's medical supplies to over 150 countries as he spoke about the country's vision of 'One Earth, One Health' for a collaborative approach in combating the pandemic. PM Modi also brought out the fact that despite challenges of the pandemic, India continued to be a trusted partner in the context of reliable supply chains.

War Forward

There have been mixed reactions to the outcomes of 2021 Rome G20 Summit. Some analysts are critical of G20 stance on climate change. They point out that the G20 final communique lacked firm pledges and failed to put an end date on the actual use of coal. Besides, it is argued that G20 did not make any commitments to introduce any improvements in on issues like climate finance, paving the way for difficult negotiations to be held at the COP26 being held at Glasgow, UK. Some critics have appreciated the G20 acknowledgement that G20 members' emission reduction plans, known as NDCs, were required to be firmed up over the ongoing decade to bring them on track for net zero by 2050. One critic observed: "If the G20 was a dress rehearsal for COP26, then world leaders fluffed their lines." Another analyst has lamented that the Rome Summit was unable to massively accelerate COVID-19 vaccine distribution or engender a critical acceleration to tackle the climate emergency and mark the end of coal. While hailing the G20 as a consensus-based multilateral process that can only deliver incremental progress over time, another critic has opined that from that standard, the Rome Summit had a positive impact because it succeeded in generating norms, regulations and goals that facilitate global cooperation and reduce tensions.

Review

COP26 – A Balance Sheet

“The science is clear that the window of time we have to keep the goal of 1.5 °C alive, and to avoid the worst effects of climate change, is closing fast. But with political will and commitment, we can, and must, deliver an outcome in Glasgow the world can be proud of.”
said COP President Alok Sharma

Higher expectations and lofty aspirations are always at place prior to the convening of a global conference like the Conference of Parties (COP), especially on the burning issues pertaining to climate change that in reality pose existential threats to the very survival of humankind. COP is held every year since 1995 under the aegis of the United Nations Framework Convention on Climate Change (UNFCCC) to



Figure - COP26 Logo (Image Courtesy: Wikimedia Commons)

deliberate on the issues pertaining to the ongoing process of climate change and seek solutions to deal with them. The 26th COP that was scheduled to be held in 2020 had to be postponed to 2021 in the wake of global outbreak of the COVID-19 pandemic in early 2020. Subsequently, COP26 was held in Glasgow, in the United Kingdom, from 31 October to 12 November 2021, and it was the first in-person meeting for a multilateral environmental agreement to take place. The COP26, like its predecessor COPs in the past, was held under the aegis of the UNFCCC.

The COP26 was the first since the Paris Agreement of COP21 that called upon the Parties to make enhanced commitments towards mitigating climate change, because the Paris Agreement enjoined upon the Parties to conduct a process known as the ‘ratchet mechanism’ every five years to provide improved national pledges. COP26 was attended by about 25,000 delegates from nearly 200 countries. Around 120 Heads of State/Government graced the occasion and these inter alia included: American President Joe Biden, German Chancellor Angela Merkel, French President Emmanuel Macron, Spanish Prime Minister Pedro Sanchez, India Prime Minister Narendra Modi, Canadian Prime Minister Justin Trudeau, and Japanese Prime Minister Fumio Kishida etc.

COP26 at Work

On 31 October, the inaugural day of the COP26, the participants in their respective opening statements articulated their expectations for the summit. While participants from developing countries emphasized on the need for making available adequate finance, in consonance with the long-promised goal of mobilizing \$100 billion per year by 2030, whereas the participants from developed countries stressed on the need to

finalize the rules pertaining to the Paris Agreement Rulebook that entails the potential of providing the certainty and confidence to raise ambition.

World Leaders' Summit, held on 1-2 November 2021 was the main highlight of COP26. On first November 2021, 60 world leaders and luminaries in their statements emphasized on the urgency and necessity of enhanced climate action. Risk, threat and vulnerability constituted the prime theme that resonated across statements. While underscoring humanity's shared responsibility for the security of future generations, several leaders also acknowledged the 'anger and frustration' among youth movements, and the potential for future generations to judge the current generation even more harshly. World leaders also lost no time in embracing opportunity and possibility, especially to raise finance to support developing countries. Highlights of the World leaders' Summit were following pledges and commitments:

- India's commitment to achieve net zero by 2070, along with reaching 50% renewable energy by 2030;
- Spain's announced contribution of USD 30 million to the Adaptation Fund in 2022, and commitment to increase its climate finance by 50% by 2025;
- Republic of Korea's increase of its emissions reduction target to 40% below 2018 levels by 2030, representing an improvement from its previous NDC of 24.4% below 2017 levels; and
- The launch of the Global Methane Pledge, with over 70 countries pledging to collectively lower methane emissions by 30% by 2030 from 2020 levels.

The World Leaders' Summit wrapped up on 2 November 2021, with a further 56 speeches from world leaders.

Negotiations at COP26 from 3 to 6 November 2021 veered around key issues like finance, transparency, adaptation, Article 6 of the Paris Agreement and loss and damage, among other difficult issues. Nevertheless, the final three days – from 10 to 12 November 2021 – witnessed weighing compromises on these issues. Negotiations on 10 November commenced with an overview from the COP26 presidency about the status of each track of negotiations. On the issue of finance, developed countries were seemingly perceived as 'shirking their obligations to provide finance.' The three issues – finance, loss and damage and Article 6 – that were left unresolved at COP25 that was held in Madrid, Spain, in 2019, witnessed draft texts to be readied and issued on 11 November 2021.

The final day of COP26 was scheduled on 12 November and the negotiations began by hearing the status of each outstanding issue. Divergence of views in many areas could still be discerned from countries' views, thereby indicating that final decision on these issues could require more time. 12 November was Friday and deliberations continued through Friday night and into Saturday morning. In view of COP26 presidency's insistence to accept the package of prepared texts, there ensued a lengthy round of statements, including requests for changes, and thereafter, in the aftermath of informed-informal negotiations by the COP26 presidency with the US, China, India and others, the curtains were drawn on COP26 just before midnight on Saturday, 13 November 2021.

The resultant outcome of the COP26 was adoption of the Glasgow Climate Pact incorporating three overarching cover discussions that provide an overall political narrative of the Summit.

Outcomes of COP26



Figure 8- COP26 President Alok Sharma [Photo Courtesy: Phil Noble/ Reuters]

But some climate scientists, legal experts, and politicians argued the final deal out of Glasgow resulted in incremental progress inadequate to address the severity of the climate crisis. Some climate activists and campaigners also sharply criticized the COP26 as an exclusionary fortnight of talks that became a public relations exercise.

New pledges on methane pollution At COP26, more than 100 countries joined a US-EU-led coalition to cut 30% of methane gas emissions by 2030 from 2020 levels, and it is construed as a significant step in tackling climate change and bringing the world closer to the goals of Paris Agreement to keep global temperature rise to below 2⁰ C. Known as Global Methane Pledge, it encompasses countries that account for about half of global methane emissions and 70% of global GDP. According to scientists, methane is 84 times more potent than carbon and does not last as long in the atmosphere before it breaks down and this renders methane as a critical target for combating climate change quickly while concurrently minimizing other greenhouse gas emissions.

This pledge includes six of the world's 10 biggest methane emitters – the US, Brazil, Indonesia, Nigeria, Pakistan and Mexico – and China, Russia and India that together account for 35% of global methane emissions, did not join this coalition. While announcing the launch of this pledge at COP26 on 1 November 2021, President Biden said that it was going to make a huge difference, “not just when it comes to fighting climate change – it is going to improve health, improve food supply and boost economies.”

COP26 came to an end on 12 November, after two-week long negotiations, with an agreement among approximately 200 countries to expedite the fight against climate change and to commit to stricter climate pledges. Some significant accomplishments of COP26, inter alia, include new pledges on methane gas pollution, coal financing, deforestation, completion of rules on carbon trading, and US-China deal on climate change.

But some climate scientists, legal experts, and politicians argued the final deal out of Glasgow



Figure 9- US President Joe Biden delivers a speech (Photo Courtesy: Wikimedia Commons).

Agreement on coal

Another highlight of the Glasgow Climate Pact is a final deal among nearly 200 nations that for the first-



Figure 10- A delegate walks past a sign (Photo Courtesy: Yves Herman | Reuters).

time targeted fossil fuels as the key driver of climate change. Nevertheless, according to media reports, the deal contained a last-minute change that some officials called a softening of critical language regarding coal power. Undoubtedly, reports in some sections of media indicate that China and India, some of the world’s biggest burners of coal, insisted on a last-minute change of fossil-fuel language in the pact, switching the words from a “phase-out” to a “phase down” of coal; nonetheless, India has denied this charge. Some countries initially opposed the move but ultimately conceded.

While disappointed by the change of language on coal power, some experts opined that the deal was still better than nothing and it provides incremental progress on transitioning from fossil fuels to clean energy. In a tweet about the deal, Jennifer Morgan, Executive Director of Greenpeace International, wrote: “It’s meek, it’s weak and the 1.5C goal is only just alive, but a signal has been sent that the era of coal is ending. And that matters.”

U.S.-China pledge to slow climate change

Another salutary outcome of COP26 is the agreement between the U.S. and China, the world’s two largest emitters of carbon, to cooperate during the current decade to curtail global warming from surpassing 1.5 degrees Celsius and ensure that progress result from the conference. This agreement between the rivals, as well as two largest emitters, had taken many delegates by surprise delegates during the course of summit. Admittedly, this announcement of agreement at the current juncture falls short of specific details or deadlines; nevertheless, it emphasizes that Chinese and American leaders will work to boost clean energy, mitigate deforestation and curtail methane emissions. It also reiterated their commitment to work together to help accelerate the transition to a net-zero global economy. The U.S.-China agreement lacks specific details or deadlines but emphasizes that Chinese and American leaders will work to boost clean energy, mitigate deforestation and slash methane emissions. The joint declaration said the countries will work together to help accelerate the transition to a net-zero global economy. While announcing the US-China agreement at COP26 Summit, John F. Kerry, the US special climate envoy said on 10 November:



Figure - U.S. climate envoy John (Photo Courtesy: Jeff J Mitchell | Pool | Reuters)

“The United States and China have no shortage of differences. But on climate, cooperation is the only way to get this job done.”

Toward 2030 targets to reach 1.5°C goal

It is worth noting that the draft of the final COP26 deal did not envisage a rolling annual review of climate pledges for which the developing countries had called for. Nevertheless, countries are currently called upon to revise their pledges every five years. Concurrently, the Glasgow Climate Pact also left unresolved answers on how much and how quickly countries must cut their emissions. According to the IPCC, to keep global temperatures from exceeding the 1.5°C level will require the world to nearly halve greenhouse gas emissions within the next decade to reach net-zero emissions by 2050. In this context, COP26 has been billed by some experts as humankind’s ‘last and best’ chance to support the goal to not exceed 1.5°C of global warming, the temperature target as envisaged in the Paris Agreement. Nevertheless, participating countries agreed to submit tougher 2030 targets in 2022 and to put forward long-term strategies to help transition to net-zero emissions by around 2050 in order to avert the adverse consequences of the vagaries of climate change.

While deliberating on Article 6 of the Paris Agreement, an article that describes rules for an international carbon market and other forms of international cooperation was perhaps the last piece of the Paris Agreement Rulebook that had remained to be finalized. Undoubtedly, participating countries have agreed in principle to avoid double counting of emission reduction across more than one country’s greenhouse gas inventory; however, exactly the question as to how much double counting will actually take place still remains unclear.

“Our fragile planet is hanging by a thread. We are still knocking on the door of climate catastrophe. It is time to go into emergency mode or our chance of reaching net zero will itself be zero”, warned António Guterres, UN secretary-general

Deforestation

Another pleasant outcome of COP26 was agreement among more than one hundred countries, possessing nearly 85% of the world’s forests, including countries like Canada, Russia, the Democratic Republic of Congo and the United States, to end deforestation by 2030. It was also agreed to improve upon the 2014 New York Declaration on Forests. And the signatories under this agreement had pledged to halve deforestation by 2020 and end it by 2030; however, in the 2014-2020 period, deforestation registered an increase.

Challenges Ahead

There have been mixed reactions to COP26. While describing COP26 climate summit in Glasgow as not a momentous moment, an expert referring to the fate of the planet on the line, has opined world leaders should have been swinging for the fences; instead, they played small ball, working out only incremental gains rather than the historic breakthrough the occasion demanded. According to James Salzman, a professor of environmental law at UCLA Law School, COP26 reflected an important shift in global climate strategy

toward a sectoral approach because it featured separate agreements on issues like methane, coal and deforestation, rather than focusing solely on greenhouse gas mitigation. He further added: “Talk is cheap, of course, and it remains to be seen whether these amount to anything more than aspirational rhetoric. But the pivot could be significant in breaking down a huge problem into more bite-sized approaches.”

Interestingly, COP26 was held in Glasgow, home to James Watt, the inventor of steam engine. It is in this context that one critic has opined that it is a fitting station from which the “Glasgow Train of Ambition” departs and the question now is as to how this train is going to speed up: “One thing is clear that the Glasgow train needs to provide seats for all passengers”.

Prioritizing Natural Farming

By Dr. Arvind Kumar*

“We need to adapt traditional farming techniques to modern times. We need to utilise technology to revolutionise farming techniques. Natural farming will benefit the country's 80 percent small-scale farmers the most. These farmers have less than 2 hectares of land and spend a lot on chemical fertilizers, but using natural fertilizers will benefit them.” said Modi in his virtual address.

Prime Minister Modi's clarion call to the farming community to adopt natural farming is very timely. Asserting that maximum benefits from natural farming can accrue to small farmers owning less than two-hectare land and who comprise 80 per cent of the total farmers in the country, PM Modi sympathized with small farmers who spend quite sum of amount on chemical fertilizers, and concurrently was sanguine about these farmers reaping good dividends when they turned towards natural farming. He cited the example of Gujarat that amply makes positive effects of natural farming quite visible.

Prime Minister Modi was virtually addressing the first national conclave as a part of the pre-Vibrant Gujarat summit for the agriculture sector at Anand Agriculture University, Anand in Gujarat. This event was attended by farmers across the country including the farmers who were connected live through central institutes of the Indian Council of Agricultural Research (ICAR), Krishi Vigyan Kendras, and ATMA (Agricultural Technology Management Agency) network in states.



Figure -Prime Minister Narendra Modi virtually addressing a national conclave in Anand, Gujarat. (Photo Courtesy: Twitter/@Bhupendrapbjp).

PM Modi expressed his happiness over the fact that thousands of farmers in Gujarat and Himachal Pradesh had taken up natural farming and their experiences have been encouraging. Citing the examples of Gujarat and Himachal Pradesh where efforts of the respective state governments have proved instrumental in culminating in the rapid growth of natural farming, PM Modi appealed to all the state governments to come forward in making natural farming a people's movement. As per media reports, natural farming is being practiced in over 6.5 lakh hectare land in 11 states of the country. Gujarat alone has over 1.17 lakh hectare under natural farming. The Prime Minister said that at least one village in each Panchayat should take up natural farming.

While conceding the important role played by chemical fertilizers during the Green Revolution, PM Modi said that it was also true that there was need to work on alternatives. Referring to the imports of pesticides and chemical fertilizers in large quantities and the resultant cost of farming going up and food becoming expensive for the poor along with problems associated with the health of farmers and all others in the country, he suggested that it was important to remain watchful and vigilant. While advocating for natural farming, PM Modi stated that there was no need for spending on fertilizers or pesticides under natural farming and the need for irrigation is also reduced thereby helping in countering floods and droughts.

Significance of Natural or Organic Farming



Figure -Organic Vegetable Cultivation
(Image Courtesy: Wikimedia Commons).

In contemporary times, natural farming is registering rapid strides throughout the globe. In the wake of the realization of the significance of food and its impact on human health, there is growing demand for food that is devoid of the use of chemical fertilizers and pesticides. Organic farming is defined by the US Department of Agriculture (USDA) as a “system which avoids or largely excludes the use of synthetic inputs (such as fertilizers, pesticides, hormones, feed additives etc.) and to the maximum extent feasibly relies upon crop rotation, crop residues, animal manures, and off-farm organic waste. Mineral-grade rock additives and biological system of nutrient mobilization and plant protection”. Organic agriculture has been described by Dr APJ Abdul Kalam, former President of India, as “a holistic system focuses on improvement of soil health, use of local inputs and relatively highly intensity use of local labour, is an admirable fit for dry lands in many ways and the dry land offers many benefits that would make it relatively easy to implement.”

According to agricultural experts, approach of natural farming entails the conversion of the selected land from conventional to organic management in tandem with the management of the entire surrounding system thereby ensuring biodiversity and sustainability of the system. Besides, biological inputs like crop rotation, residue management and organic manures are rich sources of nutrients that help in facilitating increased production. Better management practices, physical and cultural means along with biological control system can be helpful in controlling weeds and pests. There is also a need for maintaining the livestock with organic concept and making them an essential part of the whole system.

Lessons from Sri Lanka

Undoubtedly, PM Modi’s emphasis on prioritizing natural farming is a welcome idea that is already in practice in many states in the country; nevertheless, the governments at the Centre and the states should not implement this idea in a hurry. Sri Lanka is a case in stark reality where hurried implementation for organic farming has proved a fiasco. Sri Lanka’s overnight decision to complete organic cultivation and ban on fertilizer imports proved instrumental in erecting numerous stumbling blocks that ultimately forced the Sri Lankan authorities to ultimately junk the policy just barely in six months.

Feature

Is our FASHION Sustainable??

By Dr. Arvind Kumar*

The fashion value chain is of global importance, with millions of jobs attached to it, generating foreign exchange revenue in many developing countries and providing goods essential for human welfare. According to a report published the clothing industry consumes around 79 billion cubic metres of water per year. That is a massive number, considering that a huge chunk of human population experiences water scarcity. You call yourself eco-conscious and do everything to minimize your carbon footprint. You switch off the lights when not needed, close the runny tap, use cloth bags for shopping and even plant saplings in your neighbourhood. But it's going to take much more than this to save our planet and spreading awareness is the key. Most people are blissfully unaware that the clothes they wear are made after spending gallons and gallons of water in the production. Let's talk about the clothing industry and how large corporations and brands are literally sucking the planet of its natural resources.

Clothes are water-intensive make and maintain

Several UN reports and a number of civil society initiatives in recent years have highlighted the social and environmental problems related to the fashion industry. These range from noncompliance with labour standards and legislation, to pollution, high greenhouse gas emissions and more recently the failure to protect garment workers from the disastrous consequences of widespread retail closures, layoffs and furloughs, mandatory factory shutdowns and cancelled orders in the wake of the COVID-19 pandemic.



If the global population rises as expected to 8.5 billion by 2030, it is projected that the apparel consumption will rise by 63% in 2030. The more the demand of clothes, the more aggressively the clothing industry will produce clothes. Did you know that to produce just one cotton T-shirt, it requires over 3,000 litres of water? Combine this with the fact that in this age of social media, where repeating outfits is the biggest fashion crime you could commit, the average number of clothes each person owns is only going to rise. Textile production (including cotton farming) uses around 93 billion cubic meters of water annually, representing 4% of global freshwater withdrawal. Beyond production, washing clothing using washing machines is estimated to require an additional 20 billion cubic meters of water per year globally. Another study by Tree Hugger showed that a whopping



Did you know that to produce just one cotton T-shirt, it requires over 3,000 litres of water? Textile production (including cotton farming) uses around 93 billion cubic meters of water annually, representing 4% of global freshwater withdrawal



8,183 gallons of water was required to grow enough cotton to produce just one pair of jeans. The numbers get all the grimmer. Over 5.9 trillion litres of water is used each year for fabric dyeing alone. (World Resources Institute).

We are draining our natural resources

These numbers might be alarming, but they aren't going to stop the average buyer from getting that boot cut jeans or the nice flowy top off the shelf. The collective conscience will only rise when mass awareness is generated. Studies are required so that we can come up with a greener alternative to our clothing requirements. What has happened instead, is the introduction of new stretchable material being sold as athleisure or the famous lycra. Globally, around 8,000 synthetic chemicals are used to turn raw materials into textiles, and estimates suggest that 20% of the world's industrial water pollution happens at the hands of textile-dyeing and treatment processes. The fashion industry's social and environmental problems also play out along geographic dimensions. While the main markets are located in Europe and the United States, the early stages of garment production, including raw material extraction and manufacturing, are heavily weighted towards Asia and towards developing countries and economies in transition (UNEP 2020). Negative impacts also divide unequally between women and men. Women make up around 80 per cent of the garment sector workforce (ILO 2019) and their jobs are predominantly located at the bottom tier of textile production systems, which means they have higher risks of occupational injuries and exposure to hazardous chemicals (UNEP 2016). It has also been observed that sectoral impacts of the COVID-19 pandemic disproportionately affect women (ILO 2020).

Women make up around 80 per cent of the garment sector workforce and their jobs are predominantly located at the bottom tier of textile production systems, which means they have higher risks of occupational injuries and exposure to hazardous chemicals.

Big brands wearing the 'eco-conscious' hat

After the voice on water conservation grew louder, many brands jumped into damage control and



announced their own measures for saving water. However, it's going to take a lawsuit from a powerful channel to get these brands to cough up the details of the actual damage they are causing the environment. Popular brands like Nike, Zara, H&M, shared how their companies were putting in all efforts to reduce their carbon footprint.

Nike, in its FY20 Impact Report, stated that it has cut freshwater use by 30%. John Donahoe, President & CEO, Nike, had said, "We will continue to strive to lower emissions across our key operations, to shrink our product carbon footprint, to accelerate diversity

and inclusion across our teams, to enable kids to have access to play and sport. We will always challenge ourselves to do better. Always.”

On the website of popular fashion brand H&M, there’s a separate section dedicated specifically to highlight its eco-conscious method of making its products. They have in fact also listed down a number of targets, such as having 15% recycled water back in the process, and getting all business partners must comply with H&M Group’s Sustainability Commitment and water management requirements.

They even have a designated person for managing sustainable production. “We bring technical knowledge and business incentive to support our business partners to become more sustainable,” said Sharif Hoque, Water Sustainability Responsible at H&M Group, states on the website.

The makers of another fashion bigwig, Zara, came up with a green pact in 2019. “[We] are highly focused on making clothes in a responsible, sustainable way, that limits the impact on the environment and [which] challenges ourselves to continually work as hard as we can to improve how we manufacture,” said Marta Ortega, daughter of Amancio Ortega, one of the cofounders of Zara’s parent company Inditex.

Sustainable consumption for sustainable Planet

The UN Decade on Ecosystem Restoration aims to prevent, halt and reverse the degradation of ecosystems on every continent and in every ocean. Actions around ecosystem restoration are particularly relevant for the early stages of the fashion value chain, e.g., lowering the severe impacts of global cotton cultivation, addressing the ecosystem degradation caused by cashmere production, and moving to lower impact raw materials such as used clothing, agricultural residues, and microbial cellulosic fibres. But that’s just a drop in the ocean when it comes to raising the bar for sustainable fashion. With the growing demand of synthetic and stretchable materials like polyester and viscose, things are only turning worse for the environment. These fabrics are water-intensive to make, and are not bio-degradable. It’s almost like wearing plastic. Then there’s the spinning, dyeing, printing, and finishing of the fabrics, which all add to the overall water consumption. So, despite all the claims made by supposedly woke apparel brands, the truth remains that we are all part of producing heaps and heaps of non-biodegradable, water-consuming clothes. If we really want to make a difference, we must start by repeating our clothes. Do not just buy that T-shirt because it was on sale, or that it “will motivate me to lost weight”. Many companies have started accepting old, used clothes for recycling them. Make a conscious effort and find out which brands do that. Buy clothes from those brands and return the clothes once they are worn out. By continuing the research and discourse of how water is being used at the expense of selling low-cost pieces of clothing, solutions are bound to arise. For the most part, the answers are there. It’s just a matter of ensuring industries transform their practices and prioritize water sustainability methods in the future. We are already in a mess, we can at least do our bit and not add to the waste.

Making Cities as Main Bulwark of Development

By Dr. Arvind Kumar*

Cities are fast emerging as the major hub of sustainable development activities and are destined to play very important role in the realization of sustainable development goals (SDGs). History is witness to the fact that cities have played a significant role in the emergence and growth of civilizations throughout the world. Burgeoning population and increasing pace of migration from rural areas to urban areas, a phenomenon known as urbanization, globally has culminated in the expansion of cities along with creation of new urban habitats.



Currently, 55% of the global population lives in urban areas and this is expected to increase to 68% by 2050. Interestingly, the world's urban population has registered rapid strides from 751 million in 1950 to 4.46 billion in 2021 and is likely to grow to 6.68 billion by 2050, adding about 2.22 billion people to urban habitats. And the bulk of the projected growth of global urban population, say about 90%, is expected to occur in Asia and Africa between 2021 and 2050. According to the projections of the Population Division of the UN Department of Economic and Social Affairs, India, China and Nigeria together will account for 35% of the projected growth of the world's

population, and by 2050, it is projected that India will have added 416 million urban dwellers. Not to forget, cities are by far the largest contributors to GHG emissions, they consume 75% of the world's resources and produce 80% of CO₂ emissions (UN-Habitat 2005).

India is alive to the issue of burgeoning growth of its urban population and the Government of India is taking suitable measures keeping in consonance with the emerging requirements to meet the emergent urban needs. On December 17 this year, Prime Minister Shri Narendra Modi virtually inaugurated All India Mayors Conference via video conference. While referring to the recent developments in the ancient city of Varanasi, PM Modi in his virtual inaugural address, recalled his statement that the development of Kashi could be a roadmap for the entire country. Asserting that most of the cities in India are traditional cities that had

Currently, 55% of the global population lives in urban areas and this is expected to increase to 68% by 2050. And the bulk of the projected growth of global urban population, say about 90%, is expected to occur in Asia and Africa between 2021 and 2050.

been developed in a traditional way, Emphasizing that the antiquity of these cities was equally important in the present era of modernization, PM Modi remarked that these cities could teach us as to how to preserve the heritage and local skills, and he further insisted that destroying the existing structures was not

the way rather emphasis should be on rejuvenation and preservation that could be facilitated in accordance with the needs of modern times.

While calling for healthy competition between the cities for cleanliness and wondering whether there could be new categories for recognizing the cities that are making the best efforts to achieve cleanliness along



with the best performing cities, PM Modi also insisted on the beautification of cities along with cleanliness. He also called upon the Mayors to create a sense of healthy competition between the wards of their cities in this regard. Concomitantly, the Mayors were also urged to run programmes related to 'Azadi ka Amrit Mahotsav' such as freedom struggle themed 'rangoli' competitions, song-competition on freedom struggle and Lullaby (Lori) competition, which the Prime Minister has been insisting on, in his speeches and Mann ki Baat. He also suggested that Mayors should find out and celebrate birthdays of the cities and celebrate them.

While suggesting that cities with rivers should celebrate the River Festival (Nadi Utsav), PM Modi also stressed the need to spread the glory of the rivers so that people take pride in them and keep them clean. "Rivers should be brought back to the centre of city life. This will bring a new life to your cities." said the Prime Minister. While calling upon Mayors to revitalize the campaign against the elimination of single-use plastic, he asked them to look for ways of creating wealth from waste. He suggested many tasks for Mayors, such as getting in touch with NCC units of the city and create groups to maintain statues of the city; organizing speeches on the personalities in the spirit of 'Azadi Ka Amrit Mahotsav'; and identifying a

place in the city and creating a monument in sync with the 'Azadi Ka Amrit Mahotsav' through PPP mode etc.

PM Modi stressed the need to spread the glory of the rivers so that people take pride in them and keep them clean, saying "Rivers should be brought back to the centre of city life. This will

Referring to the 'One District One Product' programme, PM Modi asked Mayors to push for a unique identity of their cities promoted by some unique product or place in the city. He also exhorted them to develop people-friendly thinking with regard to various aspects of urban life. Describing the cities as the driving force of nation's economy and emphasizing on making the city a hub of a vibrant economy, PM Modi called upon Mayors to create

a holistic system where all facilities develop simultaneously to generate an ecosystem that invites and promotes economic activity...

Reiterating the need to strengthen MSMEs in nation's development model, PM Modi emphasized the role of street vendors and described them as "part of our own journey, we will see their troubles every moment. For them, we have brought PM Svanidhi Yojana. This plan is very good. Make a list of them in your city and teach them to do mobile phone transactions. This will facilitate bank finance on much better

terms.” Calling upon Mayors to give their suggestions from their experiences for the development of Kashi, PM Modi said: “I will be grateful for your suggestions and I will be your first student”.

Keeping in the geographical expanse of India and its burgeoning population, there arises a question as to whether existing and emerging cities develop into sprawling chaotic slums – with unbreathable air, uncontrolled emission of greenhouse gases and impoverished populations often bereft of food and clean water – or become truly sustainable cities, and much of this depends on how these new urban areas are planned and how the existing cities are managed environmentally. With regard to the future of cities, there are differing opinions of experts from different disciplines. While many economists argue that population growth is required to generate wealth and that urbanization significantly reduces environmental impact; nevertheless, other experts apprehend that the cities are becoming unmanageable – too unwieldy to adapt to rising temperatures and rising sea levels, apart from being prone to pollution, water shortage and ill health.

It is interesting to know that government is focusing its attention on investing in clean transport, water, sewage, renewable energy planning wellbeing and good affordable housing for all along with taking into consideration the neglected urban areas. It is now an accepted fact that more than 80% of global GDP is generated in cities and as such urbanization can contribute to sustainable growth given the fact that urbanization is managed well by enhancing productivity, allowing innovation and new ideas to emerge. We have to explore human-infrastructure-environment interactions at multiple scales, advance fundamental science, interdisciplinary urban-systems science, multi-infrastructure design and science-policy linkages. We have to study resource requirements of future urbanization, infrastructure transition pathways, and the response, recovery and adaptation of urban systems under multiple hazards. We must connect cities to surrounding earth systems to mitigate extreme heat, wind, flooding and pollution and develop integrated multi-infrastructure models that address the nexus of land, buildings, energy, water, food, and mobility systems by designing nature-based solutions and next-generation cyber physical technologies. Collectively we should highlight the critical emerging urban agendas, such as developing water-sensitive cities, net-zero carbon energy systems, resilient cities, healthy communities, and smart cities only then one can hope that in the wake of suggestions given by PM Modi in tandem with other suggestions of experts, the process of urbanization in India can gather momentum in a sustainable manner.

Gender Equality and Inclusion key to Achieve Agenda 2030

Dr. Arvind Kumar*

Women constitute half of total global population and they entail the potential of playing pivotal role in furthering growth and the goal of sustainable development. However, prevalent gender inequality deprives the bulk of the half population from making their contribution to mainstream development, and female empowerment is said to be the appropriate mechanism to utilize the potential capacities of women as drivers of socioeconomic and political development. Despite gender inequalities in the labour market and gender wage gaps globally, women migrant workers were responsible for sending half of the estimated \$601 billion in remittances worldwide in 2020. Women are not only the hardest hit by this Covid 19 pandemic, they are also the backbone of recovery in communities. Putting women and girls at the centre of economies will fundamentally drive better and more sustainable development outcomes for all, support a more rapid recovery, and place the world back on a footing to achieve the Sustainable Development Goals. The concept of women empowerment has come to be construed broadly in terms of promoting women's sense of self-worth, their ability to determine their own choices, and their right to impact social change for themselves and others.

Viewed in a broad framework, women empowerment is a fundamental human right and it is also a key to attaining a more peaceful, and prosperous world. The notion of female empowerment in Western nations is often associated with particular phases of the women's rights movements that have occurred at different intervals of history. Experts have divided this female movement into three phases, and the first phase started during the nineteenth century and early 20th century that was characterized by suffrage for women; and the second phase that commenced in the 1960s included the sexual revolution and the role of women in the society, and the third phase is christened as 'feminism' that is said to have started garnering traction in the beginning of the 1990s. While women have made important inroads into political office across the world, their representation in national parliaments at 23.7 per cent is still far from parity. Globally, women are just 13 per cent of agricultural land holders.

With the onset of the 21st century, emphasis on women's empowerment and promoting women's rights have garnered sufficient clout to be reckoned as a part of global movement and is continuing to explore new horizons and the resultant impact is the increasing popularity and support for the observance of the



Image Courtesy/Credit: Jagranjosh.com

International Women's Empowerment Day. However, despite a great deal of progress, women and girls are still subjected to discrimination and violence occurring frequently in almost all parts of globe. Enhancing the role of women as drivers of poverty reduction, promoting female investors and entrepreneurs, and recognizing the link between gender equality and safeguarding the environment all promote inclusive and sustainable industrialization, and directly contribute to the 2030 Agenda. In order to empower women in the marketplace, workplace and community, UN Global Compact in collaboration with UN Women have created following seven Women's Empowerment Principles:

Principle 1: Create high-level corporate leadership for gender equality

Principle 2: Treat all people fairly at work, respecting and supporting non-discrimination and human rights

Principle 3: Ensure the health, wellbeing and safety of all workers, whether male or female

Principle 4: Promote education, training and professional development for women

Principle 5: Implement supply chain, marketing practices and enterprise development that empower women

Principle 6: Champion equality through community initiatives and advocacy

Principle 7: Measure and report publicly on progress to create gender equality

Recent Measures for Empowering Women in India

As per the Global Gender Index South Asia is the second-lowest performer on the index, with 62.3% of its overall gender gap closed with India as the third-worst performer in the region, having closed 62.5% of its gap. Because of its large population, India's performance has a substantial impact on the region's overall performance. Undoubtedly, many policy measures and programs have been taken for empowering women in India in recent years; nevertheless, PM Modi has embarked on fresh measures to further enhance women's empowerment. According to PM Modi, Women self-help groups (SHGs) are champions of Atmanirbhar Bharat Abhiyan. In pursuance of this policy, the Prime Minister recently transferred Rs 1000 crore to women self-help groups (SHGs) benefitting around 1.6 million women members. The Prime Minister also transferred crores of rupees to the account of more than one lakh female beneficiaries of the Mukhyamantri Kanya Sumangala Scheme in UP where this scheme is becoming a great medium of support for the poor and women in rural areas.

He also referred to the Bank Sakhi campaign launched in UP that was bringing major changes in the lives of rural women along with employment opportunities for them. Under this campaign, women no longer have to go to the bank to withdraw the money that goes into their account from different government schemes through Direct Benefit Transfer (DBT), and the women get their money at home in rural areas with the help of Bank Sakhi. That is, 'Bank Sakhi' has brought the bank to the villages.

While laying down the foundation of Take Home Ration Plant in UP recently, PM Modi said that the responsibility of Take Home Ration in UP has been entrusted to women to carry the same for children and pregnant and lactating women. This nutrient diet was to be made by women of SHGs and this was a massive plan involving thousands of crores of rupees annually. Under this plan, women belonging to SHGs were to earn additional income and the farmers of the village were to benefit from the 202 supplementary Nutrition Manufacturing Units. The women were to buy crops and grains from the villages itself and to make nutritious food in their respective factories. Emphasizing that it was these empowerment efforts that were to start changing the lives of women, PM Modi said that he was privileged to transfer 1,000 crore rupees as an installment that the government provides to SHGs as assistance in different sectors.

Emphasizing that potentials of a woman, her education and her skills determine the direction of the society and the nation and not only of the family, PM Modi stated that when his government took the initiative to realize the massive dreams and aspirations of Maa Bharati in 2014, the government began by giving new energy to the belief of the women of the country. Therefore, the government made plans and campaigns to empower women at every stage in the cycle of life from the birth of a daughter. PM Modi further added: “We tried to awaken the consciousness of the society through the Beti Bachao, Beti Padhao campaign so that daughters are not killed in the womb and they are born. Today the result is that the number of daughters has increased a lot in many states of the country. Maternity leave has been extended to six months so that the mothers can continue their work without worrying about the initial care of their child after delivery.”

Referring to the provisions of the Pradhan Mantri Matru Vandana Yojana, under which Rs 5,000 is deposited in the bank account of women during pregnancy, so that they can take care of proper diet, PM Modi informed that about Rs 10,000 crores had been given to more than two crore women. He further added that his government had not lagged in any effort whether it was building separate toilets for girls in schools for girls in schools or making sanitary pads accessible to the poorest of the poor. Alluding to measures like opening up of bank accounts of girls under the Sukanya Samridhi Yojna, construction of toilets for women and girls under the Swachh Bharat Mission, gas connection facilities under the Ujjwala scheme and ensuring the tap water, PM Modi stated that such measures have made the lives of women privileged and their dignity enhanced. He also alluded to benefits accruing to women under the Ayushman Bharat scheme Pradhan mantra Awas Yojna, the Sawmitva Yojna, the Mudra Yojna and Deendayal Antyodaya Yojna. Describing women of SHGs as the champions of the Aatmnibhar Bharat, PM Modi said that these SHGs are actually national help groups.

The Prime Minister also drew attention to other steps taken by his government for the benefits of women, such as supply of free ration during the COVID19, easing the rules to enable women to work in night shifts, removal of restriction for women working in mine, establishment of fast track courts across the country for speedy trial of heinous crime against women and passage of law against Triple Talaq to save Muslim women from atrocities etc.

Way Ahead

Undoubtedly, Modi government has undertaken laudable measures to ameliorate the lot of women by empowering them economically through various schemes. However, the data of the NCRB for recent years show that lot more needs to be done to bring them into the national mainstream of decision-making and policy implementation. Political empowerment of women is the need of the hour so that women can be equal partners in political decision making and political power sharing as well. . In order to empower women in true sense of the term by ensuring gender equality and protecting them from discrimination and heinous crimes, there is need for enhancing the role of civil society with the increased participation of women. Empowerment of women is a sure guarantee for a peaceful, stable and prosperous society. Looking ahead towards a gender-positive recovery, it is possible to design systems and policies which boost gender parity in economic participation in the recovery phase, avoid scarring of the pandemic becoming permanent, and create more resilient socio-economic systems. As economies and societies prepare for a new post-pandemic world, it is essential that the recovery is gender-equal and serves all stakeholders in society.

Rural Development: A National Priority

By Dr. Arvind Kumar*

“I would say that if the village perishes India will perish too. India will be no more India.” India is the land of villages as rightly said by Mahatma Gandhi.

The notion of rural development has come to be construed as the process of improving the quality of life and economic well being of people living in rural areas, especially the areas that are relatively isolated and entail sparse population. India lives in its villages, and the development of villages will be critical if we want to close the gap between the “haves and have not’s” for better human development. In the Human Development Report (HDR) 2021, India ranks at 131st place and 140th at the Gender Development Index (GDI), a rating classed by the United Nations as ‘medium human development’.

From a traditional perspective, the focus of rural development has often been on exploiting land-intensive natural resources like agriculture and forestry. Nevertheless, the changing character of rural areas in the wake of ongoing transformations in global production networks and rapid

pace of urbanization is said to have paved way for increased tourism, niche manufacturing, and means of recreation, and the cumulative impact of these changes has often culminated in the replacement of traditional resource extraction and agriculture as preeminent economic drivers.

About 80 per cent of South Asia’s poor live in rural areas, most of who depend on agriculture for their livelihood. Agriculture and rural development are the keys to eradicate poverty and create conditions for sustainable and equitable growth

About 80 per cent of South Asia’s poor live in rural areas, most of who depend on agriculture for their livelihood. Agriculture and rural development are the keys to eradicate poverty and create conditions for sustainable and equitable growth. South Asian agriculture faces several new challenges – ranging from a deteriorating natural resources base, climate change, and increasing deregulation of trade. Moreover, the sector is dominated by small farmers often with weak bargaining power and limited political voice.

Gradual pace of transformation in the outlook of rural communities has seemingly proved instrumental in spurring them to approach development from a broader perspective that has engendered more focus on a wide range of development goals rather than only generating incentive for agriculture or resource-based businesses. Achieving the vision of inclusive economic growth set out in the 2030 sustainable development Agenda requires solutions tailored for the challenges of rural communities, starting with unlocking the potential of agricultural productivity. Only with substantial gains in productivity can rural communities create new economic opportunities for firms to provide farm and non-farm goods and services.

Development of rural areas is dependent on multiple factors, such as dissemination of education, entrepreneurship, expansion of physical infrastructure along with social infrastructure as well. Admittedly, emphasis on locally generated economic development strategies play vital role in promoting rural

development. Rural regions are distinguishable from one another as compared to urban areas that are prone to entail many similarities. It is owing to this fact that a wide range of rural development approaches are often practiced worldwide.

Rural development is a comprehensive term that primarily focuses on action for the development of areas outside the mainstream urban economic system. The primary emphasis of rural development actions is to promote socioeconomic development and wellbeing of rural communities. Programs designed to promote rural development that had historically been managed on the basis of top-down approaches from – local or



regional authorities, regional development authorities, non-government organizations (NGOs), national governments or international development organizations – led to the identification of a crucial ‘organization gap’ during the late 1960s, mirroring the discontinuity between national organizations and rural communities; and the resultant outcome was in terms of increased emphasis on participation of rural communities in rural development agendas.

With the passage of time the notion of emphasis on participation of rural communities in rural development agendas went on garnering international traction, both in developed and developing countries, and some developing countries are now adopting integrated development approaches, and in this context, many approaches and ideas like bottom-up approaches, Participatory Rural Appraisal (PRA), Rapid Rural Appraisal (RRA), Working with People (WWP) etc., have thrived and are being implemented in many countries.

Rural Development in India

Rural development assumes immense significance for India where majority of the population, nearly about 65% of the people, reside in rural areas. The emphasis of government programs and policies in the realm of rural development has been on poverty alleviation, better livelihood opportunities, provision of basic amenities and infrastructure via innovative programs of wage and self-employment etc. Nevertheless, under the dynamic leadership of Prime Minister Narendra Modi, Government of India has adopted and implemented some new innovative programs and schemes to uplift the rural communities from the morass of poverty to make them self-reliant and enable them to be active partners of the mainstream development.

In pursuance of his ambitious project of accelerating the pace of ‘White Revolution’ or Milk Revolution in India, PM Modi recently laid the foundation stone of ‘Banas Dairy Sankul’ at the UP State Industrial Development Authority Food Park, Karkhiyaon, Varanasi. This Dairy to be built at a cost of about Rs 475 crores will have a facility for processing 5 lakh litre of milk per day. The Prime Minister also digitally transferred about Rs. 35 crore bonus to the bank accounts of more than 1.7 lakh milk producers associated with Banas Dairy. While also laying the foundation stone for the Biogas-based Electricity generation plant for the Milk Producers Cooperative Union Plant, Ramnagar, Varanasi, PM Modi launched a Portal and Logo

dedicated to the Conformity Assessment Scheme of milk products, developed by the Bureau of Indian Standards (BIS) with the help of National Dairy Development Board (NDDB).

In another effort to reduce the land ownership issues at grassroots level, the Prime Minister virtually distributed the rural residential rights record 'Gharauni' under the Swamitva scheme of the Union Ministry of Panchayati Raj, to over 20 Lakh residents of Uttar Pradesh. The program also witnessed the Prime Minister inaugurating and laying the foundation stone of developmental projects worth over Rs. 1500 crores in Varanasi. This will further strengthen the ongoing 360 degree transformation of Varanasi.

While underlining the importance of livestock that provided livelihood to over 80 million families, the Prime Minister added that strengthening of India's dairy sector was his government's one of the top priorities. He expressed satisfaction at the fact that the milk production in India has increased comparable to recent past years and currently India produces about 22 percent of the world's milk.

While underlining the role of dairy sector and animal husbandry in providing a new push to white revolution in transforming the lives of farmers, PM Modi attributed four factors in this regard. In the first instance, animal husbandry could become a huge source of additional income for small farmers; secondly, India's dairy products have a huge market abroad, in which there is a great potential to grow; thirdly, animal husbandry is a great way for the economic empowerment of women to further their entrepreneurship; and fourthly, livestock is a big source of biogas, organic farming and natural farming.

While embarking on a next step of empowering the rural communities, the Prime Minister launched virtual distribution of the rural residential rights record 'Gharauni' under the Swamitva scheme of the Union Ministry of Panchayati Raj, to over 20 Lakh residents of Uttar Pradesh. He said this will open new vistas of development and dignity for rural poor and will make them part of the development growth story.

War Forward

Policies and programs undertaken by the Central Government and respective state governments in facilitating rural development via various schemes have been instrumental in the improvement of living standards of the rural communities to some extent. Nevertheless, long road lies ahead to uplift rural population out of the morass of poverty, ill-health, educational backwardness and poor infrastructure facilities. Besides, locations of most of the rural regions, especially those on coastal areas, are often prone to the adverse impacts of the vagaries of climate change. While formulating policies and programs designed to promote rural development with enhanced participation of rural communities, climate-related factors have to be taken into consideration. And in this regard role and participation of civil society organizations (CSOs) cannot be ignored.

Urban Ecological Restoration

By Kavita Prasad, Senior Consultant, India Water Foundation

Introduction

The transformation of urban surfaces into greener areas in association with water, energy, climate and sustainable urbanization nexus is the point of concern for environmental policymakers. The best approach of passive ecological restoration is Sustainable Urbanization, where we can undertake ecological damages to restore native landscapes by allowing natural succession after removing a source of the disturbance. The process of sustainable surfacing during infrastructural development aims to recreate, initiate, or accelerate the recovery of a respective ecosystem that has been disturbed due to a lack of commitment towards the natural system. The environment and urban development policy shall include correct and meaningful baselines considering restoration objectives and selecting realistic restoration endpoints require awareness and commitment from both citizens and policymakers.



Image Courtesy/ Source: Wikipedia

The rehabilitation of urban areas into small pockets of safe urban nature reserves and places for recreation and relaxation can benefit the health of humans as well as the ecosystem. The idea of an ecological system including the entire metropolitan area can help to achieve the larger picture of ecological restoration in terms of enhanced food security, improved air, soil and water quality, climate change resilience, job creation, and health benefits.

The Blue-Green surfaces need to be placed at the heart of city planning. The sincere global initiatives to develop more sustainable urban places, communities and healthy lifestyles that consume less of the non-renewable resources with a multifunctional approach can address the exiting sustainable ecosystem restoration issues.

Knocking Ecological Time Frame

According to a study conducted by Sir Bill Jordan in his communication- III, derived the prevailing restoration challenges that can be accomplished with the desired outcomes of sustainable urban development and human sensation for the natural system. We all have to accept the ecological loss that cannot be replaced with the present restoration projects. The global tools can be developed to calculate the past and present restoration is the situation. The limitation of available data about earlier ecological projects or success stories and lessons with respective time duration is widening the gap between restoration projects and the time frame.

Real Challenges of Restoration Projects

- The natural habitats are constantly changing;
- Human beings are not sensitized towards natural systems;
- The threat of decreasing natural remnants;
- Time-consuming and slow restoration projects;
- Conflicting desires among restoration project stakeholders;
- The lack of sufficient resources and availability to support long-term projects;
- Irreversible nature of ecological time

Sensitive and Innovative Environment Policy

Assessing the present ecological scenario, Green Collar crime is considered one of the major concerns all over the world. Not only the criminal acts but also the unethical actions committed against the Environment and wildlife are needed to be covered under the universal environmental policy. We all are facing adverse effects on the ecosystem and are witnesses of climate damages because of the lack of human sensitivity. The present policies are designed to protect and benefit the human race, on the contrary, we need to protect the environment as a whole. We support the small but destroy most of the biospheres, hence assuming human superiority in a natural system is not worth developing the restoration framework for environmental protection. The new innovative and sensitive policies upon statutes, laws and environmental protection acts are required to support the common goal of environmental protection and restoration.

Most of the ecological restoration initiatives are described on a continuum of active restoration projects whereas, passive restorative projects require more human assistance for minimizing the disturbance, helping recovery, repairing sites with biological communities and indigenous societies, livelihood generation respecting natural system, monitoring the environmental status and more. Let's take the accountability to recover and restore natural processes to some previous better and healthy ecological state by Urban Ecological Restoration.

WATER- THE ELIXIR OF LIFE

Mrs. Rooma Pathak*

“The wars of the twenty-first century will be fought over water”- Ismail Serageldin

World water supply is finite and limited. As per UN’s estimate 700 million people in 433 countries suffer today from water scarcity. By 2025 1.8 billion people will be living in countries or regions with absolute water scarcity and two-third of the world’s population would be living under water stressed conditions. With the existing climate change scenario, almost half the world’s population will be living in areas of high-water stress by 2030. In addition, water scarcity in some arid and semi-arid places will displace between 24 million to 700 million people. It is rightly said that next world war will be over water.

India is increasingly facing acute water crisis especially during the summer months. Ground water-tables are dipping fast owing to excess withdrawal and even available water is contaminated due to discharge of untreated industrial and human waste. India has 4% of the world’s freshwater which has to cater to 17% of world’s population. As per NITI Aayog report released in June 2018, India is facing the worst- ever water crisis in history. Approximately 600 million people or roughly around 45% of the population in India is facing high to severe water stress. The report says that nearly 40% of the population will have absolutely no access to drinking water by 2030 and 6% of India’s GDP will be lost by 2050 due to the water crisis.

The uncontrolled demographic growth and its uncontrollable and sprawling mega cities with overcrowding, water shortages, lack of sanitation are one of the main reasons for water crisis. Increasing pollution, deforestation and climate changes are also responsible.



Courtesy/ Source: dehrtalkies.com

Another serious development has been the depletion and poisoning of our groundwater. Indiscriminate use of chemical fertilizers has resulted in the poisoning of ground water in many places, rendering it unfit for drinking. The drop in water-table has caused tube-wells to dry up in many places. The central Groundwater Board’s estimate shows that the groundwater table in most parts of the country has been declining every year because of over-exploitation. If groundwater continues to decline unabated meeting the country’s agricultural and drinking water requirement will become a big challenge. 85% of rural water supply, 45% of urban water supply and over 64% of irrigation now rely on groundwater.

The increase in temperature due to Global warming has caused the glaciers to melt at an alarming rate. The Gangotri glacier is receding, over the last 25 years; it has retreated more than 850 meters with a recession of 76 meters from 1996 to 1999 alone. The disappearance of Himalayan glaciers will result in the drying up of the Ganga, Yamuna and other rivers which sustain our civilization. India is already reeling from acute

Page 62 of 76

water shortage. Can we survive the disappearance of our rivers? Our technical and economic growth will mean nothing if such disaster is there.

It's about time we need to take stock of the situation and start doing whatever we can as individuals, social groups, policy makers and executors to make the change which is so very essential today, if we have to survive. Conservation of water resources is of utmost importance to the mankind. It is we who can make a difference with our small yet concrete actions. Do not wait for others to do something- do whatever you can to save our water resources.

Our ancestors harvested rain water but we have lost touch with these local solutions. We have to revive these age-old systems of harvesting rain water. We need to adopt ancient yet effective systems like drip irrigation, step wells, enact legislation making rain water harvesting compulsory in cities, recharge underground water and build artificial lakes to store rain water.

Let us assert that right to water is an indispensable element of human dignity. The government has allocated 1.1% of the budget to the departments of water resources, river development and Ganga rejuvenation, drinking water and sanitation. We need to make a major economic reform aside for water conservation. We must say it strongly –all technological development is fine but it cannot replace clean and fresh drinking water.

Schools have a special role to play. As centers of learning they can help students understand the problems the planet is facing and become demonstration sites for sustainable living.

Water is essential in educational buildings as it serves several purposes such as drinking, cleaning, sanitation etc. therefore it is necessary to rationalize its consumption. Adopting water sustainability in schools is basically focused on water reuse, water collection, water recycling and minimization of water use through making changes to the behavior of users, in addition to the application of water efficiency technology. The application of water sustainable systems in schools is a great opportunity for educating children about the advantages of preserving our natural resources.

School sanitation facilities are among the most widely used water facilities so water saving appliances, such as low flux faucets and appliances with small economic flush tanks can be used. Reuse of the water should be adopted so that grey water can be separated from the black water which is added to sewers. Rainwater harvesting should be adopted to collect the rain water which can be reused for various purposes and also helps to recharge the ground water table. Various water efficiency activities should be conducted in which school and school should ensure participation of parents and the community. Integrating sustainability into each aspect of school life and extending it to the community, will help to build a better and more sustainable planet for the present and for generations to come.

**Principal, M.M. Public School, Delhi*

The Harbingers of Climate Change....

By Sunila Athley, Principal, Amity International School

After any crisis, natural or manmade, it is the vulnerable children who have always had to bear the brunt of the aftermath. Be it pollution, cyclones, heavy downpours and waterlogging thereafter, extreme heat waves or chilly weather....it is the survival and development of children which has been impacted. Naturally then, this has posed an unequivocal threat on their physical, emotional and social health... academic fallout is obvious. If we look at the bigger picture, famines, droughts and flooding has affected food grains production which has had a direct impact on the health and nutrition index of children. It is heart wrenching to know that malnourishment accounts for almost 45% of deaths in African children as per WHO reports. Pictures of children with yellow bands on their skinny upper arms flashed across TV screens cause alarm bells to ring. Incessant torrential rains, inadequate drainage results in air and water borne epidemics that has a direct impact on the metabolic and respiratory systems of children. Air pollution and extreme weather condition in an around the national capital is an annual feature now. Schools are closed as a precautionary measure and it is the children again whose lives and learning are at stake.



Image Source- Worldbank.org

Ask a child to draw what he or she likes best and invariably it will be a bright yellow smiling sun peeping between the triangular brown mountains, lush green meadows, a blue river with colourful fish and the ubiquitous thatched hut. Ironically, the innocent child has poured out his feelings on paper. The message is clear for all of us to see....the child wants a connection with nature....its bounty and beauty. The child never colours a grey hazy sky or barren lands or even dry river beds.

Everyone talks of Child Rights. Is clean climate not a child's right? Does environmental exploitation weigh so heavily on economic development that the health, nutrition, development, survival and future potential of children take a back seat. A UNICEF report states that almost every child on earth is exposed to an environmental hazard and nearly half the world's children in 33 countries live in areas that are at 'extremely high risk'. The way forward is building a resilient framework with access to water, sanitation and hygiene which includes schools, home and a climate responsive society. Each country should keep a substantial amount of their national income for climate finance, cut emissions by 2030, reduce carbon footprints. Children and the youth rarely find a voice in drafting policies or decision making. One Greta Thunberg and her 'Fridays for Future' movement isn't enough. Climate education and sensitization

curriculum should be an integral component of learning at schools and be taught by a set of suitable trained teachers who can bring in the required change.

Emergency aids from developed countries are short term measures, the need of the hour is long term sustained efforts.... land rehabilitation, life saving programmes, access to sanitation, livelihood skill training and child protection efforts. The mission of our Honorable Prime Minister given on the occasion of Bharat ka Amrit Mahotsav.....*Swach Bharat Swabhiman Bharat* should be everyone's responsibility.

Water: A Precious Resource

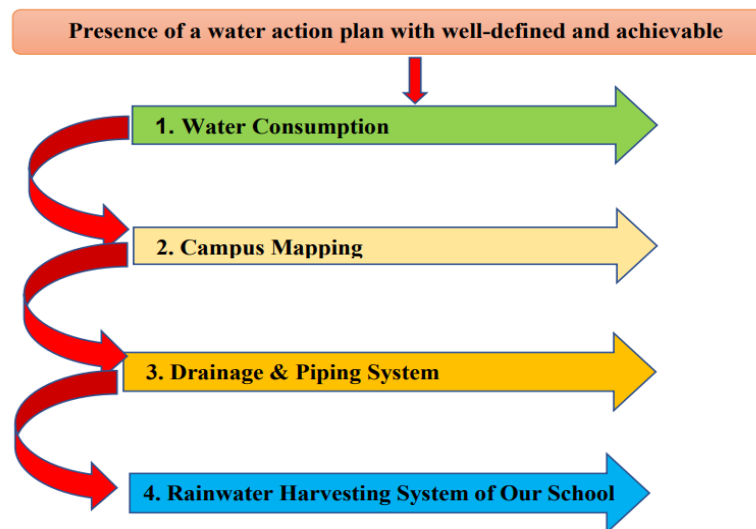
By Ms. Namrata, Gyan Mandir Public School, Naraina Vihar

Gyan Mandir, an integral part of one of the finest centers of learning in Delhi. The school is situated in Naryana Vihar, (South West Delhi). Our school has made a strong pitch to save water and our rivers, in the wake of the ongoing Jal Shakti Abhiyan (JSA) under which efforts are being taken to ensure a water-secure future for the country. The activities to highlight the plight of the rivers and the need to clean them were organized from time to time.

WATER: A PRECIOUS RESOURCE

“It is always better to know a problem before solving it.”

- 1) Presence of a water action plan with well-defined and achievable targets.



CAMPUS MAPPING: We made a complete campus mapping portraying various points of water consumption and usage.

DRAINAGE AND PIPING SYSTEM:

- a) The tanks present on the roof surface are well checked.
- b) All taps are checked periodically for any leakage.
- c) Several pits are also present on the rooftop so as to ensure collection of rainwater.
- d) The roof top system also consists of pits that are specifically being used to create roof top gardens.

e) The gardens created in these small pits consist of air purifying plants. These plants even help to enrich the air quality.

f) We are utilizing the best of space for eco-friendly purpose.

IMPLEMENTATION OF PROJECT: We divided the whole projects into some tasks, which would make it much simpler to understand the whole idea of undertaking this project. The tasks were –

- ❖ **END-USE LOCATIONS:** Identifications of the various locations in the school where water is used as well as the activities in those locations that require water. These are referred to as end-uses
- ❖ **SURVEY OF LEAKAGES:** Identification as well as quantification of water loss due to leakages in the school
- ❖ **PROPORTION OF USAGE:** Understanding and calculating the percentage of total water used for each end use
- ❖ Numbers of painting, essay and debate competitions organized to promote water conservation and management activities such as skit, rap song, speech, games, poster making and plantation drive.

CONSERVATION STRATEGIES ADOPTED BY THE SCHOOL

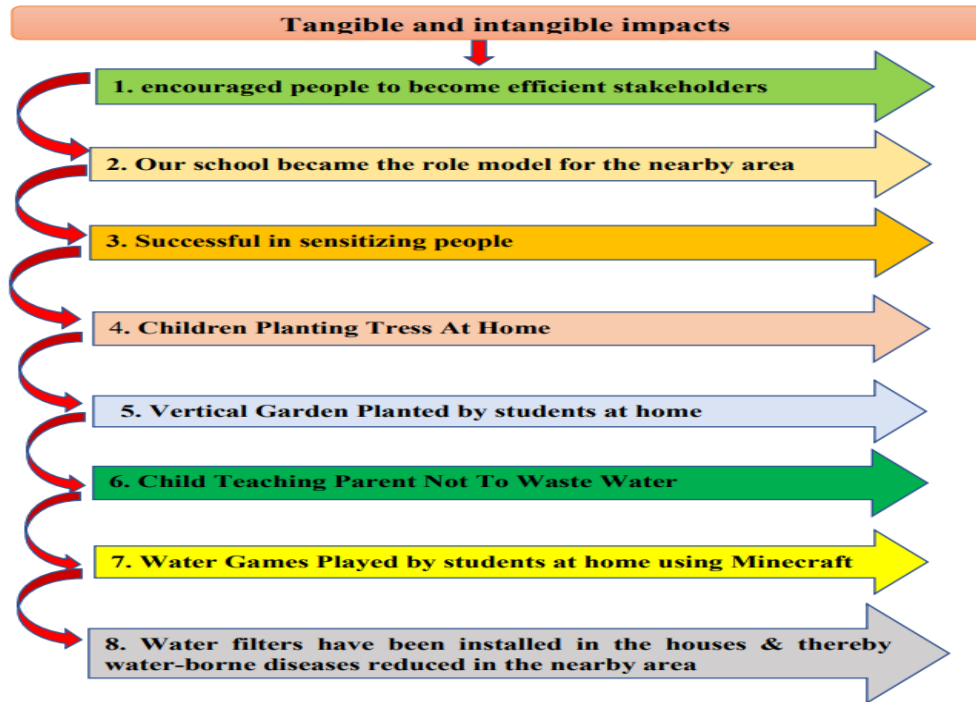
- Installation of the float valves in all the tanks to stop overflow.
- Plug leakages in water pipelines and taps in the school.
- Install drop taps at all outlets.
- Setting up drip or sprinkler irrigation system in the school.
- Installation of flush system on urinals.

Role of students: Students conducted individual water quality tests of their nearby water sources. The data was examined and used to obtain essential results about water quality of nearby sources.

Role of teacher: Teachers encouraged students to talk to their friends, parents and organizations related to waste management and to get as many outlooks as possible.

SECTION 3: PROJECT IMPACTS

- ❖ **Tangible and intangible impacts of our project:**



School received following accolades for the work on Water Conservation

1. Water Conservation Award (Department of Environmental Education & Development)
2. Rotary Club Award for play on Water

Our project work was able to reduce consumption of water in following ways:

- (1) A low flush toilet can reduce this to as little as 6 litres, saving up to 70% water.
- (2) 'Tank float boosters' which allows the lever to be triggered sooner, stopping the flow of water to the tank early is another method which can save 3-5 litres of water per flush.

❖ **Challenges faced during the project:**

Campus mapping:

- During campus mapping the collection of data for demand for each enduser was biggest challenge during the project

View of the student: “The waste water and rainwater which comes out from our school goes into drain and then to Sewage Treatment Plants (STP). Our school is in vicinity of Mayapuri STP. Our School arranged the visit to Rithala STP in association with the department of environment and forest, Govt. of NCT, Delhi. The visit was highly informative and the students gained a lot through this. It helped us to understand the procedure and the need of treating waste water”

By AYUSH BHARTI
CLASS IX

OUTREACH

Twenty-eight teachers and eight hundred students actively participated in this project. Students of age group 4-16 years actively participated in the project. Even people from nearby societies started water management in their house after inspiring by rallies and nukkadnatak organized by our school.



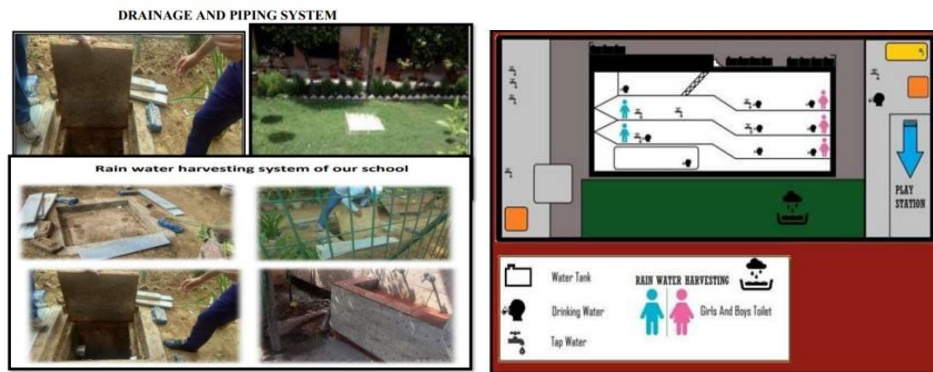
To test the presence of nitrate in water sample



Survey conducted by our students



NUKKAD NATAK



Miscellaneous Activities

FEBRUARY 2022: Road to Dakar: Water Security for Peace and Development

The Government of Senegal and the World Water Council are organizing 9th WorldWater Forum from 22-27 March 2022 at Dakar, Senegal. Yesterday at the extraordinary board meeting the governors were presented with the logistics planning for the forum. The Senegal government has planned out some fabulous sessions, and has made the procedure to attend convenient and accessible for all. I am sure the forum will be a big success. Let's attend the Mecca of Water in huge numbers. The

French government and others are taking a huge delegation of officials and experts. In #UNFCCC #COP26 as well there was record participation, so as a #Governor on board I urge hon'ble members, governments, basin organizations to attend the high level plenaries, sessions and exhibitions in big numbers, showcase your success stories and benefit from the quality, multi-actor exchanges. The forum programme, agenda, logistics is all on the forum website https://lnkd.in/gNqAvP_w The COVID cases are minimal in Senegal and there is visa on arrival for Indian nationals. In case of any difficulty please contact us and we shall facilitate the procedure for you.



FEBRUARY 2022: IndiaWaterFoundation appreciates the warm gesture of Indonesian Embassy's H.E. Mochammad Rizki Safary, Minister Counsellor and Mr. Haidi Nur Hashfi, Second Secretary Political Affairs for visiting our office and having a comprehensive discussion on diverse agendas of Technology Support, Environment and Water Conservation and Sustainable Development especially in context to the Prosperity and Development of Asia Pacific Region and heralding a new chapter of mutual cooperation.

FEBRUARY 2022: Mainstreaming #wetlands ecosystem services & #biodiversity into our developmental policies & urban planning processes, including climate change mitigation, is the pressing need of the hour." said Dr Arvind Kumar on the World Wetlands Day celebrations organized by NMCG and WWF.

The common people, civil societies and state agencies should come together for protection of #wetlands in the country and wetlands conservation would not be limited to just getting them a Ramsar tag but increasing space for peoples participation in management and decision making



DECEMBER 2021: Dr. Arvind Kumar while speaking at the Dialogue on “50 Years of Bangladesh-India Partnership: Towards a Journey in the Next 50 Years”, organised by Centre for Policy Dialogue (CPD) in collaboration with the Research and Information System for Developing Countries (RIS), India in hybrid mode on 1st December 2021, highlighted how connectivity projects can create more trade opportunities for Bangladesh and especially the Northeastern states of India like the ‘border haats for hilisha, flowers, spices located on the zero line of the border between the two nations have played a vital role in boosting waterways connectivity for people centric approach which he had personally witnessed. He further stressed on renewing the Water sharing dialogue between both countries with a new impetus and also congratulated the people of Bangladesh for 50 glorious years of independence.



NOVEMBER 2021: The Fifth sub-regional SDG Forum was organized by the UNESCAP on 15-16 November 2021 for Asia and the Pacific to bring together stakeholders on a common platform to discuss achievements and challenges in the progress towards the SDGs for further review at the Asia-Pacific Forum for Sustainable Development and at the United Nations High-level Political Forum on Sustainable Development (#HLPF). The forum was followed by Policy Dialogue on Regional Cooperation for Sustainable Development in South Asia on 17th November 2021.



Dr. Arvind Kumar as representative of think tank India Water Foundation deliberated on Life below water #SDG14 regional cooperation. He stressed on the need for investment in sustainable fisheries and tourism, greening the shipping

industry, better waste management and promoting research for better data collection to prevent ocean pollution and protect life below water". He also highlighted how "The #SANS portal can play a very crucial role in accelerating knowledge sharing and achieving the SDG goals being a multistakeholder platform. Broader partnerships between governments, international development organizations, private sector and regional #CSOs should be given more space and scope in order to address regulatory and resource mobilization challenges."



Special mention to the government of Sri Lanka for their wonderful hospitality, warmth and diplomatic welcome. Inaugurating the Forum, Prime Minister Mahindra Rajapaksa of Sri Lanka said that “the theme of this year’s Forum is timely and relevant, as we strive to build back better and stronger from the global pandemic that resulted in devastating consequences for our economies and societies.”<https://www.linkedin.com/feed/update/urn:li:activity:6870301819734679552>

NOVEMBER 2021: Investment in 'blue' recovery and stimulus packages, along with policy reform, can immediately create jobs and provide short-term economic relief, all while fostering long-term economic growth, resiliency and social and environmental benefits" said Dr. Arvind Kumar while speaking at the 5th South Asia SDG Forum Building Back Better from COVID19 while accelerating the implementation of SDG in SSWA, 15-16 November 2021 organised by UNESCAP and Government of SriLanka.



NOVEMBER 2021: As Alternate Governor of World Water Council Shweta Tyagi Chief Functionary India Water Foundation attended the 75th virtual board of governors meeting of World Water Council. The deliberations were timed considering the upcoming World Water Forum at Dakar Senegal in March 2022. Looking forward to an all inclusive enriching forum



NOVEMBER 2021: Hi friends speaking live from COP amidst the vibrant ambience at the Scottish event campus and palpable excitement and enthusiasm among all participating.

NOVEMBER 2021: Dear Friends please find the perspectives of India Water Foundation on the developments at the leaders summit and why this COP 26 is crucial for India. Watch the full video on India Water Foundation YouTube channel (https://youtu.be/FFz_pPSWlxc).

OCTOBER 2021: Dr. Arvind Kumar emphasized that Transversal shift interlinking vertical linkages between water, energy Food and environment nexus with horizontal linkages like Agriculture, Entrepreneurship, livelihoods must be incorporated. Knowledge-driven approach is required across sectors and actors at local level where indigenous knowledge, With UNFCCC COP just around the corner and speaking about common country analysis and NDC updation this model interlinks both and ensures food security in a sustainable manner. Nature and modern science based solutions should be leveraged to enhance rural prosperity. More small holder-centric reforms in the agriculture sector are needed before the EBA model is widely applied in India. While presenting "Enabling Business in Agriculture via Ecosystem based adaptation for sustainable food security" at the Seminar on "Sustainable Agriculture and India towards Total Food Security" organized by World Food Trust on 28th October 2021.



<https://www.linkedin.com/feed/update/urn:li:activity:6859789657111093248>

OCTOBER 2021: Dear Jalmitra, Please find the activities of India Water Foundation as a direct member of International Commission on Irrigation and Drainage, (ICID) published in their Annual report 2020-21.

https://icid-ciid.org/icid_data_web/ar_2020.pdf

OCTOBER 2021: Dr. Arvind Kumar president India Water Foundation attending the CSO Townhall with World Bank Group President, David Malpass. Great interactive session and questions of civil societies being answered comprehensively.



OCTOBER 2021:Dr. Arvind Kumar, Governor-World Water Council and Founder President-India Water Foundation presenting his new compilation "United Nations: 75 and beyond" to Shri Aziz Haider, Head-Media Communications at the World Food Trust. Dr. Arvind Kumar, @environment and sustainable development goals (SDGs),@Regional Water Diplomacy, @RainfedAg Water Environment Federation (WEF), World Food Trust WFT

OCTOBER 2021: Attended the inaugural Asia Pacific Science Policy Business Forum (AP-SPBF) of the UNEP convened virtually as a one-day event yesterday from 6.30 am to 4 pm. The opening session explored the dynamic of the post-COVID recovery in the region and the thematic sessions focused on the two issues of regional and global significance: the first on combating marine plastic pollution and the other on mitigating emerging zoonotic diseases. All in all it created greater understanding of diverse perspectives regarding some of today's most pressing issues.



SEPTEMBER 2021: Presented a copy of the limited edition of UnitedNations75andBeyond to Mr. R. M. Mishra Executive Chairman of the Meghalaya Investment Board. We are grateful to Mr. Mishra for his insightful contribution to the book in the form of an interview.

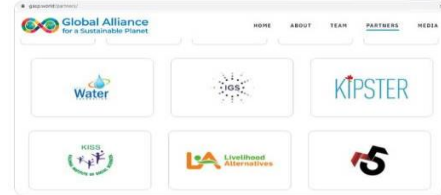


SEPTEMBER 2021: "There is a need for integration to achieve synergies between all the water needs to deliver the sustainable development goals, specifically SDG 6 with water as a central integrator, that can leverage on the opportunities from other sectors in the context of the SDGs." said Dr Arvind Kumar as member of 'The Economic Times SDGs Water Leadership Council' first meeting convened on 14th September.

<https://www.linkedin.com/feed/update/urn:li:activity:6844563459632353280/>

September 2021: To amplify our efforts in Sustainability, IndiaWater Foundation has forged a new partnership with Global Alliance for a Sustainable Planet (#GASP). A collaborative platform for transformation and mobilizing action. Looking forward to an exciting voyage. gasp.world/partners/

To amplify our efforts in Sustainability, #IndiaWaterFoundation has forged a new partnership with #GlobalAllianceforaSustainablePlanet (#GASP). A collaborative platform for transformation and mobilizing action. Looking forward to an exciting voyage. gasp.world/partners/ #SDGs



SEPTEMBER 2021: Attended the Launch of the second Progress Report on Transboundary Water Cooperation. Global status of #SDG indicator 6.5.2 and acceleration needs” jointly organized by #UNESCO and #UNECE in their role as UN custodian agencies of the SDG6 indicator 6.5.2 . The report is very comprehensive and informative and throws light on how concrete actions can be taken to accelerate transboundary water cooperation in support of the SDG 6 and towards the 2030 Agenda for Sustainable Development.



<https://www.linkedin.com/feed/update/urn:li:activity:6843537530701328384/>

August 2021: "The harmony of sustainability and water security should be embedded in the future of water management and important to ensure good water quality because India’s development and self-reliance is dependent on water security and water connectivity." said Dr. Kumar in his keynote address at the Virtual 5thWorldWaterSummit2021 from 21st to 22nd August 2021. The inaugural session was opened by Sh. R. K. Singh Honble Union Cabinet Minister of New and Renewable Energy and Power Government of India, and Dr. Ajay Mathur Director General International Solar Alliance. The Summit was attended by national and international delegates from Australia, Belgium, Berlin, Canada, Denmark, Egypt, Germany, Greece, Italy, Japan, Netherlands, Portugal, Sweden, Thailand, Turkey, UK and USA. The Summit brought together leading international and domestic players, policy makers, government officials, technocrats, industry and academia on a common platform.



<https://www.linkedin.com/feed/update/urn:li:activity:6835543564202639360/>

August 2021: Dr. Arvind Kumar, President, India Water Foundation participated in the National Stakeholder Consultation for the Common Country Analysis today 16 August 2021 and had a very rich discussion on leveraging evidence-based policy research for the Sustainable Development Goals (SDGs) in India



August 2021: Dr. Arvind Kumar sharing his views at brainstorming meeting "How to Make SANS more effective & sustainable". SANS members engage in productive panel discussion at brainstorming meeting "How to Make SANS more effective & sustainable led by Dr. Nagesh Kumar.



Forthcoming Event:

Galvanizing Commitment and Mobilizing Action

The World Water Council catalyzes collective action during and in between each World Water Forum – the world's largest event on water. Organized every three years with a host country, the Forum provides a unique platform where the water community and key decision makers can collaborate and make long-term progress on global water challenges.



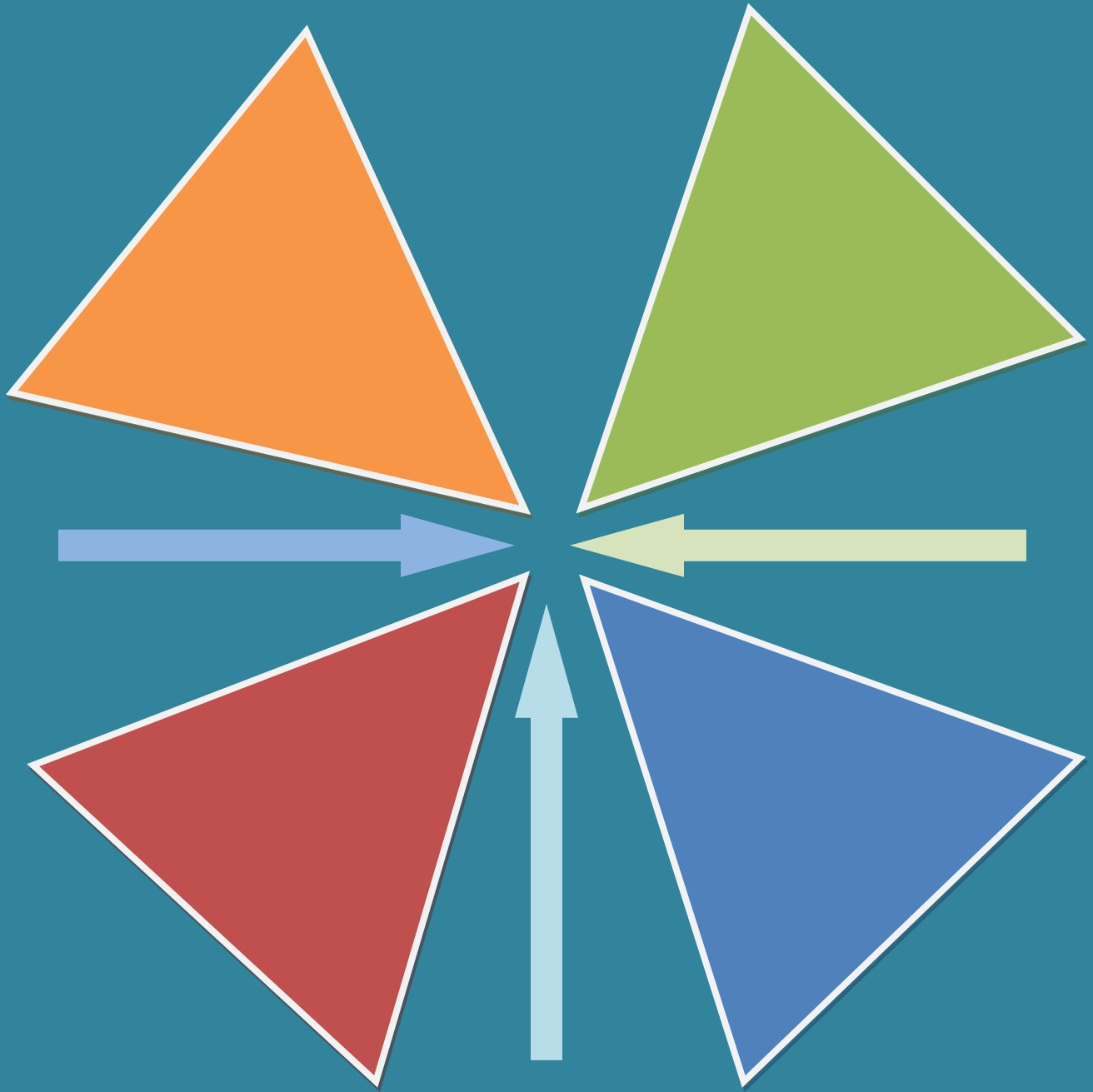
9TH WORLD WATER FORUM | DAKAR 2022

The Forum brings together participants from all levels and areas, including politics, multilateral institutions, academia, civil society and the private sector, among others. Over the years, the number of people participating in the Forum has grown from a few hundred to tens of thousands, from both the international community and host countries.

The 9th Forum will be the first of its kind to be hosted in sub-Saharan Africa by Government of Senegal on the theme '**Water for Peace and Development**'

By bringing together participants from all levels and areas, including politics, multilateral institutions, academia, civil society and the private sector, among others, the World Water Forum provides a unique platform where the international water community and key decision makers can collaborate and make long-term progress on global water challenges. Over the years, the number of people participating in the Forum has grown from a few hundred to tens of thousands, from both the international community and host countries. By participating in the upcoming 9th World Water Forum, you can build on this momentum and contribute to strengthening the ability of the entire world to respond to the challenges of water and sanitation of our time.

For more please click on <https://worldwaterforum.org/en>



CONTACT

SHWETA TYAGI
CHIEF FUNCTIONARY
INDIA WATER FOUNDATION
TEL. NO. 91-11-2634953