



Monitoring of the Golis Mountain Forest in Somalia



**Technical Report No. L-18
December 2010**

Somalia Water and Land Information Management
Ngecha Road, Lake View. P.O Box 30470-00100, Nairobi, Kenya.
Tel +254 020 4000300 - Fax +254 020 4000333,
Email: enquiries@faoswalim.org Website: <http://www.faoswalim.org>.



The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations and the SWALIM Project concerning the legal status of any country, territory, city or area of its authorities, or concerning the delimitation of its frontiers or boundaries..

This document should be cited as follows:

Mumuli, S. O., Alim, M. and Oduori, G., 2010. Monitoring of the Golis mountain forest in Somalia. FAO-SWALIM. Project Report No. L-18. Nairobi, Kenya.

Table of Contents

Acknowledgements.....	5
1 Background.....	6
1.1 General.....	6
1.2 Geographic Location.....	7
1.3 Climate.....	7
1.4 Golis Mountain Forest (Figure 3).....	11
1.5 Use of the forest products.....	11
1.6 Threats.....	12
2 Objectives.....	12
3 Methods and materials.....	12
3.1 Satellite image interpretation.....	13
3.1.1 Preliminary land cover mapping.....	13
3.1.2 Final land cover mapping.....	13
3.1.3 Image preprocessing.....	13
3.1.4 Image classification.....	14
3.1.5 Further cleaning and assigning class names.....	15
3.2 Ground field ecological observations.....	16
3.3 Interviews with the local people.....	17
4 Results.....	17
4.1 The land cover/vegetation map.....	17
4.1.1 Closed Shrubs with Trees.....	19
4.1.2 Open Shrubs.....	19
4.1.3 Very Open Shrubs.....	19
4.1.4 Closed Shrubs.....	19
4.1.5 Crop Fields.....	19
4.1.6 Herbaceous.....	19
4.1.7 Sparse Vegetation.....	20
4.1.8 Bare Soil.....	20
4.1.9 Settlement.....	20
4.1.10 Proportion of Land cover classes in the Golis forest.....	20
4.2 Plant density and Percent cover.....	21
4.3 Activities related to resource use and management in the Golis Mountains forest.....	26
4.3.1 Settlement.....	26
4.3.2 Source of livelihood.....	26
4.3.3 Environmental degradation problems.....	30
4.3.4 Goods and services provided by the Golis forest.....	31
4.3.5 Environmental training attended.....	33
4.3.6 Knowledge on the Golis forest.....	34
4.3.7 Threats to the Golis Forest.....	34
4.3.8 Beneficiaries of the Golis forest.....	35
4.3.9 Golis forest extraction trend.....	36
4.3.10 Destination of Forest products.....	37
5 Discussions and conclusions.....	37
6 Challenges.....	39
7 Bibliography.....	40

8 Appendices..... 41

Acknowledgements

The authors wish to thank the SWALIM liaison office in Hargeisa and the field surveyors from Somaliland line ministries, Mohamoud Ibrahim Mohamed and Abdiwahid Elmi Rooble, for tirelessly carrying out the field observations in the harsh conditions. The effort put in by the interns, Elsi Okhoba and Linda Nakhulo to automate all the field data is also highly acknowledged. Lastly, the authors wish to acknowledge the considerable support, drive and motivation given by the SWALIM Chief Technical Adviser, CTA, Dr. Zoltan Balint. This document would not have been compiled were it not for the wise leadership of Zoltan.