



ALL INDIA INSTITUTE OF MEDICAL SCIENCES, RAJKOT, INDIA
DEPARTMENT OF COMMUNITY AND FAMILY MEDICINE

PUBLIC HEALTH BULLETIN

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June, 2022



World Environment Day
05 June, 2022

*“Only One Earth”
 Living Sustainably in Harmony
 with Nature*



World Food Safety Day
07 June, 2022

*End hunger and ensure access by
 all people to safe, nutritious and
 sufficient food all year round*



National Statistics Day
29 June, 2022

*Professor Prasanta Chandra
 Mahalanobis
 29 June 1893– 28 June 1972*

Quiz Corner

1. Paris Agreement on climate change was done in which year?

- a) 2011
- b) 2013
- c) 2015
- d) 2017

2. Theme of World Environment Day, 2022 is -

- a) Only One Earth
- b) Ecosystem Restoration
- c) Time for Nature
- d) Air pollution

3. Food Safety and Standards Authority of India (FSSAI) under which ministry of India

- a) Ministry of Health & Family Welfare
- b) Ministry of Women & Child Development
- c) Ministry of Agriculture and Farmers' Welfare
- d) Ministry of Consumer Affairs, Food and Public Distribution

4. Head Quarters of National Sample Survey Organisation is situated at -

- a) Delhi
- b) Mumbai
- c) Chennai
- d) Kolkata

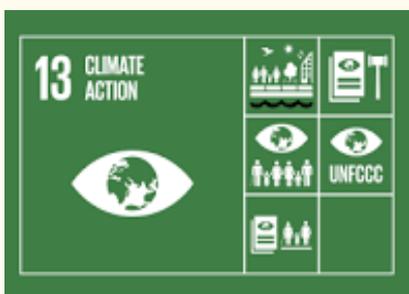
World Environment Day - 05 June

“Only One Earth”

was the slogan for the first United Nations Conference on the Human Environment, held in Stockholm in 1972. Fifty years later, Sweden hosted Stockholm+50 from 2 to 3 June, and World Environment Day on 5 June, 2022.

Problem Statement¹

- Climate change affects the social and environmental determinants of health – clean air, safe drinking water, sufficient food and secure shelter.
- Between 2030 and 2050, climate change is expected to cause approximately 2,50,000 additional deaths per year, from malnutrition, malaria, diarrhoea and heat stress.
- The direct damage costs to health is estimated to be between USD 2-4 billion/year by 2030.
- Areas with weak health infrastructure, mostly in developing countries, will be the least able to cope without assistance to prepare and respond.



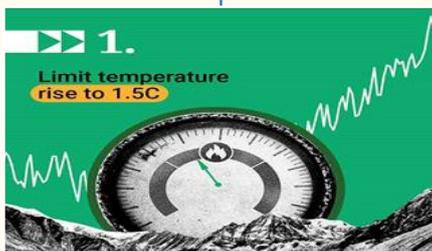
SDG 13 Targets²

- 13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
- 13.2** Integrate climate change measures into national policies, strategies and planning.
- 13.3** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

Historic Paris Agreement³

- UN Climate Change Conference (COP21) in Paris – 12/12/2015
- A legally binding international treaty. It entered into force on 4 November 2016. Today, 193 Parties (192 countries plus the European Union) have joined the Paris Agreement
- Commitments from all countries to reduce their emissions and work together to adapt to the impacts of climate change.
- Provides a pathway for developed nations to assist developing nations in their climate mitigation and adaptation efforts.
- Provides durable framework guiding the global effort
- Marks the beginning of a shift towards a net-zero emissions world.
- The operational details were agreed on at the UN Climate Change Conference (COP24) in Katowice, Poland, in December 2018, in what is colloquially called the **Paris Rulebook**, and finalized at COP26 in Glasgow, Scotland, in November 2021.

3 KEY ELEMENTS OF THE PARIS AGREEMENT



India's Response to Climate Change

PM MODI INTRODUCES INDIA'S 'PANCHAMRIT' AT COP26 IN GLASGOW⁴

- Reach non-fossil energy capacity of 500GW by 2030
- Fulfil 50% energy requirements via Renewable Energy by 2030
- Reduce 1 billion carbon emissions by 2030
- Reduce carbon intensity below 45% by 2030
- India will achieve the target of Net-Zero by 2070

Nationally Determined Contribution (NDC) for 2021-2030 under the Paris Agreement⁴

- To reduce the emissions intensity of its GDP by 33 to 35% by 2030 from 2005 level,
- To achieve about 40% cumulative electric power installed capacity from non-fossil fuel based energy resources by 2030 with the help of transfer of technology and low cost international finance,
- To create an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030.

India's noteworthy contributions to address Climate Change⁴

- **National CDM Authority (NCDMA)** registered 1686 projects to CDM Executive Board. Certified Emission Reductions (CERs) issued to Indian projects is 265 million (12.4%) of the total 2131 million CERs issued.
- **Carbon-neutral development of Ladakh** is a holistic vision of development that also takes into account climate change and its impact.
- **India Climate Change Knowledge Portal** - <https://www.ckcpindia.nic.in/>. - contains information regarding, inter alia, India's climate profile, National policy framework, Nationally Determined Contributions (NDCs), mitigation and adaptation actions, etc.
- **Climate Action and Finance Mobilization Dialogue (CAFMD)** launched by India and the U.S. on 13th September 2021.
- India and UK has partnered a number of global climate initiatives namely the **International Solar Alliance**, **Coalition Disaster Resilient Infrastructure (CDRI)**, leadership Group for Industry Transition (LeadIT Group), Call for Action on Adaptation and Resilience, and Mission Innovation.
- **Quad Leader's Summit** held on 12 March 2021, Quad Leaders announced the setting up of a Quad Climate Working Group to strengthen climate actions globally on mitigation, adaptation, resilience, technology, capacity-building, and climate finance.
- **BASIC Ministerial declaration** released in the 30th BASIC (Brazil, South Africa, India and China) Ministerial meeting on 7- 8 April, 2021 in India
- **Climate Change Action Plan:** The objective of the plan to advance India's development and climate change targets through effective implementation of eight Missions under National Action Plan on Climate Change (NAPCC).
- Two Research programmes viz. **National Carbonaceous Aerosols Programme (NCAP)** a multi-institutional programme being implemented by a consortium of 17 institutions led by IIT Bombay and **Long Term Ecological Observatories (LTEO)** which required All India Coordination are under implementation.
- Under **National Adaptation Fund for Climate Change (NAFCC)**, 30 projects in 27 States/ Union Territories have been approved so far. In the meanwhile, one project titled 'Scaling-up Resilient Agriculture Practices towards Climate Smart Villages' in Haryana has been closed and the remaining 29 are in various stages of implementation.

References:

1. Key Facts. Available at: <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>. Last accessed on 15th June, 2022
2. Goal 13 Target. <https://www.un.org/sustainabledevelopment/climate-change/>. Last accessed on 15th June, 2022
3. The Paris Agreement. Available at: <https://www.un.org/en/climatechange/paris-agreement>. Last accessed on 15th June, 2022
4. Annual report -2020-21 Ministry of Environment, forest and climate change. <https://moef.gov.in/wp-content/uploads/2022/03/Annual-report-2021-22-Final.pdf> Last accessed on 15th June, 2022

World Food Safety Day - 07 June



Sustainable Development Goal (SDG) 2 aims to 'end hunger and ensure access by all people especially the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

Facts and Figures¹



Nearly 690 million people are hungry, or 8.9 percent of the world population



In 2019, close to 750 million – or nearly one in ten people in the world – were exposed to severe levels of food insecurity



An estimated 2 billion people in the world did not have regular access to safe, nutritious and sufficient food in 2019.



144 million children under age 5 were affected by stunting in 2019.



In 2019, 6.9 per cent (or 47 million) children under 5 were affected by wasting, or acute undernutrition, a condition caused by limited nutrient intake and infection.

SDG 2 Targets

2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.

2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.

2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.

Contributing factors of food insecurity²

Domestic food price inflation - macroeconomic factors had a major impact on the purchasing power of the poorest households, many of which were still experiencing job and income losses due to pandemic-related restrictions.

Weather-related disasters- Weather shocks – in the form of drought, rainfall deficits, flooding and cyclones – have been particularly detrimental in key crises in East, Central and Southern Africa, and Eurasia. Malnutrition in food-crisis countries Malnutrition remained at critical levels in countries affected by food crises, driven by a complex interplay of factors, including low quality food due to acute food insecurity and poor child-feeding practices, a high prevalence of childhood illnesses, and poor access to sanitation, drinking water and health care.

Displacement- In 2021, out of 51 million internally displaced people (IDP) globally, nearly 45 million were in 24 food-crisis countries/territories. The six countries/territories with the highest numbers of IDPs – the Syrian Arab Republic, Afghanistan, the Democratic Republic of the Congo, Yemen, Ethiopia and the Sudan – were among the ten largest food crises in 2021 by numbers of people in Crisis

COVID-19, Conflict/War like situations- Out of around 21 million refugees and 4 million asylum seekers globally in 2021, over 60 percent (around 15.3 million people) were hosted in 52 food-crisis countries/territories, where a mix of conflict/insecurity, COVID-19, poverty, food insecurity and weather extremes compounded their humanitarian plight.

India's Efforts in Food Safety



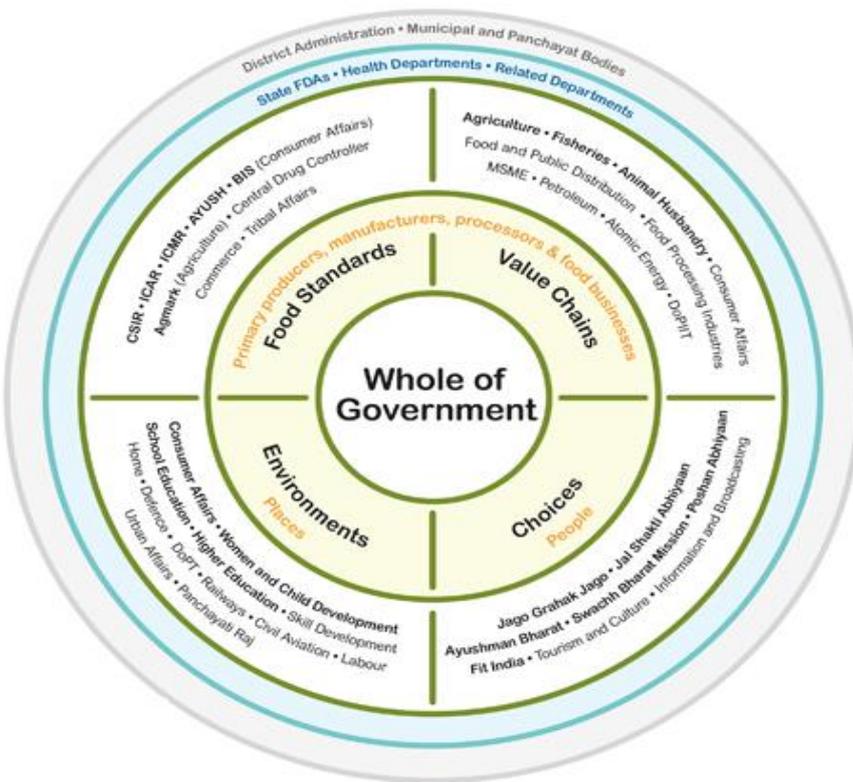
Food Safety and Standards Authority of India (FSSAI)

A statutory body established under the Ministry of Health & Family Welfare, Government of India. The FSSAI has been established under the Food Safety and Standards Act, 2006, which is a consolidating statute related to food safety and regulation in India.

Mission: Set globally benchmarked standards of food and encourage and ensure food businesses to follow these standards and adopt good manufacturing and hygiene practices, and finally enable citizens to eat safe and eat right.

Vision: Build a New India by enabling citizens to have safe and nutritious food so as to prevent disease and lead healthy and happy lives

Food Systems WHOLE OF GOVERNMENT



EAT RIGHT INDIA

Large-scale effort to transform the country's food system in order to ensure safe, healthy and sustainable food for all Indians through the 'Eat Right India' movement.

The tagline 'Sahi Bhojan. Behtar Jeevan', thus, forms the foundation of this movement.

Eat Right India is aligned to the National Health Policy 2017 and flagship programmes like Ayushman Bharat, POSHAN Abhiyaan, Anemia Mukh Bharat and Swachh Bharat Mission.

FOOD SAFETY COMPLIANCE SYSTEM (FoSCoS)⁴

FSSAI launched Food Safety Compliance System (FoSCoS) wef 01st June 2020 replacing existing Food Licensing and Registration System.

An enhanced version of Food Licensing and Registration System (FLRS) for issuance of pan-India FSSAI Licenses and Registration.

INDIAN FOOD LABORATORIES NETWORK (INFoLNeT)⁴

an IT based system for Lab Management since the collection of sample

Provides an extensive online portal to food laboratories and different stakeholders who are involved in process.

FOOD SAFETY TRAINING AND CERTIFICATION (FoSTaC)⁴

FSSAI recommends that all licensed food businesses must have at least one trained and certified Food Safety Supervisor under FoSTaC for every 25 food handlers in each premise.

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1. Facts and figures. <https://www.un.org/sustainabledevelopment/hunger/>. Last accessed on 17th June, 2022.
2. Glob Report on Food Crisis, 2022. <https://www.fao.org/3/cb9997en/cb9997en.pdf>. Last accessed on 17th June, 2022
3. Eat Right India. <https://eatrightindia.gov.in/EatRightIndia/eatrightindia.jsp> Last accessed on 17th June, 2022
4. <https://fssai.gov.in/cms/infonet.php>. Last accessed on 17th June, 2022

National Statistics Day - 29 June



The Government of India decided to celebrate National Statistics Day on the outstanding contribution made by Late Professor Prasanta Chandra Mahalanobis in the field of economic planning and statistics and therefore National Statistics Day mark his birth anniversary. Notification published in the Gazette of India on June 05, 2007.

PROFESSOR PRASANTA CHANDRA MAHALANOBIS

- The chief architect of the post-independence statistical system in India.
- Established the Indian Statistical Institute in Calcutta on 17 December, 1931.
- National Sample Survey started its operations in October 1950 under the leadership of Mahalanobis, the technical expertise being provided at the Indian Statistical Institute (ISI).
- Both the apex statistical bodies of independent India, the Central Statistical Organization (CSO) and the National Sample Survey (NSS) and the State Statistical Bureaus are the creations of Mahalanobis
- Mahalanobis' innovative techniques and methodology for large scale sample surveys are widely acknowledged throughout the world.
- **Sample survey**- invented techniques for conducting large-scale sample surveys and calculated acreages and crop yields by using a method of random sampling.
- Introduced the concept of pilot surveys and advocated the usefulness of sampling methods. Early surveys began between 1937 and 1944 and included topics such as consumer expenditure, tea-drinking habits, public opinion, crop acreage and plant disease.
- Mahalanobis' sample survey estimate of jute production was 7540 bales (1 bale = 400 lbs) obtained at a cost of 8 lakh rupees with a work force of 600 while the plot-to-plot enumeration yielded a figure of 6304 bales at an expenditure of 82 lakh rupees and 33,000 employees which turned out to be an underestimate by 16.6%
- When the units are of varying size, Mahalanobis was aware of sampling of units with probabilities of selection proportional to their sizes instead of equal probabilities in 1937 itself. The mathematical theory for Probability Proportional to Size Sampling (PPS) method was later given by Hansen and Hurwitz in 1943.
- Mahalanobis in collaboration with D B Lahiri of the NSS presented a detailed analysis of errors in censuses and surveys in the Indian context.
- Generated a statistical method known as Fractile Graphical Analysis to compare the socioeconomic conditions of different groups of people. For flood control, he also applied statistics to economic planning.
- Played a critical role in the campaign to bring India its first digital computers in the 1950s
- Devised the Mahalanobis distance and in the Second Five-Year Plan, he was instrumental in formulating India's strategy for industrialisation.
- **Mahalanobis Distance (MD)** - an effective distance metric that finds the distance between point and a distribution. It is quite effective on multivariate data.
- Served as secretary to Rabindranath Tagore, particularly during the latter's foreign travels, and also worked at his Visva-Bharati University, for some time.

Recognition from Government

- **Padma Vibhushan** from the Government of India for his contribution to science and services to the country.
- The Government of India released a postage stamp bearing his picture and the Institute he founded on the occasion of the birth centenary of Mahalanobis in 1993
- Government name the building of the National Sample Survey Organisation at its Calcutta Head Quarters as '**Mahalanobis Bhavan**'.

References:

Role of P C Mahalanobis in Nation Building. <https://pib.gov.in/newsite/printrelease.aspx?relid=166909>. Last accessed on 17th June, 2022

RECENT UPDATES

WHO situational report on Covid-19

Globally, the number of weekly COVID-19 cases has increased for the third consecutive week. During the week of 20 to 26 June 2022, over 4.1 million cases were reported, an 18% increase as compared to the previous week. As per press release on 4th July, 2022, India's Active caseload currently stands at 1,13,864. Active cases stand at 0.26%. 16,135 new cases recorded in the last 24 hours. Weekly Positivity Rate (3.74%).

Digital India Week 2022

At Digital India Week 2022, Gujarat -

Hon'ble PM launches **Indiastack.global** – Key projects to be included initially - Aadhaar, Unified Payment Interface, Digilocker, CoWin Vaccination Platform, Government e-Market Place (GeM), DIKSHA UMANG, eSanjeevani, API Setu, e-Office, e-Hospital, Arogya Setu.

Hon'ble PM launches **MeriPehchaan** Platform – includes National Single Sign-on, one login for accessing multiple public services, Sign in using Mobile number, Username, Password/PIN

Ban on Single Use Plastic (SUP) 1st July, 2022 onwards

Ban is on manufacturing, import, stocking, distribution, sale and use of Single Use Plastic (SUP) items, as per Plastic Waste Management (Amendment) Rules, 2022

Democratic Republic of the Congo declared the end of the Ebola virus disease (EVD) outbreak

On 4 July 2022, the Ministry of Health (MoH) of the Democratic Republic of the Congo declared the end of the Ebola virus disease (EVD) outbreak that affected Mbandaka and Wangata health zones, Equateur province. In accordance with WHO recommendations, the declaration was made 42 days (twice the maximum incubation period) after the burial of the last confirmed case who died in the community.

Message from Executive Director



I heartily congratulate the Department of Community and Family Medicine for releasing third issue of e- Bulletin on Public Health.

My best wishes to the department.

- Dr (Col) CDS Katoch, Executive Director, AIIMS, Rajkot, INDIA

Team Public Health Bulletin, Department of Community & Family Medicine, AIIMS Rajkot, INDIA



Happy to share the third issue of Public Health e-Bulletin by Department of Community & Family Medicine with the objectives to brief the readers on topics related to Global and Indian Public Health. Happy Reading!

- Dr. Bhavesh Modi, Professor & Head



Delighted to share the new issue Public Health Bulletin.

Continue the support & enjoy reading.

- Dr. Krupal Joshi, Associate Professor



Thank you for all the support of all the readers. Happy to present the third issue of Public health Bulletin.

- Dr. Bhautik Modi, Editor, Assistant Professor

Answer of the quiz: 1. (c), 2. (a), 3. (a), 4. (d)