

QUANG NGAI RURAL DEVELOPMENT
PROGRAM (RUDEP) - PHASE 2

Consultancy Report: *Farmer Animal Health
Training Improvement; Commune Paravet
Competency Assessment and SDAH Animal
Health Capacity Building and Training Program for
2005-2007*



VIETNAM-AUSTRALIA

Prepared for

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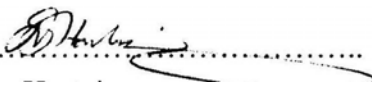
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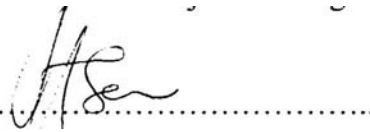
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Acronyms

AG	Activity Groups
AHS	District Animal Health Station
CCG	Commune Contact Group
CPC	Commune People's Committee
FU	Farmer's Union
HHs	Households
RUDEP	Quang Ngai Rural Development Program
SDAH	Sub-Department of Animal Health
ToT	Training-of-Trainers
VSCF	Village Savings and Credit Facilities
WU	Women's Union

Summary

Some consulting activities were provided by the Animal Health Training Consultant in April 2005 to support Provincial SDAH in implementing animal health activities. The main results revealed that:

For the Farmer Animal Health Training:

- A set of the Farmer Animal Health Training and Extension Manuals on goat were reviewed and a one-day *ToT course* for Provincial SDAH and District AHS staff was carried out to satisfy requirements of households involving in goat raising. The agreed content of the Goat Animal Health Booklet towards Households need to be completed soon and the agreed flip-chart content should be laid carefully out by handwriting it on A1 size.
- The animal health training outline and materials were reviewed and improved for RUDEP Activity Groups and future farmer training through a meeting with SDAH officers and trainers.
- Initial VSCF ex-post adoption assessments in a RUDEP commune (Tinh Tho) were conducted. The content and method used should be continuously utilised for future ex-post adoption assessments.
- Based on the Commune Paravet Competency Profiles, initial assessments on paravet competency and the current animal health situation were conducted in 2 RUDEP communes (1 lowland and 1 upland commune) to learn from experience. Findings from these assessments should be reviewed and improved for future assessments in 17 remaining RUDEP communes.

For the Provincial SDAH and District AHS capacity building:

- A 2-year capacity building program for the year 2005-07 for Provincial SDAH and District AHS staff was prepared based on their needs.
- A 3-day ToT course on Paravet Training Methodologies for the staff of new RUDEP districts was conducted. Some of them should be selected for taking part in future paravet training courses based on the SDAH capacity building program.

1 Introduction

The Quang Ngai Rural Development Program (RUDEP) has been collaborating with the Provincial Sub-Department of Animal Health (SDAH) to support improved animal health services in RUDEP Communes and in Quang Ngai Province. With the assistance from the National Animal Health Training Consultant (Dr. Ta Ngoc Sinh), the following activities were implemented in April 2005:

- Reviewing the farmer animal health training outline and materials and conducting a one-day Training-of-Trainers (ToT) course on goat for selected Provincial SDAH and District Animal Health Stations (AHS) staff.
- Reviewing and improving the animal health training outline and materials for RUDEP Activity Groups (AG) and future farmer training.
- Conducting initial VSCF ex-post adoption assessment in a RUDEP commune (Tinh Tho).
- Conducting initial assessments on paravet competency in 2 RUDEP communes (Duc Phong and Nghia Tho).
- Preparing a 2-year capacity building program for the year 2005-07 for Provincial SDAH and District AHS staff.
- Conducting a 3-day ToT course on paravet training methodologies for new RUDEP district AHS officers.

This report shows the results of those activities and the recommendations for each activity.

2 Reviewing the Farmer Animal Health Training Outline and Materials and ToT Course on Goat

Households (HHs) in some communes are keeping cattle, buffalo, pig, chicken and also goat. Therefore, a set of animal health training materials on goat including handouts, flip-charts and teaching plan for trainers was drafted by the SDAH and then reviewed and discussed with the Consultant at a meeting. After that, a one-day ToT course on farmer goat training was conducted to satisfy requirement of HHs revolving in goat raising.

2.1 Reviewing the Farmer Animal Health Training Outline and Materials on Goat

Duration: one-day meeting on 19 April 2005

Venue: SDAH office

Participants:

- 10 SDAH and District AHS officers (*for detailed list, see*
- **Table 1: List of participants at the meeting reviewing the goat animal health manuals**)
- RUDEP: Mr. Ta Ngoc Sinh - Consultant

Implementation

Firstly, 10 selected SDAH and District AHS officers were given the manuals drafted by the Techniques Department of the SDAH to browse. Sections overlapping with 3 completed cattle/buffalo, pig and chicken booklets were removed and the outline for the goat booklet was agreed.

The goat booklet content then was carefully discussed. According to agreed booklet content, the content of flip-chart and teaching plan were discussed and agreed in detail.

It took time for us to review the manuals. There were lots of mistakes were find out and corrected; lots of unsuitable items were edited out. However, it is commendable because this is the first time SDAH officers design a manual toward farmers. In spite of leaving late after a hard-working day¹, all participants took part actively and effectively in discussions.

2.2 ToT Course on Goat Animal Health Training

Duration: one-day ToT course on 24 April 2005 (for detailed agenda, see

Table 2: Agenda of the ToT course on goat animal health training)

Venue: Song Tra hotel

Participants:

- 18 selected SDAH and District AHS officers in the districts where there are goat raising activities (*for detailed list, see*
- **Table 3: List of participants at the ToT course on goat animal health training)**
- Trainer: Mr. Sinh

Implementation

The same steps like recently ToT courses on cattle/buffalo, pig and chicken were carried out. The drafted goat booklet was delivered to all participants for understanding roughly its content before discussions in detail.

Based on the agreed goat booklet, the detailed flip-chart and teaching plan that included predicted situations, questions and answers, supporting materials, training methodologies and time consuming for each item were presented to the participants. Estimated time for providing training on goat for farmer is about 4 half-days.

By using handmade flip-chart with drawing and emphasized important items combined with other teaching aids, the participants have gained valuable knowledge and training methodologies over the course.

¹ Reviewing animal health training outline and materials on goat ended at 6 pm

Although the course was held on Sunday², the participants showed their enthusiasm. Especially, the course was attended by the Director of SDAH that showed SDAH's high interest in this activity.

2.3 Output

- Detailed content of the goat animal health booklet towards households has been agreed. It will be complete on computer and hand over to RUDEP by SDAH for printing.
- Detailed content of the flip-chart (see Annex 1) is available for developing.
- Trainers' teaching plan (see Annex 2) is available for use.

2.4 Recommendations

For future animal health training on goat, the following issues should be addressed:

- Complete the agreed content of the goat animal health booklet towards households on computer and then print it.
- SDAH and District AHS trainers should be requested to prepare and use handwriting flip-chart for providing future farmer training courses effectively.
- Design a set of pre- and post-test questions on goat animal health to measure levels of animal health competency of farmers before training and their competency gains after training³.

3 Reviewing and Improving the Farmer Animal Health Training Outline and Materials

3.1 Reviewing and Improving the VSCF Training

The farmer animal health training courses were carried out in 44 VSCFs in Cycle 1 and Cycle 2 RUDEP communes in the second half of 2004, and a workshop to review VSCF animal health training was then held recently. Subsequent to the workshop, a half-day meeting between SDAH officers and trainers and the Animal Health Training Consultant was held on 12 April 2005 to improve the animal health training outline and materials for RUDEP AG and future farmer training.

The meeting has revealed some achievements along with some limitations of the VSCF training courses and the following comments were given:

Training content:

- The training content on cattle/buffalo, pig and chicken is appropriate; however, training needs of households in some communes on goat and duck are revealed. The animal health manuals on goat are now reviewed as mentioned above.

² Due to many SDAH's activities in support of the Consultant have to be done in a period of one month

³ Only goat booklet, flip-chart and teaching plan were drafted before the date when the ToT course was conducted

- There are still some printing mistakes in the Farmer Animal Health Booklets on cattle/buffalo, pig and chicken. Those mistakes were reviewed, corrected and updated booklets⁴ are now available for reprint.

Teaching aids:

- Flip-charts used for providing VSCF training had not been prepared by handwriting. They were merely photocopies with unclear drawings, too small size of letters, and no important information emphasized by colours. This influenced negatively the effectiveness of the training courses.
- Trainers had not used colour cards during the courses yet.
- The teaching aids used in the courses were insufficient.

Training method:

- By using the participation training method, the training courses were highly appreciated by farmers and gained some initial achievements. Farmer's awareness on animal disease prevention is initially improved.
- VSCF training sessions were conducted by a team of 2 people: one Provincial SDAH officer and one District AHS officer, but there were some sessions provided by the Provincial SDAH officer only (the District AHS officer worked as an assistant). This showed that these District AHS officers are unselfconfident to provide training for farmers. Furthermore, there were a few training sessions delivered by both the Provincial SDAH and the District AHS trainer; however, those sessions were carried out separately by each trainer. The result was that it took very short time to finish the training courses, but it also caused some big limitations that reduced the effectiveness of the courses because the trainers could not realize their strong and weak points without the assistances of their colleagues.

Trainers did not really cover the teaching plans; in fact, they mentioned many out-of-topic issues.

Organizing:

- General principles for the courses sometime were not strictly obeyed (e.g. participants not the same, late attendance).
- It seems that 5 half-day training sessions per training course is not enough, because:
 - Ability to acquire knowledge of farmers was slow; especially minorities in uplands.
 - It was time-consuming to introduce the tool box provided by RUDEP (one tool box per VSCF). This activity did not include in the teaching plan yet.
 - It took time to complete RUDEP evaluation form⁵ at the end of the courses (except post-test assessment).
 - In some cases, it took time to transfer to farmer's house for on-farm guiding participants using disinfectants.

⁴ 3 corrected and updated booklets on cattle/buffalo, pig and chicken animal health are attached with this report

⁵ This evaluation form was delivered by CBO

3.2 Recommendations

The following issues should be addressed for AG and future farmer training.

Farmer animal health booklets:

- Improved Farmer animal health booklets on cattle/buffalo, pig and chicken should be used for future reprints.
- The farmer booklet on goat animal health need to be soon developed prior to near future training in Pho Chau commune (Duc Pho district).

Teaching aids:

- The flip-charts need to be carefully improved by SDAH and District AHS trainers themselves to use in future training courses.
- Other teaching aids (vaccines, vet-medicines, A4 size colour pictures, chicken, etc) should be prepared more sufficiently.
- Every specific session in future farmer training courses should be carried out by a team of trainers in order to learn experience from each other. District AHS trainers have to take part directly in providing the training for farmers.
- Increase the time for training (e.g. from 5 to 8 half-day training sessions per each course on cattle/buffalo, pig and chicken animal health).
- Direct observation should be made by the Consultant in some courses in both lowland and upland communes to provide more specific recommendations to the trainers in combinative using of teaching plan and other materials and dealing with situations during training courses for farmers.

4 VSCF Ex-post Adoption Assessment

4.1 Introduction

There was at least one animal health training course for farmers (covering only one livestock variety) delivered to each of the 44 VSCFs in Cycle 1 and Cycle 2 RUDEP communes in the second half of 2004. About 5 months have elapsed since the last farmer animal health training courses were carried out. It's time for RUDEP conduct some ex-post competency assessments to identify post-course knowledge retention and application of training technologies.

To learn from experience for future assessments, 2 ex-post competency assessments with the assistance from the Consultant was carried out at 2 VSCFs in Tinh Tho commune (Son Tinh district) on 26 April 2005⁶:

- Morning: Tho Dong I (trained on pig animal health)
- Afternoon: Tho Trung I (trained on cattle/buffalo animal health)

⁶ Another assessment in Son Hai was not conducted on 27 April 2005 due to bad information between DDO, CCG and Head of VSCF

4.2 Participants

- VSCF members:
 - Tho Dong I: 18
 - Tho Trung I: 16
- SDAH: Mr Tan (Director)
- RUDEP: Mr. Quang (M&E officer) and Mr. Sinh (Consultant)

4.3 Content

Assessments were focused on 2 issues:

- Level of knowledge retention of trained farmers
- Their application of training technologies in animal disease prevention

4.4 Methods and Implementation

Assessments were conducted unexpectedly on the VSCF's monthly meeting date. To have an unprejudiced evaluation on the farmer training courses provided by SDAH, the leaders of SDAH attended actively this activity personally (without trainers).

After introducing the purpose of the assessment, the following methods were used for implementing assessments:

- Used the same format as the Post-Course Competency Evaluation forms⁷ (*see Annex 3*) to measure level of farmers' knowledge retention:
 - Gave each trainee a Post-Course Competency Evaluation form to fill out:
 - Each form contained 10 multiple choice questions containing 4 possible answers (A, B, C, or D) with only 1 answer being correct.
 - Trainees that could not understand the questions or had limited literacy skills were assisted by RUDEP staff and the Consultant who read and went through the form with them.
 - A maximum time limit of 20 minutes was applied for households to complete the test.
 - Forms were collected and will be then marked and analysed by Mr. Quang.
- Group discussions on the application of training technologies in animal disease prevention:
 - After finishing filling this form, all farmers were divided into 3 groups (5-6 members per each group) and each group was given a questionnaire (*see Annex 4*) for discussion on their application in disease prevention for livestock variety that they were trained. The time for group discussion was about 45 minutes.
 - RUDEP staff and the Consultant helped each group with discussing, managed each group in order to preventing them from discussing to far away from the topic.
 - The results of the group discussions were presented at a plenary session involving all participants. Especially, RUREP staff and the Consultant raised lots of questions to make sure information given by trainees were true.

⁷ There are two different post-course assessment forms (odd and even)

4.5 Recommendations

Based on the implementing assessment activities, the following recommendations are made:

- Used methods and content are feasible and should be continuously applied for further farmer ex-post adoption assessments.
- The best time for conducting assessments should be on the monthly meeting date of each VSCF so that most of members of the VSCFs can take part in assessments.
- DDO has to coordinate more closely with CPG and VSCF's Head for organizing further assessments.

5 Commune Paravet and Animal Health Competency Assessments

5.1 Introduction

Assessments on current paravet competency and main animal health problems will be carried out in RUDEP communes by the SDAH under a contract to RUDEP. The result of these assessments will be used to develop a training and capacity building program for paravets and identify feasible options to improve animal health services in all RUDEP communes.

To support the SDAH in conducting the task, some initial assessments with the assistance from the Consultant were carried out in 2 RUDEP communes with different criteria:

- Duc Phong commune (Mo Duc district): lowland commune, with paravets
- Nghia Tho commune (Tu Nghia district): upland commune, without paravets

5.2 Assessment in Duc Phong commune

Participants:

- Commune paravets: A total of 14 paravets undertook the competency assessment (for detailed list, see Table 4: **List of participants at the paravet competency assessment in Duc Phong commune**)
- CPC: Mr. Nguyen Xuan (CCG)
- SDAH: Ms. Lam and Mr. Huy
- Mo Duc District AHS: Mr. Tuan
- RUDEP: Mr. Huy, Ms. Khang (DDO) and Mr. Sinh (Consultant)

Implementation:

The assessment was taken place in the CPC office on 25 April 2005. Due to co-ordination closely between DDO, the SDAH, District AHS and the CPC, the assessment was carried out smoothly.

After short DDO's introduction, the purpose of the paravet competency assessment was clearly introduced to paravets and the CPC by SDAH officers. With the assistance from the Consultant, the following activities were then conducted by SDAH officers:

- Identify general issues and problems facing paravets in the commune that hinder their work through conducting a Problem – Cause – Effect – Solution tree exercise.
- Conduct some theoretical and practical exercises to identify skill/knowledge levels of paravets. The content and methods for assessment were agreed in the recently held workshop⁸. The participants individually took a test in theoretic knowledge and a test in practical skills (for detailed content, see Annex 5a and 5b). The answer sheets were then collected and brought back to the SDAH office for giving marks.

To learn from experience, a review meeting was held at the SDAH office right after the assessment between the SDAH and the Consultant.

5.3 Assessment in Nghia Tho Commune

Participants:

- A total of 19 people undertook the assessment, including representatives of Commune Women's Union, Commune Veteran Union, villages, hamlets and households who are mainly members of VSCFs⁹ (for detailed list, see Table 5: **List of participants at the animal health assessment in Nghia Tho**)
- SDAH: Mr. Tan (Director), Mr. Huy and Mr. Thien
- Tu Nghia District AHS: Mr. Than (Head)
- RUDEP: Ms. Thu (DDO) and Mr. Sinh (Consultant)

Implementation

Nghia Tho is an upland commune in Tu Nghia district. There are 2 villages only (Villages I & II) with 7 hamlets and there is no paravet¹⁰ in the commune. Therefore, households selected to undertake the assessment were based on village and hamlet basis. The assessment was taken place in the open air next to the CPC office¹¹ on 28 April 2005. It caused a bit in lack of participants' concentration on the assessment.

After short DDO's introduction, the purpose of the assessment was introduced to all participants by the SDAH officer (Mr. Huy). With the assistance from the Consultant, SDAH officers conducted the preliminary assessment to build commune animal health services as the following exercises:

- Seasonal calendar of livestock diseases
- Problem – Cause – Effect – Solution tree of 'Livestock Diseases'

Lastly, a competency assessment with households considered to have some knowledge in animal health using the same format as the Paravet Competency was conducted to assess

⁸ SDAH capacity building workshop was held in December 2004

⁹ Nobody of CPC took part directly in the assessment due to engaged to other activities

¹⁰ There is only a person (Mr. Nguyen) who is responsible for animal health activities in the commune

¹¹ Due to CPC office is being built

their level of knowledge and practical skills in comparison to Paravet Competency Profiles. Since these households admitted VSCF training courses, we decided to assess the competency of most of them. The answer sheets were then collected for giving marks and the results of the preliminary assessment were collected for analysis.

A short review was held there and then between the SDAH officers, including the Director of SDAH and the Consultant for future assessments.

5.4 Recommendations

Through assessments in 2 RUDEP communes, SDAH officers have learnt many lessons, particularly the way how to handle situations that happen in the assessments. Now they have enough sufficient capacity to conduct future assessments in remaining RUDEP communes. To conduct effectively future assessments, however, the following issues should be addressed:

- Problem – Cause – Effect – Solution tree exercise should be conducted for implementing assessments in RUDEP communes both without and with paravets. Result of this activity combined with other ones will be valuable for identifying training needs and for developing an appropriate capacity building and training program to improve paravet skills and animal health services in each commune.
- Identified options to improve animal health services in every commune have to be clearly made in relation to their feasibility and sustainability.

6 Capacity Building Program for 2005-07 for Provincial SDAH and District AHS Staff

6.1 Introduction

RUDEP and the SDAH have been implementing many collaborative activities such as animal health training for farmers; paravet training and capacity building; commune animal health network building; and capacity building for Provincial SDAH and District AHS officers. Among them, capacity building activity for the SDAH officers plays an important role and completes penetration to other activities.

Some previous strengthening training activities for existing commune paravets have been conducted; however, these conducted by the RUDEP Animal Health Training Expert. RUDEP support on capacity building for commune paravets would focus on building the skills of Provincial SDAH and DAHS staff. Based on the results of paravet competency assessments in 19 RUDEP communes, a training and capacity building program for commune paravets will be prepared. Then some paravet training courses will be implemented by Provincial SDAH and District AHS staff.

To enable the SDAH and District AHS trainers to have enough sufficient capacity to conduct effectively future training courses for paravets, this 2-year capacity building program for them was drafted based on a methodical paravet training program.

6.2 Identify Provincial and District Training and Capacity Building Needs

A meeting was held at the SDAH office on 10 April 2005 to identify Provincial and District training and capacity building needs. A total of 6 people attended the meeting:

- SDAH: Mr. Tan (Director), Mr. Toan (Vice-Director), Mr. Huy (Head of Personnel Department), Mr. Thuan (Head of Technical Department) and Ms. Lam (Member of Technical Department)
- RUDEP: Mr. Sinh (Consultant)

The meeting focused on current animal health situation in Quang Ngai province, problems facing the SDAH and collaborative activities should be conducted for both future paravet training and the SDAH and District AHS staff capacity building. Main findings from the meeting as below:

- The number of paravets and their training level varies from commune to commune. In some upland areas, there is no paravet currently operating in the commune and households face many animal health difficulties.
- Paravet training activities were not carried out a long time ago. There are no standardized curricula for paravet training.
- Great demand on trainers: There are too few people of the SDAH who can conduct paravet training. Trainers are lacking in participatory skills and practical training methodologies. District AHS officers provide half- or one-day technical guidance prior to vaccination campaigns in their district only.

It is agreed that the best way to meet Provincial and District training and capacity building demands is to carry out methodical paravet training courses with assistance from a qualified animal health training expert.

6.3 Capacity Building Program for 2005-07 for Provincial SDAH and District AHS Staff

Based on the paravet competency profiles and the SDAH needs, the following capacity building program was discussed and drafted through some meetings with the SDAH leaders and officers.

6.3.1 Expected Outputs and Activities

Expected outputs	Content of Activities	Timing
<i>Output 1.</i> A team of qualified trainers from Provincial SDAH and District AHSs are set up, they have sufficient skills to deliver effectively paravet training courses	<ul style="list-style-type: none"> • Identify training needs for Provincial SDAH and District AHS staff 	Apr 05
	<ul style="list-style-type: none"> • ToT Course for Cycle 3 and 4 District AHS officers 	Apr 05
	<ul style="list-style-type: none"> • Conduct paravet competency assessments in 19 RUDEP commune 	Apr-Jun 05
	<ul style="list-style-type: none"> • Select Provincial SDAH and District AHS officers to undertake 2-year paravet training courses with assistance from the RUDEP AH Expert 	Jul 05

	<ul style="list-style-type: none"> • Design the appropriate paravet training program based on commune paravet training needs 	Jul 05
	<ul style="list-style-type: none"> • Select communes and trainees for paravet training 	Jul 05
	<ul style="list-style-type: none"> • Selected trainers conduct paravet training courses with assistance from the RUDEP AH Expert, including: <p><i>a) Preparation (at SDAH office):</i></p> <ul style="list-style-type: none"> - Handouts for paravets - Pre-test questionnaire for each session - Flip-chart, real samples, colour pictures - Teaching plan for trainers - Rehearse before providing training in the field <p><i>b) Provide paravet training in the field:</i></p> <ul style="list-style-type: none"> - Arrange date, location, lunch... - Provide assigned training sessions (mainly group working) <p><i>c) Learn from experience and preparation for next training (at SADH office):</i></p> <ul style="list-style-type: none"> - Meeting to learn from experience after every training time - Draft outline and content for next training - Assign tasks of preparation to every trainer prior to next training 	Jul 05-Jun 07
<p><u>Output 2.</u> Some trained households can function as paravets in upland communes</p>	<ul style="list-style-type: none"> • Select households considered to have some knowledge in animal health to train them to function as paravets • Provide households with animal health training sessions • Training and technical assistance to sustain the operation of farmer medicine boxes 	
<p><u>Output 3.</u> Paravet networks are built in some RUDEP communes that paravet training course conducted</p>	<ul style="list-style-type: none"> • Equip a tool box for each paravet who completed successfully the training course • Support the building and managing of commune veterinary medicine boxes • Follow-up paravets after training on technical knowledge and skills • Support the operation of commune paravet networks 	Jul-Sep 07

6.3.2 Expected Time Consuming for a Paravet Training Course

Below is expected time consuming for a paravet training course:

(2 days/training event)

No.	Activities	Descriptions	Time consuming (day)
1	Organization	Coordinate with the CPC to arrange date, location	1
2	Preparation prior to training (at SDAH office)	22 sessions X 3.5 day/session	77
3	Transfer (from and to)	2 times X 0.5 day X 11 training events	11
4	Provide training sessions (in commune)	22 sessions X 1 day/session	22
5	Learn from experience and preparation for next training (at SADH office)	1 day/training event X 11 training events	11
	Total		122

6.3.3 Recommendations

For future paravet training, it is recommended that:

- The number of future paravet training courses need to be based on paravet competency assessments¹².
- Each training event should be implemented after every 5-6 weeks.
- The training content and duration of the courses needs to be appropriate with the competency of the paravets of each commune.
- The criteria for choosing trainees of future paravet training courses are that they need to be selected by their villagers and approved by the CPC.

7 Training-of-Trainers Course on Paravet Training Methodologies

7.1 Introduction

The first *ToT course* on paravet training methodologies was held on November 2003 for the Provincial SDAH and Cycle 1 and Cycle 2 District AHS staff. Since RUDEP has expanded to new districts and communes (Cycle 3 and Cycle 4), efforts to build the capacity of these District AHS staff will need to be pursued.

A following 3-day *ToT course* on paravet training methodologies for Provincial SDAH and District AHS staff has been conducted from 19 to 21 November, 2003 at Song Tra hotel to provide them basic training methodologies for delivering high quality training to paravets.

¹² Paravet and animal health competency assessments will be completed at the end of June 2005

7.2 Participants

A total of 23 people attended the *ToT course* (for detailed list, see

Table 6: List of participants at the ToT course on paravet training methodologies):

- SDAH: 4 (including 2 teaching trainers)
- District AHSs: 19
- Trainer: Mr. Sinh

7.3 Content

The ToT course focused on (for detailed Agenda, see **Table 7: Agenda for the ToT course on paravet training methodologies**):

- Basic concepts of agricultural extension
- Training method for adults
- Making out the training plan
- Preparation of training
- Training methodologies
- Presentation skills
- Asking and listening skills in participatory training
- Use of colour cards in training
- Evaluation

7.4 Implementation

After making acquaintance together, objectives of training course were stated clearly by participants. Then a questionnaire with 20 questions is given to the participants to test their comprehension of the education for adults (see *Annex 6*). The result showed that some of them gave wrong answers when being asked about the difference between teaching at school and teaching in agricultural extension.

2 SDAH trainers¹³, who admitted at the first ToT course and provided animal health training farmers, were given an opportunity for teaching assistance and sharing their experience. After covering the contents above, participants were divided into 3 groups to practice participatory training skills and methodologies on subjects which they chose themselves. Members of each group presented their presentations at a plenary session involving all participants. Weaknesses on both training methodologies and professional knowledge were revealed through their presentations. Then comments from other ones and the Consultant were given for learning from experience.

To check whether learners have achieved the objectives, a questionnaire with 10 questions (right/wrong choice) is answered by participants (see *Annex 7*). The result showed that most of them have gained basic training methodologies. Lastly, an evaluation form is

¹³ Mr. Thuan and Ms. Lam, Technical Department of SDAH

distributed to participants to collect their personal opinions, attitudes and impression towards the content training, organizing matters and methodologies used (*see Annex 8*).

The training course is highly appreciated by participants. Although all participants mentioned that the duration of the course is too short, they expressed that the training methodologies presented at the course are quite new for them and the knowledge gained from this course is really significant to apply in their activities.

7.5 Recommendations

To conduct effectively future paravet training, the following issues should be addressed:

- Based on specific situation of each district, the SDAH and RUDEP should discuss to set up a team of permanent trainers.
- Members of the team of trainers should to be continuously trained through the paravet training course mentioned above.

Table 1: List of participants at the meeting reviewing the goat animal health manuals

19 Apr 2005 - SDAH office

No.	Full name	Agency	Position
1	Nguyễn Đình Huy	Personnel Department, SDAH	Head
2	Lê Thị Thanh Lâm	Techniques Department, SDAH	Member
3	Nguyễn Kim Thiện	Techniques Department, SDAH	Member
4	Nguyễn Văn Tấn	Quang Ngai Town Veterinary Station	Head
5	Nguyễn Đức Tú	Quang Ngai Town Veterinary Station	Member
6	Nguyễn Văn Hón	Binh Son DVS	Member
7	Nguyễn Thị Liên	Son Tinh DVS	Head
8	Lê Thị Xuân Lan	Son Tinh DVS	Member
9	Trần Quý	Son Tay DVS	Head
10	Nguyễn Hai	Tu Nghia DVS	Member

Table 2: Agenda of the ToT course on goat animal health training

24 April, 2005 - Song Tra hotel

Time	Content	Persons
08.00 – 08.15	Introduction	Mr. Tan
08.15 – 08.30	Objective	Mr. Sinh
08.30 – 09.00	Introduce the goat booklet and flipchart	Ms. Lam/Mr. Huy
09.00 – 09.30	Discuss on the goat booklet	Group working
09.30 – 09.45	Break	
09.45 – 10.15	Discuss on the content of flipchart and teaching plan	Group working
10.15 – 11.30	Prepare presentation of the farmer training on goat	Group working
13.30 – 15.00	Presentation	All participants
15.00 – 15.15	Break	

15.15 – 16.00	Comments and questions	Mr. Sinh
16.00 – 16.15	Review meeting	Mr. Sinh
16.15 – 16.30	Closing	Mr. Tan

Table 3: List of participants at the ToT course on goat animal health training

24 April, 2005 - Song Tra hotel

No.	Full name	Agency	Position
1	Võ Văn Tân	SADH	Director
2	Nguyễn Đình Huy	Personnel Department, SDAH	Head
3	Lê Thị Thanh Lâm	Techniques Department, SDAH	Member
4	Nguyễn Văn Tấn	Town Animal Health Station	Head
5	Phan Huy Anh	Minh Long DVS	Head
6	Nguyễn Nhịp	Son Ha DVS	Head
7	Phạm Quang Vinh	Tra Bong DVS	Member
8	Lê Văn Dương	Son Tinh DVS	Member
9	Lê Thị Xuân Lan	Son Tinh DVS	Member
10	Trương Thị Nhu	Nghia Hanh DVS	Head
11	Võ Văn Ngọc	Nghia Hanh DVS	Member
12	Phạm Anh Tuấn	Mo Duc DVS	Member
13	Nguyễn Văn Hai	Mo Duc DVS	Member
14	Lê Thị Xuân Lan	Son Tinh DVS	Member
15	Nguyễn Văn Sáu	Duc Pho DVS	Head
16	Nguyễn Văn Ba	Duc Pho DVS	Member
17	Nguyễn Thị Loan	Duc Pho DVS	Member
18	Trương Đình Nho	Ly Son DVS	Head

Table 4: List of participants at the paravet competency assessment in Duc Phong commune

25 April, 2005

No.	Name	Hamlet	Position
1	Nguyễn Cườm	Châu Me	Paravet
2	Phạm Đợi	Châu Me	CAHC, member
3	Nguyễn Văn Chính	Lâm Hạ	Paravet
4	Nguyễn Phong	Lâm Hạ	Paravet
5	Trịnh Văn Đồng	Lâm Thượng	Paravet
6	Nguyễn Thanh Quang	Lâm Thượng	CAHC, member
7	Nguyễn Văn Ban	Thạch Thang	Paravet
8	Phạm Đẹp	Thạch Thang	Paravet
9	Lâm Văn Sáu	Thạch Thang	CAHC, Head
10	Văn Xuân Phần	Thạch Thang	Paravet
11	Lê Qua	Thạch Thang	CAHC, member

12	Lê Quang Chí	Văn Hà	CAHC, member
13	Lê Minh Dũng	Văn Hà	Paravet
14	Lê Văn Kính	Văn Hà	Paravet

Table 5: List of participants at the animal health assessment in Nghia Tho

28 April, 2005

No.	Full name	Village	Hamlet	Position
1	Phạm Thị Nga	I	Cây Trâm	Head of Commune WU
2	Phạm Thuỳ	I	Cây Trâm	Head of Commune VU
3	Phạm Éo Huê	I	Cây Trâm	Head of Village I
4	Phạm Thị Viên	I	Cây Trâm	Farmer
5	Phạm Thị Yên	I	Cây Trâm	Farmer
6	Phạm Phương	I	Đá Bàn	Vice-Head of Village I
7	Đinh Thị Nô	I	Đá Bàn	Farmer
8	Phạm Bu	I	Cửu Diễn	Farmer
9	Phạm Nguyên	I	Cửu Diễn	Commune AH
10	Phạm Vinh	I	Cửu Diễn	Farmer
11	Phạm Mân	I	Cầu Phên	Land survey
12	Phạm Chính	II	Tà Măng	Vice-Head of Hamlet
13	Phạm Cừ	II	Tà Măng	Farmer
14	Phạm Đối	II	Tà Măng	Farmer
15	Phạm Công Đức	II	Tà Măng	Farmer
16	Phạm Búp	II	Cây Da	Farmer
17	Phạm Vũ	II	Cây Da	Family planning
18	Đinh Văn Cường	II	Nước Ngọn	Farmer
19	Phạm Thuỷ	II	Nước Ngọn	Farmer

Table 6: List of participants at the ToT course on paravet training methodologies

13-15 April - 2005 Song Tra hotel

No.	Full name	Agency	Position
1	Nguyễn Xuân	Binh Sơn DVS	Member
2	Nguyễn Phương	Tra Bong DVS	Head
3	Phạm Quang Vinh	Tra Bong DVS	Member
4	Đào Khắc Dũng	Tây Tra DVS	Head
5	Lê Thị Xuân Lan	Sơn Tinh DVS	Member
6	Huỳnh Hữu Nghĩa	Sơn Tinh DVS	Member
7	Trần Quý	Sơn Tây DVS	Head
8	Nguyễn Tiến Hoàng	Sơn Tây DVS	Member
9	Nguyễn Đức Tú	Quang Ngai Town Veterinary Station	Member
10	Huỳnh Đê	Tu Nghĩa DVS	Member
11	Nguyễn Thị Minh Tâm	Nghĩa Hành DVS	Member
12	Nguyễn Minh Thứ	Mo Duc DVS	Head

No.	Full name	Agency	Position
13	Phan Huy Anh	Minh Long DVS	Head
14	Võ Thị Hồng Loan	Minh Long DVS	Member
15	Ngô Hữu Tường	Ba To DVS	Member
16	Nguyễn Văn Sáu	Duc Pho DVS	Head
17	Nguyễn Thị Loan	Duc Pho DVS	Member
18	Trương Đình Nho	Ly Son DVS	Head
19	Nguyễn Đình Tuấn	Sa Huynh Quarantine Station	Head
20	Nguyễn Kim Thiện	Techniques Department, SDAH	Member
21	Nguyễn Thị Thanh Hoà	Techniques Department, SDAH	Member
22	Nguyễn Văn Thuận	Techniques Department, SDAH	Teaching assistant
23	Lê Thị Thanh Lâm	Techniques Department, SDAH	Teaching assistant

Table 7: Agenda for the ToT course on paravet training methodologies

13-15 April, 2005 - Song Tra hotel

Time	Content	Persons in charge
13 April		
08.00 – 08.15	Introduction	Bede/Tan
08.15 – 08.40	Making acquaintance together	Participants
08.40 – 08.55	Content of the training course	Sinh
08.55 – 09.15	Objective of the training course	Participants
09.15 – 09.30	Pre-test	Sinh/Thuan/Lam
09.30 – 09.45	<i>Break</i>	
09.45 – 11.30	1) Basic concepts of agricultural extension	Sinh
13.30 – 15.00	2) Training method for adults	Sinh
15.00 – 15.15	<i>Break</i>	
15.15 – 16.00	Making out the training plan	Sinh
16.00 – 17.00	3) Preparation steps for a training course	Sinh/Thuan/Lam
14 April		
08.00 – 09.30	Preparations for training (<i>cont.</i>)	Sinh/Lam
09.30 – 09.45	<i>Break</i>	
09.45 – 11.30	4) Training methodologies	Sinh
13.30 – 15.00	5) Presentation skills	Sinh
15.00 – 15.15	<i>Break</i>	
15.15 – 16.10	Presentation skills (<i>cont.</i>)	Sinh
16.10 – 17.00	6) Use of color cards in training	Sinh
15 April		
08.00 – 09.30	7) Teaching practice	Sinh
09.30 – 09.45	<i>Break</i>	
09.45 – 12.00	Teaching practice (<i>cont.</i>)	Sinh/Lam
13.30 – 15.00	Teaching practice (<i>cont.</i>)	Sinh/Lam
15.00 – 15.15	<i>Break</i>	

15.15 – 16.10	8) Evaluation for a training course	Sinh
16.10 – 16.30	Post-test	Sinh/Lam
16.30 – 16.45	Closing the course	Tan/Sinh

Annex 1

Flip-chart for Goat Animal Health Training

Annex 1: Flip-chart for Goat Animal Health Training

PHÒNG TRỊ BỆNH CHO DÊ

CÁC BIỆN PHÁP PHÒNG BỆNH CHO DÊ

- Vệ sinh chuồng nuôi
- Nuôi dưỡng, chăm sóc
- Ngăn ngừa dịch bệnh lây lan

Vệ sinh chuồng nuôi

Nuôi dưỡng, chăm sóc

- Cho ăn no, đủ chất, thức ăn cân đối
- Trồng cỏ
- Bổ sung tinh bột, chất đạm, khoáng
- Sửa móng chân cho dê 3-4 lần/năm
- Có chế độ chăn thả phù hợp

Ngăn ngừa dịch bệnh lây lan

- Thường xuyên quan sát phát hiện dê bệnh
- Cách ly ngay con bệnh
- Không bán chạy, giết mổ dê bệnh
- Dê chết phải chôn sâu
- Sát trùng chuồng nuôi + xung quanh
- Cách ly dê mới mua về ít nhất 2 tuần
- Tẩy giun sán 2 lần/năm (trước và sau mùa mưa)

MỘT SỐ HOÁ CHẤT SÁT TRÙNG THƯỜNG DÙNG

- Vôi bột
- Nước vôi
- Benkocid
- Chloramin B
- Vime-Iodin 10%

QUAN SÁT PHÁT HIỆN DÊ BỆNH

TT	Dê khoẻ	Dê bệnh
1	- Linh hoạt, phàm ăn - Béo khoẻ, mau lớn	- Kém/bỏ ăn, mệt mỏi, bồn chồn - Gầy yếu, chậm lớn
2	- Lông mượt, nhẵn	- Lông rụng, rụng - Da khô, dày, đóng vảy
3	- Mắt nhanh - Niêm mạc màu hồng	- Mắt nhắm, chảy nước, có ghèn - Niêm mạc trắng bệch/đỏ
4	- Mũi không chảy dịch - Thở bình thường	- Mũi khô, chảy nước - Ho, thở khó

TT	Dê khoẻ	Dê bệnh
5	- Miệng không chảy dịch - Nhai chậm rãi	- Chảy dãi, miệng có nốt loét - Ít/ngừng nhai lại
6	- Đuôi luôn ve vẩy - Phân bình thường	- Đuôi cụp - Phân lỏng, lẫn máu/trắng, mùi tanh
7	- Đi lại bình thường	- Đi khập khiễng, liệt - Có mụn nước ở vành, kẽ móng
8	- Nước tiểu trong	- Nước tiểu màu cà phê/đỏ thẫm

TT	Dê khoẻ	Dê bệnh
9	- Bụng bình thường	- Bụng chướng to, hõm hông trái căng phồng
10	- Các lỗ tự nhiên bình thường	- Chảy dịch viêm, hôi, lẫn máu đen
11	- Vú bình thường - Sữa thơm ngon	- Vú viêm - Sữa giảm
12	- Dịch hoàn bình thường	- Dịch hoàn sưng to

Cần phải làm gì khi phát hiện thấy dê bệnh?

- Cách ly ngay
- Chuồng nuôi thoáng, khô
- Cho ăn thức ăn dễ tiêu
- Thực hiện đúng hướng dẫn của thú y
-

BỆNH VIÊM PHỔI

Nguyên nhân

- Do mầm bệnh: vi khuẩn, vi rút, ký sinh trùng
- Do môi trường sống:
 - Nuôi chật
 - *Chuồng bẩn, ẩm*
 - Vận chuyển xa
- Thời tiết thay đổi đột ngột

Biểu hiện

- Sốt cao 40-41oC
- Kém ăn, bỏ ăn, lờ đờ, hay nằm
- Chảy nước mũi, ho nhiều
- Nếu cấp tính => Thở bằng miệng

Phòng bệnh

- Thức ăn, nước uống đủ và sạch
- Chuồng sạch, thoáng

BỆNH VIÊM RUỘT HOẠI TỬ

Đặc điểm

- Gây ra do vi khuẩn yếm khí:
 - Tồn tại lâu trong đất ẩm
 - Sống trong đường ruột của dê khỏe
- Bệnh phát ra khi:
 - Thức ăn thay đổi đột ngột
 - **Ăn quá nhiều tinh bột:** mỳ, cám, rỉ mật
 - **Ăn quá nhiều rau xanh non**

Biểu hiện

Bỏ ăn, trợn mắt, chảy
dãi

Đau bụng, lưng cong

Tiêu chảy ***phân
lẫn máu,***
mùi ***thối khắm***

***Chết sau 1-4 ngày
hoặc kéo dài***

Phòng bệnh

- KHÔNG CHO ĂN QUÁ NHIỀU:
 - tinh bột mà ít xơ
 - thức ăn xanh non

- Không thay đổi thức ăn đột ngột

Chăm sóc dê chu đáo

Chữa bệnh

- Giảm tiết độc tố đường ruột:
 - 100-170 g bột **than hoạt tính**
 - 15-30 g **muối Bicarbonate** } Hoà nước **cho uống**
- Kháng sinh
- Cung cấp nước và tăng cường điện giải:
 - **Vime C-Electrolyte**: 1gam
 - Nước: 2 lít } Hoà tan **cho uống**

BỆNH VIÊM LOÉT MIỆNG TRUYỀN NHIỄM

Đặc điểm

- Bệnh Viêm loét miệng truyền nhiễm = Bệnh Lở mép dê
- Do vi rút:
 - Có sức đề kháng rất cao, tồn tại lâu ngoài môi trường
 - Gây bệnh cho **dê, cừu mọi lứa tuổi**
- Vi rút xâm nhập qua các **vết thương**
(do dê ăn phải thức ăn già, cứng)
- **Bệnh xảy ra quanh năm**

Biểu hiện

- Nốt đỏ nhỏ → **Mụn nước**:
 - Chủ yếu ở **môi, mép**
 - **Lợi, lưỡi**
 - Nơi không lông (**bầu vú, bìu dịch hoàn, vành móng, bụng**)
- Mụn nước vỡ → Vết loét → **Đóng vảy cứng**
 - **Dê không ăn** được do đau miệng
 - **Chảy nhiều nước dãi, mùi hôi**
- **Có con phù mắt**

Phòng bệnh

- Không mua dê mắc bệnh
- Thường xuyên quét dọn chuồng nuôi sạch, khô
- Định kỳ phun thuốc sát trùng
 - Vime-Iodin 10%
 - Benkocid

Chữa bệnh

- Dùng chanh, khế chua chà sát cho vảy bong ra
- Xanh Methylen 2%: bôi vết loét 2-3 lần/ngày

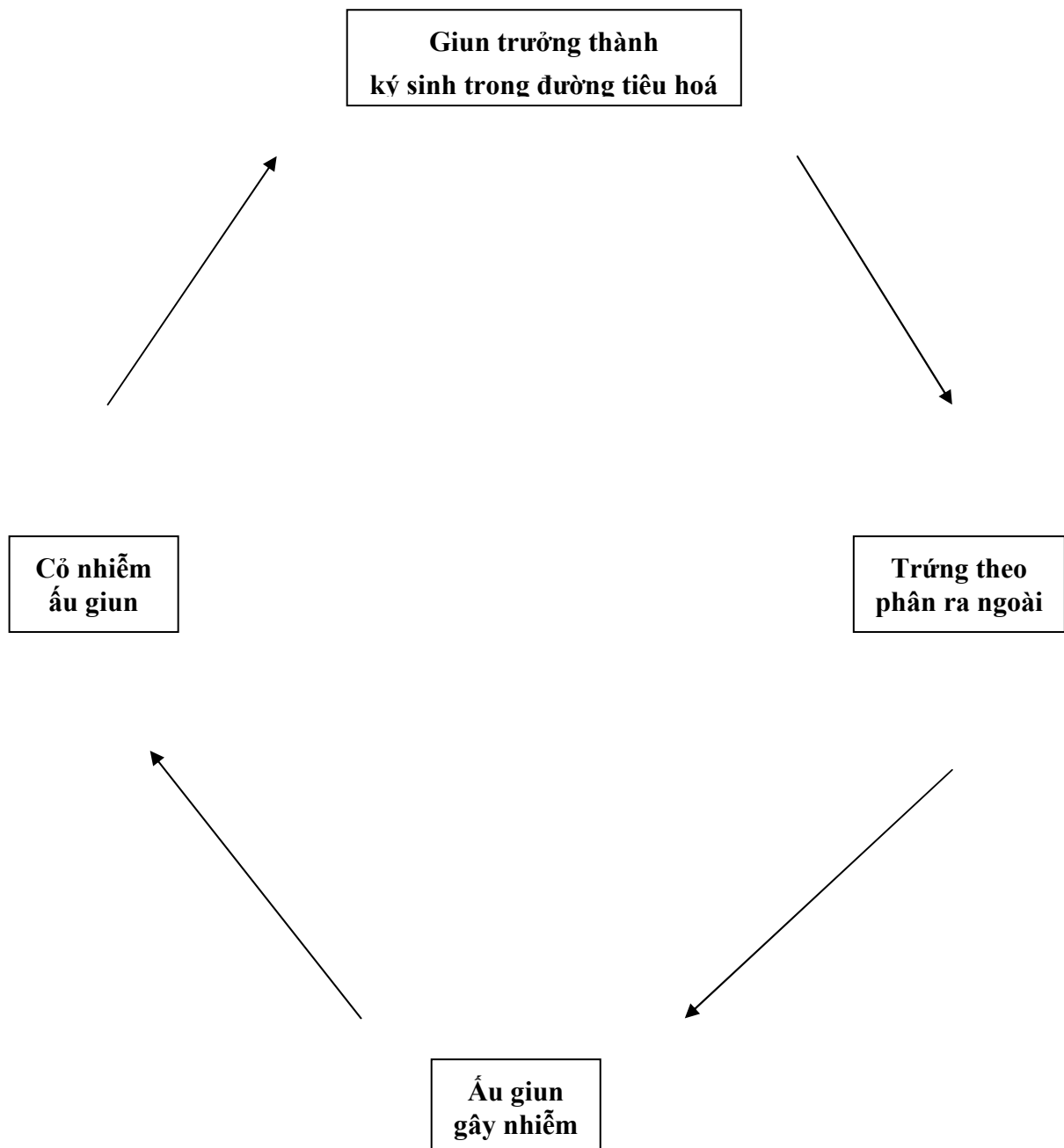
đến khi khỏi hẳn

☞ **Chú ý: Bệnh có thể lây sang người**

→ **Đeo găng tay, sát trùng kỹ khi tiếp xúc với dê bệnh**

BỆNH GIUN TRÒN

Vòng đời phát triển của giun tròn



Biểu hiện

- **Bệnh tiến triển chậm:**
 - Dê gầy, chậm lớn, lông xù, da khô
 - Niêm mạc mắt nhợt nhạt
 - **Phù thũng dưới hàm**
- **Nếu nhiễm nặng → ỉa chảy phân xanh thẫm/đen**

Phòng bệnh

- Tẩy giun ít nhất 2 lần/năm (tháng 4 và 9)
- Chuồng sạch, thu gom phân rác ủ với vôi bột
- Khai thông nước đọng ở bãi chăn

Tẩy trừ

Tên thuốc	Cách dùng	Liều dùng
<i>Levamisol 7,5%</i>	Tiêm dưới da hoặc bắp	1 ml/8-10 kg thể trọng
<i>Vimectin 0,3%</i>	Tiêm dưới da hoặc bắp	1 ml/14-16 kg thể trọng

Annex 2

Teaching Plan for Goat Animal Health Training

	bệnh cho dê	<p>→ Phòng bệnh</p> <p>- Phòng bệnh thì gồm những biện pháp nào? → Thẻ màu ghi tên 3 yếu tố → Bảng lật để tổng kết.</p>	<p>Thẻ màu</p> <p>Bảng lật</p>	
	1. Vệ sinh chuồng nuôi	<p>- Hỏi những hộ CN dê: <i>Làm chuồng như thế nào, có giống chuồng bò không? Khác nhau ở chỗ nào? Vì sao chuồng dê lại khác với chuồng bò?</i></p> <p>- Cho quan sát tranh bảng lật vài phút → Mời 1 vài người bình chú → Hỏi ý kiến của người nuôi thành công.</p> <p>→ THV chốt lại bức tranh: Vị trí, độ cao sàn chuồng so với mặt đất 0,5-1 m, có khe để phân và nước tiểu dễ lọt xuống.</p> <p>- Vệ sinh, sát trùng thường xuyên (trao đổi phần thuốc sát trùng sau kèm giới thiệu mẫu vật)</p> <p>- Phát quang bụi rậm.</p> <p>- Phân rác gom vào trộn với đê ủ: <i>Yêu cầu một người nêu cách ủ phân, cách phun thuốc?</i></p> <p>- THV tóm tắt lại phần vệ sinh chuồng nuôi.</p>	<p>Tham gia</p> <p>Bảng viết</p> <p>Bảng lật</p>	30
	2. Nuôi dưỡng, chăm sóc	<p>- Vệ sinh chuồng nuôi chưa đủ, khâu chăm sóc, nuôi dưỡng không kém phần quan trọng, <i>nếu chăn nuôi mà không đủ thức ăn thì sao?</i> Giải thích “<i>nuôi dưỡng</i>” & “<i>chăm sóc</i>”.</p> <p>- <i>Dê có thể ăn những thức ăn gì? So với nhà/địa phương mình thì thế nào?</i></p> <p>- THV thu nhận các ý kiến, sau đó nêu 1 số lá cây dùng làm thức ăn cho dê, nói rõ điểm khác so với trâu bò.</p> <p>- Cần trồng cỏ, bổ sung khoáng, tinh bột (<i>cần cảnh giác, sẽ trao đổi kỹ ở phần sau</i>).</p> <p>Hỏi kinh nghiệm của bà con chăm sóc dê, sinh sản, đẻ con, để chia sẻ kinh nghiệm cho cả lớp</p> <p>- Bảng lật: <i>Vì sao phải sửa móng chân cho dê?</i> THV tóm tắt lại.</p>	<p>Tham gia</p> <p>Bảng lật</p>	30
	3. Ngăn ngừa dịch bệnh lây lan	<p>- Yêu cầu một vài người nhắc lại khái niệm về mầm bệnh : VR, VK, KST. Người khác bổ sung.</p> <p>- <i>Vậy để ngăn ngừa dịch bệnh lây lan ta cần phải làm gì?</i> Ghi nhận ý kiến → viết bảng</p> <p>→ Bảng lật: Nhấn mạnh việc quan sát phát hiện dê bệnh; cách ly con bệnh/tân đảo; không bán/giết mô dê bệnh; <i>nếu có dê chết thì phải làm gì?</i></p>	<p>Tham gia</p> <p>Bảng viết</p> <p>Bảng lật</p>	20
	4. Một số hoá chất sát trùng thường dùng	<p>- <i>Các bác đã ai dùng thuốc sát trùng chuồng nuôi, thuốc nào?</i></p> <p>- Bảng lật: 5 loại → Phát mỗi người 1 tờ A4 trong đó ghi chi tiết 5 loại thuốc sát trùng</p> <p>- Giới thiệu lần lượt từng loại thuốc (mẫu vật), lưu ý cách sử dụng.</p>	<p>Bảng viết</p> <p>Tờ A4</p> <p>Mẫu thuốc</p>	30

			sát trùng	
III	Quan sát phát hiện dê bệnh	<ul style="list-style-type: none"> - Thế nào là ủ bệnh ? - Mục đích của việc phát hiện sớm dê bị bệnh? - Giữa dê bệnh và dê khỏe khác nhau ở những điểm nào? → Chia nhóm thảo luận (chú ý các nhóm phải có người biết chữ để ghi thẻ màu) → Dán các thẻ lên giấy A₀ - THV xử lý kết quả thảo luận → so sánh với thông tin trên bảng lật. - Vậy phải làm gì khi phát hiện thấy dê bệnh? → Bảng lật: <ul style="list-style-type: none"> + Cách ly ngay + Chuồng thoáng, khô + Cho ăn thức ăn dễ tiêu + Báo ngay cho thú y và thực hiện theo hướng dẫn của họ 	Thảo luận nhóm Mỗi nhóm 1 màu thẻ Giấy A ₀ Bảng lật	60
	Hệ thống lại	<ul style="list-style-type: none"> - Biện pháp phòng bệnh - Phát hiện sớm dê bệnh 		15
IV		MỘT SỐ BỆNH THƯỜNG GẶP Ở DÊ		15
1	Bệnh viêm phổi			
	Dẫn nhập	<p>Bà con nuôi dê hay gặp bệnh gì ? biểu hiện những bệnh đó như thế nào? Ghi thông tin lên bảng (lưu ý phân loại thông tin khi ghi, có thông tin cần giữ lại để xử lý sau).</p> <ul style="list-style-type: none"> - THV thu nhập những thông tin chọn thông tin khi dê bị ho, khó thở - Bệnh xảy ra nhanh hay chậm, mùa hay mắc? → Một bệnh rất hay xảy ra: Viêm phổi → Bìa bảng lật 	Tham gia Bảng lật	
	Nguyên nhân	<ul style="list-style-type: none"> - Do mầm bệnh (VK, VR, KST). THV phân tích sự nguy hiểm của mầm bệnh. - Do môi trường sống - Do thời tiết thay đổi đột ngột (không lây) 	Thuyết trình Bảng lật	20
	Biểu hiện	<ul style="list-style-type: none"> - Khai thác lại thông tin về triệu chứng từ các hộ đã phát biểu. - Bảng lật: Mũi khô (sốt); kém/bỏ ăn, lờ đờ, hay nằm; chảy mũi, ho, khó thở 	Tham gia Bảng viết	30

		- THV tổng hợp lại, đối chiếu với thông tin từ các hộ xem liệu đó có phải bị viêm phổi không.	Bảng lật	
	Phòng bệnh	- <i>Thức ăn, nước uống?</i> - <i>Chuồng trại đạt yêu cầu?</i> (sạch, thoáng); Phun thuốc sát trùng. - Làm gì khi thời tiết quá nóng hoặc quá lạnh	Tham gia bảng lật	20
	Tổng kết	- Đặt câu hỏi yêu cầu vài người nhắc lại, người khác bổ sung. - Cuối cùng tập huấn viên tóm tắt lại	Tham gia	10
2	Bệnh viêm ruột hoại tử			
	Nhập đề	Khai thác thông tin những hộ có dê bị tiêu chảy (tận dụng thông tin còn ghi trên bảng rồi hỏi lại người đó) - <i>Lứa tuổi?</i> - <i>Thức ăn?</i> - <i>Khi bị bệnh chết nhanh hay chậm?</i>	Tham gia Thẻ màu	15
	Đặc điểm	- Mầm bệnh do vi khuẩn yếm khí gây ra: Phân tích nếu để chuồng ẩm thì sao? - <i>Sống sẵn trong đường ruột dê khỏe thì gây bệnh khi nào?</i> Do thức ăn thay đổi đột ngột; ăn quá nhiều tinh bột (mì, cám, rỉ mật); ăn quá nhiều thức ăn lên men	Tham gia Thuyết trình	15
	Biểu hiện	- Các ý kiến tham gia, ghi bảng - Bảng lật: Cho quan sát tranh (các ô thông tin được che), mời nhận xét. - Bóc dần các ô, nhấn mạnh: đau bụng; phân lẫn máu+thối; chết nhanh 1-4 ngày	Tham gia Bảng lật	30
	Phòng bệnh	- <i>Không cho ăn quá nhiều cái gì?</i> Liên hệ phần đặc điểm → Phân tích kỹ 2 trường hợp (tinh bột/rau xanh non). - Bảng lật: giải thích 2 nguyên nhân còn lại	Tham gia Bảng lật	20
	Chữa bệnh	- Hỏi kinh nghiệm của bà con - Bảng lật: Giải thích bệnh là do độc tố của VK yếm khí → Phải dung thuốc giảm tiết độc tố (than hoạt tính)	Bảng lật Mẫu điện giải	20

		<ul style="list-style-type: none"> - Kháng sinh: Khuyến bà con báo TYV giúp. - Cấp nước+ điện giải: Giới thiệu mẫu vật, cách dùng (có thể thay bằng Orezol) 		
	Tổng kết		Tham gia	10
3	Bệnh viêm loét miệng truyền nhiễm			
	Nhập đề	Khai thác thông tin những hộ có dê bị lở mép, ghi bảng: - <i>Biểu hiện, có hay gặp, lứa tuổi, mùa nào bị nhiều?</i> - <i>Tác hại của bệnh? Chữa được không?</i> → Bìa bảng lật tên bệnh → Ta xử lý lần lượt: Đặc điểm/ Biểu hiện/ Phòng chữa (dùng các thẻ ghi sẵn)	Tham gia Thẻ màu Bảng lật	10
	Đặc điểm	<ul style="list-style-type: none"> - Tên khác của bệnh? - Do VR. Phân tích SDK và vết thương ở miệng dê: <i>Thức ăn ưa thích của dê là những loại thức ăn nào, thức ăn đó ở đâu? Thức ăn già, cứng có ảnh hưởng gì đến dê?</i> - Con mẹ bị viêm vú, lây qua cho con con - Bệnh xảy ra quanh năm, nhất là mùa ẩm ướt 	Tham gia Bảng lật	20
	Biểu hiện	Khai thác người đã gặp về quá trình phát triển của bệnh rồi giải thích: - <i>Nốt nhú đỏ nhanh chóng thành mụn nước</i> - Vị trí: chủ yếu ở môi, mép (<i>nên có tên là bệnh Lở mép dê!</i>), ngoài ra còn ở trong miệng; nơi không lông - Mụn vỡ thành vết loét → <i>đóng vảy cứng</i> - <i>Quan sát thấy gì? Dê không ăn vì sao?</i> (đau mồm); chảy dãi, có mùi hôi. - <i>Bệnh này có gì giống và khác với bệnh LMLM?</i> * Giống nhau : Vi rút, có mụn nước, mọi lứa tuổi, xảy ra quanh năm, chảy nhiều nước dãi, có bọt * Khác nhau :	Tham gia Bảng viết Bảng lật	30

		<ul style="list-style-type: none"> + LMLM: Có mụn nước, loét màu đỏ hồng, có bờ phủ màu vàng; không có ở bụng + Lở mép: Vết loét đóng vảy cứng dày, khi bóc vảy để lộ tổ chức bị loét có phủ lớp keo màu vàng, có ở bụng, có con phù mắt 		
	Phòng bệnh	<ul style="list-style-type: none"> - Vệ sinh chuồng nuôi sạch, khô - Sử dụng các loại thuốc sát trùng 	Tham gia Bảng lật	15
	Chữa bệnh	<ul style="list-style-type: none"> - Hỏi kinh nghiệm bà con - Bảng lật. - Cho xem mẫu thuốc. Có so sánh với chữa LMLM 	Tham gia Bảng lật Xanh Methylen	20
	Tổng kết			10
4.	Bệnh giun tròn			
	Dẫn nhập	Trong chăn nuôi dê thường hay gặp dê gầy, chậm lớn, vì sao vậy? → Do mắc bệnh KST, đặc biệt là các loại giun tròn → Mở bìa bảng lật	Tham gia	10
	Vòng đời	<ul style="list-style-type: none"> - Do một số loại giun tròn ký sinh trong đường tiêu hóa dê: giun xoắn ở dạ múi khế, giun móc, giun đầu gai ở ruột non... (nêu tác hại: hút máu...) - <i>Nhưng giun từ đâu vào mà có?</i> → mời bà con xem tranh “Vòng đời của giun tròn” rồi nhận xét.- sau khi mời vài phát biểu, THV giải thích lại → Mời 1 vài người nhắc lại. 	Tham gia Bảng lật	30
	Biểu hiện	<ul style="list-style-type: none"> - Bệnh tiến triển chậm, biểu hiện không điển hình + Gầy yếu, chậm lớn, lông xù, da khô + Niêm mạc nhợt nhạt + Phù dưới hàm - Dạng nặng: phân xanh thẫm/đen 	Tham gia Bảng lật	30
	Phòng bệnh	<ul style="list-style-type: none"> - Liên hệ lại phần vòng đời: <i>Để phòng ta phải làm gì?</i> - Bảng lật: 	Tham gia Bảng lật	20

		<p>+ Định kỳ tẩy giun (<i>tại sao tẩy vào tháng 4+9 ?</i>)</p> <p>+ Ủ phân: <i>Mục đích ủ? Cách ủ? Ủ bao lâu thì lấy bón được?</i></p> <p>Cho bài học vươn lên, quan sát bảng lọc...</p> <p>Gợi ý có thể phòng ở giai đoạn nào.</p>		
	Tẩy trừ	<p>- Bà con đã tẩy cho dê bao giờ chưa? Loại gì?</p> <p>- Bảng lật kết hợp giới thiệu mẫu vật.</p>	<p>Tham gia</p> <p>Bảng lật</p> <p>Thuốc giun</p>	20
	Tổng kết			10
	Tổng			670 <i>(4 nửa ngày)</i>

Annex 3

**A: Post-training Course Evaluation Test Pig
Disease Prevention and Treatment for
Farmers**

**B: Post- training Course Evaluation Test
Cattle/Bufalo Disease Prevention and
Treatment for Farmers**

Annex 3a: Post-training Course Evaluation Test Pig Disease Prevention and Treatment for Farmers

Full name:

Commune:

Please circle THE BEST ANSWER for each following question:

1. What measures have to be taken to prevent pigs from diseases?

- a Conduct regular antiseptic/sterilisation of sty
- b Inoculate them with vaccines
- c Feed and provide water to them fully
- d All the above mentioned measures

2. Purpose and time of iron injection for piglets?

- a To prevent piglets from lack of blood
- b Inject piglets immediately after they were born
- c Inject piglets when they are at 3 and 10 weeks old
- d Only a and c are correct

3. There are "4 red diseases" in pigs. What are they?

- a Hog cholera, Swine salmonellosis, Pasteurellosis and Leptospirosis
- b Hog cholera, Pasteurellosis, Erysipelas, and Foot and Mouth disease
- c Hog cholera, Swine salmonellosis, Erysipelas and Leptospirosis
- d Hog cholera, Swine salmonellosis, Pasteurellosis and Erysipelas

4. What diseases in pigs can be prevented by using Tam Lien vaccine?

- a Pasteurellosis and Swine salmonellosis
- b Hog cholera and Swine salmonellosis
- c Hog cholera , Pasteurellosis and Erysipelas
- d Hog cholera , Pasteurellosis, and Swine salmonellosis

5. After how long do pigs have ability to resist diseases since the time they receive vaccines?

- a Immediately after being injected
- b After 3 days
- c After about 2 weeks
- d After 1 month

6. What should be paid attention to when getting in touch with pigs suffering from Leptospirosis disease?

- a No need to wear gloves and boots when examining diseases
- b Avoid getting in touch with urine of sick pigs
- c Eating pork suffered from Leptospirosis does not cause any bad effect to human health
- d All is correct

7. Make comparison in digestion signs between Hog cholera and Swine salmonellosis disease?

- a Pigs in both cases do not suffer from diarrhoea
- b Pigs in both cases suffer from diarrhoea and their feces have nauseous smell
- c Pigs in both cases suffer from diarrhoea, and their feces are yellow and very fetid
- d Pigs in both cases suffer from diarrhoea but pigs' feces in Swine salmonellosis are yellow and very fetid; and dark brown and nauseous in Hog cholera

8. Pigs at what months old usually get Swine Salmonellosis disease?

- a All months old
- b From 2-4 months old
- c From 3-6 months old
- d From 3-12 months old

9. What diseases in pigs have the symptom of hard-breath?

- a Hog cholera and Pasteurellosis
- b Swine salmonellosis
- c Erysipelas
- d All "4 red diseases"

10. What should be done when pigs suffer from diarrhoea?

- a Limit them in drinking water
- b Let them drink a lot of water and Electrolyte
- c Inoculate them with vaccines
- d Only b and c are correct

Annex 3b: Post-training Course Evaluation Test Cattle/Bufalo Disease Prevention and Treatment for Farmers

Full name:

Commune:

Please circle THE BEST ANSWER for each following question:

1. What is main reason for bloating disease in cattlle/bufalo?

- a Due to eating too much dry straw
- b Due to eating green feed
- c Due to eating too much young grass
- d Due to getting Foot and Mouth disease

2. The symptoms of bloating disease in cattlle/bufalo?

- a Not eat, stop ruminating, have fast breath, raised-eyes, bent back
- b Left part of abdomen is miasmal, left hip is full
- c Die soon if treatment not on time
- d All is correct

3. Spread rate of Pasteurellosis disease in cattle?

- a Happen sparsely, spread slowly
- b Fast spread out
- c Become serious outbreak easily
- d Not spread

4. Symptoms of Pasteurellosis in cattle?

- a Not ruminate, suffer from bloating
- b Tear shed, nose breeding, cough, hard-breath
- c Oedematous faucal area
- d All is correct

5. Measures to prevent cattle from Pasteurellosis?

- a. Feed in moderate, good hygiene tasks
- b. Not eat sick or dead beef/buffalo meat
- c. Inoculate cattle with Pasteurellosis vaccines every 6 months
- d. All is correct

6. Characteristics of Foot & Mouth disease in cattle?

- a The spread rate is slow

- b Sick cattle/buffalo can not plough
- c Livestock products can not be transported and exported as well
- d Only b and c are correct

7. What should be done when Foot and Mouth disease occurs?

- a No need to report to paravets or local authority
- b Sick livestock is still kept in shed, fed soft and easily digested feeds
- c The disease is left self-treated
- d All is correct

8. Features and symptoms of Trypanosomiasis in cattle?

- a The disease develops fast
- b Cattle is still healthy
- c Faucal area, rear legs and genital organs are oedematous
- d All is correct

9. What kinds of diseases have symptoms of cattle oedematous faucal area?

- a Cattle Pasteurillosis; and Foot and Mouth disease
- b Cattle Pasteurillosis; and bloating disease
- c Cattle Pasteurillosis; and Trypanosomiasis in cattle
- d Trypanosomiasis in cattle; and Foot and Mouth disease

10. How often and when are medicines for cattle blood parasitic disease prevention used every year?

- a once: in April
- b once: in December
- c twice: in April and September
- d twice: in September and December

Annex 4

Group Discussion Questionnaire for Ex- post Adoption Assessment

Annex 4a: Group Discussion Questionnaire for Ex-post Adoption Assessment

Livestock variety: *Cattle/bufalo*

(Duration: 45 minutes per group)

1. Do you apply prophylactic hygiene method to prevent *cattle/bufalo* from disease when raising and taking care of them?

Yes

Partially

Totally

If not, Why?

If yes, How and when?

2. Do you use medicine to treat parasitic disease for *cattle/bufalo*?

Yes

No

If not, Why?

If yes, What kinds of medicine have you used ?

How do you use? And when?

3. Do you use vaccine in preventing *cattle/bufalo* from disease?

Yes

No

If not, why?

If yes, what kinds of vaccine have you used?

How do you use it? And when?

4. Group suggestion

Annex 4b: Group Discussion Questionnaire for Ex-post Adoption Assessment

Livestock variety: *Pigs*

(Duration: 45 minutes per group)

1. Do you apply prophylactic hygiene method to prevent *pigs* from disease when raising and taking care of them?

Yes

Partially

Totally

If not, Why?

If yes, How and when?

2. Do you apply method to prevent spreading of diseases for *pigs*?

Yes

No

If not, Why?

If yes, What kinds of medicine have you used ?

How do you use? And when?

3. Do you use vaccine in preventing *pigs* from disease?

Yes

No

If not, why?

If yes, what kinds of vaccine have you used?

How do you use it? And when?

4. Group suggestion

Annex 5

Paravet Competency Assessment Forms and Outline

Annex 5: Paravet Competency Assessment Forms and Outline

FORM A

'Questionnaire for assessment of paravet theoretic knowledge'

Quang Ngai, /..... / 200...

Name:.....

Commune:.....

District:

1. Please write for each of the following disease if it is caused by parasites, virus or bacteria (1 point)

- Newcastle Disease	V
- Avian Influenza	V
- Gumboro	V
- Pasteurellosis in poultry	B
- Duck plague	V
- Hog Cholera	V
- Swine Salmonellosis	B
- Erysipelas	B
- Pasteurellosis in pig	B
- Taenia in pig	P

- Leptospirosis	B
- Diarrhoea in piglets by E. coli	B
- Enzootic pneumonia	B
- Palsy in sow	-
- Foot and Mouth Disease	V
- Hemorrhagic septicemia	B
- Trypanosomiasis	P
- Fascioliasis in cattle/buffalo	P
- Ascarid in calves	P
- Anthrax	B

Marking direction: 0.1 point for each item; 1 point for all

2. What are the common causes of diarrhoea in piglets? (1 point)

- Food for sow: **insufficient, unbalanced**
- Food for piglet: **lacks milk, mineral (Fe), suddenly changes**
- Drinking water: **insufficient, dirty**
- Stable: **dirty, wet floor, draught**

- Weather: **too hot, cold, wet**

✎ *Marking direction: 0.2 point for each item; 1 point for all*

3. What is meant by “Incubation period”? What does the animal look like in “Incubation period”? (1 point)

- **Show the concept of incubation**
- **Affirm that during the incubation period, animal did not show symptoms**

✎ *Marking direction: 0.5 point for each item; 1 point for all*

4. How to disinfect veterinary equipments (pin, scissor, syringe and needles)?

(tick the right answers as many as required) (1 point)

- Wash by clean water
- Boil 30 minutes
- Boil 15 minutes
- Disinfect with Formol
- Dip in boiling water

✎ *Marking direction: 1 point for the right tick; minus 0.25 point for each wrong tick*

5. How to disinfect a stable? (tick the right answers as many as required) (1 point)

- Apply concentrated lime solution
- Spray and wash with clean water with high pressure
- Use Chloramin 2%
- Use Formol 2-5%
- Use BKA 1-2%

✎ *Marking direction: 0.25 point for each right tick; minus 0.25 point for the wrong tick*

6. What is the purpose of vaccination? (tick the right answers as many as required) (1 point)

- To treat diseases
- To prevent diseases
- To stimulate growth in livestock

✎ *Marking direction: 1 point for the right tick; minus 0.25 point for each wrong tick*

7. How to store and transport vaccines correctly? (tick the right answers as many as required) (1 point)

- Store the vaccine in the refrigerator at 2-8 °C
- Store the vaccine in the freezer compartment of the refrigerator
- Transport the vaccine in a cooling container with ice

- Transport the vaccine in a cooling container without ice
- Keep it on a shelf together with drugs

✎ *Marking direction: 0.5 point for each right tick; minus 0.3 point for each wrong tick*

8. Should the syringe and the needles be disinfected with Alcohol before using them for vaccination? (1 point)

- Yes No

Why? **Alcohol will spoil the vaccine.**

✎ *Marking direction: 0.3 point for the right tick; 0.7 point for the right explanation; 1 point for all*

9. Write up the normal body temperature of following animals: (1 point)

- Buffalo: **38.0 - 38.5 °C**
- Cattle: **38.0 - 39.0 °C**
- Pig: **38.5 - 39.0 °C**
- Piglet: **39.5 - 39.8 °C**

✎ *Marking direction: 0.25 point for each right answer; 1 point for all*

10. In order to be able to make a good diagnosis of a diseased animal, we need to: (tick the right answers as many as required) (1 point)

- Ask the farmers questions about the diseased animal
- Ask the value of the animal
- Observe the animal
- Take the body temperature of the animal
- Inject it with antibiotics immediately

✎ *Marking direction: 0.3 point for each right tick; 1 point for all right; minus 0.3 point for each wrong tick*

11. a) List the clinical signs of Hog Cholera

(tick the right answers as many as required) (0.5 point)

- Breathe normally
- Haemorrhage like “mosquito bites” on the thin skin
- Swollen fauces and face
- Diarrhoea with watery and fetid faeces

✎ *Marking direction: 0.25 point for each right tick; minus 0.25 point for each wrong tick*

b) List the lesions of Hog Cholera

(tick the right answers as many as required) (0.5 point)

- Spleen is blue-purple, swollen in the middle, pliable but strong like rubber when being cut
- Circle shaped ulcers at the ileum- caecum valve

⌘ *Marking direction: 0.5 point for the right tick; minus 0.5 point for the wrong tick*

12. a) List the characteristics and clinical signs of Newcastle disease

(tick the right answers as many as required) (0.5 point)

- Spread very quickly with high mortality in chicken, duck, swan and goose
- Diarrhoea with green-white faeces
- Breathe very hard
- Swollen head and crest

⌘ *Marking direction: 0.25 point for each right tick; minus 0.25 point for each wrong tick*

b) List the lesions of Newcastle disease *(tick the right answers as many as required)*
(0.5 point)

- Subcutaneous haemorrhage in leg and spaces between toes
- Haemorrhage on holes of pre-ventriculus
- Haemorrhage in intestine with ulcers

⌘ *Marking direction: 0.25 point for each right tick; minus 0.25 point for the wrong tick*

13. a) List the characteristics and clinical signs of Trypanosomiasis in cattle/buffalo

(tick the right answers as many as required) (0.5 point)

- Cause by a bacteria
- Progress slowly
- High fever continuously in several days
- The animal is very thin with pale mucous membrane

⌘ *Marking direction: 0.25 point for each right tick; minus 0.25 point for each wrong tick*

b) Medicines for treatment (tick the right answers as many as required)
(0.5 point)

- Ampicillin
- Azidin
- Levamisol
- Trypamidium

⌘ *Marking direction: 0.25 point for each right tick; minus 0.25 point for each wrong tick*

14. What do you use antibiotics for? *(tick the right answers as many as required)*
(1 point)

- Disease prevention
- Treatment of viral diseases
- Treatment of bacterial diseases
- Treatment of parasitic diseases

⌘ *Marking direction: 1 point for the right tick; minus 0.3 point for each wrong tick*

15. What is the minimum duration of an antibiotic treatment?

(tick the right answers as many as required) *(1 point)*

- 1 day
- 2 days
- 3 days
- 1 week

⌘ *Marking direction: 1 point for the right tick; minus 0.3 point for each wrong tick*

16. Identify from the following list, drugs that are antibiotics with an “A” and those that are parasiticides with a “P” *(1 point)*

Penicillin	<i>A</i>	Analgin		Tetracyclin	<i>A</i>
Levamisol	<i>P</i>	Streptomycin	<i>A</i>	Calmaphos	
Dextran-Fe		Trypamidium	<i>P</i>	Dexamethasone	

⌘ *Marking direction: 0.2 point for each right tick; minus 0.2 point for each wrong tick*

17. What is important for the use of antibiotics?

(tick the right answers as many as required) *(1 point)*

- The body weight of the animal
- The age of the animal
- The sex of the animal
- Gradual increase of the dose
- Combination of at least 3 antibiotics

⌘ *Marking direction: 0.5 point for each right tick; minus 0.3 point for each wrong tick*

18. What is the purpose of the Iron injection (Dextran Fe) for piglets? *(1 point)*

To prevent the anaemia for piglets.

⌘ *Marking direction: 0.5 point*

At what age do you usually inject? *3 and 10 days of age*

⌘ *Marking direction: 0.5 point*

19. Why and when are vaccines not effective?

(tick the right answers as many as required)

(1 point)

- Bad storage, transportation
- Expired
- Injection needle is too short for intramuscular injection
- Vaccination has been done during incubation time
- The vaccine dose was not enough
- Wrong sex of the animal

⚡ Marking direction: 0.2 point for each right tick; minus 0.2 point for the wrong tick

20. True or false? (tick the true answers)

(1 point)

- Prevention is better than cure
- After examining a group of pigs with Hog Cholera it is not necessary to disinfect your hands/shoes before going to another pig farm
- Avian Influenza cannot be cured by antibiotics
- Calves should not be fed colostrum
- Do not let piglets with diarrhoea drink

⚡ Marking direction: 0.5 point for each right tick; minus 0.3 point for the wrong tick

Assessment:

Point	Evaluation
0 – 3.3	Critical
3.4 – 6.7	Concerned
6.8 – 9.5	Consolidated
9.6 – 10	Competent

FORM B
'Content and methods for assessment of paravet practical skills'

Quang Ngai, / / 200...

Name:.....

Commune:.....

District:

1. Collecting information about the sick animal from the owner (1.5 points)

- The evaluator gives a situation: a household has a sick flock of chickens, some sick pigs or a sick cattle/buffalo so they ask a paravet for help.
- The evaluator plays the owner role and requests the paravet to provide questions that he/she can use to collect information about the sick animal.

2. Using thermometer (1.5 points)

- Preparation: a thermometer (may set above the normal temperature of the animal)
- Requirement for paravets:
 - Perform the usage of the thermometer (for pig, cattle/buffalo).
 - Read the number on the thermometer scale.
 - The evaluator gives the different temperatures of each type of animals and requests the paravet to answer if it is a fever or not.

3. Using syringe and needles (1.5 points)

- Preparation: a syringe (metal), needles of several sizes, 5 ml ampoule of distilled water, pin.
- Requirement for paravets:
 - Disassemble and then assemble the parts of the syringe. Check for suitable tightness.
 - Take the medicine (replaced by distilled water).
 - Show the intramuscular, subcutaneous injection sites for chicken, pig and cattle/buffalo (if possible, request the paravets to show the injection sites on live animals).
 - Disinfection of syringe and needles.

4. Calculating, diluting and using antiseptic (1.5 points)

- Preparation: a 100 ml bottle of BKA antiseptic, an 8-10 l sprayer, a bucket of water.
- Requirement for paravets:
 - Calculate to dilute 5 l BKA 1%.
 - Perform the dilution and spraying.

☒ May test the paravet knowledge of some kinds of other antiseptics!

5. Some common used medicines in treatment (1.5 points)

- Preparation: Some antibiotics (Penicillin, Streptomycin, Ampicillin, Tylosin...) in both powder and liquid type; some parasiticides (Tayzu, Azidin, Dertil-B...); vitamins, minerals, hydration powder.
 - Requirement for paravets:
 - Classify medicines into groups
 - Show main medical properties of specific medicines.
 - The evaluator gives some situations and requests the paravets to answer:
 - How to use right dose of Tayzu (4 g packet) to worm a household's chickens of different ages?
 - How to use right dose of Penicillin (1 million IU bottle) to cure a pig suffered from Erysipelas?
 - How to use right dose of Streptomycin (1 g bottle) to cure a cattle suffered from Hemorrhagic septicaemia?
- 6. Knowledge of live and inactive vaccines (1.5 points)**
- Preparation: Some live vaccines (Lasota, Hog Cholera...) and some inactive vaccines (Hemorrhagic septicaemia).
 - Requirement for paravets of performing:
 - Dilution: with how much distilled water/ NaCl 0.9%?
 - Usage: eye, nose dropping or intramuscular, subcutaneous injection?
 - Storage and transportation of each type of vaccines.
- 7. Giving medicines through animal's mouth (1.5 points)**
- Preparation: a medicine packet in powder type (Tayzu...) and some tablets (Dertil-B...)
 - Requirement for paravets:
 - Mixing a small amount of medicine in powder into food for chicken/pig.
 - Dissolving medicine in powder into drinking water for chicken.
 - Giving medicines in tablet and liquid type for chicken, pig and cattle/buffalo.
- 8. Knowledge of some important chicken diseases (2 points)**
- Preparation: some colour pictures (20x30 cm) of symptoms and lesions of some important poultry diseases such as Newcastle, Gumboro, Avian Influenza...
 - Requirement for paravets:
 - Comment on the pictures (name of organs? in what diseases?)
 - Can be confused with what diseases? How to distinguish?
- 9. Knowledge of some important pig diseases (2 points)**
- Preparation: some colour pictures (20x30 cm) of symptoms and lesions of some important pig diseases such as Hog Cholera, Swine Salmonellosis, Erysipelas, Swine Pasteurellosis, Leptospirosis, Ascarid in pig...
 - Requirement for paravets:
 - Comment on the pictures (name of organs? in what diseases?)
 - Can be confused with what diseases? How to distinguish?
- 10. Knowledge of some important cattle/buffalo diseases (2 points)**

- Preparation: some colour pictures (20x30 cm) of symptoms and lesions of some important cattle/buffalo diseases such as Foot and Mouth Disease, Hemorrhagic septicemia, Anthrax...
- Requirement for paravets:
 - Comment on the pictures (name of organs? in what diseases?)
 - Can be confused with what diseases? How to distinguish?

11. Writing report *(1.5 points)*

- Preparation: some forms of reports (on epidemic diseases, vaccination in the commune)
- Requirement for paravets:
 - Explain some items in the reports.
 - How to collect data (as a paravet/Head of Commune Animal Health Committee)?
 - Fill in the reports.

12. Operating poultry *(2 points)*

- Preparation: a chicken or duck, scissor, scalpel, pin, stray, fresh water.
- Requirement for paravets:
 - Perform the operation.
 - Show the organs.
 - Describe some possible lesions.

Assessment:

Point	Evaluation
0 – 3.3	Critical
3.4 – 6.7	Concerned
6.8 – 9.5	Consolidated
9.6 – 10	Competent

Annex 6

Questionnaire

Annex 6: Questionnaire

Full name:

Unit:

The difference between teaching at school and teaching in agricultural extension

1. Teachers punish the students who don't get good result
2. Teachers appreciate the training course to learn its experience and do better for next course
3. Teachers play the role of encouraging the class
4. Teachers use the program which well-prepared before
5. Teachers are the only information source supplied to class
6. Teachers teach in informal atmosphere
7. Teachers and students together discover the main ideas of lesson
8. Teachers have the professional skill, giving out the suggestions for students' questions
9. Teachers are experts who have the duty in transferring scientific technology ideas to students
10. Teachers control the whole process of training course
11. Teachers prepare the training program based on evaluation of students' needs
12. Teachers & students share success and failure of training course
13. Teachers criticize work done by students
14. Teachers request students to do test & give mark
15. Teachers is the person who transfer information, knowledge to students
16. Teachers prepare the teaching plan based on students' experience
17. Teachers encourage the students to give out their comments about work done on mutual-contributing
18. Teachers teach informal atmosphere
19. Teachers always care about the student's expect
20. Teachers make a comparison between students' expect and training objectives

Annex 7

Comprehension

Annex 7: Comprehension

Full name:

Unit:

Circle correct ideas of the following sentences:

Sentence 1: Points should be paid attention when adopted discussion method in class

- a. Create fun & friendly atmosphere in class
- b. Develop teaching plan based on contributed ideas
- c. Often summarize the main ideas
- d. 3 above ideas are correct

Sentence 2: When teaching, trainer should or shouldn't add the funny stories?

- a. Should not; cause the decent atmosphere in class will be decreased
- b. Should; cause the tension in class will be decreased
- c. Should not; cause trainer will be thought as a unserious person and trainees will look down at him
- d. Should; cause it's necessary to get ideas' involvements form all trainees

Sentence 3: Adult trainees' character

- a. Learn quickly and remember longer than young trainees
- b. Writing little and cannot remember many contents at the same time
- c. Willing to learn to new knowledge
- d. 3 above ideas are correct

Sentence 4: Adult trainees learn well when

- a. Local authorization appears
- b. Contents of lesson can help them in solving problems which they're dealing with
- c. Finance supplied to trainees
- d. Transportation included

Sentence 5: When should documents be distributed to trainees?

- a. Before class begins (cause it needs for observing of trainee)
- b. During the time of training
- c. End of training course
- d. Anytime

Sentence 6: Role of teaching aids

- a. Support for trainees' memory
- b. Help trainers to explain matter clearly and save time
- c. Increase the persuasion for trainees
- d. 3 above ideas are correct

Sentence 7: An agricultural extension trainer who teaches well is :

- a. To know how to use modern teaching aids

- b. No need to know how to use teaching aids but fluent performance skill
- c. To know how to make teaching aids
- d. To choose & use teaching aids which are suitable with each situation

Sentence 8: Structure of a teaching plan includes:

- a. Introduction, main content and conclusion sessions like an essay
- b. Only introduction and go straight to main content (to save time)
- c. Only the main content (which trainer wants to present)
- d. 3 above ideas are wrong

Sentence 9: How to know students understand the lesson or not?

- a. Ask questions and request to answer
- b. Request trainees to repeat the main ideas
- c. 2 above ideas are wrong
- d. 2 above ideas are correct

Sentence 10: Limitation of flip-charts?

- a. Difficult to combine with other teaching aids
- b. Just suitable with training for low-level trainees
- c. Difficult to use in class with so many trainees
- d. 3 above ideas are correct

Annex 8

Training Course Evaluation Form

Annex 8: Training Course Evaluation Form

(completed by paravet trainers)

1. Are the objectives of the training course appropriate for your activities?

- Yes No

2. What is your opinion about the content of the training course?

- Very good So so
 Good Bad

3. What is your opinion about the methods presented at the training course?

- Very good So so
 Good Bad

4. What is your opinion about the duration of the training course?

- Long Short
 Medium Too short

5. What is your most deeply understanding through this training course?

.....
.....
.....
.....

6. What is your request/comment?

.....
.....
.....
.....

Limitations

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