





LIFE AForClimate Project - LIFE15 CCA/IT/000089

Adaptation of **FOR**est management to **CLIMATE** variability: an ecological approach

Ugo Chiavetta

Council for Agricultural Research and Economics (CREA) Research Centre for Forestry and Wood





PARTNER

















Objectives of the project

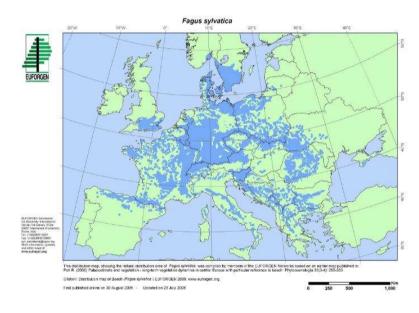
General Objective: To maintain and improve the efficiency of beech forest ecosystem, through an effective forestry, planned on the basis of climatic cycles

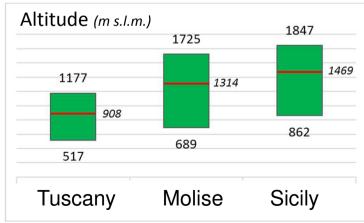
Specific Objective: Definition of a method for **measuring climatic factors predisposing and predicting** specific phenology, growth and resilience, promoting **forest regeneration and seed production**





Demonstration areas





NORTH-SOUTH Transect in the southern extreme of beech range in three Italian Regions: Tuscany, Molise and Sicily







Acronym		Name	Туре	Role in the project	
Crea	CREA	Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria Centro di ricerca per la selvicoltura	Public body Research Centre	Coordinator beneficiary	
Sauria dello	CDF	Compagnia delle foreste	SME Responsible for communication and Publisher dissemination activities		
	DSRTRS	Regione Siciliana Assessorato Regionale dell'Agricoltura dello Sviluppo rurale e della Pesca Mediterranea	Public body Regional Forest Service	al Forest	
DREAM	DREAM	D.R.E.AM. Italia società cooperativa agricolo forestale	SME Forestry Enterprise	Technical Manager Financial and Administrative responsible	
UNIVERSITÀ DIGUSTUDI DI PALERMO	DSAF	Università degli studi di Palermo Dipartimento Scienze Agrarie e Forestali	Public body University	Implementation leader of monitoring in Sicily	
	REGMOL	Regione Molise	Public body Regional Forest Service	Responsible for the implementation of the project in Molise	
	UMMUGE	Unione Montana dei Comuni del Mugello	Public body Local Forest Service	Responsible for the implementation of the project in Tuscany	
UNIVERSITĂ DEGLI STUDI DEL MOLISE	UNIMOL	Università degli Studi del Molise Dipartimento di Bioscienze e Territorio	Public body University	Implementation leader of monitoring in Molise Coordinator for defining guidelines	





Project Budget and Scheduling

- Total project budget: 2,386,250 €
- Total eligible project budget: 2,385,250 €
- EU financial contribution requested: 1,431,063 € (60% of Total budget)

	Beneficiary short name	Overheads	EU contrib.	Total eligible costs	% of total eligible costs
	CREA	48.641	456.027	745.927	31,27%
	CDF	10.149	139.634	155.149	6,50%
	DRARFD	16.028	108.356	245.013	10,27%
	DREAM	15.118	207.886	231.103	9,69%
	DSAF	15.126	141.164	231.227	9,69%
	REGMOL	16.093	108.612	246.002	10,31%
	UMMUGE	17.527	117.789	267.925	11,23%
	UNIMOL	17.199	151.595	262.904	11,02%
	Total	155.881	1.431.063	2.385.250	100%

2016

Preparatory actions

2018

- Silvicultural planning and networking
- Monitoring (baseline)

2019

- 1° Silvicultural applications
- Monitoring phenology

2021

- 2° Silvicultural applications
- Monitoring (project effects)

2022

• Final report





Starting assumptions

Climate change is known to influence forest tree growth response and the CO₂ cycle

Classic methods of forest management planning **do not** include climate variability although climate is the one of the main driver in trends of tree growth

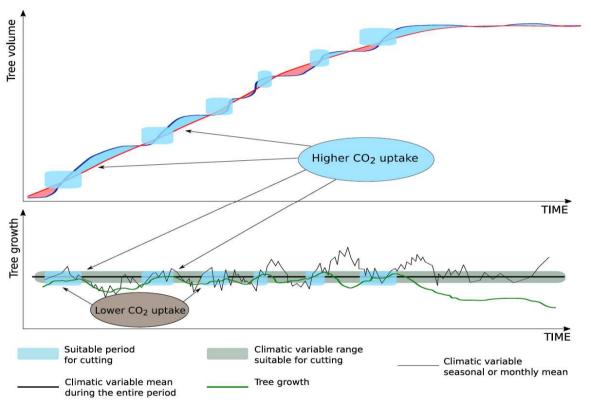
Forest biomass, resilience, and CO₂ storage may be damaged unless forest planning and management implement the relationships between climate variability and trends of tree growth.

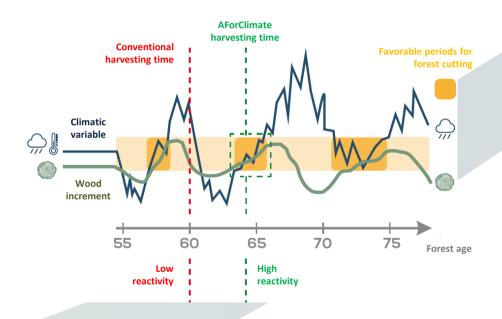




AforClimate proposal



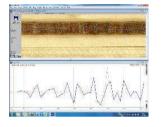








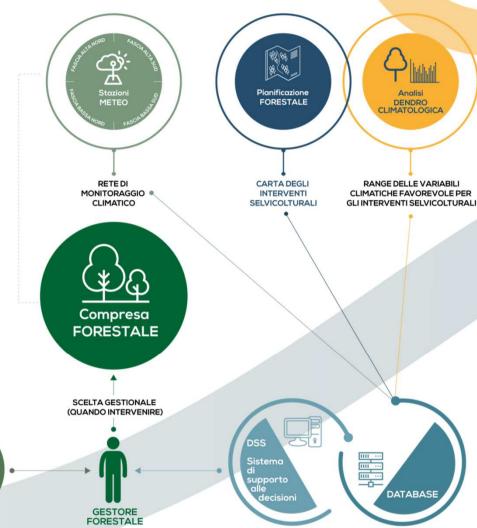
Method:



- Dendroclimatological analisys
- Climate monitoring network
- Decision support system
- Flexibility and adaptation to traditional approach and variables
- Additional and Non alternative













Expected results:

R1 (A - Preparatory Actions) definition of the parameters (thresholds) of the beech forests ecosystem reactivity

R2 - (C - Concrete Actions) Development of the innovative silviculture planning based on climatic variability

R3 - (D - Monitoring Actions) Monitoring and validation of the system for experience replication

R4 - (E - Dissemination) Ensuring appropriate visibility for disseminating results

R5 - (F - Project Management) To ensure the proper management of the project





Progress:









Networking with FutureForCoppices

- Participation to **Life 25 e Foreste** (May 2017, Firenze)
 - Interviewing forest LIFE projects representatives
- 1 Meeting (February 2018) and 2 field visits in Mugello and Monti Nebrodi (April and June 2018)
 - <u>Silviculture to pe applied</u> in the AForClimate demonstration areas
 - Joining LIFE projects: FoResMit, FutureForCoppices, SelPiBioLife ResilForMed e ManFor C.BD



























Thanks for your attention!







www.aforclimate.eu



@aforclimate



uchiavetta@gmail.com

