

SOLARIZATION IN J&K

Solarization in Jammu and Kashmir (J&K) refers to the implementation and expansion of solar energy initiatives in the region. This effort is part of a broader push towards renewable energy and sustainable development. Here's an overview of solarization efforts in J&K: J&K has introduced policies to promote solar energy. This includes setting targets for solar power capacity and providing incentives for solar installations. The government has been working on setting up large-scale solar power plants in various parts of the region. This includes both grid-connected and off-grid solar projects. There are financial incentives and subsidies available for individuals and organizations installing solar panels. This includes subsidies on solar panel costs and tax benefits. There's a significant push for installing rooftop solar panels on residential, commercial, and government buildings. This helps in harnessing solar energy directly at the point of use. To support agriculture, solar water pumping systems have been introduced, which help in irrigation by utilizing solar power. Installation of solar street lights has been a focus to improve public lighting while reducing reliance on conventional power sources. The region's varied climate, including heavy snowfall and cloud cover, can impact the efficiency and reliability of solar power generation. Developing the necessary infrastructure for solar power, including grid integration and storage solutions, can be challenging in remote and mountainous areas. Despite subsidies, the initial investment for solar installations can still be a barrier for many residents.

Growing Fears of Technological Disaster

■ VIJAY GARG

Today's world is of technology. Measures like computers, internet, artificial intelligence have made our work easier in many ways. During the Covid pandemic, the world had seen that due to these facilities there was no major disruption in its movement. But this is one aspect of dependence on technology; the other aspect is what was presented before 19. On July 2024, 5 lakh computers worldwide crashed due to a faulty technical update running on Microsoft Windows. ItsThe question is why this happened and whether the world can avoid such technological accidents. What happened after all that a minor update became a problem for the operation of computers. This data has been released by the Microsoft company itself that the problem that arose on July 19 caused a problem called 'Blue Death of Screen' (BDOS) on at least 85 lakh computers. The entire screen of computers is suddenly working due to this.The letters turned sky blue and an error message started appearing on them. Although such messages of errors remain local due to various activities on computers, but this time the problem was worldwide. That's why. This happened because CrowdStrike, another company to protect Microsoft computers from cyber attacks, had released an automatic 'software update' for all Microsoft computers, which kept on coming and leaving some flaws. As this software update begins, Microsoft WindowsThe computers running on it stopped operating. Since this Computers are equipped with automatic shutdown mechanisms when an internal (such as a hardware or motherboard problem) or external problem (such as a virus attack or cyber attack) occurs, so they may stop working as soon as a faulty software update is introduced. . In particular, the blue screens of millions of computers connected to the 'Clyde Network' made it clear that their system had crashed. This software update, called CrowdStrike Falcon, is actually a cyber security tool, whichIt is designed to protect computers from various cyber attacks. But there was a technical flaw in it. Therefore, the operation of computers equipped with Microsoft Windows stopped suddenly. There is a need to consider that in the present world, when there is talk of handing over all the work to internet based technologies and devices, what will happen to the world if there is an immediate 'shutdown'. The artificial intelligence which is being touted as the cure for all diseases is not a blessing from the sky but it is also based on the Internet andThere is a system based on the network of computers, which is called Tuki Vhee Ki Ran' Bhi' Dha Dhawana Vadhma Method. There is also a possibility that some faulty system operating within it might do such a thing and the world would remain cheated. Today, the way hospitals are being run all over the world through the network of computers connected to the Internet, traffic control is being done, stock markets, reservation systems and even the security systems of countries are based on them - in such a situation, if there is any technical flaw, all the arrangements are being made. Can destroy in a single moment. It is noteworthy thatThere is no dearth of factors causing such technical flaws. This can happen due to cutting of the 'cable' laying under the sea providing internet services. This situation can occur in case of server failure due to power failure. This is a recent example of a software glitch, but this can also happen due to a computer virus attack or a cyber attack by an enemy country. It is possible that the situation may worsen due to the satellites through which internet or cloud internet services are being provided, getting hit by a solar storm. to sayThere are anti-viruses available to protect computers from viruses, there are many measures to prevent cyber attacks, but what about other technological disasters when a simple activity like a software update can create such a big crisis. Go. The latest digital tsunami occurred when a company implemented a legitimate and possibly tried and tested technique like a software update. But imagine what happens when a hostile country, hacker or terrorist group deliberately unleashes a technological disaster on the world. What will be the result if I join forces? This is alt is a strange irony that the Texas (America) based cyber security company CrowdStrike is responsible for protecting millions of computers running the 'Aapre Operating System' called Microsoft Windows from cyber attacks and keeping them running smoothly. A software update recently caused such a huge digital disaster. This company is considered an expert in cyber security. It is claimed that corporate networks and cloud networks of large companies, airlines, emergency services andThis company plays an important role in protecting connecting devices etc. from computer viruses, malware and hacking. Especially companies using cloud network services take the services of CrowdStrike to keep their servers safe from cyber attacks and hacking. This company is said to play an important role in investigating cyber attacks around the world. But the latest incident has raised questions on the credibility of CrowdStrike company as well as Microsoft. Similarly, in 2010, antivirus manufacturing company McAfee was unaware of a mistake.Windows XP PCs were discontinued worldwide in 2015. There was a similar stir at that time also. It is not that this is the only incident of internet dependent cyber network being disrupted. Small technical accidents happen frequently. Sometimes the server of 'Meta', the company that operates WhatsApp, Instagram, Facebook etc. gets stalled, and sometimes Google's performance slows down. Cyber attacks and hacking have shocked the world. It is true that many tasks have become convenient with the Internet and computers, butAs our dependence on selected technology companies is increasing, we will have to be prepared for such technological disasters. How can a technological storm destroy a world which has turned into an island with the help of technological arrangements? The time has now come to remember this lesson and make arrangements to avoid it.

(The writer is Retired Principal and educational columnist)

Hepatitis: Understanding the Disease and Raising Awareness

■ BHAVNEET KOUR

Introduction Hepatitis, a condition marked by liver inflammation, affects millions of people worldwide. The liver, a vital organ responsible for numerous essential functions, including detoxification, protein synthesis, and the production of biochemicals necessary for digestion, is compromised when inflamed. Hepatitis can be caused by various factors, such as viral infections, excessive alcohol use, certain medications, and autoimmune diseases. The most common types of viral hepatitis are hepatitis A, B, C, D, and E, each caused by different viruses and presenting unique challenges in terms of transmission, prevention, and treatment. Raising awareness about hepatitis is crucial to combating this disease and reducing its global burden.

Types of Hepatitis

Hepatitis A: Hepatitis A virus (HAV) is primarily transmitted through ingestion of contaminated food or water. It can also spread through close personal contact with an infected person. The disease is generally acute and self-limiting, meaning most people recover without long-term liver damage. Symptoms can include fatigue, nausea, abdominal pain, loss of appetite, and jaundice. Vaccination is highly effective in preventing hepatitis A, and maintaining good hygiene practices, such as hand-washing, is essential in minimizing its spread.

Hepatitis B: Hepatitis B virus (HBV) is spread through contact with infectious body fluids, such as blood, semen, and vaginal fluids. It can be transmitted from mother to child during childbirth, through sexual contact, and via sharing needles or other drug-injecting equipment. Hepatitis B can be both acute and chronic. Chronic hepatitis B can lead to serious complications like liver cirrhosis and liver cancer. Vaccination is available and highly effective in preventing hepatitis B. For those already infected, antiviral medications can manage the disease and reduce the risk of liver damage.

Hepatitis C: Hepatitis C virus (HCV) is primarily transmitted through blood-to-blood contact. This can occur through sharing needles, receiving contaminated blood products, or less commonly, through sexual contact. Hepatitis C often becomes chronic and can lead to severe liver damage, including cirrhosis and liver cancer. Unlike hepatitis A and B, there is no vaccine for hepatitis C, but antiviral medications can cure most cases. Early diagnosis and treatment are crucial for preventing long-term liver damage.

Hepatitis D: Also known as delta hepatitis, hepatitis D virus (HDV) occurs only in individuals already infected with hepatitis B, as it requires the hepatitis B virus to replicate. HDV

is transmitted similarly to hepatitis B and can be prevented with the hepatitis B vaccine. Co-infection with HBV and HDV can lead to more severe liver disease and a higher risk of complications.

Hepatitis E: Hepatitis E virus (HEV) is transmitted through the consumption of contaminated water. It is generally self-limiting, but it can be severe in pregnant women, leading to a high risk of mortality for both the mother and fetus. Improved sanitation and clean drinking water are key to preventing hepatitis E. In regions where HEV is endemic, promoting these measures is critical.

Global Impact

Hepatitis is a significant global health issue, affecting hundreds of millions of people. According to the World Health Organization (WHO), an estimated 325 million people live with chronic hepatitis B and C worldwide. These infections are responsible for 1.4 million deaths annually, a number comparable to deaths caused by tuberculosis and higher than those caused by HIV/AIDS. The global burden of hepatitis is exacerbated by the lack of awareness and inadequate access to preventive and treatment services in many regions.

Prevention and Awareness

Raising awareness about hepatitis is essential for its prevention and control. Public health campaigns should focus on several key areas:

Vaccination: Promoting the availability and importance of vaccines for hepatitis A and B is crucial. Vaccination not only protects individuals but also helps control the spread of these viruses. For hepatitis A, vaccination is recommended for all children at age one, travelers to countries where hepatitis A is common, and people at high risk of infection. For hepatitis B, vaccination is recommended for all infants at birth, unvaccinated children aged 0-18 years, and adults at risk, including healthcare workers and individuals with chronic liver disease or HIV.

Safe Practices: Encouraging safe injection practices, safe blood transfusions, and safe sex practices can significantly reduce the transmission of hepatitis B and C. Healthcare facilities should adhere to strict infection control guidelines to prevent nosocomial infections. Public education on the dangers of sharing needles and the importance of using sterile equipment for tattoos and piercings is also vital.

Education: Educating the public about the modes of transmission and symptoms of hepatitis can lead to early diagnosis and treatment, thereby reducing the risk of severe liver damage. Public health messages should emphasize that hepatitis can often be asymptomatic, meaning individuals may not show symptoms but can still spread the virus and suffer liver damage.

Women as Global Labour Force: Development and Challenges

■ DR. RAJKUMAR SINGH

Women make up a significant portion of the global labour force and their role has evolved substantially over time. In many countries, women are now increasingly present in a diverse range of professions, from skilled trades to leadership roles. This participation has been driven by various factors, including educational advancements, policy changes promoting gender equality, and shifting societal attitudes. However, challenges persist. Women often face barriers such as wage gaps, underrepresentation in senior roles, and workplace discrimination. Additionally, in many parts of the world, women continue to shoulder a disproportionate share of unpaid domestic work, which can limit their full economic participation. The concept of "female as a global labour force" encompasses several defining features that highlight women's participation, challenges, and contributions in the workforce worldwide. The key features include:

a. **Diverse Participation:** Sectoral Representation: Women are involved in a wide range of sectors including healthcare, education, technology, agriculture, and manufacturing. Varied Roles: Women occupy roles from entry-level positions to top executive and leadership positions, contributing to different levels of organizational structures.

b. **Economic Contribution:** GDP Contribution: Women's participation in the labour force significantly contributes to the Gross Domestic Product (GDP) of countries. Entrepreneurship: Female entrepreneurs create jobs, drive innovation, and contribute to economic diversification.

c. **Educational Attainment:** Increasing Educational Levels: More women are attaining higher levels of education, which enhances their skills and employability. STEM Involvement: An increasing number of women are entering Science, Technology, Engineering, and Mathematics (STEM) fields, although disparities still exist. Efforts to address these issues include initiatives to promote equal pay, support for work-life balance, and measures to enhance women's rep-

resentation in leadership and decision-making roles. Improving access to education and training also plays a crucial role in empowering women and maximizing their contributions to the global economy.

Origin and development

The origin and causes of female participation in the global labour force can be traced through historical, economic, social, and political developments whose overview include:

a. **Historical Context:** Industrial Revolution: The transition from agrarian economies to industrialized ones in the 18th and 19th centuries saw women entering factories and mills. While often underpaid and working in poor conditions, this marked the beginning of women's large-scale entry into the formal workforce. World Wars: During World War I and World War II, men were drafted into military service, leading women to fill roles traditionally held by men. This demonstrated women's capability in various industries and services.

b. **Economic Factors:** Economic Necessity: In many households, dual incomes became necessary for maintaining an adequate standard of living, pushing more women into the workforce. Globalization: The expansion of global markets and the establishment of multinational corporations have created diverse employment opportunities worldwide, drawing more women into the labour force.

c. **Social Factors:** Educational Advancements: Increased access to education for women has equipped them with the skills and qualifications necessary for a wide range of professions. Changing Social Norms: Societal shifts towards gender equality have encouraged women to pursue careers and challenge traditional gender roles.

d. **Political and Legal Factors:** Legislation and Policy Changes: Many countries have enacted laws promoting gender equality in the workplace, including anti-discrimination policies, maternity leave, and equal pay legislation. Women's Rights Movements: Advocacy for women's rights has been instrumental in achieving legal and societal changes that support women's participation in the workforce.

Technological Advancements: Automation and IT Revolution: The rise of information technology and automation has created new job sectors where women have been able to participate more fully, often with greater flexibility.

f. **Cultural Influences:** Media and Representation: Media portrayal of successful women in various professions has helped to normalize and inspire female participation in the workforce. Role Models and Mentorship: The presence of female role models in leadership positions has encouraged more women to pursue ambitious career paths.

g. **Global Trends:** Urbanization: As more people move to urban areas, women find more employment opportunities in cities compared to rural areas. Demographic Changes: Aging populations in many developed countries have led to increased demand for workers, including women, particularly in healthcare and service industries. Overall, the integration of women into the global labour force is a multifaceted process influenced by a combination of historical precedents, economic needs, educational advancements, and ongoing social and political efforts aimed at promoting gender equality.

Facing challenges

The female labour force faces a variety of challenges that can impede women's full participation and advancement in the workplace. These challenges are multifaceted and vary across different regions and industries. Some of the key challenges include:

a. **Wage Gap:** Gender Pay Gap: Women, on average, earn less than men for the same work, which is a persistent issue in many countries. Valuation of Work: Jobs typically dominated by women, such as caregiving and teaching, are often undervalued and underpaid.

b. **Occupational Segregation:** Horizontal Segregation: Women are often concentrated in certain sectors or roles, such as healthcare, education, and administrative positions, which may offer fewer opportunities for advancement. Vertical Segregation: Women are underrepresented in senior and leadership positions across most industries, often referred to as the "glass ceiling."

c. **Work-Life Balance:** Caregiving Responsibilities: Women often bear a dispro-

portionate share of unpaid domestic work and caregiving responsibilities, which can limit their career opportunities and advancement. Flexible Work Arrangements: Lack of access to flexible working conditions can make it challenging for women to balance professional and personal responsibilities.

d. **Discrimination and Bias:** Gender Discrimination: Women may face explicit or implicit discrimination in hiring, promotions, and daily work interactions. Stereotypes and Biases: Gender stereotypes and biases can affect perceptions of women's capabilities and contributions in the workplace.

e. **Lack of Support Systems:** Childcare and Family Support: Limited availability of affordable childcare and family support services can hinder women's ability to participate in the labour force. Mentorship and Networking: Women may have less access to mentorship and professional networks, which are crucial for career advancement.

f. **Legal and Policy Barriers:** Insufficient Legal Protections: In some countries, laws protecting women's rights in the workplace are inadequate or poorly enforced. Maternity and Parental Leave: Inadequate maternity and parental leave policies can negatively impact women's career continuity and progression.

g. **Education and Skills Gap:** Access to Education: In some regions, girls and women have less access to quality education and vocational training, limiting their employment opportunities. Skills Mismatch: Women may face challenges in accessing training for high-demand, high-paying jobs, particularly in STEM fields.

h. **Economic and Social Factors:** Economic Insecurity: Women are more likely to be in precarious employment, with lower job security and fewer benefits. Social Norms and Expectations: Cultural and societal expectations about gender roles can restrict women's career choices and aspirations. These challenges requires concerted efforts from governments, businesses, and society as a whole.

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101st birth anniversary of Soulful Mukesh

■ VINOD CHANDRASHEKHAR DIXIT

Recently in Dungarpur (Rajasthan), on the occasion of the 101st anniversary of famous singer Mukesh, a program of 'Kabhi Kabhi Mere Dil Mein' was organized in the Darpan Auditorium at Shilpgram. Lovers Club and West Zone Cultural Center. In this, former Chief Secretary of Kerala IAS Dr. Vishwas Mehta enthralled the audience by presenting the songs sung by Mukesh with live orchestra. Dr. Mehta also shared unheard memories related to Mukesh and his songs.

Dr. Vishwas Mehta has got a similar voice and is known as a modern day Mukesh. Though Mehta is not trained, he loves to sing and use to perform during his school and college days.

In the auditorium packed with Mukesh's

fans, Dr. Mehta won the hearts of the audience by singing Kabhi Kabhi Mere Dil...Koi Jab TumharaHriday Tod De...along with more evergreen and sad songs of Mukesh.

Dungarpur is truly a gem city that adds a feather to the cap of Rajasthan tourism. Music lovers of Dungarpur were on a treat, with unforgettable masterpieces of the 50s, 60s and 70s, including one of Mukesh's last songs 'KabhieKabhie Mere Dil Mein' from 1976 film KabhieKabhie.

Here, I would like to point out that Mukesh a legendary singer acquired the sobriquet of 'tragedy king' in the film industry for his nasal voice that conveyed agony, sorrow and pathos like no other. What's more, nearly five decades since his passing, emerging singers continue to breathe life into his music. Nearly five

decades after his death, MukeshchandMathur aka Mukesh's songs are a slow burn for Indian movie junkies. A self-taught man, Mukesh who was a non-matriculate, went to a Pashtu school and only wrote in Urdu. He could not read Hindi; all his song books were in Urdu. "But over a period of time, he managed to learn and speak English impeccably." He had the voice that could paint a thousand shades of melancholy. One could feel the tenderness and joy in his voice ; his singing style was unparalleled.

Secretary of Music Lovers Club TinuMandawat and President Dr. Reena Rathore told that the outline of this musical program organized in collaboration with West Zone Cultural Center was prepared by the patron of Music Lovers Club

and former Chief Secretary of Kerala Dr.Vishwas Mehta and he presented the songs sung by Mukesh along with his fellow artists.

A large number of music lovers including the club's chief advisor Dr.Prem Bhandari, Chinmay Dixit were present.

One of Mukesh's last songs was 'Kabhiekabhie mere dilmeinkhayalaatahai' ('KabhieKabhie,' 1976) which fetched him a Filmfare award, posthumously. Dr. Mehta brought to life Mukesh's timeless melodies, offering the audience a harmonious blend of nostalgia, intense emotions. All of Mukesh's songs are his favourite because he loves his voice and Mukesh's voice stirs something inside him. It's not so easy to emulate Mukesh's voice without passion and feelings.

