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UNITED NATIONS DEVELOPMENT PROGRAMME

PROJECT NAME:

“ECOSYSTEM-BASED APPROACHES TO CLIMATE CHANGE”

# PASTURE AND CARBON INVENTORY AND MONITORING IN ISMAYILLI PILOT AREA:

AMENDMENT TO DATA SHEET I

“QUESTIONNAIRE FOR ASSESSING PASTURE MANAGEMENT OF SUMMER PASTURES”

(SEE GIZ MONITORING MANUAL FOR SUMMER PASTURES)

J. Etzold, M. Rühls, S. Busse, J. Couwenberg

July 2014



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## 1 Background

The inventory approach is based on the existing GIZ "Monitoring Manual for Summer Pastures" (Etzold & Neudert 2013) which is linked to a remote sensing analysis and a carbon inventory of the pilot region. Thus, the field assessment had to be merged with the demands of a ground truth process of the preliminary results of an unsupervised classification in the remote sensing analysis and additional soil sampling for assessing soil organic carbon (SOC).

Additionally, despite a detailed socio-economic survey of each farm in 2013, a cross-checking of information like livestock numbers for 2014 and the used pasture size is necessary.

## 2 Completion of socio-economic survey

*A socio-economic inventory of the single farms of the pilot region is the key to suitable recommendations of adapted pasture use and/or for necessary changes in the land tenure and land access framework, concerning the system of migration between winter pastures, intermediate pastures and summer pastures. Here, the already in 2013 conducted survey with a preliminary questioning of 52 farmers of the pastoralists' camps, comprising the 16 camps in the pilot region supplies a lot of helpful and necessary information. It provides names of pasture camps and of farmers as well as in most cases the registered number of livestock, the size of the pasture and its location. Beyond that, the database contains data about the responsible leasing administration, about the age of the contract and its runtime. In addition, farmers had been asked for an estimate of the quality of the summer pasture and for problems in the recent usage of the pastures. Additional sampling and cross-checking of already existing socio-economic information will be the tasks of the integrated field assessment in 2014.*

Thus, the set of already sampled data for every farm should be taken to the field for cross check and for completion. *It is recommended to fill in the already sampled data into the data sheet I for every single farm to be approached in the 2014 survey.*

*While the ecological inventory and assessment delivers findings about threats and damages from overstocking and overgrazing, it helps to locate and to describe existing or evolving problems. But, only in combination with the socio economic inventory the knowledge about the farm situation suffices, to develop ideas and recommendations how to meet with the challenges.*

*Adapted usage might not only be established by decreased numbers of livestock for a complete summer pasture camp. Thus, a deeper knowledge about the whole farm, about facilities and limitations, is important. Then, recommendations can encompass strategic aspects as well as cooperation options.*

Here, the division of the summer pasture of one single farm into different management units is one important step in preparation of the assessment and of the process of deriving recommendations. The survey should encompass cross-checking and adding of lacking important information concerning:

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- Size of winter pasture
- Location and name of winter pasture
- Date and runtime of contract for winter pasture
- Responsible administration for winter pasture
- Pathway for migration and intermediate pastures or resting places
- Targeted number of livestock in future
- Structure of pasture camp communities (men, women, families)
- Quantities of manufactured milk products and of distributed livestock and milk products
- Main phases for selling of livestock
- full contact data (phone, postal address) of farmers – for further contact and cooperation

Detailed questions concerning these points have been added as a supplement to the GIZ pasture assessment manual.

Even though the concept and the management plan have their focus on summer pastures, in the transhumant system of livestock husbandry in Azerbaijan, the two compartments summer and winter pasture cannot be seen and managed independently. Finally, the bottle neck in provision of fodder, either on summer or on winter pasture, rules the decisions of the farmer in his management. A shortage in winter fodder supply can force the farmer to migrate to the summer pastures (too) early, which might lead to problems of overgrazing, though there is no overstocking on the summer pasture to be stated in general.

### 3 How to fill in Data Sheet I

The Data Sheet I "Questionnaire for assessing pasture management of summer pastures", amended for the UNDP pasture and carbon inventory, you find in chapter 4.

Most of the tasks on Data Sheet I are conducted in the way as described in the GIZ "Monitoring Manual for Summer Pastures". Only few questions have been added for some tasks. Behind each task is a reference to the corresponding pages in the GIZ "Monitoring Manual for Summer Pastures" explaining the necessary steps and the importance of the variables. Please see also the general "Interview guidelines" on page 6 of the GIZ document.

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## 4 UNDP pasture and carbon inventory – amended Data Sheet I: Questionnaire for assessing pasture management of summer pastures

The page references to the GIZ "Monitoring Manual for Summer Pastures" are noted as follows: "GIZ p. xy"

Interviewer: \_\_\_\_\_ Date: \_\_\_\_\_ Sheet No. \_\_\_\_\_

Tel.-No. for later contact: \_\_\_\_\_

Farm No. \_\_\_\_\_ (from survey 2013)

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### 1. Basic data of summer pasture (GIZ p. 7)

1.1 GPS-Point (Name): \_\_\_\_\_

N (Latitude): \_\_\_\_\_ E (Longitude): \_\_\_\_\_ Altitude [m above sea level, from GPS]: \_\_\_\_\_

1.2 Name of summer pasture: \_\_\_\_\_

1.3 Name of interview partner: \_\_\_\_\_

For how many years do you personally come to this summer pasture?

\_\_\_\_\_ years

When do you usually arrive on this summer pasture and when do you leave?

Arrival date: \_\_\_\_\_ Departure date: \_\_\_\_\_

1.4 Related sheet numbers of data sheets for pasture condition (Data Sheet II): \_\_\_\_\_

### 2. Winter pasture (GIZ p. 7)

2.1 Where does the livestock kept on this pasture stay in winter?

Winter pasture: Name of rayon: \_\_\_\_\_

Near which village/town/mountain: \_\_\_\_\_

Village Name of rayon: \_\_\_\_\_

Name of village: \_\_\_\_\_

2.2 Which intermediate pastures are used between summer and winter pasture?

How long do you stay on intermediate pastures on the track? \_\_\_\_\_ weeks

Intermediate pasture: Name of rayon: \_\_\_\_\_

Near which village/town/mountain: \_\_\_\_\_

Village Name of rayon: \_\_\_\_\_

Name of village: \_\_\_\_\_

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### 3. Farm organisation (GIZ p. 7)

#### 3.1 Who is responsible for herding on this summer pasture?

*Fill in the names in the table and mark "herding tasks" and "presence on the summer pasture"*

| No. | Name | Herding tasks            | Management tasks         | Livestock ownership | Presence on summer pasture |
|-----|------|--------------------------|--------------------------|---------------------|----------------------------|
| 1.  |      | <input type="checkbox"/> | <input type="checkbox"/> |                     | <input type="checkbox"/>   |
| 2.  |      | <input type="checkbox"/> | <input type="checkbox"/> |                     | <input type="checkbox"/>   |
| 3.  |      | <input type="checkbox"/> | <input type="checkbox"/> |                     | <input type="checkbox"/>   |
| 4.  |      | <input type="checkbox"/> | <input type="checkbox"/> |                     | <input type="checkbox"/>   |
| 5.  |      | <input type="checkbox"/> | <input type="checkbox"/> |                     | <input type="checkbox"/>   |
| 6.  |      | <input type="checkbox"/> | <input type="checkbox"/> |                     | <input type="checkbox"/>   |
| 7.  |      | <input type="checkbox"/> | <input type="checkbox"/> |                     | <input type="checkbox"/>   |
| 8.  |      | <input type="checkbox"/> | <input type="checkbox"/> |                     | <input type="checkbox"/>   |

#### 3.2 Who is responsible for the management of this summer pasture? <sup>1</sup>

*Mark "management tasks" in the table.*

#### 3.3 Who are the three most important livestock owners on this summer pasture? <sup>1</sup>

*Mark the most important livestock owner with "1", the second most important with "2" and the third most important with "3".*

<sup>1</sup> In case the persons were not mentioned yet, fill in additional names and their tasks in the table.

To fill in the last column ask:

Do these additional persons stay on the summer pasture at least one month each summer?

Mark "presence on the summer pasture" in case the answer is "yes".

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#### 3.4 Who decides about the following issues?

*Write down the No. of the persons as indicated in the table.*

*In case other persons are responsible, add them to the table.*

- a.) Daily organisation of herding
- b.) Veterinary care for livestock
- c.) Time and organisation of seasonal migration
- d.) Number of livestock on the summer pasture

#### 3.5 With whom can we discuss management recommendations for your pasture?

*Write down the No. of the person as indicated in the table*

#### 3.6 Who else stays here on the summer pasture?

- a.) only paid shepherds
- b.) only farmer and paid shepherds
- c.) whole farmers' families and shepherds
- d.) others

#### 3.7 Which milk products are produced and sold from the summer pasture?

Product/ Market Place/ Amount

#### 3.8 Which number of livestock is sold during the year on markets?

Time/ Market Place/ Number

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#### 4. Pasture access (GIZ p. 7)

##### Summer Pasture

4.1 Can you give information about the lease contract for this summer pasture?

- Yes, *Proceed with Question 4.2.*
- No, Who can give information? When and/or where is the person available for an interview?

*Proceed the interview with Question 5.1*

4.2 Which form of lease agreement secures the access of your farm to this summer pasture?

- Written contract with administration
- Oral agreement with administration
- Written sublease contract with original leaseholder
- Oral sublease agreement with original leaseholder

4.3 Who holds this lease contract/agreement?

Name: If applicable: No. from table in Topic 3:

Else: Relationship to persons involved in the farm:

4.4 Which administration issued the original lease contract/agreement?

- Rayon administration  Belediye
- other

Name of administration:

4.5 For how many years is the contract/agreement valid?

- years  only for this year

4.6 According to the lease contract how many hectares do you use?

Total: Fertile land:

4.7 How do you estimate the security of your rights to this summer pasture?

- secure  medium  insecure

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## Winter Pasture

4.8 Can you give information about the lease contract for your winter pasture?

- Yes, *Proceed with Question 4.9.*
- No, Who can give information? When and/or where is the person available for an interview?

*Proceed the interview with Question 5.1*

4.9 Which form of lease agreement secures the access of your farm to the winter pasture?

- Written contract with administration
- Oral agreement with administration
- Written sublease contract with original leaseholder
- Oral sublease agreement with original leaseholder

4.10 Who holds this lease contract/agreement?

Name: If applicable: No. from table in Topic 3:

Else: Relationship to persons involved in the farm:

4.11 Which administration issued the original lease contract/agreement?

- Rayon administration  Belediye
- other

Name of administration:

4.12 For how many years is the contract/agreement valid?

- years  only for this year

4.13 According to the lease contract how many hectares do you use?

Total: Fertile land:

4.14 How do you estimate the security of your rights to the winter pasture?

- secure  medium  insecure

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## 5. Livestock (GIZ p. 8)

5.1 How much livestock is kept on the summer pasture? (*Fill in total number*)

Sheep:

Goats:

Cattle (older than 6 months):

5.2 How did the number of livestock develop in the last years?

Became more

Stayed the same

Became less

*Cross check livestock data with your own counts/estimations.*

5.3 What is the target figure for the number of livestock for the future?

Sheep:

Goats:

Cattle (older than 6 months):

---

## 6. Use of shepherd dogs (GIZ p. 8)

6.1 How many adult dogs do you keep on your summer pasture?

Number:

6.2 Do you take dogs with you during herding?

Always

Sometimes

Never

6.3 Where do your dogs go during the day?

Stay in camp

Go max. 200 m radius

Go further than 200 m

6.4 What do you feed regularly to your dogs?

barley

barley and meat

other:

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## 7. Spatial organisation of pasture use (GIZ p. 8)

*Space for drawing is provided on the last page of the data sheet.*

7.1 Can you draw a simple map of your summer pasture?

Show the location of streams/valleys and ridges.

Show the location of the camp and access roads.

Where can you find much fodder?

Where is the fodder scarce?

Which places does the livestock like/dislike?

7.2 Do you use a spatial and/or temporal pattern of herding?

Please explain it by using your map.

Are there places, where the livestock does not go/goes only infrequently?

*Please make sure that all aspects of the discussion are recorded on the map.*

---

## 8. Pasture condition (GIZ p. 8)

8.1 How do you appraise the condition of this pasture compared to neighbouring pastures?

Better

same

worse

If the pasture condition is better or worse, please explain why.

8.2 Did the condition of this pasture change during the last 10 years?

Better

same

worse

8.3 Is the pasture area enough for the livestock kept here?

More than enough

just enough

not enough

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8.4 What measures do you use to improve the condition of this pasture?

8.5 In general: Are there degradation problems on summer pastures in this region?

Not at all

few problems

severe problems

8.6 When you keep too much livestock on a pasture...

a.) ...what happens to the livestock?

b.) ...what happens to the pasture?

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## 9. Cross-checking of livestock numbers (GIZ p. 8)

9.1 Sheep

9.1 Goats

9.2 Cattle

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Please draw map here:

