

# NEWS LETTER

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“ Solar renewable energy represents a game-changing opportunity to increase agricultural competitiveness and farmer income while promoting environmental and social sustainability objectives.

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## Highlights

- From the Desk of Chairman

## Focus Areas

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- Research and Consultancy Wing
- Education and Learning Wing
- Knowledge Management Wing
- Finance and Administration Wing



**Shahid Javed Burki**  
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## Consequences for Pakistan of the United States and China Decoupling

In the late 1960s Foreign Minister Zulfikar Ali Bhutto quit his position in the cabinet headed by Field Marshal Ayub Khan. He left since he believed that the military president had become uncomfortably close to Washington. Instead, he advocated a close relationship with China which was one of Pakistan's four neighbors. Beijing wished to work with Pakistan especially to use the

Pakistani space to have its western provinces gain access to the sea. This would be done by using an all-weather road that linked Kashgar in Xinjiang Autonomous Region with Gwardar on Pakistan's Baluchistan's coast. Bhutto after leaving the Ayub government gave several statements that implied that Pakistan had become a slave to the United States. Ayub Kahn responded by sub-titling his political autobiography, *Friends Not Masters*.

I worked for almost eight years as the Director of the World Bank's China Operations. During that time, I got to know well several senior leaders of China. One of them, Prime Minister Zhu Rongji, asked me to get some response from Pakistan in China's interest in building a road that would make it possible for heavy Chinese trucks to bring materials and goods from the world outside to China. They had approached Pakistan's ambassador to China and their ambassador to Pakistan had contacted the Pakistani government to get a response from Islamabad. But there was silence from the Pakistani side. The Chinese prime minister asked me to help which I did by taking the Chinese message to then President Ghulam Ishaq Khan (GIK) with whom I had close relations. He said that he knew of the Chinese interest, but Prime Minister Nawaz Sharif was interested only in developing strong economic relations with Saudi Arabia. GIK's intervention laid the ground for the building of what has come to be called the China-Pakistan Economic Corridor. With the discovery of precious metal deposits in Afghanistan, China and Pakistan are now working on extending the CPEC to Central Asia.

These developments are coming at a time when President Donald Trump's Washington is taking steps to "decouple" the United States from China. His decision to place heavy tariffs on imports from China and to severely limit the

number of Chinese students studying in American universities are parts of this effort.

On May 28, Marco Rubio, the United States Secretary of State, announced that the Trump administration would work to "aggressively revoke" visas of Chinese students attending American universities. The approach towards applications from students from other countries would be less aggressive. A report published in 2024 by the State Department and the Institute of International Education, a non-profit organization, said that China had the second largest share of more than 1.1 million international students who were enrolled in American higher education institutions in the 2023-2024 term. More than 277,000 students came from China, behind India, with its more than 331,000 students. However, the number of Chinese students had declined by 4 percent from the previous academic year while the number of Indians had surged by 23 percent. The sharp increase in the Indian enrollment was that of the children of United States citizens of Indian origin.

In the 2022-23 academic year, 10,164 Pakistani students were enrolled in American universities. This represented an increase of 16 percent over the previous year. Given the strong anti-Muslim bias of the authorities in the Donald Trump administration, it is going to be increasingly difficult for those applying from Pakistan for visas to enter the United States.

Of late, the number of Pakistani's going to China for higher studies has increased. This is the area that should be of greater focus for Islamabad. Pakistan should also get its institutions of higher learning to teach Mandarin, the Chinese language.



**Shahid Najam**  
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## State-citizen Engagement and Synergy

The perceptions and preferences of stakeholders and citizens are vitally important for formulation and implementation of public sector policy and development planning. It is a fundamental requirement for decision-makers and planners. The citizens if not properly engaged in the process may feel excluded and may take it as optional and of secondary importance. Generally, however, they are keenly interested to participate with a hope to collectively influence the planning and decision processes to be able to make a positive difference in various spheres of the civic life.

Citizens' active and meaningful engagement (CE), however, entails mobilization of civil society through both political and non-political means coupled with the availability of pluralist fora to foster a sustainable blend of knowledge, skills, values and motivation (KSVM). KSVM helps synergize and articulate citizen's felt needs and preferences. If orderly and prudently conducted, CE also stimulates change in citizens' mind set and behavior to achieve public interest goals e.g., respect of rule of law and fundamental rights, reduction in CO<sub>2</sub> emissions, sustainable water use, health and hygiene standards, cleanliness and waste management etc.

In the development and policy making arenas, the critical importance of citizen participation gained global recognition during 1960s, which was further enriched and amplified by Robert

Chambers, in his seminal work "The Origins and Practice of Participatory Rural Appraisal" and Michael Cernea's book "Putting People First" in 1980s and early 90s. Thereafter, a systematic involvement of citizens was adopted as an imperative to integrate their voice and provide feedback on issues of community and public interest and to create state-citizen synergy for sustainable and impactful outcomes. While over the years, there has been a rapid surge in demand by the civil society organizations and citizens to have a greater say in public decision-making, there is at the same time a growing realization by many governments that state-citizen synergy is *sine qua non* and that the disenfranchisement of citizens not only contravenes democratic norms but also counterproductive to sustainable and equitable development.

The government of Pakistan, therefore, needs to deploy and institutionalize appropriate mechanisms to establish state-citizen synergy and benefit from citizens' active involvement in governance, development and service delivery functions. There is though no one single standardized prescription or tool for design and implementation of CE initiatives, a range of multiple channels could be deployed to effect state-citizens' synergy which include:

- Institution of effective local government system (Articles 32 and 140-A of the Constitution coupled with each province's own local-government-enabling legislation for local government system);
- Citizens needs surveys on the public services management and their delivery;
- Public consultations and dialogue on planning, budgeting and programming, social audits,
- Stakeholder's sessions and citizens' advocacy;



- ICT enabled consultations such as crowdsourcing, online consultations, interactive mapping, electronic participation etc.;
- Gender responsive engagement;
- Community-based monitoring and evaluation for timely availability of the inputs; follow-up of the work plans; timely implementation of adjustments or corrective measures; effective communication with the stakeholders and; cost-effective utilization of resources.



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## The New-Innovation-Order for Competitive Advantage of Innovation Ecosystem

The linear model of research and innovation largely advanced by Vannevar Bush's landmark report, Science - The Endless Frontier has produced miraculous results in the USA in the second half of 20th century.

The US public policy of science, technology and innovation is stuck rather trapped in the linear model proposed by Dr. W. Bush. The CHIPS and Science Act and other preceding S&T acts follow the same principle of investing in science to gain competitive advantage. The debate in Issues ([www.issues.org](http://www.issues.org)) on USA S&T policies confirms this trend and doubts on the presented promise of gaining competitiveness through investment in science.

China has gained a growth momentum by adopting a non-linear model of investment in technologies followed by investment in priority science instead of open science. Asian countries like Korea, Singapore, and Japan have followed this new innovation order. Europe is also mostly stuck in a linear model too which is the success formula of the 19th and 20th century but no more valid in the 21st century.

The new innovation order is taking place in Asia where investment is made in technologies developed from open science done by the western countries like AI, Machine learning, renewable energy, electrical vehicles, rail transport and 5G technologies. These Asian countries led by China are following the new innovation order of investing in technologies followed by priority science instead of open science.

The S&T policy researchers need to investigate the phenomenon of new innovation order taking place in the great bay area of China. We need to explore the in-practice pattern, behavior of actors and policies that are shaping up the new innovation order in the greater bay area of China. The policy makers need to plan and practice new-innovation-order more effectively, remove barriers and cover the gap. The study findings will help the public and private sector of the emerging economies like

Pakistan to develop a competitive edge over other innovation eco systems like the Tokyo Bay Area and San Francisco Bay Area.



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### Beyond the Classroom: Embracing Hybrid Learning for a Future-Ready Higher Education

Hybrid teaching and learning, which merges traditional in-person instruction with online components, has evolved into a key approach in modern higher education. It is no longer seen as a temporary measure but as a vital strategy for delivering effective, adaptable, and engaging education. This model enhances the learning experience by promoting meaningful interaction, knowledge-building, and active teaching, all of which are essential in today's academic landscape.

Beyond being a response to global disruptions, hybrid education reflects a broader shift in how institutions address the needs of a diverse and digitally connected student population. It offers greater flexibility, broader access, and the ability to tailor learning experiences to individual needs. When carefully designed and implemented, hybrid education can lead to better outcomes than traditional formats, as it takes advantage of digital tools, interactive content, and real-time feedback to support student success.

To successfully implement hybrid learning, significant policy changes are needed at both national and institutional levels. Education systems must move beyond short-term digital adjustments and adopt long-term frameworks

that integrate technology into every aspect of learning. This includes updating accreditation standards, adjusting how faculty workloads are measured, and creating quality assurance systems tailored to hybrid formats. Ensuring fairness and access is crucial, especially for students in underserved communities. Investments in digital infrastructure, teacher training, and access to devices and internet connectivity are essential to prevent widening educational gaps.

From a teaching perspective, hybrid learning requires a shift in instructional design. Simply transferring existing lessons online is not enough. Educators must design experiences that encourage active participation, collaboration, and critical thinking. Tools like learning platforms, virtual classrooms, and interactive simulations play a key role in supporting various learning preferences. Instructors also need training in digital teaching methods, including how to use technology effectively and assess student progress in virtual environments. Ongoing professional development is vital for building these skills.

The successful rollout of hybrid education depends on clear strategies and strong institutional commitment. Universities must develop long-term plans that include infrastructure development, curriculum redesign, staff engagement, and continuous evaluation. Leadership support is critical for guiding this transformation and ensuring alignment across departments.

Despite challenges such as resistance to change, digital fatigue, and funding limitations, the potential benefits of hybrid education are significant. With thoughtful planning and innovation, hybrid learning can create more inclusive, flexible, and future-ready education systems that are well-equipped for the demands of a knowledge-driven world.



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## **Pahalgam Standoff: Win-Win or Lose-Lose—There Is No Third Way**

The April 22 attack in Pahalgam claimed the lives of 26 tourists and injuring many more, it has become the latest flashpoint in the turbulent history of India-Pakistan relations. Killing of law-abiding civilians is unjust and unacceptable globally. Any militant group or a regime behind such an incident should be brought to justice.

Similarly, if India takes Pahalgam incident as a pretext to wage war against Pakistan, which would naturally result in killing of hundreds if not thousands of innocent civilians, it will be viewed as unjust and an act of terror on logical basis. As killing carried out by a group of militants is rightfully claimed to be an act of terrorism, India cannot escape from being called a terrorist state if it pulls Pakistan into a self-claimed war against terrorism.

A logical discourse of Pahalgam situation reveals that there should be three options for Pakistan and India to move forward on the issue. Each of the three options have its unique outcome and the decision makers of both countries needs to evaluate the outcome of the options before locking their choice as there is no turning back after a choice is taken.

In a classical view the three outcomes of the strategic moves could be any one of the following, which are “win-lose” meaning that

any one country India or Pakistan wins the argument and the other would naturally be losing it. India somehow based on its covert rational believes it can win the war, because it should attack only if it trusts it can win. Without going into technical details, the history which is in fact the outcome of the wars over the years, has shown that wars can certainly promote hatred, create misery prolong issues over generations but certainly cannot solve it. Therefore, going for this “win-lose” for India or Pakistan is not actually a true option, this would again bring both countries to same decision point, but only a little later on timeline. The history of both the countries has proved the outcome of this choice to be true from time to time.

Therefore, the only two real options to think about in the present scenario are the “Lose-Lose” and the “Win-Win”. The two options are more closely linked than generally believed, it is rather a quantum choice. It will be a win-win for both countries or lose-lose, as there are no half wins in world history, as half wins would mean that the war continues.

Exploring the Lose-Lose scenario for both the countries, certainly both states have the capacity for assured mutual destruction with additional consequences for the rest of the world. The India, Pakistan, China are the most populace region of the world and if the rest of the world does not care about the “No Room for Error” situation in the region, then perhaps the Lose-Lose option is what the region and the world decision makers unconsciously but really wants to opt for. But again, the rational mind activates, can the world consciousness be this stupid? Hopefully not. The world leaders are presently suffering from local versions of MEGA syndrome, not grasping that after realizing the global connectivity, it is not possible to make localized policies again, it is

great, but it would be like travelling back in time. Global warming, Pandemics, Economic unrest, Dictatorship and Terrorism are all global issues now and can be dealt with only, the same perspectives.

With elections looming in India, Prime Minister Modi faces growing domestic pressure to act decisively. Experts suggest that unlike previous confrontations in the past such as the Balakot airstrikes in 2019. India might opt for more sophisticated, riskier kinetic options. These could include drone and missile strikes or coordinated air-sea-land operations. On the other hand, Pakistan's likely response would be far from restrained. Military analysts in Islamabad suggest that any aggression could provoke both conventional and unconventional retaliation, as the stakes are far higher now. In the absence of a crisis management framework or neutral mediator, even a minor misstep could spark uncontrollable escalation.

The sufferings of WW2 and its catastrophic end after the use of nuclear weapon was a time the world consciousness was alleviated. The world leaders consciously decided to ensure that such weapons shall not be used in future conflicts. However, the world bodies were not able to develop all needed processes for the purpose.

As both countries are on high alert, and still no significant move is made by any side, there remains a narrow window for international diplomacy to promote win-win option. This option translates into an international investigation into the incident to trace the actual culprits and bringing them to court of law. This option is not totally in the hands of Pakistan and India, rather the international bodies and influential will have to play a role in creating an environment for fair investigations, so that the truth of the incident can come out.

Pakistan demands that a fair investigation must be held before any unilateral action is taken by India, but if rationality does not prevail from Indian side, Pakistan has no other option but to give an appropriate and timely respond. The Indian observation that military is not popular with masses in Pakistan presently and it can take some advantage of the situation may carry some wait, but on the last option of mutual destruction, Pakistan would not sacrifice its self at the world alter for the indifference of the world leaders.



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## The Plight of the Uneducated Youth of Pakistan

Youth play a pivotal role in the development of any country. Active participation of youth in socio/economic and education and sports related activities is an indication of a physically and mentally fit youth who have the capacity to reshape the future by actively contributing towards the country's overall prosperity and progress.

Pakistan has a huge demographic advantage. It's youth (under the age of 30) constitute 70% of the total population of Pakistan, represents the country's most influential demographic resource. However, the downside to it is that it also holds the unwanted world ranking of having the highest number of out-of-school children. Approximately, 27 million of its children do not go to school. This number represents a staggering 36 per cent of the population aged 5-16 years, according to data



available from Pakistan Census 2023.

This pathetic state of affairs has led to a progressive decline in the education and corresponding healthcare and general well being of our youth. According to the Global Youth Development Index (YDI) Update Report 2023, Pakistan ranks 162 out of a total of 180 countries. This absolutely deplorable situation is further re-enforced by the Human Development Index (HDI) obtained by a different source. According to the UNDP 2023/2024 Report, Pakistan is placed in the 'low' Human Development Index (HDI) category with a global ranking of 164 out of 193 countries.

The fact that 36% of the children, aged 5-16 years old, are out of school, and thus missing out on school-based child training and development process is a stark contravention to the constitution which guarantees the right to education of all children of Pakistan. According to Article 25-A of the constitution:

*"The State shall provide free and compulsory education to all children of the age of five to sixteen years in such manner as may be determined by law."*

The 36% figure of out-of-school-going-children reflects poorly on our ability as a nation to fulfill this extremely important constitutional obligation. The massive population growth rate is also a major hindrance towards providing the constitutional right to our children.

Pakistan's uphill struggles on socio-economic and cultural fronts, compounded by extremist tendencies in our society can be attributed directly to lack of education amongst its youngsters, the importance of which cannot be overstated. All stakeholders must join hands countrywide to formulate action plans for expeditious implementation of our pending constitutional obligations through review of appropriate educational policies, legal framework, adequate resource allocation and

other enforcement mechanisms to ensure free education for all our children, at least at primary levels to start with.

We need to identify areas of shortcomings in the present system before we can propose a way forward.

## 1. Prioritization of Education - Budget Enhancement

Pakistan allocates a very meagre amount of its budget towards education and allied facilities and infrastructure. This allocation towards Education only represents 1.91% of Pakistan's GDP, up from 1.5% in 2023-24 but still far below the international recommendation of 4% of GDP. Moreover, 83% of the budget goes to salaries and recurring expenditure, leaving little for infrastructure development related programs.

## 2. School Infrastructure Improvement Needed

We talk about providing playgrounds and other sports amenities within school premises. However, it is startling to note that an alarming number of schools across Pakistan even lack toilets and potable water among other basic facilities. According to the report 2021-22 published by The Pakistan Education Statistics, 24 percent of primary schools across Pakistan did not have toilet facilities.

According to a report published by UNDP in 2018, only seven per cent of Pakistani children have access to a playground in their school or community.

## 3. Curriculum Review

Curriculum of Primary Schools must be reviewed. Focus must be to develop a dual role-based system whereby equal emphasis is paid on not only achieving academic targets but also a program of physical training along



with sessions on ethics and mannerism, the idea being to develop a holistic approach which caters to the physical, mental and academic needs of children.

#### 4. Public Private Partnership

We are a developing country with its own financial and budgetary constraints. PPP is a strategic tool which can be used to support and complement the already strained public education system.

#### 5. Teacher Training Program

There is a need to revamp teacher training initiatives whereby teachers are trained to adopt a more holistic approach towards the children under their supervision.

#### 6. Gender Inclusivity

In the local context, Gender Inequality is a big issue which needs to be tackled when undertaking youth development programs. According to the UNDP, Pakistan is ranked at a pathetically low 145 out of the 146 countries being graded. This inequality aspect is starkly reflected in primary education and sports sectors also.

#### Conclusion

The above is just a short review of the state of education and especially the very pathetic situation we find itself in whereby a staggering 27 million children find themselves on the streets instead of going to schools. This youth is our future. Instead of taking short term measures for immediate gains, we must invest in our youth for a better and prosperous Pakistan.



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## Enhancing Agricultural Competitiveness and Farmer Income through Solar Renewable Energy

The integration of solar renewable energy into agriculture is emerging as a pivotal solution to address rising production costs, food security challenges, and climate change impacts. Globally, governments and stakeholders are increasingly recognizing its potential to improve agricultural productivity and resilience. Particularly in countries with abundant sunlight but limited access to affordable grid electricity, solar energy presents a sustainable pathway for intensifying agriculture without degrading the environment.

One of the most significant benefits of solar energy in agriculture is its capacity to enhance competitiveness by reducing operational costs. Traditionally, farmers in many developing countries rely on diesel-powered irrigation and energy-intensive processes that are both costly and environmentally damaging. Solar-powered irrigation systems, cold storage, and on-farm processing units offer a clean and cost-effective alternative. Solar irrigation can reduce the cost of water pumping by as much as 90% compared to diesel-powered systems, as stated by the International Renewable Energy Agency (IRENA) (IRENA, 2016). Further, in India, solar pump adoption has been linked to a 25% rise in crop production due to better irrigation (World Bank, 2018). Morocco, Kenya, and India are among the countries that have

introduced mega-scale solar programs for agriculture, substantially increasing productivity in off-grid rural communities.

The economic benefits for farmers are also strong. In East Africa, solar irrigation by smallholder farmers led to increases in income of between 50% and 70%, as noted by CLASP and Energy Saving Trust (2020). In Bangladesh, too, adoption of solar-driven irrigation systems has resulted in saving fuel annually by more than USD 300 per farmer (FAO, 2021). India's PM-KUSUM program not only encourages installation of solar pumps but also enables farmers to sell excess electricity to the power grid, increasing their annual income by USD 400–700 (MNRE, 2022).

Environmental and social co-benefits also enhance the utility of solar energy in agriculture. Replacing each diesel pump with a solar pump avoids 2 to 4 tons of CO<sub>2</sub> emissions every year (IEA, 2020). Solar-powered water access also saves women time for water collection, increasing their engagement in economic activities (UN Women, 2022).

Although promising, the large-scale deployment of solar technologies is hindered by factors including high initial capital costs, technical capacity constraints, and financing deficits. Targeted subsidies, support for affordable financial models (such as pay-as-you-go), and mainstreaming solar power into national climate and agricultural plans should be provided by governments.

Solar renewable energy represents a game-changing opportunity to increase agricultural competitiveness and farmer income while promoting environmental and social sustainability objectives.



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## India's Jingoistic Media

The information war is as pivotal in modern warfare as the actual war itself. As two nuclear powers of South Asia squared off, following India's military strikes across Pakistan, which according to Pakistan's version resulted in civilian casualties including children, the threat of nuclear Armageddon surfaced, compelling world powers to intervene in order to broker a ceasefire. Amid such precarious times, the role of the Indian media was nothing short of a war-mongering pillar of the Indian state. The Indian media are peddlers of a masculinized nationalism and fake news. Majority of the news outlets function as house organs of the ruling party Bhartiya Janata Party (BJP), depicting the machismo and so-called leadership qualities of Prime Minister Narendra Modi, who has somewhat become a teflon, whilst intimidating the opposition and otherizing the minorities especially the Muslims of the country as anti-India.

This obnoxious iteration of Hindu nationalism was on full display and on steroids during the recent Pak-India exchange of salvos. Anchors like the conspicuously pro-India Arnab Goswami of the right-wing and sensational Republic TV, were shouting at the top of their lungs to punish Pakistan, erase it from face of the earth, and that India is potent enough especially as an economic power to get away with the outright destruction of its arch rival and Western neighbor without producing a shred of evidence of Pakistan's involvement in the Pahalgam attack. Since 2014, the Modi dispensation as well as BJP have spread their

tentacles across the Indian media spectrum, that all critical voices have either been silenced or imprisoned. The India media has one job, to paint Modi as a victor – in one instance it ludicrously claimed that Modi has a bigger chest than Indian film actor Salman Khan - and Pakistan as a rogue state that needs to be invaded and made part of Akhand Bharat.

Additionally, it spread absolute fake news regarding Operation Sindoor, inter alia, Indian troops crossing international borders into Pakistan, the Indian media targeting Karachi port using visuals from Gaza to foul the impressionable Indian audience who have become bereft of critical thinking and swayed Hindutva greatness especially in the last 11 years. The role of the Indian media was utterly and irresponsibly jingoistic in nature, without realizing that a nuclear war would have no winners and mean absolute devastation for the region and the world over.



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## The Power of Lifelong Learning

Learning never stops. It does not end when we leave our formal education. We can learn new things at any age. It continues throughout our life, helping us to build knowledge and develop new skills. It helps us to discover new passions and hidden talents. Studies show that continuous learning can make your brain more active and helpful in improving memory and concentration.

According to **UNESCO (1996)**: Education

throughout life is based on four pillars. Each pillar covers a key life skill.

- **Learning to Know:** It focuses on developing skills to think critically, understand and apply knowledge not just memorizing facts.
- **Learning to Do:** Applying knowledge into practice to solve problems and adapt rapidly changing environment.
- **Learning to Live Together:** Understanding other's viewpoints, their cultural differences, religion and other norms without any judgment.
- **Learning to Be:** Learning your values and purpose. It means developing as a whole person.

### Aims of Lifelong Learning:

Lifelong learning involves the skills pursuit, knowledge throughout one's life. It also helps an individual to set and pursue new goals in life. Learning is a powerful force for personal and professional growth. The key aims of lifelong learning are:

- **Personal Growth:** It fosters self-awareness. Understanding of who you are and what is your purpose of living. It also leads us to self-improvement.
- **Professional Growth:** It makes an individual more competitive in job market by staying updated with industry trends and acquiring new skills. It also enhances our financial condition.

### Benefits of Lifelong Learning:

- It challenges individual to step out of their comfort zone.
- It helps individual to stay focused.
- It promotes a growth mindset where we are open to take new challenges and see learning as a process of improvement.
- Makes you more adaptable and employable by keeping skills updated in changing job market

In essence, lifelong Learning is a continuous process of growth and development that enriches individual lives, and contributes to be more informed and engaged members of society.



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### BIPP Round Up

On April 7, 2025, the Shahid Javed Burki Institute of Public Policy (BIPP) conducted a productive meeting with Effendi Consolidated Pvt Ltd. Both organizations discussed establishing a strategic partnership to collaborate on areas of mutual interest, including research initiatives, policy formulation and implementation, knowledge exchange, technological innovation, and advocacy programs.



From May 22 to 24, 2025, a delegation from the BIPP, led by Vice Chairman Mr. Shahid Najam, visited Namal University, Mianwali, for a series of high-level engagements aimed at fostering collaboration between academia and policy institutions. The delegation included Dr. Suleman Lodhi (Consultant Knowledge Management), Dr. Iftikhar Hussain Shah (Agri-

Pharma Consultant), Mr. Rehmatullah Gill (Head, Science & Technology Cluster), Dr. Haroon Akhtar (Technology Expert), Mr. Faisal Haroon (Agroforestry Consultant), Mr. Muhammad Waqas (Research Assistant), and Mr. Raja Ameer Zulkiffal.



During the three-day visit, the team participated in extensive discussions with faculty and university leadership on several critical areas, including the establishment of an AI-Valley and an Agri-Tech Park, the importance of climate-smart agriculture and agri-preneurship, and the role of renewable energy in enhancing agricultural competitiveness and increasing farmers' income. Conversations also explored pressing issues in environmental policy, government interventions, local governance, and strategies for strengthening community integration. Moreover, the potential development of incubation centers and co-working spaces was deliberated to support innovation and entrepreneurship among youth.





A key highlight of the visit was the dialogue on the proposed AI Valley, which emphasized the transformative role universities can play in advancing research, innovation, and technology-led growth in Pakistan. On May 24, the BIPP delegation attended Namal University's Open House Discussion and Final Year Project Exhibition. Students showcased their innovative ideas through well-curated poster presentations and project stalls, reflecting a deep commitment to addressing real-world challenges through creative and practical solutions.



The visit concluded with a tour of the Agritech Park and the Center of Excellence for Olive Research and Training in Chakwal, a safari along the Indus River, offering valuable insights into the region's agricultural ecosystem and natural landscape.



This visit marked a meaningful step toward strengthening institutional partnerships and advancing evidence-based policy frameworks in the fields of agriculture, technology, and sustainable development.





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## Rethinking Governance in a Smart Age

Artificial Intelligence (AI) is no longer just the future, it is the engine of transformation reshaping public policy and governance worldwide. With its potential to enhance efficiency, transparency, and responsiveness, AI is being integrated into government operations at an accelerating pace. With the global AI market projected to hit \$244 billion by 2025 and soar past \$800 billion by 2030, countries are racing to harness its power and they're investing boldly. Canada has rolled out a \$2.4 billion AI infrastructure plan, China unveiled a \$47.5 billion semiconductor fund, and France committed a staggering \$117 billion. India is backing its "AI for All" strategy with \$1.25 billion, while Saudi Arabia's Project Transcendence pledges a massive \$100 billion to redefine AI in governance.

But it's not just about the money. Countries are putting AI to work. Singapore's National AI Strategy 2.0 is investing over \$700 million into key sectors such as healthcare, transport, and smart cities. Estonia is running over 50 AI-powered tools across its digital government including AI judges for small claims. India is collaborating with Google, Microsoft, and Intel to apply AI in education, agriculture, and city management. Meanwhile, the European Union has taken a bold lead in ethical AI, championing human oversight and accountability through its AI Act and Ethics Guidelines.

Pakistan is stepping into the AI arena with its Draft National AI Policy (2023), aimed at transforming the country into a knowledge-based economy. The policy proposes channelling 30% of the national R&D fund into AI, focusing on health, agriculture, and education. The Presidential Initiative for Artificial Intelligence and Computing (PIAIC) is another leap forward bringing AI education to youth, women, and marginalized groups nationwide.

Yet, the challenges are real. Pakistan ranks 109th on the Government AI Readiness Index, far behind India (46th) and Bangladesh (80th). Weak digital infrastructure, fragmented institutions, and low funding have slowed progress. However, this is not the end of the story it's the beginning of a transformation. Pakistan's young population (median age just 20.6) and booming digital economy in fintech, e-commerce, and healthcare create fertile ground for rapid AI integration if we act strategically.

One bold strategy is to adopt a Nexus Approach linking AI across interconnected sectors like water, energy, food, health, and climate. Imagine using AI to forecast floods, optimize irrigation, reduce power outages, align food policy with public health, or design smarter urban spaces. This approach is not just smart it's sustainable. But it requires more than vision; it needs strong institutions, cross-sectoral data sharing, and digital infrastructure that supports intelligent systems. If embraced, this approach can usher in system-wide resilience, moving Pakistan beyond fragmented policies toward holistic governance.

The opportunities are immense. AI can revolutionize service delivery automating tasks in NADRA, FBR, or hospitals, just as India is doing with rural health diagnostics. AI can

fuel predictive policymaking boosting agriculture, improving climate forecasting, and planning livable cities, following China's smart city model. For social protection, AI can detect fraud, track subsidies, and improve transparency as Brazil has shown in its welfare programs. And for citizen engagement, AI platforms can make governance more open, interactive, and trusted think Estonia's KrattAI or the UK's AI councils.

### **Seizing the Moment**

Artificial Intelligence isn't just a tool it's a transformational force that can redefine governance in Pakistan. With the right mix of political will, regulation, education, ethics, and collaboration, AI can help us build a governance model that is efficient, inclusive, and transparent. This is our moment to leapfrog to build not just a smarter government, but a better one, powered by the people, for the people.

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Policy for Present, Gains for posterity,  
Reducing Deficit, Producing Results

## Mission Statement

BIPP's mission is to improve the welfare of the citizenry with particular emphasis on identifying policy measures that will lead to inclusive, people-centered growth with equity, political stability and sustainable development besides fully harnessing the potential for regional and global integration of the country. BIPP primary areas of interest encompass social, economic, environmental and political development and security, trade and foreign policy-related issues.

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