

TRI-SERVICES INTEGRATION

India's military strength, the fourth largest in the world, stands as a symbol of national power, resilience, and sovereignty. However, in an increasingly complex and technologically advanced global security environment, mere size is not enough. Integration of the Indian Army, Navy, and Air Force into a cohesive and unified fighting force has become not just desirable but indispensable. The ongoing efforts toward tri-services integration, including the creation of joint theatre commands, the appointment of a Chief of Defence Staff (CDS), and collaborative operational planning, mark a transformative shift in India's defence posture.

The idea of integrating the three services is not new. It was first formally proposed after the Kargil War in 1999, where the lack of synergy between the services was found to be a critical weakness. The Kargil Review Committee and subsequent Group of Ministers report strongly recommended reforms in higher defence management, which eventually led to the appointment of the first CDS in 2019. The CDS is mandated to ensure jointness in operations, training, logistics, and planning-functions long operating in silos.

In today's hybrid warfare environment, where threats are multi-domain-from land and sea to air, cyber, and space-single-service operations are insufficient. Future wars will not afford the luxury of time for coordination between services post facto. The response must be instant, integrated, and seamless.

Joint Theatre Commands are the next major step in this journey. These commands will combine elements of all three forces under a single operational commander for specific geographical or functional theatres. Once operational, these commands will enable rapid deployment, optimized resource usage, and synchronized warfare tactics. For a country facing dual challenges from Pakistan, this integrated approach is crucial.

However, this transformation comes with its share of challenges. Inter-service rivalry, legacy issues, differing doctrines, and operational cultures can hinder smooth integration. Building consensus and trust among the forces, while aligning objectives, remains a key task for the CDS and the Ministry of Defence. Equally important is the need to invest in joint training academies, simulation exercises, and a common communication network that allows real-time sharing of intelligence and situational awareness.

The geopolitical environment, especially in the Indo-Pacific, is rapidly evolving. To counterbalance hostile threats and secure our strategic interests, India must become not only a strong military power but also a smart one. The strength of a military lies not just in firepower but in unity of command, clarity of purpose, and synergy of action. Tri-services integration is not a bureaucratic reform but a strategic necessity. As India aspires to become a regional and global power, it must first unify its war-fighting machinery, enhance operational readiness, and project strength through a fully integrated defence force. The process is complex and gradual, but the direction is clear and irreversible.

Sericulture as a Profitable Enterprise

DR. BANARSI LAL

Rearing of silkworms for the production of raw silk is known as sericulture. It is considered as one of the oldest agribased industries in the world. This sector has higher potential for farm returns. Sericulture involves the rearing of silkworm, collection of cocoons, reeling of raw silk from the cocoons and availability of mulberry trees from which fresh leaves can be obtained to feed the silkworms. Presently, China and India together produce about 95 per cent of the global raw silk production. J&K is one of the leading silk producing territories in India. In J&K there are around 2,800 villages where the sericulture is considered as an important activity for the farmers. In J&K there are about 7 lakh mulberry trees out of which 53 per cent are available in Jammu region and 47 per cent in Kashmir region. Cocoon production in J&K reached to 822 metric tons in 2023-24, a 17.6 per cent increase from the previous year. Mulberry plantations rose by 5.2 per cent in 2023-24. J&K is the only territory in the country which is at the same altitude in which leading bivoltine sericulture countries of the world lie. J&K is bestowed with the conducive atmosphere to produce the bivoltine silk. Sericulture is the traditional cottage industry in J&K. J&K produces high quality bivoltine silk comparable to the international standard. Sericulture can help to improve the economic condition of the rural people of J&K.

In the Union Territory of J&K, sericulture is considered as an age old vocation. Due to favourable climatic conditions, J&K is conducive for sericulture. J&K has enormous potential in sericulture or silk production. This sector is able to provide income and employment to the rural poor especially small farmers, marginalised and weaker sections of the society. The raw silk produced in J&K is recognised globally. Commercial sericulture can really empower the farmers of J&K by increasing their income and employment. The raw silk produced in J&K is recognized across the globe. As per researches sericulture is considered as an age old vocation in J&K but in Jammu region it was introduced about 100 years back. Major part of J&K is rain fed and

maize, wheat and paddy are the major crops of the region. The size of land holding in J&K is small and horticulture and agroforestry have immense potential in the region. It is difficult for the farmers of J&K to mitigate all their basic needs because of low income from agricultural sector. Some farmers from the particular areas of J&K take sericulture as the subsidiary occupation. In order to promote the sericulture industry in J&K, mulberry trees production needs to be enhanced. There is need to introduce some new varieties of mulberry so that the leaf production can be increased which will facilitate the silkworm production. Generally two rearings of silkworms are conducted one in February-March and another in Aug.-September but if the mulberry leaves are available in sufficient quantity then four rearings are possible in a year. Sericulture is taken as a subsidiary occupation by about 33000 rural households in J&K. Most of these families are economically backward and sericulture plays a crucial role for their livelihood. In order to empower these farm families' productivity and quality of cocoons need to be improved by applying the more scientific package of practices. Some high yielding breeds of silkworms along with the new varieties of mulberry need to be introduced. Integrated Nutrient Management (INM) is also required for the scientific mulberry cultivation. Farmers need more rearing space and start-up tools for the scientific sericulture. More awareness and capacity building programmes need to be organized for the farmers so that they can be updated with the latest technologies in sericulture. Sericulture is mostly bivoltine in J&K and most of the cocoons are produced during the spring season. Although the autumn crop has been introduced but yield and quality is not excellent. Post-cocoon management also needs to be improved. It has been observed that cocoons reared in J&K are of high quality in Asia. Its fibers can be compared with the best on the world. Inadequacy of mulberry leaves and lack of awareness on scientific technologies are the hurdles for the progress and area expansion of sericulture industry in J&K. Sericulture is one of the most ancient industries

in J&K. J&K silk goods are recognized across the globe because of their colour and quality. There was time when the silk goods were exported from J&K to the Roman, Greek and Persian empires. Mughals were also fond of silk from Kashmir. Many nurseries are established for the production of mulberry saplings which are further distributed among the farmers. Department of Sericulture and State Agriculture Universities (SAUs) of J&K are making strenuous efforts for the area expansion and production of cocoons in J&K. They collaboratively organize the capacity building programmes for the silkworm growers and upgrading their knowledge on sericulture. There are about 0.38 lakh of weavers who are engaged in this industry in J&K. Silk goods from J&K are of high demand in the national and international level. These handloom goods generate employment in J&K. Reasi and Udhampur districts of J&K have huge potential for sericulture. There are certain sericulture pockets in both the districts where the farmers are doing commercial cocoon production. The income from sericulture is supplementing their total income and uplifting their socio-economic status.

Mulberry cultivation forms the backbone of sericulture. Mulberry leaves contribute about 38.20 per cent to the successful rearing and production of high quality cocoons. J&K is the only territory in the country which is at the same altitude in which the leading bivoltine sericulture countries of the world lie. J&K has the natural climate which is congenial for the production of high quality raw silk. Bivoltine sericulture is on the top priority for the Indian sericulture industry. Although India is at second rank in the silk production in the world but the domestic demand is more than that of production. The more demand is mitigated through the import from China. J&K has huge potential in the production of bivoltine silk and can reduce its import from abroad. In J&K silk industry can be flourished and more income and employment can be generated through it. There is a dire need to give a boost to the sericulture industry in J&K. It can rejuvenate the

industrial sector in J&K. The silk carpets from J&K are already are of great demand and with new innovations we can tap the untapped markets. Some more research projects can help in the value addition in the sericulture industry. More and more unemployed youths can be attracted towards this industry by providing them the incentives and subsidies. This sector has been identified as the viable sector for the employment generation. This industry can revolutionize this beautiful Union Territory with a new source of livelihood for the rural and urban people. SKUAST-J, SKUAST-K and Department of Sericulture can play the key role to enhance the quality and quantity of cocoons in J&K. There should be proper mechanism to sale the cocoons and silk products. Strenuous efforts are needed to revive this industry for the benefit of the rural people. There is dire need to promote the silk produced from J&K. The government has launched some small schemes including free plant material and distributing of free silk rearing kits that growers are using during rearing process of cocoons. Sericulture authorities organized cocoon auction markets across J&K where the growers sell their cocoons. In J&K, sericulture is an ideal enterprise for the rural development especially for the weaker sections of the society. This sector has the unique feature of converting family labour into useful income for the family of the farmers. Sericulture is an eco-friendly vocation and has high potential for poverty eradication. It has proved as an ideal tool for women and tribal farmers of J&K. It is an excellent tool for transfer of wealth from affluent section of the society to the poor. A strategic approach is needed to give a boost to the sericulture industry in J&K. Start-ups in sericulture can contribute to the economic growth of J&K. By addressing challenges, developing infrastructure and promoting research and development, new income and employment opportunities can be created in this sector.

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IGNOU's Role in Transforming Education in Jammu & Kashmir

RAKESH KOUL



Education is the backbone of any progressive society. For a region like Jammu & Kashmir, where geographical, economic, and political challenges have often restricted access to quality education, distance learning has emerged as a powerful tool of empowerment. The Indira Gandhi National Open University (IGNOU), through its Regional Centre at Jammu, has been a beacon of hope for lakhs of learners, opening new doors of opportunity since its establishment.

My association with IGNOU is not just professional-it is deeply personal. In 1991, when militancy forced me and thousands of Kashmiri Pandits to leave our motherland, I was compelled to abandon my home, childhood, and conventional education in Kashmir. In those dark times, it was IGNOU that gave me a second chance. I enrolled as a student of IGNOU, and it became the

foundation of my academic and professional growth.

Later, I dedicated myself to IGNOU's mission, first as a daily-wage consultant and then, for more than 23 years through an outsourced agency, I worked tirelessly at the IGNOU Regional Centre Jammu. My commitment was driven by the belief that education through distance mode could transform the lives of thousands, just as it had transformed mine. Yet, despite decades of service, my contribution often felt unrecognized and unrewarded."all in vain." Still, I take pride in knowing that my efforts contributed, even in a small way, to the expansion of IGNOU's mission in Jammu & Kashmir.

The Establishment of IGNOU Regional Centre, Jammu

The vision for a Regional Centre in Jammu began in 1996 under the leadership of Er. K. K. Bhat, then Regional Director of IGNOU Karnal, who, with the intervention of Maqbool Dar, then MoS Home, approached the Ministry of Human Resource Development in New Delhi. After much effort, the Regional Centre was inaugurated in March 1998

at the SPMR College of Commerce, Jammu, with Er. Bhat as its founding Regional Director.

This was the beginning of a revolution in higher education for the Union Territory, bringing affordable and flexible education within reach of students, teachers, professionals, and housewives.

Expansion of Programmes and Partnerships

Over the years, IGNOU Jammu has expanded its reach through strategic collaborations and programme launches:

**MoUs with Institutions:** With the Police Academy, Udhampur for the Certificate in Human Rights (CHR), and with the Mata Vaishno Devi Shrine Board for the Certificate in Disaster Management (CDM) (2004, under Dr. K. K. Goutam).

**Introduction of Master's Programmes (2005):** Including MEG, MHD, MPS, MSO, MSCDFSM, and MAH.

**Sarva Shiksha Abhiyan (2006):** MoU signed for the Diploma in Primary Education (DPE) to upskill thousands of primary school teachers.

**B.Ed. Training (2017):** IGNOU part-

nered with SSA J&K for B.Ed. courses for untrained graduate teachers, generating over ₹60 crore revenue while upgrading the quality of teaching in schools.

Additionally, IGNOU has been instrumental in offering need-based programmes in Rural Development, Women Empowerment, Horticulture, Agriculture, and Health Sciences, which directly benefit local communities.

Success of IGNOU Pass-outs

Today, IGNOU graduates from Jammu are serving not only in Government departments and Private sectors across Jammu & Kashmir but also in other Indian states and foreign countries. This wide acceptance of IGNOU degrees highlights the credibility and global recognition of the University. Many alumni hold key positions in administration, education, business, and research, proving that distance education can be equally powerful in shaping careers.

Infrastructure Growth - A Regional Centre of Its Own

From operating in a college campus in

1998, IGNOU Jammu has now grown to have its own land purchased from the Jammu Development Authority (JDA). On this land, a modern Regional Centre complex has been constructed at Bantalab, Jammu, giving IGNOU Jammu a permanent home with better infrastructure and facilities for students and staff. This achievement reflects the sustained growth of the University in the Union Territory.

Importance of Distance Education in J&K

Distance education has been life-changing for J&K due to:

- 1. Accessibility** - Bringing higher education to the remotest villages and conflict-affected zones.
  - 2. Affordability** - Providing low-cost learning opportunities for underprivileged families.
  - 3. Flexibility** - Allowing working professionals, women, and displaced communities to continue studies.
  - 4. Skill-Oriented Approach** - Aligning education with employability and entrepreneurship.
- The Way Forward**  
To strengthen its impact, IGNOU

should also ensure local employment opportunities in its Regional Centre and Study Centres. Lower-level staff form the backbone of day-to-day operations and deserve better facilities, regular training, and fair growth prospects. Strengthening local capacity will make the system more efficient and responsive to learners' needs.

Conclusion

From its inception in 1998 to its modern-day complex in Bantalab, Jammu, IGNOU has transformed education in Jammu & Kashmir. By empowering students, teachers, and communities through flexible learning, the University has emerged as a true lifeline for the Union Territory. Its alumni, now working in government, private sectors, and abroad, are a living testimony to its success.

As someone who has lived through displacement, rebuilt life through IGNOU's support, and devoted more than two decades in service of the University, I believe IGNOU is not just an institution-it is a symbol of hope, resilience, and empowerment for Jammu & Kashmir.

Saving Our Extincting Wildlife

G L KHAJURIA

We deserve no right to live over this globe, if we don't bear sympathy in mind for a variety of animal life that surrounds us, and definitely God will be unhappy at our activities of merciless and wanton destruction of this wildlife which He himself loved and sympathized with. With this may be added what Mr. Nehru once remarked. "I wonder sometime what these animals and birds think of man and how would they describe him if they have the capacity to do so. I rather doubt if their description would be very complimentary to man. In spite of our rich culture and civilization man continues to be not only wild but more dangerous than any of the so called animals.

History amply shows that our religion, custom and traditions were intimately associated with variety of form of animal life. But with the passage of time and other conditions, things went on changing from bad to worse. With the advent of the world wars, new type of guns were manufactured and the hunters took their use otherwise. The early British officers were too much interested in hunting and they caused great havoc. Add to it the merciless treatment extended by princes of India, who in their interest killed a large number of lions, tigers and leopards. Then came the Grow more food campaign", which resulted in the indiscriminate felling of forest tree for agriculture. The Government itself was little aware and less interested in preserving wildlife and instead, issued the licenses extensively. As a result of this merciless destruction, the number went on reducing and at present the species are classified as rare, threatened and extinct. Rare being those which were in abundant in number but due to destructive means have been reduced to few, threatened are those which are continuously subject to threat while extinct being those which were abundant once but have now reduced to zero.

Breeding of endangered species in captivity is a recently introduced method by which the species can be multiplied under proper care and supervision. In the mid of 1976, world conference on breeding of endangered species in captivity took place. One hundred and seventy delegates from all over the world participated in the conference held at Zoo in London for three days. After discussion it was concluded that though captive-breeding suffers from large amount of failures, when a species is shifted from its natural habitat, yet success has been



found in varying degrees. So, certain species which are more threatened with extinction, can be bred in captivity under proper care and supervision and can therefore, be multiplied successfully. And of new origin, the nature lovers don't agree with breeding in captivity taking the plea that these domesticate the wildlife and result into their natural instinct.

The paramount need of the hour lies in the systematic ecological studies, population surveys, mortality and breeding datas, predator prey relationship in order to ascertain their real condition and circumstances. The improvement of game habitat is one of the most important measure if we are to succeed in handling of the problem of dynamic manipulation. Again, appointment of various committees and commission to review the progress made and at the same time give broad out lined step to be undertaken for the protection of wildlife of all strata.

In the third place natural extinct, which is also named

as "biological eclipse" is also responsible for the wildlife extinction. But it is law of nature which applies everywhere extension- threshold is allied to renewability, named the power of species to establish itself from near zero-abundance. When the extinction threshold is reduced to lower degrees then gradual decline in the wild animals takes place and this had been the predominant cause of extinction of wildlife. There are many more to be named which were in one way the order responsible for its extinction of wildlife i.e. use of pesticides in the agricultural lands and many more of its ilks. As a results of the factors enumerated above, many species became extinct and many more are subject to threat. Too much has been talked about saving the Asiatic lion (Panthera despesica). This Sher babar which inhabit open tracts was abundant in our country, but it is sad that today its number is reduced and confined to "Gir Forest" in Gujarat. However, the wildlife department is fully on the job to enhance their existing strength.

During the past few decades in the Gir Forest the sanctuary area has shrunk from 5180 kms. to 1295 kms. where has all the land gone? It has been devoured by men, his houses, factories and plantation, with the poor lion pushed to corner fending (providing) for itself. The cheetah (Actionanys jubatus) or the hunting leopard has disappeared from our country which was once plenty in the Deccan, its principal food was the blackbuck, chinkara, and four-horned antelope. which was subjected to destruction with the result that it itself disappeared. The great Indian rhinoceros (R. Unicornis) which once existed throughout the Indo gangetic plain, almost up to Peshwar, today it is confined to a small areas like Assam, Bengal, same is the case with other animals viz, the Kashmir stag (Cerous hunglu), the Indian wild ass the thamin deer (panokiaeldieldi), the muskdeer (Moschus moschifems), the pigmy hog (pomeulaSyloania), the snowleopard (UnicesUnices.), the clouded leopard ( Neafelisnebulosa) the great India Bustard (Chariotiesingriops), the white winged duck ( Asacomissatulatus) the pink headed duck (Rhodonessacaryophthlacea), etc. These species were at time abundant but today they are threatened with extinction.

How threatened species can be safeguarded? There on cut and try formula to safeguard these species. Of the various steps which can be undertaken, first is the control of such activities which have lead and still leading to the extinction of the species and these include as mentioned earlier, habitat change, poaching, killing, hunting, use of pesticide and industrialization, etc. Then other steps can be undertaken and of these first comes the declaring of as many areas under wildlife sanctuaries, National parks, in safeguarding species are necessary, in parallel with upcoming of "Days- weeks" for the last half a century, wildlife week is most reverentially celebrate from Oct 2to 8 every year to make humankind's awakening.

And conclusively, it is added over here that "convinced of the fundamental importance of conserving the natural environment, upon which rests the foundation of human civilization, let us solemnly pledge that we will spare no efforts to preserve our vanishing wildlife and our dwindling forest area?"

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