

# Qinghai, Zado County Village Level AHWs' Training Report (July 2010)

**Name of course:** Zado County - Village Level Animal Health Workers' Training  
**Date of course:** 1<sup>st</sup> Session: July 23<sup>rd</sup> to July 26<sup>th</sup> (4 day training)  
2<sup>nd</sup> Session: July 28<sup>th</sup> to July 31<sup>st</sup> (4 day training)

**Lead for Training:** Plateau Perspectives (China, Qinghai, Xining)  
**Project Support:** Animal Health Bureau, Zado County

**Trainers:** Dr. J. Monty Mathis  
Dr. Shelley Mathis

**Translators:** Miss Kara Chuo Tso (Ganzi, Qinghai Province)  
Mr. Kush (Caiwang Dongzhu – 才旺东周) (Yushu, Qinghai Province)

**Involved AHB Staff:** Mr. Wang Yong Zhou, Zado County Veterinary Director

**Venue:** Yushu Prefecture, Zado County Seat, AHB Office

## BACKGROUND

The Animal Health Workers (AHWs) of Yushu Prefecture are used mostly for the government's vaccination programs and to monitor for infectious diseases that need to be reported. Those at the grassroots' level (prefecture / county / township) have expressed the need for a type of veterinary clinician, able to diagnose, treat and help control local diseases beyond the scope of just being a government AHW and the need for the AHW to educate the local herders in regards to good animal husbandry practices. Over the past years, Plateau Perspectives has been attempting to fulfill this desire from the local county governments of Yushu Prefecture to facilitate a veterinary training at the township and village level. Last year, December 2009, was the first Plateau Perspective's initiated, Animal Health Workers' Training. This first training targeted AHWs at the Township Level (TAHW) as they are the key mediators between the Animal Health Bureau (AHB) and the Village Level Animal Health Workers (VAHW). The purpose of this training was for the upgrading of knowledge, skills and equipment and to prepare the TAHWs to train and mentor the VAHWs in their corresponding Townships. Because of the success of this training the county wanted more such trainings but directed to the village level workers. It was decided to hold two mini trainings (4 days each) directed towards those working directly with the nomads (the VAHW).

## SUMMARY

The trainings were held from July 23<sup>rd</sup> to July 26<sup>th</sup> and then July 28<sup>th</sup> to July 31<sup>st</sup>. We left Xining on the 21<sup>st</sup> arriving in Zado on the 22<sup>nd</sup>. We returned to Xining on the 3<sup>rd</sup> of August.

The first class of participants was a mixed group of TAHWs and VAHWs. It made for an interesting mix and a challenge as to how to work in one class with two such different levels of education and experience. We separated the TAHWs into two groups and the VAHWs into two groups during the participatory activities. We also needed to use both Tibetan and Mandarin in order to communicate clearly to all the participants. It was a stretch but we think beneficial as both the TAHWs and the VAHWs were able to gain an appreciation for each other, their knowledge, experience and skills.

The second class was filled with all new recruits. Most were illiterate and with little to no experience in veterinary medicine though the majority owned animals. This class had its challenges on establishing a knowledge base. We were able to pare down the scientific terms and disease concepts to teach a class that the participants could understand and build on.

The discussions in both classes went well identifying what they felt were the roles of AHWs in the field. The difficulties that they faced varied, as the second group did not consider transportation a problem because most had had their own motorcycles.

We had animals for each of the participants to work with, on the third day of the first training and for day 2 & 3 of the second training. This was so helpful! Especially with the second training where there was more time to practice skills and techniques.

The participants seemed very grateful to receive the medicines and equipment. It will be interesting if a follow-up can be done to see how much of the supplies they actually use and to what degree they found success in using them.

Again, as in the December 2009 training, about 50% of the participants seemed to take the training very seriously and of those about 25% were always eager to get their hands dirty. An interesting situation was one student that seemed to be not interested in the training. I took him to the side and shared with him about the importance of the training and the difficulties I had with his attitude. He changed around and became one of the top students.

## **OBJECTIVES/GOALS OF THE TRAINING**

- Fulfill the requested goals of Plateau Perspectives
  - Improve the living standards of those living in Yushu Prefecture
  - Support the local government in target areas
  - Train AHW who are working at a village / nomad camp level
  - Improve livestock conditions
- Enable the participants to:
  - Discuss amongst themselves various ideas, observations, difficulties, and hopes.
  - List Responsibilities of AHW
    - Delineate responsibilities
    - Identify obstacles to fulfilling those responsibilities
    - Theorize on possible solutions to those difficulties
  - List Current problems on the rangeland
  - List Current Disease Issues.
    - Create a list of diseases that are causing problems
    - Identifying the top 2 diseases (usually comes out to be 5)
  - Take an informative History and learn how to evaluate the data.
  - Understand a western approach to a Physical Examination
    - The Environment that the animal(s) live in
    - The animal(s) itself (the whole animal)
    - The other animals in contact with the sick animal(s)
    - Organ Systems review & relation to PE
  - Build skills in Physical Examination.
    - Obtaining accurate Temperature / Pulse / Respiration Rate
    - Understand the different tools used in a PE, e.g. a stethoscope
    - Emphasize the importance of using their hands to feel abnormalities
    - Make objective and correct judgments on what is Normal and what is Disease
  - Diagnose, treat and prevent local diseases of animals.
  - Improve knowledge of diseases and appropriate treatments.
  - Understand Prevention and control of internal and external parasites.
  - Learn Dose Calculations for various medicines.
  - Upgrade basic equipment and knowledge / skill of the equipments used.
  - Take classroom theoretical knowledge and use it as applied skills.
  - Understand their need to be sources of information and teachers in their areas of work.
  - Realize the need for integrity and true concern for those they have responsibility for.
  - Delineate some of the tensions between Tibetan Buddhist World View and dealing “scientifically” with certain diseases that need to be eradicated.
- Plan for the next stage of trainings for Yushu Prefecture.

## **VENUE**

The training was held in Zado County Seat. The Animal Health Bureau arranged the training facility, and housing for the participants. The AHB also arranged daily tea/snacks for the participants. We met daily from 9 am to 6 pm with a lunch break from 12:00 to 2:30. For the 1<sup>st</sup> session there was one day out in the field to gain practice at PE and diagnosis. For the 2<sup>nd</sup> session there were two days in the field to gain practice at PE / Diagnosis and treatment of diseases. Both sessions had the occasional drop in case (dogs, yak, goat) at the training center to be examined and treated during regular class hours.

## **PARTICIPANTS**

### **1<sup>st</sup> Session:**

- 17 finished the class (originally 20 but 3 were dismissed due to not coming to class on second day)
- 8 of the participants were graduates of Huangyuan Muxiao (湟源牧校) working at the county level office.
- 9 participants were village level AHW.
- The mix of knowledge and experience gave a unique difficulty to how to teach the class but after working through class structure and to what level to teach to, both groups learned to appreciate one another's strengths.

### **2<sup>nd</sup> Session:**

- 19 finished the class (originally 20 but one was dismissed due to missing a class)
- 1 participant had many years of experience and graduated from Huangyuan Muxiao
- 18 participants had no experience as AHB AHW but most had livestock and good common sense.
- The county used this training as an opportunity to build a bigger base of trained workers.

What the Village Level AHW see for responsibilities

- a. Prevent and Treat Diseases
- b. Educate others
- c. Study hard the theory so you can put it into practice
- d. Keep up to date on changes in veterinary medicine
- e. To work scientifically
- f. To make sure the animals and animal products are safe
- g. Parasite control
- h. Disseminate animal health information to the people
- i. Isolate Sick animals from healthy ones
- j. Keep quality control of medicines and vaccines

What the Township Level AHW see for responsibilities

- a. Help Community
- b. Give Vaccinations
- c. Prevent and Treat Diseases
- d. Isolate sick animals
- e. Educate Herders
- f. Be willing to get dirty and work
- g. Try to learn and develop skills
- h. Advise and Educate Slaughterhouses

What the AHW see for problems:

- a. Lack of Transportation to see animals
- b. Lack of adequate communication with Nomads
- c. Lack of Facilities ~ equipment & transportation
- d. Lack of knowledge (Medicine, treatments, diseases, etc.)
- e. Lack of adequate numbers of Animal Health Workers
- f. Remote, far off living conditions
- g. Government support could be better
- h. Not enough salary or compensation for difficult assignments
- i. Nomad families not cooperating with the AHW
- j. There seems to be discrepancies in the theoretical knowledge and reality/practical

## **TRAINING METHODOLOGY:**

- **Participatory Group Forums** (from setting rules for the training (start & end times, no smoking, no spitting, no cell phones, breaks, lunch, cleanup, if late?? (sing to group), etc.) to diseases to preventions, etc.)
- **Lectures** (summarizing all the sharing, giving new information, true lectures on things they know nothing of)
- **Dry Labs** (medicine dosage calculations, medicine weighing, surgical suturing)
- **Wet Labs** (physical examinations on dogs & livestock, giving medicines to dogs & livestock )
- **Demonstrations** (surgical suturing, PE on dog, medicating dogs, using muzzles, temperature taking, thermometer reading)
- **Question/Answer Time** (participants had some questions but it is not their custom to ask in class)
- **PowerPoint Presentation**
- **Field Trips**
- **Open Clinics each day of the week**
- **Handouts**

- **Daily participatory case studies** used to review the previous day's material and introduce new

## **MATERIALS**

A list of needed supplies was received from Mr. Wang (Veterinary Director, Zado County) and then through local veterinary supply outlets in Xining, the needed items were purchased (*See appendix 2*).

## **TRAINING COSTS in RMB**

1. Veterinary Supplies & Teaching Aids:	¥ 19,427
(¥ 4,620 Rx + ¥ 10,821 Instruments + ¥ 3,986 Training Supplies)	
2. Daily Allowance:	¥ 9,000
3. Vehicle Costs:	¥ 8,996
(¥ 7,000 vehicle Rent + ¥ 1,996 Fuel)	
4. Translator Compensation:	¥ 4,300
(¥ 2,600 Kush + ¥ 1,500 Kara)	
5. Shipping Costs to Zado, Yushu	¥ ??
6. Participants Daily Allowance:	Covered by Zado
7. Daily Snack/Tea:	Covered by Zado
<b>TOTAL COST OF TRAINING:</b>	<b>≈ ¥ 41,523 RMB</b>
	<b>(≈ ¥ 1,153 / trainee)</b>
	<b>(≈ ¥ 966 / trainee if the full 43 participants had attended )</b>

## **TRAINING EVALUATION**

### **Animal Health Workers Evaluation:**

The AHW personnel thought that the training was a success. They mentioned that there had been a training put on by a Hong Kong group that was very flashy but did not address their real issues, i.e. the training came with a rigid agenda. The AHB hoped that there would be more trainings in the future. AHWs Commented that the Trainings:

1. Were too short (more days of training needed)
2. Needed more on diagnosis and appropriate treatment regimes
3. Were very helpful in knowledge and skills
4. Reaffirmed the knowledge base they do have
5. Increased their understanding of what it means to be a veterinarian and their role in the communities
6. Case reviews were helpful
7. Learned skills to diagnosing & treatments
8. New thoughts/concepts on preventative medicine
9. Time to learn surgical techniques
10. New understanding on dogs
11. New understanding on some local disease
12. Exposed to new teaching method

### **Translators Evaluation:**

Felt that the training was a great success. It gave:

1. New method/style of training
2. A venue for the participants to share amongst themselves.
3. The field experience was excellent and should be increased.
4. Challenged the local vets to how they think about disease, treatment and prevention.
5. Challenged the local vets to get out and do an exam instead of just relying on the owner's statements.
6. Affirmed the local veterinarians that they have a very important role to play both to the local community and to the greater population as well.
7. As a translator I learned new words, concepts, ways of training, and a broader understanding of issues that affect my Tibetan society.
8. A very active learning environment through methods and even through the tea breaks
9. A venue that the participants were well appreciated, affirmed and encouraged

Improvement areas:

1. Work on further translations of material to handout.
2. Longer Trainings ~ 6 to 7 days.
3. Limit the training to only the best students who are really interested
4. Repeat Trainings for students to go into deeper level of training
5. Target different counties

## SUGGESTIONS AND RECOMMENDATIONS

- More trainings in veterinary medicine/surgery are wanted and in different counties!
- Live cases and real animals to practice on are vital to a well rounded training
- Holding trainings post harvesting of caterpillar fungus and before the late fall/winter.
- A good understanding of what group of trainees will be working with ~ recruits, TAHW, VAHW, etc.
- Completed handouts on different diseases translated into Tibetan and Mandarin.
- Created and translated handouts on dog issues, diseases and vaccination schedules.
- Time to travel to nomad camps of some students to affirm them in their work (also an appropriate car).
- Having appropriate translator(s) is crucial to the success of these trainings ~ a translator needs to have a minimal base of a high school biology English/Chinese/Tibetan translation ability. Having a person who is fluent in English/Tibetan (Kham dialect) and a person in English/Mandarin is important ~ either the same person or two different people. The TAHWs (mostly Huangyuan Muxiao graduates) want to have trainings in Mandarin. The VAHWs desire to have the trainings in their Tibetan language.
- More visual aids (PowerPoint, Slide Shows, etc.) Having a Digital Camera to document the day's work / progress was invaluable and motivating to students.
- A need to spend more time with the Animal Health Workers to get a better understanding of their work and responsibilities. If possible, spend a month with the workers there shadowing and being a resource.

## CONCLUSION

The two, four day AHW trainings were completed with a general feeling of good success. There was much learned from this training and a continuing increase of trust for the work of Plateau Perspectives to do further trainings in Zaduo county. There was a continuation of understanding the needs of the county and those who live and work there. The Veterinary Office was very pleased with what was accomplished. Each participant was provided with a veterinary box full of medicines and equipment giving continuity to the training as they return to their villages/nomad camps performing their work and strengthening their skills and knowledge (*appendix 2*).

The training on the whole went smoothly with good cooperation from all who were involved. The facility that Zaduo AHB arranged was adequate (Animal Health Bureau's office building). Though the hope was to take the training to the township centers, Mr. Wang assured us that the facilities in those areas would not be conducive for what we wanted to accomplish.

Our method of training (participatory training) is a new concept for the trainees in Zaduo. The first morning of the training was difficult but by that afternoon they understood the process and were able to really participate and enter into the sharing and learning. By the end of the courses the participants stated that this style of learning and the subject matter that was covered was excellent and very helpful. They compared it to another training that was mostly lectures and how much more appropriate Plateau Perspectives' training was to meeting their situation and needs.

For both trainings we were able to procure animals (both dogs and livestock) for the participants to practice on. The first session we went to a neighboring nomad camp to do a herd health exam. The second session practiced physical exams on one of the trainees yak herds and then the next day practiced treatment regimes as the animals in the herd had a chronic lung problem/pneumonia. We also had daily veterinary cases that dropped in. The highlight for many was the opportunity to work on dogs. Our dog, Nora was the demonstration dog for many procedures. We also had dogs from the town come in for examinations and treatments. The use of live animal demonstrations and having live animals to practice on is vital to a well rounded training.

We took one day following the close of the 2<sup>nd</sup> Session to travel to Jiédūdō Xiāng and evaluate one of our top student's working conditions; shadowing him as he did some of his rounds. This was beneficial to him as well as to us to understand a bit of the state of livestock rearing in this area. A conclusion that we drew (not verified) is that though the herders claim that they want better health for their animals there is not much motivation on their behalf to do such. It appears that as long as their animals give enough manure for fuel, enough milk for yogurt and cheese, enough numbers to occasionally have meat they are doing ok. We saw many marginal herds that were just surviving yet providing what the family needed in terms of manure, milk and meat. I think that the profits gained

from harvesting caterpillar fungus have also impacted the livestock industry such that there is not as much demand on the herds for ultimate survival of the people. The losses within the herds per year is somewhere between 10% to 30% on average with times of over 50% from disease. Other events, like hard snows, can play an even harder blow to the livestock. It is hard to say what is true though, since many, if not all of the nomad families do not share their true livestock figures with the authorities.

For the amount of preparation time that was available to put together this training we seemed to have adequate and appropriate materials to form a cohesive course and hold the general interest of the participants. It seemed that about half the class was very eager to absorb all the information and experience that they could. This was a great encouragement for us to push on when exhaustion was setting in. It would be good in the future to do more of these trainings especially if there can be better pretraining preparation time with lesson plans and visual aids already completed.

Again, like the December 2009 training, the Veterinary Bureau personnel did an excellent job in coordinating the training facilities and taking care of the visiting TAHWs. They coordinated the daily tea breaks that were important to help keep focus on the material at hand. There were often discussion time and questions during the tea breaks for those wanting more information or clarity of what information had been given. The VB/hosts to this training were very conscientious to make us feel appreciated and that what we had to share was of great benefit to the participants. All this went together for an effective training.

## **SPECIAL ACKNOWLEDGEMENT**

Shelley & I would like to give a special recognition/acknowledgement for the dedication, work, effort and time that Kush and Kara gave to this training. There were many very late nights and very early mornings preparing for the lessons of the day and making sure that correct translations were in place. I believe we all worked very well together fulfilling our different roles and functioned excellently as a team.

## **Appendix No - 1 (Open Forum Discussions)**

### **Problems covered during open discussions.**

- Village Animal Health Worker's Issues and Problems.
- Village Animal Health Workers' Responsibilities and Needs
- Disease
- What makes for a good history
- What makes for a good physical exam
- Botulism
- Pasturelosis
- BVD and Brucellosis
- Contagious Bovine Pleural Pneumonia
- Taenia multiceps (Gid) & Echinococcus Tapeworm
- Drug dosing and treatment
- Preventative Medicine
- Suturing
- Wound care
- Canine (Handling, PE, Treatments, etc.)
- Tensions within the herders' world view on raising livestock and treating diseases

## **Appendix No - 2 (Medicines & Equipment Distributed)**

### **Medicines Distributed to Participants**

- **Ivermectin** (1 box @ 304 RMB (80 bottles of 100 pills) = NC
- **Normal Saline** (15 liters) = NC
- **Procaine/Lidocaine** (60 @ 1.2 RMB / box)
- **Povidone Iodine** (45 bottles @ 8 RMB / bottle)
- **Trimethoprim Sulfa** (45 bottles @ 8 RMB / bottle)

- **Procaine Penicillin Inj.** (3,000,000 Units / vial) (45 boxes @ 23 RMB / box)
- **Gentamycin Inj 100mg / ml** (43 boxes @ 2 RMB / box)
- **Oxytetracycline LA** (90 boxes @ 10 RMB / box)
- **Praziquantel tablets** (43 bottles @ 32 RMB / bottle)
- **Albendazole** (90 bottles @ 10 RMB / bottle)
- **Sulphadiazone** (2 bottles @ 22 RMB / bottle)

#### **Equipments Distributed to Participants**

- **Veterinary Boxes** (43 boxes @ 80 RMB / box)
- **White Lab Coats** (43 coats @ 25 RMB / coat)
- **Stethoscope** (43 @ 20 RMB / scope)
- **Surgical Scissors** (43 Scissors @ 13 RMB / scissor)
- **Surgical Needle Holders** (43 Needle Holders @ 13 RMB)
- **Surgical Thumb Forceps** (43 Rat Tooth @ 5 RMB / forceps)
- **Surgical Hemostats** (86 Hemostats @ 13 RMB / hemostat)
- **Surgical Knife Handle** (43 handles @ 5 RMB / handle)
- **Scalpel Blades** (40 packets of blades @ 3 RMB / packet)
- **Syringes** (43 Syringes 10 cc @ 10 RMB / syringe)
- **Syringes** (43 Syringes 20 cc @ 12 RMB / syringe)
- **Syringe Needles** (430 boxes of 1/2 inch X 20 @ 2 RMB / box)
- **Syringe Needles** (43 boxes of long X 16 @ 3 RMB / box)
- **Suture** (43 box of silk @ 6 RMB)
- **Cutting Needles** (43 packets of needles @ 3 RMB / packet)
- **Thermometers** (90 @ 3 RMB / thermometer)
- **Weight Tapes** (43 tapes @ 3 RMB / tape)
- **Non Sterile cotton gauze 3X3 squares** (50 bags @ 20 RMB / pack)

### **Appendix No - 3 (Handouts)**

- Kunde's Echinococcus Life Cycle Poster
- Lymph node Locations for Physical Examinations
- IM Injection Sites
- HR Chart
- Causes of HR increases and decreases
- Respiration Chart
- Temperature Chart
- Calculating Weight Chart
- Horse Exam Sheet
- Horse Hoof Exam Sheet
- Sheep Exam Sheet
- Cow Exam Sheet
- Eye Ointment Use Sheet
- Ivermectin Sheet
- Penicillin Sheet
- Disease Categorizing Worksheet
- Paravertebral Anesthetic Injection Site
- Paralumbar Incision Site for Rumenotomy