



TAMIL NADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY



IDP OF TANVUAS



ANNUAL REPORT 2020 - 2021

(1) Executive summary

The Institutional Development Plan (IDP) functioning at Tamil Nadu Veterinary and Animal Sciences University was developed to focus on improving the curriculum with modern pedagogical tools to facilitate the students to learn at their convenience and to possess multiple skills. To achieve this, under IDP of TANUVAS, it was planned to develop open knowledge hubs, quality open contents, skill development centres, learning and assessment centre, entrepreneurship development cell, senior residency programmes, knowledge sharing by industry and alumni. Further, the quality of faculty will be improved through faculty development programmes in niche areas of education technology. In this regard, four objectives were proposed under IDP of TANUVAS. First objective was to focus on curriculum improvement through outcome based learning, improved pedagogy and identification of day one skills. The second and third objectives was to focus on development of open knowledge hubs and skill development respectively. The final one was to focus on networking with alumni and global institutions to develop the institution in international arena. For every objective 3-5 well defined programmes was identified with monitorable targets. The functioning of IDP at TANUVAS ensures successful development of the institution.

One smart classroom, two skill labs and five modernisation and refurbishment of classrooms were created during this period. Eight major robotic equipments were procured and installed in Learning and Assessment centre of MVC, Chennai. Due to COVID-19 restrictions, all the developmental programmes for students and faculties were carried out through online mode. Online clerkship programme mimicking international clinical externship programme was conducted for 15 elite final year BVSc& AH students for 3 weeks. A total of 18 guest lectures, 15 student development programmes and 8 skill development programmes covering various aspects of Veterinary education and career development were undertaken during this trying situation for the undergraduate students. For faculties, 3 workshops, 2 trainings and 1 guest lecture were conducted by online to expand the knowledge levels on student-centred teaching. A total of 8166 students and faculties have directly derived benefits under IDP in this financial year. Suitable environmental and social safeguard measures were taken up. International clinical externship and faculty development programmes as well as visiting of adjunct faculties could not be pursued due to COVID pandemic situation.

Progress made during period

The progress made across each component of NAHEP during April 2020 to March 2021 is provided.

TECHNICAL PROGRESS

The following committees were formed for better functioning of the scheme:

- a) Procurement Committee
- b) Bid evaluation committee
- c) Purchase committee
- d) Technical expert committee for ITES
- e) Project monitoring committee
- f) Civil work committee
- g) Virtual Anatomy monitoring committee

A. PROCUREMENT

S.No.	Activity Reference no. / Description	Procurement category	Evaluation options	Process status
1.	Modernisation of classroom to smart classroom at Madras Veterinary College - 2 no; CFDT-1 No.	Civil work	RFQ	Completed
2.	Modernisation and refurbishment of Learning assessment Centre , MVC	Civil work	RFQ	Completed
3.	Modernisation of classroom to smart classroom at VCRI Namakkal - 1 No.	Civil work	RFQ	Completed
4.	Modernization of lecture halls to smart classrooms at VCRI Namakkal - 1 No.	Civil work	RFQ	Completed
5.	Modernization and refurbishing of soft skill labs - Roof, wall and floor paneling, partitioning and HVAC - VCRI-NKL; CFDT – 2Nos.	Civil work	RFQ	Completed
6.	High end Microscopes with large digital display - 16 Nos.	Equipment	RFB	Approval pending

S.No.	Activity Reference no. / Description	Procurement category	Evaluation options	Process status
7.	Textbooks for undergraduate students in veterinary and animal sciences and food sciences	Goods	RFQ	Completed
8.	Stainless steel physical examination table	Equipment	RFQ	Completed
9.	Office furniture - Roundfile – 2 Nos., Exhibition display panel - 3 Nos.	Furniture	RFQ	Completed
10.	Bovine simulators - AI training model, injection and anatomy models	Goods	DC	Completed
11.	Canine surgical model	Goods	DC	Completed
12.	e books and e journals	Goods	DC	Completed
13.	Veterinary Simulators - Equine venipuncture, Bovine dystocia simulator and Theriogenology unit, canine spay simulator, suture pads, canine limb simulator	Goods	DC	Completed
14.	Bovine Haptic Cow	Goods	DC	Completed

Installations and Training at LAC of TANUVAS

The following special installations were made at the Learning and Assessment Centre. The faculty were also trained for imparting clinical skills using the modern robotic systems and simulators at Learning and Assessment Centre, MVC, Chennai to train the V year BVSC & AH students and Internees.

- i. **Biometric attendance and RFID based locks** have been installed in smart classrooms and Learning Assessment Centre respectively, to ensure controlled access to the facilities.
- ii. **QR codes** were created for the equipment purchased for better and easy physical verification of the same.

- iii. **Live animal models with Arduino capacitive sensitive touch sensors** have been installed for efficient self-learning of restraining, clinical points of interest in the different domestic animals.
- iv. The Learning and Assessment Centre / Soft Skill Lab was refurbished at MVC Chennai and the following **robotic equipment** were installed for the benefit of students:
- Canine Anatomy Models – Large Dog
 - Bovine Anatomy Model with AI simulator
 - Bovine Injection simulator
 - Cow Anatomy flipchart
 - Holstein Dystocia simulator including matching calf
 - Bovine Theriogenology Model with bovine uterus set
 - Canine Spay Model – (3 canine multi-layer suture pads, 3 canine uterus models)
 - Suture Pad Base
 - Hollow Organ Suture Pads
 - Multi-Layer Suture Pads
 - Canine Multi-Layer Suture Pads
 - Canine Bandaging Limb – Hind
 - Canine Bandaging Limb – Front
 - Equine Neck Venipuncture with IM injection and adjustable rolling stand
 - Replacement IM Pads
 - Replacement Vein Tubing
 - K 9 IV trainer dog
 - Dog hip
 - Dog ear healthy and sick
 - Median section of dog's head
 - CPR dog extended version
 - K 9 Respiratory and heart tone simulators
 - K 9 thoracocentesis
 - Dog head vascular access simulator
 - Foot of horse model
 - Mimorette laboratory rat

- Critical care fluffy
- Live size fibre glass animal models – Cattle, Buffalo, Horse, Pig, Dog, Poultry
- Horse model fibre glass seat
- Stuffed toys to practice suture and edema draining procedure and any other innovative procedures

B. TRAININGS AND WOKSHOPS:

Student development activities

1. Online lectures for undergraduate courses were conducted for undergraduate students (I-year to V-year BVSc & AH) using the infrastructure facility created under NAHEP. Their active participation during the online lecture was monitored by Assistant Professors of the respective department and Education Cell staff. Virtual attendance was maintained properly

The details of the same are as follows;

S.No.	Date	Number of Lectures conducted	Approximate Number of students attended	Online platform used
1.	April 1 st – 4 th , 2020	24	1586	Zoom
2.	April 6 th – 10 th , 2020	40	1264	Zoom
3.	April 13 th – 17 th , 2020	50	1268	Zoom
4.	April 20 th – 24 th , 2020	26	Average: 590/day	Cisco
5.	April 27 th – May 1 st , 2020	36	Average: 590/ day	Cisco
6.	May 4 th – 8 th , 2020	32	Average: 590/day	Cisco

2a. In addition to the regular academic lectures, the following webinars were conducted for the benefit of undergraduate students.

S.No.	Date	Topic of the lecture	Guest speaker / Resource person	Student beneficiaries	No. of Students
1.	April 15 th – 17 th , 2020	Advanced Theriogenology	Dr. Ram Kasimanickam, Washington State University	IV and V year BVSc&AH students	312

S.No.	Date	Topic of the lecture	Guest speaker / Resource person	Student beneficiaries	No. of Students
2.	April 29 th , 2020	Clinical case discussion "Memoirs on Infertility investigation in cattle"	Dr. K.Krishnakumar, Professor & Head, Dept. of VOG, MVC	V-year BVSc&AH students	212
3.	April 29 th , 2020	Clinical Case Analysis Discussion on Soft tissue surgery and its complications	Dr. K.Krishnakumar, Professor & Head, Dept. of VOG, MVC	IV and V-year BVSc&AH students	300
4.	May 4 th , 2020	Covid 19 outbreak and its status	Dr. Niranjana Rajalakshmi, Veterinary Microbiologist and Science Writer	IV and V year BVSc&AH students	506
5.	May 4 th , 2020	Application of Reproductive technologies for conservation of Endangered Equids	Dr. Budhan S. Pukazhenthil – Research Physiologist (ungulates), Smithsonian Conservation Biology Institute, Front Royal, Virginia, USA	IV and V year BVSc&AH students	220
6.	May 4 th , 2020	Stress and positive psychological response	Dr. K. Jayanthi Rani, MA, Ph.D., Assistant Professor, Department of Psychology, Ethiraj college, Chennai – 8	BVSc & AH, BTech students	306
7.	Feb 8 th , 2021	Online Workshop on Soft Skills	Mrs Radha, CEO Smart Series, Bengaluru	BVSc & AH, BTech students	346
8.	Feb 9 th , 2021	Online Workshop on Soft Skills			285
9.	Feb 10 th , 2021	Online Workshop on Soft Skills			240
10	Feb 11 th , 2021	Online Workshop on Soft Skills			204
11	Feb 11 th , 2021	The Art of Life - Success Mantra	Dr Vidya Hari, Dentist & Motivational speaker, Chennai	BVSc & AH, BTech students	366

S.No.	Date	Topic of the lecture	Guest speaker / Resource person	Student beneficiaries	No. of Students
12	Feb 12 th , 2021	Online Workshop on Soft Skills	Mrs Radha, Bengaluru	BVSc & AH, BTech students	193
13	Feb 12 th , 2021	The Art of Life - Success Mantra	Mrs K. Rajeshwari, Lawyer, High court, Chennai	BVSc & AH, BTech students	266
14	Feb 15 th , 2021	Online Workshop on Soft Skills	Mrs Radha, CEO Smart Series, Bengaluru	BVSc & AH, BTech students	121
15	Feb 16 th , 2021	Online Workshop on Soft Skills			196
16	Feb 19 th , 2021	Guest Lecture on Wildlife and Biodiversity	Dr N. S. Manoharan, Forest Veterinarian	BVSc & AH, BTech students	233
17	Feb 22 nd , 2021	Online Guest Lecture on Gender Sensitization	Mrs Radha Krish	BVSc & AH, BTech students	198
18	Feb 24 th , 2021	Online Guest Lecture on "Wildlife of the Indian Subcontinent – Diversity, threats and conservation challenges"	Dr Ashraf, Director, Wild Life Trust of India, New Delhi	BVSc & AH, BTech students	208
19	Feb 26 th , 2021	Online Guest Lecture on "Climate Change – Scenario and Impact"	Dr S. SriShalini, DST Scientist- Anna University, Chennai	BVSc & AH, BTech students	104
20	Mar 3 rd -24 th , 2021	Online clerkship (Alternative to Internship)	Dr Ram Kasimanickam, Adjunct Faculty	Toppers of the 2015-16 batch, IV yr BVSc & AH	15 (10- MVC, Chennai 5- VCRI, Nkl)
21	Mar 4 th , 2021	Online Guest Lecture on "From MVC to IIT"	Dr Ninitha, Assistant Professor (DBT), IIT- Chennai	BVSc & AH students	359
22	Mar 9 th , 2021	Online guest lecture on "The science behind food extrusion"	Dr Kumar Mallikarjunan, University of Minnesota, USA	BTech students	95

S.No.	Date	Topic of the lecture	Guest speaker / Resource person	Student beneficiaries	No. of Students
23	Mar 9 th , 2021	Workshop on Stress	Dr Vidya Hari, Dentist & Motivational speaker, Chennai	BVSc & AH, BTech students	114
24	Mar 10 th , 2021	Neutralization			262
25	Mar 11 th , 2021				76
26	Mar 12 th , 2021				187
27	Mar 13 th , 2021	Online guest lecture on "Advances in application of high pressure in food processing"	Dr Kumar Mallikarjunan, University of Minnesota, USA	BTech students	85
28	Mar 15 th , 2021	Workshop on Stress	Dr Vidya Hari, Dentist & Motivational speaker, Chennai	BVSc & AH, BTech students	108
29	Mar 16 th , 2021	Neutralization			87
30	Mar 16 th , 2021	Online guest lecture on "Pulsed electric field and ohmic heating in food processing"	Dr Kumar Mallikarjunan University of Minnesota, USA	BTech students	69
31	Mar 19 th , 2021	Online Guest Lecture on "From a Vet to an entrepreneur"	D Madhurita Gupta- Founder, My Vets Charitable Trust & research centre, Mumbai	BVSc & AH, BTech students	106
32	Mar 20 th , 2021	Online guest lecture on "Recent advances in cold plasma / UV / pulsed light and its application in food industry"	Dr Kumar Mallikarjunan University of Minnesota, USA	BTech students	70
33	Mar 22 nd , 2021	Online Guest Lecture on "Becoming an Army Vet in RVC"	Major Dr Sridhar Indian Army, OTA, Chennai	BVSc & AH students	150
34	Mar 23 rd , 2021	Online Guest Lecture on "Excel as a private veterinary practitioner"	Dr. Lakshmi Kripa, Paws and Claws Pet Clinic, Chennai	BVSc & AH students	61

S.No.	Date	Topic of the lecture	Guest speaker / Resource person	Student beneficiaries	No. of Students
35	Mar 24 th , 2021	Online guest lecture on "Microbial and genomic technology methods for detection of food borne pathogens"	Dr. David Baumler University of Minnesota, USA	BTech students	55
36	Mar 26 th , 2021	Online Guest Lecture on "Water conservation and restoration"	Dr S. SriShalini, DST Scientist- Anna University, Chennai	BVSc & AH BTech students	60
37	Mar 29 th , 2021	Online Guest Lecture on "Fundamental building blocks for exam preparation"	Mr Saurab K. Pandey, CEO- Yuvaan Skill advisory, Greater Noida	BVSc & AH, BTech students	91

2b. The following offline guest lectures were conducted in the Madras Veterinary College campus at Chennai for the benefit of undergraduate students in the short period after the initial lockdown when the students had returned back to regular study mode:

SI No	Date	Topic of the lecture	Guest speaker /resource person	Student beneficiaries	No. of students
1.	March 8, 2021	Offline guest lecture on How to venture as an entrepreneur	Dr. Nandita Pandey Personal Branding Coach, Strata Vision Pvt Ltd.	BVSc & AH students	106
2.	March 18, 2021	Offline guest lecture on Banking opportunities for Vets	Dr. A. R. Nithish, GM, SBI, Chennai	BVSc & AH students	43
3.	March 24 th , 2021	Offline guest lecture on How to face UPSC exams	Dr. R.Anandakumar, IAS - Commissioner of Sugars, Govt. of Tamil Nadu	BVSc & AH students	118

3. Entrepreneurial Video Lessons: The following video lessons were completed and uploaded on YouTube as part of Entrepreneurship development for undergraduate students:

- a. Establishing a Pet Animal Clinic and Spa
- b. Poultry Hatchery Management
- c. Establishing a Dairy products processing unit
- d. Feed mill management
- e. Integrated Livestock farming
- f. Native chicken farming
- g. Ornamental fish management
- h. Ethno veterinary practices in livestock

Faculty development activities

i) International:

Faculty development workshops International for Master Trainers:

This programme could not be conducted as faculty could not come from WSU, due to travel restriction imposed for pandemic Covid-19.

ii) National:

The following five workshops were conducted for the faculty of TANUVAS in association with some external institutions/agencies;

Sl.No.	Period	Topic of workshop	Organised by	No. of faculty of TANUVAS
1.	April 1 st -3 rd , 2020	Curriculum delivery/ Transaction	Quality Assurance Strategic Planning Institutional Research, UK and Association of Indian Universities	18
2.	May 12 th , 2020	Workshop on "Knowledge improvement opportunities with Fulbright Commission"	Fulbright Commission, USIS, US Consulate, Chennai	120
3.	March 22- 26, 2021	Workshop on Intellectual Property Rights, Copyright, Industrial design and Plagiarism	ICAR-National Academy of Agricultural Research and Management	28

Sl.No.	Period	Topic of workshop	Organised by	No. of faculty of TANUVAS
4.	Mar 30 th , 2021	Faculty Development Lecture on “Art of Power point and Excel design” – Content designing / Data analysis	Mr Saurab K. Pandey, CEO- Yuvaan Skill advisory, Greater Noida	254
5.	Feb 18 th , 2021	Identifying and prioritizing Veterinarian’s day one skills for industrial needs	IDP of TANUVAS	70
6.	Mar 12 th , 2021	Identifying and prioritizing Veterinarian’s day one skills for industrial needs	IDP of TANUVAS	180

C. OVERSEAS TRAININGS

i) Students:

- **Overseas clinical externship for BVSc & AH students** could not be conducted due to Corona pandemic. Hence, an online clerkship programme by overseas faculty on “Bovine medicine” was arranged. Fifteen meritorious students were selected to attend the programme for a duration of three weeks. The programme was held between March 4, 2021 and March 25, 2021. The programme comprised of online lectures, practical and demonstration at farms. The programme was conducted by Dr. Ram Kasimanickam, Associate Professor (Adjunct faculty of TANUVAS), Washington State University.

ii) Faculty:

- Faculty selected less than 40 years of age – two out of four staff, could not travel overseas for the 3-months training even after obtaining Visa due to COVID.
- Two faculty, in the age group of 40-50 years of age and One faculty in the 50-58 years of age groups were selected, but could not travel overseas for the 2-months and 14 days training respectively, due to COVID.

D. SHORT VISIT:

Two faculty from MVC, Chennai are yet to leave for a short visit (14 days) to Royal Veterinary College, London

E. ADMINISTRATIVE WORK:

- Additional Co PIs were included for smooth conduct and monitoring of activities of IDP-TANUVAS, during the year 2020-2021.
 1. Dr. B. Mohan – VCRI activities i/c
 2. Dr. V. Apparao – CFDT activities i/c
 3. Dr. A. Sangaran – Student Development Programmes
 4. Dr. T. A. Kannan – Student Development Programmes
 5. Dr. S. Meenakshisundaram – Student Development Programmes
 6. Dr. V. Ramesh - Student Development Programmes
 7. Dr. S. Rajalakshmi – Student Development Programmes & Finance Management
- ICAR –IDP TANUVAS annual review meeting online was attended on 4/6/2020 and 5/6/2020 by PI and CoPIs. Presented the work done details along with outcome and financial utilization for the year 2019-20
- Procurement Review Meeting scheduled on 9/6/20 was attended by PI and CoPIs. Presented the procurement status and probable timeline of completion of procurement of Goods and Equipment
- ICAR-NAHEP Scheme review of environmental, social safeguards and social inclusivity of IDP of TANUVAS by WB team was attended on 13/07/20 by PI and CoPIs. Presented the activities carried out at MVC Chennai and VCRI Namakkal campus
- Post Procurement Review (PPR) July 16th, 2020 was attended by PI and CoPI.
- PI and CoPI participated in Launch of “Krishi Megh” (“NARES Cloud Infrastructure and Services”) along with “Accreditation Portal” and “Alumni Network Portal”
- PI and CoPI participated in “Improving Higher Agriculture Education Job Outcomes in India: Challenges and Opportunities” September 3rd, 2020
- Review meeting by Director of Research and Chairman, Project Monitoring Committee for IDP of TANUVAS attended on 03/10/20 by PI and CoPIs.
- Internal Audit of IDP of TANUVAS from inception by the World Bank Auditors M/s Lochan & Co was commenced on 17/12/20 and completed on 28/12/20 at the IDP Office at MVC. The mode of audit is physical and virtual and for a duration of almost eight days. Further documentary evidence and clarifications were provided upto

5/1/21 to the auditors. Concluding debriefing meeting for the internal audit of IDP by World Bank auditors scheduled today 6/1/21 and was attended by PI and CoPIs.

- National Steering Committee ICAR-NAHEP released the approved rates for online lectures, practicals and webinars on October 21st 2020 due to ongoing pandemic crisis. ICAR has agreed for USD150 Professor/Associate Professorship for a 60-90 minutes online lecture with four lectures per week and 12 per three months. Approval to invite international scientists as online guest faculty/invitee for webinar with honorarium USD 125/invitee and number of lectures one hour/month limited to 6hours/year.
- One day National webinar on “IA (Impact assessment) kick-off and implementation performance assessment” conducted by ICAR-NAHEP on 10th December 2020. IDP TANUVAS got a score of 6.5 out of 10.0 and placed in "Competent' category. A need to improve in financial management (utilization of operational expenditure), which will help to improve the score in output and outcome monitoring and strengthening of Student Development Activities was inferred.
- Financial Management Workshop on 19/01/2021 for PI of IDP, ICAR NAHEP was attended by PI and CoPIs.
- Timescale extension of IDP TANUVAS for one year upto 31/3/2022 without any additional financial implications to ensure completion of financial activities was released by ICAR NAHEP.

ACTION TAKEN FOR SUGGESTIONS DURING ANNUAL REVIEW MEETING 2019-20

Sl. No.	Review Points	Action Taken
1.	Provide details as to the connection between the overseas training of faculty and the establishment of the Learning and Assessment Center. What is the impact of overseas training?	The faculty who have gone for overseas training were responsible for identification of creation of robotics / simulator stations at LAC. As a result LAC has been established for the first time in India.
2.	Sixteen students went overseas and only showed outcomes for six	The remaining students except one student has joined master's degree in National

Sl. No.	Review Points	Action Taken
	students. What has happened with the remaining students?	Institutes / Universities. One student is preparing for UPSC examinations
3.	This is an output for the 37 students under industrial training. Evidence of entrepreneurship in the future would be the outcome. How are the learnings being applied in practice? How does TANUVAS monitor the follow-up with those who have participated in training/workshops?	Of the 37 students, two students has been offered job in the industry in which they were trained. The other students are graduating in July 5, 2021 and the impact will be analysed after that
4.	Success stories are encouraging. Veterinary teaching tools through simulators and robotics is encouraging. Is there a plan to record all the lectures for a course, and then share it through ICAR as a virtual class room in future, as being done by UGC?	A separate YouTube channel has been created for IDP of TANUVAS and educational videos are uploaded regularly. A Lecture capture system is being installed. Since, no in person class has been conducted due to Covid 19 the work is pending. Under NAHEP Component 2, consent has been given for establishment of virtual class room.
5.	Have you arranged for lectures to students and faculty for preparing manuscripts for SCI rated journals?	Not applicable since IDP is for UG students.
6.	Any impacts foreseen on internships/employment due to COVID? If yes, what is the action plan, if any?	It has been decided to conduct online clerkships for a duration of 12 days. One such programme has been completed during 2020-21 and six more have been planned for 2021-22.
7.	How the weak students were benefitted? Any figures in terms of performance?	Weak students are benefitted through remedial classes. So far 227 students have been benefitted.
8.	The IDP is sitting on about INR 12 cr. Why? Please don't park funds and adhere to FM guidelines. Hope travel	The pending balance amount is due to inability to sent 37 students and 6 faculty for overseas training.

Sl. No.	Review Points	Action Taken
	advances are no longer accounted for as expenditure as was pointed out during the last mission.	
9.	How have you planned ESP? What are the provisions undertaken during civil works for the safety of students, faculty, and labor?	Yes. ESP is under operation and the same is being implemented. Regular quarterly reports are being sent to PIU.
10.	Progress update on Result Framework indicators is good.	Noted.

Project staffing:

Interview for appointment of Computer Programmer was held on November 1st, 2019 and one candidate was selected and one candidate was waitlisted. The selected candidate joined on December 9th, 2019 and resigned on February 5th, 2020 due to health reasons. From February 5th, the contractual post remained vacant. Later in the month of August, willingness was sought from the waitlisted candidate and upon due approval the waitlisted candidate joined as Computer Programmer on 13/08/2020.

Reports submitted during 2020-2021 PIU NAHEP

Sl.No.	Details of reports submitted	Date of submission	Submitted to
1.	Weekly report	Every week on Friday	PIU, NAHEP
2.	Bank Reconciliation Statement	First week of every month	NAHEP Finance
3.	Annual report for the year 2019-20	May 26 th , 2020	PIU, NAHEP
4.	Detailed presentation for Annual Review of IDP scheduled from June 4 th to June 5 th , 2020	May 28 th , 2020	PIU, NAHEP

Sl.No.	Details of reports submitted	Date of submission	Submitted to
5.	Updated Procurement Plan for 2019-20 and 2020-21 as suggested in Procurement Review on June 9th, 2020	June 10 th , 2020	STEP
6.	Database of Expenditure for IDP of TANUVAS	July 2 nd , 2020	PIU, NAHEP
7.	Reassessment of utilization capacity report	July 7 th , 2020	PIU, NAHEP
8.	Output-Outcome-Framework (OOF) for Q1 of 2020-21	July 8 th , 2020	PIU, NAHEP
9.	Action Plan, Physical and Financial targets for Q2 of FY 2020-21	August 14 th , 2020	PIU, NAHEP
10.	Details of course curriculum (pilot course) for 16 courses	August 14 th , 2020	PIU, NAHEP and PwC
11.	Return of Revenue Receipt for the FY 2019-20	September 9 th , 2020	PIU, NAHEP
12.	Audited Report of Project Financial Statements by the ICAR-NAHEP empaneled auditors (M/s T.G.Sukumaran & Co)	October 1 st , 2020	NAHEP Finance
13.	Anticipated expenditure for FY 2020-21	September 25 th , 2020	NAHEP Finance
14.	Environmental Action Plan (EAP) data required for preparation of coffee table book	August 29 th , 2020	PIU, NAHEP
15.	Monthly outgo in r/o for RA/SRF and YP-1 & 2 for FY 2020-21	September 30 th , 2020	NAHEP Finance
16.	Output-Outcome-Framework (OOF) for Q3 of 2020-21	January 3 rd , 2021	PIU, NAHEP
17.	Action Taken Report on Audit observations for FY 2018-19	March 1 st , 2021	NAHEP Finance

Sl.No.	Details of reports submitted	Date of submission	Submitted to
18.	Output-Outcome-Framework (OOF) for Q4 of 2020-21	April 1 st , 2021	PIU, NAHEP
19.	IUFR and Annual SoE for FY 2020-21	May 3 rd , 2021	NAHEP Finance

(2). MAJOR INNOVATIONS / ACHIEVEMENTS DURING THE PERIOD 2020-21

A. Student related

- After the introduction of COVID-19 lockdown, academic lectures were conducted online for all the students through Zoom, Cisco and Google Meet
- Special academic and career-related lectures were organized to enrich their knowledge and utilize their time efficiently
- In addition, students were inculcated with soft skills, communication skills, knowledge on stress management and subject enrichment on niche topics on food security, food technology, public health and emerging clinical topics.
- Online Clerkship programme as an alternative for Clinical externship was conducted by international adjunct faculty to meritorious final year students.
- Student exchange programmes with eminent Veterinary overseas institutions were increased from 3 to 4 during the year and two more are in pipeline
- Entrepreneurship trainings for updating knowledge on new rules, regulations, Government policies etc. and to meet challenges in industry were conducted to students
- Interactive USB flash drive for Experimental Pharmacology is also an additional strength created under IDP

B. Faculty related

- Identifying and prioritizing Veterinarian's Day one skills requirement for industrial needs was held at MVC Campus and at VCRI, Namakkal Campus. The following recommendations were evolved from the workshops
 - To improve soft skills of the students by training, guest lectures, interactive sessions and practice
 - Industrial internship for a duration of 2-3 weeks should be conducted

- Frequent updating knowledge on new rules, regulations, Government policies etc., is required
- Problem solving skills to meet challenges is required
- Conduct of industry-Academia interface meeting frequently at least once in six months.
- The curriculum should be flexible and dynamic

C. Facilities related

- The Learning and Assessment Centre / Soft Skill Lab was refurbished at MVC, Chennai and the robotic equipment procured were installed for the benefit of students. The faculty were also trained for imparting clinical skills using the modern robotic systems and simulators at Learning and Assessment Centre, MVC, Chennai for the IVth year BVSC & AH students.
- E books and Journals from Intl. publishers were purchased and made available to students and faculty of TANUVAS for facilitated learning
- Airconditioned, acoustic adjusted classrooms with modern smartboard improved learning environment
- HoloSuit – augmented and virtual learning on cattle anatomy, completed modules were reviewed periodically by the faculty of anatomy, demonstrated to students and feedback was obtained
- Virtual anatomy lab facility for HoloSuit was designed and being created at Learning and Assessment Centre, MVC, Chennai

D. Visibility related

- Visibility of IDP using social media links have been established for IDP of TANUVAS .
 YouTube - idpoftanuvras
 Facebook - idpoftanuvras
 Twitter - idpoftanuvras
 Instagram – idpoftanuvras
 Website – [https:// idpoftanuvras.com](https://idpoftanuvras.com)
- Six experts from global Universities have been added during the year 2020-2021

- Entrepreneurship videos were created and uploaded in Youtube for awareness and enhancement of knowledge for students
- Strengthening of WiFi facilities in three accredited colleges to improve Open Knowledge Environment is under progress
- Website was created for IDP of TANUVAS (<https://idpoftanuvras.com>) and for TANUVAS placement cell
- Logo for Institutional Development Plan of TANUVAS was developed

E. Environment related

- Mitigation and compliance with environmental and social safeguard measures were regularly adopted and sensitisation programmes were conducted for students.

S.No.	Legal Compliances	Mitigation Measures Undertaken
1.	National Building code of India (2005)	Measures regarding fire safety Approach to physically challenged Barricading the area and prevention of mingling of students and workers, Separate toilet for workers were provided.
2.	Energy conservation Act (2001)	Fixing of LED bulbs and Three-star air conditioners were installed.
3.	Noise Pollution Act (2000)	During construction, contractor was advised to minimize the noise pollution. The generators used were all noise free generators.
4.	E-waste rule (2011)	Applied to all electrical and electronic equipment
5.	Regulation of Employment and Conditions of Service Act (1996)	No child labour were engaged by the contractors during the work

- The Wall Paneling work in Learning Assessment Centre and Soft Skill Laboratories were carried out with recycled material which are “Non-Carcinogenic” and environmentally friendly in nature.

- Eight plastic free drive were conducted in all the three colleges with the theme “Clean and Green Campus”
- Application for ICAR sponsored ‘Clean and Green Environmental Award’ was submitted

(3). Information on Performance Indicators (April 2020- March 2021)

a. Output-outcome monitoring

Sl.No.	Particulars ¹	April'20 to March'21		
		Plan	Achievement	Progress made during period (Elaboration)
1.	Number of new facilitative units established to enable academic and research infrastructure (IIIC- Industry Institution Interaction Cell / Start up cell / incubation cell / experiential learning unit / placement cell etc.)	4	4	Smart Classrooms – 2 (One at MVC and another at VCRI-NKL) Skill Labs – 2 (One each at VCRI-NKL and CFDT)
2.	Number of pilot courses added / upgraded on communication skills, entrepreneurial skills, information processing, creative and innovative thinking, leadership skills, industry oriented courses etc.	1	1	Scientific English for all first year students
3.	Additional revenue generated through institutional activities with industries in INR lakhs	-	Rs. 10.00 Lakhs	
4.	Revenue generated through public usage of infrastructure for academic activities in INR lakhs	-	-	Facilities are now used at college level only. They are yet to be opened to public due to Covid 19.
5.	Number of MoUs signed with industry for knowledge exchange programs/ internships / short term training programs etc.	-	In pipeline	Students have been sent for industrial training to various industries for a duration of 12 days.

¹ Add the numbers for component specific awarded AUs and fill the required fields accordingly. If there was no plan against any specific indicator during this period, it needs to be filled zero.

Sl.No.	Particulars ¹	April'20 to March'21		
		Plan	Achievement	Progress made during period (Elaboration)
				Signing of MoU with industries (12 Nos.) is under progress
6.	Number of faculty exchange programmes (both national and international) initiated by AU	4	2	Could not be conducted due to Covid 19
7.	Number of student exchange programmes (both national and international) initiated by AU	37	-	Could not be conducted due to Covid 19

b. Input and activity monitoring

Input / Activity indicator	Sub- head / category	Expenditure / input in INR lakhs		Justification ²
		Planned	Utilization	
Goods and equipment	Equipment, Plant & Machinery	-	-	-
	Office equipment	-	-	-
	Laboratory equipment	149.00	62.22	<ol style="list-style-type: none"> 1. Syndaver surgical canine mankin - 1 No. 2. Canine spay model - 1 No. 3. Holstein Dystocia Simulator with matching calf - 1 No. 4. Bovine Theriogenology model with bovine uterus set-1No. 5. Suture pad base-15 Nos 6. Multi-layer suture pads- 15 Nos. 7. Hollow organ suture pads-15 Nos. 8. Canine multilayer suture pads-10 Nos. 9. Canine bandaging-hind

² Mention the physical numbers and specify the activities / purposes against each input category

Input / Activity indicator	Sub- head / category	Expenditure / input in INR lakhs		Justification ²
		Planned	Utilization	
				limb-1 No. 10. Canine bandaging-front limb-1No. 11. Equine neck venipuncture-1No. 12. Stainless steel Examination tables-15 Nos.
	Furniture & fixtures	-	-	-
	Computers and Peripherals	10.00	0.09	
	Books and Journals	15.00	15.15	Books – 143 nos. E books were made available online at TANUVAS KOHA portal
Civil works	Minor repair and renovation work	90.00	104.33	1. Smart classroom at Namakkal – 1 No 2. Skill lab at Namakkal – 1 No. 3. Skill lab at CFDT – 1 No.
Human capacity building³	National level training	-	-	
	International level training	-	9.43	Expenditure incurred for Ramya Kalaivanan and P.Sankar 1for overseas training at RVC, London under less than 40 years category
	Short visit/ seminars	-	0.00	
	Meetings and workshops	-	5.63	Towards conduct of three workshops by ICAR-NAARM and one workshop on Curriculum delivery / Transaction by AIU.
Consultancy	National level consultancies	-	-	-
	Travel	-	0.25	TA for faculty attending

³ Plz share the training details

Input / Activity indicator	Sub- head / category	Expenditure / input in INR lakhs		Justification ²
		Planned	Utilization	
Recurrent cost / Miscellaneous				trainings under NAHEP within India
	Contractual services	-	13.66	Senior Research Fellow - 1no. up to January 2021 Data Entry Operator - 1 no. Computer Programmer - 1 no. - From August 13th, 2020
	Operational costs	15.78	206.73	Student development activities 1. Online clerkship – 1 2. Online Guest Lectures – 18 3. Student development lectures – 15 4. Skill development programmes – 8 5. Clinical case discussions – 2 Faculty development activities 6. Workshops – 3 7. Guest lectures - 1
	Institutional charges	0.79	18.01	
Total		280.57	435.50	

c. Challenges faced and lessons learnt under Component 1a

- i. Cancellation of: International trainings and difficulty in bringing adjunct faculty from US and UK
- ii. Inability to go for overseas training: Short visit – 2; >50 years of age – 1; <40 years of age – 2 nos.
- iii. Difficulty in conducting online programmes by international faculty due to time zone difference

d. Plan ahead (Key activities) for next reporting period

S. No.	Particulars ⁴	Progress made during period Apr'21 to March'22	
		Plan	Achievement
1.	Number of faculty exchange programmes (both national and international) initiated by AU	5	
2.	Number of student exchange programmes (both national and international) initiated by AU	30	
3.	Number of technologies transferred to industry / private sector / national / international organisations	NA	
4.	Number of students selected in JRF / SRF / ARS	20	
5.	Number of students who were admitted in foreign universities	2	
6.	Number of students received National Young Scientist Award	NA	
7.	Number of students received ICAR's Jawaharlal Nehru thesis Award	NA	
8.	Number of students awarded at Agri-unifest	5	
9.	Number of students awarded at Agri uni sports meet	5	
10.	Number of industry- sponsored projects and positions in cutting-edge areas of Agri-science	NA	
11.	Number of competitive grants from a national/international funding agency	NA	
12.	Number of technologies commercialised by AU	NA	

⁴ Add the numbers for component specific awarded AUs and fill the required fields accordingly. If there was no plan against any specific indicator during this period, it needs to be filled zero.

LEARNING AND ASSESSMENT CENTRE



Holstein dystocia simulator



Haptic cow simulator



Canine Surgical simulator



Canine Heart sound simulator

LEARNING AND ASSESSMENT CENTRE



Learning and Assessment Centre



Students at LAC working in Suture station

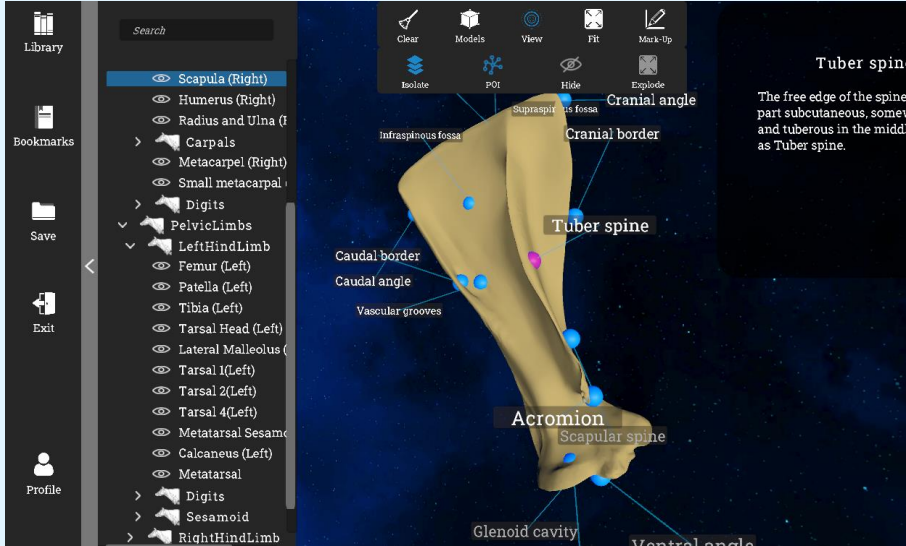
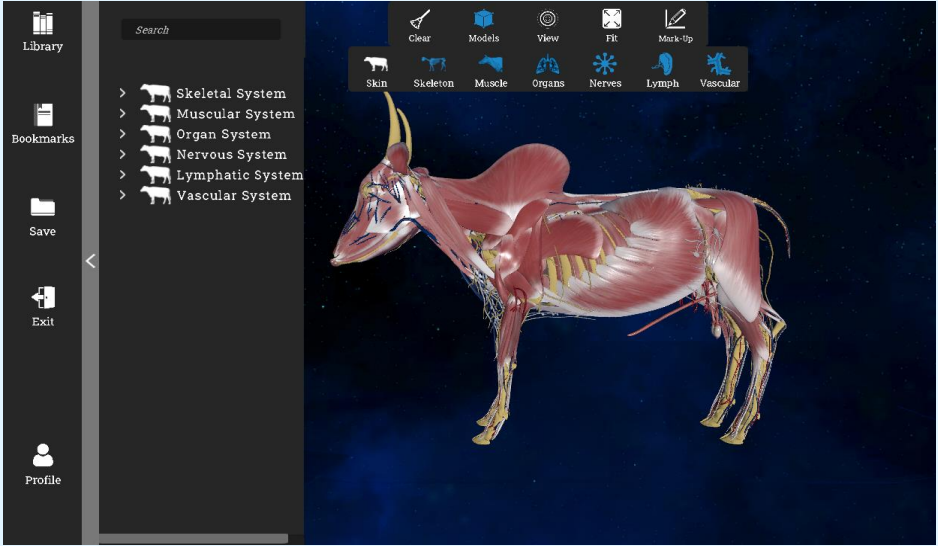
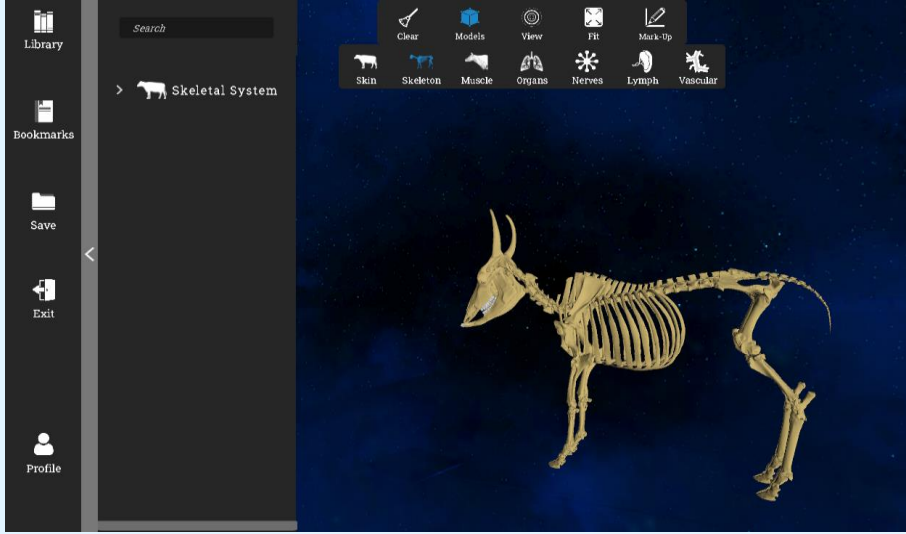
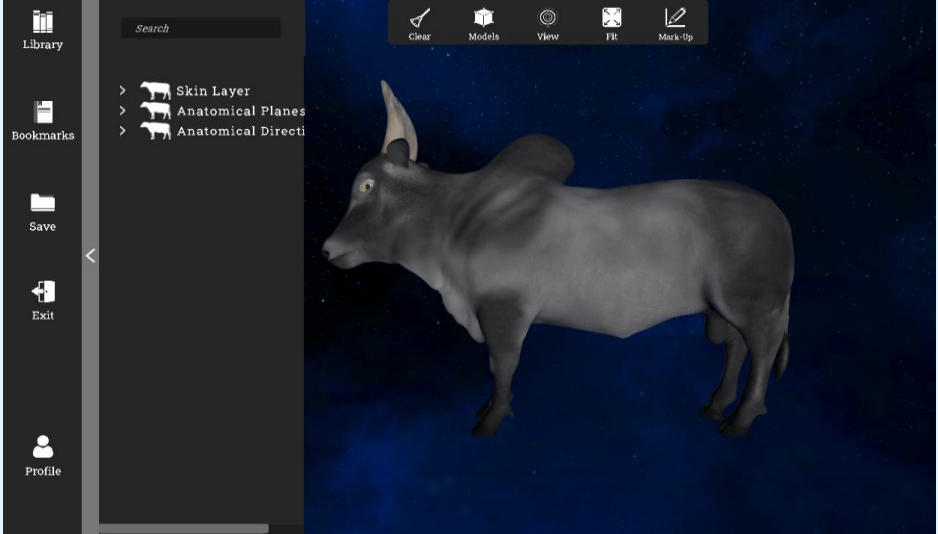


Students @ Learning and Assessment Centre

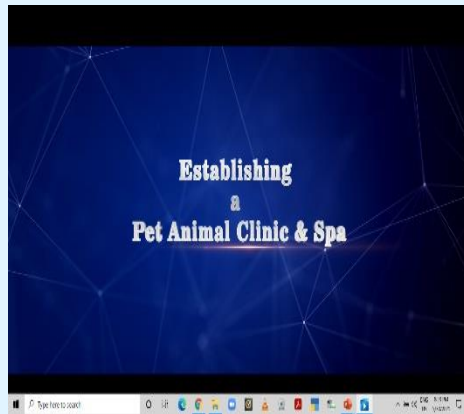


Live animal models @ LAC

HOLOSUIT BASED VR/AR CATTLE ANATOMY



ENTREPRENEURSHIP VIDEO LESSONS DEVELOPED AND UPLOADED IN YOUTUBE



STUDENT DEVELOPMENT PROGRAMMES

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THE LIVE WEBCAST
"FROM A VET TO AN ENTREPRENEUR"
-DR. MADHURITA GUPTA
FOUNDER - MY VETS CHARITABLE TRUST & RESEARCH CENTRE, MUMBAI.

zoom LIVE

ZOOM ID : 954 0867 5004
PASSWORD : 577812
19th March 2021
5.30 PM

<https://idpoftanuvas.com>

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JOIN US FOR THE LIVE WEBCAST
on 24th March 2021 at 4 pm

IDP Institutional Development Plan TANUVAS

HOW TO FACE UPSC EXAMS"
-Dr. R. Anandakumar, IAS
Commissioner of Sugars
Chennai

Zoom

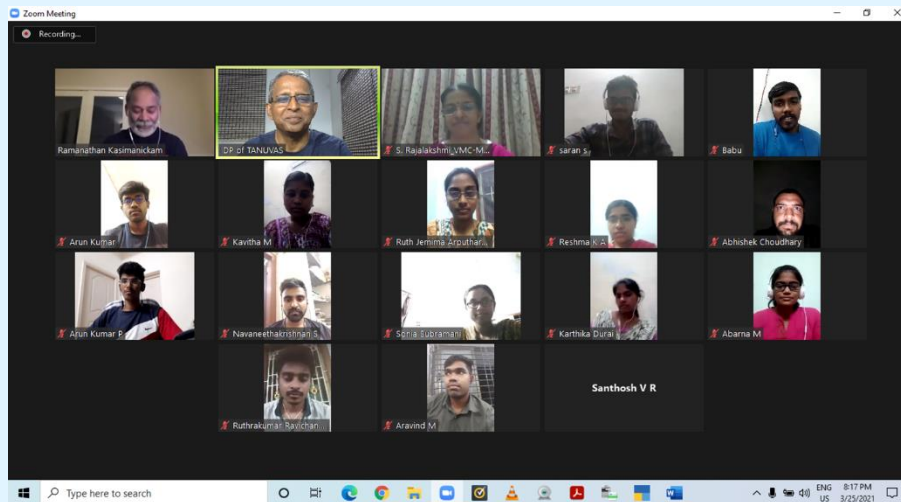
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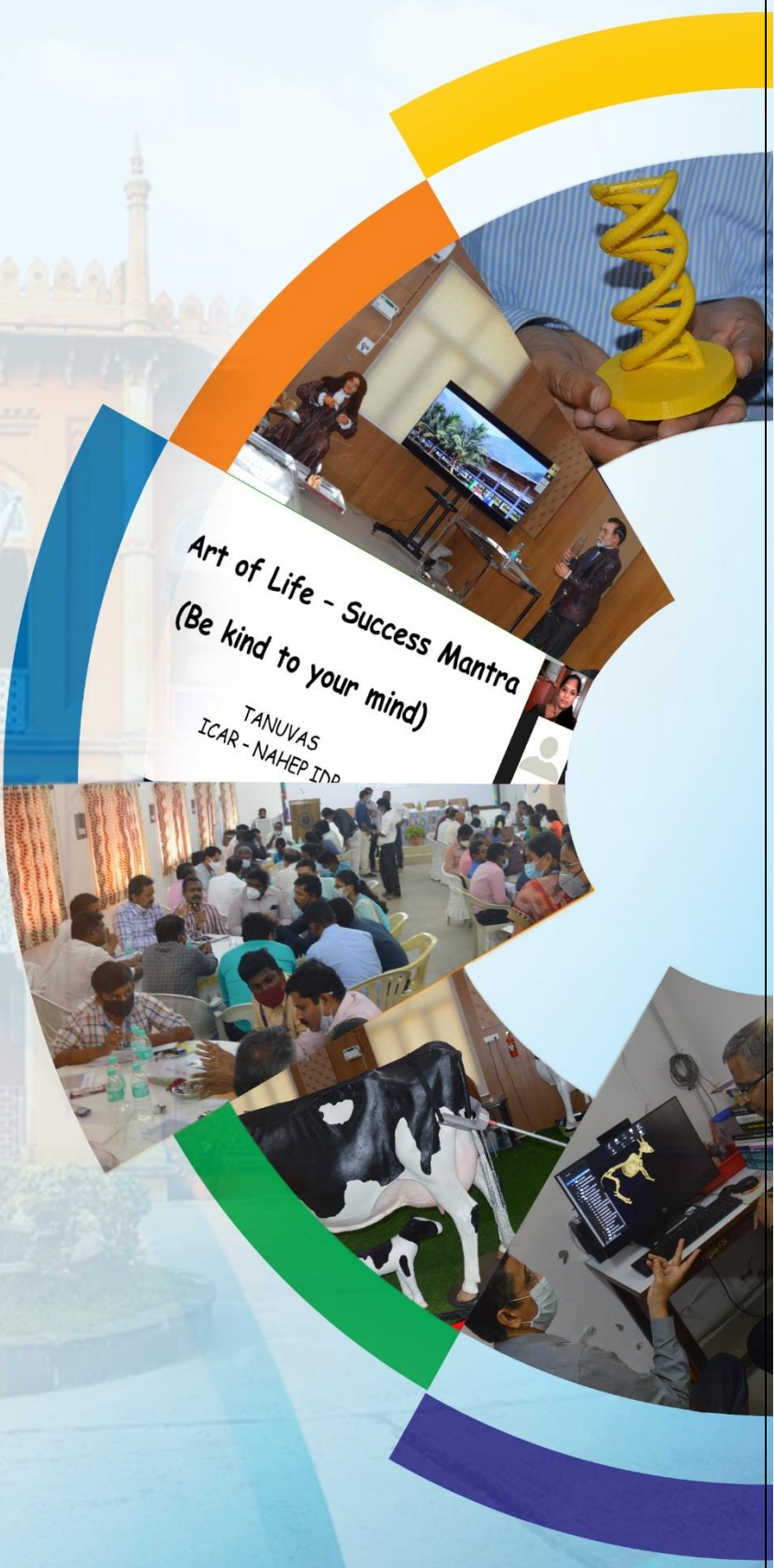
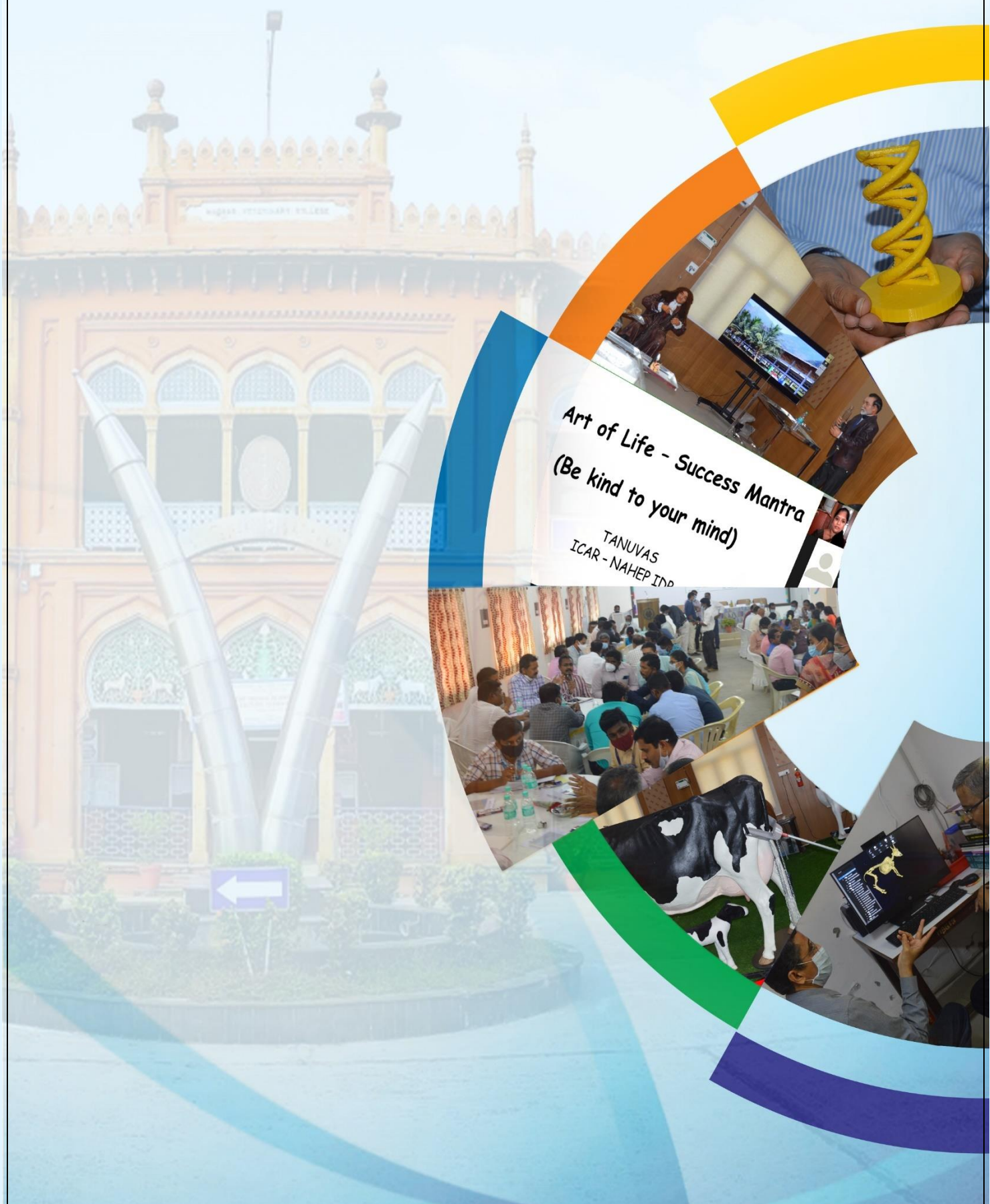
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**Institutional
Development Plan
TANUVAS**



**Art of Life - Success Mantra
(Be kind to your mind)**

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