

## Appendix(1)

### Survey of an Assessment of Rangeland in Semi-arid Ecosystem White Nile state (tandelti)

#### 1. Identification:

- Date : \_\_\_\_\_

- Name of Village: \_\_\_\_\_

- Tribe: \_\_\_\_\_

#### 2. Occupation of respondents:

1/ Farmers

2/ Nomads

3/ Merchant

4/ Others ( Specify)

#### 3. Age of respondent:

1/ 15-19

2/ 20-24

3/ 35-29

4/ 30

#### 4. Martial Status:

1/ Married

2/ unmarried

3/ Divorced

4/ Widowed

#### 5.Type of the resident:

1/ Extended Family

2/ Dependent Family

#### 6. Have you migrate outside the Area:

1/ Yes

2/ No

7. If “ Yes” What is the destination:

1/ Within the council                      2/ outside the province

3/ outside the State                      4/ outside the Country

8. Any change in rainfall:

1/ Yes    2/ No

9. How do you rate the amount of rainfall in relation to cultivation in each  
of the following years?

10. What soils are prevalent in the area?

1/ Sandy Qoz                                      2/ Clay Loam

3/ Sandy Loam                                      4/ Clays

11. Which of these is most dominant:

1/ Sandy Qoz                                      2/ Clay Loam

3/ Sandy Loam                                      4/ Clays

12. Which of the above soils is characterized by dense grass cover:

1/ Sandy Qoz                                      2/ Clay Loam

3/ Sandy Loam                                      4/ Clays

13. Any observed problems in the local soils:

1/ Yes    2/ No

14. if “yes” account these problems:

1/ decrease of productivity              2/ Shrinkage in vegetation cover

3/ increased winds frequency

15. Are you plant species were disappeared:

1/ Yes

2/ No

16. What are the reasons behind the disappearance of both grass and trees:

1/ overgrazing

2/ overcultivation

3/ drought symptoms

4/ Fires

5/ Cutting for constuctio

6/ Pests and disease

7/ Sands creeping and winds

8/ charcoal production

## **Abstract**

The study was conducted in White Nile State (Tandelti area ) which extends between latitude °12.2-°13 north and longitude 31-39.30 east. The study aimed to identify the factors that affect rangeland degradation in the area. The most important results of the study were: rainfall fluctuations and drought spells, in addition to the fires and illegal trees cutting overgrazing.

The study recommended that regulation of grazing system is needed to reduce rangeland degradation, increase of animal route numbers and the entrance to the grazing area should be after the maturity of its plants.

## الخلاصة

أجريت هذه الدراسة بولاية النيل الأبيض منطقة تندلتي التي تقع بين خطي طول  $31^{\circ}$ - $39^{\circ}$  شرق وخطي عرض  $12^{\circ}$ - $13^{\circ}$  شمال وتهدف هذه الدراسة لتحديد العوامل التي تؤدي إلى تدهور المراعي الطبيعية بالمنطقة ، من أهم النتائج التي خلصت لها الدراسة هي أن هناك تذبذب في معدلات الأمطار بالمنطقة وتكرار في موجات الجفاف بالإضافة إلى الحرائق والقطع الجائر للأشجار الرعوية والرعي الشديد و ..... الخ .

من أهم توصيات هذه الدراسة تنظيم الدورات الرعوية التي تقلل من تدهور المرعى ، وزيادة عدد المسارات بالمنطقة لتقليل ضغط التربة كما أوصت الدراسة بتأجيل دخول الحيوانات إلى المرعى حتى وصول النباتات الرعوية لمرحلة النضج .

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