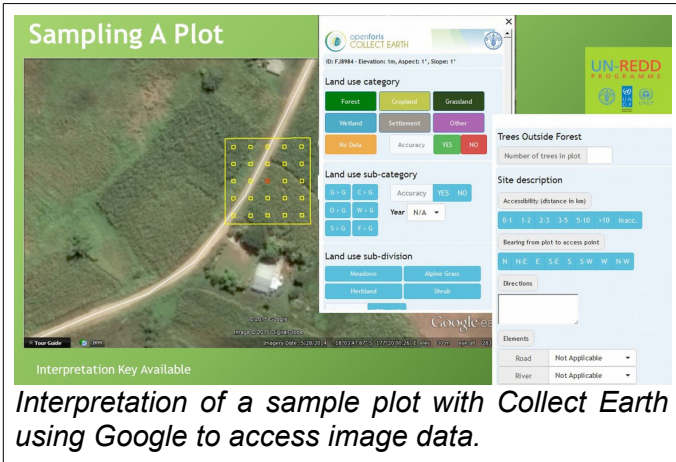


Collect Earth an Open Source Tool to Collect Country Data of Land Use and Land Use Change

Filimoni Yaya is part of the FAO Regional Forest Monitoring Facility based at the GIS&RS in SPC.



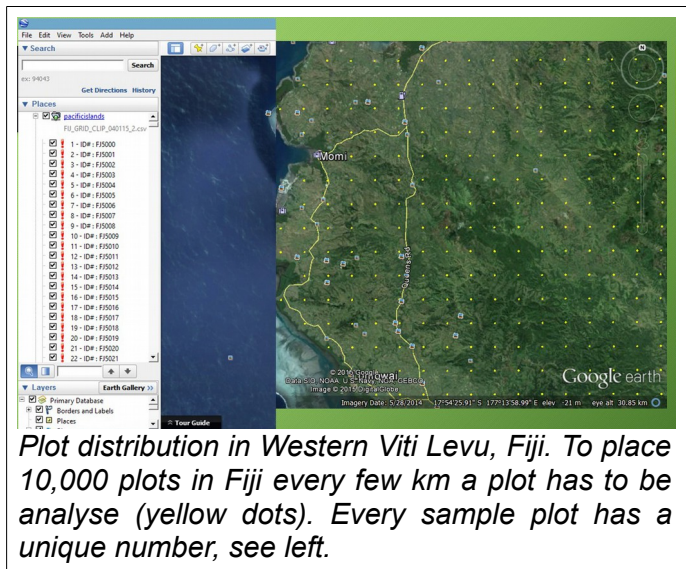
FAO Rome developed a tool called **Collect Earth** which creates statistically sound data on land use and land use change. The tool does not map the current land area but establish sample points of one hectare where GIS officers interpret the current land use and display historical satellite image data for the same sample plot and record the land use before. Doing this for 10,000 systematic distributed sample points within one country a statistically sound dataset is created allowing to calculate the percentage of land cover belonging to each of six land use

categories. The dataset created also allows to determine how many plots have changed from one land use category to another which provides an exact figure on deforestation.

The system is based on Google Earth and Bing Maps. The user does not pay for any satellite image and has the latest very high resolution image data available from DigitalGlobe such as QuickBird, GeoEye, WorldView-2 or WorldView-3 and also from the satellites of Airbus Defense and Spatial. The user cannot download the satellite images, however, this is not necessary for the interpretation of a plot. In addition, the operator has the nearly complete satellite image archive available when he checks historical data. This again is without any cost.

The system also provides the database and analysis software to calculate current land use and land use change from the dataset created. The statistics created from 10,000 sample points is statistically sufficient for required country reporting to UNFCCC.

In Fiji, GIS officers with field experience of Agriculture and Forestry working together at SPC to interpret and analyse 10,000 plots. 1 ½ months are estimated to complete this task. The GIS&RS unit of SPC as Regional Forest Monitoring Facility provides computer, guidance and Internet access.



Filimoni Yaya: Filimoni.Yaya@fao.org

GIS&RS Unit: wforstreuter@yahoo.co.uk