

**MANAGE, Hyderabad and ICAR – IVRI Collaborative Training Programme on
“Changing Paradigms in Agricultural Extension: New Demands need New Capacities”
Division of Extension Education, ICAR-IVRI, Izatnagar 243122, UP
14-21 March, 2018**



M S Kannadhasan participated in the MANAGE-ICAR-IVRI Collaborative Training Programme on “Changing Paradigms in Agricultural Extension: New Demands need New Capacities”, organized at the Division of Extension Education, ICAR-Indian Veterinary Research Institute, Izatnagar, during 14-21 March, 2018. He shares his experiences here.

CONTEXT

Globally, the pressure on agriculture to enhance food production needs to be intensified given the demands of a rapidly growing human population. In this scenario, new technologies aiming to increase agriculture productivity and profitability are being continuously developed by scientists. Extension functionaries, through their extension and advisory services (EAS), are expected to disseminate such technologies along with relevant technical know-how among the actors in the value chains, viz., farmers, processors, retailers and agripreneurs. Farmers and their rural advisory service providers must learn new skills and find new ways of working together in order to develop types of ‘inclusive business models’ that help link diverse farmers and entrepreneurs to growth markets. This calls for changes in the prevailing agriculture scenario to meet the new demands that can only be met by enhancing the capacities of the extension functionaries. In this context, the MANAGE, Hyderabad and ICAR-IVRI Collaborative Training Programme on “Changing Paradigms in Agricultural Extension: New Demands need New Capacities” was organized by the Division of Extension Education, ICAR-Indian Veterinary Research Institute, Izatnagar during 14-21 March, 2018. The objectives of the training were as follows:

- Orientation on new demands and new capacities, RAS within the Agriculture Innovation System (AIS);
- Role of Extension & Advisory Services (EAS) in promoting agripreneurship, Farmer Producer Organizations, Attracting and Retaining Youth in Agriculture, social media use in agricultural transformation; and
- ICT& Mobile apps for information delivery.



SESSIONS

Inaugural session

The programme started with a welcome address by Dr Mahesh Chander, Head, Division of Extension Education, Joint Director (Acting) of Directorate of Extension Education, IVRI and the Course Director. He elaborated on the intent of training, saying that it was basically to orient extension professionals on the rapidly changing agricultural landscape, and the preparation required to make extension and advisory services relevant to various categories of stakeholders in the agricultural value chain.

In his inaugural address, Dr RK Singh, Director, IVRI, emphasized the need to develop the capacities of extension functionaries to meet the evolving challenges in agriculture and allied sectors. A WhatsApp group was formed comprising all the trainees and trainers as a platform to communicate information on the training schedule and to share field experiences, photos and ideas of the group members.

Session 1: Ice-breaking and expectation setting

Dr Mahesh Chander, Course Director, along with Course Coordinators, Dr R Suman and Dr K Pachaiyappan, conducted an ice-breaking session. It helped to overcome the barriers in learning and communication and resulted in team-building. The succeeding exercise on 'expectation setting' was performed by trainees individually. Appreciably, all the trainees listed what they expected from this programme in the context of their job responsibilities, based on their field experiences.

Session 2: Introduction to the programme

Introduction to 'Changing Paradigms in Agriculture Extension' was presented by Dr Mahesh Chander to orient the group towards the core theme of the programme, which was influenced by the spirit, content and modules of GFRAS' New Extensionist Learning Kit (NELK). He provided background information citing various modules of NELK and the need to develop capacities to meet emerging demands in the agricultural sector and responses needed from Extension and Advisory Services (EAS), along with relevant examples.



Session 3: World is changing, so too must agricultural extension – New Extensionist concept

In this session, Dr Mahesh Chander gave an overview of the prevailing agriculture extension scenario globally. He enlightened the participants on the 'New Extensionist' concept in Extension and Advisory

Services) given the rapidly changing paradigms of agricultural extension. He elaborated on the importance of various modules developed as part of the New Extensionist Learning Kit by Global Forum for Rural Advisory Services (GFRAS), which are meant to develop capacities of extension functionaries (<http://www.g-fras.org/en/knowledge/new-extensionist-learning-kit-nelk.html>). The need and usefulness of pluralistic extension in agriculture was also dealt with by him in this session. He highlighted the role and importance of stakeholder organizations of GFRAS, such as Indian Extension Forum, Agricultural Extension in South Asia and Agricultural Extension in India and their role in strengthening rural advisory services (RAS). He also provided handouts of AESA and GFRAS, including GFRAS Global Good Practices Notes to supplement the learning. This session was path-breaking as the participants came to understand where they stand in reference to global developments in the field of agricultural extension.

Session 4: Documenting farmers' success stories

Short films on progressive dairy farming, KVK activities, farming of medicinal and aromatic plants, and improved sugarcane cultivation by a progressive farmer prepared/produced by KVK, IVRI, Izatnagar, using Android mobile phones and uploaded on YouTube were screened in this session conducted by Dr BP Singh. The session highlighted the significance of realism and simplicity in documenting success stories. At the end of the session, the trainees evaluated the screened short films and gave their remarks and suggestions based on their acquaintanceship with the subjects in the videos. A discussion followed, on the subjects raised by trainees who were supplemented by the course co-coordinator for the purpose of enhancing their understanding and experience with documenting success stories of agripreneurs.

Session 5: Farmer as retailer / exporter: How can extension services help?

An exposure visit to Creation Biotech (Bareilly) was arranged by the organizers to emphasize the importance of extension service in the creation of new enterprises and export-related certifications. Mr Nihal Singh, a successful agripreneur in certified organic farm production and owner of Creation Biotech, provided an opportunity to visit his office, the vermicomposting unit and export-oriented organic products processing unit. He narrated his journey from a humble start to the current growth in his business. He highlighted the importance of getting accurate information from a credible source at the right time for success in agripreneurial enterprises. Dr Mahesh Chander shared his experience with Creation Biotech, including his blog 'Minting Organic Money' which had profiled the [story of Mr Nihal Singh](#).



A rural meet was organized at Kishanpur village, Ramnagar block, Bareilly, involving local farmers, trainees and trainers. The participants were motivated to appreciate the agripreneurial behavior of local farmers who were engaged in certified organic farming, especially in mint, cereals and pulses. For organizing this visit, the social capital of the progressive farmer Mr Nihal Singh was utilized. During the visit, the trainees observed the farming practices followed by the farmers in their fields. In continuation, trainees visited commercial dairy farming to gain first-hand knowledge on the difference between subsistence and commercial dairy farming practices.



Mr Prateek Bajaj of Sehyogi Biotech, Bareilly, also spoke of his metamorphosis from a job-seeker to an entrepreneur by venturing into vermicomposting. He also reiterated the importance of extension and advisory service in transforming the farm into firm, wherein KVK-IVRI had played a crucial role.

Session 6: Switching to organic farming: Expectations from extension services

Mr Anil Sawhney, an engineer-cum-farmer turned entrepreneur, explained the process involved in converting to organic farming, including organic production, processing, certification, and organic product marketing. Based on his experiences and the challenges he had faced, he spoke at length about his expectations from agricultural scientists, and more specifically from extension and advisory services. In his presentation, he talked about the need for nurturing agricultural graduates with appropriate competencies to meet the challenges of present day agriculture. He had no hesitation in saying that EAS often fail to meet the expectations of new generation farmers and agripreneurs. He went on to appreciate the organizers who had thought of addressing the problems of young farmers who need smart extension functionaries who can cater to their needs.

Session 7: Value chain extension – The whats and whys

Mr Mandeep Pujara, Project Director, ATMA, Amritsar (Punjab), made a presentation on 'Value chain extension'. He enlightened the trainees on the growing importance of value chain extension, while saying that it is not good enough just to tell farmers how to increase productivity but they also need to be told what they have to do once they have produced something – signifying the importance of extension services while processing and marketing of produce. He explained the relationship between value chain actors and service providers, highlighting the increasing significance of value chains giving examples of the rice value chain model, online functioning of Tiwana bee farm, and ATMA Kisan hut models popular among farmers in Punjab. This was something most of the trainees had not heard much of, yet they found it very useful.



Session 8: Mobile apps, ICT tools and other techniques in transforming contemporary extension

The role of mobile apps in transforming contemporary extension was discussed by Dr Rupasi Tiwari. She spoke of the methods to be adopted in developing a farming-oriented mobile app, with her practical experience of working on Mobil Apps. The session gave an overview on transition of agriculture extension from traditional to modern that is dominated by e-Extension and m-Extension.

Dr Yashpal Singh, Senior Scientist, IVRI, organized a teleconference-based guest lecture via SKYPE delivered by Dr K Srinivas, Principal Scientist, NAARM, Hyderabad, on agri-business incubation. His lecture gave an overview of agripreneurship and incubation citing examples of incubatees from NAARM. In continuation, Dr Yashpal Singh talked of [PhoneGap](#), an open source development framework for building mobile apps using web technology. The session gave better understanding about Windows Media Player file making, uploading and downloading of farming-oriented videos and website creation.



Session 9: Visit to units offering extension and advisory service at IVRI, Izatnagar

For trainees to acquire first-hand experience, visits to Agriculture Technology Information Centre (ATIC), Krishi Vigyan Kendra (KVK) demonstration farm, and Central Avian Research Institute (CARI) were arranged. Dr Rupasi Tiwari, Principal Scientist and In-charge, ATIC, talked of the on-campus & off-campus extension activities and initiatives undertaken by IVRI to benefit the farming community, and

guided the trainees on how to view the displays and models arranged at the ATIC. The participants also observed the KVK demonstration farm on the IVRI campus as well as the poultry farms maintained at CARI. The visit also helped the trainees to get acquainted with the role played by IVRI in extension and advisory services.



Session 10: Visit to *Krishi Unnati Mela*, New Delhi

A visit to *Krishi Unnati Mela* at IARI, New Delhi, was organized on 17 March 2018, to get exposure on latest technologies, display of technologies in a *Mela*, and to interact with farmers and exhibitors in order to know what stakeholders expect from EAS. Trainees, individually, completed a practical



assignment on documenting their experiences based on their observations of the technologies displayed and technical know-how offered at the *Mela*. On returning from the *Mela*, trainees shared their experiences and impressions drawn from their documentation. The sharing added another dimension to their understanding of the motivation and utility of such *Melas*, that are perceived by both farmers and scientists as a way to make EAS more farmer friendly.

Session 11: Prospects of innovations and patenting inventions

Dr R P Singh, Head, Division of Biological Products, and In-charge, Agri-business Incubation Cell at IVRI, explained the prospects for innovations, inventions and their patenting, while elaborating on the patent filing process. He also highlighted the need for strengthening the innovation ecosystem and incubation facilities via PPP in Universities. He shared his experiences on patent filing of various technologies developed by IVRI. It gave us a comprehensive understanding of patent filing despite its tediousness. The lecture clearly brought out the vital connection that exists between research and technology transfer and technology commercialization.

Session 12: How to form Farmer Producer Organizations

At the start of this session, trainees performed an exercise on listing the constraints faced by farmers in performing various agricultural activities. Using this list of constraints as a source, Mr Kamal Jeet, Executive Director, Kisan Sanchar Pvt. Ltd., Chandigarh, explained the need for FPOs to solve many of the farmers' problems in the present scenario. An FPO has to be formed with the appropriate mandates, procedures, important factors and available institutional support. This lecture was very useful for the participants since information on this is sought by many farmers and we were not much aware of this emerging field. The Course Director, Dr Mahesh Chander, shared his AESA blog on Farmers Producer Organizations and GFRAS Global Good Practices Notes on FPOs, which were excellent reading materials, well appreciated by the trainees.

Session 13: Developing soft skills for attaining professional excellence

Soft skills are necessary for extension functionaries in delivering EAS effectively. Professional excellence is all about attitude, power of positive thinking along with the skills to deliver. It was thoroughly dealt with in this session by Prof P K Chhonkar, NAAS Fellow, ICAR Emeritus Scientist, and Adjunct Professor at IARI, New Delhi. In his motivational lecture, he used an appropriate mix of quotes, interactions, experiences, anecdotes, cartoons and pictures, which enabled the trainees to understand the need for, and role of, soft skills in job performance. Considering the importance of the topic, this session was opened for both faculty and students' participation across the divisions. He made a remarkable effort to make the trainees adept at managing life's many situations.

Valedictory session

Dr R K Singh, Director, IVRI, in his address as the Chief Guest congratulated the trainees, gave away participation certificates, and urged them to direct their efforts towards the well-being of the farming community using the innovative techniques learnt in this training programme. Responding to an invitation for sharing their training experience, two participants spoke of their experiences, appreciated that the training was being made more practice-oriented than just being theoretical lectures and PPT



presentations. They also suggested that the organizers extend the training to include more extension functionaries, and also increase the duration of the training period to 15-20 days. A video presentation comprising visuals taken during the entire training programme was screened by Dr K Pachaiyappan, making the trainees cherish the memories of their training experience. In his training report, Dr Mahesh Chander, Course Director, summarized the whole training programme along with his experiences with the participants during the programme, especially the participants' keen involvement during field visits.

MY IMPRESSIONS

1. The organizing team's management was well planned and organized. The trainees were given utmost care by the organizing team. The information on topics, timing, venue and transport arrangements were promptly updated in the WhatsApp group that was comprised of both the trainees and the organizing team. The entire programme went on very smoothly, which was a learning in itself for us.
2. Together, the 24 participants (including four women) portrayed a balanced group representing ICAR, State Departments of Animal Husbandry, SAUs, SVUs, and NGOs from seven states viz., Uttar Pradesh, Uttarakhand, Jammu & Kashmir, Andhra Pradesh, Manipur, Maharashtra, and Tamil Nadu. They were encouraged to voice their suggestions as well as the ideas that were

ignited in their minds during individual and group exercises. As a trainee, I enjoyed the methods used, which gave me an opportunity to develop core competency in EAS.

3. The organizing team meticulously devoted their time and attention to the organization of guest lectures – from practitioners in the field, to those running agripreneurial ventures and are involved in EAS. These professionals excelled in their content delivery using an appropriate mix of training aids and methods, which must have helped the trainers and trainees to learn more about the specific themes being discussed. They concluded their presentations within the stipulated time; and it made the programme that much more effective and productive.
4. The whole programme went smoothly in the right spirit of training. The topics were influenced by the GFRAS New Extensionist Learning Kit (NELK) modules, such as Role of extension in value chain, Farmer organizational development, Agripreneurship development, Agricultural extension program management, ICT4RAS (Information and Communication Technologies for Rural Advisory Services) including Social Media application for Agricultural information sharing, etc. We really came to understand the current agricultural innovation system and our role as extension professionals in EAS in the rapidly changing rural context. We could have learnt more on these topics if the training period was a little longer, say 15-20 days.
5. We are deeply touched by the ongoing news about farmers and the many troubles they face while marketing their products. The guest lectures delivered by successful entrepreneurs, viz., Mr Nihal Singh, Mr Prateek Bajaj and Mr Anil Sawhney, reinforced the promising opportunities that are available for trading agricultural produce through online electronic portals.
6. Apart from the training sessions, the effort taken with regard to accommodation, logistics, and food made by the course organizers was outstanding. It went a long way towards improving the trainees' varying learning skills. I was also impressed by how diligent logistics planning can coordinate a programme, which has sessions at multiple places without any snag. The arrangements made to meet unforeseen hiccups in power supply and audio-visual aids by the organizing team through sensible contingency planning were appreciated by all the trainees, given their past experiences with similar trainings.
7. The Indian Veterinary Research Institute, the venue of the training programme, covered with a green blanket by its vegetation, made us breathe afresh. We were kept occupied in hours outside the training hours by rambles inside the campus. We shared light moments with our fellow trainees and the organizing team during refreshments and dinner time. Unanimously, we can say, that we will now go on to expect the same from any organizing team in future.
8. I now take the freedom to cite some suggestions that can improve the training programme. We will be greatly thankful to the organizing team, if they conduct such training during months other than March as it is during this time we have piled up commitments pertaining to financial year end. Also, we feel that the duration of the training could be enhanced to 15-20 days so that entire GFRAS-NELK modules are effectively addressed.
9. Also, it is my humble opinion that, since finance is an integral part of agricultural practices, and we are dealing with newer dimensions, focuses shifts, paradigm changes, etc., experts from financial institutions could have been invited to assist/enrich the content of this training with regard to financial management, which in turn could offer participants useful methods for daily application.

10. As a whole, I take this opportunity to record our sincere gratitude to MANAGE and ICAR-IVRI for organizing this training programme, which improved our knowledge and skill on EAS, especially our exposure to GFRAS-NELK. Without a doubt, the programme blended with classroom sessions, exposure and field visits, have definitely nurtured the trainees in the desired direction! We will surely move ahead and use the learned knowledge and skill in providing EAS, and thus contribute to the betterment of the farming community.

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