

## BUILDING SECURITY GRID

India's security landscape is evolving rapidly, driven by technological transformation, emerging threats, and the growing need for integrated surveillance across borders, cities, and critical installations. In this environment, the concept of a next-level security grid is no longer optional-it is an essential national priority. A next-generation grid aims to combine smart technologies, multi-agency coordination, advanced data systems and rapid-response mechanisms to create a robust, proactive, and intelligence-led security architecture.

A modern security grid begins with real-time situational awareness, achieved through an extensive network of high-resolution CCTV systems, thermal imaging cameras, drone surveillance units, and AI-enabled sensors deployed across strategic locations. These systems feed encrypted data into Integrated Command and Control Centres (ICCCs), where advanced analytics and live monitoring tools help security agencies detect unusual activity, anticipate risks, and respond swiftly. Artificial Intelligence plays a crucial role by analysing behavioural patterns, flagging anomalies, and minimising human error.

Another pillar of the next-level grid is inter-agency collaboration, which ensures seamless coordination between the police, armed forces, intelligence agencies, disaster response forces, border security units, and cyber cells. Traditionally, these agencies operated in silos, but the new model promotes data sharing through secure platforms, joint protocols, and coordinated operations. Multi-agency fusion centres enable real-time information exchange, strengthening the nation's ability to predict, prevent, and neutralize threats.

Cybersecurity forms the backbone of this upgraded ecosystem. As threats increasingly shift to the digital domain, the grid must incorporate robust firewalls, encryption systems, intrusion detection tools, and cyber forensic capabilities. Training cybersecurity personnel and building specialised cyber units is essential for defending critical infrastructure such as power grids, transportation systems, banking networks, and government databases. Regular audits, stress tests, and simulation drills ensure that digital vulnerabilities are identified and addressed promptly.

At the border level, the next-level grid includes smart fencing technologies, integrated surveillance towers, unmanned aerial systems, seismic sensors, and automated communication systems that alert forces instantly to movements or infiltration attempts. These innovations reduce manpower burden and enhance the efficiency of border patrols, particularly in challenging terrains.

In urban spaces, the grid incorporates smart policing solutions such as predictive policing software, GPS-based patrol management, mobile command vehicles, and facial recognition systems at public hubs. These tools improve law enforcement visibility, response speed, and public safety, especially in high-density city environments. As India continues to advance, this modernised security architecture will play a decisive role in ensuring national stability, protecting communities, and shaping a safer future for coming generations.

■ DR. BANARSI LAL

Tourism is continuously growing across the globe because of its various attractive and new destinations for the tourists. It is termed as an instrument for employment generation, poverty eradication and sustainable human development. Tourism affects economic, cultural, social and political values of a country. Tourism has emerged as one of the world's largest service industries with sizable economic benefits. With the emergence of e-commerce, innovations and technological advancements, demographic changes and the de-regulation of airline industry, the travel and tourism is spontaneously contributing to improve Gross Domestic Product (GDP) and creation of jobs across the world economy. This has led to the improvement of other related industries especially transportation, construction, retail etc. The World Travel and Tourism Council estimates that the travel and tourism sector accounts for about 9.9% of global GDP. World tourism is the world's largest employer; generating more than 230 million jobs, or nearly one out of every 12 jobs globally. This booming tourism industry is emerging as an important driver of growth and prosperity, employment generator; supports to enhance the national income and improves the balance of payments. India's tourism industry is experiencing a strong period of growth in high spending foreign tourists and coordinated government campaigns to promote 'Incredible India'. Promotion of agri-tourism needs conceptual convergence with rural tourism, eco-tourism, health tourism, adventure tourism and culinary adventure. Present concept of travel and tourism is limited to urban and rich class which constitutes only a small portion of the population. However, the concept of rural tourism takes travel and tourism to the larger population, widening the scope of tourism. Rural tourism is considered as the fastest growing sector in the tourism industry and the places like Union Territory of J&K has immense scope in rural tourism.Tourism is a socio-cultural event for tourists. Through tourism the person gets the opportunity to see different areas of the world and observe different cultures and way of life. Tourists are a major factor of socio-cultural change. Tourism has many advantages. It enhances communication with the people,

improves self image of the community, increases employment opportunities, improves educational opportunities, motivates for learning new things etc. Indian economy is a developing economy. The growth of new employment opportunities is lesser than population growth. At the time of independence, the Indian economy was having almost all characteristics of underdeveloped economy. Indian economy is an agricultural economy, as around 70 per cent of the country's population gets employment in agriculture.

Reasi district of Union Territory of Jammu and Kashmir is situated in the Shivalik hills and is around 72 km away from Jammu. This district is located at 1528 meters above mean sea level and is predominantly a hilly district. It is one of the oldest towns of J&K. It was the seat of the erst-while Bhimgarh state, said to have been established by Bhim Dev somewhere in the 8th century. It remained an independent principality till 1822 when Gulab Singh, the then King of Jammu consolidated small states. Upto 1948 Reasi was the district of Jammu province but in the first administrative reorganization of the state undertaken in 1948 major part of the then district Reasi was merged with Udhampur district, while some area became part of district Poonch (now Rajouri).The name Reasi is derived from the town's old name "Rasyal".According to 2011 census total population of the district is 3, 14,714 and is at 570th rank out of 640 districts in India. Total literacy rate of Reasi district is 59.42%. Its population density is 184 persons/sq.km. Its population growth over decade 2001-2011 was 27.06% and has a sex ratio of 891 females for 1000 males. The district lies between 33°05' N latitude and 74°050' E longitude. The headquarter of district Reasi is situated at Reasi town. The district comprises presently of nine Tehsils and twelve blocks as per new statistics. There are 255 villages and 147 Panchayats in the district. Total geographical area of the district is about 1719 Sq. Km. It is the 13th largest district in Jammu and Kashmir.

The primary occupation of the people of Reasi is agriculture and allied activities. Reasi is economically an under-developed district. Various ethnic communities viz. Hindu, Muslim & Sikhs are the inhabitants of the district. It was carved out from Udhampur district on 1st April, 2007.

Udhampur, Rajouri, Jammu, Ramban and Shopian are the adjoining districts of Reasi. This district of Jammu and Kashmir is worldwide famous because of Shri Mata Vaishno Devi Shrine where millions of devotees used to visit and pay homage to this holy shrine. The Chenab River flows through this district and added glamour to it. The district has an immense potential of hydel electricity generation and has one of the largest hydel projects in the country: Salal Power Project has been constructed over the Chenab River and this generates around 690 MW power. Through this project electricity is provided to U.P, J&K, Punjab, Haryana, Delhi, H.P, Chandigarh & Rajasthan.1315 meters long Chenab railway bridge construction is in progress and will be the highest bridge (383.10 meters height) in the world after its completion. The Jammu-Srinagar-Baramulla railway line also passes through Reasi district. This railway line will bring Reasi on the rail map of the country. Reasi district of Jammu and Kashmir is said to an abode of Mata Vaishno Devi and blessed with vast biodiversity.

Reasi district has a variable climate ranging from sub-tropical to temperate. Reasi district comprises of three main agro climatic zones. The lower Hills of Katra, Pather, Reasi, Pooni, Talwara fall in the sub-tropical belt. Intermediate zone comprises of Arnas, Kanthan, Thampal, Judda, Dharmari etc. Higher hills zone comprises of Buddhan, Mahore, Chasana, Lar, Deval etc. Mean annual rainfall of the district varies from 1000-1100mm with intensity ranging from the drizzling to the torrential rain. Rainfall is heavy and well distributed from June-September. Rainfall is moderate in other months. Sometimes dry spell also prevails in the district. Mountainous terrain and high peaks in the district are the main factors for the climate variation in the district. Summers are generally warm and winters cold with snowfall in higher altitudes.

Most part of the district is rain fed and about 6 per cent area is irrigated. Major crops of the districts are maize, wheat, paddy, mustard, black gram and green gram. Vegetables production and fodder have immense potential in the district. There is ample scope of mushroom cultivation, sericulture, apiaries for honey, backyard poultry and dairy farming in the district. Horticulture is an important sector in the district. Citrus and

mango are important crops in Reasi area while temperate fruits like apple, almond, walnut, have tremendous potential in higher elevations. The district has immense potential for growing spices namely onion, garlic, ginger and turmeric in specific pockets of the district. Floriculture is new emerging industry in the district as the state is gifted with the world famous religious places.

Reasi is one of the most important places in terms of tourism in the state. Religious places like Mata Vaishno Devi shrine, Shiv Khori Shrine, Dera Baba Banda Bahadur, Baba Aghar Jitto Ji, Siarh Baba, Nao Devian, Deva Mai, Dhansar Baba etc. are in Reasi district and pilgrims from across the globe used to visit these spots throughout the year and pay homage. Bhimgarh Fort and Sula Park are also important tourists' destinations in the district. Throughout the year he Salal Hydro Electric Project located at Dhayangarh, Shri Mata Vaishno Devi University (SMVD), Karkayal, Krishi Vigyan Kendra, Tanda are important centres in the district which added glory to the district. The train to Kashmir passes through this district and makes it an important place in the national atlas. Banganga, Anji, Ans, Rudd, Plassu, Pai etc. are the tributaries of the Chenab River. Through rural tourism more economic profits can be gained.Rural tourism has now become a major sector influencing all aspects of a nation's. There is need to take proper measures for creating framework for the promotion of rural tourism. There is need to increase the rural tourism at a fast rate and it should be diversified. Increased tourists traffic in Reasi district calls for new marketing and pricing policies. There is need of proper planning and effective legislation for resource conservation and balanced developmental activities for the rural tourism. The technical resources are also required for successful promotion of rural tourism. Rural tourism can be fostered if it is an integral part of a balanced economic and social development programme. It is not only the government but the private sector can also play an equal responsible role for the development of rural tourism. Rural tourism can make our rural areas become attractive and prosperous.

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# White Revolution 2.0: A National Milk Day Vision for India's Dairy Decade (2025-2035)

■ PROF.DINESH CHANDRA RAI

Every National Milk Day (November 26)reminds the quiet power of the vision of Dr. Verghese Kurien. We mark this day with a deep sense of gratitude for a man who turned the struggles of rural India into a story of shared strength. As the Father of the White Revolution, Dr. Kurien stepped into the world of Kaira's dairy farmers not as an outsider, but as someone ready to listen and build alongside them. His Anand Model wasn't just a system; it was a quiet revolution in trust and self-determination, blending smart technology with the real needs of ordinary people. That legacy feels like a steady hand on the wheel today, helping us navigate the challenges of our time. It's that same spirit that shines through in White Revolution 2.0, launched by Union Cooperation Minister Shri Amit

Shah last September and shaped into action with the Standard Operating Procedure on December 25. Under the Ministry of Cooperation's thoughtful guidance, this effort stands out for its clear-eyed approach-blending policy smarts with a genuine nod to grassroots realities, much like Kurien's own path. At a moment when those first cooperative steps are already showing promise, we need a roadmap that's more than a plan: it's a way of thinking, one that puts fairness, endurance, and fresh ideas ahead of raw numbers. Drawing on insights from the National Dairy Development Board and the Rashtriya Gokul Mission's focus on our native breeds, this outline moves in three stages-building the base from 2025 to 2027, picking up speed through 2028 to 2030, and settling into a lasting rhythm after 2031. Deep down, it circles back to

the Anand Model's core truth: growth isn't about overwhelming floods of production, but about steady flows of opportunity, where tools like tech support people in a true partnership of government, learning, business, and farming life.

The first stage, beginning from the years 2025 to 2027, entails laying strong foundations in the form of reshaping cooperatives as a living network that reaches out into the deepest untouched areas. It is here that the actual work lies in growing Multi-Purpose Agro-Cooperatives into decision-making spaces, with easily operated digital tools like the NDDB's Pashu Bhagya portal ushering in openness and space for all, especially women who have given silent support to this endeavor for decades. Small adjustments in existing laws, furthering the spirit of freedom

enacted through the Cooperative Societies Act, could allow for online meetings, supported by continued funding from national strategies to bolster the fundamentals. Simultaneously, it looks to unravel the ongoing tension between output and long-term health: investigating the genes of native breeds such as Sahiwal and Gir, along with simple monitoring systems for livestock, to fine-tune the daily rhythm of farm life. Sharing specific steps, such as better breeding timing or smarter feeding plans, down lines through local hub centers such as Krishi Vigyan Kendras would go toward shaping a new generation of informed farmers. And while building value along the chain, consider upgrading plants to produce value-added products such as A2 milk with care, or initiate programs that empower women to create better health linked to

actual economic steps. These steps focused on new trade links in regions such as ASEAN and the Middle East would outline a risk map supported by maps and data, setting up a more robust and resilient manner of farming.

Then, in 2028-2030, the push forward will realize its real momentum through connections: tying cooperatives to fishing and growing crops, making groups tough to weather market storms. Payments would be crystal clear using tools like blockchain, and ups and downs could be moderated by data forecasts, sealed with agreements between NDDB and tech players in finance. As yields climb-high, driven by early warnings for animal health and overhead views of feed lands, the shift beyond size into deeper quality sparks new ventures in alternative feeds within creative spaces. Turning waste into power through bio-plants aligns such

groups with natural cycles and safety nets that cover herds against the unexpected. The goal here of a stronger mark on farming chains and food for all leaps into life with loops that give back, as part of how this revolution evolves from sheer volume to a fuller kind of life.

Tracing this journey, we show true regard for Dr. Kurien's legacy by being faithful to his cooperativising soul: reimaging it for our complex world, making small rivuletsinto assured tributaries. Those cooperatives-the essence of collective well-being-demand this force; this moment, pregnant with promise, demands plainspeaking. Let White Revolution 2.0 strive to do better than reenact history to write a more equal future, one where each drop of milk speaks to solidarity earn.

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# Impact of Special Intensive Revision (SIR) in Jammu & Kashmir

■ ROHIT GUPTA

Special Intensive Revision (SIR) is a major activity undertaken by the Election Commission of India (ECI) to update and cleanse the electoral rolls in a thorough manner. In contrast to routine annual or summary revisions that are based on existing records, SIR entails door-to-door enumeration and new verification of voters' details with respect to name, address, photograph, and documentation. ECI announced a nationwide SIR in 12 states and union territories in 2025, which also includes Jammu & Kashmir (J&K). The media informed that the commencement of the SIR for J&K is anticipated around April-May 2026 after the weather improves. The training of Booth Level Officers (BLOs) for the upcoming SIR has already been initiated in Ramban district, among others.

The SIR operation in J&K is not only a routine administrative exercise amid a politically sensitive and security context. It has far-reaching implications related to demographics and the region's political future. I delve into the impacts of SIR in J&K, both potential and realized, across various dimensions in the sections below.

**Objectives of SIR in Jammu & Kashmir**

To understand the impact, it is important first to understand the point by looking at the objectives of the SIR and how they relate to J&K.

**Ensuring Electoral Integrity**

ECI wants to clean the list of voters by removing duplicate, ineligible ones, and those who have passed away while adding all eligible residents. A revision like this can be a powerful tool in J&K, with its demographic changes, migration, and identity controversies, to not only firm up the rolls but also to gain trust in them.

**Verifying Residency and Citizenship**

According to media sources, one of the reasons for the SIR in J&K is a purported concern over illegal immigrants (viz. Bangladeshi, Pakistanis, or oth-

ers) being registered as voters. To SIR may also require extra documentation or verification for confirming both residency and citizenship.

**Preparing for Future Elections**

Despite the fact that delays in Jammu and Kashmir have been witnessed when it comes to local-level polls (for instance Panchayat and municipal elections), there is a rumor that SIR might be a stepping stone towards the next electoral exercises. Besides, SIR is merely one of the steps among many that must be taken for smooth elections.

**Improving Voter Inclusion**

Another point on the agenda is the incorporation of young voters (who might have turned 18 after the last revision of the electoral rolls) as well as those communities whose rights have been trampled without having the opportunity to exercise them.

**Potential or Observed Impacts**

The different types of impacts here that SIR can have in J&K include political, demographic, legal, and social impacts.

**1. Democratic and Political Impact Delay or Enabling of Elections**

The SIR being a large-scale operation, the local body elections (Panchayat or municipal elections) as well as assembly by-elections may be postponed due to its implementation. In fact, a few analysts see the SIR as a device for a fake election postponement, which would be claimed as a necessity for administration. However, a new voter list after the SIR would be a good reason for the next election to be more legitimate thus enabling the election to take place.

**Political Contestation and Trust**

Since politically trust in J&K is highly questionable, SIR is likely to become one more political issue and a topic of hot debate. The members of the political parties may blame one another for the momentum of inclusion or exclusion of specific groups of voters. Disenfranchisement of local communities (or migrant groups) may be among the most talked issues at that time. Political actors (through BLAs) being

directly involved in the verification and objection to names can speed up political mobilization which is already at a high level.

**Security Implications**

Given the history of conflict in J&K, a cleanup of rolls might be framed in terms of national security, identifying "foreigners" or "non-locals" added to voter lists. This could have both stabilizing and destabilizing effects: stabilizing by ensuring only eligible residents vote, but destabilizing if certain communities feel targeted.

**2. Social and Demographic Impact Inclusion of Youth and Marginalized Groups**

SIR is to the advantage of the youth voters (especially those who took their coming of age from the last significant revision) as they are facilitated in registering if the outreach is done properly. This approach can be considered as democratizing political participation by widening the voter base.

**Vulnerable Populations at Risk**

On the contrary, the foreigners, migrant, and nomadic communities, as well as those without documented permanent addresses, will be potentially left out if the verification process is conducted in a strict manner. The same can be said for the people of J&K among whom there are displaced and those living in difficult terrain.

**Administrative Cost and Human Resource Stress**

The challenges involved in the door-to-door exercise such as the mountainous areas and isolated villages of J&K will consume a lot of energy, time, and money. There are more logistical difficulties in the process of training and deploying BLOs, EROs in the field here than in other parts of the country India.

**3. Legal and Constitutional Impacts Legal Challenges**

The SIR undertaking is surrounded by controversies. An example of a case where its legitimacy was doubted is the state of Bihar. The reason for this was that the authorities were shifting the burden of proof to the citizens. If a sim-

ilar lawsuit is filed in J&K, it would focus on issues such as which documents being used for residence or citizenship, and whether certain people being excluded are those unfairly denied.

**Judicial Scrutiny**

As a matter of fact, the case for SIR in different states has already been challenged in courts. The Indian Supreme Court has been petitioned to step in, more so when it concerns the acceptance of identity documents. Besides, according to the reports, there is also a political debate, saying that the SIR in J&K is sub judice.

**Constitutional Rights**

The SIR involves the basic democratic rights, for example, the right to vote (under Article 326 of the Indian Constitution) as well as the ECI's constitutional obligation (under Article 324) to ensure the electoral rolls are kept fairly. The way the SIR is carried out may lead to a new understanding of how far the ECI is allowed to go in forthcoming roll revisions without causing voter rights violations.

**4. Institutional and Administrative Impacts Capacity Building and Training**

In its report, the SIR mentions the need for the ECI to enhance the administrative capacity level. In this regard, the ECI is engaging in the training of AERO, BLOs, and other officers in J&K through various activities. As a result, this might facilitate a higher level of institutional capacity for elections in the coming times.

**Public Awareness and Participation**

The success of SIR is largely dependent on the level of public awareness. The people have to be informed about the process, the need for them to personally fill out Enumeration Forms (EFs), and to provide the requested documents. Taking into account the socio-economic diversity of J&K, a large scale of awareness campaign may be necessary for the rural and remote areas in particular.

**Data Quality and Digitization**

Single Intervention Registry (SIR) initiatives entail the modernization of electoral data in J&K. To perform the task, the ECI is opting for computer matching/linking with data that refer to the past SIRs. Thus, in the long run, this can serve as a foundation for an up-to-date, digitized voter list that is user-friendly and transparent.

**Risks and Criticisms**

**Although the SIR looks promising, a number of potential risks specific to the J&K area are outlined:**

**Political Manipulation:** Opponents may point out that political implementation of SIR is the only point of the effort with the goal of tampering with the voter rolls to gain the favor of certain parties or demographic groups that benefit.

**Disenfranchisement:** The chance that some eligible voters, such as those from the marginalized groups or transient populations, could be left out unwittingly or purposely is real and considerable.

**Documentation Barriers:** Should the ECI decide to require very strict documentation, it is likely that many legitimate voters will find it difficult to meet the requirements.

**Resource Constraints:** With the J&K's terrain, the area is not less than costly in terms of the administration, and that it is more prone to be delayed.

**Lack of Oversight:** Trust may be an issue in this process, in the absence of transparency and independent observation, especially among communities that are already skeptical of state-led countermeasures to which they have been subjected.

**Potential Benefits and Positive Outcomes**

In spite of the problems, SIR is still able to point out a number of prospects that are important for J&K as well, and are given below.

**Strengthening Democracy:** The core of democracy is a sound and up-to-date voter list which is what SIR essentially is reinforcing, thus, democracy would actually be the winner in the end.

**Legitimizing Elections:** If it is imple-

mented properly, the future elections' legitimacy and popularity can be increased by SIR which is most needed in a region like J&K that is politically sensitive.

**Boosting Participation:** The youth voters as well as those who have never registered before can be mobilized effectively so as to become the active participants of the electoral system, hence increasing political engagement.

**Administrative Modernization:** The completion of the task can be a source of change in electoral administration which includes digitization, better field mechanisms, capacity building, etc.

**Security Assurance:** Security worries about foreign voter inclusion can be eliminated through SIR which is basically about verification of residency and citizenship, provided it is done fairly and transparently.

**Conclusion**

The Special Intensive Revision (SIR) in Jammu & Kashmir is not merely an administrative exercise but rather an intervention that has political and socio-demographic aspects which can be felt in all areas. SIR has the potential on the one hand to improve democratic legitimacy, extend the electoral rolls' cleaning, and make the region ready for fair and more participatory elections. However, the operation has the potential to be politically manipulated, some people may be deprived of their right to vote, and there could also be legal challenges, especially when we take into account that the history of J&K is closely related to the conflict, that the demography of the region is sensitive, and that there are problems in the governance sector. The final effect of SIR in J&K largely depends on the transparency of the way it is done, its inclusiveness, and whether there are safety measures for the vulnerable groups. On the contrary to this, if poorly handled, it may result in a deepening of the existing fault lines.

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