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From Director’s Desk

Good Agricultural Practices (GAPs) as defined by FAO, are a collection of principles to apply for on-farm production & post-production processes, resulting in safe & healthy food, while taking into account economic, social & environmental sustainability.

GAP starts from production activities such as use of quality seed, seed treatment, adoption of Resource conservation technologies (RCTs) and other sustainable practices. This helps in not only improving the quality of food but also reduces cost of production and increases productivity. In the livestock sector, GAPs involve scientific rearing, maintenance of hygiene and better animal health management etc.

Use of GAPs is important for production of safe food both for the sake of consumers' as well as farmers' health. Due to lack of awareness and knowledge in this area, the quality of food is negatively impacted and it also results in the bad health of those involved in the agricultural production. It is important for both the producers and traders to adopt GAPs to maintain a healthy food supply chain. Capacity building in this area will help in promoting safe practices for growers, minimize negative impact on the environment and create consumer confidence in food quality and safety.
Artificial Intelligence in Agriculture and Allied Sectors

Artificial Intelligence (AI) refers to intelligence exhibited by a computer, robot, or other machine to perform tasks that actually require human intelligence. It includes use of visual perception, speech recognition and other techniques for better decision making. In agriculture and allied sectors, AI helps farmers to get higher yields through automated precise operations using fewer resources. Use of wireless sensors, drones, image recognition techniques, Big Data etc. help to collect precise data, analyze it and take better decisions.

In order to help trainees understand the meaning of Artificial Intelligence (AI) and its relevance in agriculture and allied sectors, an online training was organized from 06-07 Dec., 2021. In all, 74 extension officials from state agriculture and allied depts., Dept. of Cooperation, Markfed, Milkfed and ATMA got registered. Training was focused on various AI applications and their practicalities in today’s agricultural scenario. Discussions about future scope and potential of AI technologies was also part of the training.

Experts from PAU and GADVASU, Ludhiana and CDAC, Kolkata interacted with trainees and explained the latest research developments in this area. During feedback, trainees said that the applications of AI in agri and allied sectors seem promising, however, there are many challenges which need to be addressed before promoting these to the farmers on a wider scale.

Developing Leadership capabilities for improving performance

Leadership is the ability to give vision and direction to others, clearly define goals and to motivate the team to give their best performance. It is important in agricultural extension as the extension officials should know how to build teams and create good leaders not only to achieve their own objectives but also to help farmers to form/sustain their groups. The decisions of an effective extension leader affects the delivery of extension services, farming community and overall agricultural development.

Keeping this in view, PAMETI organized a workshop from 5-7 January for extension officials from state agriculture and allied departments, Dept. of Cooperation, Milkfed, Markfed and ATMA. In all, 58 participants attended the workshop. The main objective was to help the extension officers to raise their self-awareness and equip them with leadership skills in their respective operational area.

Dr HS Dhaliwal, Director, PAMETI, during inaugural session discussed the need of leadership skills in today’s extension scenario. He stated that leaders are not born, these skills can be developed with training. Dr Sandhya Mehta, Professor (HR), GNIMT, Ludhiana took a practical session on Psychological testing for helping trainees understand their self for becoming effective leaders. The participants were also enlightened by various experts on different topics including effectively connecting to people, delegation, leadership drills and emotional intelligence etc. The programme was highly appreciated by all the participants.
Developing Contingency Plan for Risk Management

Agriculture is influenced by a variety of factors, ranging from climate variability, frequent natural disasters, uncertainties in yields and prices etc. These risks not only endanger the farmers’ livelihood but also undermine the viability of the agriculture sector. Contingency plan help farmers to come up with options to minimize his risk and recover from a critical situation to resume normal operations.

Keeping this objective in view, a webinar was held on 14th March, in which 89 extension officials from state agriculture & allied departments got registered. Dr Sathyendra, MANAGE, Hyd. explained various agricultural risks and their effect. Dr Sanjeev Sharma from PAU discussed integrated farming as an option to reduce agricultural risk as it ensures year around income generating activities. Efforts of PAMETI staff to organize such training was well appreciated by the participants.

Promoting Agro biodiversity, PPV&FR and IPR

Agro biodiversity is diversity in flora and fauna that are used directly or indirectly for food and agriculture and it is the foundation of sustainable agricultural development. Developing a common understanding of all the stakeholders about the agro biodiversity conservation is necessary to implement it at the field level.

Therefore, an online training was organized from 18-20 January for the benefit of extension officials from state agriculture and allied depts., Milkfed, Markfed, Dept. of Cooperation and ATMA in which 85 officials got registered. Training included sessions about tree diversity, importance of indigenous livestock breeds, Indigenous Technical Knowledge and Integrated Farming System. Session about the protection of rights of breeders, researchers and farmers with respect to various plant varieties as defined in PPV&FR act and Intellectual Property Rights (IPR) was also part of the programme. Training ended with positive feedback from the participants.

Innovative strategies for improving extension delivery mechanism

Now-a-days, focus of extension is not only on increasing production rather it is more tilted to marketing and other profit-oriented aspects. In order to expose the extension officials towards various innovative extension models an online training was organized from 01-03 Feb. In all, 72 trainees registered in this webinar including extension officials from state agriculture and allied departments, Department of cooperation, Milkfed, Markfed and ATMA.

During the webinar, various faculty members from PAU, KVK, PAMETI and ATMA (Faridkot) discussed concept of Extension Plus, farmer trainers, farming situation based extension, use of ICTs in agri and allied extension etc. S Amandeep Singh, progressive farmer from Ropar, shared his experiences about his innovative marketing ideas. Mr. Rajinder Singh from Agri Clinic, Amritsar explained his extension model for providing trainings to unemployed youth and disseminating agri knowledge to the farmers. Trainees opined that a robust extension system would go a long way in fortifying agricultural scenario in the state.
Other Activities


- Director - PAMETI, Ms Bharti Madan and Ms Rupinder Kaur attended an online meeting under the chairmanship of Hon’ble Financial Commissioner (Agriculture) to review works/projects under RKVY scheme (2021-22) on 7th Feb.

- Ms. Vandana, DD(IT) attended an online training programme on “Climate Change and Smart Agriculture” from 07-11 Feb. organized by MANAGE in collaboration with TNAU, Coimbatore.

Value Addition in Dairy: Fermented and Fortified products

In order to educate the dairy extension officials about latest value addition technologies in dairy sector, an online training was organized from 07-09 Feb., in which 91 extension officials from the Department of Dairy Development, Animal Husbandry, Agriculture, MILKFED and ATMA got registered.

Various experts from College of Dairy Sc. and Technology, GADVASU, Ludhiana interacted with participants during the training. Recent techniques used in starter culture, commercial production of fermented and fortified dairy products were explained to the trainees. Participants were also given knowledge about FSSAI registration & license procedure for commercial quality production of dairy products.

Extension officials interacted well with the scientists and gave their positive feedback about this online training. They said that training was designed meticulously and served their knowledge needs. They further emphasized on the need of periodically conducting such programmes for upgradation of their knowledge.

Sponsored Training Programmes for GADVASU students

PAMETI organized a total of four training programmes under the sponsorship of ICAR- Strengthening and Development of Higher Agricultural Education in India- Sub Component: SC-SP for students of College of Fisheries and College of Animal Biotechnology, GADVASU, Ludhiana.

The objectives of the programme was to help students enhance their skills so that they can grab the professional opportunities and make a better career. The capacity building of students was done to enhance their entrepreneurial skills.

During the programmes, students were given practical knowledge and guidance about creation of enterprises in their related fields. Following programmes were organized during the period from Jan to Feb., 2022:

- Creative Writing (5th Feb, 2022) (23 students).
- Digital Journalism (12th Feb, 2022) (23 students).

These programmes were held through online mode where experienced faculty from MANAGE, PAU, PAMETI and SAUs interacted with the students. Trainings provided a platform to the students to interact with various progressive farmers and blooming entrepreneurs. This helped them to understand the practical challenges being faced by the farmers and young entrepreneurs.

Trainees were also given practical exercises through which they presented their innovative entrepreneurial ideas. The feasibility and practicalities of these ideas were also discussed by the experts. Trainings were appreciated by the students and faculty of GADVASU.
Other Activities

- Ms. Bharti Madan, DD (IT) attended an online training by EEI, Nilokheri on “Application of AI in Agri. & allied Fields” from 7-11 Feb.
- Ms. Vandana attended online training on “Video Production & Dissemination Skills for Agriculture Extension Functionaries” held by MANAGE in collaboration with SAMETI-West Bengal from 15-18 Feb.
- Dr Harmeet Kaur attended 7th online meeting of Academic Committee of EEI, Nilokheri on 21st Feb.
- Ms. Bharti Madan, DD (IT) attended an online training on “MDP for women officers in development sectors” organized by MANAGE from 21-25 Feb.

Commercial Dairy Farming

In order to train the members of FPOs in dairy sector about various aspects of Commercial Dairy Farming, a total of three training programmes were organized by PAMETI in the month of March, 2022. These one day training programmes were attended by FPO members from Hoshiarpur (15), Gurdaspur (20) & Ferozepur (16).

During the training, the technologies related to Clean Milk Production were discussed with the trainees by Dr. RS Sahota, Director Extension (Retd.), GADVASU, Ludhiana. Trainees sought clarifications on the topic presented and Dr Sahota answered their queries. Discussion on Breed improvement through artificial insemination, exposure visit to dairy farm, GADVASU and practical session on Hay and Silage making were also part of the training programme.

Participants interacted well with the experts and gave their positive feedback about this training programme. They emphasized that more such practical trainings should be organized in future for other FPOs in the state.

Extension Strategies for Linking Farmers to Markets

(in collaboration with MANAGE, Hyderabad)

PAMETI, in collaboration with National Institute of Agricultural Extension Management (MANAGE), Hyderabad organized an online three day training programme on “Extension Strategies for Linking Farmers to Markets” from 15-17 March. The programme was meant for the benefit of extension functionaries from Agriculture and Allied departments, Milkfed, Markfed and Department of Cooperation. Training also included scientists/faculty from SAUs, KVKs, entrepreneur and members of FPOs. In all, 27 trainees participated in the programme.

During the inaugural session, Dr Shalendra Singh, Deputy Director (BS), MANAGE welcomed all the trainees and briefed about the programme. Dr H S Dhaliwal, Director PAMETI said that the programme objective was to sensitize the extension officials about the importance of guiding the farmers to produce according to the customized needs of the consumers. Ms Bharti Madan, DD(IT), PAMETI thanked MANAGE for sponsoring the programme.

During the programme, emphasis was given on advising the farmers about what, when, where & how to produce and sell. Different innovative strategies and approaches for marketing of agri produce and value added products were discussed in detail during the programme. Different experts in the field of agricultural economics and marketing discussed Market Led Extension, Contract Farming, Supply Chain Management, Use of IT in agricultural marketing, Forward & Future markets etc. Practical aspects of grading, packaging, labelling & branding of agri-based products and different successful models adopted by entrepreneurs for marketing of their agri produce were shared among the participants.

The programme concluded with feedback from participants who laid stress on need of minimizing the length of marketing chain so that farmers may come close to the consumer, can assess their demands, produce accordingly and hence may gain more profits.
**Other Activities**

- Ms. Vandana attended online trg. on “Application of ICT and Agri. Dev.” held by MANAGE & RLBCAU, Jhansi, UP from 09-10 March.

- Dr Harmeet Kaur attended an online training on “Electronic Platforms Facilitating Agril. Mktg. in India” held by MANAGE with VANAMATI from 14-16 March.

- Dr Harmeet Kaur took a session on PAMETI for students from College of Community Sc., PAU on 24th March.

- Dr Harmeet Kaur took a session on PAMETI for students from College of Community Sc., PAU on 24th March.

- Director PAMETI attended inauguration of DAESI batch at Barnala on 24th March.

- Ms. Bharti Madan, took a session during trg. on “Social Media Skills for extension officers of Dept of Agri.” held by MANAGE & PJTSAU, Hyd. on 25th March.

- Dr Harmeet Kaur attended online National webinar on Agri-Institution building: Challenges & Opportunities for SAMETIs on 29th March.

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**Skill Training of Rural Youth (STRY)**

Skill Training of Rural Youth (STRY) is a flagship scheme of Govt. of India for imparting various skills in agriculture and allied sectors to unemployed rural youth. This will help to create more employment opportunities for them or they may start their own ventures. Candidates with age between 18-34 and with matric qualification, may participate in these trainings. Trainings under this scheme are designed to give more practical exposure to the candidates by including 60% practical session with 40% theoretical concepts.

The training activities are implemented in Punjab through PAMETI at state level and coordinated through identified training institutes at district level. In last quarter of 2021, a total of 25 trainings were organized under this scheme and 375 candidates were trained. These trainings were organized by PAMETI, ATMA Faridkot, Ferozepur and Bathinda.

Rural youth and farm women were trained in specialized skill areas including nursery management, commercial dairy farming, mushroom cultivation etc. Practical sessions were conducted on baking, food preservation, home decoration and textile dyeing during trainings for farm women.

Following were the major skills areas:

- Urban Agriculture
- Horti-preneurship
- Goat Farming
- Dairy Farming

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**Diploma in Agricultural Extension Services for Input Dealers (DAESI)**

National Institute of Agricultural Extension Management (MANAGE), Hyderabad has launched a “One-year Diploma in Agricultural Extension Services for Input Dealers (DAESI) Program” under Centrally Sponsored and self-financed mode in every state through SAMETIs. The main objective of this diploma programme is to build technical competency of input dealers so they can act as para-extension professionals and can serve farmers better.

PAMETI inaugurated seven (7) batches of DAESI programme during 2021-22.

- First batch at PAMETI was inaugurated by Dr NS Malhi, Former Director Extension, PAU and Former VC- Guru Kashi University, Bathinda on 17th Feb.
- Second batch at PAMETI was inaugurated by Dr Rajbir Brar, Director, ATARI, Ludhiana on 22nd Feb.
- One batch at ATMA, Faridkot was inaugurated by Dr Gurvinder Singh, Director of Agriculture, Punjab on 20th March.
- One batch each at ATMA- Sri Muktsar Sahib, Tarn-taran and Ferozepur was inaugurated on 24th and 25th March.
- One batch at KVK, Barnala was inaugurated by Dr Inderjit Singh, Vice-chancellor, GADVASU on 24th March.

Examination of three last year batches of PAMETI (2) and ATMA, Faridkot (1) were successfully conducted from 21-26 March.
About PAMETI, Punjab

SAMETI in Punjab, known as PAMETI (Punjab Agricultural Management and Extension Training Institute) is working as an autonomous institute located in Punjab Agricultural University, Ludhiana campus to provide extension management trainings to the extension staff. The institute was registered under the Societies act 1860 and started functioning in 2000.

Forthcoming Programmes (Both in Online and Offline Modes)

Online Mode:
- Improving Physical and Mental Health of Extension Personnel
- Advances in ICTs in Agricultural Marketing System (in collaboration with MANAGE, Hyderabad)
- Quality Certification for agri. & allied products
- ICTs in Agricultural Marketing–Blockchain Technologies
- Strengthening Nutrition sensitive Agriculture Capacities of Mid-senior level officers (in collaboration with MANAGE, Hyderabad)
- Promotion of Family Farmer Concept
- Promotion of Bio-fortification for ensuring Nutritional Security (in collaboration with MANAGE, Hyderabad)

Offline Mode:
- Good Agricultural Practices and Certification
- Waste Management Strategies in agri. & allied sectors (in collaboration with EEI, Nilokheri)
- Leadership Skills for Employee Relationship Management
- Women Empowerment through Entrepreneurial Skills
- Micro Processing techniques in Horticulture
- Operationalization of e–governance portals (ERMS, PFMS, e-Office, DBT)

About PAMETI, Punjab