

Project Update: March 2006

Time period: November 2005 - February 2006

Pilot study

The pilot data analysis for the purposes of forest cover change detection was run for the surrounding areas of Vanadzor city. Two satellite images were processed and analyzed. The results showed that a massive deforestation occurred between the 1989 and the 2000. Though this fact was known earlier, there was no documentary evidence backed up with scientific methods to confirm the extent of forest cover changes.

The data analysis was then followed by fieldwork to verify the results on the ground. Trips were organized to the study area for gathering observational data as well as taking photographs of the affected areas for subsequent verification with the forest cover classification of satellite imagery.

The research produced a forest cover map of the area in question for the years 1989 and 2000 as well as "change detection" results, the extent of the deforestation (see illustrations below).

The next steps include an extensive fieldwork planned for the end-of-April to June and further analysis of satellite imagery.

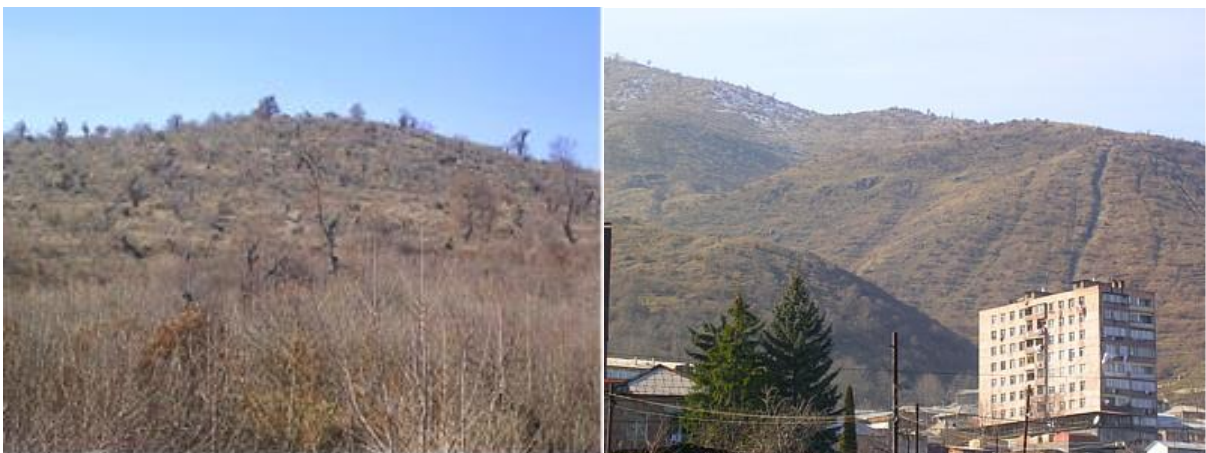
Achievements

A major achievement of the project has been the featuring of its materials in a documentary film about deforestation and illegal logging titled "From Need to Greed". This documentary was filmed entirely in the Republic of Armenia and produced by VEM Media Arts, Yerevan, Armenia and funded by Armenia Tree Project, Armenian Forests NGO and the WWF Caucasus Programme Office. The project results were shown as a transition of images of forest cover around the city of Vanadzor in 1989 and 2000, visualizing the deforested areas.

New contacts were established with the Armenian Forests NGO, one of the leading organizations in Armenia fighting the deforestation. It is planned to continue extending this network to facilitate the dissemination of information and project results at the final stages of the project.

Illustrations

The surrounding area of Vanadzor city as seen on the Landsat satellite imagery taken from 1989 and 2000. The left column shows the original satellite imagery, with forest areas in dark green colour. Vanadzor city is located in the centre of the image. The right column shows the forest cover classification results.



Photographs above are of the hill slopes to the south of and immediately adjacent to Vanadzor city. Once being covered by a rich forest cover they are now a home to bare trunks. The area is extensively used by the locals for grazing, thus preventing any attempts to reforest the area.

Forests around Vanadzor city in 1989



Fig.1

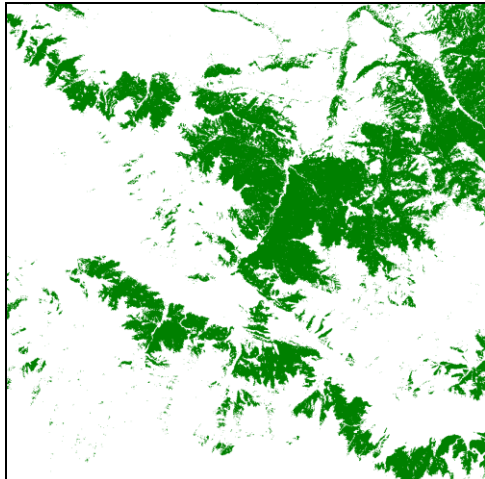


Fig. 2

Forests around Vanadzor city in 2000



Fig. 3

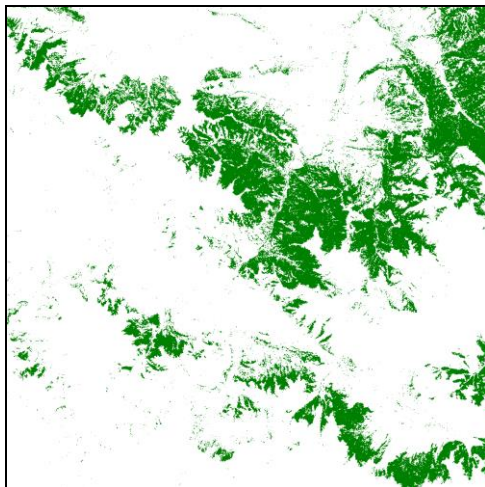


Fig. 4

Fig. 5. Changes in forest cover for the period from 1989 to 2000. The deforested areas are shown in RED colour.

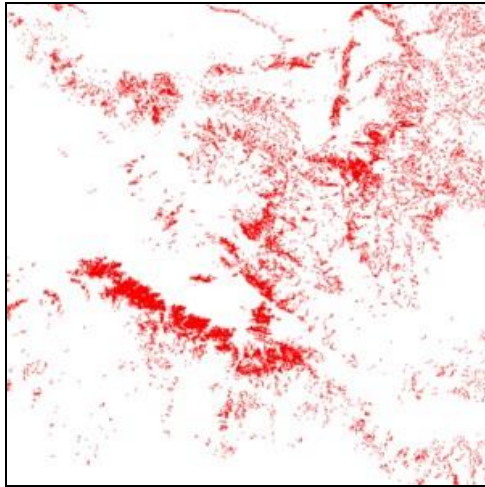


Fig. 5