

Workshop on
**VETERINARY EDUCATION -
EMERGING PERSPECTIVES**

10th and 11th September, 2003



WORKSHOP PROCEEDINGS

Workshop organized by
Acharya NG Ranga Agriculture University (ANGRAU)
Hyderabad

With the support of
Capitalization of Livestock Programme Experiences India (CALPI)
New Delhi

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1. Background

In a meeting held between the Dean and the Senior Faculty of Acharya NG Ranga Agriculture University (ANGRAU) and the representatives of CALPI on 19th June 2003 at the ANGRAU campus, the following issues related to veterinary education emerged:

- i. The responsibility for review and modification of the veterinary curriculum is vested with the Veterinary Council of India (VCI).
- ii. The curriculum introduced by VCI in 1993 has bridged most of the gaps and deficiencies identified till then. It has also incorporated some flexibility to meet local needs.
- iii. VCI has already initiated the process for reviewing the existing curriculum (though it might take 1-2 years for the curriculum to get actually revised).
- iv. Under the circumstances, it would be advisable for ANGRAU to make best use of the flexibility in the existing curriculum and to focus on operationalisation of the existing curriculum.
- v. Continuing education and skill building of teachers in the veterinary colleges is another key area requiring priority attention by ANGRAU.

The meeting finally suggested the following actions :

- i. Identify the operational gaps and deficiencies in veterinary education, which could be made good within the framework of the existing curriculum, through a workshop of the major stakeholders.
- ii. Arrange need analysis for skill up-gradation and improving the teaching skills of teachers.
- iii. Based on above, prepare a detailed plan for improving veterinary education in ANGRAU indicating the support expected from CALPI and other agencies.
- vi. Solicit support of VCI in filling the gaps and deficiencies in veterinary education making best use of the flexibilities within the existing curriculum and for a review, and if necessary, modification of the existing veterinary curriculum.

Based on the above, a stakeholder workshop on 'veterinary education, emerging perspectives' mentioned at item one above was jointly organized by ANGRAU and CALPI on 10th and 11th September 2003 in the ANGRAU campus. The workshop was followed by an exercise on training need assessment of teachers of the veterinary colleges of ANGRAU. This report summarizes the points discussed during the workshop. The report on training need assessment is presented separately.

2. Objectives of the Workshop

- i. To identify the operational gaps and deficiencies in veterinary education which could be bridged within the framework of the existing curriculum.
- ii. To generate ideas to bridge the gaps and deficiencies through operationalisation of the Veterinary curriculum so as to enable veterinary graduates to address the emerging challenges effectively.

3. Programme

The workshop was jointly organized by CALPI and ANGRAU, on 10th and 11th September, 2003 in the ANGRAU auditorium. About 35 participants representing most of the stakeholders including the Dean and the senior faculty of ANGRAU, representatives of the Dept. of AH, the State Management Institute for Livestock Development Associations (SMILDA), the Veterinary Council of India (VCI), NDDB, Dairy cooperatives, selected NGOs, the livestock/poultry industry, Indo Swiss Natural Resource Management Project Andhra Pradesh, CALPI etc. attended the workshop.

Ms. Annette Kolff, Head Agricultural Team, Intercooperation Head Office, Berne moderated the workshop.

The workshop commenced on 10th September with an introduction and welcome address by Dr. M.V. Subba Rao, Dean, Faculty of Veterinary Science, ANGRAU. Dr. A.K. Joseph, Senior Programme Coordinator, CALPI gave a brief introduction on CALPI.

4. Presentations

There were three key presentations followed by group discussions. The highlights of the presentations are given in the box numbers 1 to 3.



Presentation by Dr. M.V. Subba Rao, Dean,
Faculty of Veterinary Science, ANGRAU

Topic I: Veterinary Education – Objectives and the gaps and deficiencies in the operationalisation of the existing curriculum

Presenter: Dr. M V Subba Rao, Dean, Faculty of Vet. Science, ANGRAU.

The gaps and deficiencies highlighted by Dr. Subba Rao, included some which require modification of the veterinary curriculum (proposed to be brought to the attention of VCI) and others which can be made good within the framework of the existing curriculum. The highlights of his presentation are given in Box No. 1. The full text of the presentation is attached as Annexure - I

Box 1: Highlights of the presentation on ‘Veterinary Education – Objectives and the gaps and deficiencies in the operationalisation of the existing curriculum’
<ol style="list-style-type: none">1. Rigidity of Curriculum<ul style="list-style-type: none">• VCI may make the curriculum more flexible to include local requirements.2. Redundancy in the syllabus<ul style="list-style-type: none">• Restructuring of syllabus• Amalgamation of Courses and Departments3. Deficiency in clinical training<ul style="list-style-type: none">• Introduce training from the 6th semester instead of from 7th.• Integrate clinical departments with Teaching Veterinary complex• Upgrade diagnostic facilities• Training in Tele-veterinary services- linked to rural veterinary dispensaries of AH Department4. Constraints in the conduct of examinations<ul style="list-style-type: none">• Encourage senior teachers to accept external examinership by facilitating leave, higher incentives/ remuneration, reducing pressure on evaluation of theory answer scripts etc.5. Deficiencies in internship program<ul style="list-style-type: none">• Strengthen 3 regional centers with adequate infrastructure, staff etc.• Establish 24 hrs hospitals with inpatient facility for internship.• Establish polyclinic and lab diagnostic facilities• Resident Doctors from the university also to train and monitor internship in addition to JD, AH.6. Training in skill development<ul style="list-style-type: none">• Product oriented ‘earn while you learn’ programmes, value addition, marketing entrepreneurship etc.• A.I and Pregnancy Diagnosis• Institutionalization of animal health camps and NSS programmes for the students to get credit.• Lack of some important equipment as prescribed by VCI.7. WTO and globalization<ul style="list-style-type: none">• Promote livestock trade• Include topics like: Biotechnology, IT, Quality of products, Food safety• Post harvest technology - Training needs (training needs in respect of transport, processing, storage, quality, marketing etc.)• Teaching and Research facilities on Livestock economics and marketing• The course “Livestock economics Marketing and business management” to be shifted from 1st to 4th year for better comprehension.8. General<ul style="list-style-type: none">• Better understanding of emerging livestock service needs of small farmers.• Veterinarian to function as a producer of jobs and not as a job seeker

Topic ii: Veterinary Education – Perceived gaps and deficiencies in the emerging context

Presenter: Dr. Sagari R. Ramdas, Director, ANTHRA.

The highlights of the presentation on ‘Veterinary Education – Perceived gaps and deficiencies in the emerging context’ are given in Box No.2. The full text of the presentation is included as Annexure II.

Box 2: Highlights of presentation on ‘Veterinary Education – Perceived gaps and deficiencies in the emerging context’

The veterinary education must:

1. Encourage a critical, analytical and questioning mind and attitude among students
2. Build perspectives on rural livestock production systems and their intricate relationship to people’s livelihoods, agriculture and the surrounding natural resources.
3. Focus on socio-economic and political contexts of livestock production,
4. Include:
 - § range land/ grass land management, land use planning, ecological degradation,
 - § Trans-human and nomadic pastoralist and semi-nomadic migratory grazing systems,
 - § Livestock economics, local markets, linking the producer and the consumer
 - § Local breeds, multiple breeding objectives
 - § Alternate systems of medicine, approaches to animal health and healing
 - § Participatory tools in planning and monitoring
 - § Extension
 - § Gender Sensitization
5. Reinforce theory and exposure to village realities.
6. Include policies
7. Develop an effective internship programme

Topic iii: Current Veterinary Curriculum, its strengths and challenges in the context of emerging perspectives

Presenter: Prof. V Ramkumar, Former Secretary, VCI.

The highlights of the presentation on ‘Current Veterinary Curriculum, its strengths and challenges in the context of emerging perspectives’ are given in Box No.3

Box 3: Highlights of presentation on ‘Current Veterinary Curriculum, its strengths and challenges in the context of emerging perspectives’

Dr. Ramkumar indicated the nature of flexibilities existing in the curriculum and how best these flexibilities could be made use of for bridging some of the identified gaps and deficiencies highlighted by the key speakers. He also suggested that some of the identified gaps in the curriculum, which require modification of the curriculum, be brought to the attention of the VCI.

5. Group Discussions

Following the presentations, discussions, clarifications and feed back, the major issues, which remained, were grouped under five topics. The participants were then split into four groups (as shown below) and each group was entrusted with the task of examining one topic (group III was assigned two topics) in detail.

Group	Topics
I	Operationalisation of Curriculum- Human, Administrative and Management Aspects
II	Farmer Focussed Practical orientation
III	a) Quality Service Delivery- changing needs b) Flexibility in Curriculum
IV	Globalization and Market Access



Discussion

The participants were asked to examine the relevance of these issues in the context of operationalization of the curriculum, prioritize the issues, generate ideas and suggest ways of operationalising the ideas in ANGRAU. The groups then presented their recommendations in the plenary followed by further discussions.

6. Group Presentations

Group I, Topic: Operationalisation of curriculum - Human, Administrative and Management aspects

Issues and suggestions:

1. Shortage of human power, funds and infrastructure

- Regular recruitment without insisting on NET
- Transfer of services
- Additional financial allocation
- Mobilizing infrastructure through other sources

2. Institutionalization of skill development

- Giving due credit/weightage for 'earn while you learn', NSS and Animal Health camps for the benefit of teachers
- Additional programmes to impart better skills among teachers

3. Lack of Training

- Training of teachers in preparing lesson plans
- Capacity building of teachers in appropriate areas
- Computer aided learning
- Shift from classroom to individual learning
- Case studies

4. Deficiency in clinical training

- Training may be introduced from 6th semester instead of 7th
- Integration of clinical departments with other departments
- Diagnostic services to be modernized and upgraded

5. Internship

- Upgradation of one hospital of AH department in each region as a super specialty hospital for higher level of training
- Improvement of infrastructure and facilities in veterinary polyclinics/hospitals to meet the needs of internship programme
- A resident teacher from university to train and monitor internship programme with the joint director of Animal Husbandry
- At least two weeks of rural exposure of students to resource poor farmers and their farming system

6. Constraints in conduct of exams

- Common understanding among universities to encourage and permit teachers to act as external examiners on duty
- Payment of appropriate remuneration to the examiners

7. Need for hi-tech integrated production system

- Creation of appropriate infrastructure and linkages with the industry
- Seeking partnership with industry for teaching and training

8. Lengthy and tightly packed five-year course

- Rationalization of course curriculum to avoid redundancy
- Making room to include newer developments
- A separate organization like a veterinary university may be a solution for the problems faced by the veterinary colleges

Group II, Topic: Farmer Focused Practical Orientation

Issues and suggestions:

1. Livestock production systems to include local resources and knowledge system

- In the existing curriculum, students get some exposure to organized farms, but not to unorganized farms. Exposure to unorganized farms be arranged through:
 - i) Orientation in the beginning
 - ii) Practical training in the villages while teaching LPM/LPT Courses
 - iii) Internship to include exposure/placement in villages with clear tasks and assignments
 - iv) Increase in financial support to students to facilitate the village stay

2. Natural resource planning - land and water/ environment

- There is no course in the existing curriculum. To start with, it may be taken care of through inter departmental meetings
- In future, a course would need to be introduced

3. Veterinary services and poor farmers

- Presently, the needs of the poor farmers are not completely met
- Vacant posts in Government sector to be filled up.
- The role of para-veterinarians and para veterinary workers should be defined clearly. Para-veterinarians should work closely with qualified veterinarians. The veterinarians should guide and monitor their work.
- The para-veterinary curriculum would need to be revised based on their role definition.
- Government must invest more in veterinary education.
- Inadequate diagnostic facilities at district level needs to be addressed.
- There is need for an open debate on veterinary healthcare (clinical and preventive), service delivery systems, quality and cost of service delivery, role clarity etc.

(Due to differences in opinion and divergent views among the group members, no consensus could be arrived at on these issues).

4. Participatory Rural Appraisal (PRA) to be taught as one of the tools to understand farmer issues

- Can be introduced through existing extension syllabus
- Students should use PRA in villages including during internship
- PRA can be used in related subjects as well

5. Attention to local breeds

- Needs to be emphasized in the Animal genetics and breeding subject

6. Gender sensitization

- Should be taught as a separate course

Group III, Topic: (a) Quality Service Delivery- Changing needs

Issues and suggestions:

1. Increase clinical component credits especially during internship training
2. Inadequate focus on emerging diseases of small ruminants, poultry, cattle etc.
3. More emphasis on internship and practical exposure. Focus on skill development of students and its effective monitoring.
4. Public good and private good livestock services, role definition of govt., farmer organizations, private etc. in service delivery and alternate channels of service delivery are relevant and essential. Encourage more and more veterinary graduates to take up private veterinary practice.
5. Focus on quality of inputs, effectiveness of delivery, pricing of services and mode of delivery (at farmer's doorstep or at the center)
6. Environmental issues including Disaster Management are already dealt with in the Syllabus (page 25 (101), VPH 412).
7. ANGRAU should propose measures to reduce redundancy in syllabus to VCI.
8. ANGRAU should emphasize pedagogic effectiveness by improving the teaching skills of the teachers.
9. Teaching has to change from instructional methodology and cognitive learning to psychomotor learning.
10. Special focus on the inputs and services required by small ruminants and poultry (the poorest among animal owners).

Group III, Topic (b): Flexibility in Curriculum

Issues and suggestions:

1. There is not much scope for flexibility within the stipulated 188 credits of the curriculum. Flexibility is possible only in credits beyond this prescribed level. Therefore, revision of curriculum is unavoidable.
2. The tight, rigid schedule hampers the limited flexibility now existing
3. Considerable scope exists for amalgamation of courses and avoiding redundancy.
4. There are many areas of redundancy, which could be taken care of. VCI should play a pro-active role in this regard.
5. University teachers and departments should come together and emphasize on skill development

Group IV, Topic: Globalization and Market Access

Issues and suggestions:

1. Include a chapter in AHE 121 (Action ANGRAU), Shift course no. 121 to 411 and vice versa (VCI subject).
2. Codex, ISO, EEC, standards are sine-qua-non of WTO. These have to be included in appropriate courses in VPH 311 and 321 (Action ANGRAU).
3. Introduce a course by combining VPH 311 AND 321 as Livestock Food Products Safety and Public Health with 3 credits (2+1) in 4th year- (VCI).

4. Economics is already covered in the existing syllabus, cost of production to be linked to all livestock enterprises and small farmers livelihood systems (ANGRAU)
5. Cost benefit analysis of disease control and eradication to be included in VEP 411 (ANGRAU)
6. Veterinary Public Health Policies are covered in the existing curriculum, but prevalent laws need amendment to meet the current needs. (Action Government of India and Government of A.P).
7. Explore possibility of merging milk hygiene and meat hygiene and shifting to 4th year
8. Export capacities of resource poor farmers are covered in existing curriculum in AHE-411. This may need review.
9. Quality Control in relation to Local Markets is dealt with in AHE 121. May need review in the context of emerging global scenario.
10. The Role of veterinarians should be well defined.

7. Constitution of Expert Group (EG)

The group discussions and presentations generated a rich pool of ideas and suggestions for improvement, some within the existing curriculum and others needing modification of the curriculum. The group felt that, these ideas should be examined in detail, discussed with the departments concerned and newer ideas solicited. The plenary therefore recommended constitution of an Expert Group (EG) to address these. It also discussed the tentative composition of the EG and its broad terms of reference. The plenary requested the Dean to constitute the EG, finalize their TOR and assign the tasks with the support of CALPI and based on the broad terms of reference and composition discussed. It was also recommended that the recommendations of the EG should be discussed in stakeholder workshop participated by the AH department, milk cooperatives, NGOs, industry, students etc. before presentation to Academic Council.

8. Next Steps

ANGRAU	CALPI
1. Circulate the draft proceedings of the workshop among the participants	1. Help in finalizing the draft proceedings of the workshop
2. Finalize the TOR for the Expert Group (EG) jointly with CALPI	2. Assist the Dean in constituting EG Assist in finalizing draft TOR for the EG
3. Constitute EG and assign tasks as per TOR including review of the present and the earlier workshop recommendations, proposals of departments, finalization of plan etc.	3. Support ANGRAU in the process
4. Convey the recommendations of the workshop, which require revision of the curriculum to VCI for action as deemed fit.	
5. Organize stakeholder workshop to validate the final recommendations of EG.	4. Support ANGRAU
6. Submit proposals to the Faculty Board of Vet. Science and the Academic Council.	
7. Prepare a plan for implementation	5. Assist ANGRAU in finalizing a plan for approval and implementation
8. All departments to be ready for implementation of approved plan.	

9. Valedictory Remarks

Dr. M.V. Subba Rao, Dean welcomed the chief guest Padmasri Dr. I.V. Subba Rao, Former Vice Chancellor and the other dignitaries. Dr. Md. Hafeez summarized the proceedings of the workshop. Dr. P. Sriramulu committed the state AH department's full cooperation in all the efforts of ANGRAU and CALPI to produce veterinary graduates with improved skills. Ms. Annette Kolff briefed on the history of Indo-Swiss collaborations and the role being played by both SDC and Intercooperation in India. Dr. **S.** Ramalinga Raju congratulated ANGRAU for organizing such a good workshop and committed support of the VCI to the extent possible in this endeavor.

In his address, Padmasri, Dr. I.V. Subba Rao congratulated ANGRAU for organizing such a successful workshop and emphasized the following:

- India has immense potential for exploiting the global market for agriculture and agri-related products
- Farmers should be helped and supported to face the WTO linked challenges and those of the global market.
- Entrepreneurship and self-employment of graduates should be the focus in future.
- Tremendous changes have taken place in educational systems in other countries. We should gain from their experiences.
- Hands on practical training has to be the priority in veterinary education.

Dr. A.K. Joseph of CALPI emphasized the need for helping small farmers face the emerging challenges through quality services delivered to them by competent veterinary professionals. He thanked ANGRAU, Dr. MV Subba Rao, Dean and the members of the faculty for organizing such a fruitful workshop. Dr. K. Somasekhar Reddy gave the Vote of Thanks.

10. Conclusion

The workshop clearly led to a consensus on the follow up actions to be taken, both by ANGRAU and CALPI, towards improvement of veterinary education. The participation in the workshop, the discussions which took place and the action plan drawn up clearly pointed to the success of the workshop and the effective manner in which it was facilitated. Though, occasionally, the discussions drifted to development/reorientation of the veterinary curriculum, the discussions were, quite well focused on operationalisation of the curriculum taking best advantage of the flexibilities existing in it.

Above all, the workshop brought to the fore, the excellent collaboration and friendly relationship forged between CALPI and ANGRAU, particularly the faculty of Veterinary Science, The workshop well recognised and appreciated the need for nurturing this collaboration so as to enable ANGRAU to pave the way for improving veterinary education in the state.