

Biokenaf

QLK5 CT2002 1729

Kick-off meeting
Athens 9 & 10/4/2003

E. Alexopoulou/CRES



- The **overall objective** of the project is to introduce and evaluate kenaf as a non-food crop through an integrated approach for alternative land use in South EU that will provide diversified opportunities for farmers for biological materials for the "bio-based industries" of the future.

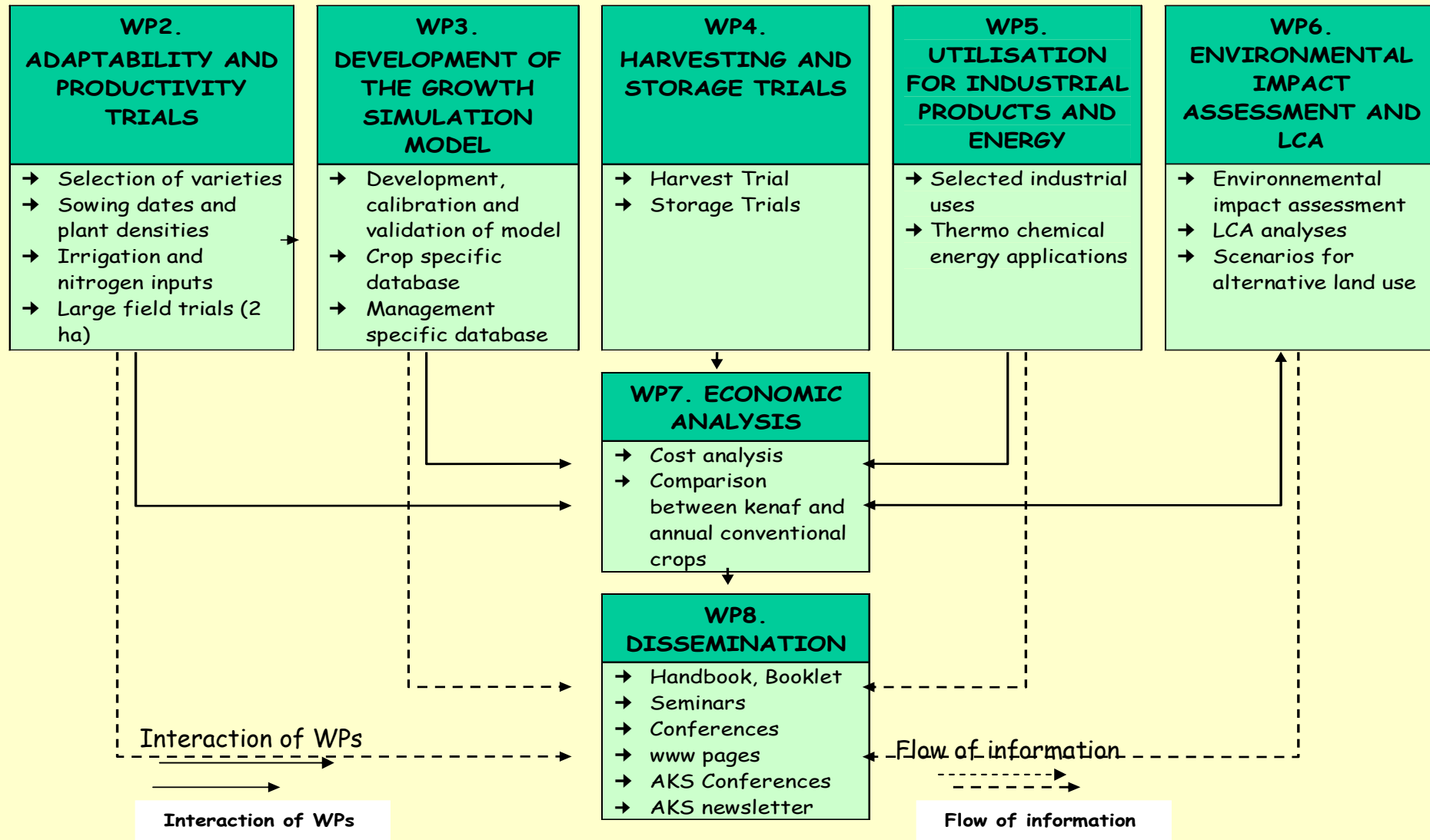


Specific objectives

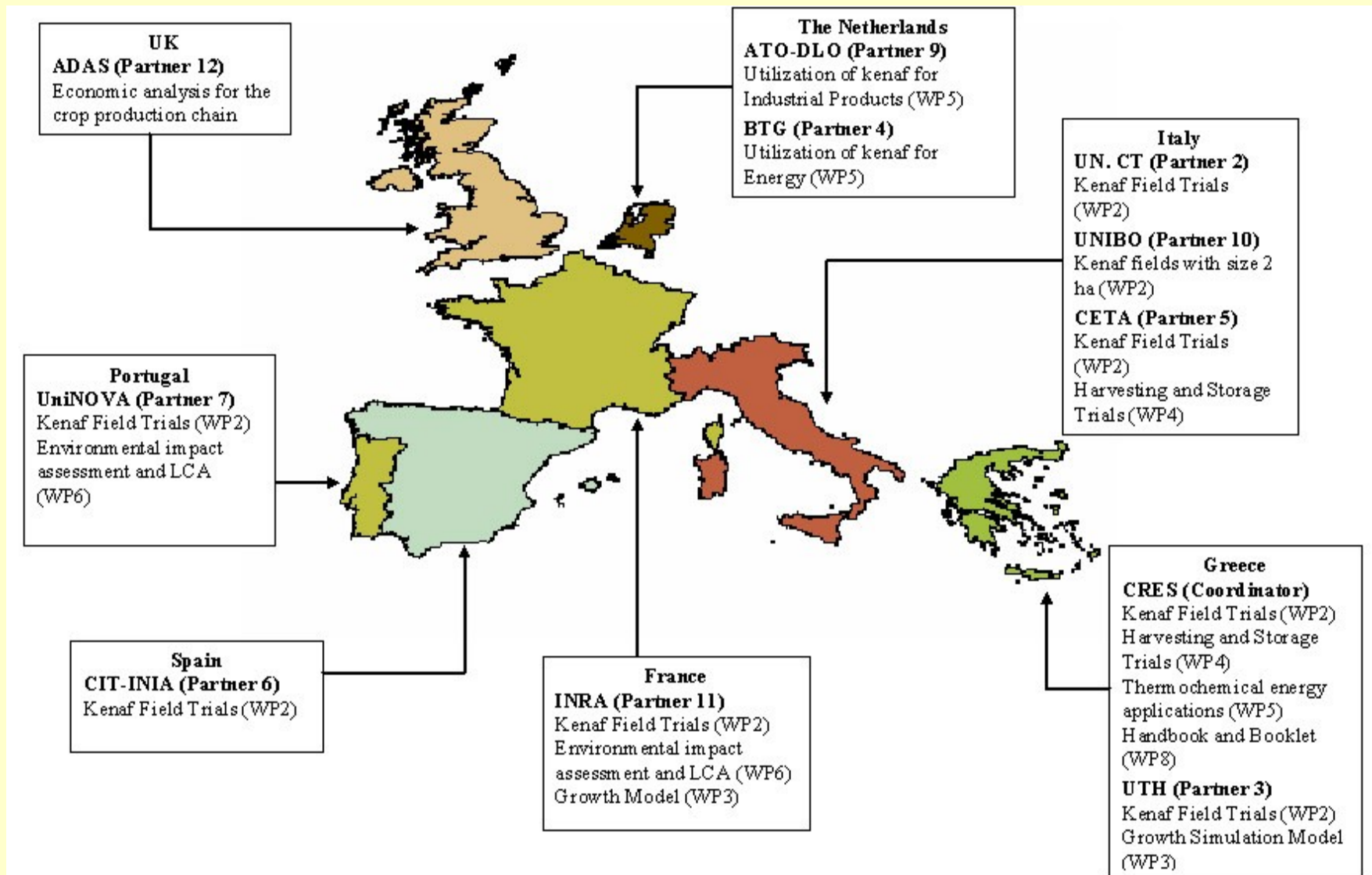
- ★ Determination of the sustainable yielding potential of kenaf
- ★ Development of a dynamic growth simulation model
- ★ Evaluation of the effect of harvesting time and storage methods to the quantity and quality of harvested material.
- ★ Evaluation of the suitability of kenaf for both selected industrial and thermochemical energy applications
- ★ Environmental assessment and LCA to make scenarios for alternative land use in South EU
- ★ Economic evaluation of kenaf for alternative land use
- ★ Preparation of a handbook and booklet for kenaf
- ★ Link establishment between Biokenaf and AKS



Graphical presentation of the partners' components



Geographical presentation of the projects' components

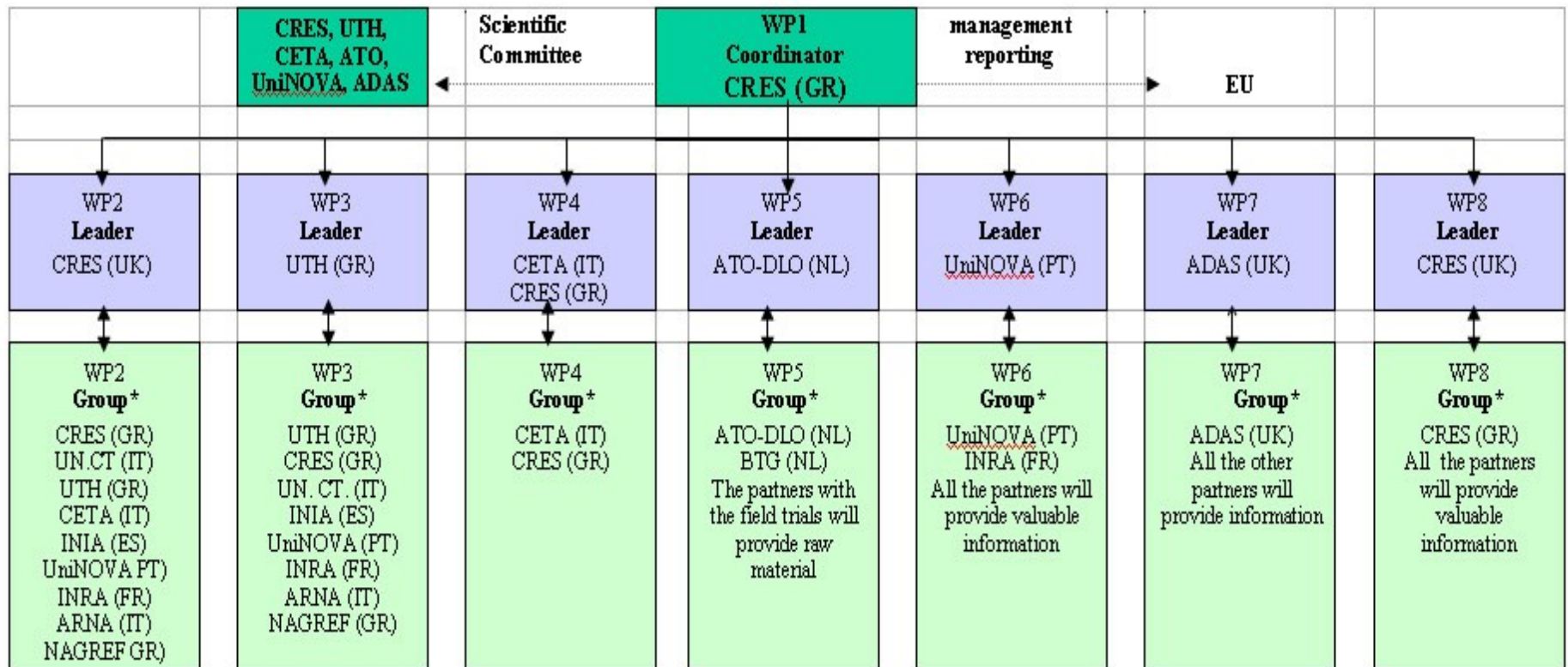


Consortium

Partners	Country	Main involvement
CRES	Greece	WP1, WP2, WP4, WP8
University of Catania	Italy	WP2
University of Thessaly	Greece	WP2, WP3
BTG	The Netherlands	WP5
CETA	Italy	WP2, WP4
INIA	Spain	WP2
FCT/UNL	Portugal	WP2
ATO	The Netherlands	WP6
UNIBO	Italy	WP2
INRA	France	WP2, WP6
ADAS	UK	WP7



Organization and management structure of the project



WP1. Coordination and Link Establishment with the American Kenaf Society (AKS)

WP2. Adaptability and Productivity Field Trials

WP3. Development of the Growth Simulation Model for Kenaf

WP4. Harvesting and Storage Trials

WP5. Utilization of Kenaf for Industrial Products and Energy

WP6. Environmental impact assessment and Life Cycle Analysis (LCA) of Kenaf Production and Use

WP7. Economic Analysis for the crop production chain

WP8. Handbook and Booklet for Kenaf

Project planning and timetable

Workpackage	Workpackage short title - Milestones	Year 1				Year 2				Year 3				Year 4	
WP1	Coordination and Link Establishment with AKS														
	Coordination														
	Technical Meetings	✓			✓			✓			✓		✓		✓
	Common protocols														
	Detailed literature review														
	Annual reports				✓			✓				✓			✓
	Dissemination activities														
WP2	Adaptability and Productivity trials														
	Screening Trial					M1				M1				M1	
	Effect of sowing dates and plant populations on yields					M2				M2				M2	
	Effect of irrigation and fertilization on biomass yields					M3				M3				M3	
	Kenaf field trials with size 2ha													M4	
	Data collection for the model development					M5				M5				M5	
WP3	Development of the Crop Growth Simulation Model														
	Preparation of the crop growth simulation model														M6
	Completion of crop-specific database					M7				M7				M7	
	Completion of the management specific database					M8				M8				M8	
WP4	Harvesting and Storage Trials														
	Evaluation of various harvesting times						M9				M9				M9
	Evaluation of various harvesting machines and storage methods										M10				M10
WP5	Utilization of kenaf for industrial products and energy														
	Market/ techno-economic feasibility studies for industrial uses													M11	
	Thermochemical conversion processes													M12	
WP6	Environmental impact assessment and LCA														
WP7	Economic analysis for the whole chain of the crop														
	Economic analysis for the crop chain production														M13
	Economic comparison between kenaf and other agricultural crops														M14
WP8	Preparation of a Booklet and a Handbook for Kenaf														
	Booklet preparation												📖		
	Handbook preparation												📖		

Note: M1, M2, M3 and M4: Annual evaluation of the results from all trials
M5: Collection of data for the model development
M6: Crop growth simulation model
M7: Crop-specific database
M8: Management of the specific database
M9: Evaluation of the harvesting dates
M10: Evaluation of the harvesting machines and storage methods

M11: Establishment of a market-driven demand for kenaf use for industrial applications
M12: Quality characteristics of kenaf as biofuel for the thermochemical conversion to energy processes
M13: Cost analysis of the crop
M14: Cost comparison between kenaf and other crops

Deliverables

	Deliverables	Deliverable time
D1	Updated timetable	2
D2	Link establishment with AKS	3
D3	Detailed literature review for kenaf	3
D4	Common protocols for all field trials	3
D5	First final report and minutes for the project meetings	13
D6	Second final report and minutes for the project meetings	25
D7	Data collection for the growth model	6-36



Deliverables

	Deliverables	Deliverable time
D8	List with the appropriate cultivation techniques	36
D9	Third year report and minutes for the project meetings	37
D10	List of appropriate harvesting dates and methods	12-38
D11	A dynamic growth model and biomass production simulation model	42
D12	Technical specifications of kenaf based products for selected industrial uses	12-40



Deliverables

	Deliverables	Deliverable time
D13	Economic characteristics and market perspectives for the industrial products	12-40
D14	Quality characteristics and energy potential of kenaf as a biofuels for thermo chemical processes	12-40
D15	Environmental impact assessment and LCA	39
D16	Cost analysis	40
D17	Economic comparison of kenaf with other annual crops	40



Deliverables

	Deliverables	Deliverable time
D18	Seminars for the dissemination of the demo fields in Greece, Italy and Spain	36-40
D19	Technical visits for farmers in the 2 ha fields	
D20	Handbook	42
D21	Booklet	40
D22	Papers in European and International conferences and journals	42
D23	Final report	42

