

ICAR-ATARI, Kanpur

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Awareness Programs Organized through Krishi Vigyan Kendras for 'Viksit Bharat - G RAM G' Scheme



On 3-4 January 2026 KVKs of Uttar Pradesh organized awareness programs for 'Viksit Bharat- G RAM G' scheme. The aim of this program is to inform farmers and the rural community about the Government of India's new 'Viksit Bharat - G RAM G' (Viksit Bharat - Guarantee for Rozgar and Ajivika Mission (Gramin)) scheme and to make them aware of the benefits available under it. There was active participation from farmers, villagers, Gram Pradhans and agricultural scientists across all KVKs in Uttar Pradesh. Under these programs, various activities were organized by all KVKs in the state, including the integration of mission-related information during training sessions, village-level workshops (Goshthis) and dialogues with public representatives and individuals associated with Gram Panchayats. Through these events, villagers were provided with detailed information on employment opportunities and various aspects of rural development.

During the 'Sarpanch Samagam' held at the KVK campuses, Sarpanches, Gram Panchayat members, farmer representatives, and local public representatives participated. On this occasion, speakers emphasized the role of Panchayats in rural development, the necessity of employment generation, and the importance of collective participation.

Additionally, KVK scientists organized village workshops and seminars in selected villages, establishing direct communication with the rural population. Through these programs, people were

told how this mission would prove helpful in providing more days of employment to rural families, increasing income sources, and developing basic infrastructure in villages.

As part of the awareness campaign, widespread publicity was carried out through social media, information materials, pamphlets, posters, and wall writings to ensure that a maximum number of rural people could benefit from it.

KVK scientists and officials stated that the objective of such programs is not just to provide information but to make villagers active partners in becoming self-reliant. The participating villagers also appreciated this initiative, calling it a positive step toward employment and development.

Natural Farming in Focus during Hon'ble UP Agriculture Minister's Visit to ICAR-ATARI, Kanpur



08 Jan. 2026: The Hon'ble Minister for Agriculture, Agricultural Education and Research, Government of Uttar Pradesh, Shri Surya Pratap Shahi ji, visited ICAR-ATARI, Zone-III, Kanpur on 8 January 2026, along with senior officials. Shri Ravindra Kumar, Principal Secretary (Agriculture), Government of Uttar Pradesh; Dr Sanjay Singh, DG UPCAR, Lucknow; Shri K. Vijayendra Pandian, Commissioner, Kanpur and Vice-Chancellor, CSAUA&T, Kanpur; and Dr Raghwendra Singh, Director, ICAR-ATARI, Kanpur, were present during the visit.

The Hon'ble Minister inspected the Natural Farming Demonstration Field at the ICAR-ATARI campus and appreciated the ongoing initiatives on natural farming. He interacted with scientists and

staff of ICAR-ATARI, Kanpur and emphasized the importance of effective dissemination of agricultural research and technologies to farmers for sustainable agricultural development. The Hon'ble Minister expressed satisfaction over the efforts of ICAR-ATARI, Kanpur, in strengthening research-extension linkages and promoting farmer-centric innovations in the state

Meeting with Director Extensions of SAUs in ATARI Kanpur



On January 14, 2026, Dr. N.K. Bajpai, Director Extension of Banda University of Agriculture and Technology (BUAT), Banda visited the ICAR-Agricultural Technology Application Research Institute (ATARI), Zone-III, Kanpur. During the visit, he participated in the meeting with Director, Scientists & Administrative staff of ATARI, Kanpur.

In the meeting, Director Extension BUAT, Banda discussed the progress of ICAR projects across the seven (7) Krishi Vigyan Kendras (KVKs) operated by BUAT, Banda. Detailed discussions were held on various important topics related to agricultural extension and KVKs. Dr. Bajpai engaged in intensive deliberations regarding the role of BUAT's KVKs in the regional agricultural development of Bundelkhand, the current status of technology dissemination, the reach of new technologies to farmers, the effectiveness of training programs, and issues related to the challenges faced by Krishi Vigyan Kendras.

Dr. Raghwendra Singh, Director of ATARI, Kanpur, emphasized the need for better coordination between research and extension through KVKs. He stated that for increasing farmers' income, the

effective ground-level implementation of scientific technologies is essential. At the conclusion of the meeting, emphasis was laid on further strengthening the coordination between the Agricultural University and ATARI, and working jointly to provide maximum benefits to farmers through KVK-based programs.



On January 15, 2026, a review meeting was held at the ICAR-Agricultural Technology Application Research Institute (ATARI), Zone-III, Kanpur. Dr. Ram Batuk Singh, Director Extension, ANDUA&T, Ayodhya, and Dr. R.K. Yadav, Director Extension, CSAUA&T, Kanpur participated in meeting with Dr. Raghwendra Singh, Director of ICAR-ATARI, Kanpur and other officers of ATARI Kanpur. They also participated in the International Kite Day celebrations organized at the institute.

On this occasion, the Extension Directors of both universities, along with Director, ATARI Kanpur and other Scientific, financial & administrative staff of ATARI Kanpur, reviewed the progress of the Krishi Vigyan Kendras (KVKs) and ICAR projects operated by the two universities. The meeting involved deliberations on the required funding across various heads for essential infrastructure at KVKs over the next five years. Discussions also focused on agricultural extension programs, training and awareness initiatives for farmers conducted by KVKs, and programs aimed at increasing farmers' income.

Brainstorming Session on the Promotion of Kalanamak Rice held at ICAR-ATARI, Kanpur



On February 10, 2026, with the objective of further strengthening agricultural research and extension, two eminent agricultural scientists—Dr. Nagendra Kumar Singh, former Director of the National Institute for Plant Biotechnology, New Delhi, and Dr. N.P. Singh, former Director of ICAR-National Institute of Abiotic Stress Management, Baramati visited ICAR-Agricultural Technology Application Research Institute (ATARI), Zone-III, Kanpur. They held discussions with Dr. Raghwendra Singh, Director of ATARI, Kanpur and Dr. Ajay Kumar Singh, Principal Scientist.

On this occasion, Dr. Nagendra Kumar Singh held a special discussion on the possibilities of popularizing advanced gene-based mutant varieties of Kalanamak Rice in Siddharthnagar, Basti, Bahraich, and surrounding districts of Eastern Uttar Pradesh. He stated that Kalanamak rice is renowned for its unique aroma and quality, and farmers' income can be increased through these improved varieties. He emphasized that the active role of Krishi Vigyan Kendras (KVKs) is crucial for this mission.

During the meeting, the Director ATARI, Kanpur, also briefed both scientists on the progress of various projects and agricultural extension activities being carried out through the Krishi Vigyan Kendras.

Concluding the discussion, Dr. Raghwendra Singh, Director ICAR-ATARI, Kanpur, expressed his



gratitude to the visiting scientists, noting that such scientific dialogues provide a new direction to agricultural research and extension.

Discussion on Crop Residue Management Project Held at ICAR-ATARI, Kanpur



On 11 Feb. 2026, a discussion regarding the Crop Residue Management project was held at ICAR-ATARI, Kanpur. Dr. J.P. Mishra, Director of the ICAR-Agricultural Technology Application Research Institute (ATARI), Jodhpur, visited ICAR-ATARI, Kanpur. During his visit, he met with Dr. Raghwendra Singh, Director of ATARI, Kanpur, and Principal Scientist Dr. Ajay Kumar Singh to discuss the Crop Residue Management project. The Crop Residue Management (CRM) Project, operated by the Government of India, is to prevent farmers from burning stubble and to eliminate the air pollution caused by it. He mentioned that by adopting scientific and eco-friendly management of the residues left in the fields after harvesting, the stubble can be made useful within the field itself.



Dr. J.P. Mishra, Director, ATARI, Jodhpur, held detailed discussions with the scientists of ATARI, Kanpur, on various measures such as techniques for incorporating stubble into the soil instead of burning it, possibilities for off-site utilization, management through agricultural machinery, and the use of bio-decomposers to quickly decompose residues into manure. Sharing his experiences of the project's implementation in various states, he emphasized the need to connect farmers with new technologies to provide them with practical and profitable solutions while ensuring environmental conservation.

ICAR Principal Scientist Dr. Sanjeev Panwar Visited KVK Gorakhpur-II to Review KVK Activities, Field Units and Training Programmes



On 18 February 2026, Indian Council of Agricultural Research Principal Scientist Dr. Sanjeev Panwar visited Mahayogi Gorakhnath Krishi Vigyan Kendra, Gorakhpur (KVK Gorakhpur-II).

The visit was conducted under the chairmanship of Dr. R. K. Singh, Senior Scientist & Head of the KVK Gorakhpur-II. Dr. Shashi Kant Yadav, Senior Scientist & Head, Krishi Vigyan Kendra Belipar, Gorakhpur-I, was also present during the programme.

The visiting scientist was received by Dr. Sandeep Prakash Upadhyay (Soil Scientist), Dr. Shweta Singh (Home Scientist), and Mr. Ashish Singh (Farm Manager), who briefed him on the ongoing projects and activities being implemented under the Swachh Bharat initiative. Dr. Panwar was taken on an extensive tour of the KVK farm and its various functional units.

During the visit, he inspected the Value Addition Unit and the Soil Testing Laboratory and provided constructive suggestions for further strengthening these facilities. He also visited the Jaggery Processing Unit, Seed Processing Plant, Pigeonpea (Arhar) Seed Production Plot, Wheat Seed Production Plot, Integrated Farming System Unit, and Vermicompost Unit. Dr. Sanjeev Panwar appreciated the systematic efforts and field-oriented activities being undertaken by the KVK.

He also interacted with trainees participating in a five-day residential training programme on Natural Farming organized by the Department of Agriculture for "Krishi Sakhis," and encouraged them to actively disseminate sustainable agricultural practices at the grassroots level.



Hon'ble Agriculture Minister Shri Shivraj Singh Chouhan's Visit to KVK Ayodhya & Interaction Program with Farmers



On 25 February 2026, the Hon'ble Union Minister of Agriculture and Farmers' Welfare & Rural Development, Shri Shivraj Singh Chouhan *ji* visited Krishi Vigyan Kendra Ayodhya and participated as Chief Guest in a Farmer Interaction Programme organized on this occasion. Guest of Honour Shri Baldev Singh Aulakh *ji*, Hon'ble Minister of State for Agriculture, Uttar Pradesh and other dignitaries, senior officers & public representatives were also present in the program.

The Hon'ble Union Agriculture Minister Shri Shivraj Singh Chouhan *ji* interacted with progressive farmers from different development blocks of the Ayodhya district. Farmers shared their experiences, including intercropping with improved sugarcane varieties, integrated farming systems with goat rearing, vermicompost-based vegetable and crop production, agricultural diversification, and drone-based agricultural services. Hon'ble Minister emphasized the adoption of modern agricultural technologies, drone applications, mechanization, and crop diversification. He stated that farmers' income can be significantly enhanced by adopting scientific practices and innovations. He particularly appreciated the integrated farming model adopted by Mr. Shobharam and the innovative drone initiatives undertaken by "Drone Didi" Ms. Sabina Khatoon. Issues regarding problems of farmers were also discussed. Dr. Raghwendra Singh, Director, ICAR-ATARI, Kanpur and Dr. R.B. Singh, Director (Ext.), ANDUAT Ayodhya were also present.

The programme concluded with plantation of a guava sapling in the KVK campus by the Hon'ble Union Agriculture Minister and other dignitaries.



Third phase of MDP Training Organized at ICAR-ATARI, Kanpur



The third phase of the Management Development Programme (MDP) was organized at ICAR-ATARI, Zone-III, Kanpur, from March 3 to March 7, 2026. This training program was conducted with the objective of capacity building, management enhancement, and effective dissemination of agricultural technology for the newly appointed Heads of five Krishi Vigyan Kendras (KVKs): Dr. Naveen Kumar Singh (KVK Varanasi), Dr. Sandeep Kumar (KVK Bahraich II), Dr. Ashwani Kumar Singh (KVK Barabanki), Dr. Dharendra Pratap Singh (KVK Maharajganj), and Dr. Navneet Kumar Mishra (KVK Amethi).

During this five-day training program, Dr. Raghwendra Singh (Director, ATARI Kanpur), Dr. Ajay Kumar Singh (Principal Scientist), Dr. Seema Yadav (Scientist), and other officials of the institute provided training to the KVK Heads on scientific, administrative, financial, and technical subjects through lectures and presentations.

The program concluded on March 7, 2026. In the valedictory session, Director ATARI addressed the participants and discussed agricultural extension, management, and the dissemination of modern agricultural techniques. On this occasion, the participants also shared their experiences and suggestions gained from the training.



Live Telecast of the 22nd Installment Release of PM-KISAN Nidhi Organized at Krishi Vigyan Kendras

On March 13, 2026, under the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) scheme, the 22nd installment—amounting to over ₹18,000 crore—was directly transferred into the bank accounts of more



than 9.32 crore farmers across the country by the Honorable Prime Minister, Shri Narendra Modi, from Guwahati, Assam. All Krishi Vigyan Kendras (KVKs) in Uttar Pradesh participated in this event through online platforms. The live telecast of the Prime Minister's address was collectively viewed and heard by farmers, public representatives, scientists, students, and other participants present at the KVKs. Extensive participation of PM-KISAN beneficiary farmers was ensured across all Krishi Vigyan Kendras. On this occasion, a thousands of farmers and other stakeholders, attended the programs organized across 88 KVKs in 74 districts of Uttar Pradesh.

During these events, coordinated by ICAR-ATARI Kanpur and organized by the KVKs, farmers were provided with information regarding the PM-KISAN scheme as well as other significant government initiatives. Detailed insights were shared regarding the Digital Agriculture Mission, Natural Farming, the Pulses Mission, and other agriculture-related schemes and new farming technologies. Scientists also briefed farmers on modern agricultural techniques, better resource utilization, and measures to make agriculture more profitable. The primary objective of these programs was to connect farmers with government schemes, new technologies, and institutional resources to enhance their income and make agriculture more empowered and sustainable.

18th Institute Foundation Day' and Workshop on CRM Project organized at ICAR-ATARI, Kanpur



On 19 March 2026, the ICAR-Agricultural Technology Application Research Institute (ATARI), Zone-III, Kanpur celebrated its 18th Foundation Day. On this occasion, a one-day workshop on *"Crop Residue Management: Sustainable Solutions"* was also organized. The programme commenced with the ceremonial lighting of the lamp by the dignitaries and the Director of ATARI, Kanpur.

The Chief Guest, Rajkumari Ratna Singh, Chairperson, Krishi Vigyan Kendra, Pratapgarh, emphasized the need to encourage more rural youth to engage in agricultural enterprises.

The Guest of Honour, Shri K. Vijayendra Pandian, Commissioner of Kanpur and Vice-Chancellor, Chandra Shekhar Azad University of Agriculture and Technology, Kanpur, highlighted that with the growing population, agriculture is expanding and Krishi Vigyan Kendras (KVKs) are playing a crucial role in enhancing farmers' income. He also discussed the increasing use of Artificial Intelligence (AI) in agriculture.

The Guest of Honour, Dr. U.S. Gautam, Former Deputy Director General (Agricultural Extension), ICAR, stressed the need to further develop fruit storage and dairy product preservation systems. He also underlined the growing importance of KVKs and the need for their expansion.

The Guest of Honour, Dr. R.R. Burman, Assistant Director General (Agricultural Extension), ICAR, New Delhi, joined the programme virtually and discussed about upcoming ICAR projects.

On this occasion, other dignitaries including Dr. M.P. Chacharkar, Former Director, DRDO; Dr. Ravi Gopal Singh, International Consultant (Agricultural Research & Development); and Dr. Anjani Kumar Singh, Director, ATARI Patna, also shared their views.

Earlier, in his welcome address, Dr. Raghwendra Singh, Director, ICAR-ATARI, Kanpur, welcomed all the guests and in his address he told that the institute was upgraded from a Zonal Coordination Unit to a Zonal Project Directorate on 19 March 2009. He told that today the institute is celebrating its 18th Foundation Day. He further mentioned that a workshop titled *"Crop Residue Management: Sustainable Solutions"* is also being organized today on this occasion. 23 Krishi Vigyan Kendras from Uttar Pradesh having *Crop Residue Management* (CRM) Project are participating in workshop. The primary objective of CRM project is to prevent stubble burning and reducing pollution. He also elaborated on the achievements of 89 KVKs functioning under ICAR-ATARI, Zone-III, Kanpur in Uttar Pradesh.

On this occasion, publications of ICAR-ATARI, Kanpur were released. Awards were also presented to Krishi Vigyan Kendras, Farmer Producer Organizations (FPOs), and scientists & other staff of the institute.

The programme was anchored by Scientist Dr. Preeti Yadav and the vote of thanks was given by Principal Scientist Dr. Ajay Kumar Singh.



Kisan SARATHI 2.0 Sensitization and Awareness Workshop organized at ICAR-ATARI, Kanpur



24 March 2026: A one-day "Sensitization and Awareness Workshop" on Kisan SARATHI 2.0 for scientists of Krishi Vigyan Kendras was successfully organized at ICAR-ATARI, Zone-III, Kanpur on 24th March 2026, in collaboration with ICAR-Indian Agricultural Statistical Research Institute, New Delhi, aimed at strengthening the capacity of Krishi Vigyan Kendra (KVK) scientists in delivering digital, need-based agricultural advisory services to farmers. Kisan SARATHI, an initiative of the Indian Council of Agricultural Research, serves as a unified digital interface integrating various agricultural advisory services. It enables real-time interaction between farmers and scientists through call centers, mobile applications, and web-based systems, ensuring quick resolution of farmer queries. Kisan SARATHI 2.0 is introduced with extended features such as where apart from registered farmers, other farmers can contact to KVKs and Kisan Call Centres and introduction of Kisan SARANTHI Farmers call mobile application.

More than 100 participants attended the workshop. The programme commenced with the ceremonial lighting of the lamp followed by the national song.

The Chief Guests, Dr. Sanjay Singh, DG, UPCAR, Lucknow highlighted the role of digital agriculture in improving productivity and farmer income.

Guest of Honour Shri Ramesh Kumar Singh, Founder Chairperson, KVK Unnao, shared field-level experiences and stressed the importance of timely expert guidance.

Guest of Honour Dr. Anil Kumar Rai ADG (ICT), ICAR, New Delhi joined the programme through virtual mode and elaborated on the importance of Kisan SARATHI in strengthening digital advisory services. He highlighted its role in providing timely, need-based guidance to farmers using modern ICT tools.

Guest of Honour Dr. R.R. Burman, ADG (Agricultural Extension) from ICAR also attended the workshop virtually and encouraged KVK scientists to develop short video modules on agricultural technologies for wider dissemination. He further emphasized the importance of the text-to-speech calling system in enhancing outreach, especially for farmers with limited access to digital literacy.

Guest of Honour Dr. G.P. Dixit, emphasized the importance of ICT-enabled advisory services in enhancing pulse production. He stressed that timely, location-specific digital advisories can significantly improve productivity, profitability, and decision-making among pulse growers.

Dr. K.K. Chaturvedi, Principal Scientist, ICT unit, ICAR, New Delhi elaborated on the objectives of Kisan SARATHI, stating that the platform connects farmers directly with agricultural experts to provide customized, need-based advisories using the latest mobile and digital technologies. It was informed that under the Kisan SARATHI platform, more than 2.88 crore farmers have been registered across India, out of which approximately 21% are from Uttar Pradesh.

Earlier, in his welcome address, Dr. Raghwendra Singh, Director, ICAR-ATARI, Zone-III, Kanpur, welcomed all the dignitaries. He said that this platform connects farmers directly with agricultural experts, providing need-based advisory through mobile and digital technologies. He also mentioned that over 60 lakhs farmers in Uttar Pradesh through 89 Krishi Vigyan Kendras are connected to this platform.

The major objective of the workshop was to conduct hands-on technical sessions for KVK scientists on the effective use of the Kisan SARATHI platform and its newly added features. These included the three-tier calling system designed to enable direct interaction with farmers, as well as the Event Management System for better programme coordination. During the technical sessions, practical training was provided on Kisan SARATHI login, user management, help desk operations, and advisory dissemination mechanisms. The hands-on sessions were conducted by the Kisan SARATHI team. The technical sessions were coordinated by Dr. Seema Yadav Nodal officer Kisan SARATHI 2.0 from ICAR-ATARI, Zone-III, Kanpur along with the Mr. Sudhir and Mr. Tapish of Kisan SARATHI project team. The second session focused on enabling KVK scientists to undertake content

creation, follow approval mechanisms, and develop location-specific and crop-specific advisories, particularly for pulses. The workshop concluded with an interactive feedback session from participants. Vote of thank was given by Dr. A.K. Singh, PS (Agronomy), ICAR-ATARI, Kanpur.



Quarterly Progress Report (Jan-March, 2026)

S.No.	Activities	Achievements
1.	On- Farm Trials Conducted (Nos.)	55
2.	Frontline Demonstrations Conducted (Nos.)	18650
3.	No. of Farmers and farm women Trained (Nos.)	4902
4.	No. of Extension Personnel Trained (Nos.)	1545
5.	Production of Seeds (in Quintals)	9060.00
6.	Production of Planting materials (in lakh)	15.70
7.	Production of livestock strains and fingerlings (in lakh)	5.06
8.	Soil and water samples tested (in lakh)	0.019
9.	No. of Farmers provided mobile agro-advisory (in lakh)	11.90
10.	No. of Farmers and other stakeholder benefitted through various Extension Activities (in lakh)	1.80

Kharif Advisories

CEREAL CROPS

Direct Seeded Rice



Kharif Paddy var. Pusa 2090: KVK Bijour

DSR is suitable for sandy loam to heavy clay soils, but should be avoided on light textured soils like loamy sands and sands. Choose a well-levelled field (which is best achieved using laser-assisted land levelling) with good drainage and reliable irrigation, as DSR needs precise water control during early growth stages. Select high-yielding, early to medium duration varieties that are resistant to lodging and local pests/diseases. Good choices include Pusa 2090, MTU-7029, Pusa Sugandha 4, Pusa Rice Hybrid 10, NDR- 9930111, Sambha Sub-1 and NDR-9436. DSR can be sown in dry soil followed by light irrigation for germination, or in moist soil after pre-sowing irrigation or rain. Planking after sowing in moist soil conserves moisture and improves establishment. While both methods suit conventional tillage, moist soil sowing is preferred for ZT-DSR due to softer soil.

Plan to sow seeds between mid-May and mid-June, before the monsoon sets in, to take advantage of early rains and reduce weed problems. Sowing with primed seeds in moist soil promotes rapid crop establishment. To prime,

soak seeds in water for 10-12 hours in a gunny bag, then air-dry for 1-2 hours to ensure smooth low through the seed drill. For pre-germination (moist soil sowing), incubate the soaked seeds for an additional 8-12 hours. Seeds should be sown soon after priming or incubation. Avoid sowing pre-germinated seeds in dry soil, as this can reduce emergence.

Treat seeds with fungicides (e.g., Carbendazim 2g/kg seed) to prevent seed-borne diseases. Use a seed rate of 20-30 kg per hectare, depending on the sowing method (drum seeder or broadcasting) and type of grain (ine or coarse grain) at a depth of 2-3 cm in rows spaced 20-25 cm apart to ensure uniform germination and allow easy weed control later.

Apply fertilizers based on soil test results. If a test is not available, use a general dose of 80-120:60:60 kg/ha of N:P:K along with 25 kg/ha of zinc sulphate (33%). Apply all fertilizers except urea at the time of sowing, placing compound fertilizers like DAP or NPK as basal. Apply the remaining nitrogen as urea in 3-4 equal splits, starting 2-3 weeks after sowing and finishing at panicle initiation. Ensure nitrogen is applied just before irrigation.

Immediately after sowing, apply a pre-emergence herbicide such as Pendimethalin (1.0 kg a.i./ ha) within 1-2 days to control early germinating weeds. Monitor weed growth, and if needed, spray a post-emergence herbicide like Bispyribac-sodium (25 g a.i./ha) around 20-25 days after sowing, depending on weed type and density.

Keep the field moist, especially during critical stages like germination, tillering, lowering, and grain filling. Avoid standing water in early growth stages, but ensure timely irrigation. Adopt alternate wetting and drying method to save water. Allow the soil to dry for 2-3 days before irrigating again.

Regularly inspect crops for pest attack, especially stem borer, leaf folder, and brown plant hopper. Use insecticides like Chlorantraniliprole, Flubendiamide, or Imidacloprid as per recommendations when needed. For diseases such as rice blast, sheath blight, and bacterial leaf blight, grow resistant varieties, improve drainage, and spray appropriate fungicides (e.g., Tricyclazole, Propiconazole) in early stages if symptoms appear. Harvest when about 80-85% of the grains on each panicle turn golden yellow. Ensure the grain moisture content is around 20% at the time of harvest to avoid damage during threshing. Dry the harvested paddy to 13-14% moisture to prevent fungal growth in storage.

Puddled transplanted rice

Select suitable rice varieties: Early maturing (110-115 days): Malviya Dhan 2, Pusa 2-21, Pusa 33, Pusa 834, Govind, Saket 4, Narendra 97. Mid-late maturing (120-125 days): NDR 2065, VL Dhan 61, Pusa 169, Pusa 205, Pusa 44, Sarju 52, Pand Dhan 10, Pant Dhan 12. Long duration (more than 130 days): Malviya 36, Narendra 359. Use certified, disease-free seed; seed rate: 30-40 kg/ha; seed treatment with Carbendazim or Trichoderma @ 2 g/kg seed to prevent fungal diseases; for insect protection, treat seed with Imidacloprid @ 5 ml/kg seed.

Nursery area: about 800-1000 m² per hectare of main field, nursery sowing time: mid-May to mid-June. Apply FYM or compost to nursery @ 5-10 t/ha and apply 1 kg urea, 2.5 kg SSP and 0.5 kg MOP as basal for 100 m² nursery. Maintain proper moisture; avoid water stagnation in early stages; use light irrigation and drain excess water during heavy rainfall in nursery.

Transplant 20-25 day-old seedlings during mid-June to early July, preferably in the morning or evening hours, avoiding continuous rain, using 2-3 seedlings per hill with a spacing of 20×15 cm for HYVs and 20×20 cm for hybrids. Maintain 2-3 cm standing water for the first 3-5 days after transplanting, followed by 2-5 cm during tillering and 5 cm during panicle initiation and lowering. Apply the recommended dose of fertilizers, and in case of zinc

deficiency, spray 0.5% zinc sulphate mixed with 2.5% urea solution at 15-day intervals, repeating 2-3 times as needed.

Perform weeding manually or mechanically at 20 and 40-45 days after transplanting; for chemical weed control, apply Bispyribac-sodium @ 25 g a.i./ha at 15-20 days after transplanting. Monitor for pests such as stem borer, leaf folder, gall midge, and grain bugs; apply Cartap hydrochloride 4 G @ 10 kg/ha for stem borer, spray Chlorantraniliprole @ 150 ml/ha for leaf folder and for grain-sucking bugs, apply Acephate 75 SP @ 1 g/liter. Monitor for diseases such as blast, sheath blight, brown spot and false smut, and manage them with appropriate fungicides- spray Tricyclazole @ 0.6 g/liter for blast, Mancozeb @ 2.5 g/liter for brown spot, and Tilt (Propiconazole) @ 1 ml/liter for false smut.

Avoid nitrogen topdressing at lowering/grain-illing stage to reduce disease risk. Harvest when 80-85% grains are golden yellow and hard. Stop irrigation 10-12 days before harvest. Delay in harvesting increases shattering and lodging risk. Thresh soon after harvest and dry grains to 13-14% moisture

Basmati Rice

Cultivation practices for Basmati scented rice differ slightly from general rice, primarily in aspects like nitrogen application, lodging and specific pest/disease management. Basmati, particularly tall and semi-tall varieties, require less nitrogen and prone to lodging. For pest and disease management, basmati rice requires specific strategies for diseases like neck blast and sheath blight. Variety of scented basmati rice: Azad Basmati, Pusa Basmati 1, Pusa Basmati 6, Pusa Basmati 4, Pusa Sugandh-2, Pusa Sugandh-3, Pusa Sugandh-4, Pusa Sugandh-5, Ballabh Basmati 22, Malviya Sugandh 105, Malviya Sugandh 4, Malviya Basmati 1, Pusa Basmati 1509, PRH 10.

Optimum sowing time for DSR is the first fortnight of June. For nursery sowing and transplanting: Pusa Sugandh-4, Pusa Sugandh-5, Ballabh Basmati 22, Malviya Sugandh 105, Malviya Sugandh 4, Malviya Basmati 10, Pusa Basmati 1509: Nursery sowing in 1st fortnight of June; transplanting in 1st fortnight of July. CSR 30 (for pH >8.5 soils), Basmati 370,

Basmati 386: Nursery sowing in 2nd fortnight of June; transplanting in 2nd fortnight of July.

Treat seeds with *Trichoderma harzianum* @ 15 g/kg seed before sowing to prevent foot rot. Dip seedling roots for 6 hours in *T. harzianum* solution (15 g/litre) before transplanting. Transplant 25-30 day-old seedlings (5-6 leaf stage), using 2-3 seedlings per hill at 20×15 cm spacing (33 hills/m²); reduce to 15×15 cm (44 hills/m²) for late planting to avoid yield loss. Prefer green manuring with 45-55 days old dhaincha/sunn hemp or incorporation of summer moong straw. Skip urea application if green manure is used.

Apply fertilizers based on soil test and crop rotation. Avoid phosphorus if already applied in the preceding crop. For Pusa Sugandh-4, Sugandh-5, Ballabh Basmati 22, and Malviya varieties, apply 90 kg urea/ha in two equal splits at 3 and 6 weeks after transplanting. For Pusa Basmati 1509, apply 135 kg urea/ha in three splits at 3, 6, and 9 weeks after sowing (DSR) or in two equal splits after transplanting. Apply urea when fields are non-flooded; irrigate on the third day after application.

Maize



Kharif Hybrid Maize (Var. Pioneer P3396)

Select suitable hybrids and composites like Pioneer P3396, Shaktiman-1, K-41, Azad Uttam, Sharad Mani, Azad Kamal, Chandra Mani, Azad Shankar Makka-1 and Azad Shankar Makka-2 or other recommended varieties based on agro-climatic zones. Use certified, disease free seeds treated with Carbendazim or Captan @ 2 g/kg for fungal protection and Imidacloprid @ 5 ml/kg for insect protection at a seed rate of 20-25 kg/ha.

Adjust sowing time to ensure proper crop establishment before the regular onset of monsoon. Time of sowing from mid-June to early July with spacing of 60 cm×20 cm (approximately 83,000 plants/ha). A population of 60-75 thousand plants per hectare at harvest is required for obtaining the optimum yield.

In irrigated area, it is most desirable to complete the sowings 10-15 days before the onset of the rain. For rain-fed areas, which entirely lack irrigation facilities, it will be desirable to sow the crop as soon as adequate amount of soil moisture has been built up to ensure germination and establishment of proper plant stand. Ensure proper field drainage to prevent water stagnation, especially during germination.

Apply FYM or compost @ 8-10 t/ha during land preparation; also apply 120-135 kg nitrogen, 60 kg phosphorus (P₂O₅) and 40 kg potash (K₂O) per hectare, with full phosphorus, potash, and one-third nitrogen as basal at sowing, followed by top dressing of one-third nitrogen at knee-high stage and the remaining at tasseling, along with 25 kg/ha zinc sulphate if deficiency is suspected.

Perform inter-culture and weeding at 20 and 40 days after sowing to maintain a clean field, and apply pre-emergence herbicide Atrazine @ 1.0-1.5 kg/ha within 2 days of sowing to control broadleaf and grassy weeds effectively.

Monitor for insect-pest (stem borer, shoot fly, fall armyworm, and aphids) and diseases, and follow recommended practices as per need. Maintain soil moisture during critical stages-tasseling, silking, and grain filling; avoid water stress and drain excess water during heavy rainfall.

Harvest when husk turns brown and grains become hard and glossy, dry cobs properly before shelling; reduce grain moisture to 13-14% for safe storage

Bajra

Grow improved long-duration hybrids such as ICMB-155, WCC-75, Narendra-3, Raj 171, Pusa 322, Pusa 23, 86M90 and ICMH-451 based on the length of the growing period and purpose. Sowing should be done from mid-July to mid August. Sow seeds 4 cm deep using the behind-the-plough method, maintaining a row spacing of 50 cm. Use 4 kg/ha

seed rate for all recommended varieties/hybrids. If seeds are not treated, treat 1 kg of seed with 2.5 grams of thiram before sowing to prevent seed-borne diseases. Seeds can be extracted by dipping in a 20% salt solution.

For effective weed management, first weeding 15 days after germination, and the second weeding at 35-40 days. Apply fertilizers based on soil test results. In the absence of soil test data, apply 80-100 kg nitrogen, 40 kg phosphorus (P_2O_5), and 40 kg potassium (K_2O) per hectare for hybrids. For local varieties, apply 40-45 kg nitrogen and 40 kg potassium per hectare. Apply the entire dose of phosphorus and potassium, along with half the

nitrogen, as basal dose at sowing. Apply the remaining half of nitrogen as topdressing at 25-30 days after sowing.



Hyb Bajra Pioneer (86M90)

PULSE CROPS

Arhar (Pigeon Pea)

Well-drained, fertile loam soils are best suited for Arhar cultivation. Waterlogging in the field harms the crop and reduces productivity. Grow improved long-duration varieties such as Bahar, Amar, Narendra-1, Azad, Pusa-9, PDA-11, MA-6, MAL-13, IPA 203 and Narendra Arhar-2, and short-duration varieties like Paras, UPAS-120, Pusa 992, and Type-21 based on the growing period and intended use. Late-maturing varieties (approx. 270 days) should be sown in July, while early-maturing varieties should be sown in irrigated areas by mid-June to allow harvest by the end of November and timely sowing of wheat in early December.

Sowing should be done behind the plough. Maintain a spacing of 50 cm between rows and 20 cm between plants. Use 20 kg seed per hectare for all varieties. Perform thinning 20-25 days after sowing to ensure proper plant spacing and remove excess seedlings. Higher yields are often obtained with ridge sowing.

Treat 1 kg of seed with either a mixture of 2 g Thiram and 1 g Carbendazim, or 4 g Trichoderma + 1 g Carbendazim or Carboxin before sowing. Additionally, inoculate seeds with Rhizobium culture specific to pigeon pea by mixing one packet (sufficient for 10 kg of seed) evenly by hand. Sow treated seed immediately and avoid exposure to

strong sunlight to protect the culture. Use culture especially in fields where pigeon pea is being cultivated after a long interval.

Fertilizer application should be based on soil test results. In the absence of test data, apply 25-30 kg nitrogen (N), 40-50 kg phosphorus (P_2O_5), and 30 kg potassium (K_2O) per hectare as a basal dose at sowing. Use single super phosphate as the phosphorus source to also supply 12% sulphur. All fertilizers should be applied by drilling them 5 cm deep and 5 cm away from the seed in the furrows. Apply 20 kg sulphur per hectare (equivalent to 154 kg gypsum or phospho-gypsum) and 3 kg zinc per hectare (equivalent to 15 kg zinc sulphate heptahydrate or 9 kg zinc sulphate monohydrate) as a basal dose. In case of zinc deficiency in standing crops, spray a solution of 5 kg zinc sulphate and 2.5 kg lime dissolved in 800-1000 litres of water per hectare. For iron deficiency in light-textured soils, foliar application of 0.5% ferrous sulphate ($FeSO_4$) is recommended at 60, 90, and 120 days after sowing.

The first 60 days are critical for Arhar; two mechanical weedings should be done- first at 20-25 days and second at 45-50 days after sowing, before lowering. For effective weed control, apply Pendimethalin @ 0.75-1.0 kg a.i./ha as a pre-emergence spray in 400-600 litres of water to prevent weed seedling emergence for up to 50 days. In fields with persistent weed problems, use

Fluchloralin 50% EC @ 1.0 kg a.i./ ha incorporated into the soil before sowing, or Alachlor 50% EC @ 2.0-2.5 kg a.i./ha in 400-500 litres of water as a pre-emergence spray.



Pigeon pea (Var NA-2) - KVK Ballia

Green gram and Black gram

Green Gram (Moong) Varieties: Shikha, Narendra Mung-1, Narendra Mung-2, T-44, K-851, Sweta, Swati, IPM 02-03, IPM 02-14, IPM 409-4, Virat, SML 668, SML 832, and HUM 16. Black Gram (Urd) Varieties: Vallabh Urd-1, Narendra Urd-1, Narendra Urd-2, T 27, T-77, T-65, T-9, Shekhar-1, Shekhar-2, Shekhar-3, Azad Urd-1, Azad Urd-2, Azad Urd-3, KU-99-21, Pant Urd-19, and Pant Urd-3.

Mung bean and urd bean should be sown with the onset of monsoon, typically from June to July, as both early and late sowings can negatively affect crop performance. Early sowing may lead to maturity during the rainy period, causing losses, while late sowing results in poor crop growth and

higher disease incidence. During the rainy season, both crops are often broadcast using a seed rate of 15 kg/ha, but line sowing is recommended as it provides better canopy management and facilitates intercultural operations.

Maintain row spacing of 30-45 cm depending on the sowing time and variety, with 15 kg/ha seed rate being optimal for effective plant stand and spacing. Before sowing, treat seeds with Agrosan GN or Thiram @ 2.5 g/kg of seed to prevent seed-borne diseases. Inoculate seeds with appropriate Rhizobium culture, especially if urd bean is being cultivated in the field for the first time or after a long gap, to enhance nitrogen fixation. For weed control, one or two hand weeding should be done up to 40 days of sowing depending upon the weed intensity. Weeds can be controlled by the use of Pendimethalin 0.75-1.00 kg a.i./ ha in 400-600 L of water as pre-emergence application.



Greengram (var. Shikha): KVK Bhadoi



Blackgram (var. Shekhar-2) : KVK Kasganj

OILSEED CROPS

Groundnut

Cultivate improved groundnut varieties such as Chitra, Kaushal, Prakash, Ambar, TG 37A, Utkarsh, and Divya, based on the length of the growing season and end-use requirements. Groundnut matures in about 120-130 days and should ideally be sown in the first fortnight of July to ensure harvest by the end of October.

Maintain row spacing of 45-50 cm and plant-to-plant spacing of 15-20 cm. Use 70-75 kg seed/ha for timely sowing, and 90-95 kg/ha for late sowing conditions. Treat seeds before sowing with Thiram @ 2 g and Carbendazim @ 1 g per kg of seed, or Trichoderma @ 4 g + Carboxin @ 1 g per kg. Inoculate seeds with groundnut specific Rhizobium culture 5-6 hours before sowing. Dissolve 50 g jaggery in 0.5 liters of water, mix with 250 g Rhizobium culture, and coat over 10 kg of seed. Dry treated seeds in the shade for 2-3 hours and sowing of seeds should be done in early morning or evening times to protect Rhizobium from heat-induced mortality.

Apply fertilizers based on soil testing; in the absence of test results, apply 20 kg nitrogen, 30 kg phosphorus, 45 kg potash, 250 kg gypsum, and 4 kg borax per hectare. Perform two hoeing-cum-weedings, the first at three weeks after sowing and the second three weeks later, as this helps minimize early weed competition, promotes better aeration, and supports healthy crop growth. For additional control, especially under high weed pressure, apply pre-emergence herbicide imazethapyr @ 100 g/ha in 500-600 liters of water within 3 days of sowing.

Soybean

Cultivate improved soybean varieties such as PK-472, JS-715, PS-564, PK-262, JS-2, JS 935, JS-7244, JS 20-29, Pusa-20, Pusa-16, and PK-416 based on growing season and production goals. The crop matures in about 120-125 days; sow between mid-June and the first fortnight of July. Maintain a row

spacing of 45 cm and plant-to-plant spacing of 3-5 cm; sow seeds 3-4 cm deep. Use 70-75 kg seed/ha under normal conditions and 75-80 kg/ha under late sowing. Ensure a minimum germination of 75-80%.

Sesamum

Grow improved varieties such as Type-4, Type-12, Type-13, Type-78, Shekhar, Pragati, Tarun, GJT 5 and RT-351 depending on crop duration and use. The crop matures in 90-95 days; sow in the last week of June to the second fortnight of July. Maintain a row spacing of 30-45 cm; use 3-4 kg seed/ha. Due to small seed size, mix seeds with sand, ash, or dry light soil for uniform sowing. Treat seed with Thiram @ 2 g and Carbendazim @ 1 g/kg to control seed-borne diseases. Apply fertilizers based on soil test; in the absence of test data, apply 30 kg nitrogen, 20 kg phosphorus, and 20 kg sulphur per hectare. In rocky soils, add 20 kg potash per hectare. Apply half of the nitrogen and full doses of phosphorus, sulphur, and potash as basal at sowing; apply the remaining nitrogen during weeding. Spray 2% urea solution during lowering and pod formation to enhance yield.

Conduct first weeding at 15-20 days and second at 30-35 days after sowing. During weeding, thin the plants to maintain a spacing of 10-12 cm. For chemical weed control, apply Alachlor 50 EC @ 1.25 liters per hectare as pre-emergence. Provide irrigation at the pod development stage if moisture stress occurs when 50-60% of pods have formed.



Sesamum (Var GJT6)-Prayagraj

COMMERCIAL CROPS

Sugarcane

Select suitable varieties based on region and maturity group: Early maturing (CoS 08272, CoS 13231, CoS 17231, CoS 13235, UP 05125, CoSe 98231, CoSe 03234, Co 0118, Co 98014, CoLK 94184, CoLK 14201), mid-late maturing (CoS 08279, CoS12232, CoS 09232, CoS 14233, CoS 15233, CoS 16233, CoSe 08452, CoSe 13452, CoPant 84212, CoPant 97222) and waterlogging conditions (CoS 10239, CoS 08276, UP 9530, CoSe 96436, CoLK 94184).

Use healthy, 3-budded setts from 8-10 months old crop for seed cane and treat setts with Carbendazim (0.1%) before planting. Adopt proper spacing 75 cm to 90 cm between rows. For spring planting, ideal time is February to mid-March; late planting can be done up to May with assured irrigation. The recommended fertilizer dose for sugarcane is 180-200 kg N, 80 kg P₂O₅, and 60 kg KO per hectare. Apply one-third of 2 nitrogen and the full dose of phosphorus and potassium as basal at planting. The remaining two-thirds nitrogen should be applied in two equal splits, first at 45 days after planting and second before the monsoon. Adjust doses based on soil test results for precise nutrient management. According to soil type and rainfall, 4-5 irrigations in the eastern region, 6-7 in the central region, and 7-8 irrigations in the western region of the state and two supplemental irrigations after rainy season.

Weeds can sometimes reduce sugarcane yield by up to 30%, with a more pronounced effect observed in ratoon crops. Perform intercultural operations (hoeings) at 30, 60, and 90 days after planting. For chemical weed control, apply Atrazine @ 2 kg/ha or metribuzine @ 1 kg a.i./ ha immediately after planting, followed by 2,4-D sodium salt @ 2 kg/ha at 60 days after planting.

Carry out earthing-up at 60-90 days to support plants and reduce lodging. Monitor and manage pests- Early shoot borer (dead heart; control with Carbofuran 3G @ 33 kg/ha or Chlorantraniliprole granules), top shoot borer (appears in later stages;

remove infested shoots), termites (apply Chlorpyrifos 20 EC @ 2.5 l/ ha in irrigation water), use light traps and natural predators (Trichogramma) for IPM. Watch for diseases- red rot (rogue and destroy affected clumps, use resistant varieties), smut (remove smutted whips, use sett treatment with fungicide). For ratoon management, cut cane at ground level, irrigate immediately, remove dead clumps and do gap illing, apply 25% higher fertilizer N and irrigate regularly.

VEGETABLE CROPS

Treat seeds with 2 g of Thiram per kg to prevent seed-borne diseases and damping off in the nursery. Sowing of bhendi (Kashi Shrishti) during June-July, and tomato and brinjal in June. Use 18-20 kg/ha seed for bhendi with a spacing of 45x20 cm. For tomato and brinjal nurseries, use 500 g and 650 g seed per hectare, respectively. After transplanting, maintain spacing of 50x50 cm for tomato and 60x60 cm for brinjal.

Apply fertilizers based on soil test; basal application should be done at the time of sowing. For effective weed management, perform hoeing at 30, 60, and 90 days after sowing. To manage sucking pests in summer vegetables like gourd, bitter gourd, and cucumber, spray Imidacloprid 70% WG @ 1.05 g in 15 liters of water. For whitely control in brinjal and tomato, use Thiamethoxam 25% WG @ 6 g in 15 liters of water. In okra, spray Thiamethoxam 25% WG @ 3 g per 15 liters of water for jassid and whitely control. For shoot and fruit borers, spray Carbaryl 50 WP @ 2.5 g/l or Quinalphos @ 2.0 ml/l, or Monocrotophos @ 1.6 ml/l as required. To control jassids, aphids, and whitelies, use Dimethoate @ 2.0 ml/l or Triazophos @ 1.5 ml/Lof water.

In crops like muskmelon and watermelon, mulching with mustard stover helps in conserving soil moisture. Ridge and furrow sowing in cucurbits improves fruit quality, reduces irrigation needs by 35-40 %, and ensures better returns. Onion bulbs, after harvesting, should be dried in the shade for 3 days. The stalk should be trimmed 1.5-2 cm above the bulb to enhance storage life. For kharif season,

use the Agri Found Dark Red variety, which is ready for marketing as green onions by November-December.



Okra (Var Kashi Shrishti) KVK Muzaffarnagar-II

In bottle gourd, select germplasm with prominent bottlenecks and pale green fruits, yielding 25-30 t/ha.



Capsicum (Var Swarna): KVK Hamirpur

FRUIT CROPS

Plant banana in July. If fertilizers haven't been applied in April, use 140 kg Urea, 80 kg DAP, and 80 kg MOP per acre. To address stem burst issues, apply 25 g magnesium sulphate per plant, remove unwanted suckers, and irrigate regularly. For pest control in litchi orchards, spray Thiocloprid @ 0.75 ml or Novalurone @ 1.5 ml per liter of water. To prevent fruit bursting, spray Borax @ 4 g per liter of water. Spray Naphthalene Acetic Acid (NAA) @ 20 ppm at 15-day intervals during April-May to reduce fruit drop, especially when agricultural operations are disturbed.

In mango orchards, intercrop with turmeric to supplement income. Prune dead, criss cross branches to allow sunlight penetration and reduce canopy density. For uniform lowering and fruiting, spray 1% Urea and 0.5% Zinc Sulphate during October-November. Apply 100 g of NPK per one-year-old tree (217 g Urea, 625 g SSP, 167 g MOP), increasing by 100 g each year up to 10 years. For trees older than 10 years, apply 2.17 kg Urea, 6.25 kg SSP, and 1.67 kg MOP per tree. During harvesting, mangoes should be picked with the pedicel intact to avoid bruising and fruit drop. Avoid shaking the branches to reduce losses. Use proper post-harvest handling to maintain fruit quality and market value.

LIVESTOCK

During extreme summer, animals should be protected from heat stress by ensuring wallowing arrangements on farms, especially in rural or small-scale operations. Large commercial dairy farms may use cooling devices like fans, wet curtains, air coolers, or air conditioners. Ensure availability of clean, cool, potable water at all times, and install shaded water troughs in convenient locations in sufficient numbers.

Feed a concentrate mixture with more than 18% digestible protein and 70% energy content, along with palatable, digestible, and laxative green fodder. Increase the proportion of green fodder in the diet and chop long fodders before feeding to enhance intake. Soaking concentrates in equal amounts of water for 20-30 minutes improves nutrient utilization. Supplementation of sodium, potassium, minerals, and vitamins is essential during heat stress, as it helps maintain health and improves milk yield.



Goatery (Jamunapari, Barbari, and Beetal)

During the monsoon season, maintain clean, leak-proof animal sheds to prevent dampness and disease. Rainy-season grasses should be partially sun-dried before feeding to reduce water content and improve digestibility. De-worm livestock at the beginning of the season and repeat as necessary since worm burden increases in moist conditions. Regular spraying of animals for ectoparasite control and cutting of bushes near sheds is recommended. Disinfect sheds frequently and ensure dry, safe feed storage. In goat husbandry (Breeds Jamunapari, Barbari, and Beetal), avoid feeding potentially toxic plants like rhododendrons, and seek immediate veterinary help if ingested. Goats are highly susceptible to internal and external parasites and must be dewormed every 2 to 3 months. Young kids should receive deworming medicine at 7-8 weeks of age. CDT vaccination should also be administered at 7-8 weeks, with a booster after 4 weeks and then annually, to protect against clostridium and tetanus.

In poultry farming (Breed White Leghorn), efforts should be made to integrate poultry produce like eggs and meat with essential commodity supply chains, especially in targeted regions. Public awareness campaigns are needed to dispel myths about poultry product safety and educate consumers about nutritional benefits and production standards. Eggs should be properly cleaned, graded, packed, and labeled with details like date of production, expiry, weight, and nutritional content to boost consumer confidence. Improved transportation practices for live birds, such as using ventilated and temperature-controlled containers, are recommended. Processed chicken meat consumption should be promoted by encouraging hygienic processing, attractive and informative packaging, reliable cold chains, and building trusted brand identities.

Public health campaigns involving healthcare professionals, influencers, and social workers can further enhance consumer trust and poultry product consumption. Before brooding, prepare poultry sheds by spraying insecticide immediately after removing old birds. Remove all portable equipment and leftover feed. Eliminate rodents, wild birds, and thoroughly clean all organic material like manure, litter, feathers, cobwebs, and

dust using hard brushes. Remove weeds and trash from the vicinity, and use lame guns to sanitize wire mesh, crevices, and equipment. Mass vaccination of backyard poultry against diseases such as Newcastle is essential during stress periods like extreme summer.



Poultry (White Leghorn) Unit: KVK Pratapgarh

FISHERIES

During summer, rising water temperatures reduce the dissolved oxygen content in fish ponds, which can stress fish and affect productivity. To manage this, catfish farming is a better option in this season due to its higher tolerance to low oxygen conditions. If irrigation facilities are available, circulate fresh water in the pond regularly to boost oxygen levels. Additionally, manually circulating water by running a boat in the pond can also help aerate the water and maintain a healthy environment for fish. During the monsoon season, water levels in ponds naturally rise, which can lead to over flow and erosion if not managed properly. Deepening the pond before the monsoon increases its water-holding capacity and helps avoid flooding. Strengthen and repair pond dykes in advance to prevent erosion caused by heavy rainfall, and ensure proper slope for effective drainage and control of excess water.

Desalting of ponds is crucial before the onset of the rainy season. Organic matter tends to accumulate at the pond bottom, which, when mixed with excess rainwater, can deteriorate water quality by affecting the growth of beneficial algae and zooplankton.

Regular removal of silt helps maintain a favorable aquatic environment. Rainwater can also reduce dissolved oxygen, causing fish to come to the surface. In such cases, immediately add fresh water or use aeration devices to restore oxygen levels. Continuous monitoring of water parameters, especially pH, is essential during the monsoon, as rain tends to make surface water more acidic. Adequate drainage systems and inflow of fresh water help maintain optimal water quality. To prevent over low, inlet and outlet structures should be in place and well-maintained. These outlets help manage water levels during heavy rainfall and allow complete drainage when required.

A collecting area within the pond is useful for gathering excess water and preventing fish loss during floods.



Fishery unit: KVK Hardoi-II

Other meetings organized by virtual and hybrid mode

05.01.2026	Urgent and important meeting regarding head wise EFC From 2026 -2031
06.01.2026	Formal meeting regarding the Institute Budget is scheduled to be held 06 jan 2026
07.01.2026	Online meeting of Reply of Special CAG Audit Observation-Reg
20.01.2026	Participation in virtual workshop on "Freshwater Aquaculture Technology dissemination in India - Charting the way Ahead" organized by ICAR-CIFA, Bhubaneswar (Odisha)
21.01.2026	KVK Mau SAC Meeting
21.01.2026	Virtual meeting on the issue of expenditure/demand/savings under the chairmanship of DDG (AE). All AAO, AFAO and Director of all ATARIs/CIWA/DKMA organized by section officer
27.01.2026	Meeting to discuss issues related to CFLD and FLD programme implemented by ICAR institutes under NMEO-OS organized by Dept. of Agriculture & Farmer Welfare Ministry of Agriculture & farmer Welfare
03.02.2026	Review meeting on Physical and Financial progress of all ongoing projects, National Programs & schemes
06.02.2026	Virtual Meeting on NICRA review Budget 2025-26
10.02.2026	Virtual seminar on "Staying Safe Online in the age of AI" organized by C-DAC Hyderabad
11.02.2026	Virtual meeting on One Team One Task organized by ICAR-ATARI X Hyderabad
13.02.2026	Participation in the KVKs Impact Acceleration Series - 43 in which KVK, Kalyandurg, Anantapuram-2, Andhra Pradesh organized by ICAR-ATARI Hyderabad
16.02.2026	Virtual meeting National Launch of BHARAT-VISTAAR Hosted by Secretary, DARE & DG, ICAR
19.02.2026	NICRA Review Meeting with KVKs and CRIDA Hyderabad
19.02.2026	Review meeting of CFLD (Oilseed) & Natural Farming Project
19.02.2026	Virtual meeting on NICRA Financial Review Meeting with KVKs and CRIDA Hyderabad
25.02.2026	Discussion on AUC 2023-24 and 2024-25 of CFLD Oilseed project
05.03.2026	Virtual meeting regarding participation and Registration in the upcoming GCWAS Conference
05.03.2026	Virtual meeting on Post Budget Webinar on the Theme "Agriculture and Rural Transformation"
10.03.2026	Online Meeting regarding progress reports 2025-26 of CFLD- Bio fortified varieties
17.03.2026	Online meeting on National mission on natural Farming budget utilization 2025-26-reg.
17.03.2026	13th Institute Management Committee (IMC) Meeting of ICAR-ATARI Kanpur
17.03.2026	Urgent Meeting regarding Budget discussion of Project - CFLD Pulses & MPV (2025-26)
18.03.2026	Virtual Meeting regarding Preparation of Bhumi Suposhan
20.03.2026	Virtual meeting Review of CFLDs on Bio fortified Varieties project organized by ICAR - ATARI Jodhpur
24.03.2026	Virtual meeting with Director ATARIs hosted by DDG (AE)
24.03.2026	Kisan SARATHI 2.0 - One day Sensitization and Awareness Workshop with KVK Scientists
24.03.2026	National mission on Natural Farming budget utilization 2025-26