

A CALL TO ACT

Biodiversity—the rich variety of life on Earth—is the foundation of a healthy planet. From the towering rainforests of the Amazon to the vibrant coral reefs of the Indian Ocean, biodiversity sustains ecosystems, supports livelihoods, and drives essential ecological processes. Yet, human activities such as deforestation, pollution, climate change, and habitat destruction are causing unprecedented species loss. Protecting biodiversity is no longer an option but a necessity for the survival of all life, including humans.

Biodiversity plays a critical role in maintaining ecological balance. It ensures food security by providing diverse crops and pollinators, regulates climate through carbon sequestration, and supports industries like medicine, where over 50% of pharmaceuticals originate from natural sources. Additionally, forests, wetlands, and oceans act as natural carbon sinks, mitigating climate change. Preserving biodiversity safeguards these invaluable ecosystem services and enhances resilience against environmental shocks.

The primary threats to biodiversity stem from human actions. Deforestation for agriculture and urban expansion destroys habitats, pushing species to extinction. Pollution, from plastic waste to chemical runoff, poisons land and water bodies, endangering marine and terrestrial life. Climate change disrupts ecosystems, causing coral bleaching, shifting weather patterns, and species migration. Overexploitation through hunting, fishing, and logging further accelerates biodiversity loss. Without urgent action, many species face extinction within this century.

Establishing and expanding protected areas, such as national parks and wildlife reserves, prevents habitat destruction. Governments and organizations must enforce strict regulations to safeguard forests, wetlands, and marine ecosystems.

Sustainable Land and Resource Use: Eco-friendly farming, reforestation, and responsible fishing practices can reduce environmental impact. Adopting agroforestry, organic farming, and crop diversification helps maintain soil fertility and preserve pollinators. Cutting down plastic use, regulating industrial waste, and adopting circular economies minimize environmental degradation. Encouraging recycling and sustainable packaging can reduce the burden on landfills and oceans. Transitioning to renewable energy, reducing carbon emissions, and restoring degraded ecosystems help mitigate the effects of climate change on biodiversity. Protecting mangroves, peatlands, and coral reefs can strengthen resilience against extreme weather events. Community and Indigenous-Led Conservation: Indigenous communities, who have lived in harmony with nature for centuries, hold invaluable knowledge about conservation. Supporting their rights and integrating their practices into conservation policies can enhance biodiversity protection.

Rural Women Empowerment through Agricultural Extension Services

DR. BANARSI LAL

Agriculture serves as the fundamental basis of India's economy, engaging more than half of the nation's population with women making substantial contribution to its property. The agricultural sector has a unique potential for empowering rural women and providing diverse opportunities. The empowerment of women through agricultural extension services is crucial intersection that connects gender equality, rural development and sustainable agricultural practices. Agricultural extension services when tailored to empower women, cover a range of interventions targeted at augmenting female involvement, expertise and autonomy in farming practices. These efforts focus on offering customized training, opportunities to learn contemporary farming methods, knowledge in financial matters and skills in entrepreneurship development. Innovations provide unprecedented opportunities, yet trends indicate a digital divide and women are under-represented in the field of science and technology.

In order to achieve the Sustainable Development Goals trans-formative shifts, integrated approaches and new solutions are required particularly when it comes to advancing gender equality and women empowerment.

It prevents them from developing and influencing gender responsive innovations to achieve trans-formative gains for the society. There is dire need to build a gender-balanced world. Collective actions and shared responsibility for driving a gender-balanced world is direly needed. According to Gloria Steinem, a world-renowned feminist, journalist and activist "The story of women's struggle for equality belongs to no single feminist nor to any one organization but to the collective efforts of all who care about human rights".

Although lot of efforts are made on gender equality but still it has not been realized. A gender pay gap still persists across the globe

and women are still not present in equal numbers in politics, jobs and in business. Globally it has been observed that women's education, health and violence against women are worse than men. It has been observed that one-in-five women faced violence from an intimate partner in the past year fuelled by new technology, such as through cyber-harassment. Men still control three-quarters of parliamentary seats. Women are largely excluded from peace processes. Violence against women remains pervasive. According to World Economic Forum Report 2017, it could take another 100 years before the global equality gap between men and women to disappear. An equal world is an enabled world.

It has been observed that women are considered as the vital part of the Indian economy. Women farmers contribute enormously to the Indian agriculture. Women comprise the largest percentage of the workforce in the agricultural sector but they do not have control over all the land and productive resources. There is need to make efforts to bring about a positive change in knowledge, attitude and skills of the women farmers by providing training and technical advice and also assisting them in taking decisions in adoption of new agricultural technology. Generally women role in agriculture is systematically marginalized and underestimated. Many times women farmers are by-passed by male extension workers. It would be correct to state that women farmers in India have failed to get their due share in extension services apropos their contribution to the Indian agriculture. There is need to refine, modify and redesign the extension services in India so that the latest technologies can be reached to the women farmers effectively without any biasness. Women are considered as the best caretaker of the children and agricultural sector. Rural women play the pivotal role in agriculture from sowing to harvesting to post-harvest management. Women farmers make significant contributions to agricul-

tural production, food security and nutrition, land and natural resources management and building climate resilience. They play multi-dimensional role in agriculture and can play a crucial role in the second green revolution in India. Government of India is endeavouring for the empowerment of rural women and has launched various innovative schemes especially for them. Although women have made significant progress in India in various sectors but still the gender inequalities remain pervasive in every dimension of society.

Although a progress has been made to gain equal rights for women but still there is need of many efforts for women equality especially in the rural areas of India. The role of women in agricultural and rural development and their efforts for ensuring the food security has been widely acknowledged. Although a lot of progress has been made but still the rural women are having low income, less education, limited land and inheritance rights. Extension services in India need to be refined, modified and redesigned so as to reach farm women effectively. The purpose of agricultural extension services can be achieved for sustainable rural development only if sincere attempts are made to provide and improve farm women's access to the available extension services thereby leading to their technological empowerment. Women comprise 43 per cent of world's agricultural force which rises to 70-80 per cent in some countries such as India.

Farm women in India are enhancing agricultural production, improving food security and eradicating poverty. The Indian rural women face the significance inequality in farms even they do more agricultural work than men. According to the Food and Agriculture Organization (FAO) report, if women are given equal access to resources as men, agricultural yield can be increased by 2.5 to 4 per cent in the developed countries enough to feed at least 100 million more undernourished people. If rural

women get opportunities and facilities, they can propel the country towards second green revolution and can change the landscape of the development. Rural women play a significant role in labour supervision and participation in post-harvest operations. Women farmers can be productive and enterprising as their male counterparts but are less able to access land, credit, agricultural inputs, markets, high value agrifood chains and obtain lower prices for their crops. Women in rural areas lack equal access to productive resources and assets, public services such as education, health care and infrastructure including sanitation while much of their labour remains invisible and unpaid even as their workload increases due to migration of their men. It has been observed that rural women face more difficulties than the rural men and urban women. They disproportionately experience poverty, exclusion and inverse effect of climate change. There are 731 Krishi Vigyan Kendras (KVKs) in India and in every KVK a special provision for training programmes for women are made. SIIGs can play a significant role in rural women empowerment. Involvement of women in agricultural development process by ICAR has been further strengthened by several ways. Still these efforts are not sufficient to make a substantial dent on the overall agricultural scenario of the country. Various Non-Government Organisations (NGOs) have involved women on issues related to social empowerment of women. They also have given little attention on women's role in agriculture. Strenuous efforts are needed to bring significant improvement in the women's access to the new agricultural technologies in India. Profound change in the mindset of the people is primarily required women empowerment.

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Ah, Kashmir Rained & Sheened by and Large!

BAIRAJ CHAWALGAMI

People of Kashmir in particular and Jammu & Kashmir in general sighed a big relief as higher reaches of both Jammu and Kashmir witnessed moderate to heavy snowfall and even some plains of Kashmir saw Chadder of light snow including in Shari Khaas-Srinagar which turned the city into white for a while.

The Jammu as well as Kashmir valley experienced heavy rainfall to the delight of the populace as it broke the dry spell and the people's worries also diminished particularly in Kashmir as the dry winter now gave place to precipitation which brought joy to the people of both the divisions of Jammu and Kashmir.

It seems that the weather God and nature is pleased and it brought snow and rains which gave lately a goodbye to the dry winter season in Kashmir. It is worthwhile to mention that there was worry, gloom upon the Kashmiris as the water sources like rivers, streams and springs at many places in Kashmir valley were drying and dying making people worried about the future paucity and scarcity of water.

The farmers, agriculturalists, orchardists were feeling the pain because they predicted and forecasted

that there will be dry spell, deficit rainfall and scarcity of water for irrigation as well as for drinking. People in general and farmers of Kashmir in particular were skeptical that deficit snow and rainfall will affect the farm products including paddy, pluses and vegetables. But now since two, three days Kashmir as well as Jammu continues to be leashed by rains and even snow in upper reaches and in some plains also and it ceased the dry weather and so the bad days seem to be over in both Jammu and Kashmir.

The heavy rainfall in Jammu and Kashmir regions brought a good message that this year too there will be rich harvest of staple crops like paddy, wheat, pluses and vegetables. Besides the rains will give a goodbye to sickness and ailments like common cold, respiratory problems and viral fever which the people of Jammu and Kashmir division are facing due to completely dry winter.

The snow and rains has led to decrease in cough, bad cold and other respiratory problems which aggravated with dry spell of winter and consequent dust. However people have got a great relief from these ailments.

Jammu and Kashmir has been experiencing snow and rains since three

consecutive days on Thursday with multiple places witnessing snow depth of 3 to 4 feet during this period. In fact we can opine that snow blankets Kashmir in white and the MeT predicts more rain and snow for few days.

The temperature in both Jammu and Kashmir has gone down after having warm and dry winter. In both Jammu as well as in Kashmir people had kept warm clothes in cupboards and now with the onset of rain and snow at the fag end of the winter season have been forced to open their trunks and cupboards to pick up warmers and are now again wearing warm and woolen clothes, jackets and caps.

Srinagar and other parts of Kashmir valley received a fresh snowfall, bringing down the temperature and disrupting normal life on Thursday. However people especially the farmers are thanking Almighty for showering rains and snow which the people regard as a good omen for crops, pluses, vegetables and grass for the cattle. Thus people got a measure relief that downpour and snow in various parts of Kashmir valley and higher reaches of the Jammu division is continuing and it is a good news for farmers in particular and other people in general.

Rain and snow will ensure sufficient

water for irrigation as well as for drinking. Rains and snow is received with warmth and welcome as people embrace rain and snow and thank God for showering his blessing in the form of rains and snow which is taken as an assurance for good crop in the months to follow.

Inder Daveta - the god of rain is pleased and as such good rainfall is continuing in various places in the whole of Jammu and Kashmir. Wet spell cuts 20% rain deficit in Jammu and Kashmir. The current ongoing wet spell has brought the rain deficit from 80% to 65%. The rain and snow is a big relief and boon for farmers, transporters, hoteliers, travel agents and travel guides and traders all of them will be benefitted baring farmers who will have to wait from planting paddy saplings and its harvesting but definitely the farmers who are the backbone of the rural economy of Jammu and Kashmir will also be benefitted.

There is joy and delight among tourists on the snowfall and they are thronging in large numbers to winter tourist destinations across Kashmir valley and also Badrawah, Patnitop and other winter tourist destinations. Gulmarg, Sonamarg, Yousmarg, Pahalgam, Sinthantop, Bandipora,

Guaz etc. are brimming with tourist footfall due to the current heavy snowfall.

Tourists from different states of India are thronging the winter tourist destinations of Kashmir and are indulging in skating, skiing and other snow adventures. This winter tourist footfall is a means of livelihood to the local people associated with tourism and winter sports.

In fact rain and snow being signs of harsh winter in Kashmir are also the blessing for the people connected with winter tourism and to the farmers, orchardists and agriculturists and all of them welcome rains and snow and the receding of the dry winter spell which is not in the interest of the populace of Jammu and Kashmir.

Pir Panjal range of Jammu division also witnessed heavy snowfall which is taken as the harbinger of fortune in Jammu as well as Kashmir valley. Before the current rainfall and snow scattered a various places of Kashmir, the water level of river Jhelum and other rivers has receded and there are reports that at number of places in Kashmir, springs and streams have dried and it is a shock warning to the people of Kashmir. Now with the incessant rain fall and snow for the last

three days, there is hope among the people of Kashmir who say that rains and snow is the lifeline of the agricultural and rural economy and thank God for the benevolence of showering rains and snow which will ensure good crop in the New Year.

Snow is not confined to Kashmir valley alone, but it is heavily snowing in Baderwah, Kishtwar, Doda etc and thus coldness is intense and March resembles December. MeT has predicted rains and snow for three days including 3rd March. It so good that water reservoirs recharged again especially in Kashmir. Wet spell ended in both the divisions of the JK. Fresh wet spell compensated rainfall deficit by at least 50%.

It also led to the increase in water level of River Jhelum, the life line of Kashmir by and other water bodies by 3-4 feet. Thus rains and snow is not always a bane but is definitely a boon for people of Kashmir and they always pray to God for bringing rain and snow. They say better late than never and it fits appropriately to the current rainfall and snow on the end of the winter season. Surprising there was U turn in weather and rains and snow lashed Kashmir and some districts of Jammu division as well plummeting the mercury.

Mughal Road-Alternate Lifeline to Kashmir

ER RABINDER SHEKHAR

Not many people would know about the Mughal Road. Srinagar-Jammu National Highway, also known as NH44, is often considered to be the only road connecting the cities of Jammu and Srinagar. It is true that it is indeed a better maintained, wider, more travelled upon, and shorter way to travel between the two places but it is definitely not the only one. There actually exists another route that is far more scenic, less crowded, takes you through some internal parts of Kashmir, and has existed for far longer than the regular NH44 highway. Let me draw your attention on an alternate route to reach Kashmir traversing through scenic beauty of nature and YES, I am talking about "Mughal Road". From Sept.05,2021 to April 30, 2023, I was Technical Officer to Chief Engineer Mughal Road Projects and I got an opportunity to study and know about the history and importance of this road. Today I have rendezvous with this most beautiful road of J&K UT.

A route linking Hirapur (modern Hirpora) in the Kashmir Valley with Poonch via the Pir Panjal Pass (Peer Ki Gali) has been used from ancient times. The road originated at the Mughal capital, Agra (in UP). It wound its way through Lahore (now in Pakistan) to Poonch, Rajouri and thence, to Srinagar in the valley. The Poonch segment of a road used to be called the Namak road (Presumably, the 'salt road') till Jehangir (early 17th century) travelled on it and renamed it the Mughal road. During period of Sultans it was extended up to Bhimber. Historian Mohibbul Hussain Writes, it played an important role during this period. King Akbar strengthened the road after conquering Kashmir. This road was also named as "Imperial Road"



Chief Minister Sheikh Mohammad Abdullah took up this project in 1979 and named it "Mughal Road". But soon the project halted due to terrorism. Terrorists has blown Buffliaz Bridge. Actual construction started in 2005 with target dayte of completion in 2007 at an estimated cost of Rs255 crores. The work completed in December 2008 and the road was opened on 12 July 2009 for inspection by state legislators, officials, engineers, and others. It was supposed to be thrown open for light vehicles in October 2010 but the law-and-order situation in Kashmir in 2010 imposed delays. A double-lane road was completed and opened for light vehicles in August 2012. A Mughal Road Car Rally has been held annually since 2010.

There was a major bottleneck in the construction when a conservation trust petitioned in Hon'ble Supreme Court to stop construction citing that the road construction would create disturbance to animals in the Hirpora Wild Life sanctuary particularly "MARKHOR GOAT". Hon'ble court gave conditional permis-

sion for construction of road and thus the work completed with delay.

Today Mughal Road is an alternate route to Kashmir valley and it has reduced the distance for the people of both distt. i.e Rajouri and Poonch. Mughal road is 84.10 km from Baffiaz to Shopian. It passes through scenic places like Buffliaz, Behramgala, Chandimarh, Dugran, Pushana, chatta pani, Mansar, Peer Ki Gali are also linked with it. Sarinastan and Girjan are the famous meadows on this region can be witnessed from this road.

The road is snow bound for 63 kms and out of which 21 kms of length is heavy snow bound and remains closed for almost 04 months. To over the problem and keep the road open through out the year; it is proposed that a tunnel shall be constructed from Chattapani to Zaznar. Until I was TO to Chief Engineer; there were two proposals for construction of tunnel:-

Option 1st: From Elevation 3029 MSL, the proposed length of tunnel is 8.508 Kms with then cost estimates

4124 crores. The tunnel will reduce the road length 13.10 Kms

Option 2nd: From elevation 3080 MSL, the proposed length of tunnel is 7.885 kms and estimated cost of construction 4055 Crores. It reduces the road length 13.72 Kms.

When I was transferred on my elevation to Superintending Engineer, the consultations and deliberations for construction of tunnel were going on and it was also being planned to hand over the road to national High Authorities of India for further widening and maintenance.

The road stretches as:

Station From	Station To	Length
Jammu	Rajouri	151 Km
Rajouri	Bffliaz	31Km
Buffliaz	BehramGala	
BehramGala	Chandimarh	
Chandimarh	Dograj	44.10 Km
	(Dogran)	
Dograj(Dogran)	Pushana	
PushanaChattapani		
Chattapani	Pir Ki Gali	
Pir Ki Gali	Alibad	

Alibad	Zaznar	40.0 Km
Zaznar	Dubjan	
Dubjan	Hirapora	
Hirapora	Shopian	
Shopian	Srinagar	56 Km

Place to halt and adore: Pir ki Gali

Pir ki Gali is an attractive natural place located at 3490 mts above the sea level exactly on the boundary of Poonch and Shopian. Pir marg (meadow) surrounded with snow clad peaks, cool breeze and tribal life satyle starts from pir gali which is known as the crown of 240km log Pir panchal range, the 84.10 km long Mughal road passes through the heart of Pir Panchal via Pir gali which is 44.10 km away from Buffliaz Poonch and 40 km from Shopian with the opening of Mughal road great hustle bustle starts at Pir gali and simultaneously the surrounding natural resort and beautiful valley of seven lakes, Panj tarnimeadow, Girjan Doke, Tata kutti, peak, Chatta pani, Glacier come into lime light which are ideal for scenic and adventure Tourism.

In short, embarking on a road less

travelled is often a gateway to discovering hidden treasures and unravelling the mysteries of the past. The Mughal Road, a historic route connecting Srinagar to Poonch and Rajouri and Jammu, takes the adventurous traveller through breathtaking landscapes and a journey back in time.

The Mughal Road, with its roots firmly embedded in history, presents a remarkable blend of cultural, economic, and strategic importance. As it winds through the Pir Panjal range, it carries with it the echoes of centuries past, inviting both locals and visitors to partake in its storied journey. The road remains an enduring symbol of connectivity, resilience, and the enduring legacy of the Mughal Empire in the picturesque landscapes of Kashmir. In epitomising, Mughal Road is - A Living Testament

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