Tools for designing and implementing an A/D CDM project

Capacity Building on
Climate Change and Natural Resource Management
Islamabad, May 30th 2007

inter cooperation

DEZA
DDC
DSC
SDC
COSUDE

SEAMEO SEARCA

UNDP

Tools & clarifications provided by the EB

- **Tools**
  - Additionality tool
  - Tool for the eligibility of land
  - Tool for calculation of sample plots
  - Identifying significance of other GHG emissions
- **Clarifications**
  - A/R in the baseline
  - Determination of the baseline approach
  - Pre-project activities and leakages
  - Renewable biomass
  - National & Sectoral policies

More information: www.cdm.unfccc.int

The ENCOFOR toolbox for CDM-AR

the result of a learning by doing experience

inter cooperation

Face

LEUVEN

UNIQUE forestry consultants

El Boletin Forestal mensual

IWMI International Water Management Institute

JOANNEUM RESEARCH

Profafor Face

ICRAF

CETE INFORMA

B, S, S. Blochliger, Staehelin & Partner, Volkswirtschaftliche Beratung

http://www.joanneum.at/encofor

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Reducing carbon dioxide for people and environment

creating opportunities

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an EU-funded project for the design of sustainable CDM forestry projects

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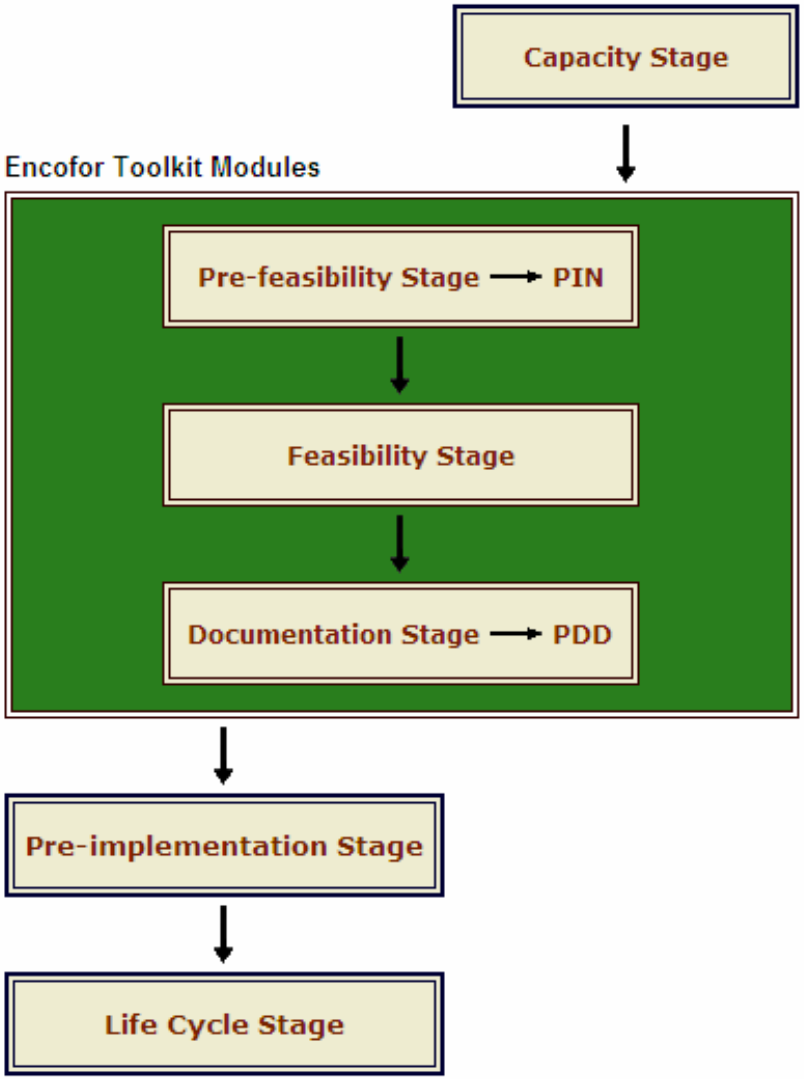
TOOLS

- How to use these tools
- Demonstration of tools
  - Pre-feasibility Stage
  - Feasibility Stage
  - Documentation Stage
- Download tools

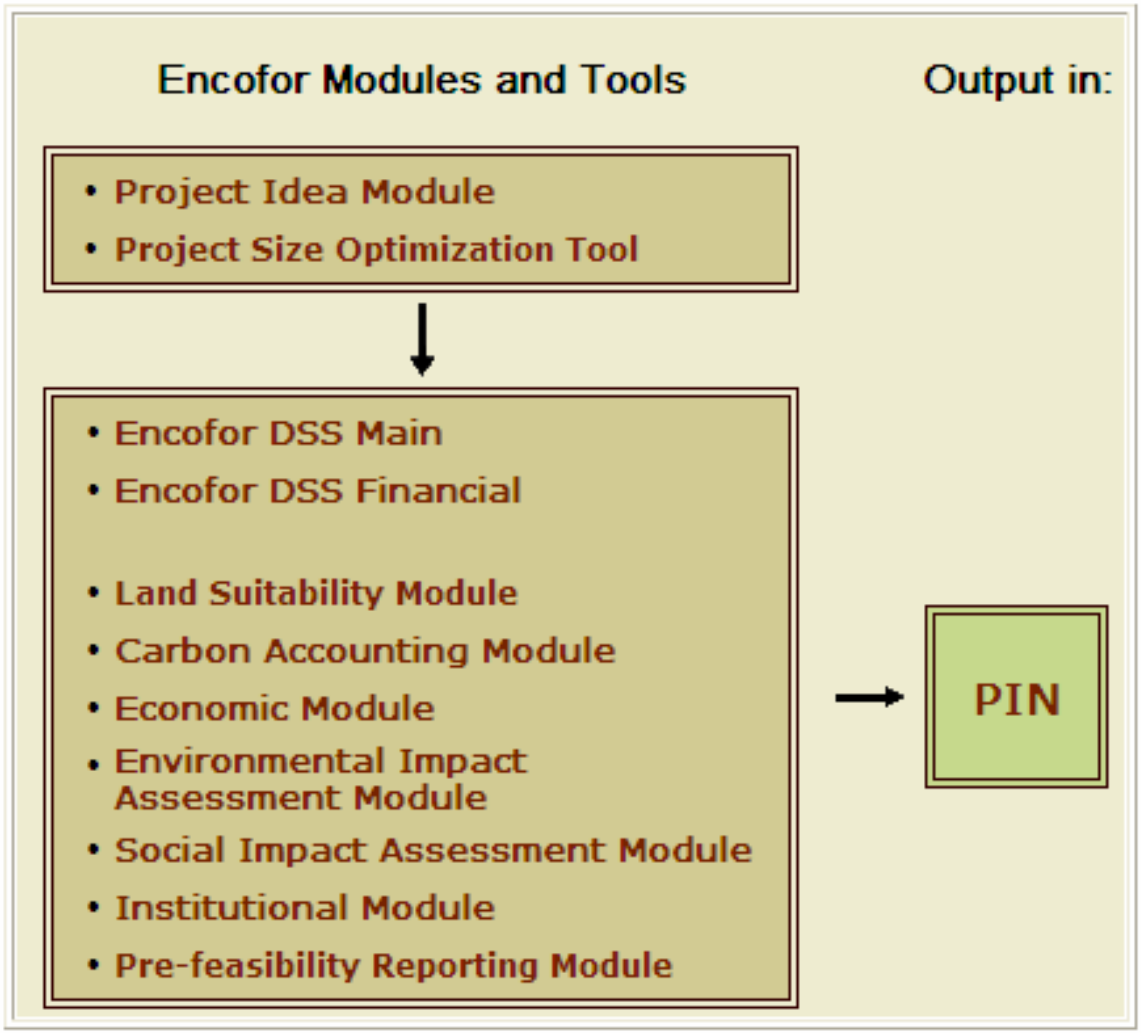
Encofor Tool Demonstration

These pages will help you to understand the order of work in the pre-feasibility and feasibility stages of project development and their associated tools. The link provides access to tools that have been used in project examples. For empty versions of the tools you can proceed to **Pre-feasibility Stage**, **Feasibility Stage** or **Documentation Stage**.

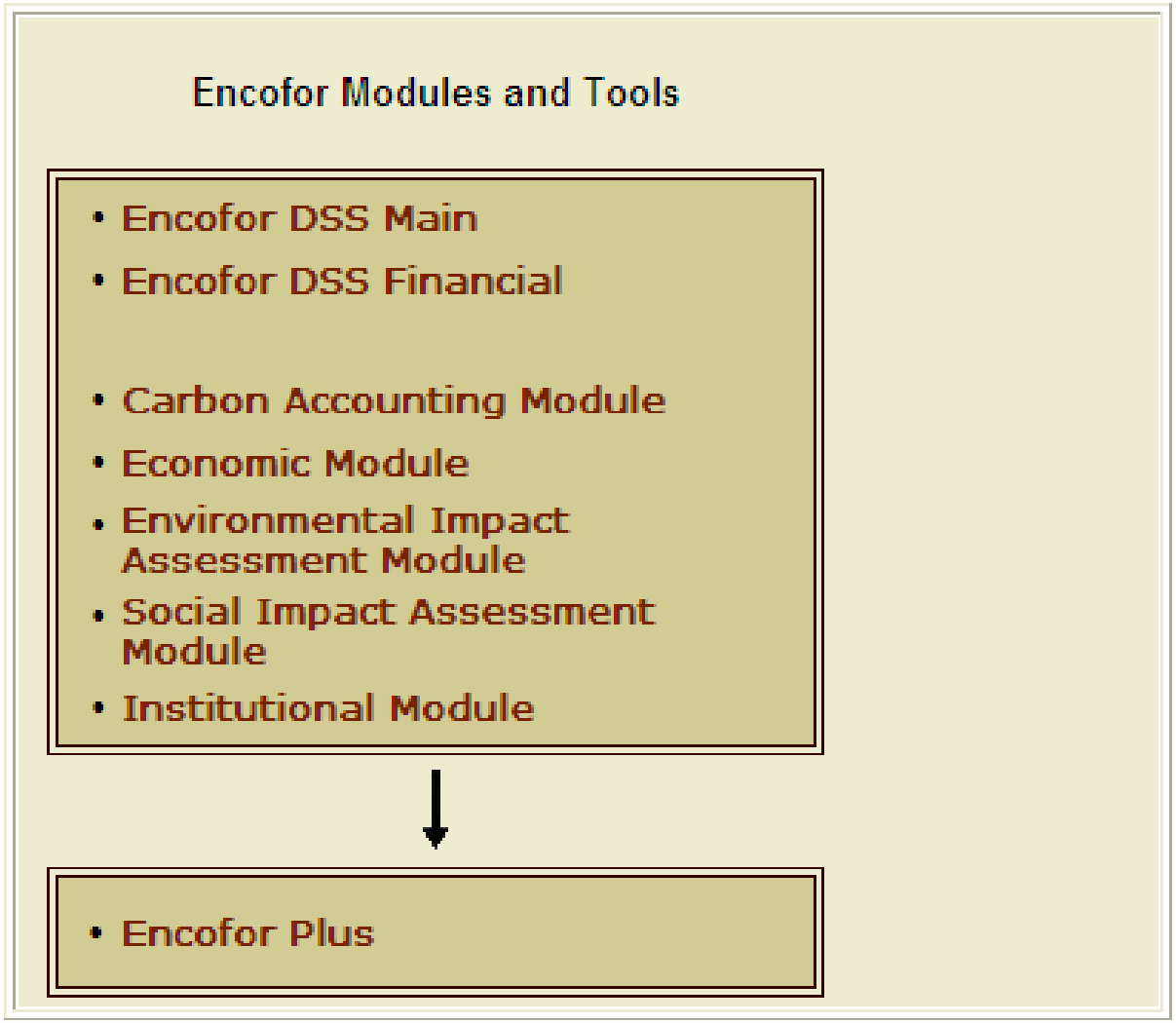
CDM-AR project life cycle



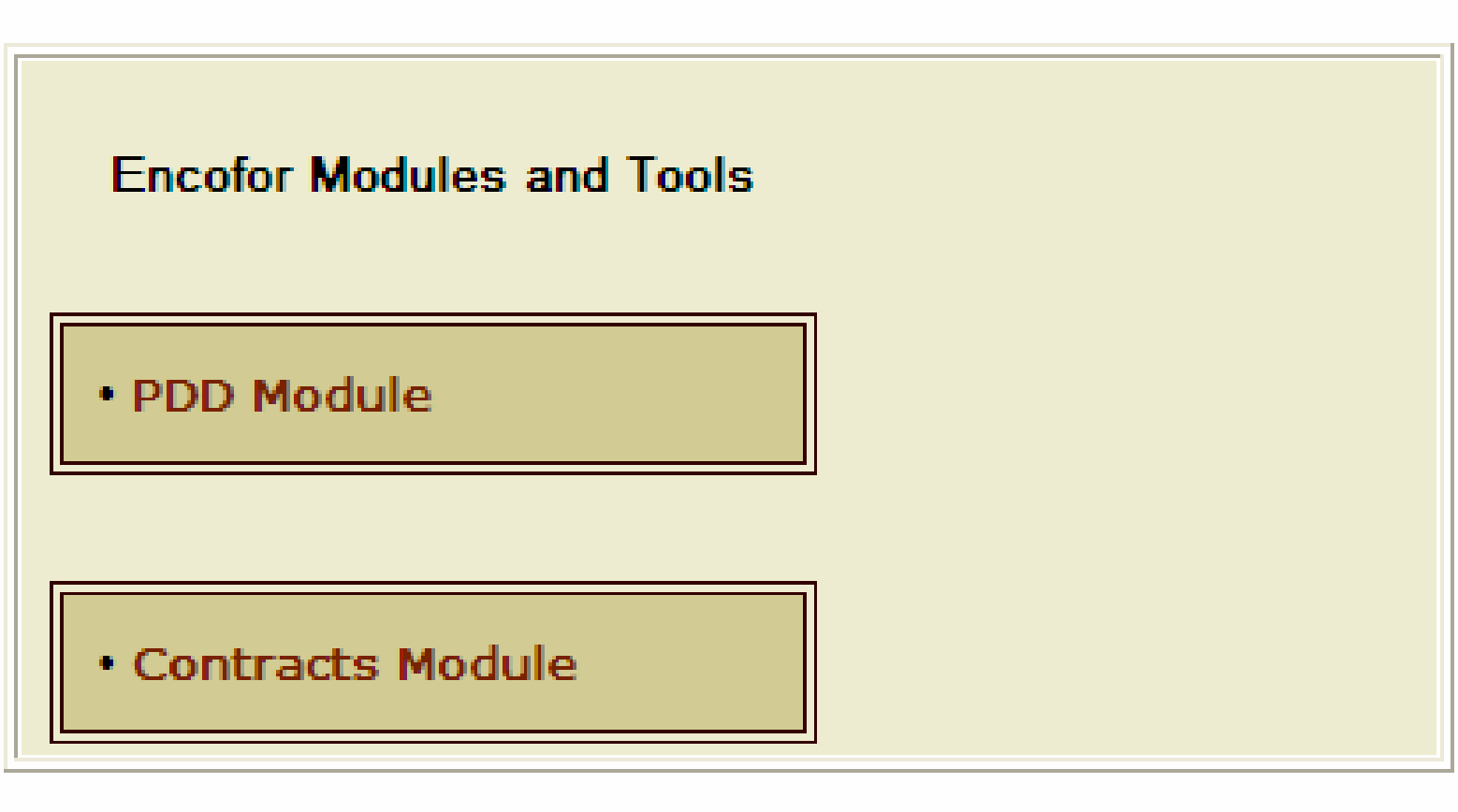
Prefeasibility stage



Feasibility stage



Documentation stage



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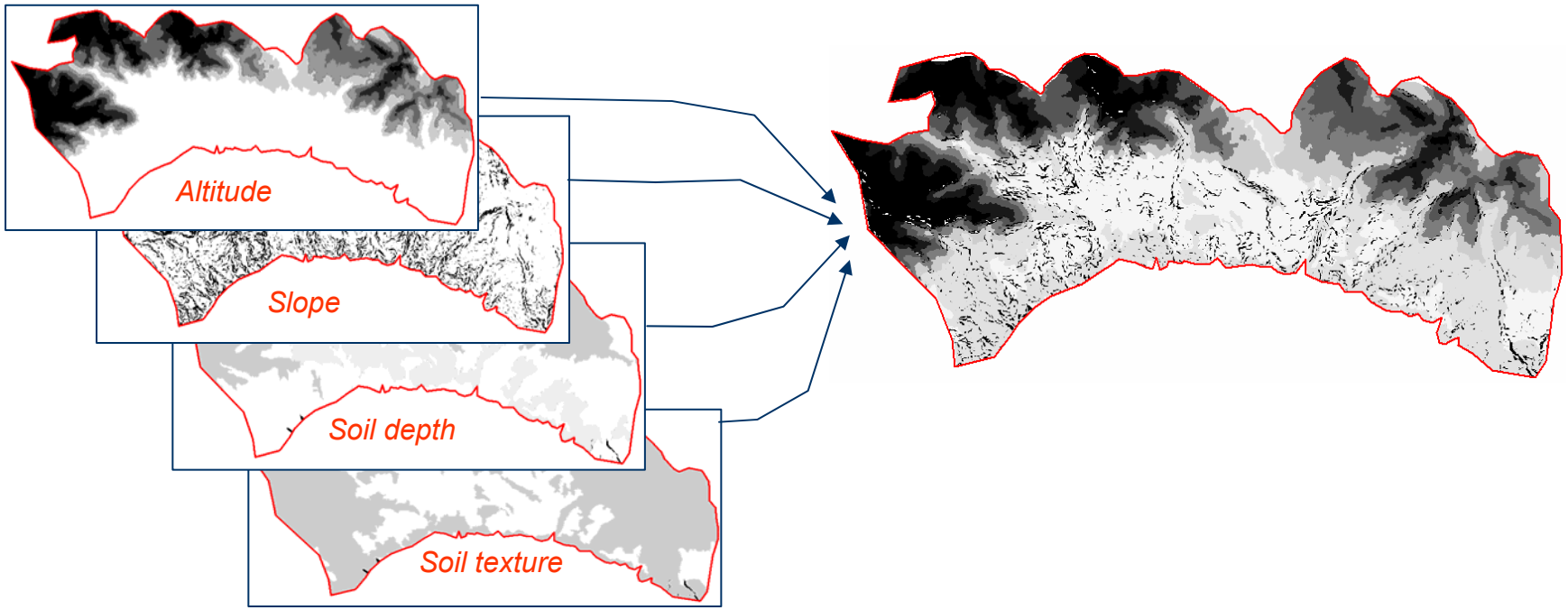
List of available tools (1)

- Land Availability and Suitability Modeling for CDM-AR Project Analysis
  - For land and species suitability

LSM Methodology

2) Suitability maps for each tree species spatialize the predicted growth response (selecting the most limiting factor – *Liebig's Law of the Minimum*)



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List of available tools (2)

- Decision Support System
  - Design Criteria Analyser
  - Financial Analysis
  - Methodology Selector
  - Strata Merger
  - C Model
    - C model baseline input
    - C Model grown table

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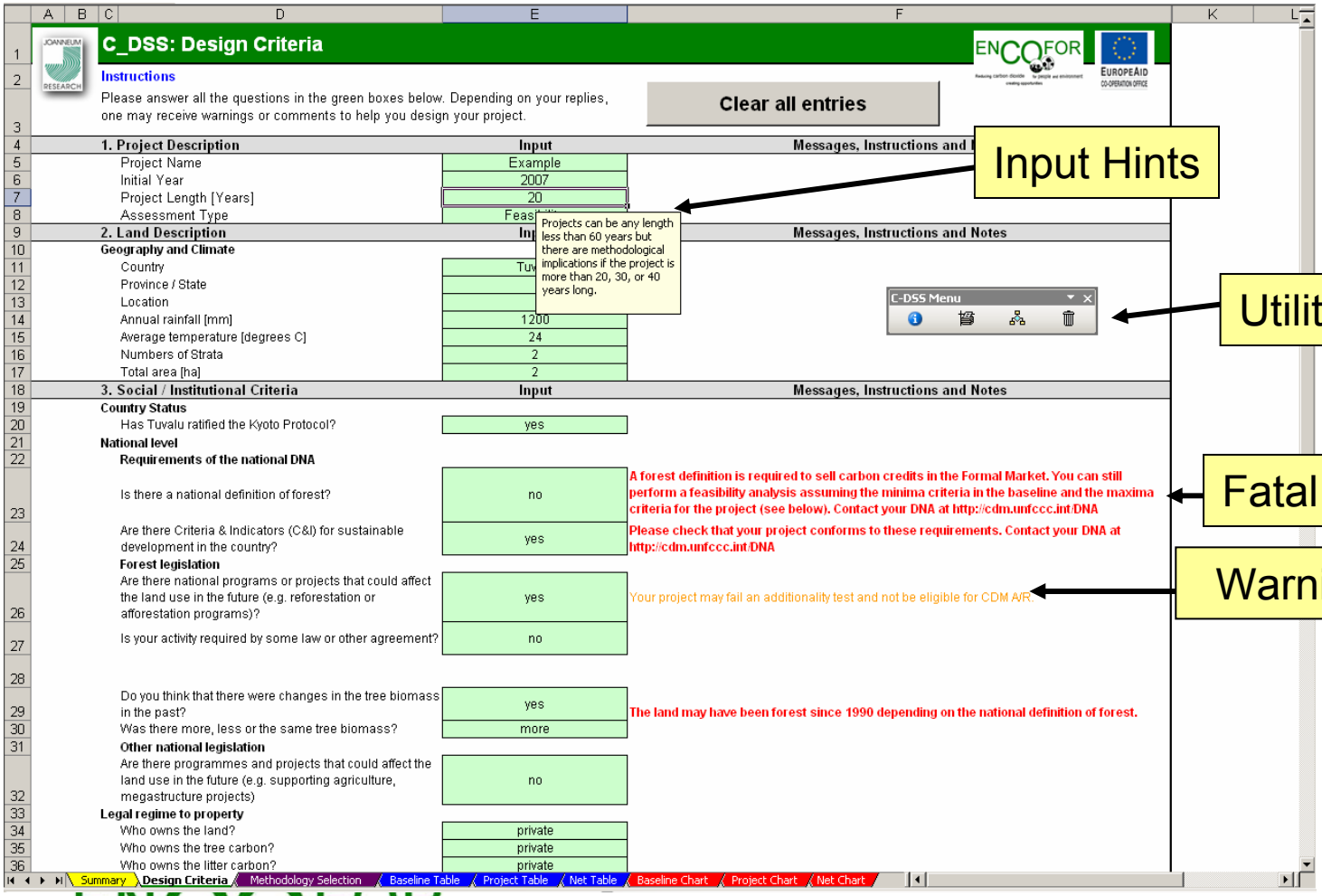
Design Criteria Analyser



General Input – Financial Analysis

General Input for Financial DSS

Name of country	
Project Size (in ha)	1'000
Duration of Project (in years)	25
Profit Tax in	
Interest rate of government bond in	10%
Currency to be used	$
Type of carbon credit	ICER
Crediting period	20 years
ICER price in $ per credit	
tCER price in $ per credit	2.50

Choose discount rates to calculate NPV of project

Discount rate 1	10%
Discount rate 2	20%

Choose discount rates to calculate NPV of baseline scenario (Opportunity Cost)

Discount rate	1%

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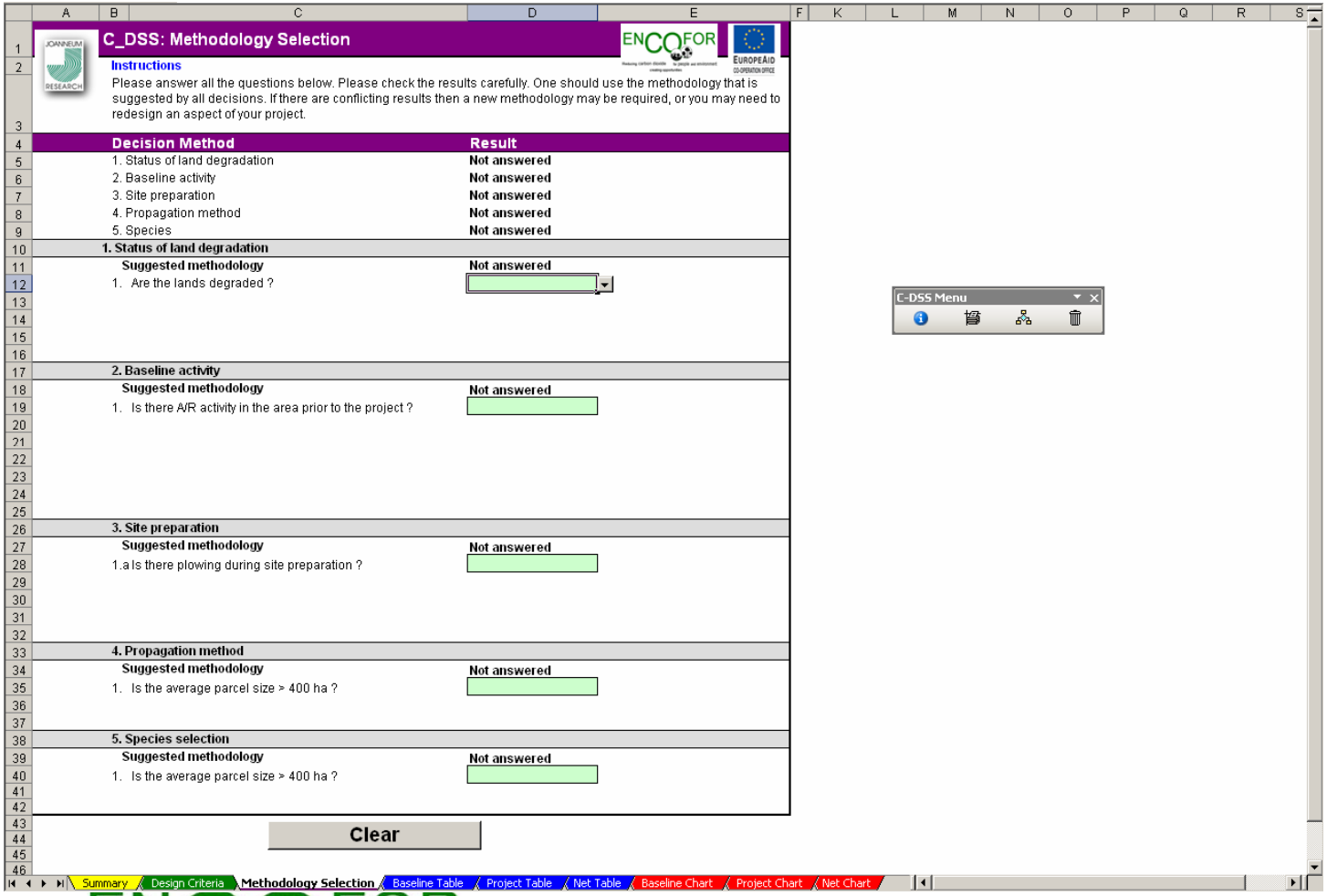
Methodology Selector



C_DSS: Methodology Selection

Instructions

Please answer all the questions below. Please check the results carefully. One should use the methodology that is suggested by all decisions. If there are conflicting results then a new methodology may be required, or you may need to redesign an aspect of your project.

Decision Method	Result
1. Status of land degradation	Not answered
2. Baseline activity	Not answered
3. Site preparation	Not answered
4. Propagation method	Not answered
5. Species	Not answered

1. Status of land degradation

Suggested methodology — Not answered

1. Are the lands degraded ?

2. Baseline activity

Suggested methodology — Not answered

1. Is there A/R activity in the area prior to the project ?

3. Site preparation

Suggested methodology — Not answered

1.a Is there plowing during site preparation ?

4. Propagation method

Suggested methodology — Not answered

1. Is the average parcel size > 400 ha ?

5. Species selection

Suggested methodology — Not answered

1. Is the average parcel size > 400 ha ?

Clear

C-DSS Menu

Summary | Design Criteria | Methodology Selection | Baseline Table | Project Table | Net Table | Baseline Chart | Project Chart | Net Chart

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Project Summary

C_DSS Project Summary

Project Name:		Example
Design Criteria:	Warnings	2
	Fatal errors	4
	Percentage completed	57%
Methodology Selection:	1. Status of land degradation	Not answered
	2. Baseline activity	Not answered
	3. Site preparation	Not answered
	4. Propagation method	Not answered
	5. Species	Not answered
	Percentage completed	0%
Carbon Model:	Date / Time Stamp:	13/05/2007 12:22

C_DSS Version No.: 1.6
Release date: May 12, 2007

Acknowledgements
C_DSS and C_Model were designed by JOANNEUM RESEARCH as part of the EuropeAID funded ENCOFOR Project (Ref. No.: 2309031) Members of the JOANNEUM RESEARCH team that worked on this software include (in no particular order): Lorenza Canella, Neil Bird, Hannes Schwaiger, and Wolfgang Wagner. Members of the ENCOFOR team that were involved with product testing include (in no particular order): Juan Garcia-Quijano, Timm Tennigkeit, Anko Stilma, Luis-Fernando Jara, Wolfram Kägi and Igino Emmer.

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For more information, to report bugs or to suggest improvements please contact neil.bird@joanneum.at or visit the ENCOFOR website at http://www.joanneum.at/encofor

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List of available tools (3)

- Social Impact Analysis and Assessment
  - Social groups,
  - Social impacts,
  - Social processes

Social Criteria

- **Social groups**
  - Social groups that are involved in the project shall be characterized
  - Interactions among key social groups shall be identified
  - Alliances and conflicts between social groups should be considered
- **Social impacts**
  - Benefits shall be maximized
  - Lack of benefits should not been perceived as negative impacts
  - Negative impacts should be minimized
  - Risks should been reduced
- **Social processes**
  - Social groups concerned by the project shall been informed in advance
  - Social groups involved by the project should be able to promote their interests
  - Participatory decision-making mechanisms should be in place

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List of available tools (4)

- Environmental Impact Analysis and Assessment
  - Physical changes,
  - use of natural resources,
  - contamination & pollution,
  - risks of accidents for the environment,
  - sustainable management of the plantation,
  - biodiversity and landscapes

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Kick-out assessment (Screening)

1.- Physical Changes: topography, land use, water bodies and sources, etc.
1.1.- Will the project involve actions which will cause physical changes in the locality (topography, land use, changes in waterbodies, etc)?
1.2.- Are there any other areas on or around the location which are important or sensitve for reasons of their ecology e.g. wetlands, watercourses or other waterbodies, the coastal zone, mountains, forests or woodlands, which could be affected by the project?
1.3.- Are there existing land uses on or around the location e.g. agriculture, forestry, tourism, mining or quarrying which could be affected by the project?
2.- Use of natural resources
2.1.- Will the project use natural resources such us water, materials or energy, specially non-renewable?
2.2.- Are there any areas on or around the location which contain important, high quality or scarce resources e.g. groundwater, surface water, forestry, agriculture, fisheries, tourism, minerals, which could be affected by the project?
3.- Contamination and pollution
3.1.- Will the project involve use of substances which could be harmful to the environment or raise concern about actual or perceived risk to climate change (e.g. N fertilizers)?
3.2.- Will the project lead to risk of contamination of land or water from releases of pollutants and sediments onto the ground or into surface waters, groundwater, coastal wasters or the see?
3.3.- Are there any other factors which should be considered such as consequential development which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality?
3.4.- Are there any areas on or around the location which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?

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Kick-out assessment (Screening)

4.- Risk of accidents for the environment
4.1.- Will there be any risk of accidents during construction or operation of the project which could affect the environment?
4.2.- Is the project location susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme adverse climatic conditions e.g. fire, pest & deceases, temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?
5.- Sustainable Management of the plantation
5.1.- Has the project the proper spatial planning, strategies and management plant to ensure the sustainability of the plantation?
5.2.- Are the biodiversity and the ecological processes like biological, genetic and habitat diversity, endangered?
5.3.- Are the environmental services like soil and water protection endangered?
5.4.- Is the social and cultural wellbeing of the stakeholders compromised by the project execution?

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List of available tools (5)

- Tool for addressing institutional issues
  - National level and project level (including tenure and ownership issues

Institutional Criteria

- **National level**
  - Requirements of the national DNA shall been fulfilled
  - Legal regime on land tenure and land use rights shall be respected
  - Forest legislation shall be fully considered
  - Other national legislation on natural resources shall be fully considered
- **Project level**
  - Regional and/or local legislation should be fully considered (at province, municipality and parish level), including customary rights
  - Changes in ownership of and access to land and carbon pools shall be documented
  - Ownership of the CERs shall be clarified
  - Contract conditions and obligations between project proponents and landowners should be socialized -also ERPA
  - Association forms that facilitate project implementation shall be promoted
  - Sharing mechanisms shall be institutionalized

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The ENCOFOR Tools have been designed considering and validated in four pilot projects:

- Uganda
- Kenya
- Bolivia
- Ecuador

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…. now we only need to apply the tools and formulate PDDs…

Thank you for your attention!