PROCEEDINGS OF IX EXTENSION AND CONTINUING EDUCATION COUNCIL MEETING

The IX Extension and Continuing Education Council meeting was held on Thursday, 29th December, 2016; 11.00 am at University Headquarter, Nagpur under the chairmanship of Hon'ble Vice Chancellor, MAFSU, Nagpur.

Following members were present during the meeting.

1.	Prof. A. K. Misra, Hon'ble Vice Chancellor, MAFSU, Nagpur	Chairman
2.	Dr. N. P. Dakshinkar, DI & Dean (Vet.) MAFSU, Nagpur	Ex-Officio Member
3.	Dr. A. S. Bannalikar, Director of Research, MAFSU, Nagpur	Ex-Officio Member
4.	Dr. R. S. Dalvi, Dean (Fisheries), MAFSU, Nagpur	Ex-Officio Member
5.	Dr. S. P. Changade, Dean (Dairy Technology), MAFSU, Nagpur	Ex-Officio Member
6.	Dr. A. S. Ranade, Associate Dean, KNP COVS, Shirwal	Ex-Officio Member
7.	Dr. A. G. Karpe, Associate Dean, COVAS, Udgir	Ex-Officio Member
8.	Dr. (Mrs.) S. B. Majee, Associate Dean, COVAS, Parbhani	Ex-Officio Member
9.	Dr. M. R. Patil, Associate Dean, CDT, Udgir	Ex-Officio Member
10.	Dr. A. P. Somkuwar, Associate Dean, COFS, Udgir	Ex-Officio Member
11.	Dr. (Mrs.) M. M. Gatne, Associate Dean, BVC, Mumbai	Ex-Officio Member
12.	Dr. V. P. Pathak, Associate Dean, PGIVAS, Akola	Ex-Officio Member
13.	Dr. Randhir Singh, Asst. Director General (Agri. Extension), ICAR, New Delhi	Nominated Member
14.	Dr. A. V. Harikumar, Senior Manager (AH) NDDB, Anand	Nominated Member
15.	Shri. C. Nandanpawar, Dy. Director (Prog.) Doordarshan Kendra, Mumbai	Nominated Member
16.	Dr. Dinesh T. Bhosale, Ex- Chairman, CLFMA of India	Nominated Member
17.	Dr. Ravindra Hari Patil, Entrepreneur in Poultry Breeding, Jalgaon	Nominated Member
18.	Dr. G. S. Rajorhia, Vice President IDA, Karnal	Nominated Member
19.	Dr. P. Sivaswaroop, Regional Director, IGNOU, Nagpur	Nominated Member
20.	Shri. Ashok Mankar, Nagpur, Progressive Dairy Farmer	Nominated Member
21.	Dr. Sharad N. Bharsakale, Shri Krupa Poultry Feed, Nagpur	Nominated Member

- 22. Shri. Sunil Mansinghka, Chief Coordinator Go-Vigyan Anusandhan Co-opted Member Kendra, Deolapar
- 23. Dr. N. N. Zade, Director of Extension, MAFSU, Nagpur Member Secretary

At the outset, Dr. N. N. Zade, Director of Extension and Trainings welcomed all the members of the Extension and Continuing Education Council and felicitated Hon'ble Vice Chancellor, MAFSU and Chairman of the meeting by offering a floral bouquet. Dr. Zade then requested Hon'ble Vice Chancellor to offer introductory remarks. Hon'ble Vice Chancellor welcomed all the members on behalf of MAFSU and requested them to introduce themselves. After the introduction, Hon'ble Chairman gave a brief introduction of various extension activities carried out at MASFU to the house. He elucidated that the University has always cared to the problems faced by the farmers in the state and addressed them on top priority. The University is working in close coordination with Department of Animal Husbandry, Dairy and Fisheries to identify the problems of the farmers. The extension and training programmes of the University are premeditated as per the need of the farmers. Further, the constituent colleges of MAFSU have adopted villages in their respective jurisdictions and the faculty of the colleges is making regular visits to these villages to address the problems faced by livestock farmers in that region. The University has also been actively participating in the Mera Gaon Mera Gaurav programme being implemented by ICAR, New Delhi. The constituent colleges have been conducting regular extension activities like NSS camps, trainings, workshops, health camps, rallies etc. throughout the year.

Hon'ble Chairman told the house that during last year the University conducted a special drive in suicide prone districts of the state to sensitize the farmers about the benefits of the animal husbandry activities that act as buffer during economic crisis consequent to natural vagaries. A total of 1067 villages were covered in the drive throughout the region. The faculty members of respective constituent colleges whole heartedly participated in the drive and provided technical guidance to the farmers with the help of audio video films, one day workshops and short trainings about dairy, fishery, poultry and integrated livestock farming. The University has also organized one day workshop in Agrovision - 2016 on Fishery, Goatery, Clean Milk Production, Poultry farming, Livestock Insurance and Marketing. Apart from these regular extension activities, the University is also implementing projects sanctioned by ICAR under Tribal Sub Plan in tribal areas of the state. Every year the University publishes the calendar with farmer's advisories and compilation of success stories of livestock farmers in the form of 'Yashogatha' to motivate other farmers. The Hon'ble Chairman also announced that at the instance of Hon'ble Chancellor and Governor of Maharashtra, the University intend to start six months' certificate training course of 'Gau Sevak' for the benefit of rural youths. Finally, the Hon'ble Vice Chancellor requested all the members to give their valuable inputs in shaping the extension activities of MAFSU for the year 2017.

After the introductory remarks, Dr. N. N. Zade requested the Chairman to release quarterly newsletter of University, 'MAFSU VARTA'. The newsletter was released by the dignitaries. After this the regular agenda of the meeting was taken up.

SUBJECT NO. 9/1: Confirmation of minutes of the VIII meeting of Extension and Continuing Education Council held on 29th December, 2015.

Dr. Zade informed the house that the minutes of the VIII meeting of Extension and Continuing Education were circulated to all the members and no suggestion and correction have been received from the members. The house then unanimously confirmed the minutes of the last Extension and Continuing Education Council Meeting and passed following resolution.

RESOLUTION NO. 9/1: Extension and Continuing Education Council unanimously confirms the minutes of the VIII meeting of the Extension and Continuing Education Council held on 29th December, 2015.

SUBJECT NO. 9/2: Compliance of the decisions taken in the VIII meeting of Extension and Continuing Education Council meeting held on 29th December, 2015

As directed by Director of Extension and Training, Dr. Sariput Landge Technical Officer to Director of Extension presented the review of extension activities of MAFSU and action taken report on the recommendations of the VIII Extension and Continuing Education Council meeting held on 29th December, 2015.

Brief review of extension activities undertaken during the year 2016

- **1. On farm Demonstrations:** A total of 367 on farm demonstrations were conducted by the faculty of the constituent colleges of the University.
- 2. Farmer's trainings: In all 133 trainings for farmers were conducted in the year 2016 while 108 technical trainings were organized for the Livestock Development Officers and other functionaries from the state department of Animal Husbandry. 12 trainings were sponsored by ATMA during the same year. For a total of 935 times the faculty members guided the participants in trainings organized by various developmental organizations and NGOs.
- 3. Animal Health camps: Sixty five animal health camps were organized across the state.
- **4. Extension publication:** The faculty of the colleges published 208 extension articles in reputed journals and leading newspapers.
- **5. Participation in Media:** Under Farm School on AIR a special series of 11 episodes were conducted by the University with the AIR, Nagpur on Goat Production for the farming community. Total 94 faculty members participated in various animal husbandry related radio programmes while 26 faculty members participated in the television programmes.

- **6. Livestock rallies and workshop:** The constituent colleges participated in 13 events while 40 programmes like rallies and workshops were organized at various colleges of the University.
- **7. Participation in the Exhibitions:** The University participated in 25 exhibitions across the state while 9 exhibitions were organized for various events in the University including the seminars, workshops and student's exhibitions under their study circles and experiential learning components. Total 96 audio visual exhibits were developed for display during the various events.
- **8. Farmer's Visits:** More than 7712 farmers and entrepreneurs visited various facilities like the livestock farms, colleges and experimental units in the University and about 9273 farmer's enquiries were answered by the experts from the various constituent colleges of the University including the University headquarters.
- **9. Farmer's Scientists meet:** The faculty members of the University guided in 411 farmer's scientists meets apart from the 115 farm and home visits and 35 institutional visits across the state including 8 extension related surveys on various important field issues and problems.
- **10. Visits to the Adopted Villages:** A total of 134 visits were conducted in the adopted villages of the colleges for implementing various developmental activities while 8 field visits were organized for the farmers through ATMA and 3 by the colleges.
- **11. Revenue Generation:** A total of Rs. 39,00,518/- were generated through organization of trainings and various extension based programmes for the farming community.
- **12. Publication of Farmer's Advisories:** MAFSU published "Advisory for farmers" as a regular monthly feature in Marathi daily Newspaper Agrowon. These advisories were also broadcasted through All India Radio and Nagpur Doordarshan.
- **13. Farmer's Awareness Campaigns:** MAFSU has initiated a campaign for farmer's awareness in the suicide affected areas of Marathwada and Vidarbha region of the State. The programme was initiated on 15th August 2015 with an aim of covering 1000 villages across the Vidarbha and Marathwada region of the State. A total of 1064 villages were covered till 15th August 2016.
- **14. Toll Free Number:** MAFSU's Toll Free Number **1800-233-3268** is operational at the Directorate of Extension and Training where the faculty of Nagpur Veterinary College and Directorate of Extension and Training have answered 1726 farmer's queries.
- 15. Collection and development of data base for dissemination of advisories.

Dr. Landge informed the house that a total of 4908 farmers data was collected by the colleges and the same is being used for dissemination of advisories on different Animal Husbandry and fisheries related activities. During the discussions on action taken report Hon'ble Chairman pointed out that the collection of data base of farmers is going very slow and expressed disappointment over the sluggish progress and insufficient collection of data about farmers and asked the colleges to accelerate the process and collect the data base of farmers including those visiting TVCC for treatment of their animals.

(Action: All Associate Deans)

16. Conducting scientific trials on the Hydroponic Fodder production technology with various crops.

Department of Animal Nutrition, NVC, Nagpur is conducting a research trial of 90 days entitled "Effect of replacement of concentrate mixture by maize hydroponics fodder on performance of goats". Further the chemical analysis of maize and wheat hydroponics green fodder was carried out from 1st to 10th day of growth.

The Hon'ble Vice Chancellor also informed the house about the MoU signed between MAFSU and Ayurvet regarding Hydroponic fodder production and the facilities installed by Ayurvet at Cattle Breeding Farm of Nagpur Veterinary College, Nagpur. The Hon'ble Vice Chancellor also directed Dr. N. N. Zade to speed up the process to complete the publication of Yashogatha and making their short documentaries for use in the exhibitions and other extension activities and also send the copies to ICAR, New Delhi at the earliest.

(Action: Director of Extension and Training, MAFSU, Nagpur)

17. Enhancing the farmer's interaction with the faculty and to increase the field visits of the faculty.

To enhance the farmer's interaction with the faculty and to increase the field visits of the faculty the initiatives like adopted village and Mera Goan Mera Gaurav are being implemented by the constituent colleges. Bombay veterinary College and Post Graduate Institute of Veterinary And Animal Sciences have identified 5 villages each for the same. Further it was decided to have a minimum of two visits of faculty for such farmers scientist interactions.

(Action: All Associate Deans, Director of Extension & Trainings, MAFSU)

18. Documentaries of success stories of the farmers for showing them in the exhibitions and training.

The preparation of success stories in the form of documentaries were to be prepared from the success stories of the progressive farmers by the Directorate of Extension and Training. Since the recording of the short stories were not of good quality and hence Hon'ble Vice-Chancellor instructed to prepare good quality short films in the coming year. Two short stories of the progressive farmers were broadcasted through television programmes on Doordarshan Nagpur and Mumbai. College of Veterinary and Animal Sciences, Udgir prepared 10 such short documentaries for use in the extension activities. College of Veterinary and Animal Sciences, Parbhani has also developed short success stories on dairy, goat and fodder production. Krantisinh Nana Patil College of veterinary Sciences have also prepared a short documentary on hydroponics fodder production. Hon'ble Vice-Chancellor

instructed to prepare good quality short films in the coming year so that the same can be used during exhibitions and other extension activities.

19. Wearing aprons while performing animal related activities like treatment, health camps, pregnancy diagnosis and surgeries etc.

Instructions were passed on to all colleges and the same are complied.

20. Formation of Shetkari Shastradnya Manch at college level on the lines of Agriculture Universities and evolve more personalized ways for interacting with the farmers and providing them need based technical services especially in drought affected areas.

Under the Shetkari Shastradnya Manch the Nagpur Veterinary College has established a "Poultry Farmer's Club" and "Goat Farmer's Club" along with the creation of a separate website as nvclivestockfarmersclub.com. The College of Veterinary and Animal Sciences, Parbhani have initiated "Shetkari Scientist Manch" and it will be functional with the activity plans in the coming year. At PGIVAS, Akola two 'Shetkari Shastradnya Manch' were formed for goat owners and poultry owners. Similarly, Krantisinh Nana Patil College of Veterinary Sciences, Shirwal, College of Dairy technology, Udgir and College of Fishery Science, Udgir have also established Shetkari Shastradnya Manch.

Hon'ble Vice Chancellor instructed to call the Shetkari Shastradnya Manch as "Farmers - Scientist Forum" and connect the same with the functioning of adopted villages and the villages being covered under Mera Goan Mera Gaurav. All the colleges should have such Manch.

21. To provide technical services to various agencies and participate in the exhibitions conducted by private parties on chargeable basis.

The colleges are providing technical services including feed analysis reports, postmortem report, blood and feacal sample reports, etc. on charge basis. The constituent colleges are also providing services to Goshalas, NGOs, farmers and entrepreneurs including the facilities for researchers from other institutes.

Hon'ble Vice - Chancellor instructed to increase the participation of faculty members in all the farmers related events and also suggested to organize various events for farmers on the college premises.

22. Celebration of different events.

Extension and NSS wings of the colleges are involved in celebration of days like World Rabies day, World Milk day, World Veterinary day, World Zoonoses day, World Women's day and world biodiversity day etc. Apart from this birth and death anniversaries of eminent leaders are also being celebrated in the university and the constituent colleges.

23. Training programme should be chargeable.

As per the approved rates for the various training programs the colleges are taking regular training programs for farmers, unemployed youth and other stakeholders. The areas like goat farming, dairying, fish farming are the sought after domains for the entrepreneurship development training.

24. Trainings of milk processing under MACP.

Training program under MACP was conducted by College of Dairy Technology, Warud. Other training programs were also sponsored by CAIM, Yavatmal, DIC, Buldhana and ATMA, Yavatmal in CDT, Warud.

Similarly, Dairy Technology College, Udgir have also organized eight on farm demonstrations and six workshops/ training programmes supported by ATMA, Yavatmal.

25. Designing of training modules on milk processing on new product development and quality standards and other legal requirement of packaging and marketing.

The faculty of Dairy Technology have developed training module entitled "Quality Production of Khoa" and the same was approved in the 68th Executive Council Meeting for implementation.

26. Stepping up of extension activities of COFS, Nagpur.

The Associate Dean, College of Fishery Sciences, Nagpur provided detailed plan of extension activities for the next year and the same was provided in separate Annexure –III and IV in the agenda notes.

27. Submission of popular articles by the faculty members of COFS, Udgir.

Four popular articles on various aspects like fish farming practices, Biodiversity and Agrotourism were published by the faculty members in various news papers and magazines. In the discussion it was decided to have a minimum of two popular articles by each faculty members in the coming year.

RECOMMENDATIONS ON THE ACTION TAKEN REPORT

Dr. Dinesh Bhosle brought to the notice of the house that technical notes on layer farming were not available with colleges and that needs to be prepared and provided to the farmers for technical help. Hon'ble Vice Chancellor directed all the Associate Deans to prepare technical information on layer and broiler farming in Marathi for the benefit of farmers and keep the information updated regularly.

(Action: All Associate Deans, Director of Extension & Trainings, MAFSU)

Dr. Dakshinkar and Dr. Karpe informed the house that they have already prepared the technical notes on layer farming in Marathi. Dr. Bhosle pointed out that there is an urgent need to promote layer farming as the demand of eggs in Maharashtra is around 4 crores daily and against that we produce only 75 lakhs eggs per day and if we could publish the technical information in Marathi it will immensely benefit the farmers. Shri. Sunil Mansighka also requested the University that the technical information on 'Panchgavya' should also be published in Marathi and Hindi language for benefit of farmers and public. Hon'ble Vice Chancellor apprised the house that the University is in the process to design a short course module on Cow and Cow Products for rural youths. Dr. Rajorhia also endorsed the opinion of Dr. Bhosale and suggested that steps should be taken to develop entrepreneurship among rural youths with regards to poultry production for sustainable livelihood.

Dr. Randhir Singh, ADG, ICAR, New Delhi also supported the view of Dr. Rajorhia and informed the house that in Secretary Group meeting at New Delhi deep concerns were expressed regarding alienation of rural youths from agriculture and animal husbandry. Therefore, there is an urgent need to take steps to stop the drifting of youths from agriculture and its allied sectors, for this value addition of livestock products and postharvest technology need to be popularized among with youths. Hon'ble Vice Chancellor intervened and opined that due to lack of remunerative prices to the agriculture produce and animal products the farmers are incurring heavy losses and shifting from agriculture to non agriculture sector and until we give remunerative prices this drifting cannot be stopped.

Dr. Randhir Singh opined that markets throughout the country should be linked so that the farmers can sell their produce at any place and this would give them bigger markets and opportunities. Dr. Rajorhia supported the view and told that value addition of the animal products is the need of the hour to fetch good prices. Another animal husbandry activity that did not get it due attention is goat farming said Dr. Rajorhia. He informed that Agha Khan Foundation has been preparing Feta Cheese from goat milk and earning handsome profit, 9 kg of feta cheese can be produced from 100 lit of goat milk and it fetches the price of Rs.1000/- per kg. Goat milk has great medicinal value hence, value addition of goat milk is the need of the hour. All the SAUs should promote animal husbandry activities as a form of business and develop innovative ideas. Dr. D. T. Bhosale pointed out that traditional farming practices are no more profitable in present scenario and innovative ideas need to be developed with scientific thinking to make animal husbandry activities more profitable. The banks are ready to finance such innovative ideas. Dr. Zade informed the house that the University has signed a MoU with Skill India in this regard and trying to develop innovative ideas with regards to product development and development of marketing skills.

(All Associate Dean, Director of Extension & Training, MAFSU)

Dr. D. T. Bhosale congratulated the faculty members for regular publication of extension and popular articles in 'Agrowon' newspaper. Dr. Randhir Singh emphasized over the need to quantify the impact of such publications on the public. Dr. Rajorhia also praised the efforts of MAFSU taken up for upgradation of TVCCs of colleges. Dr. Randhir Singh pointed out that the TVCCs are based in the heart of the city and only pets are being benefitted with such facilities. Hon'ble Vice Chancellor informed the house that the University has purchased six state of the art large animal ambulances for all the veterinary colleges and theses ambulances are providing services at no profit no loss basis to the farmers and the benefits of TVCCs are now reaching up to the far away rural areas as the farmers are able to bring sick large animals to the TVCCs at nominal costs.

The house expressed satisfaction on the action taken report and unanimously approved the same with few recommendations.

RESOLUTION NO. 9/2: The Extension and Continuing Education Council unanimously approves the actions taken with few recommendations.

SUBJECT NO. 9/3: Regular extension activities to be undertaken during the calendar year 2017.

As directed by Director of Extension and Training, Dr. Sariput Landge, Technical Officer, Director of Extension and Training presented the proposed extension activities of MAFSU to be under taken during the calendar year of 2017 for discussion (**Annexure** – **I**). The house approved the proposed extension activities of MAFSU to be undertaken during calendar year 2017.

RESOLUTION NO. 9/3: The Extension and Continuing Education Council unanimously approves the proposed extension activities of MAFSU to be undertaken during the calendar year 2017 (Annexure – I).

SUBJECT NO. 9/4: Training programmes to be conducted for farmers and field veterinarians.

As directed by DET, Dr. Sariput Landge presented the department wise details of the training programmes for farmers, field veterinarians, veterinary practitioners, fish farmers, women self-help groups, unemployed youths and entrepreneurs etc. that are to be conducted by all the constituent colleges of MAFSU (**Annexure – II**). After brief discussions, the house unanimously approved the training programmes that are to be conducted by all the constituent colleges of MAFSU during the calendar year 2017.

RESOLUTION NO. 9/4: The Extension and Continuing Education Council unanimously approves the training programmes to be conducted by constituent colleges of MAFSU during the calendar year 2017 (Annexure – II).

SUBJECT NO. 9/5: Strengthening of extension education programmes

Dr. Sariput Landge presented the details of the farmer's awareness programmes initiated in the suicide prone districts of the Marathwada and Vidarbha region of Maharashtra. Dr. Zade requested the house for suggestions and input to further strengthen these programmes.

The house appreciated the efforts taken by MAFSU in suicide prone districts of Maharashtra. During the discussions, Hon'ble Vice Chancellor directed Dr. Dakshinkar to measure the impact of outreach programme of MAFSU taken up to sensitize the farmers about the animal husbandry activities in the suicide prone villages of Maharashtra. The house agreed to the suggestion of Hon'ble Chairman.

RESOLUTION NO. 9/5: The Extension and Continuing Education Council appreciates the efforts taken by MAFSU to sensitize the farmers in the suicide prone districts and direct the University to measure the impact of the extension programmes taken by MAFSU in the suicide prone districts of Maharashtra.

(Action: Director of Instruction and Dean (Vet) and Director of Extension and Training,

MAFSU)

SUBJECT NO. 9/6: Review of the extension activities conducted by the constituent colleges during the year 2015-16.

Dr. Zade requested the concerned Associate Deans to present the report of extension activities undertaken by all the constituent colleges in their respective regions.

1. NAGPUR VETERINARY COLLEGE, NAGPUR

The report of various extension activities under taken by Nagpur Veterinary College, Nagpur was presented by Dr. N. P. Dakshinkar, Associate Dean of the college. After brief introduction of the college Dr. Dakshinkar presented action taken report on the recommendations of the VIII Extension and Continuing Education Council meeting. He informed house that the data have been generated about the livestock farmers visiting the college. He further informed house that the training programme on Applied Clinical Pharmacology for Field Veterinarians will be conducted in the year 2017 after approval of the Training Module in Board of Studies Meeting. The college has conducted scientific trials on the Hydroponics Fodder Production Technology. The chemical analysis of maize and wheat hydroponics green fodder has been carried out from 1st to 10th day of growth in the

Department of Animal Nutrition. Further Department of Animal Nutrition is conducting research trial of 90 days entitled "Effect of replacement of concentrate mixture by maize hydroponics fodder on performance of goats". The draft of success stories of the livestock farmers has been submitted to Directorate of Extension and Training, MAFSU for inclusion in Yashogatha, informed Dr. Dakshinkar.

About the formation of 'Shetkari Shastradnya Manch' at college level on the lines of Agriculture Universities, Dr. Dakshinkar told the house that The Nagpur Veterinary College has initiated these activities with the formation of "Poultry Farmer's Club" and "Goat Farmer's Club" for interacting with the farmers and providing them need based technical services. The college has launched a website nvclivestockfarmersclub.com for dissemination of information to livestock farmers. In his action taken report Dr. Dakshinkar informed the house that the college is providing services to Goshalas, NGOs, Researchers of various other Institutes, needy farmers and entrepreneurs. The college staff also participates in the various camps and exhibitions organized by the state departments and other agencies. The college regularly provides various technical services including feed analysis reports, diagnostic post-mortem report, blood and faecal sample reports, etc. to various agencies and farmers.

After the action taken report Dr. Dakshinkar presented the report of various extension activities *viz*. on farm demonstrations, farmer's trainings, lectures in trainings organized by other agencies, health camps, publication of extension articles, participation in radio and television talks, participation and organization of exhibitions development of audio visual aids for farmers and celebrations of various events etc. Dr. Dakshinkar also presented the activities being undertaken by college in adopted village. The college has also actively participated in the MAFSU Farmer's Awareness campaign and covered 97 villages of different districts of Vidarbha region. Apart from the report of previous extension activities Dr. Dakshinkar also presented proposed extension activities of the college for the calendar year 2017.

During the discussions, Dr. Bhosale stressed over the need to conduct scientific trials on hydroponic fodder production technique. Dr. Harikumar pointed out the occurrence of aflatoxicosis in hydroponic fodder which come from the poor-quality seeds. Dr. Dakshinkar informed that the college has also faced the same problem but it has been controlled. Hon'ble Vice Chancellor sought scientific data on hydroponic fodder quality and its economics and told the house that the University is trying to generate it. Dr. Bhosale told that the hydroponic fodder production technique was found to be more expensive and is only beneficial under drought conditions. Dr. Rajorhia intervened and explained that the technique is economical only when it is done traditionally with low cost bamboo structures. However, there is an urgent need to generate scientific information on presence of HCN in hydroponic fodder.

(Action: All Associate Deans)

Dr. Bholsale urged the University to focus on commercial goat farming since it is the need of the hour to develop goat farming on scientific lines for sustainable livelihood of the poor farmers. Dr. Bhosale also requested the University to publish technical information about 'Kadaknath' poultry breed in local language for information of farmers and public. Hon'ble Vice Chancellor directed all Associate Deans to take a note of this and ask the concerned faculty members to publish the information in Agrowon newspaper.

(Action: All Associate Deans)

Dr. Dakshinkar assured to publish the information in Agrowon and told that the leaflets would also be published for distribution in the exhibitions. Dr. Bhosale also requested the University to conduct training programme for LDOs on silage making. Dr. Dakshinkar assured that the college would include this in the proposed extension activities for the calendar year 2017.

(Action: All Associate Deans)

2. COLLEGE OF VETERINARY AND ANIMAL SCIENCES, PARBHANI

Dr. (Mrs.) S. B. Majee, Associate Dean of COVAS, Parbhani presented the review report of various extension activities undertaken by college during the calendar year 2016 *viz.* trainings, onfarm demonstrations, animal health camps, celebration of different days, NSS activities, visits of dignitaries, publications, adopted village and Mera Gaon Mera Gaurav activities, success stories and report on farmer's awareness campaigns etc. Dr. Majee informed that the college has covered 63 villages under famers awareness campaign in suicide prone districts of Marathwada and guided the farmers about urea treatment and fodder enrichment, fodder management under drought conditions, goat rearing, poultry farming, benefits of chaff cutting, azolla production and control of ticks and mites in livestock. Dr. Majee informed that six villages have been selected under Mera Gaon Mara Gavrau scheme and the activities such as baseline survey, animal health camp, plantation, Swachha Bharat Abhiyaan, farmer-scientist meet have been started in these villages. Dr. Majee also presented the success stories of different farmers on fodder production, goat farming, dairy farming and rearing of Karawan dogs. She also informed that a documentary on rearing of Red Kandhari cattle is produced by the college in collaboration with Doordarshan Kendra, Worli and another documentary on cultivation of medicinal plants is in progress.

During discussions Hon'ble Vice Chancellor directed Dr. Majee to share information on layer farming with Dr. Dinesh Bhosale and asked the Associate Deans of all colleges to disseminate the information on DHN fodder cultivation to farmers.

(Action: All Associate Deans)

Dr. Bhosale suggested that an annual get together with trainees should be organized by each college wherein the colleges would get feedback from the trainees and would also get success stories. Hon'ble Vice Chancellor agreed with the suggestion and directed all the Associate Deans to organize annual get together of trainees at their colleges.

(Action: All Associate Deans)

3. COLLEGE OF VETERINARY & ANIMAL SCIENCES, UDGIR

Dr. A. G. Karpe, Associate Dean, COVAS, Udgir presented the review report of extension activities conducted by the college during the calendar year 2016 *viz*. farmer's training on management of livestock in drought, goat farming, Technical refresher courses for Livestock Development Officers and Asst. Commissioners of Animal Husbandry, animal health camps, organization and participation in exhibitions and livestock shows, demonstrations, celebration of events, farmer's visit and visit to animal shelters.

Hon'ble Vice Chancellor asked Dr. Karpe to apprise the house about the animal shelters. Dr. Karpe explained that Udgir district is drought prone area and in summer there is tremendous scarcity of water and to save the animals from drought, animal shelters are erected by the Govt. The college has undertaken various activities in those animal shelters including providing information regarding economical use of feed and fodder, importance of mineral supplementation, use of non-conventional feed stuffs, Azolla production and hydroponic fodder production technique which immensely helped the drought affected farmers. The college has also undertaken various activities in adopted villages viz. animal health camps, farmer's meet and trainings on fodder production which has resulted in improvement in livestock health, and motivated the farmers for fodder cultivation. There was marked improvement in housing and clean milk production, crop residue enrichment and some of the youths from these villages have taken up dairy business after getting technical support from the college. Dr. Karpe also informed the house about the famer's awareness campaign under taken by the college in suicide prone districts, a total of 362 villages have been covered under the campaign in Latur, Nanded, Osmanabad and Beed districts and around 17645 farmers have been benefited by the campaign. Dr. Karpe also informed about the activities undertaken by the college under Mera Gaon Mera Gaurav scheme. Dr. Karpe also presented 10 success stories of different farmers who have been benefited by the technical support provided by the college.

During discussions Dr. Bhosale suggested that the adopted villages should be changed every year to cover more number of villages. Dr. Karpe told that the adopted villages are changed after 4 to

5 years since the impact of efforts taken by colleges in those adopted villages appear only after 3-4 years hence it would not be wise to change the adopted villages every year. Dr. Rajorhia suggested that the farmers should adopt value addition of animal products to be more successful in their ventures and colleges should take efforts to popularize value addition of milk products in farmers.

(Action: All Associate Deans)

4. BOMBAY VETERINARY COLLEGE, MUMBAI

Dr. (Mrs.) Gatne, Associate Dean, BVC, Mumbai presented the report of various extension activities of the college such as trainings, demonstrations, NSS camps, refresher courses, publication of popular articles etc. In her review report Dr. Gatne informed that 498 farmer's data has been generated and college is organizing onfarm demonstrations throughout the year for the farmers at Goregaon farm including urea treatment, silage making, vermicompost, Azolla production, preparation of low cost concentrate mixture. Besides, the college has also conducted demonstration of hygienic retail chicken outlet for butchers, the model chicken outlet has been developed by the college in ICAR funded research project on Post Harvest Technology. The college has conducted various training programmes on value addition of milk products, commercial goat farming and poultry farming for farmers and advance training on reproductive health management for LDOs and ACAH at the college. Dr. Gatne also presented 5 success stories of different farmers involved in animal husbandry activities.

Dr. Gatne informed the house that the college has constituted a committee of 4 senior faculty members for implementation of Mera Gaon Mera Gaurav scheme. The committee has conducted baseline survey and identified 5 villages for the scheme and regular visits of the faculty members would be undertaken to theses villages.

Dr. Randhir Singh enquired Dr. Gatne about the issues that college has identified in the villages for Mera Gaon Mera Gaurav. Dr. Gatne explained that the college has just identified the villages and further visits would reveal the problems faced by those villages. Dr. Singh told that the college should identify issues that are related with veterinary field and develop training and demonstration programmes.

(Action: All Associate Deans)

Dr. Ranade explained that the college is in Mumbai, and being very huge urban area the villages around Mumbai has been industrialized and farmers are engaged in various other commercial activities since agricultural land is shrinking due to very high cost of the land. The college has selected those villages that have shown interest in traditional livestock practices. The college is trying to motivate the youths to venture into animal husbandry activities and slowly the youths are attracted

towards animal husbandry activities including poultry farming, value additions of milk products and hygienic chicken meat production etc. Dr. Randhir Singh suggested that fisheries should be concentrated at Raigarh and in adjoining areas since this is coastal area.

(Action: Associate Dean, BVC, Mumbai, Associate Dean, COFS, Nagpur and Udgir)

5. KNP COLLEGE OF VETERINARY SCIENCE, SHIRWAL

Dr. Ajit Ranade, Associate Dean, KNP College of Veterinary Science, Shirwal presented the review report of various extension activities of the college. Dr. Ranade informed the house about trainings of farmers, NGOs, SHGs and unemployed youths, a total of 12 trainings were conducted by the college on different activities of animal husbandry and 429 participants attended the trainings. The college has also organized six refresher courses for livestock development officer and field veterinarians. Apart from these, farmers study tour/exposure visits, school children's exposure visits were also conducted. The college had also participated in exhibitions/livestock shows and organized seminar, workshops for practitioners, animal health camps, on farm demonstrations and rallies for benefit of farmers and public. The college has developed linkages with Department of Animal Husbandry, YASHDA Pune, NABARD, Sakal International Learning Center Pune, Kisan Forum, State Level Training Institute Pune, Bankers, National Institute of Virology Pune, etc. For Mera Gaon Mera Gaurav the college has formed 11 teams comprising 4 member in each team and each team has adopted five villages for providing required information, advisories on regular basis. The work on benchmark survey is going on, informed Dr. Ranade. The house expressed satisfaction over the activities undertaken by the college. Dr. Randhir Singh advised all the Associate Deans to speed up the activities at the villages selected under Mera Gaon Mera Gaurav.

(Action: All Associate Deans)

6. POST GRADUATE INSTITUTE OF VETERINARY AND ANIMAL SCIENCES, AKOLA

Dr. V. P. Pathak, Associate Dean, of PGIVAS, Akola presented the extension review report before the house. Dr. Pathak presented the action taken report on the recommendations of VIII Extension and Continuing Education Council meeting followed by report on various extension activities of the college such as on farm demonstrations, training programmes, farmer's scientist meet, animal health camps, publication of extension and popular articles, participation in radio and TV talks, organization and participation in exhibitions, exposure visits of farmers, organization of technical seminars for field veterinarians, awareness programme on zoonotic diseases, and celebration of various events. Dr. Pathak also presented progress report of the activities with regards to Mera Gaon Mera Gauray.

During the discussions, Dr. Rajorhia enquired from Dr. Pathak about transferable technologies developed by college through Post Graduate Research. Dr. Pathak informed the house that the college has completed research project on formulation of area specific mineral mixture for the whole state of Maharashtra. The recommendations of the project have been accepted by the Govt. of Maharashtra and is being implemented throughout the state, further the college has also generated considerable technical data on the breed characteristics of Berari goats and due to the persistent efforts the Berari goat has been recognized by the NBAGR, Karnal. Dr. Rajorhia suggested that if the college has developed some transferable technologies it should be immediately disseminated to the grass root levels. The college should publish a booklet on the technologies developed by the college. The findings of the post graduate research should be made public for benefit of the farmers.

(Action: Associate Dean, PGIVAS, Akola)

7. COLLEGE OF DAIRY TECHNOLOGY, WARUD

Dr. S. P. Changade, Associate Dean, CDT, Warud presented the review report of the extension activities of the college before the house. Dr. Changade informed the house about involvement of faculty in training programmes, Shetkari Jagrukta Abhiyan conducted in 48 villages, Workshops on Clean Milk Production and Processing, On farm Demonstrations, three days and six days training programmes, radio and TV talks, and extension publications etc. The faculty from the institute visited six villages Moha, Warud, Kakaddati, Loni, Harshi and Shembalpimpri for Mera Gaon Mera Gaurav scheme. Further, identification of more villages under the scheme is in progress. The college has developed audio visual CD of 45 minutes on preparation of six dairy products. Under Shetkari Jagrukta Abhiyan the college has covered 48 villages from Yavatmal and Washim districts. The District Magistrate, Yavatmal appreciated the efforts put up by the college and felicitated the faculty members by awarding 'Sanman Patra'. Dr. Changade also presented two success stories of budding entrepreneurs who have adopted dairy processing.

During the discussions, Dr. Rajorhia appreciated the products developed by the college and suggested that the chocolate and santra burfi developed by college should be disseminated to the milk producers for value addition of their milk products.

(Action: Associate Dean, CDT, Warud)

Dr. Rajorhia also urged the University to focus on rural women empowerment and involve women in training and entrepreneurship development programmes. Self Help Groups of the women should be formed and develop the women on the line of NDRI Karnal for them to become self-sustainable.

(Action: All Associate Deans)

8. COLLEGE OF DAIRY TECHNOLOGY, UDGIR

Dr. M. R. Patil, Associate Dean of CDT, Udgir presented the review report of extension activities of the college such as on farm demonstrations, training programmes/workshops, animal health camps in collaboration with COVAS, Udgir, extension publications, TV radio talks, organization and participation in exhibitions and livestock fairs, celebrations of various events etc.

Dr. Patil informed the house that the college has identified 10 villages under Mera Gaon Mera Gaurav scheme and the faculty members are visiting these villages regularly for providing technical inputs to the farmers and milk producers. Under the farmer awareness campaign the college has covered 104 villages in the suicide prone areas and created awareness among the farmers about various animal husbandry and dairy technology activities.

During the discussions, Dr. Bhosale enquired about the shelf life of paneer. Dr. Patil informed that if the paneer is deep frozen it can have a shelf life of six months. Dr. Rajorhia told that if the paneer is vacuum packed the shelf life can be increased and can be transported for long distance on room temp. therefore, the college should focus on developing packaging technology for various milk products to increase the shelf life and to decrease the cost of transportation.

(Action: Associate Dean, CDT, Warud and Udgir)

During the presentation, Dr. Bhosale pointed out that the quality of photographs is poor and it should be improved. Dr. Randhir Singh advised the Associate Deans to ensure that at least four faculty members should be assigned to one village under Mera Gaon Mera Gaurav scheme.

(Action: All Associate Deans)

9. COLLEG OF FISHERY SCIENCES, NAGPUR

Dr. R. S. Dalvi, Associate Dean of COFS, Nagpur presented the review report of various extension activities including on farm demonstrations, farmers training programs, extension publications, radio programs, rallies, workshop, exhibitions, audio visual display, fish farmer's visits to the college, visits to the adopted villages, extension project and farmer's awareness campaign etc. Dr. Dalvi also presented 3 success stories of fish farmers. The college has covered 119 villages under farmer's awareness campaign and the farmers were advised to take up animal husbandry, dairy, poultry and fisheries activities. The experts also provided technical knowledge on scientific fish culture methods to the farmers.

During the discussion, Dr. Randhir Singh enquired about the availability of fresh water prawn seed. Dr. Dalvi informed that fresh water prawn breed in coastal areas therefore the college could not produce the seed. Hon'ble Vice Chancellor intervened and told that the college of fishery at Ratnagiri

has developed a technology for production of prawn seed and the college should consult them to adopt the technology.

(Action: Associate Dean, COFS, Nagpur and Udgir)

Dr. Zade expressed his utter displeasure over the lack of extension publications from the COFS, Nagpur. Hon'ble Vice Chancellor also expressed his unhappiness over this and directed the Associate Dean to increase the number of extension publications.

(Action: Associate Dean, COFS, Nagpur)

Dr. Singh enquired about the progress of the Mera Gaon Mera Gaurav scheme. Dr. Dalvi explained that the baseline data from all the water bodies in Vidarbha has been collected. Pond culture of Indian Major Carps, prawns etc. would be promoted after identifying the water bodies. Dr. Changade pointed out that the questionnaire of Mera Gaon Mera Gaurav contains information more about agriculture and animal husbandry part is less. Dr. Singh explained that the colleges have to undertake comprehensive development including dairy, fishery, animal husbandry and agriculture under the scheme. Therefore, the colleges should collaborate with concerned departments to carry out the development activities.

(Action: All Associate Dean)

10. COLLEGE OF FISHERY SCIENCES, UDGIR

Dr. A. P. Somkuwar Associate Dean of the college presented the review report of extension activities such as, on farm demonstrations, trainings on value addition of fish products, participation in exhibitions, formation of Shetkari Shastradnay Manch, celebrations of various events, activities at adopted villages etc. The college has also developed two CDs on ornamental fish breeding and management and value additions of fish products. Dr. Somkuwar informed that the college has identified villages under Mera Gaon Mera Gaurav scheme and faculty members are visiting the villages and presented details of six farmers benefited under the Mera Gaon Mera Gaurav scheme. Dr. Somkuwar informed the house that the college has covered 89 villages under the farmer's awareness campaign of MAFSU in suicide prone areas of Maharashtra and created awareness among the farmers. Hon'ble Vice Chancellor appreciated the efforts taken by COFS, Udgir.

CONCLUSIVE REMARKS

Shri. Sunil Mansighka, Chief Coordinator Go-Vigyan Anusandhan Kendra, Deolapar in his concluding remarks first, briefly introduced the activities of Go-Vigyan Anusandhan Kendra, Deolapar and proposed to hold next Extension and Continuing Education Council meeting at the Go-Vigyan Anusandhan Kendra, Deolapar if it is possible. Shri. Mansinghka extended an invitation to all

the members to visit the Go-Vigyan Kendra and gain a firsthand experience of the activities conducted by the kendra. He highlighted the need to popularize and promote Panchgavya among the youths and informed the house that the Govigyan Kendra is working on scientific lines to develop desi cows through panchgavya and providing 5 days' residential trainings to around 2000 interested persons every year coming from all over the country. He emphasized the need to undertake development of cows on panchgavya rather than milk and urged the University to create one panchgavya center at each college for training, research and demonstration purpose. Hon'ble Vice Chancellor informed the house that the University has sanctioned Rs.5.00 crores to Cattle Breeding Farm, NVC, Nagpur and the college has initiated the process to develop the farm on scientific lines as a commercially viable model dairy farm with all modern infrastructure facilities. The farm would house Gir cows, Gaolao cattle, Nagpuri and Murrah buffaloes. The house appreciated the efforts. Shir Sunil Mansighka also draw the attention of house towards the menace of plastic which lodges in the rumen of cows and causes serious problems many cows are losing their lives due to the polyethelene bags and informed that the Go-Vigyan Kendra is creating awareness among the masses about harmful effects of plastic on cows and environment and urged the University to join hands in the programme.

Dr. Sivaswaroop, Regional Director, IGNOU lauded the extension activities under taken by the University and suggested for initiating one to one extension activities since IGNOU is already doing the same successfully. Dr. Sivaswaroop informed the house that IGNOU has been running 46 Gyan Vani Radio Station at National Level and suggested that the University can also participate in those programmes and for this IGNOU is ready to sign MoU with MAFSU. Dr. Siwaroop further told that IGNOU has large number tribal students in Gadchiroli and Aheri districts; IGNOU and MAFSU can have collaborative activities such as dairy, poultry and goat farming in tribal areas for enhancing income generation of tribal people in those areas.

(Action: Director of Extension & Training, MAFSU)

Dr. A. V. Harikumar, Senior Manager (AH) NDDB, Anand in his concluding remarks thanked University for inviting for the meeting. Dr. Harikumar informed the house that NDDB is working with 5 cattle breeds and have established good farms. He shared his personal experiences about the management of the farms and said that hoof management is a very important aspect in dairy farm management and the University should include this in its training programmes. He opined that the Gaushalas can be taken into loop for hoof management programme and providing hands on experience to students on this very important aspect. A crate can be erected at Gaushala and students can be taken there for practical exposure.

(Action: All Associate Deans)

He informed that NDDB is regularly conducting training programmes and have a very good setup of extension material. Docudrama series on various aspects of rural life and dairy business is available on the website of NDDB and University can download and take advantage of such readymade material. NDDB also have booklets and small videos in Hindi language and University can also take advantage of this.

(Action: Director of Extension & Training, MAFSU)

Dr. Randhir Singh, ADG (Agri. Extension) ICAR, appreciated the extension activities under taken by the University and recalled the speech of Hon'ble Prime Minister wherein he envisaged that the income of farmers should be doubled by 2020 and to achieve this target integrated farming is the need of the hour. Since MAFSU has three faculties *viz.* veterinary, dairy and fishery it can easily design the integrated farming activities depending upon the availability of resources. Various techniques can be promoted amongst the farmers such as silage making, scientific housing and management and post-harvest technologies etc. the University should make concerted efforts towards increasing the farmer's income. He asked the University to share the success stories with ICAR to motivate other farmers.

(Action: Director of Extension & Training, MAFSU)

He further suggested that the presentations of the colleges needs to be improved considerablly. Finally, he requested the faculty to have integrated approach of development of farmers under Mera Gaon Mera Gauray scheme.

(Action: All Associate Deans)

Dr. G. S. Rajorhia, Vice President Indian Dairy Association, Karnal also appreciated the extension activities of the University and praised the facilities at TVCC, Nagpur and Wild Life Research and Training Center. Dr. Rajorhia expressed disappointment that in the presentations of Associate Deans some of the slides were extremely poor and contained excessive text information that were not readable therefore in future the presentations should be improved.

(Action: All Associate Deans)

He urged the University to concentrate and develop kitchen products, conduct a survey and identify the kitchen products prepared by house wives and standardize those products at college. The colleges should explore newer techniques for conducting the extension work and one slide in the

presentation should be dedicated to such techniques. Dr. Rajorhia informed that the FSSAI is

financing the research for identification of adulteration in food products and the University should take advantage of this. He asked the University to conduct market survey on quality of food products and must have collaborative research programmes with the industry and should promote ethnoveterinary practices. The University should also focus on increasing the conception rate through AI and the University should also focus on Brucellosis, Listeriosis, T.B. and Mastitis as these diseases are affecting the export of animal products added Dr. Rajorhia.

(Action: All Associate Deans)

Dr. Dakshinkar informed the house that Nagpur Veterinary College is already conducting research on ethnoveterinary medicine through financial support from National Innovation Foundation and the research project has been awarded by the NIF. The college is also conducting epidemiological studies on Brucellosis, Listeriosis and Leptospirosis.

Dr. Sharad N. Bharsakale, Shri Krupa Poultry Feed, Nagpur regretted that the Universities have the vast knowledge still the people in the state are committing suicide. Therefore, the transfer of knowledge should be taken on top priority.

Shri. Nandanpawar assured full cooperation form Doordarshan and told that Doordarshan is always with the University for dissemination of technology. Dr. Zade requested Shri. Nandanpawar to increase the time of MAFSU on Doordarshan. Shri. Nandanpawar told that if the University produces its own documentaries Doordarshan would telecast them thus the time can be increased.

Finally Dr. Zade requested Hon'ble Vice Chancellor for his concluding remarks.

Hon'ble Vice Chancellor, MAFSU, Nagpur thanked all the members for their suggestions and valuable inputs in shaping the extension activities of MAFSU. He supported the views of Dr. Singh that integrated farming can play an important role in increasing the farmer's income and asked the Director of Extension to take a review of extension activities of all the colleges every six months.

(Action: Director of Extension & Training, MAFSU)

Hon'ble Chairman informed the house that University has applied for establishment of five KVKs and the matter is being pursued with ICAR. He requested Dr. Singh to expedite the issue at his level and help the University in getting KVKs. Hon'ble Chairman again thanked all the members and concluded his remarks.

The meeting ended with vote of thanks proposed by Dr. Sariput Landge.

Director of Extension & Trainings

 $\label{eq:annexure} \textbf{ANNEXURE-I}$ Regular extension activities to be undertaken during calendar year 2017

Sr. No.	Activity	Proposed activities in number
1.	On farm demonstrations	A minimum of 5 per college
2.	Faculty in the adopted village programme	A minimum of two visits per month
3.	Animal Health Camps to be organized	A minimum of 5 per college for all veterinary colleges including PGIVAS, Akola
4.	Extension publications	At least two per faculty members
5.	Participation in radio	As per allocation by All India Radio
6.	Participation in television programmes	As per allocation by Doordarshan
7.	Organization of exhibitions, fairs, melavas, rallies, livestock shows	A minimum of one activity by each college
8.	Development of audio-visual aids	A minimum of two by each college
9.	Exposure visits of farmers to the constituent colleges, research farms and modern establishments.	A minimum of two by each college
10.	Participation and organization of Scientists- Farmers Meet	A minimum of two by each college
11.	Taking various extension oriented field studies	A minimum of one by each college
12.	Organization of technical seminars for field veterinarians	A minimum of one by all veterinary colleges including PGIVAS, Akola
13.	Participation in exhibitions, fairs, melavas, rallies, livestock shows	As per the local requirements
14.	Promoting success stories	As per the requirement
15.	Organization of farm visit for the faculty members	As per the requirement
16.	Participation in programmes organized by various line departments	As per the requirement
17.	Promotion of scientific aquaculture practices	As per the requirement
18.	Answering farmer's queries through telephone and letters	As per the requirement
19.	Faculty at the Training programme/lectures delivered during farmers fairs, trainings and other scientist- farmers meet.	As per the requirement
20.	Training calendar for the year 2017	It is presented in separate annexure.
21.	Awareness programmes on the occasion of celebr	ation of following events
	Animal welfare fortnight	Last two weeks of January

World Women's day	08.03.2017
World tuberculosis day	24.03.2017
World health day	07.04.2017
World Veterinary day	29.04.2017
World Environment day	05.06.2017
World Biodiversity day	22.05.2017
World Zoonoses day	06.07.2017
World Oceans day	08.06.2017
Indian Fish Farmers day	10.07.2017
World Rabies day	28.09.2017
World Animal day	04.10.2017
World Fisheries day	21.11.2017
National Milk Day	26.11.2017
Clean Milk Production Day	03.12.2017

ANNEXURE - II

Training programmes for farmers

Sr. No.	Name of Department	Title of Training	Eligibility candidate
FAC	ULTY OF VETERINARY	SCIENCE	
1.	Animal Nutrition	Computerized balanced diet formulation for dairy animals.	Educated unemployed youth, Dairy entrepreneurs
		2. Fodder Management	Educated unemployed youth, Dairy entrepreneurs, Farmers
		3. Enrichment of fodder	LSS/ Educated unemployed youth, Dairy entrepreneurs, Farmers
		4. Green Fodder production for animals	Farmers
		5. Commercial Goat Farming	Farmers
2.	Department of Livestock	1. Modern Dairy Farming	Farmers
	production and Management	2. Intensive Dairy Farming	Farmers
		3. Modern Goat Farming	Farmers
		4. Intensive Goat Farming	Farmers
3.	Poultry Science	Short Term Commercial Poultry Training Course	Any individual willing to undertake the course
4.	Department of Livestock Products Technology	2. Milk processing and Value addition	No criteria for educational qualification
		Hygenic Meat production and processing	No criteria for educational qualification
		4. Utilization of slaughter house By- products	No criteria for educational qualification
5.	Veterinary and Animal	1. Scientific Dairy Production	Farmers and unemployed youth
	Husbandry Extension and LPM Department	2. Commercial Goat Production	Farmers and unemployed youth
6.	Veterinary Parasitology	Control of parasitic infestations of farm /companion animals	Farmers/ Cattle owners/Pet owners
7.	Department of Veterinary Public Health and Epidemiology	Occupational health hazards to Veterinarian, butchers and other workers.	Veterinarian and Butchers
		Hands on training on production of hygienic chicken meat on newly developed model retail outlet	Butcher or supervisors
		3. Standardization and calibration of laboratory	Graduate in any science discipline with working

	equipments	experience in food / diagnostic laboratory
	4. Slaughter house by product utilization	Butchers and small entrepreneurs
	5. Food Safety Aspects of Animal Origin foods	Livestock Development Officers /Academicians/ Industry personnel
Veterinary Clinical Medicine, Ethics and	Health Management of Sheep and Goat	Farmers
Jurisprudence	2. Health management of Dairy Animals	Farmers
	3. Dog training – a challenging entrepreneurship programme for the youth	S.S.C passed candidate
Veterinary Epidemiology and Preventive Medicine	Diseases of Livestock and their prophylaxis	Literate Livestock Owners/ Farmers
	Care and Management of dogs and cats	Pet owners
	3. Care and management of turtle, rabbits, ornamental fish and guinea pigs	Pet owners
	4. Basics of Herd Health Management for dairy farmer.	Literate Livestock Owners/ Farmers
	5. Preventive health care of pet animals.	Pet owners
	6. Fresh cow management programme for high yielding dairy animals	Dairy entrepreneurs, livestock managers and livestock owners
ULTY OF DAIRY TECHN	OLOGY	
Department of Dairy Technology	Dairying for Upliftment of farmers	Farmers
	Essentials of starting a new Dairy Business	Farmers, SHGs, Extension Officers, unemployed youth
	3. Value added milk products	Farmers, SHGs, unemployed youth
	4. Quality production of Khoa	Anyone who are interested
ULTY OF FISHERY SCIE	NCE	
Department of Fish Processing Technology and Microbiology	Value added fish products Development	Women Self Help Group members and other
Department of Aquaculture	Fish Farming in Ponds and Tanks	Farmers, fishermen, Entrepreneurs, members of Self
	Weterinary Epidemiology and Preventive Medicine ULTY OF DAIRY TECHN Department of Dairy Technology ULTY OF FISHERY SCIE Department of Fish Processing Technology and Microbiology Department of	Veterinary Clinical Medicine, Ethics and Jurisprudence

			Help Group
		Ornamental Fish Seed Production and management	Unemployed youth, Women SHG
		3. Fish farming in ponds and tanks	Anyone who are interested
		4. Fresh water fish seed production	Anyone who are interested
3.	Department of Fisheries Resources, Economics, Statistics and Extension Education.	Culture Based Fisheries in Small Reservoirs	Farmers, fishermen, Fish farmers, Entrepreneurs, members of Self Help Group
4.	Department of Fisheries Hydrography	Management of Water Quality Parameters in Aquaculture	Farmers, fishermen, Entrepreneurs
5.	Fisheries Engineering	Design and construction of Fresh Water Fish Farm	Farmers, fishermen, Entrepreneurs

Training programmes for Field Veterinarians

Sr.	Name of Department	Title of Training	Eligibility candidate
No.			
	ULTY OF VETERINAL		
1.	Animal Genetics and	1. Conservation of Indigenous	L. D. O./ ACAH
	Breeding	Livestock Germplasm	
		2. Animal Recording For Improved	L. D. O./ ACAH
		Breeding And Management	
		Strategies	
		3. Genetic Improvement in Bovines	L. D. O./ ACAH
		through Progeny Testing	
		4. Formation, Registration and	ACAH/ L. D.O.
		Functions of Breed Society	/LSS/Paravets/
			Livestock Keepers
		5. Basic Techniques in Animal	L.D.O./ ACAH / Biol. Sc.
		Molecular Genetics	Teachers & Students
		6. Field Performance Recording	L.S.S./Para-Vets
		(Milk) for Genetic Improvement	
		of Livestock	
		7. Field Livestock Data Collection	L.S.S./Para-Vets
		for Breeding	
		8. Essentials of Livestock Census	L.S.S./Para-Vets
2.	Animal Nutrition	 Computerized balanced diet 	LDO/LSS
		formulation for dairy animals.	
		2. Fodder Management	LDO/LSS
3.	Department of	1. Refresher course in basic	B. V. Sc & A. H.
	Veterinary Physiology	laboratory diagnostic	
		techniques & their application in	
		veterinary practice	
		2. Refresher course in basic	LSS/ Diploma holders
		laboratory diagnostic	
		techniques & their application in	
		veterinary practice	
		3. Short course in climate change	Master's degree in preferably

		and stress management in animals.	Veterinary Science (preferably Physiology, Livestock Management)/ Life Sciences / Zoology / Dairy Science / Animal Husbandry / and allied science, working not below rank of Assistant Professor and equivalent						
4.	Department of Veterinary Biochemistry	Veterinary clinical Biochemistry Laboratory Diagnostic techniques Urine Analysis as an aid in Field Diagnosis for LDOs Maintenance of Laboratory and Instrumentation for LSS Advances in clinical Biochemistry	B. V. Sc & A.H /M.V.Sc/Diploma holder in animal husbandry LDOs LSS Diploma holder in animal Husbandry B. V. Sc. & A.H., M. V. Sc., M. Sc., DMLT or its equivalent						
		5. Atomic Absorption Spectrophotometry for micronutrient analysis	B. V. Sc & A. H/ M. V. Sc./M. Sc.						
5.	Department of Veterinary Microbiology and Animal Biotechnology	Refresher Course in Laboratory Diagnosis of Infectious Diseases Z. Techniques in Tissue Culture	LDOs, Technocrats from Private/Public Institutions, students/staff from Life Science Colleges LDOs, Technocrats from Private/Public Institutions, students/staff from Life Science Colleges						
		3. Techniques in Molecular Biology	LDOs, Technocrats from Private/Public Institutions, students/staff from Life Science Colleges						
		4. Hands on Training on Molecular Diagnosis of important infectious diseases5. Techniques in investigations of	LDOs, Technocrats from Private/Public Institutions, students/staff from Life Science Colleges LSS						
6.	Veterinary Parasitology	Clinical Samples Control of economic losses to livestock sector through integrated Parasite Management Programme Integrated Pest Management for	LDO, SMS of KVK, Field vets LDO, SMS of KVK, Field						
7	Depositors and of	optimum animal production	Vets, Scientists, Teachers, PG students.						
7.	Department of Pathology	Refresher training course on Diagnostic Techniques in Veterinary Pathology	B. V. Sc. & A.H. Graduates						
8.	Department of Veterinary Public Health and Epidemiology	General requirement for NABL accreditation of testing and calibration laboratories and Internal Audit Occupational health hazards to	Graduate in any science discipline with working experience in food / diagnostic laboratory Veterinarian and Butchers						

		Veterinarian, butchers and other						
		workers.						
		3. Environmental Hygiene and Sanitation	Veterinarian, Scientist, Academician, Post Graduate students					
		4. Standardization and calibration of laboratory equipments	Graduate in any science discipline with working experience in food / diagnostic laboratory					
		Advances in quality control of meat and meat products Hygienic Meat Production	LDOs / Academicians Meat Industry personnel Municipal Officers / Livestock Development Officers / Veterinarians					
		7. Food Safety Aspects of Animal Origin foods	Livestock Development Officers / Academicians / Industry personnel					
		8. Hands on training on diagnostic techniques with special reference to important / zoonotic diseases	Livestock Development Officers / LSS / Academicians / Scientist					
9.	Veterinary Clinical Medicine, Ethics and	Critical care and emergencies in Veterinary Practice	ACAH / LDO/ Private practitioner					
	Jurisprudence	2. Herd approach to diagnosis and treatment of Metabolic and Nutritional Diseases	Livestock Keepers and field officers					
		3. Animal Health Management	Livestock Keepers and LSS					
		4. Recent trends in diagnosis and therapeutic management of ruminant and pet animals	ACAH and LDOs, of Govt of Maharashtra					
		5. Therapeutic Management of Metabolic Diseases in animals	LDOs/Veterinary Graduates					
		6. Wildlife Health Management	L. D. O./ ACAH/ Vet Graduates					
		7. Haemodialysis Training	M.V.Sc.Medicine(with small animal focus)					
		8. Radio Immune Assay (RIA) and Immuno Radiometric Assay (IRMA) in Veterinary Practice	B.V.Sc.& A.H.					
10.	Department of Gynaecology and	Ultrasonography in large & small animals	B.V.Sc.& A.H./M.V.Sc					
	Obstetrics	2. A.I./Pregnancy Diagnosis in ruminants	B.V.Sc.& A.H./M.V.Sc					
		3. Fertility management in farm animals	B.V.Sc.& A.H./M.V.Sc					
		Postpartum reproductive disorders in Farm animals. Coning Paraduction	B.V.Sc.& A.H./M.V.Sc					
11.	Veterinary Surgery	Canine Reproduction Diagnostic Imaging Technique	B.V.Sc.& A.H. LDOs, Technical staff of SAU,					
	and Radiology	2. Canine Surgery	Veterinary practioners LDOs, Technical staff of SAU, Veterinary practioners					
		3. Advancement in Large Animal	LDO, Technical Staff of SAU,					

		Surgery	Vet practioners, PG students
		4. Advanced Radiographic	LDO, Technical Staff of SAU,
		procedures in Veterinary	vet practioners, PG students
		Practice	
		5. Recent protocols in Equine	LDO, Technical Staff of SAU,
		Anaesthesia & Surgery	Vet practioners, PG students
		6. Laparoscopy techniques in small	LDO, Technical Staff of SAU,
		animals	Vet practioners, PG students
		7. Large Animal Anaesthesia	LDO, Technical Staff of SAU,
			Vet practioners, PG students
12.	Department of	Applied Clinical Pharmacology	LDO
	Veterinary	for field veterinarians	
	Pharmacology and		
	Toxicology		

21		20		19	18						15			13	12	11	10		9		∞	7	6	5	4	w		2	-	-	No.
Revenue generation by Extension Department	Field Visit organized / l	Adopted /Model villages visit and progress	ь	ATMA activities a	Success stories and			T Connection of the connection	Sponsored extension projects	Award /Recognition pertaining to Extension	Extension survey conducted		Scientist visit to	Guidance at farmer's Scientist meet	Livestock Farmers queries answered in person. mail telephone etc (No. of farmers)	Livestock Farmers Visit to Dept./Institution	Audio- Visual Developed		Livestock Exhibition		Livestock Rally/workshop	Television Interview	Radio talk	Extension Publications Articles/Leaflet/	Animal Health Camp Organized	Faculty at the Training programme/Lecture	Conducted b)	Training Programme a)	On farm demonstration	2	
y Extens	Exposure	es visit ar	b)Training	a)Study Tour	failures				ojects	taining to		<u>1(</u> d	a)fa	ientist m	ies answe	to Dept.	bd	Par	Org					Articles/L	ganized	rogramn	b)L.D.Os/Tech Enterpreuiners	a)Farmers Training			
ion Departmen		d progress	04	our	(give details	Smogno(2	c)Opagina	h)Approved	a)Submitted	Extension		b)Institute	a)farm/village	eet	ered in person,	/Institution		Participated	Organized	Participated	Organized			.eaflet/		ie/Lecture	b)L.D.Os/Technical/ Enterpreuiners	Training			
t 675949	0	2	0	0			0	0	0	0	1	8	2	1	85	57	0	0	0	0	0	0.	6	9	4	11	10	5	0	3	BVC Mumbai
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