Minutes Round-Table Discussions on Feed Resources Activities

27 May, 2007, Tashkent

A one day Round Table Discussion on Feed Resource Activities was held 27 May, 2007 in Tashkent under the "**Community Action in Integrated and Market Oriented Feed-Livestock Production in Central Asia Project**", in which ICARDA is providing technical backstopping. In this round table discussion 5 specialists from ICARDA and Principal Investigators from Kazakhstan, Kyrgyzstan and Tajikistan on range and forage have been participated (list of participants attached along with this minutes). Dr. Asamoah Larbi, Principal Investigator on Forage and Range, chaired the opening session.

OPENING SESSION

Academician Mekhlis Suleimenov, Assistant Regional Coordinator addressed welcome speech to the participants. The **Community Action in Integrated and Market Oriented Feed-Livestock Production in Central Asia Project** in three Central Asian countries has started in previous year. The objectives of the project are: i) improve the livelihoods of rural communities in Central and South Asia; ii) develop and promote community-based actions to support productive and sustainable livestock systems, access to market opportunities, and sustainable management of the natural resources base in the region. Finally, while welcoming you all, let me once again wish you a fruitful meeting and also an enjoyable stay in this beautiful city of Tashkent.

Dr. Barbara Rischkowskiy, Project Manager, Principal Investigator on Livestock, ICARDA, has made Welcome Address during opening session. She highlighted, forage and range activities theme is an important part of the project. She said, we all know that forage is a catalyst of change, and let us all aim to have this change for betterment in our project. She highlighted this day the participants of the round table discussion will be discussed the main problems of the forage and range and will be reviewed the current status of the project activities on forage and range.

Dr. Larbi, Pasture and Forage System Specialist, Principal Investigator Theme 2, also made Welcome Address presentation on opening session. He briefly introduced the main objectives of the workshop. He emphasized the round table discussion focused improving feed resources activities in the project. He called everybody actively participated in the workshop.

Dr Larbi

Dr Larbi made a presentation on "Improved Rural Incomes from Better Forage Production and Sales of Milk Products" which was done in Baglan, Afghanistan jointly with Afghanistan Ministry of Agriculture, Animal Husbandry and Food, Macaulay research Consultancy Services, Agan Khan Foundation and ICARDA. Goal of the project was Profitable alternative livelihoods for Livestock-owing households in poppy growing areas of Afghanistan; propose was efficient use of rainfed and irrigated arable land and milk production. Project components are (i) partnerships, (ii) improving fodder production, (iii) improving livestock feeding, (iv) improving milk production/processing, (v) capacity building. During the implementation of the project new forage crop varieties have been tested. These are 14 alfalfa, 9 clover, 4 grasspea, 6 vetch, 2 oats, 33 sorghum and 20 cowpea. Agronomic management options to improve fodder yields tested in five villages and their seeding rates, manure, in-organic fertilizer. Forage improvement on farm testing was conducted according to the project worklplan. In the selected farm villages milk processing was improved and established women's association and etc. Knowledge exchanged

and skills of partners improved through the project implementation. He concluded that farmers will have more opportunity to experience new forage crop varieties that could improve their crop yields and accordingly livestock production. Participants got interest the presentation and discussion was fruitful and useful for the ongoing IFAD funded project.

Dr Larbi

Dr. Larbi presented the outline of the work plan for the project second year. The outline was as follows:

1. Know each other
2. Review – progress
3. Plan for Year 2
4. Training needs
5. Agree on reporting

1. KNOW EACH OTHER

2. REVIEW – PROGRESS

National Collaborators have made presentations on range and forage on the basis of the progress report which already has been submitted to ICARDA.

Seyfulla Abdiraimov (Kazakhstan)

Prof. Seyfulla Abduraimov, briefly informed the project activities in Kazakhstan. They have done the following activities: communities are selected, communities culture was investigated; range and some forage crops were described, number of animals in each community have determinated. Research material was general condition of pastures and their natural flora. Information and data during survey and discussions were done. In order to preserve productive longevity of Duysen ranges it is recommended: to establish artificial pastures of *Haloxylon aphillum, Calligonum aphillum, Halothamnus subaphylla, Kraschennikovii ceratoides, Kochia conascens, Onobrychis ftrganica, Isatis*; and rationally use pastures in the system of pasture rotation.

Kenesh Joldeshev (Kyrgyzstan)

On farms “Alymseit” and “Kenesh” animals are fed by forage produced by planting of perennial grasses (alfalfa, sainfoin, and perennial grasses) and from the natural hayfields for winter period. 20 hectare of barley is planted (Kenesh), after harvesting of barley will be feeding animals during the winter. We also are going to plant sainfoin as cover crop in the hay fields of Alimseit in spring next year. For the time being in our republic there are no farmers or other economic entities specializing on forage production it makes some difficulties to feed animals during the winter period. Planting of perennial high yield cereal and legume grasses in areas where it is possible to obtain up to 80-100 metric quintals of hay per ha for 5 years. Cereal and legume grasses should be sown as a mixed grass crop where yield of forage increases up to 30-35%. Calendar for round year has to be made in order to properly manage forage crop production and feeding system during the winter.

Abdullo Madaminov (Tajikistan)

We have provided meetings with representatives of groups to be discussed rational use of forage production, utilization of pastures, methods of improving and management of range degradation. Demonstrative sites have been selected to be conducted the trials in villages around. It is decided to apply additional fertilization in degradated ranges. Double crops selected to plant after wheat harvest. We can use sorghum, mung bean and many other crops as double crop after wheat harvest. Triticale, vicia tonifolia, rapeseed and other legume crops also can be planted as main crop. In mountains you can see many hay fields with wild barley (*Hordeuim Bulbosium*). The wild barley is grown as cultivated crop in the ranges of the mountain area. Research is continuing and results will be presented in the next national workshops or field days.

Makhmud Kosimov (Tajikistan)

High yield species of forage crops as grain corn variety “Dilshod” 1.2 ha, variety “Omskiy” 0.2 ha, sorghum 0.5 ha, and Sudan grass 0.2 ha were planted in favorable conditions. During the vegetation period of the crops field observations are conducted. Field performance of the above mentioned crops is good. Also, corn, sorghum, corn for silage and green forage, combined sowing of corn and sorghum, alfalfa and other nontraditional crops which were planted in the neighbor farmers fields were taken under control by the project team group. Some perennial crops were cut and were dried to be used in the winter time. Ranges are monitored and farmers’ community has been selected for further study.

3. Plan for Year 2

Discussions

The number of small and large farmers are given in the table 2 which approved by the participants of the round table discussions.

Country	Farmers			
	Small		Large	
	Dushanbe	Khojand	Dushanbe	Khojand
Tajikistan	10-20	8	3	7
Kyrgyzstan	10-12		2	
Kazakhstan	7-8 (Livestock)		2	

Drs. Larbi and Aziz will be developed fodder crops (4.1.) and feed resources (5.1.) survey and will distribute next week to the national principal investigators on forage and range for further reviewing and improving.

4.2. Integration of forages into farming/cropping systems

4.2.1. Varietal evaluation

1) Tajikistan
   a. Dushanbe

- Maize as double crop (in irrigated conditions)
- Legume as double crop (in irrigated conditions)
- None traditional crops (Pearl millet)

   b. Khojand

- Maize
- Sorghum
- Sudan grass
- Corn for silage and green forage
- Pearl millet

2) Kazakhstan

- Maize
- Alfalfa/barley
- Barley (rainfed)
- Pearl millet

3) Kyrgyzstan

- Sainfoin
- Barley
- Alfalfa
- Pearl millet

4.2.2. Cropping management options

1) Tajikistan
    - Farmer – wheat/maize (option -1)
    - New test – wheat/cowpea (option -1)
    - Farmer – wheat/fallow (option -2)
    - New test – wheat+legume (option -2)
2) Kazakhstan

    - Farmer – maize (option -1)
    - New test – wheat/maize (option -2)
    - Farmer – alfalfa (option -1)
    - New test – pearl millet/sorghum (option -2)

3) Kyrgyzstan

    - Farmer – barley (option -1)
    - New test – barley/maize (option -2)
    - Farmer – alfalfa (option -1)
    - New test – legume crops (option -2)

4.3. Improving carrying capacity of degraded rangelands around villages

I. Kazakhstan

1 – option

1. Native rangeland -

2. Native rangeland + *Kochia*

2 – option

1. Native –

2. Native + *Haloxylon aphillum*

3 – option

1. Native -

2. Native -

II. Kyrgyzstan

1 – option

1. Control (hayfield)

2. Control + sainfoin

2 – option

1. Control – Native

2. Control + Sainfoin +

There are three options developed to rational use of ranges for Kyrgyzstan and Tajikistan.

1	2	3
Winter	Shed	Shed
Spring	Spring	Spring
Summer	Summer	

Pasture rotation

Rotation patterns can vary from super-aggressive “forward paddock grazing” which may move the animals daily, to a year round rotation. Year round rotation is generally the maximum rest for a pasture; half year could not be better. Some farms rotate different livestock onto pastures in sequence, taking advantage of the different grazing habits of cattle and sheep. After the cattle eat the coarse growth, sheep are brought in to eat the fine grasses and clovers the cattle missed.

Activity 5: Promoting use of fodder, crop residues and agro-industrial products for animal feeding

Survey is already mentioned in the previous chapters.

5.2. Strategic supplementary

Kazakhstan

1. Maize + Alfalfa + 1 kg
2. Maize + Alfalfa + 2 kg

Kyrgyzstan

1. Barley and wheat straw
2. Alfalfa and barley grain

4. TRAINING NEEDS

English training courses

Many professional staff in CA region has limitations in understanding English. This greatly constrains the transfer of knowledge and experience during the training courses and field days. It is important that participants attending workshops outside the country have sufficient knowledge of English to benefit from the courses. It is suggested that 3 (the number of participants of the training course has to be cleared) young scientists involved in the project will be trained in a 3.5 months English language course, which will be organized by PFU-CGIAR for CAC in Tashkent, Uzbekistan. It would also be useful if they get English training to assist as translators for future seed courses.

Graduate students

Graduate students – important part of project. Total 15 graduate students are requested to do their Master degree in the project. The research topics must relate to project's research activities and have direct relevance to the candidate's national agricultural research program.

Country	Activity					MSc Students		
	4.1	4.2	4.3	5.1	5.2	Male	Female	Total
Tajikistan	1	1	1	1	1	3	2	5
Kazakhstan	1	1	1	1	1	3	2	5
Kyrgyzstan	1	1	1	1	1	3	2	5

5. AGREE ON REPORTING

The formats of the reports will be followed the scientifically adopted writing guidelines:

a. Introduction
b. Materials and methods used
c. Results and discussion
d. Conclusion and Recommendations

It is decided that national principal investigators on forage and range should send the first year report by the end of July and then the report will be translated into English.

Community Action in Integrated and Market Oriented Feed-Livestock Production in Central and South Asia Project
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	Saturday 26 May: Arrival of Participants	
	Sunday – 27 May – Round-table Discussion of Feed Resources Activities	
	Session 1: Opening session **Chair: Dr S. Beniwal**	
08:00-08:10	Welcome Address	Dr. Beniwal
08:10-08:30	Workshop objectives, Overview and Expected Outputs	A. Larbi – PI & Theme Leader
08:30-09:00	Themes 2 & 4 General Discussion	A. Larbi – PI & Theme Leader
	Session 2: Range and Forage Production (Theme 2) - Overview and progress report on activities **Chair: Mekhlis, Suleimenov** **Rappoteur: Aziz, Nurbekov**	
09:00 – 09:20	Activity 4: Participatory evaluation and dissemination of improved fodder crops and agronomic packages to increase feed resources – Overview	A. Larbi – PI & Theme Leader
09:20-09:30	General discussion	
09:30-10:00	Group photo and Coffee break	
	Activity 4.1 Assessment of current status of fodder crop production – Progress reports and plans	
10:00 – 10:15	Kazakhstan	Activity Leader
10:15 – 10:30	Kyrgyzstan	Activity Leader
10:30 – 10:45	Tajikistan	Activity Leader
10:45 – 11:00	General discussion	
	Activity 4.2 Integration of fodder crops into fallow systems – Progress report and plans	
11:15 – 11:30	Kazakhstan	Activity Leader
11:30 -11:45	Kyrgyzstan	Activity Leader
11:45 – 12:00	Tajikistan	Activity Leader
12:00 – 12:15	General discussion	
	Activity 4.3 Community action for improving carrying capacity of degraded rangelands around settlements – Progress report and plans	
12:30 – 12:45	Tajikistan	Activity Leader
12:45 – 13:00	General discussion	Activity Leader

13:00 – 13: 45	Lunch break	
	Session 3: Range and Forage Production (Theme 2) - Overview and progress report on activities **Chair: Mekhlis, Suleimenov** **Rappoteur: Aziz, Nurbekov**	
14:00 – 14:30	Activity 5: Promoting efficient use of fodder cops, crop residues and agro-industrial by-products for increased meat and milk production – Overview	
14:30 – 14:45	Discussion	
	Activity 5.1 Assessment of feed resources and feeding calendars – Progress reports/future plans	
14:45 – 15:00	Kazakhstan	Activity Leader
15:00 – 15:15	Kyrgyzstan	Activity Leader
15:15 – 15:30	Tajikistan	Activity Leader
15:30 – 15:45	General discussion	
15:45 – 16:00	Coffee break	
	Activity 5.2 Strategic supplementation to improve meat and milk – Progress reports/future plans	
16:00 – 16:15	Kazakhstan	Activity Leader
16:15 – 16:30	Kyrgyzstan	Activity Leader
16:30 – 16:45	Tajikistan	Activity Leader
16:45 – 17:00	General discussion	
	Session 4: Knowledge exchange (Theme 4) - Overview and progress report on activities **Chair: Mekhlis, Suleimenov** **Rappoteur: Aziz, Nurbekov**	
	Activity 17: Exchanging knowledge for increased feed and livestock production	
17:15 – 17:30	Overview and future plans	A. Larbi – PI & Theme Leader
17:30 – 17:45	Discussion	
18:00 – 18:30	Next steps	A. Larbi – PI & Theme Leader
	Monday, 28 May – Departure of Participants	

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List of participants

Name	Scientific Degree / Position	Organization
ICARDA		
1. M. Suleimenov	Dr. Deputy Regional Coordinator	ICARDA-CAC
2. B.Rischkowsky	Dr. PI, Project Manager	ICARDA
3. A.Larbi	Dr. PI Forage and Range	ICARDA
4. A.Nurbekov	Dr. NPO Forage and Range	ICARDA-CAC
5. N.Nishanov	Mr. NPO Socioeconomic	ICARDA-CAC
Kazakhstan		
1. S. Abduraimov	Prof. PI Forage and Range,	South-western Scientific Production Center for Agriculture
2. T.Ibragimov	Collaborator, Forage and Range,	South-western Scientific Production Center for Agriculture
3. Kasymbay	Kasymbay	Breeding farm “Akdala” of Aris district
Kyrgyzstan		
1. K. Djoldoshev	Porf., PI forage and range,	Research Institute of Livestock
2. Kh.Imenov	Porf., PI forage and range	Research Institute of Livestock, Head Department Breeding and Seed Production of Forage Crops
Tajikistan		
1. Abdullo Madaminov	Dr. PI Forage and Range,	Tajik Research Institute of Livestock,
2. Makhmud Kasimov -	Collaborator, Forage and Range, Tajikistan	Khujand Branch, Tajik Research Institute of Livestock