

ADITI 2.0 CHALLENGE

The ADITI 2.0 Challenge, a prominent competition under the Defense Artificial Intelligence (AI) sector, marks a significant initiative by the Indian Ministry of Defense (MoD) aimed at fostering innovation and encouraging indigenous development in AI and related technologies. Following the success of ADITI 1.0, the second iteration builds on the momentum to further accelerate the integration of AI into defense applications, in line with India's broader strategic vision of self-reliance and modernization in defense technologies. The challenge invites startups, academic institutions, research labs, and industries to propose AI-driven solutions that address critical defense problems.

ADITI (Artificial Intelligence Defense Innovation Taskforce Initiative) was conceptualized as part of the Indian government's drive to modernize the defense forces by leveraging cutting-edge AI technologies. The challenge comes in response to the growing global focus on AI in defense, where advanced nations are heavily investing in AI to boost operational efficiency, autonomous systems, and strategic decision-making. As India faces evolving security threats, both external and internal, it recognizes the potential of AI to act as a force multiplier in areas like surveillance, logistics, cybersecurity, and battlefield management.

The primary objective of ADITI 2.0 is to identify and support the development of AI solutions that can strengthen the capabilities of the Indian defense sector. Through this challenge, the Ministry of Defense aims to foster an ecosystem of innovation where solutions are developed in close alignment with the specific needs of the Indian Armed Forces. The initiative not only seeks to reduce dependence on foreign technologies but also aims to create home-grown solutions that are cost-effective, scalable, and tailored for India's unique defense environment.

The ADITI 2.0 Challenge is structured to identify breakthrough ideas and mature them into practical applications through a multi-phase approach. Participants go through a rigorous selection process, ensuring that only the most promising concepts receive support and funding.

In the initial phase, participants are invited to submit detailed proposals outlining their AI-based solutions for specific defense challenges. The proposals are evaluated based on innovation, feasibility, scalability, and potential impact on defense operations. This phase attracts startups, research institutions, and AI specialists from across the country.

Shortlisted participants from the initial round are then provided financial support and mentorship to develop prototypes of their solutions. This phase involves collaboration between defense experts and innovators to ensure the proposed AI systems align with the operational needs of the Indian defense forces.

Once prototypes are developed, they undergo rigorous testing to assess their performance, reliability, and scalability. Participants demonstrate the functionality of their AI solutions in real-world or simulated defense environments, showcasing how their technology can enhance various aspects of defense operations, such as unmanned vehicles, AI-driven threat detection systems, or predictive maintenance.

Based on the performance of the prototypes, a final evaluation is conducted. Successful solutions are considered for large-scale deployment across various branches of the Indian military. Additionally, the participants are encouraged to commercialize their products, opening opportunities for export to other nations.

ADITI 2.0 specifically targets solutions across several key focus areas in defense. AI-enabled drones, unmanned aerial vehicles (UAVs), autonomous ground vehicles, and underwater systems designed for surveillance, reconnaissance, or combat support. AI-driven systems to protect critical defense infrastructure from cyber-attacks, including advanced threat detection, real-time response, and network monitoring solutions. AI algorithms that predict equipment failures and maintenance needs for military hardware, ensuring enhanced operational efficiency and reduced downtime. AI tools that enhance battlefield awareness by integrating data from multiple sensors, drones, and satellites, providing real-time insights for decision-making. AI systems designed to optimize logistics, ensuring timely supply of resources and efficient management of defense supply chains. Virtual reality (VR) and AI-based training systems for soldiers, simulating battlefield scenarios to improve combat preparedness.

The ADITI 2.0 Challenge comes at a crucial time for India, where the geopolitical landscape is rapidly changing. India faces security challenges from its neighbors, including China and Pakistan, making technological advancements in defense a national priority. AI's potential to revolutionize warfare by improving decision-making, enhancing weapon precision, and automating complex systems is unparalleled.

The challenge also aligns with India's broader vision of "Atmanirbhar Bharat" (self-reliant India), particularly in the defense sector, where the country has traditionally been dependent on imports for critical military technology. By fostering innovation at home, the ADITI 2.0 Challenge aims to reduce this dependency and empower India's defense forces with cutting-edge, locally developed solutions.

Furthermore, ADITI 2.0 supports the growth of India's startup ecosystem and promotes collaboration between the government, private sector, and academia. It nurtures an environment where small-scale innovators can contribute to solving large-scale defense challenges, potentially positioning India as a global leader in defense AI technologies.

The ADITI 2.0 Challenge represents a significant leap toward integrating AI into India's defense operations. By harnessing the power of artificial intelligence, India aims to enhance the strategic and tactical capabilities of its armed forces while fostering self-reliance in critical defense technologies. The challenge offers a unique platform for innovators to develop AI solutions that address pressing defense needs and contribute to the nation's security, economic growth, and technological leadership.

ANTIBIOTIC RESISTANCE

Antibiotic resistance is one of the most pressing global health challenges today. It occurs when bacteria evolve mechanisms that render antibiotics, the drugs used to treat bacterial infections, ineffective. This resistance leads to longer illnesses, increased medical costs, and higher mortality rates. Despite advancements in medicine, the rapid rise of antibiotic-resistant bacteria threatens to undo decades of progress in treating infectious diseases. One of the primary drivers of antibiotic resistance is the overprescription and improper use of antibiotics. Antibiotics are often prescribed for viral infections like colds or the flu, even though they are ineffective against viruses. Inappropriate dosages or incomplete courses of antibiotics also allow some bacteria to survive, leading to resistance. Antibiotics are widely used in agriculture, particularly in livestock farming, not just to treat infections but also to promote growth and prevent disease in crowded conditions. This excessive use contributes to the development of resistant bacteria that can spread to humans through the food supply or the environment. Bacteria naturally evolve over time, and when exposed to antibiotics, some may acquire mutations that allow them to survive the drug's effects. These resistant bacteria then multiply, passing on their resistant traits to future generations. The ease of travel and global trade means that resistant bacteria can spread quickly across countries. Additionally, poor hygiene practices, inadequate infection control in healthcare settings, and lack of access to clean water contribute to the spread of resistant infections. The implications of antibiotic resistance are severe and far-reaching. Infections caused by resistant bacteria are harder to treat, requiring more potent antibiotics or combinations of drugs, which may have more side effects and be more expensive. Common infections like urinary tract infections, pneumonia, and tuberculosis are becoming more difficult to treat, leading to prolonged illnesses and higher mortality rates.

Swachh Bharat Mission | Blue-Print for Urban Waste Management

■ TOKHAN SAHU

As we commemorate the tenth anniversary of the Swachh Bharat Mission (SBM), we reflect on a transformative decadal journey that has redefined cleanliness and sanitation in India. Launched on October 2, 2014, this mission was not just an initiative but a movement—a call to every citizen to contribute to a cleaner, healthier, and a Viksit Bharat. Today, SBM has broadened its focus beyond just building and enhancing access to toilets to include clear guidance for communities on adopting effective waste management practices. This shift fosters a sense of responsibility for cleanliness, encouraging individuals to actively contribute to the well-being of their societies. Prime Minister driving the initiative from the front that has resulted in India becoming open defecation free and stirred a Jan Bhagidari in our communities.

In urban areas, the SBM has spearheaded a comprehensive approach to waste management. From the implementation of efficient waste segregation systems to the establishment of waste-to-energy plants, cities across the nation have embraced innovative solutions today, which is possible due to the visionary leadership and relentless efforts anchored by our honourable Prime Minister between 2014-2024.

The introduction of the Swachh Survekshan, an annual cleanliness survey, has fostered healthy competition among cities, driving them to enhance their sanitation and hygiene standards. It has integrated sanitation with health, education, and environmental conservation.

At the heart of the SBM is the active participation of communities. From school children to women's groups, citizens have become champions of cleanliness. State governments have implemented national policies at the local level, estab-

lished clear guidelines, and formulated city-specific sanitation strategies and built essential infrastructure, such as public toilets and waste management facilities, while also investing in capacity building through training programs for municipal staff and Safai Karmacharis. States have built on their performance, with robust monitoring and evaluation mechanisms to track progress and make necessary adjustments, utilizing tools like Swachh Survekshan. By collaborating with various sectors, the mission has empowered local bodies, NGOs, and citizens to work together towards a common goal. The emphasis on public-private partnerships has facilitated resource mobilization and technological innovations, making sanitation solutions more accessible and sustainable. Additionally, initiatives like Safai Mitra Suraksha Shivers offer health check-ups and raise awareness about social security benefits, emphasizing the mission's comprehensive approach to community health.

It's important to ensure that sanitation services are inclusive and equitable for marginalized populations and SBM has successfully done that. One of such instances, that I have closely witnessed has been in Ambikapur, in Surguja district, Chattisgarh. With a decentralized waste management plan, this city of around 200,000 residents has effectively minimized landfill waste and managed it at the source, earning recognition both nationally and internationally. A key element of this success is a dedicated group of 470 Safai Karmis, a group of vibrant women trained to manage waste for the city. Their efforts have successfully supported Ambikapur Municipality to not only generate revenue but also reinvest it into community services, demonstrating the socio-economic benefits of inclusive strategies. Women in Ambikapur drive the entire waste

management process—from collection and segregation to processing—viewing waste as a resource rather than a liability. This mindset encourages recycling and resource recovery, effectively closing the loop in the waste cycle. By educating the community about responsible waste disposal, they foster active participation in environmental maintenance, unlocking economic opportunities and driving sustainable practices. This bottom-up approach has enabled states to make remarkable strides in waste management.

Ambikapur's women-led sanitation initiative serves as a promising blueprint for Tier II and Tier III cities looking to implement effective waste management strategies. While each community may face unique challenges, the Ambikapur model illustrates the power of local solutions driven by community engagement. As urban populations grow and waste management becomes increasingly critical, cities worldwide can look to Ambikapur for inspiration. With the right support and commitment, we can transform waste management into a resource for growth and empowerment, benefiting both communities and the environment.

We have numerous instances of empowered women across India, recognizing their vital role in advancing the mission's goals of cleanliness and sanitation. Women are at the forefront of waste management, community education, and health initiatives, making them essential agents of change. Through their active participation, they have not only contributed to public health but have also transformed societal attitudes toward cleanliness and hygiene. One of the impacts of SBM has been the creation of employment opportunities for women, particularly in sanitation roles. Initiatives like the National Urban Livelihood Mission have provided women with

training and resources to engage in waste collection, segregation, and processing. As Safai Karmis, the women gain financial independence and elevate their status within their communities. This economic empowerment plays a crucial role in enhancing their self-esteem and recognition, challenging traditional gender norms. Women also play a pivotal role in community mobilization and awareness campaigns. They educate families about hygiene practices, waste segregation, and the importance of sanitation. Their involvement fosters a culture of cleanliness, encouraging active participation in SBM initiatives.

In conclusion, the integration of women into the SBM not only enhances the effectiveness of sanitation initiatives but also fosters socio-economic development and gender equity. As we look to the future, the mission continues to evolve. The focus is now shifting towards ensuring sustainability in sanitation practices, addressing the challenges of urbanization, and promoting the circular economy. By harnessing technology and data-driven approaches, we aim to refine our strategies and expand our reach, ensuring that every corner of the country experiences the benefits of cleanliness. Moreover, we must continue to instill the values of hygiene and sanitation in future generations. Educational programs that promote awareness about sanitation will be pivotal in maintaining the momentum we have built over the past decade. As we move forward, let us continue to work hand in hand, embracing the spirit of Swachhata and making it an integral part of our daily lives. The journey is far from over, but with determination and collective action, a cleaner, healthier India is within our grasp.

(The writer is MoS, Ministry of Housing and Urban Affairs)

Exploring Baba Faiz Baksh Dargah Balle Da Bagh Akhnoor

■ DR SONIA VERMA

Introduction: Baba Faiz Baksh Dargah, a revered shrine located in the heart of the region, holds a significant place in the spiritual and cultural landscape of the community. This dargah is dedicated to Baba Faiz Baksh, a saint whose life and teachings continue to inspire countless devotees. Historically, the dargah has been a center for spiritual healing and guidance, attracting pilgrims from various backgrounds seeking solace and divine intervention. Baba Faiz Baksh Syed Bukhari came from Bukhara, central Asian country of Uzbekistan, and while visiting north India, he made Akhnoor his resting place. Generally known as "peer baba", Hindus and Muslims both pray at the site for the wellbeing of their loved ones during the annual Urs (religious congregation) held at the shrine on the banks of the Chenab river

The origins of Baba Faiz Baksh Dargah trace back several centuries, intertwining with the fabric of local folklore and religious practices. It is said that Baba Faiz Baksh was known for his miraculous powers, particularly in curing ailments, including dog bites, which were prevalent in the area. Such miraculous cures have contributed to the dargah's fame, as people come from far and wide to seek the saint's blessings.

Culturally, the dargah serves as a hub for communal gatherings, especially during significant events such as the first Navratra, when traditional wrestling matches or 'dangal' are organized. These events not only celebrate the saint's legacy but also foster a sense of unity among devotees. The summer season also witnesses bhandaras, or community feasts, emphasizing the importance of sharing and collective celebration within the community.

In contemporary society, Baba Faiz Baksh Dargah remains highly relevant as a symbol of faith and resilience. It stands as a testament to the rich tapestry of cultural heritage, where spirituality meets social harmony. The dargah continues to draw individuals seeking hope, healing, and a deeper connection to their roots, making it an integral part of the community's identity.

Historical Background

The historical roots of Baba Faiz Baksh Dargah can be traced back to the early 18th century, a period marked by significant social and religious transformations in the region. It is believed that Baba Faiz Baksh, a Sufi saint, arrived in this area seeking a place to spread his teachings of love, compassion, and healing. His arrival coincided with a time when the local populace was grappling with various challenges, including social unrest and the effects of natural calamities. Baba Faiz Baksh's profound connection with the divine and his dedication to serving the community quickly established him as a pivotal figure.

As tales of his miraculous abilities spread, particularly his renowned skill in curing dog bites, a growing number of devotees began to flock to him for spiritual guidance. This influx of followers led to the establishment of the dargah as a formal site of worship. Over the years, the dargah evolved into a sanctuary for those seeking solace, with many notable figures visiting to pay their respects. Local legends suggest that prominent leaders and influential personalities, both religious and political, sought Baba's blessings during their times of need.

Key historical events associated with the dargah include its role during significant cultural festivals, which have been celebrated for generations. The first Navratra, in particular, has become a hallmark event, featuring colorful festivities, wrestling matches, and communal gatherings that reinforce the dargah's importance in the cultural fabric of the community.

As the centuries progressed, the dargah not only remained a spiritual haven but also became a place for social gatherings and the promotion of communal harmony. The legacy of Baba Faiz Baksh and the historical significance of the dargah continue to resonate, ensuring that this sacred space remains a vital part of the region's heritage and identity.

Cultural Significance: The Baba Faiz Baksh Dargah plays a pivotal role in the cultural fabric of the local community, serving as a gathering place for spiritual and social activities that enrich the lives

of its devotees. Celebrations and rituals held at the dargah are not only expressions of faith but also vital components of the community's heritage and identity.

One of the most significant celebrations is the first Navratra, a festival dedicated to the worship of the divine feminine. During this time, the dargah transforms into a vibrant hub of activity, attracting devotees who participate in traditional wrestling matches known as 'dangal'. These events, deeply rooted in local customs, symbolize strength and bravery while fostering camaraderie among participants and spectators alike. Such gatherings reinforce social bonds and build a sense of belonging within the community, as people come together to celebrate shared values and traditions.

In addition to the wrestling matches, the summer season brings with it the practice of bhandara, where community members come together to prepare and share meals. This act of communal feeding is a significant ritual, symbolizing generosity, unity, and the spirit of togetherness. It emphasizes the importance of sharing resources and creating a nurturing environment for everyone, regardless of their background. Bhandara events often attract large crowds, providing an opportunity for people to connect, share stories, and partake in the collective joy that such gatherings bring.

Moreover, the rituals conducted at the dargah, including prayers and offerings, serve as a means of seeking blessings and divine intervention for personal and communal well-being. These practices are steeped in tradition and are often passed down through generations, ensuring that the values and teachings of Baba Faiz Baksh continue to resonate with the community.

Overall, the cultural significance of Baba Faiz Baksh Dargah extends far beyond its spiritual role. It is a cornerstone of local identity, where history, tradition, and community spirit intertwine to create a unique cultural landscape that honors both the past and the present.

Traditional Healing Practices

The healing practices associated with Baba Faiz Baksh Dargah, particularly the traditional remedy for dog bites, reflect the deep-rooted beliefs in the power of faith and spirituality within the local community. Historically, the dargah has been a sanctuary not only for spiritual solace but also for physical healing, particularly in a region where dog bites were common due to the prevalence of stray dogs. The legend surrounding Baba Faiz Baksh's miraculous ability to cure such wounds has attracted countless individuals seeking both spiritual and physical recovery.

Local health beliefs often intertwine with spiritual practices, particularly in the case of ailments perceived as both physical and spiritual afflictions. The traditional dog bite cure typically involves a combination of prayers, rituals, and the application of soil from beneath a Ber tree, which is standing inside the compound of dargah. Devotees believe that invoking the saint's name and performing specific rituals can invoke divine intervention, allowing the afflicted individual to experience healing that transcends conventional medicine. It is not uncommon for those affected by dog bites to visit the dargah, where they may offer prayers, pouring sarson oil in the traditional lamp, and sometimes tie threads or cloths around the shrine as a symbolic gesture of their faith and hope for healing. The significance of these practices goes beyond the physical act of healing; they reinforce a sense of community and shared beliefs. Visiting the dargah for healing fosters connections among individuals who may be experiencing similar afflictions, creating a communal atmosphere of support and encouragement. Moreover, these traditional healing practices reflect a holistic understanding of health that encompasses not just the physical body but also the spiritual well-being of individuals.

Furthermore, the perpetuation of these practices within the community highlights the importance of cultural heritage and the role of the dargah as a custodian of local traditions. As modern medicine becomes increasingly dominant, the continued reliance on traditional healing methods signifies the enduring value of faith and tradition in the lives of the community members. Through these practices, the teachings of Baba Faiz Baksh remain alive, embody-

ing the intersection of faith, culture, and healing that defines the dargah's legacy.

Festivals and Events

Baba Faiz Baksh Dargah is renowned for its vibrant festivals and events, which serve as a crucial aspect of its cultural significance. Among these, the dangal, or traditional wrestling matches, held during the first Navratra, stands out as a prominent celebration. This festival, dedicated to the worship of the divine feminine, transforms the dargah into a lively arena filled with excitement and camaraderie. The dangal not only showcases physical prowess but also embodies the principles of strength, bravery, and community spirit. Participants from various backgrounds come together to compete, while spectators cheer, creating an atmosphere of unity and joy.

The social implications of these wrestling matches extend far beyond mere competition. They reinforce social bonds among community members, fostering a sense of belonging and shared identity. The event serves as a platform for various age groups to interact, bridging generational gaps and encouraging mutual respect. It becomes a space for storytelling, where older generations share their experiences and traditions with the youth, ensuring that the cultural heritage is passed down through the ages. This exchange enriches the community, solidifying the values and norms that are integral to their identity.

In addition to the dangal, the summer season brings the tradition of bhandara, or community feasting, to the forefront. During these events, community members come together to prepare and share meals, emphasizing the principles of generosity and togetherness. Bhandara not only satisfies physical hunger but also nurtures the spirit of unity, as people from diverse backgrounds gather to partake in the feast. These communal meals often feature a variety of dishes, symbolizing abundance and the collective effort of the community.

Both the dangal and bhandara highlight the Dargah's role as a focal point for cultural expression and social interaction. They reflect the community's values, celebrating resilience, cooperation, and shared joy. Through these events, Baba Faiz Baksh Dargah continues to be a beacon of hope and unity, reinforcing its significance in the lives of its devotees.

Conclusion: Baba Faiz Baksh Dargah stands as a profound symbol of historical, cultural, and social significance within the community it serves. Rooted in the teachings of the revered Sufi saint, Baba Faiz Baksh, the dargah has evolved into a sanctuary for spiritual healing and community bonding over the centuries. Its history is rich with narratives of miraculous healing, particularly in curing ailments such as dog bites, which have drawn countless devotees seeking solace and divine intervention.

The cultural practices surrounding the dargah, especially during significant events like the first Navratra, highlight its role as a center for communal activities. The traditional wrestling matches, or dangal, serve not only as a celebration of strength and bravery but also as a means to foster social cohesion and a sense of belonging among participants and spectators alike. Such events reinforce the values of camaraderie and collective identity, allowing individuals of all ages to connect and share in the community's vibrant cultural heritage. Additionally, the bhandara, or communal feasting, exemplifies the spirit of generosity and unity that the dargah embodies. It emphasizes the importance of sharing resources and nurturing relationships, creating an environment where individuals can come together regardless of their backgrounds. These practices reflect a holistic view of community well-being, intertwining spiritual and social dimensions.

Overall, the Baba Faiz Baksh Dargah remains a vital part of the region's identity, serving as a beacon of hope, resilience, and cultural richness. Its enduring presence continues to inspire generations, ensuring that the teachings and values of Baba Faiz Baksh resonate deeply within the hearts of the community.

(The writer is Director/CEO, Synergetic Green Warriors Foundation)

Modiji's era, an era of peace in Jammu and Kashmir

■ SUNAINA MIR

It has been since 1990 that our state, which is known as heaven on earth worldwide, is burning in gruesome fire of terrorism. Our state has not only lost precious lives of armed personnel, civilians but also lost property worth crores of rupees and above all we have lost all those beautiful moments of our kids which they have sacrificed because of incessant curfews, stone pelting, cordon off and other terror activities. People were fed up with that unending terrorism and wanted to put an end to that unhealthy atmosphere. It was in 2014 when BJP came into power as a coalition with PDP. That Government gave a start to a tsunami which started annihilating the spirit of terrorism.

It is only because of our honourable Prime Minister Narendra Modi's strategic intelligence that BJP succeeded in curbing terror activities in Jammu and Kashmir. As per written records, there has been 667 dip in terror activities, terror killings, stone pelting, cross boarder insurgency and band calls by Hurriyat and other anti national establishments.

As per CID report, 228 terror initiated activities happened during year 2018, these incidents declined upto mere 43 in number till November 2023, 189 number of encounters took place between security forces and militants in 2018, that number reduced upto 48, we lost 55 precious lives of our civilians in 2018, this horrific number reduced upto 13 till 2023, our 91

army personnel sacrificed their blood for our mother land during the year 2014 that number reduced upto mere 25.

Necessary to mention here is that our National Security Advisor Ajeet Doval with his intelligence and with the help of our strong army has broken the backbone of terrorism by exposing Hurriyat, hurriyat leaders and crushing terrorists and terror outfits. Arrest of Hurriyat leaders has stopped the terror funding in Kashmir and they are also nowhere free to spoil the atmosphere of Kashmir by giving band calls as those calls have spoiled the lives of Kashmiri people to a greater extent.

Innumerable arrests of people involved in terror activities by NIA

has further declined the percentage terrorism in Jammu and Kashmir. Efforts made by B-JP has not only improved the lives of people of Jammu and Kashmir but has also given a magnificent boost to tourism. Our heaven on earth has received highest number of tourists of last three decades this year. In short BJP has turned terrorism into tourism which has ensured the rise in economy of Kashmiri people to 100 per cent.

The story of progress of our state of Jammu and Kashmir does not end here, our state has received 2153 crore rupees for developmental projects for the year 2023.

In addition to this Rs 6000 crore of investments are in pipeline. Our

state gross state domestic product (GSDP) has increased from rupees 1 lakh crore to in 2014 -15 to rupees 227, 927 crore in 2022 -23.

In the end, I just want to say that youth of Jammu and Kashmir, who carry stones and bullets in their hands for hurting and killing armed personnel are now busy in working on computers and making their contacts with world at large.

The era of bomb blasts, stone pelting, blood sheds, firings has been replaced by education, school, colleges, medical colleges, management institutions, industries, and infrastructure since Modi has taken a charge of Jammu and Kashmir.

(The writer is a resident of Rajouri District)