

SHAPING INDIA'S TECH FUTURE

India is on the cusp of a technological revolution that is set to redefine its economy, governance, and social structure. As the world's fifth-largest economy, the nation is rapidly emerging as a global technology hub, driven by digital transformation, artificial intelligence (AI), and cutting-edge innovations. With a booming startup ecosystem, government-backed digital initiatives, and an ever-growing pool of skilled talent, India is well-positioned to shape the future of technology. However, realizing this vision requires strategic investments, policy reforms, and a focus on innovation-driven growth.

Launched in 2015, Digital India has been a game-changer in transforming India into a digitally empowered society and knowledge economy. The initiative has facilitated the expansion of broadband connectivity, digital literacy, and e-governance services across the country. With over 700 million internet users, India has one of the largest online populations, paving the way for advancements in fintech, e-commerce, and digital payments.

One of the biggest successes of Digital India has been the Unified Payments Interface (UPI), which has revolutionized the way Indians transact. UPI transactions surpassed 10 billion monthly transactions in 2024, highlighting the nation's shift towards a cashless economy. Moreover, initiatives like Aadhaar, Jan Dhan Yojana, and Co-Win have demonstrated how technology can be leveraged to deliver essential services efficiently.

AI and automation are set to play a pivotal role in shaping India's future. According to a NASSCOM report, AI has the potential to contribute \$500 billion to India's GDP by 2025. The government's AI strategy, led by NITI Aayog, focuses on healthcare, agriculture, education, smart cities, and manufacturing.

AI-driven solutions are already transforming healthcare by enabling early disease detection, personalized medicine, and robotic surgeries. In agriculture, AI-powered predictive analytics help farmers optimize crop yields and manage resources efficiently. Similarly, chatbots, automation, and AI-powered tools are enhancing customer experiences in various sectors, from banking to retail.

The Make in India and Atmanirbhar Bharat initiatives are also promoting AI research and development, encouraging startups and enterprises to innovate in the field. However, for India to become a global AI leader, it must invest in AI infrastructure, ensure ethical AI deployment, and develop policies for responsible AI usage.

India has the third-largest startup ecosystem in the world, with over 100,000 startups and 110+ unicorns (companies valued at over \$1 billion). Cities like Bengaluru, Hyderabad, and Pune have emerged as global technology hubs, attracting investments from top venture capital firms.

The government's Startup India initiative has played a key role in funding, mentoring, and incubating startups. Sectors like edtech, healthtech, fintech, and deep tech are seeing rapid growth, with startups developing innovative solutions in blockchain, AI, robotics, and quantum computing.

However, challenges like regulatory hurdles, access to capital, and infrastructure gaps remain. To sustain this growth, India must strengthen its intellectual property (IP) laws, enhance ease of doing business, and provide tax benefits for emerging tech startups.

The rollout of 5G technology in India marks a major milestone in the country's digital evolution. 5G will enable faster internet speeds, seamless communication, and support for emerging technologies like the Internet of Things (IoT) and smart cities.

IoT is already transforming industries like healthcare, agriculture, and manufacturing, where connected devices and smart sensors are driving efficiency and innovation. In urban areas, smart city initiatives powered by 5G and IoT will improve traffic management, waste disposal, and energy conservation.

■ DHEERAJ JANDIAL

Blending the key features of the Old Pension Scheme (OPS) and the National Pension System (NPS), the Centre Government unveiled Unified Pension Scheme for central government employees. The scheme's effective date is April 1, 2025. The Union Government has impressed upon the States to look into the implementation of the UPS at the earliest.

Jammu and Kashmir, which presently has an elected government too shall be deliberating upon the UPS for its employees in the commencing Budget session and it is expected that option shall be provided to the employees to either switch to the UPS or continue in the NPS. As per conservative estimates, if all States opt for implementation of UPS then the number of employees benefitting from scheme is likely to surge to 9 million.

Lauding the introduction of Unified Pension Scheme, the Prime Minister Narendra Modi emphasised its role in securing the financial future of government employees. The Prime Minister said, "We are proud of all the government employees who work hard for the progress of the country. The Unified Pension Scheme (UPS) ensures dignity and financial security for these employees. This step reflects our government's commitment to their welfare and secure future."

In fact, pension has always been one of the main lures of a government job. This element of security is one of the primary reasons why a government job is coveted in India. The hike in pension and its quantum addition is always aspired for, as it has direct relation with the mental wellbeing of the pensioners. This aspiration for hike and associated social security could well be narrated in the quote by Mirza Ghalib, haaron 'Ivahihsen aisi ki har khvahihs pe dam nikle, bahut nikle mire arman lekin phir bhi kam nikle.

WHAT IS U.P.S. ?

The decision to introduce an assured pension for central government employees reflects political pragmatism over strict fiscal calculations.

Approved by the Union Cabinet on August 24 for 2.3 million central government employees across India, the Unified Pension Scheme (UPS) is amalgamation of New Pension Scheme (NPS) and the Old Pension Scheme (OPS). Through the Unified Pension Scheme, the government aims to address the dissatisfaction among employees with the NPS.

The Unified Pension Scheme (UPS) is likely to have significant impacts on government with high debt and a large debt to GDP ratio

As the scheme will be effective from April 1, 2025, all central government employees who retire on or before March 31, 2025, and are entitled to arrears, will be eligible for the Uniform Pension Scheme (UPS). Employees with the National Pension System (NPS), which is applicable to individuals who entered service after April 1, 2004, have the option to select between the two pension schemes.

To transit from NPS to UPS, the employees are required to finalise their decision prior to the scheduled implementation date. Once the choice for UPS is made, it is irrevocable, and a return to NPS is not permissible. The government affirms that over 99% of employees will experience advantageous outcomes through the adoption of the aforementioned new scheme.

The Unified Pension Scheme is still a contributory scheme but the government's share will be 18.5 per cent and there is an element of assured sum built into it. The salient features of Unified pension Scheme are as under: -

► **Retirement income guaranteed-Assured Pension:** Under this scheme, retirees will receive a pension amounting to 50

per cent of the average basic pay drawn over the last 12 months prior to retirement, for a minimum qualifying service of 25 years. The pension will be proportionate for those with shorter service periods, with a minimum requirement of 10 years of service.

► **Protection of families-Assured Family Pension:** If an employee passes away, UPS pays 60 per cent of the deceased's actual or projected pension to the employee's surviving family members. The purpose of this provision is to protect the financial security of the dependents.

► **Pension cut-off point- Assured Minimum Pension:** Regardless of their final salary, pensioners with 10 or more years of service are given a minimum monthly pension of Rs 10,000. This clause creates a basic financial safety net for all retirees and is a crucial differentiator with the NPS.

► **Adjustments for cost of living- Inflation Indexation:** In order to maintain retirees' spending power, UPS uses inflation indexation. Pension amounts are routinely adjusted based on the All-India Consumer Price Index for Industrial Workers (AICPI-IW), similar to the Dearness Allowance adjustments for current employees so as to assist retirees in keeping up with rising living expenditures.

► **Bonus for retirement- Lump sum Payment:** Employees will receive a lump sum payment one time upon superannuation. This bonus will be given in addition to the gratuity and has no bearing on the normal pension amount. This amount is calculated as 1/10th of their last drawn monthly pay (including DA) for every six months of service completed. This payment is separate from the gratuity and does not affect the assured pension. It will provide a financial safety net as you move closer to retirement, says the government.

HOW IS UPS DIFFERENT FROM NPS?

Jo Dikh Raha Usi Ke Andar Jo Andikha Hai Vo Shairii Hai,

Jo Kah Saka Tha Vo Kah Chuka Huun Jo Rah Gaya Hai Vo Shairii Hai

The National Pension Scheme (NPS) was a significant development as it marked the initiation of a defined contribution system where both employees and the government contributed to the pension fund at rates of 10% and 14% of the employee's salary, respectively. The employees' contributions were directed towards market-linked securities like equities, which meant that the final pension amount was influenced by the performance of these investments. As such, the NPS is more like a savings scheme, almost like a systematic investment plan (SIP), which is exposed to the equities market. It has done well for the beneficiaries, offering an average of 10 per cent annual return. NPS is managed by nine different pension fund managers, including prominent names such as Max Life, ICICI, Tata, SBI, Kotak Mahindra, LIC, Aditya Birla, HDFC, and UTI. These fund managers offer schemes with varying levels of risk, from low to very high, catering to different investment preferences.

Under the NPS Scheme-Central Government, managed by major players like LIC, SBI, and UTI, the returns have been around 9.22 per cent over a 10-year period and so on, according to market data. The high-risk options have even yielded 15 per cent or thereabouts. The instrument has attracted more and more private employees as well. And by now the total asset under management of the NPS has grown to over Rs 12 lakh crore.

But it's still not assured pension and it still makes government employees expose their savings to market risks-a major bone of contention for employees demanding a scrapping of the NPS. "The only difference in the changes that are made is to give an assurance and not leave things to vagaries of mar-

ket forces. The structure of UPS has the best elements of both OPS and NPS," said cabinet secretary-designate T.V. Somanathan while speaking to the media about the Cabinet decision, while introducing the UPS.

THE TRIO- IN COMPARISON

FEATURES	OLD PENSION SCHEME (OPS)	NATIONAL PENSION SCHEME (NPS)	UNIFIED PENSION SCHEME (UPS)
Pension Amount	50 % of the Last Drawn Basic Pay plus Dearness Allowance	Market Linked Pension. No defined pension, with the value depending upon the performance of the Investment Fund	Guaranteed pension of 50% of the average Basic Pay for the last 12 months before retirement.
Inflation Indexation	Adjusted for Inflation through Dearness Allowance (DA)	Not Applicable, the pension is market linked.	Indexed for Inflation based on the All India Consumer Price Index for Industrial Workers.
Employee Contribution	No contribution from employee	Defined Contribution of 10% of Basic Pay and Dearness Allowance from the employee	Defined Contribution of 10% of Basic Pay and Dearness Allowance from the employee
Government Contribution	Full Funding by Government	Defined Contribution of 14% of the employee's Basic Pay and Dearness Allowance	Defined Contribution of 18.5% of the employee's Basic Pay and Dearness Allowance
Family Pension	Yes, continues after the death of retiree	Corpus Dependent	Yes. It is 60% of the employee's last drawn pension
Risk	No market risk	Market risk is there	Lower Market risk than NPS
Taxation	Gratuity and Leave Encashment are not taxable	Contributions to the NPS are tax-deductible, but withdrawals and pension pay outs are subject to taxation, impacting the net benefit.	Details on taxation still awaited. It is expected that pension income under UPS will be subject to Income Tax
Fiscal Burden	High	Low	Marginal

WHICH PENSION SCHEME WILL BE MORE SUSTAINABLE?

The newly approved UPS is designed to strike a balance between the government's fiscal policy and employee benefits by offering a defined benefit pension similar to the OPS, while maintaining the contributory nature of the NPS. Under the UPS, government employees will receive a guaranteed pension

Pension liabilities are long term in nature. Defined Contribution schemes like NPS put the onus of sustainability of the benefit onto the individual. Sustainability of UPS which is a Defined Benefit, index linked pension liabilities (with an additional family pension) would be very challenging for the government. While the scheme entails setting aside a guaranteed reserve fund to reduce exposure of the government to additional contributions, the investment of these funds has to be monitored tightly through strong governance of the investments.

Whether one should opt for UPS or continue in NPS would really depend upon individual circumstances. UPS has a minimum service requirement, so the younger workforce who would want greater flexibility and mobility may still find NPS more advantageous. For the more tenured employees closer to retirement, UPS would have an obvious advantage. To sum up, the Urdu couplet Halki phulki si hai zindagi, bojh tuo khwaishon ka hai; Aaj maine fir jazbaat bheje, aaj tumne phir alfaaz samjhe, assumingly narrates the pensioners dilemma.

(The writer is District Treasury Officer, Udhampur and can be reached at pro.ncert@gmail.com)

J&K Assembly Ignores Kashmiri Pandits? They Need Rehabilitation Back in Kashmir as Early as Possible

■ ER. P.L.KHUSHU



The poet Amir Khusräu is said to have used this couplet to describe the Kashmir valley.

"Agar firāns bar-rue zamin ast, hamin asto, hamin asto, hamin ast" is a Persian couplet that means "If there is a paradise on earth, it's here, it's here, it's here". The poet Amir Khusräu is credited with saying this about Kashmir. What should be his impressions about Kashmir now?

What has been happening to this paradise of Kashmir and why? Who is responsible? The non arguable reply is that "Jehadi" militancy, tainted with fundamentalism of religious hate imported from across the border and unfortunately abetted by some vested Islamic fundamentalists of Kashmir; has made this paradise to lose much of its sheen and fervor to be called as a "paradise." The dynasty based politicians of ages in Kashmir and the ritualistic long duration politicians of Kashmir with an eye to remain clubbed to the power and governance of Jammu and Kashmir; have mercilessly exploited it to their advantages, when these elements are still doing so, rendering great harm and damage to the basic existence of Jammu and Kashmir as a respectable entity within the overall contours of India , which as of now is a great country of highest democratic values. Their slogan mongering about Jammu and Kashmir having a special status, without any logic of matured prudence when enough water has flown down Jhelum and Tawi rivers, is now a tale of past. Article 370 is now a history and mystery of past, which kept the pot boiling about Jammu and Kashmir being a special entity within the demonian of India.

While coming back to the budget presented in the legislative assembly of Jammu and Kashmir, with the crypto critical style of the speeches of some of the members of the legislative assembly, it appears that they are still following the monarchy styles considering J&K as their personal property and colony, when it is not so now.

Though various sectors of development and society have been given a special financial attention which is certainly needed, yet, no mention of the forcibly displaced Kashmiri Pandit's, is there in this budget for their honorable rehabilitation back in Kashmir with honor and dignity, even after the 35 years of their exile, genocide and devastation due to their forced displacement at the hands of the terrorist and the jihadi groups, which unfortunately includes some people from the local population of Kashmir too.

Kashmiri Pandits have been listening to the hallow slogans of the leaders of various political parties for long about their rehabilitation back in Kashmir; yet, nothing has so far been done in this behalf. This budget is a significant proof about it, when it is not expected from this majority ruling party ruling presently J & K, which is the fundamental political party responsible for the forced exodus of Kashmiri Pandits from Kashmir; because of its vote bank politics. This political party while being in power in 1990, witnessed the genocide of KP's through the terrorists and chose to be silent and as helpless viewers. In fact such an ethnic cleansing of Kashmiri Pandits from Kashmir, started right from 1947, when the reins of administrative and political power of Jammu and Kashmir were handed over to Sheikh Mohamed Abdullah by the congress party headed by Pt. Jawaharlal Nehru, the then prime minister of India.

While referring to the recent statement of the foreign minister of India about the abrogation of Article 370, who had said that it is dead and finished, one of the senior members of the legislative assembly linked to the Communist Party of India (Marxist) & considering Jammu & Kashmir still a Colony for such politicians, taunted the statement of the foreign minister of India about the abrogation of Article 370, by saying that the ghost of Article 370 is still haunting the minds of those who are in authority, when his reference pertains to the central leadership governing India. Such politicians are keeping the people of

Jammu and Kashmir; particularly that of Kashmir region ignorant about the hard facts of the Article 370, which was a temporary provision in the constitution of India and has been removed, which has been VETTED by the apex court of the country through one of its recent judgments about the same. No breast beating by such politicians in the assembly or outside the assembly can bring Article 370 back. In his continued utterances in the assembly, this assembly member further said that if the foreign minister says that we will bring back PoK (Pakistan-occupied Kashmir), why was Ladakh separate Ladakh from us ? Why was the region divided?" he said.

A good question by this assembly member, when its answer lies in the question itself. Let him introspect and accept that the two regions of Jammu and Ladakh akin to the region of Kashmir constituted Jammu and Kashmir as a full state, when the governance of Jammu and Kashmir always remained with the dynasty based politicians of Kashmir. While such dynasty based politicians always considered Jammu & Kashmir a personal colony never allowed Jammu and Ladakh to grow fully as per norms and always had step motherly treatment with these two regions in the issues of proper development of these two regions. These two regions remained backward in every field of development. The people of Ladakh raised their voices against it and thus Ladakh got separated from Jammu and Kashmir. It should sound as an eye opener for the governing political party of Jammu and Kashmir and the valley based assembly members like the one who has allegiance to the communist party of India, that if such an attitude again continues with Jammu region, when Jammu region has already suffered enough due to the apathies of the dynasty based politicians, who have been ruling Jammu and Kashmir for decades, it may result in the alienation of Jammu from the reaming part of Jammu and Kashmir, which is a union territory now. Will it be another disaster for the great paradise of Kashmir.

Some comments emerged about Maharaja Hari Sigh and his role about the accession of Jammu & Kashmir with India. In this regard it is necessary to mention here that Maharaja Hari Singh the Dogra king, was not an outsider to Kashmir and had as many rights in the Kashmir Valley as anyone else. Every other sane Congress leader of 1945-46, understood the absurdity of replicating the 'Quit India' call against colonial British with a 'Quit Kashmir' call against a Kashmiri Hindu ruler. Yet, Nehru plunged headlong in support of Abdullah and even landed up in Kashmir to support him. Hari Singh had asserted in the House of Lords as Vice-Chancellor of Chamber of Prince's "I am an Indian first, and then a Maharaja." Hari Singh was, thus, obviously pleading to join India in 1947 on multiple occasions but was thwarted on each occasion till Nehru's agenda was fulfilled, to bring in Sheikh Abdullah to power in Kashmir. While there was a tribal attack sponsored and abetted by newly created Pakistan in the northern regions of the Kashmir valley, in which mass massacre of Hindus and Sikhs was carried out, Maharaja Maharaja Hari Singh appealed the Lord Mountbatten the Governor-General of India for Indian military aid. In his Accession Offer dated 26 October 1947 which accompanied the Instrument of Accession duly signed by him on 26 October 1947, Maharaja Hari Singh wrote "I may also inform your Excellency's Government that it is my intention at once to set up an interim Government and ask Sheikh Abdullah to carry the responsibilities in this emergency with my Prime Minister." It is apparent that signing of the instrument of accession with India was loaded with a condition from the central government of that time headed by Jawaharlal Nehru, that this accession with India will be accepted by the government of India, only after Sheikh Abdullah is given a place in the administration of Jammu and Kashmir. Subsequently, Sheikh Abdullah was appointed head of an emergency administration by an order issued by the Maharaja which was dated except for the mention October 1947 in place of the date. Sheikh Abdullah took charge as Head of the Emergency Administration on 30 October 1947 and subsequently became the prime minister of Jammu and Kashmir with the blessings of Nehru and Maharaja Hari Singh was ousted.

It was also said by the MLA as referred to above that after Sheikh Abdullah took over the reins of power of Jammu and Kashmir, he ended the phases of Jagirdhari and enacted the land to tiller act in Kashmir; when the lands of the Jagirधारas were given to the common people of Jammu & Kashmir. The situation is different, which he has shied away to express.

Sheikh's rule in 1947, embedded the seeds of "Pseudo Secularism, viz half truths about the real concept of true secularism, in Jammu and Kashmir; for which the main suffering population of Jammu and Kashmir were the Kashmiri Pandits. It was in this time only

when the Land to Tiller laws were enforced which in particular made Kashmiri Pandits the main targets as most of the Kashmiri Pandits were well established "Zaminudars" and their agricultural lands were snatched from them and given to the tillers who were Muslims, with a biased base of communal tinge. Apart from this enough of partialities occurred during that time when KP's were refused proper representations in the government jobs, educational trainings, etc. This is the period, viz, 1947, when the first mass exodus of Kashmiri Pandits occurred towards the plains, for earning their bread and butter with dignity and honor. Subsequent governments in the erstwhile state of Jammu and Kashmir followed suit to destabilize the base of the KP's from the valley, under a well knit plan, when mass exoduses of KP's took place from time to time, thus limiting the population of KP's to just to a miniscule one in Kashmir. This respected MLA who spoke at length about the abrogation of Article 370 and end of Jagirdhari rule with Sheikh Abdullah's taking over the reins of governance of Jammu and Kashmir, should very politely know that with Sheikh's taking over, when the rule of Maharaja Hari Singh needed it started the another dynasty rule in J&K which is still in operation. Sheikh Sahib ruled up to 1953 and subsequently remained in detention etc, till 1975. He again aspired to come back to power; forgetting his slogans of plebiscite for Jammu and Kashmir; thus eluding the people of Kashmir on false and fake promises. He came back in power with a marginalized status of Chief Minister from his original status as the Prime Minister of Jammu and Kashmir. What a meltdown for power after 22 years of neglect and an oblivion state. Since then it is now the dynasty family rule in Jammu and Kashmir in one form or the other. He, His son, his son in law, his second son and then the grandson. Can it be disputed? What next who knows.

The plight of the forcibly Kashmiri Pandits may continue to remain the same under the circumstances'. The respected MLA who advocated the cause of restoration of Article 370 back, did not utter even a single word about the plight of Kashmiri Pandits regarding their mass forced exodus from Kashmir, due to their genocide in the shape of mass killings, loot, arson and the like through the terror acts of the Islamic fundamentalist militants, mostly abetted by the local population of Kashmir. Should he and the government of the day feel shy and sorrowful about the shameful act of brutally gang raping and torturing a young Kashmiri Pandit woman named as Girja Tickoo before being murdered in the most inhumane way possible. She was dismembered alive using a mechanical saw. Her remains were discarded near the Jhelum River. This respected MLA with a communist base is seeking the restoration of Article 370, when if some prudence of decency is left in him and others, they should first seek apology from the entire KP community for such brutalities.

The January month of each year after the 19th January-1990, haunts each and every Kashmiri Pandit, living in forced exile across the country of the horrors and woes of this month, when they were forced to flee from Kashmir due to the terror dragon of the Islamist fundamentalists on this day. Screaming from loud speakers from mosques and crowded streets was a message for KP's living in Kashmir; which said, Ralive, Tsaliv , Neti- Galiv. (It meant that either convert to Islam or leave Kashmir and in the alternative face death). Even after about 35 years, Kashmiri Pandits shiver remembering the night which forced them into exodus and a life of exile within their own country. Jehadi cum communal speeches from mosques were put on loud speakers meant for "Azan & Nimaz", which would say ("Yeti- Bani Pakistan, Bhatov Bhegover the Bhatenen-San"), meaning there in that the Kashmir will become a Pakistan without male Kashmiri Pandits, but including women folk of Kashmiri Pandits.

Under such conditions of terror and fanatic fundamentalists approaches in Kashmir; Kashmiri Pandit's will aspire that no statehood should be given back to J&K, unless the KP's are not rehabilitated back in Kashmir with dignity and honor. It is their right.

Let the present legislative assembly under the leadership of Omar Abdullah pass a resolution declaring such acts of terror as barbaric acts against the norms of human rights and ensure the return of Kashmiri Pandits back in Kashmir with dignity and honor and prepare proper ground for the same.

Equally the Jammu regions and its people should not be deprived of their basic right of growing equally at par with Kashmir in every field of the development of Jammu and Kashmir. In the alternative, Jammu may become another Ladakh to seek separation form J & K. In that case Kashmir the paradise will be reduced to a paradise without limbs. Let us not see that day.

(The author is a chartered consultant civil engineer)