Ministry of Environment and Natural Resources

Guatemala

Central American Regional Visualization and Monitoring System: SERVIR

(Central American Uses of Remote Sensing)

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United Nations/Austria/
European Space Agency Symposium
12-15 September 2006

Backgrounds

- Agreement in Climate Change between USA and Central American Countries
- Objective: to Support the Improvements of National GHG Inventory and National Communication on Climate Change
- Steps
  - Define focal point in Central American and USA
    CA Ministries of Environment Climate Change Unit
    EPA and NASA (USA)
  - Identify main uncertainties in GHG inventories
    Land Use Change and Forestry (LUCF)
    Agriculture (Soil)
    Waste
  - Other stakeholders
    Central American Commission for Environment and Development (CCAD)
    University of Colorado (USA)

Main Activities and Operations

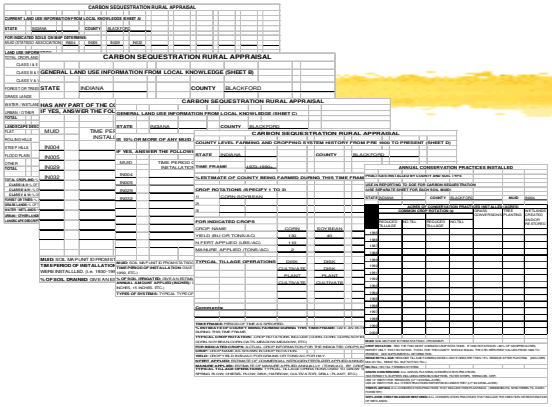
- Inventories Templates based on Good Practices Guidelines
  - Key Sources Analysis (KSA)
  - Source by Source Analysis (SBS)
  - Quality Assurance/Quality Control (QA/QC)
  - Institutional Arrangements
  - Archiving

- Software
  - Development of a computer model to address Agriculture and Land Use Change and Forestry Inventory. CAALU (Central American Agriculture and Land Use Model)

- Remote Sensing for Land Use and Agriculture Analysis

- Actual Organization
  - One centralized node in Panamá (CATHALAC)
  - Free access by partners and general public

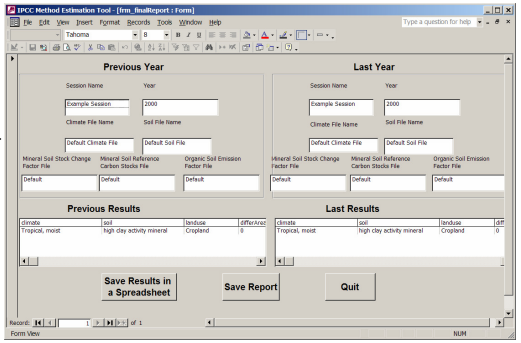
Inventory Framework: CAALU Tool



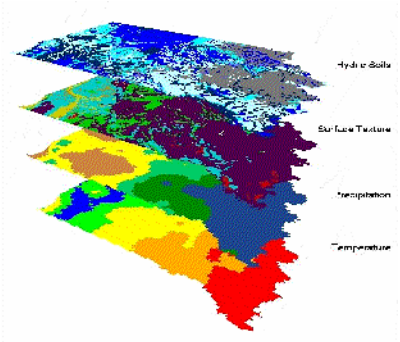
Management Activity Data: National Agriculture and Forestry Statistics

CAALU Inventory Software Tool

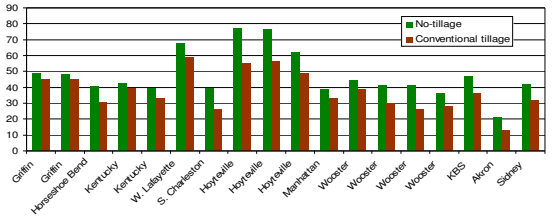
Inventory Results



GIS Spatial Data:
Land Use/Cover, Soils and Climate



Emission Factors:
IPCC Defaults or Country-Specific



Overview of Central American Agricultural/Land Use Tool (CAALU)

- Provides interactive guidance on
  - Activity Data Entry
  - Classification of land use/management systems and livestock characterizations,
  - Assignment of emission factors
  - Completing Computations
  - Quality Assurance/Quality Control

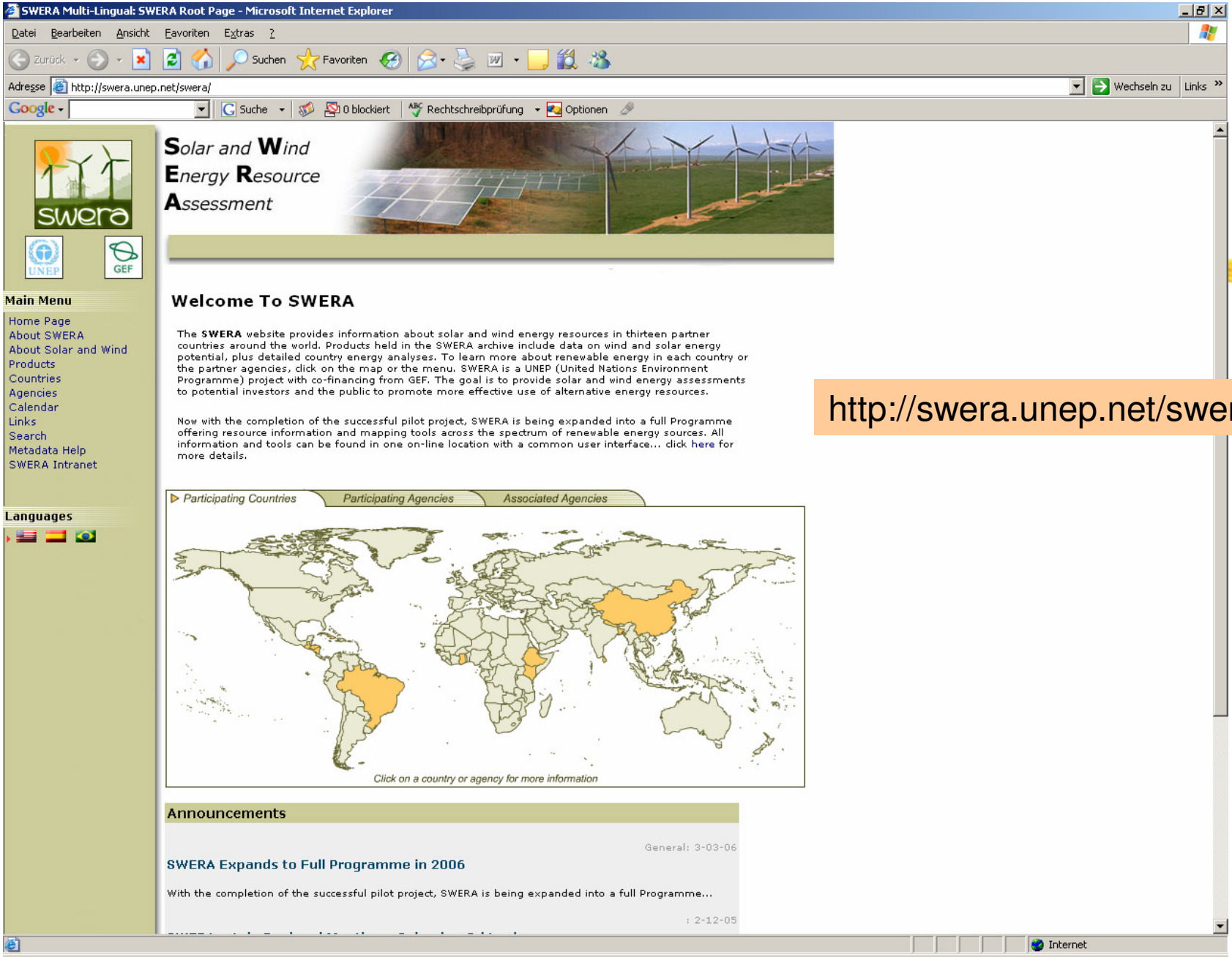
- Computations based on the Revised 1996 IPCC National Inventory Guidelines and IPCC Good Practice Guidance Documents (2000 and 2003)

- Three Modules
  - Activity Data
  - Factor Assignments
  - Computational

SERVIR

- Objectives
  - Create and distribute visualization from NASA remote sensing and other data vía web based end-user application
  - Provide decision-maker and scientists, educators, NGO´s and general public information to better understanding and addressing the dynamic environment issues in Central America
  - Other information (Renewable Energy: Wind and Solar)
- Characteristics
  - Based in Panama (CATHALAC)
  - Integrated 3D visualization and mapping capabilities
  - Web site information open to general public
  - Support from National Environment Information in each CA country
  - Both in English and Spanish
- Other Sponsors
  - World Bank
  - CATHALAC

http://servir.nasa.cathalac.org/



http://swera.unep.net/swera/

Outcomes

- A way to calculate a quick GHG emission in order to identify new key sources (if any) for years to come
- Identify key actors
- Develop institutional arrangements (strategic alliances)
- Train your expert in GHG inventory and Good Practices Guidelines
- Uses of Remote Sensing for analysis of the dynamics of Land Use Change and Forestry
- Uses of Remote sensing uses for disasters information
- Fires and smokes spots over Mesoamerica

THANKS FOR YOUR ATTENTION