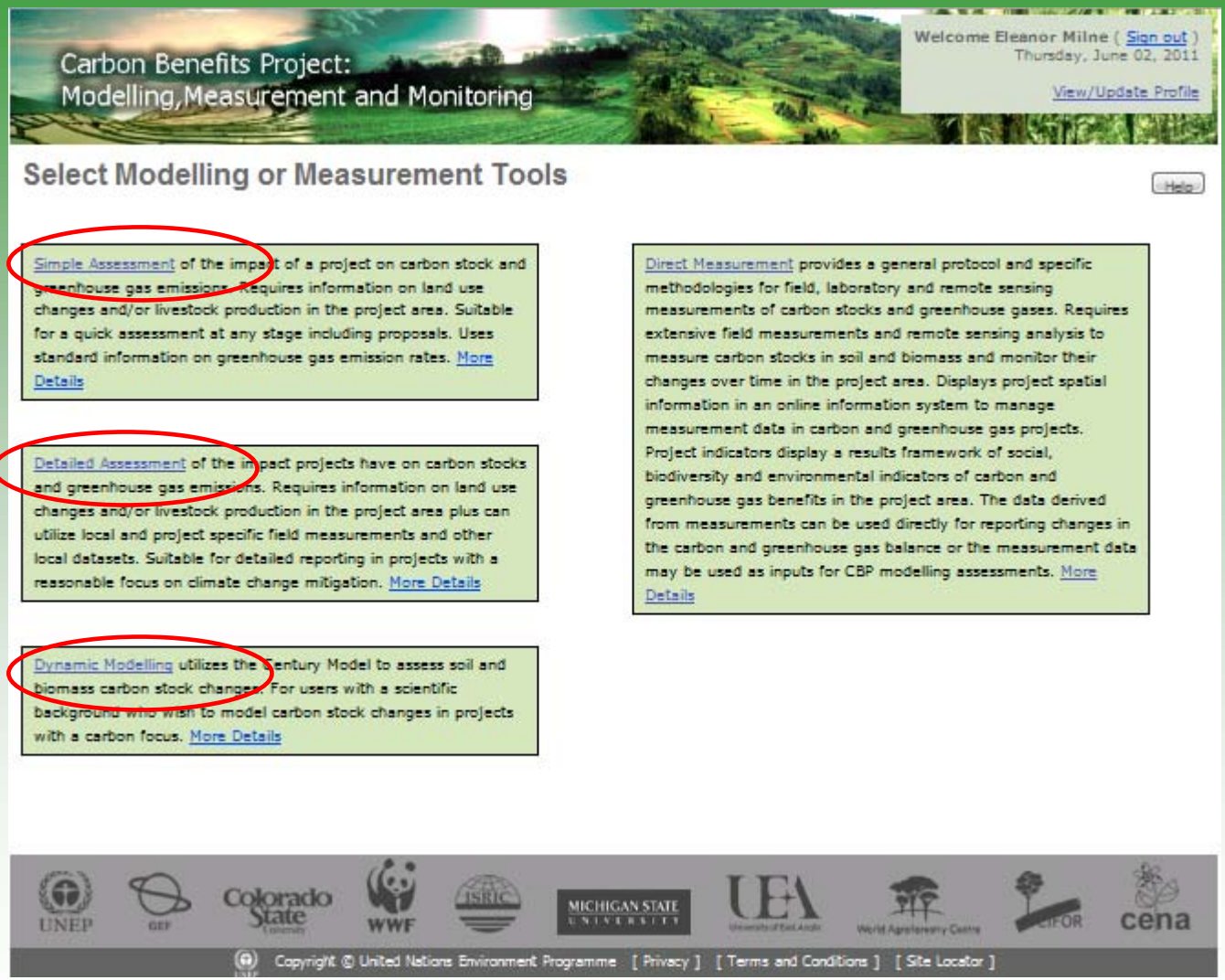
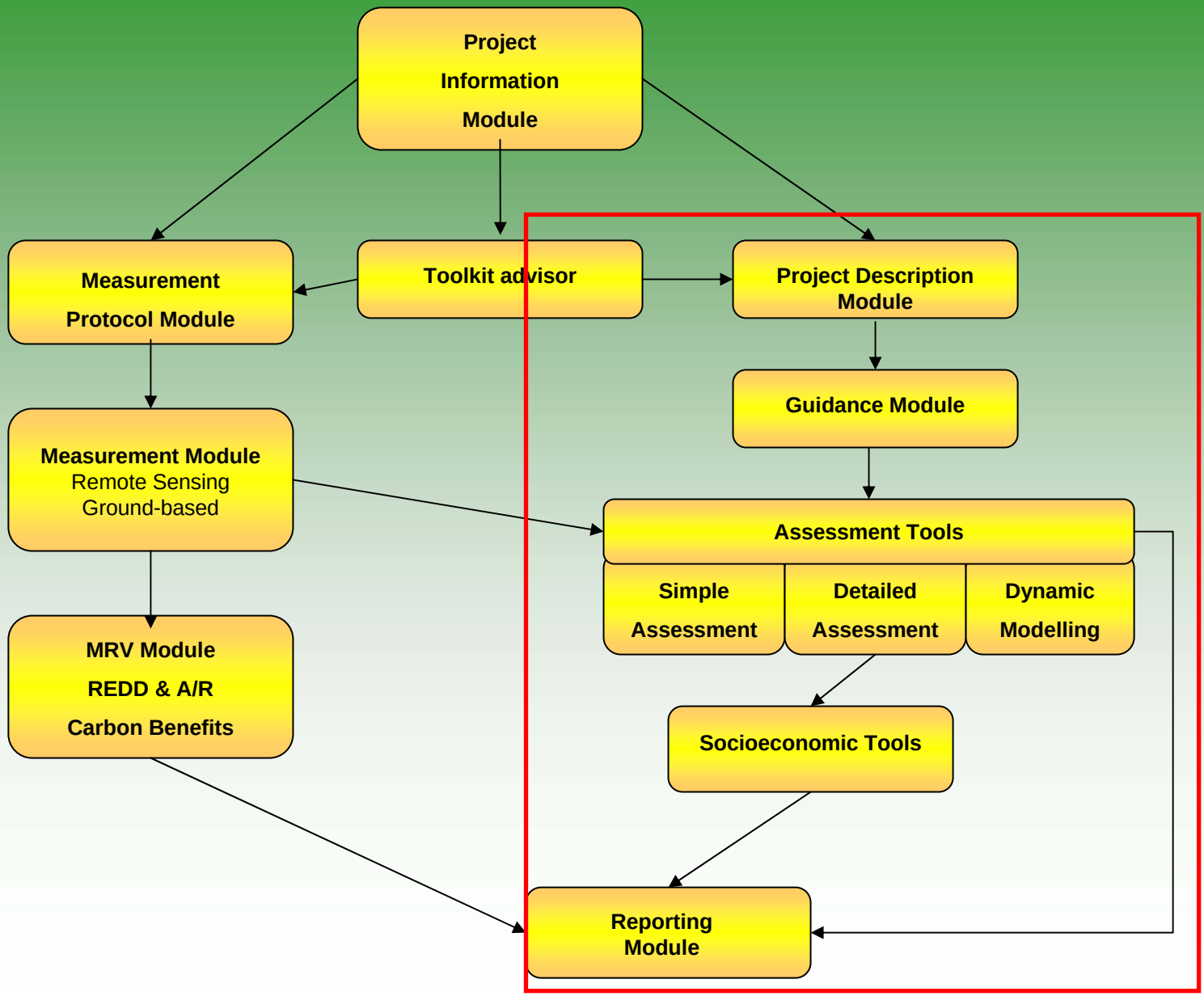
The Carbon Benefits Project
Modelling, Measurement and Monitoring

Modelling Component
Colorado State University
and partners

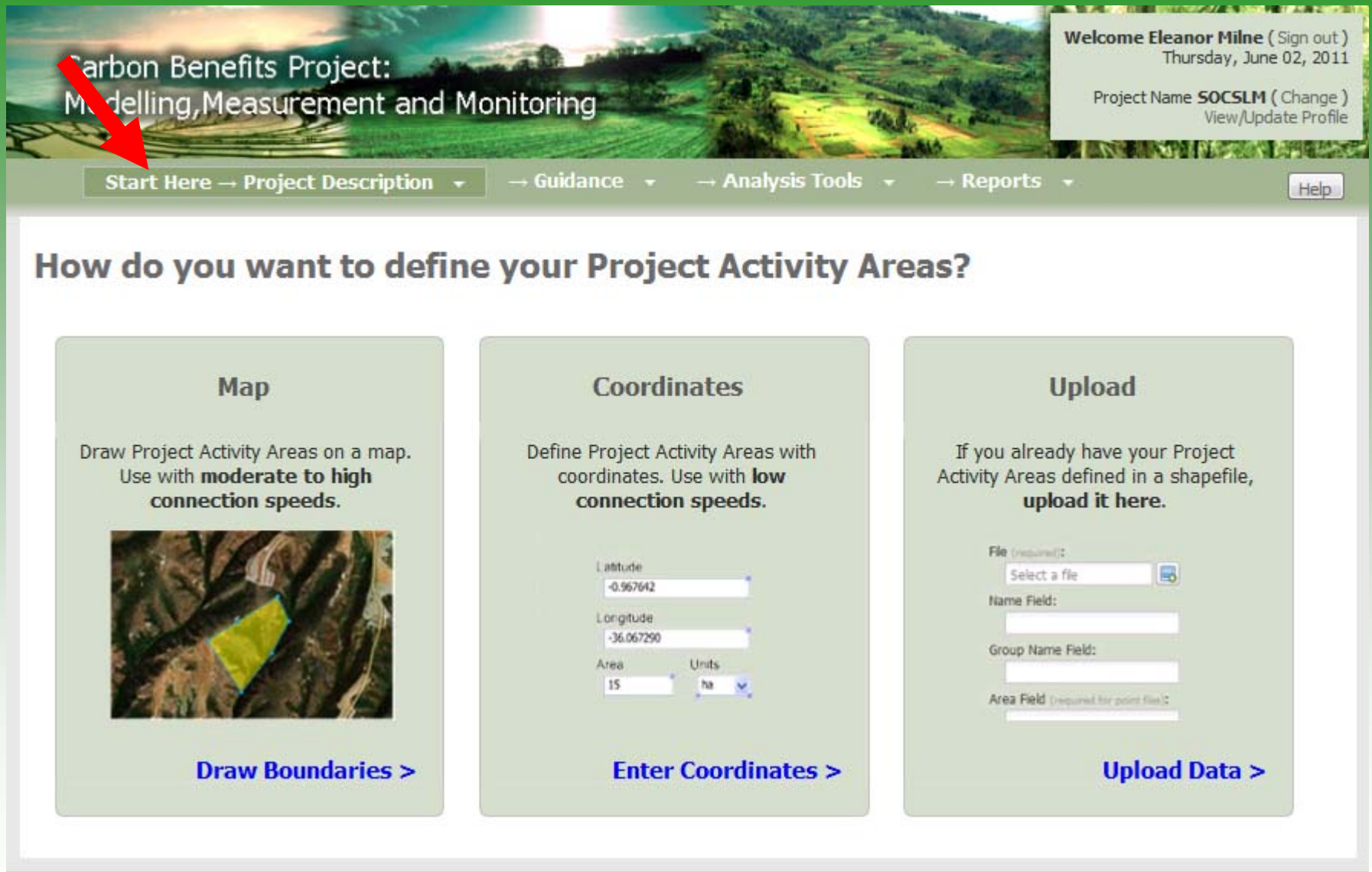
Carbon Benefits Project: Modelling,Measurement and Monitoring



Carbon Benefits Project: Modelling, Measurement and Monitoring



Project Description



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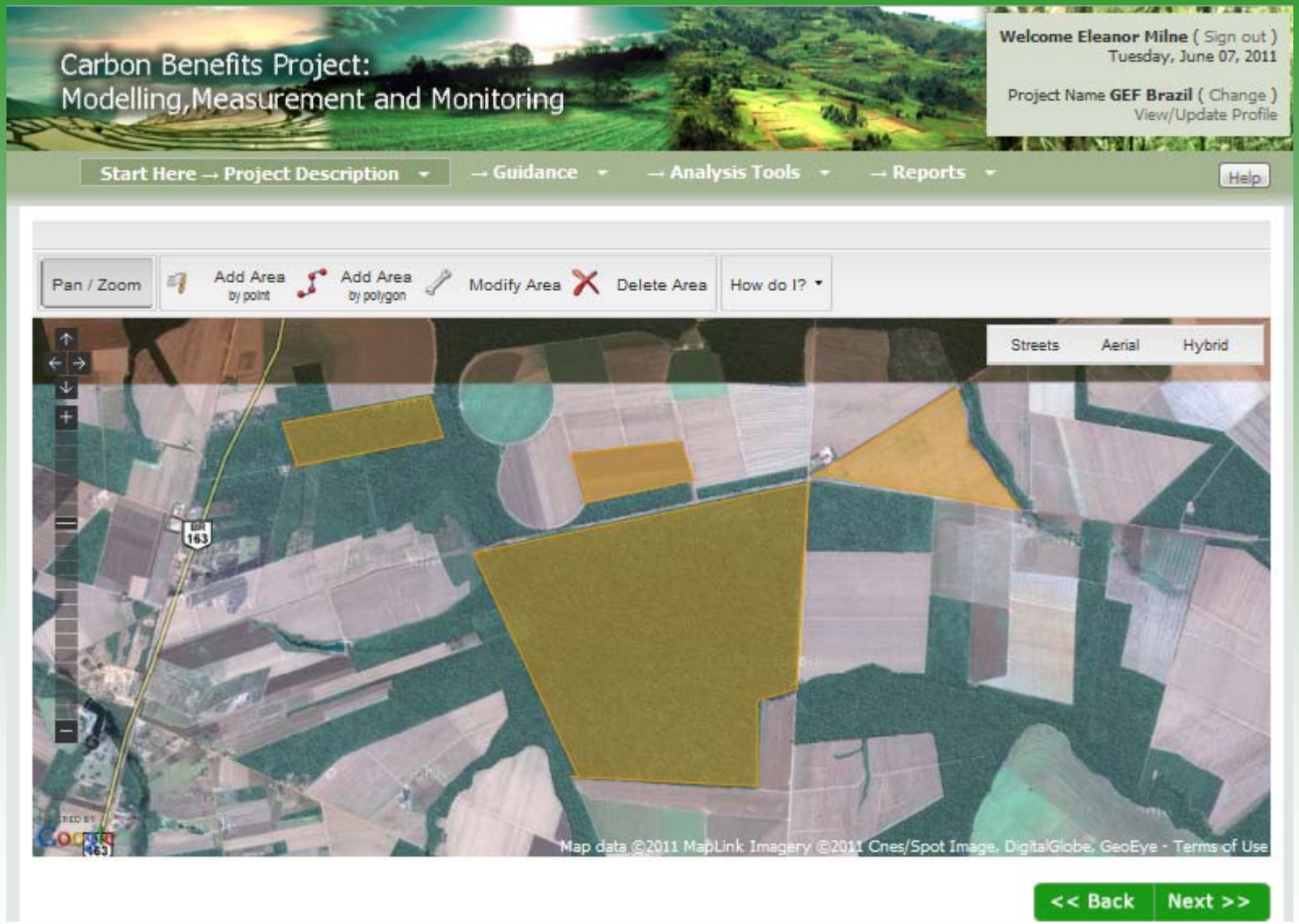

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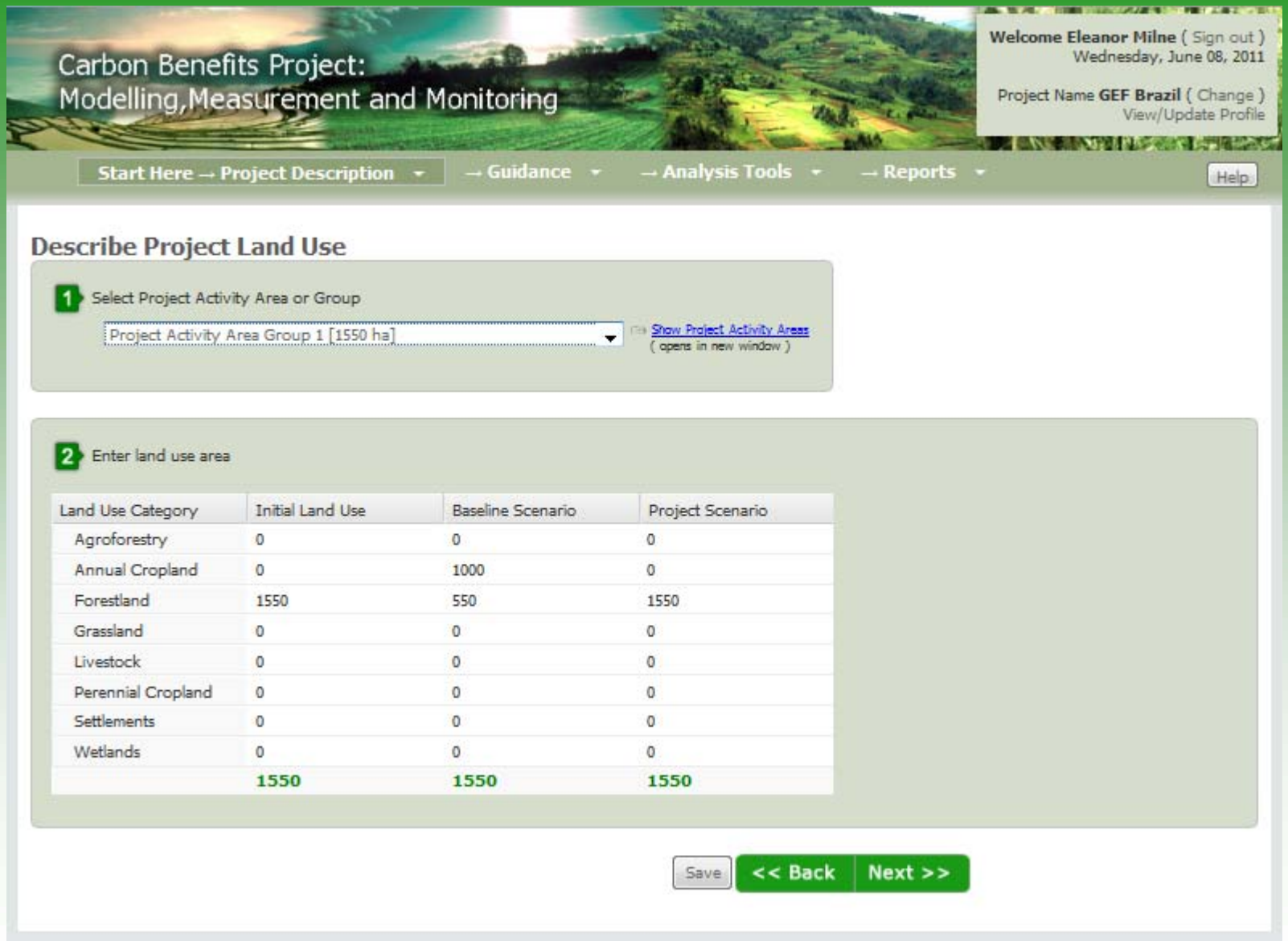
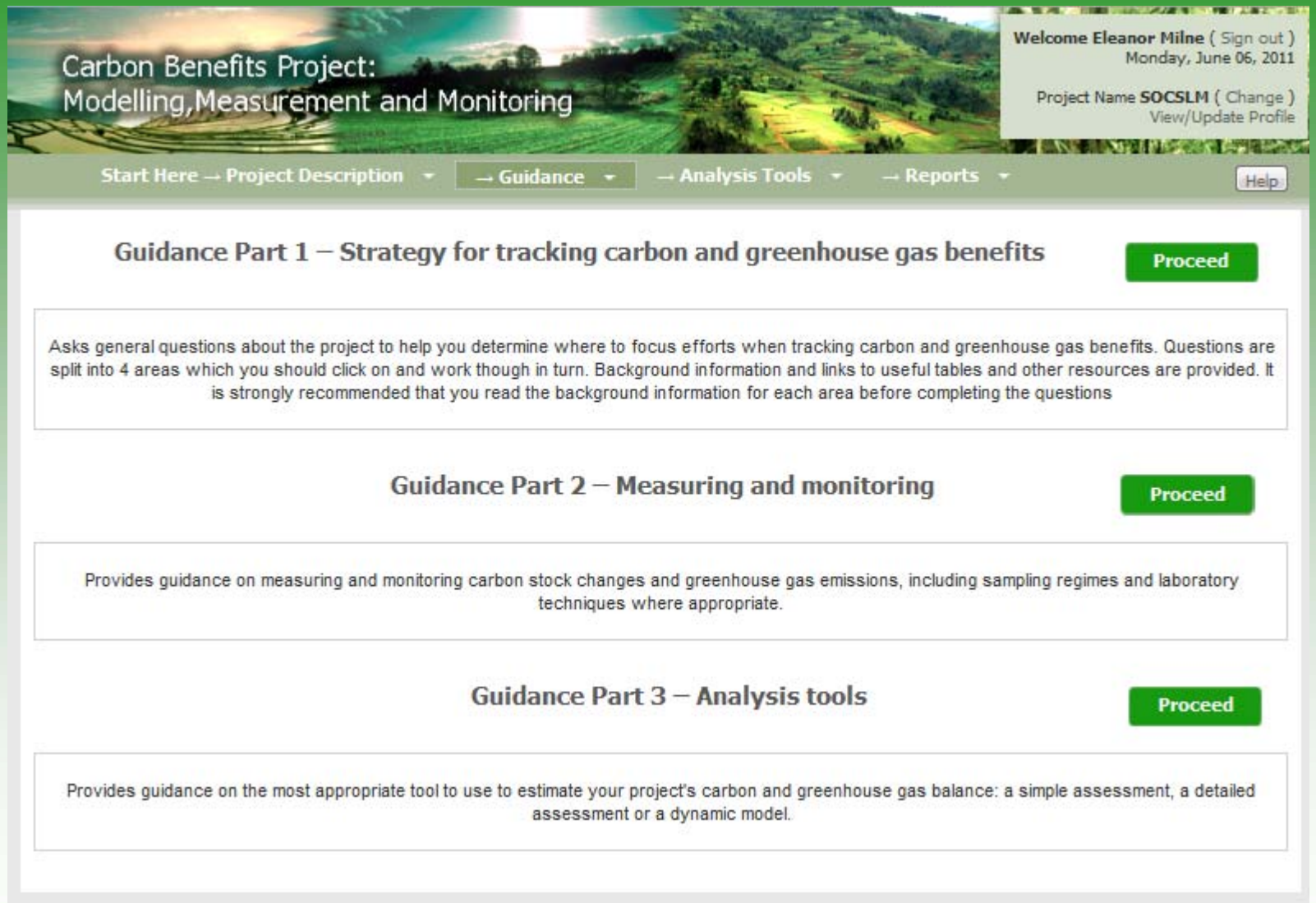


Guidance

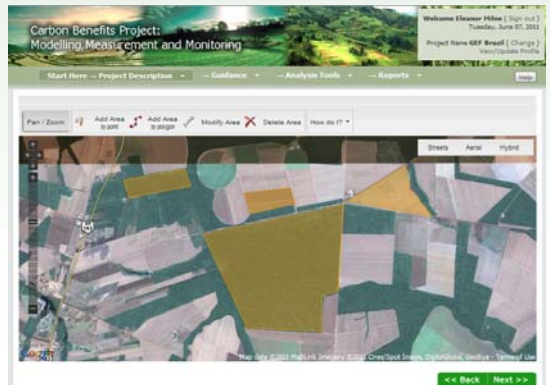

Carbon Benefits Project:
Modelling,Measurement and Monitoring
Welcome Eleanor Milne (Sign out)
Monday, June 06, 2011
Project Name SOCSLM (Change)
View/Update Profile
Start Here → Project Description
→ Guidance
→ Analysis Tools
→ Reports
Help
Guidance Part 1 – Strategy for tracking carbon and greenhouse gas benefits
Proceed
Asks general questions about the project to help you determine where to focus efforts when tracking carbon and greenhouse gas benefits. Questions are split into 4 areas which you should click on and work though in turn. Background information and links to useful tables and other resources are provided. It is strongly recommended that you read the background information for each area before completing the questions
Guidance Part 2 – Measuring and monitoring
Proceed
Provides guidance on measuring and monitoring carbon stock changes and greenhouse gas emissions, including sampling regimes and laboratory techniques where appropriate.
Guidance Part 3 – Analysis tools
Proceed
Provides guidance on the most appropriate tool to use to estimate your project's carbon and greenhouse gas balance: a simple assessment, a detailed assessment or a dynamic model.

Simple Assessment

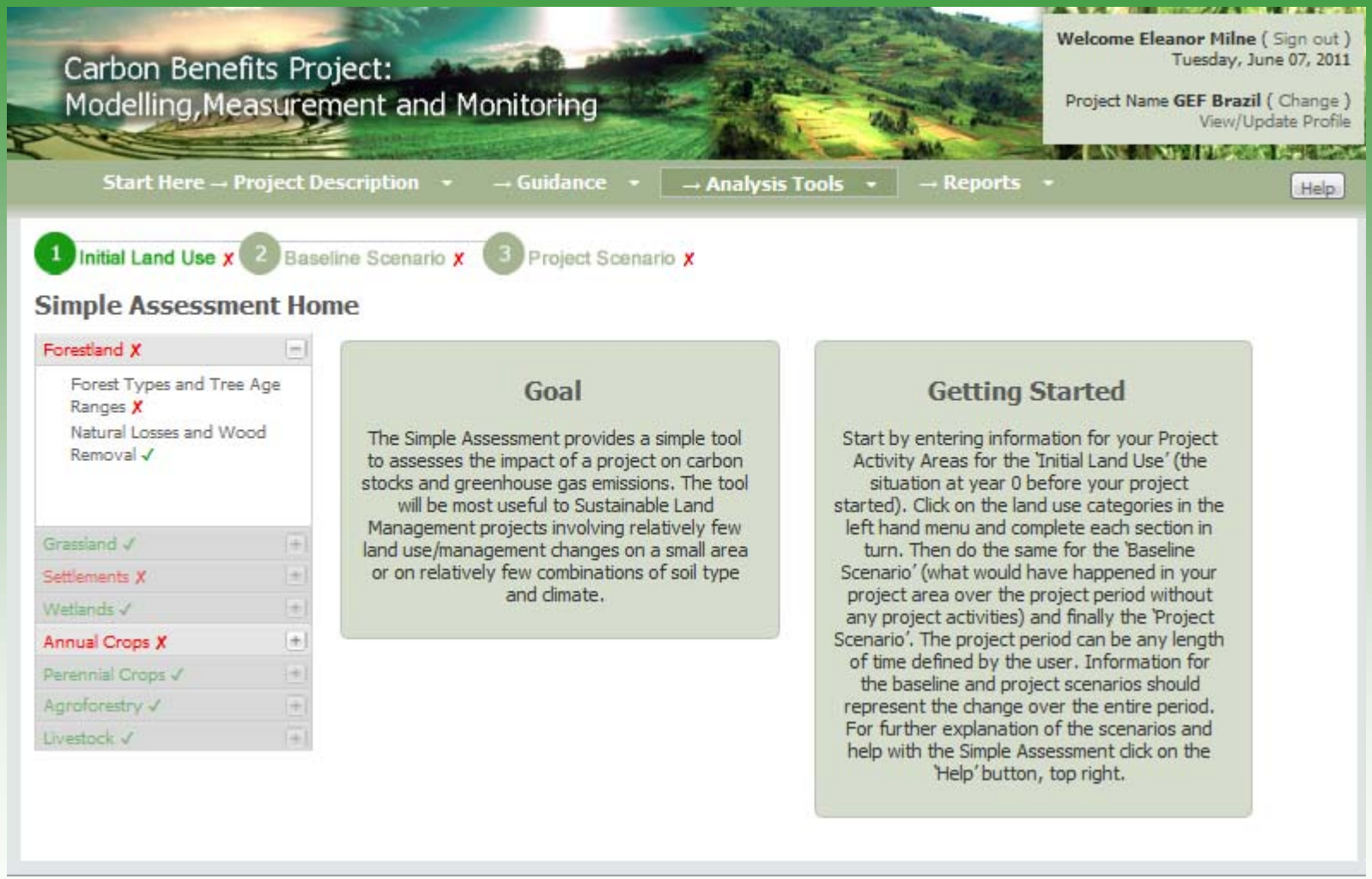
Uses pre-populated information on forest types, cropping, grassland and livestock systems

Users must have:

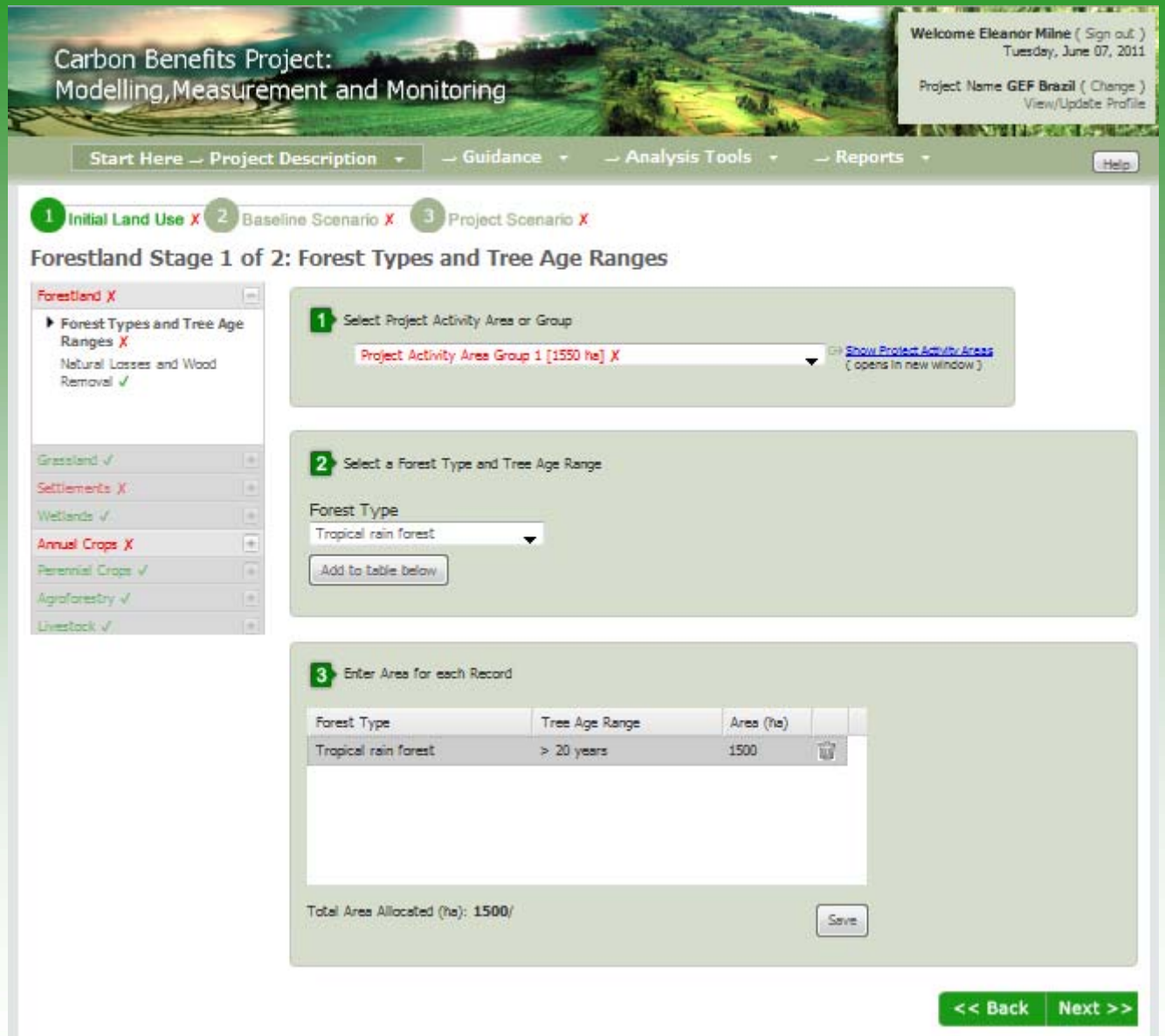
- Info on project activity areas
- Info on land use/mgt before project started
- A baseline scenario
- A project scenario
- Enough info to choose the most similar forest type, cropping, grassland or livestock system from a drop down list



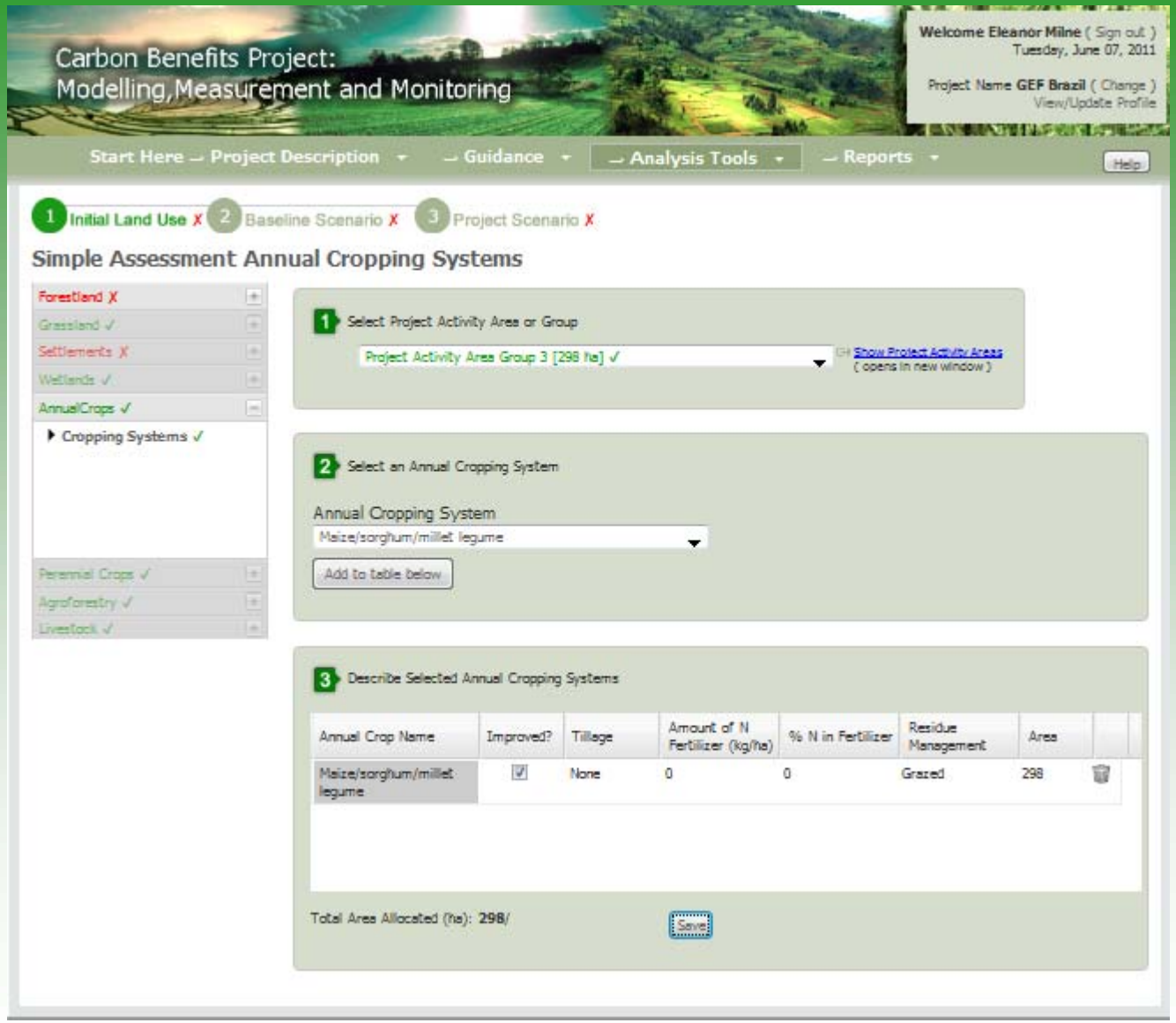
Simple Assessment



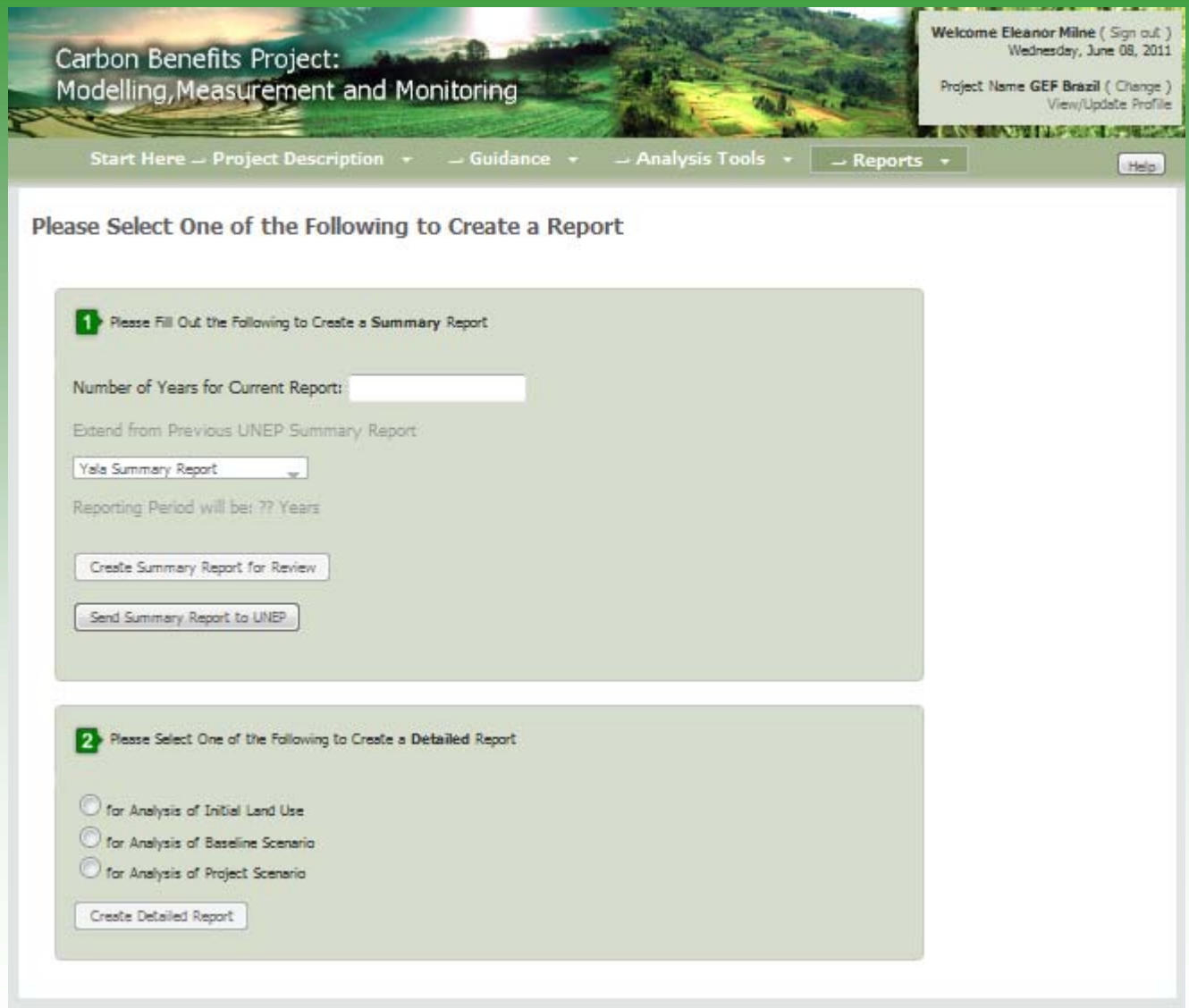
Simple Assessment



Simple Assessment



Reports


Carbon Benefits Project:
Modelling, Measurement and Monitoring
Welcome Eleanor Milne (Sign out)
Wednesday, June 08, 2011
Project Name GEF Brazil (Change)
View/Update Profile
Start Here
Project Description
Guidance
Analysis Tools
Reports
Help
Please Select One of the Following to Create a Report
1 Please Fill Out the Following to Create a Summary Report
Number of Years for Current Report:
Extend from Previous UNEP Summary Report
Yale Summary Report
Reporting Period will be: ?? Years
Create Summary Report for Review
Send Summary Report to UNEP
2 Please Select One of the Following to Create a Detailed Report
for Analysis of Initial Land Use
for Analysis of Baseline Scenario
for Analysis of Project Scenario
Create Detailed Report

Carbon Benefits Project: Modelling,Measurement and Monitoring

Summary Report

PDF, 7 pages

- Project attributes
- Total and annual C balance in CO_2e for baseline, project and incremental diff
- Tables - C changes by land use classes and emission sources
- Economic Impacts
- Social Impacts

Map 2. Project location - Western Kenya Integrated Ecosystem Managment

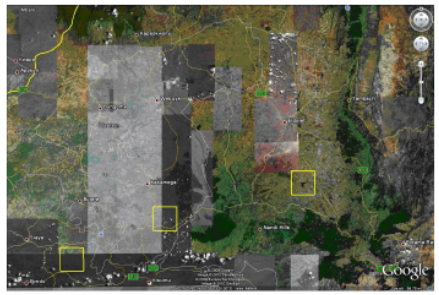


Table 3.2 Expanded Report showing Carbon Emissions by IPCC AFOLU Source Categories. Continued.

		Without Project (Baseline scenario)			With Project (Project scenario)			Incremental difference (Project scenario minus baseline scenario)		
		tonnes CO_2 e	tonnes CO_2 e / yr		tonnes CO_2 e	tonnes CO_2 e / yr		tonnes CO_2 e	tonnes CO_2 e / yr	
Source category	Source sub-category	Total	Annual	Uncertainty	Total	Annual	Uncertainty	Total	Annual	Uncertainty
	Forest Land	0	0	0	0	0	0	0	0	0
	Grassland/Savanna	0	0	0	-608642.1	-60864.21	0	-608642.1	-60864.21	0
	Annual Cropland	0	0	0	0	0	0	0	0	0

Table 3.1 Simple Summary Report following UNFCCC Common Reporting Guidelines.

Greenhouse Gas Source and Sink Categories	Baseline Emissions (2010)				Project Emissions (2020)				Carbon Benefits		
	CO_2	CH_4	N_2O	GHGs	CO_2	CH_4	N_2O	GHGs			
	tonnes CO_2 equivalent				tonnes CO_2 equivalent				Total tCO_2e	tCO_2e / ha	tCO_2e / ha /Yr
Agriculture											
A. Enteric Methane		2698.5				6746.25			40477.5	1.686563	0.1686563
B. Manure Management		116.34	2046			290.85	5115		32435.1	1.351462	0.1351462
C. Rice Cultivation		0				0			0	0	0
D. Agricultural Soils	0	0	2480.93		0	0	6201.86		37209.3	1.550388	0.1550387
E. Prescribed Burning of Savannas		0	0			0	0		0	0	0
F. Field Burning of Agricultural Residues		0	0	0		0	0	0	0	0	0
G. Other	0	0	0	0	0	0	0	0	0	0	0
Land Use Change and Forestry											
A. Forest and other Woody Biomass Stocks	0				-63869.63				-638696.3	-26.61235	-2.661235
B. Forest and Grassland Conversion	0	0	0	0	0	0	0	0	0	0	0
C. Abandonment of Managed Lands	0				0				0	0	0
D. CO2 Emissions and Removals from Soil	0				-41800				-418000	-17.41667	-1.741667
E. Other	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**2814.84**	**4526.93**	**0**	**-105669.6**	**7037.1**	**11316.86**	**0**	**-946574.4**	**-39.4406**	**-3.94406**

Detailed Report

Excel spreadsheet

- Breakdown of GHG emissions C stock changes by source (enteric methane, manure methane, manure N2O etc…..)
- activity area, then land use category
- IPCC equation given
- Uncertainty estimate