

Report on the Study tour on

## **“Dry Land Agriculture and NRM”**

to Lanzhou and Chengdu, China, for Afghan professionals under the project  
“Human and Institutional Development of Afghan Universities and affiliated Institutes”  
financed by IDRC and administered by ICIMOD, May 29<sup>th</sup> - June 13<sup>th</sup>, 2009



Participants of the study tour and Learning from the different Sites from Lanzhou and Sichuan Province (Chengdu) during the field visit



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## **Abbreviations**

MAIL	Ministry of Agriculture, Irrigation and Livestock, Afghanistan
FAO	Food and Agriculture Organization of the United Nations
USAID	United States Agency for International Development
ICIMOD	International Centre for Mountain Development
NRM	Natural Resources Management
HUC	Himalayan University Consortium
HID	Human and Institutional Development
HCD/AU	Human Capacity Development of Afghan Universities
DANIDA	Danish International Development Agency
HKH	Hindu Kush- Himalaya
ABS	Access and Benefit Sharing
CBD	Convention on Biological Diversity
MEDEP	Micro Enterprise Development
UNDP	United Nations Development Programme
BFPA	Beijing Platform for Action
ECES	Environmental Change and Ecosystems Services, ICIMOD

## Acknowledgement

We express our sincere thanks to Lanzhou University, Sichuan University and all Chinese institutions and partners for their extended support during Chinese Study tour for “Dry land Agriculture and Natural Resource Management Technologies and Extension” . We are grateful to University Official and MAIL officials from Afghanistan for providing their cooperation and support for group learning and exposures to different technologies managed by Chinese farmer and other enterprises.

We are grateful for the assistance and support provided by Prof. Long Ruijin, Mr. Gong Jianfeng and his Research team from the Lanzhou University during the study tour.

We thank Prof. Jing Tao, Vice Precedent Lanzhou University for extending all support during our visit and making appointments with different Agriculture Scientists and Researcher of Agro-based research Laboratory.

We are also thankful to Prof.Hu Ping Hua and Miss Hu Ying for organizing this event full study tour. We are also grateful to Prof. Gao Meirong, Prof Gun Youming, Prof Tong Ya (Sichuan University), Prof. Li Hong Quan for giving their valuable time and presentation during our study tour.

We are thankful to Mr. Hashim Barikzai, DG NRM at the Ministry of Agriculture, Irrigation and Livestock, Kabul University & Kandahar University, Prof. M. Salim Rahimi, Vice-Chancellor Academic of Kabul University, and Prof. Hazrat Mir Totakhil, Chancellor of Kandahar University, for constant support. We also thank Mr. Ambika Gautam, Programme Manager, ICIMOD Country Office in Kabul Afghanistan for smooth facilitation and working closely.

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Last but not least, we thank our ICIMOD personnel Mr. Diederik Prake, HID unit head and Dr. Madhav Bhadur Karki DDG for their special cooperation and guidance and Mr. Basant Pant and all other staff from ICIMOD for their support and making this China Study tour successful.

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## **Background**

Dry land Agriculture and Natural Resource Management Technologies and Extension, Chinese Study tour for University faculty and MAIL officials from Afghanistan was planned for providing group learning and exposures to different technologies managed by Chinese farmer and other enterprises from 29<sup>th</sup> May to 13<sup>th</sup> June, 2009 by ICIMOD Office supported by IDRC –South Asia under HUC/HCD-Project. The five participants from the Ministry of Agriculture, Irrigation and Livestock (MAIL) and four University faculty from Afghanistan visited various Chinese Agriculture institutions and partners with the aim for Participants to learn new practical and applicable technologies and how these are promoted through extension and outreach activities together with the involvement of the academic institutions and Govt. Bureaus. They are convinced and motivated to apply some of these technologies knowhow and/or extension approaches upon return to Afghanistan.

The 'Human Capacity Development of Afghan Universities' (HCD/AU) project aims to enhance the performance of Kabul University and other selected universities and institutes related to higher education in Afghanistan, in pursuit of the environmental and development needs of Afghanistan's mountain communities in the reconstruction phase. To this end the project offers study, consultation and research opportunities at, or offered by, members of the 'Himalayan University Consortium' (HUC). Through these activities the project simultaneously develops knowledge network among resource centers in, or oriented at, the Himalayan region.

## **Programme Highlights: Lanzhou Study trip**

***Day one: 31-05-2009***

**7.30A.M.-6.00 P.M.**

**Location /Venue: Lanzhou University**

The first session started with self introduction and their specialization on the field of Agriculture /NRM. Then Prof. Long Ruijin gave brief introduction about the Lanzhou University which is going to celebrate their 100<sup>th</sup> anniversary. Then he presented about the Arid Agriculture in Gansu and collaboration with ICIMOD. The second session started with a discussion and followed by presentation from Prof. Li Fengmin about the comparison of arid Agriculture in China and Australia .After his presentation there was an interesting presentation from French Scientist on Arid Agriculture worldwide and he shared his twenty years of experience on different models of Arid Agriculture. Final Session was a brief introduction of ICIMOD and HCD/AU project by Dr. Ashutosh Mohanty and he shared his knowledge about arid agriculture in India.

**Day Two: 01-06-2009**

Our second day started with field trip to Tianzhu Alpine grassland Research Station, Tianzhu County. On that field visit the Afghan scholars /Administrator learnt about different grass land in high elevation, sheep farming, Yak cultivation etc. Some researcher of Tianzhu Alpine grassland Research Station shared their experience about management of grassland, community based management system and storage system. Mr. Gong Jianfeng explained about the history of Tianzhu Alpine grassland Research Station and how it is helping local economic development.



Tianzhu Alpine grassland Research Station

### ***Day Three: 02-06-2009***

Third Day we visited Dingxi Agricultural Development Center, Dingxi County and learned different types of Arid /Dry land agriculture and how it is useful for Afghanistan. Afghanistan has quite similar landscape, geography and soil system. We visited Arid Agriculture with Mr. Feng, Director of Animal Husbandry, Dingxi County, who explained about the Animal Husbandry and how it is accepted by the local community for development of their local economy.

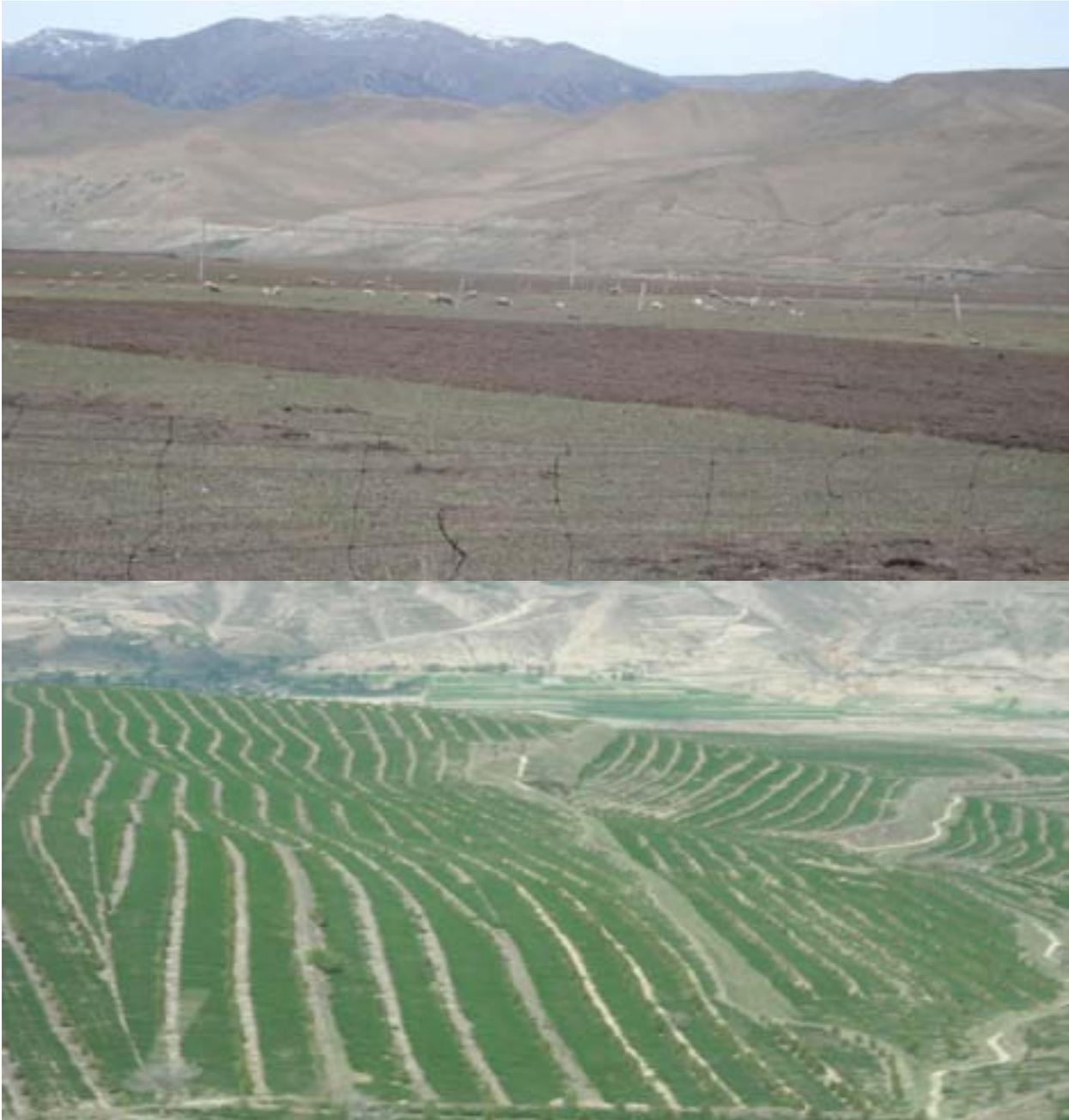


Dingxi Agricultural Development Center

### ***Day Four: 03-06-2009***

Fourth day was group discussion and presentation on summary of the last two days of field visit, experience sharing with Chinese Agricultural Scientists from Lanzhou University at Siya Building. The afternoon Session was quite interesting because Prof Yan Huijan of Southern Australian University gave a presentation on Arid Agriculture in Australia and how they cultivate without

much irrigation. Then there was another Presentation on Soil Management in Arid area by Prof. Li Xiaogang . He presented power point slides on soil management practice in different areas of China. He also described about the Plastic Mulching technology, which is widely applicable and popular in China particularly in Dry land agriculture Then next presentation was by Prof. Long Ruijin on Tibetan Rangeland resources management: productive function to functional integrity.



Range land and Tianzhu Alpine grassland Research Station

***Day Five: 04-06-2009***

Field visit to Honggu District for experience about vegetable production in Green House. We visited several sites on large scale vegetable cultivation, dairy farm and green house farm. We met some successful farmers, agriculturist and shared their long experience and adoption technology in the field of dry land agriculture. That afternoon was reserved for presentation and certificate distribution ceremony. Vice President Prof. Jing Tao distributed the certificates and honored the Afghan participants for their study tour on Dry land Agriculture and Natural Resource Management Technologies and Extension. The Vice president invited all Afghan participants for a dinner as well.



Picture from Honggu District for experience about vegetable production in Green House



Preparing frame for New Green House in Honggu District

***Day Six: 05/06/2009***

Sixth Day was for Agricultural Lab visit and site seen to down town Lanzhou and visit to Gansu museum. There we learned the history, traditional life style and technologies used for Agriculture and development of Gansu civilization. Mr. Gong Jianfeng accompanied us and described the old life style and food habit of Gansu people.





Agriculture Research Lab in Lanzhou University

## **Programme Highlight: Chengdu Study trip**

***Day One: 07-05-2009***

**7.30A.M.-6.00 P.M.**

**Location /Venue: Yanting Sichuan**

After reaching Chengdu, we traveled to State field Observation and Research Station with Prof. Hu Pinghua on Agro-ecosystem in Yanting, Sichuan. Next visit was Agricultural Non point source of Pollution (demonstration center), Agro-ecosystem, Agricultural Landscape, Agriculture-forestry compound Ecological system (center), Soil and Water conservation site. Field Visit and Site demonstration was under the supervision of Prof. Geo Meirong .





State field Observation and Research Station with Prof.Hu Pinghua on Agro-ecosystem in Yanting, Sichuan province, China

### ***Day Two: 08-06-2009***

Next field visit was Yaan City where we stayed for one night. We visited Sichuan Agricultural University and Historical Exhibition, Sichuan Agricultural University Science and Technology Zone and Experiment station. Sichuan Agricultural University has developed new variety of drought resistant hybrid Rice, Maize, Beans, Corn, Sunflower seeds. This Agriculture University has produced number of Agriculture Scientists, researchers and international PhD scholars. There we also visited metrological Center, Green House, Horticulture farm, new breed of Grapes, Peach, orange, grass, Rabbit farm, Goat farm, beef farm and Pork farm with Prof. Gan Youming .



Sichuan Agricultural University Sichuan Agricultural University and Historical Exhibition



Sichuan Agricultural University Science and Technology Zone and Experiment station.

***Day Three: 09-06-2009***

On day three we visited Bifengxia and Shangli town. We were supposed to visit the old project office of a former project under ICIMOD collaboration, but due to rain and time factor, unable to visit the site. During our travel we saw high elevation grass land research station and forest project which was initiated by ICIMOD in 1995. We returned to Chengdu same day. This visit was also under the supervision of Prof. Gan Youming.





Old project site for reviving the natural and Agro Forest in Shangli town (ICIMOD collaboration project)



Ancient Rice processing mill in Shangli town

#### ***Day Four: 10-06-2009***

We visited college of Architecture and Environment, Sichuan University, where Prof. Tong Ya gave a presentation on Agriculture and physical Environment, ecology of Sichuan Province. He also presented History and various research output of Sichuan University, model developed by the university researcher and Agro based value products and especially he presented a variety of mushroom cultivation in Sichuan province. Prof. Tang Ya also shared his research experiences

and climate change issue in Sichuan province and seven year experience with ICIMOD. We also visited new campus of Sichuan University, which was located in a beautiful place with all modern research lab facility and agro-based research sites.



Sichuan University premises and Prof. Tong Ya presentation on Agriculture and physical Environment, ecology of Sichuan Province presentation college of Architecture and Environment, Sichuan University



New Campous of Sichuan University

***Day Five: 11-.06-2009***

We visited famous Sichuan Grass Land Science Academy, where Prof. Li Hong Quan presented slides on the Different Grass land, Grass based product, Grass based value product (Herbal Tea and Wine). Then we visited Beaver Rabbit Foundation and seed farm in Xinjin County and Laojun Mountain. We learned their market based Rabbit farming for meat and wool purpose. There we also learned some Mountain based Agro Cultivation (apple, peach, orange, cherry etc.), horticulture. We visited some floriculture sites and flower garden there.



Sichuan Grass Land Science Academy, where Prof. Li Hong Quan presented slides on the Different Grass land, Grass based product, Grass based value product (Herbal Tea and Wine



Beaver Rabbit Foundation and seed farm in Xinjin County and Laojun Mountain

***Day Six: 12-06-2009***

It was a special day for us as we visited the Institute of Mountain Hazards and Environment, CAS. We saw different kinds of mountain hazard, newly built Hazard demonstration lab shown by Prof. Hu Ping Hua. After noon we visited Chengdu Immaterial Cultural Heritage Garden and National Exhibition.







Institute of Mountain Hazards and Environment, CAS and pictures from Last Earth Quake in Sichuan Province.

### ***Day Seven: 13-06-2009***

We started the return journey via Kathmandu, Nepal and had lunch with our HID colleagues in Thamel, Kathmandu.

As per the discussion with the Agriculture faculties and MAIL officials, this trip could be a mile stone, in terms of knowledge and experience sharing. Afghan Agriculture faculties are committed to transmit this knowledge from China in their study curriculum. MAIL participants are also committed to bring into attention of their higher authority and ministers to implement what they learned from the Chinese study tour in their future Agriculture planning.

### ***Study tour Evaluation Summary***

Feedback regarding the first Trip:

- Lanzhou trip was very well planned and coordinated. Learning from the field visit was impressive from the Afghan participant point of view.
- Sichuan/Chengdu field tour was somewhat less well coordinated. As the guide was not fluent in English the group faced some language barriers, while some of the exposure visits were less relevant to the theme of dry land agriculture
- Some of the participants found it difficult to adapt to the Chinese diet
- Some participants were critical about the financial allowances paid to them

- On issues of discontent the Afghans were at times rather explicit (about their critical opinions) and demanding – in manners that could easily be perceived as rude and unthankful

### ***Lesson Learnt***

- It will be helpful if the guide is fluent in English, and well versed in the topics (jargon) of the tour
- Handouts in English may be helpful after the completion of each event (the project may offer to bear translation costs)
- Food issues may be settled by promoting
  - a) More vegetarian food, with focus on fruits
  - b) Milk is essential (and there is a preference for corn oil over soya)
  - c) Halal if meat is served, and no pork
- The financial standards of the project (which are in line with ICIMOD standards, as applied to ICIMOD staff on international travel) should be even more transparently communicated before the tour, and during the tour strictly and consequently applied.
- The issue of culture and norms may be raised and discussed with the Afghans when their ways of expressing their views give rise to ill feelings among the Chinese hosts or ICIMOD organizers (but these types of friction are less likely to arise with the second group, which has participants that are more exposed and senior)

### Strategy for China Second Study Tour

- The host institutes may be reminded of the exact purpose (with program suggestions) of the tour and how it differs from the first tour, while they may also be reminded of the seniority of the participants
- Organize one official dinner/lunch both in Lanzhou and Chengdu, with high level dignitaries
- Settle all the costs in one go during this second tour (deducting advances transferred and collecting agreed support documents)



## Annex I:

### List of Participant for Dry land Agriculture and Natural Resource Management Technologies and Extension, Chinese Study tour: 29<sup>th</sup> May - 13<sup>th</sup> June, 2009

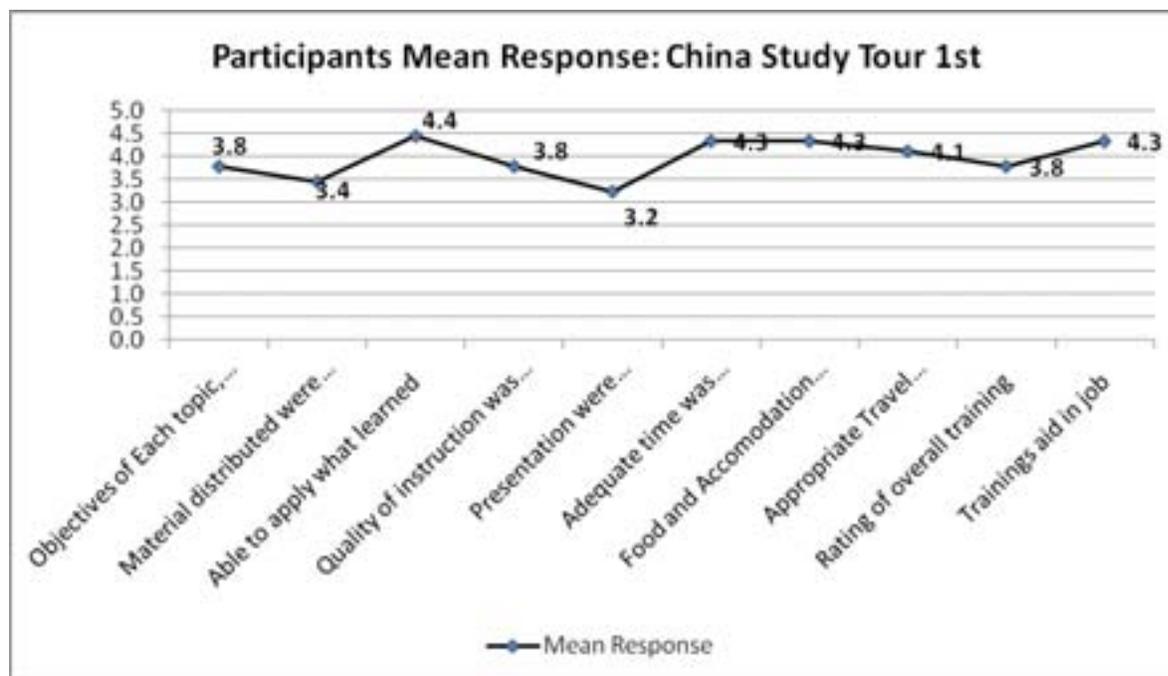
No	Name of the Participant	Institution/Organization
1	Prof. Gul Mohammad Ajir	Kabul University
2	Prof. Nesar Ahmad Kohestani	Kabul University
3	Mr. Noor Ahmad Popal	Kabul University
4	Prof. (Eng.) Ruknuddin Moshkani (Kandahar)	Kandhar University
5	Mr. Abdul Jabar Rahmani (Farah)	MAIL
6	Mr. Ahmad Shah Amarkhil	MAIL
7	Mr. Nasir Mohamad. Ahmadyar (Saripul)	MAIL
8	Mr. Abdullatif Ahmady (Zabul)	MAIL
9	Mr. Ahmad Jan Alco (Uruzgan)	MAIL

#### First Chinese Study Tour Coordinator:

10	Dr.Ashutosh Mohanty	ICIMOD
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## Annex II: Participants' Evaluation

5 signifies 'highest' rating and 1 signifies lowest rating.



Statements	Mean Response
Objectives of Each topic, were relevant and followed	3.8
Material distributed were adequate and useful	3.4
Able to apply what learned	4.4
Quality of instruction was good	3.8
Presentation were interesting and practical	3.2
Adequate time was provided for questions and clarification	4.3
Food and Accommodation were appropriate	4.3
Appropriate Travel Arrangements	4.1
Rating of overall training	3.8
Trainings aid in job	4.3

### Answers to Open Questions

#### 1. What did you find most useful? And why?

- I found all of presentations and field visits in Lanzhou most useful, because
  - i. They were very good organized
  - ii. The agro climatic condition is similar to Afghanistan
- Use of plastic film for growing corn, watermelon and other in Dry land because it will be adoptable to some parts of Afghanistan,
- Dry land management, water conservation and rangeland management

- Rangeland management in Lanzhou related form, because it is very useful for us
  - Growing Alfa Alfa in highland between forest, because of maximum use of hills
  - In Lanzhou the plastic mulch and planting alfalfa in dry land and high land, because these are applicable in our country
  - Dry land management, forestry and rangeland management
  - Dry land management in Lanzhou, because they will manage and use sustainable methods
  - New technology, because adaptable for our country
2. What did you find least useful? And why?
- I found all of field trips in Chengdu least useful, because
    - i. They were very bad organized
    - ii. There weren't researcher to explain for us
  - Lack of arrangement, plan have to be approval before group coming,
  - Whole Chengdu visit
  - Chengdu program
  - All visit in Chengdu, because those were not well arranged
  - Water conservation and forestry
  - Chengdu all site visits, because it was not well arranged in advance
  - Arrangement was least hope in future be better
3. Suggestions for improving such study tour
- Inform all of organizations to be ready already
  - Make visit only to those research stations that they can explain in English
  - Good idea study tour, try to be professional and high educated people, field more important
  - To prepare and design another study tour program specially about the community forestry
  - All programs should be arranged according to the schedule given
  - Try to put more practical and increase the period of stay
  - Improve your selection criteria of trainees of participants based on language and background
  - I want to continue another study tour program to MAIL staffs
  - This type of programs to be for long terms and practical
  - More useful for our profession
4. What was your biggest eve-opener or learning point?
- My biggest learning point was film-mulch technology in Lanzhou province
  - Dry land agriculture, environment grassland
  - Dry land agriculture management
  - Rangeland management and plastic mulch
  - Forestation of all hills
  - Dry land management in Lanzhou
  - Large scale forestry
  - Alpine grassland visit

5. What will be different in your work in half a year, if you are encouraged to apply what you learned?
- I will explain my students the film-mulch technology and I will propose a project to perform that technology
  - Study about environment, ecology grassland it is our interest and field
  - What will apply what I have learned in china visit
  - I am going to apply all gained experiences after return to my place of work
  - After arrival to my country and will apply immediately plastic mulch
  - Dry land management specially using plastic mulch for field crops
  - Transfer technology
6. Other comments
- If possible please arrange for different people different opportunity professors of universities have other needs, expertise of ministry have other priority please take these points for futures
  - If take these kinds of study tour as workshops or training courses will be more useful