Giacomo Trombi

[redacted]

ESPERIENZA LAVORATIVA

Co-fondatore
AgriZapp srl [22/09/2022 – Attuale]

Città: Firenze
Paese: Italia

IT, R&D, comunicazione

Ricercatore universitario - Sviluppatore di software
Università degli Studi di Firenze [01/01/2007 – Attuale]

Città: Firenze
Paese: Italia

Linee di Ricerca:
Impatti dei cambiamenti climatici sull'agricoltura.
Mitigazione: strategie e misure per diminuire le emissioni/aumentare il sequestro di carbonio a livello aziendale.
Adattamento: misure di adattamento a livello aziendale per fronteggiare il cambiamento climatico così come da proiezioni per il futuro.
Sviluppo e applicazione di modellistica agro-meteorologica: ideazione, sviluppo e realizzazione di software e modelli agro-meteorologici, gestione di siti web e server, estrazione ed elaborazione dati, gestione di basi di dati.
Responsabile del server, del sito web e della base dati del "Progetto per il rilevamento e il monitoraggio dei consumi della risorsa idrica in toscana". Attualmente responsabile dei seguenti server (e siti web ospitati): agrometeo.unifi.it, grantchain.unifi.it, pastoralp.eu, olivemiracle.eu, frumentaria.unifi.it, vinaria.unifi.it, trombi.it, pitclei.it, drolive.unifi.it, effort.unifi.it, ccltoscana.it, systemic-hub.eu

Sviluppatore di software
Università degli Studi di Padova [01/11/2021 – 31/10/2022]

Città: Padova
Paese: Italia

Sviluppo di una piattaforma web ad elevato grado di automazione per la valutazione dei danni da grandine su colture di mais e frumento

Sviluppatore di software
PIN scarl / COOB [2021 – 2022]

Città: Prato
Paese: Italia

Sviluppo di una piattaforma web per l'implementazione della scheda VINIL (Valutazione INtegrata per l'Inclusione Lavorativa). La scheda VINIL è uno strumento elaborato dall'Unità di Sviluppo Inclusivo per la profilazione delle persone con disabilità. La scheda permette una valutazione dell'occupabilità della persona ai fini dell'inserimento lavorativo nei diversi contesti e progetti. E' uno strumento basato sul linguaggio ICF (International Classification of Functionings) ed è stato co-progettato e co-creato grazie ad un percorso partecipativo che ha coinvolto, a partire dal 2016, più di 100 operatrici ed operatori tra assistenti sociali, educatori, professionisti del Terzo Settore, infermieri, psichiatri, psicologi e medici del lavoro delle diverse Società della Salute e zone distretto della Toscana.

Sviluppatore di software
Bios-is / myricae [2020 – 2021]

Città: Firenze
Paese: Italia

Sviluppo di una piattaforma di smart alert system per l'arcipelago toscano. Si tratta di una rete partecipata per allerta e intervento tra agricoltori e Consorzio di Bonifica con formazione e selezione per il conferimento di incarichi di piccole manutenzioni. Trattasi a tutti gli effetti di un sistema informatico (web app) integrato per la gestione e la risoluzione delle segnalazioni provenienti dall'Arcipelago Toscano e relativamente soprattutto a fenomeni di dissesto/degrado del territorio.

Sviluppatore di software
BALANCE srl [01/11/2020 – 31/12/2020]

Città: Firenze
Paese: Italia

Porting di un software per l'ottimizzazione della produzione in Python.

Sviluppatore di software
lavoratore autonomo in collaborazione con cinquepunti [01/01/2005 – 31/12/2012]

Città: Firenze
Paese: Italia

Sviluppo di piattaforme gestionali web tramite framework Symfony. Ideazione, progettazione e sviluppo di siti web e server; progettazione e gestione di basi di dati. Creazione di siti web.

Ricercatore
CNR [01/06/2006 – 31/12/2006]

Città: Firenze
Paese: Italia

Progetto "e-Ecorisk" nella raccolta ed elaborazione di dati per la creazione di carte tematiche del territorio.

Sviluppatore di software
Comune di Vicchio [01/01/2013 – 31/07/2013]

Città: Vicchio
Paese: Italia

Ideazione, progettazione e sviluppo software di tipo gestionale (applicazioni basate sul web) per le pratiche edilizie

ISTRUZIONE E FORMAZIONE

Diploma di Laurea in Scienze e Tecnologie Agrarie
Università degli Studi di Firenze [01/10/1997 – 25/10/2005]

Indirizzo: Piazza San Marco 4, 50121 Firenze (Italia)
Sito web: unifi.it

Progetto Erasmus
University of Aberdeen [09/1999 – 02/2000]

Indirizzo: Aberdeen (Regno Unito)

Summer School in Rural Development
Università di Sarajevo - Tempus Project [01/07/2003 – 15/07/2003]

Indirizzo: (Bosnia-Erzegovina)

COMPETENZE LINGUISTICHE

Lingua madre: **Italiano**

Altre lingue:

Inglese

ASCOLTO C2 **LETTURA** C2 **SCRITTURA** C2

PRODUZIONE ORALE C2 **INTERAZIONE ORALE** C2

Francese

ASCOLTO B1 **LETTURA** B2 **SCRITTURA** A2

PRODUZIONE ORALE A2 **INTERAZIONE ORALE** A2

Spagnolo

ASCOLTO B1 **LETTURA** B1 **SCRITTURA** A2

PRODUZIONE ORALE B1 **INTERAZIONE ORALE** B1

COMPETENZE DIGITALI

Microsoft Office / Microsoft Word / Microsoft Excel / Microsoft Powerpoint / python / Django / yii2 / php / R / html / css / javascript / QGIS / Photoshop / Illustrator / unix / linux / MySQL

PUBBLICAZIONI

MODELLING THE INTEGRATION OF SLOW PYROLYSIS OF AGRICULTURAL RESIDUES IN THE STEELMAKING SECTOR: A TECHNO-ECONOMIC ANALYSIS OF THE ITALIAN CASE STUDY FROM MUSIC H2020 PROJECT

[2022]

Slow pyrolysis of ligno-cellulosic biomass residues represents a renewed opportunity to produce both sustainable bioenergy and high value co-products. The present work aims at evaluating the possible synergies for the integration of a slow pyrolysis plant within a steel-making plant, focusing on the use of biochar as a possible coal substitute to be used in a blast furnace. Within this framework, a model is proposed to calculate a preliminary sizing for the slow pyrolysis plant, and calculate the mass and energy balance for the integrated plant. Finally, it evaluates the main key economic parameters and performs specific sensitivity analyses. The model has been developed within the activities carried out by the H2020 MUSIC project, and applied to the Italian Case Study, located in the Apulia region and considering ArcelorMittal Taranto steel-making plant. The model estimated that more than 60 kt/yr of biochar could be produced for coal substitution, and 38M Nm3/yr of Natural Gas used in the steel plant could be substituted by pyrolysis gases. This in turn would lead to more than 240 ktCO2/yrof avoided emissions, that could be traded on the EU ETS market. Overall, the economic parameters proved viable, with a 7-years Pay Back Time and an Internal Return Rate for the investment of 19%

The chaos in calibrating crop models: Lessons learned from a multi-model calibration exercise

[2021]

Calibration, the estimation of model parameters based on fitting the model to experimental data, is among the first steps in many applications of process-based models and has an important impact on simulated values. We propose a novel method of developing guidelines for calibration of process-based models, based on development of recommendations for calibration of the phenology component of crop models. The approach was based on a multi-model study, where all teams were provided with the same data and asked to return simulations for the same conditions. All teams were asked to document in detail their calibration approach, including choices with respect to criteria for best parameters, choice of parameters to estimate and software. Based on an analysis of the advantages and disadvantages of the various choices, we propose calibration recommendations that cover a comprehensive list of decisions and that are based on actual practices

Assessing climate change impacts on crops by adopting a set of crop performance indicators

[2021]

The impact of climate change on the agricultural systems of three major islands in the Mediterranean basin, namely Sicily, Crete and Cyprus, was evaluated using a suite of specifically calibrated crop models and the outputs of a regional circulation model for Representative Concentration Pathway (RCP) 4.5 and 8.5 downscaled to 12 km of resolution and tested for its effectiveness in reproducing the local meteorological data. The most important annual (wheat, barley, tomato and potato) and perennial (grapevine and olive tree) crops were selected to represent the agricultural systems of the islands. The same modelling framework was used to test the effectiveness of autonomous adaptation options, such as shifting sowing date and the use of varieties with different growing season length. The results highlighted that, on average, warmer temperatures advanced both anthesis and maturity of the selected crops, but at different magnitudes depending on the crop and the island. Winter crops (barley, wheat and potato) experienced the lowest impact in terms of yield loss with respect to the baseline, with even some positive effects, especially in Sicily where both wheat and barley showed a general increase of 9% as compared to the baseline, while potato increased up to + 17%. Amongst perennial crops, olive tree showed low variation under RCP 4.5, but on average increased by 7% under RCP 8.5 on the three islands. Climate change had a detrimental effect specifically on tomato (− 2% on average in RCP 8.5 and 4.5 on the three islands) and grapevine (− 7%). The use of different sowing dates, or different varieties, revealed that for winter crops early autumn sowing is still the best option for producing wheat and barley in future periods on the three islands under both future scenarios. For tomato and potato, advancing sowing date to early winter is a winning strategy that may even increase final yield (+ 9% for tomato and + 17% for potato, on average). For grapevine, the use of late varieties, while suffering the most from increasing temperatures and reduced rainfall (− 15%, on average), is still a valuable option to keep high yield levels with respect to earlier varieties, which even if showing some increases with respect to the baseline have a generally much lower production level. The same may be applied to olive tree although the production differences between late and early varieties are less evident and climate change exerts a favourable influence (+ 4 and + 3% for early and late varieties, respectively)

Multi-model evaluation of phenology prediction for wheat in Australia

[2021]

Predicting wheat phenology is important for cultivar selection, for effective crop management and provides a baseline for evaluating the effects of global change. Evaluating how well crop phenology can be predicted is therefore of major interest. Twenty-eight wheat modeling groups participated in this evaluation. Our target population was wheat fields in the major wheat growing regions of Australia under current climatic conditions and with current local management practices. The environments used for calibration and for evaluation were both sampled from this same target population. The calibration and evaluation environments had neither sites nor years in common, so this is a rigorous evaluation of the ability of modeling groups to predict phenology for new sites and weather conditions. Mean absolute error (MAE) for the evaluation environments, averaged over predictions of three phenological stages and over modeling groups, was 9 days, with a range from 6 to 20 days. Predictions using the multi-modeling group mean and median had prediction errors nearly as small as the best modeling group. About two thirds of the modeling groups performed better than a simple but relevant benchmark, which predicts phenology by assuming a constant temperature sum for each development stage. The added complexity of crop models beyond just the effect of temperature was thus justified in most cases. There was substantial variability between modeling groups using the same model structure, which implies that model improvement could be achieved not only by improving model structure, but also by improving parameter values, and in particular by improving calibration techniques

How well do crop modeling groups predict wheat phenology, given calibration data from the target population?

[2021]

Predicting phenology is essential for adapting varieties to different environmental conditions and for crop management. Therefore, it is important to evaluate how well different crop modeling groups can predict phenology. Multiple evaluation studies have been previously published, but it is still difficult to generalize the findings from such studies since they often test some specific aspect of extrapolation to new conditions, or do not test on data that is truly independent of the data used for calibration. In this study, we analyzed the prediction of wheat phenology in Northern France under observed weather and current management, which is a problem of practical importance for wheat management. The results of 27 modeling groups are evaluated, where modeling group encompasses model structure, i.e. the model equations, the calibration method and the values of those parameters not affected by calibration. The data for calibration and evaluation are sampled from the same target population, thus extrapolation is limited. The calibration and evaluation data have neither year nor

site in common, to guarantee rigorous evaluation of prediction for new weather and sites. The best modeling groups, and also the mean and median of the simulations, have a mean absolute error (MAE) of about 3 days, which is comparable to the measurement error. Almost all models do better than using average number of days or average sum of degree days to predict phenology. On the other hand, there are important differences between modeling groups, due to model structural differences and to differences between groups using the same model structure, which emphasizes that model structure alone does not completely determine prediction accuracy. In addition to providing information for our specific environments and varieties, these results are a useful contribution to a knowledge base of how well modeling groups can predict phenology, when provided with calibration data from the target population.

Innovative low-cost air quality stations as a supporting means for road traffic regulations in urban areas

[2020]

Air pollution is currently one of main issues affecting urbanized areas worldwide. Industrial activities, road traffic and heating systems are main emission sources significantly increasing the levels of atmospheric pollutants as particulate matter, ozone, and nitrogen oxides. Local administrations monitor these harmful gases by means of reference monitoring stations provided by regional/national environmental protection agencies. These stations, however, have limitations due to the little presence over the whole municipality, low time-frequency, and high costs. In this framework, CNR-IBE, University of Florence - Department of Agriculture, food, environment, and forestry (DAGRI), Tuscany Region Environmental Protection Agency (ARPAT) and epidemiologists of the Pisa University agreed an initiative to create an environmental "living lab" aimed at assessing the impacts due to anthropogenic activities on air quality and thus on population exposure. Two study areas located in the Tuscany region (Italy) were chosen: the rural town of Capannori, and the city of Florence. The town of Capannori was selected since it lies within a critical area both affected by a variety of emission sources and winter weather conditions unfavourable to pollutant dispersion. The city of Florence was chosen for assessing air quality in urban areas following a possible traffic reduction due to creation of new urban tramway lines. The air quality analysis was carried out by means of a monitoring network comprising innovative low-cost stations (named AIRQino). PM concentrations were mainly considered for providing indicative air quality measurements. The preliminary results indicated that: i) low-cost stations, after calibration and validation against more than one-year observations from a reference air quality station, confirmed their reliability in measuring air quality data; ii) AIRQino data can supplement air quality information from reference stations and may be used to help traffic regulation actions at urban scale

Management and spatial resolution effects on yield and water balance at regional scale in crop models

[2019]

Due to the more frequent use of crop models at regional and national scale, the effects of spatial data input resolution have gained increased attention. However, little is known about the influence of variability in crop management on model outputs. A constant and uniform crop management is often considered over the simulated area and period. This study determines the influence of crop management adapted to climatic conditions and input data resolution on regional-scale outputs of crop models. For this purpose, winter wheat and maize were simulated over 30 years with spatially and temporally uniform management or adaptive management for North Rhine-Westphalia (˜34 083 km^2), Germany. Adaptive management to local climatic conditions was used for 1) sowing date, 2) N fertilization dates, 3) N amounts, and 4) crop cycle length. Therefore, the models were applied with four different management sets for each crop. Input data for climate, soil and management were selected at five resolutions, from 1 × 1 km to 100 × 100 km grid size. Overall, 11 crop models were used to predict regional mean crop yield, actual evapotranspiration, and drainage. Adaptive management had little effect (<10% difference) on the 30-year mean of the three output variables for most models and did not depend on soil, climate, and management resolution. Nevertheless, the effect was substantial for certain models, up to 31% on yield, 27% on evapotranspiration, and 12% on drainage compared to the uniform management reference. In general, effects were stronger on yield than on evapotranspiration and drainage, which had little sensitivity to changes in management. Scaling effects were generally lower than management effects on yield and evapotranspiration as opposed to drainage. Despite this trend, sensitivity to management and scaling varied greatly among the models. At the annual scale, effects were stronger in certain years, particularly the management effect on yield. These results imply that depending on the model, the representation of management should be carefully chosen, particularly when simulating yields and for predictions on annual scale

Effects of input data aggregation on simulated crop yields in temperate and Mediterranean climates

[2019]

Soil-crop models are used to simulate ecological processes from the field to the regional scale. Main inputs are soil and climate data in order to simulate model response variables such as crop yield. We investigate the effect of changing the resolution of input data on simulated crop yields at a regional scale using up to ten dynamic crop models. For these models we compared the effects of spatial input data aggregation for wheat and maize yield of two regions with contrasting climate conditions (1) Tuscany (Italy, Mediterranean climate) and (2) North Rhine Westphalia (NRW, Germany, temperate climate). Soil and climate data of 1 km resolution were aggregated to resolutions of 10, 25, 50, and 100 km by selecting the dominant soil class (and corresponding soil properties) and by arithmetic averaging, respectively. Differences in yield simulated at coarser resolutions from the yields simulated at 1 km resolution were calculated to quantify the effect of the aggregation of the input data (soil and climate data) on simulation results. The mean yield difference (bias) at the regional level was positive due to the upscaling of productive dominant soil(s) to coarser resolution. In both regions and for both crops, aggregation effects (i.e. errors in simulation of crop yields at coarser spatial resolution) due to the combined aggregation of soil and climate input data increased with decreasing resolution, whereby the aggregation error for Tuscany was larger than for North Rhine Westphalia (NRW). The average absolute percentage yield differences between grid cell yields at the coarsest resolution (100 km) compared to the finest resolution (1 km) were by about 20–30% for Tuscany and less than 15 and 20% for NRW for winter wheat and silage maize, respectively. In the Mediterranean area, the prediction errors of the simulated yields could reach up to 60% when looking at individual crop model simulations. Additionally, aggregating soil data caused larger aggregation errors in both regions than aggregating climate data. Those results suggest that a higher spatial resolution of climate and especially of soil input data are necessary in Mediterranean areas than in temperate humid regions of central Europe in order to predict reliable regional yield estimations with crop models. For generalization of these outcomes, further investigations in other sub-humid or semi-arid regions will be necessary

Diverging importance of drought stress for maize and winter wheat in Europe

[2018]

Understanding the drivers of yield levels under climate change is required to support adaptation planning and respond to changing production risks. This study uses an ensemble of crop models applied on a spatial grid to quantify the contributions of various climatic drivers to past yield variability in grain maize and winter wheat of European cropping systems (1984–2009) and drivers of climate change impacts to 2050. Results reveal that for the current genotypes and mix of irrigated and rainfed production, climate change would lead to yield losses for grain maize and gains for winter wheat. Across Europe, on average heat stress does not increase for either crop in rainfed systems, while drought stress intensifies for maize only. In low-yielding years, drought stress persists as the main driver of losses for both crops, with elevated CO2 offering no yield benefit in these years

Projected shifts of wine regions in response to climate change

[2013]

This research simulates the impact of climate change on the distribution of the most important European wine regions using a comprehensive suite of spatially informative layers, including bioclimatic indices and water deficit, as predictor variables. More specifically, a machine learning approach (Random Forest, RF) was first calibrated for the present period and applied to future climate conditions as simulated by HadCM3 General Circulation Model (GCM) to predict the possible spatial expansion and/or shift in potential grapevine cultivated area in 2020 and 2050 under A2 and B2 SRES scenarios. Projected changes in climate depicted by the GCM and SRES scenarios results in a progressive warming in all bioclimatic indices as well as increasing water deficit over the European domain, altering the climatic profile of each of the grapevine cultivated areas. The two main responses to these warmer and drier conditions are 1) progressive shifts of existing grapevine cultivated area to the north-northwest of their original ranges, and 2) expansion or contraction of the wine regions due to changes in within region suitability for grapevine cultivation. Wine regions with climatic conditions from the Mediterranean basin today (e.g., the Languedoc, Provence, Côtes Rhône Méridionales, etc.) were shown to potentially shift the most over time. Overall the results show the potential for a dramatic change in the landscape for winegrape production in Europe due to changes in climate

ATTIVITÀ SOCIALI E POLITICHE

Consigliere Comunale

[Firenze, 25/05/2014 – 18/12/2018]

Membro di opposizione (sinistra) del Consiglio Comunale. Membro delle Commissioni II (sviluppo economico), IV (sanità), V (cultura e sport), VI (ambiente, vivibilità e trasporti). Presidente della Commissione Affari Istituzionali.

PROGETTI

Virtual Fencing per la gestione di precisione degli allevamenti di bovini da carne (precision liveSTOCK)

[2020 – 09/2022]

Il progetto ha come obiettivo generale la messa a punto di un sistema integrato di pascolo turnato (sistema VISTOCK) che combina tecnologie e pratiche innovative sviluppate per il comparto foraggero-zootecnico basate sull'applicazione di collari *Virtual Fencing*, sistemi di rilevamento della produttività del pascolo da remoto e dispositivi di *Precision Livestock Farming*, in grado di fornire agli allevatori uno strumento per un più efficiente controllo dei bovini al pascolo, ottimizzando l'utilizzazione della risorsa pascoliva e migliorando il benessere animale

Market Uptake Support for Intermediate Bioenergy Carriers (MUSIC)

[01/09/2019 – Attuale]

Intermediate bioenergy carriers (IBCs) are formed when biomass is processed to energetically denser, storable and transportable intermediary products analogous to coal, oil and gaseous fossil energy carriers. IBCs can be used directly for heat or power generation or further refined to final bioenergy or bio-based products. The EU-funded MUSIC project aims to improve market uptake of three IBC types – pyrolysis (bio-oils), torrefaction (solid products) and microbial oil. It will do so by developing feedstock mobilisation strategies, improving biomass logistics and developing IBC trade centres. As part of concrete case studies regional feedstock mobilisation strategies will be developed. New platforms will stimulate regional discourse in Finland, Greece, Italy, and Sweden. The project will also offer practical guidance that will serve as input for informed policy, market support and financial frameworks.

Pastures vulnerability and adaptation strategies to climate change impacts in the Alps (LIFE PASTORALP)

[2017 – Attuale]

The overall aim of the LIFE PASTORALP project is to reduce the vulnerability and increase the resilience of alpine pasture agriculture by assessing and testing adaptation measures, increasing capacity building and developing improved management strategies for climate change adaptation. The achievement of this goal will be based upon a solid science-based knowledge of future climate change impacts on pastoral communities located in two national parks, (the Parc National des Ecrins in France and the Parco Nazionale Gran Paradiso in Italy) in the western Alps, as examples of the alpine environment. Another goal of the project is the deployment of the PASTORALP platform tools for facilitating the development and adoption in the two parks of climate change adaptation strategies, which can then be transferred to other pastoral ecosystems across the Alps, along with the creation of guidelines and recommendations for adaptation planning.

Methodology for Effective Decision-making on Impacts and AdaptaTION (MEDIATION)

[01/01/2010 – 30/06/2013]

Assessment of climate change impacts, vulnerability and adaptation requires a combination of generic and context-specific knowledge. Currently, the availability of such knowledge in Europe is fragmented and incomplete. MEDIATION addresses this challenge through six activities: (i) analysis of the decision-making context; (ii) inventory, review and improvement of methods and metrics for impacts and vulnerability analysis; (iii) likewise for costing of impacts and adaptation options; (iv) development of an overarching integrated methodology; (v) development of a flexible, interactive common platform for knowledge sharing; and (vi) dissemination of this knowledge and training. The components of the project will be connected in an iterative fashion, using case studies which combine selected regional, sectoral and cross-sectoral characteristics and policy questions. The consortium combines eleven top European scientific institutions with a high reputation and long experience in impacts, vulnerability and adaptation research and assessment. They represent different regions in Europe with contrasting vulnerabilities, cover the wide array of disciplinary and interdisciplinary knowledge required to assess

sectoral and cross-sectoral vulnerabilities, already participate in numerous related European and national research programmes, and have extensive expertise in science-policy interactions. The project will establish an Advisory Group of key international scientific experts and climate change policy makers to strengthen the scientific basis of the project as well as the policy relevance. In addition to scientific innovation, MEDIATION aims at supporting national and international policy development through targeted interactions, including the UNFCCC process (notably the Nairobi Work Programme), and the EU White Paper process, the latter by systematically addressing the components of the 3rd pillar of the EU Green Paper related to knowledge development and sharing

ADaptation And Mitigation strategies supporting European Climate Policy (ADAM)

[01/09/2008 – 31/08/2011]

The EU ADAM project has analysed the expected changes in electricity demand due to climate change. This study has estimated that over the next 100 years, climate change could cause up to a 20 per cent decrease in demand for electricity for heating in Northern Europe and up to a 20 per cent increase in demand for electricity for cooling in Southern Europe. The results indicated that an increase in temperature has an impact on electricity consumption four times the size of the equivalent decrease in temperature. This could be because cooling requires more energy than a 'similar' amount of heating. In particular, Greece's consumption was estimated to rise by 10 per cent and Turkey's by 18.6 per cent. In the Northern countries it is estimated that there will be a fall in consumption. For example, Latvia would reduce its consumption by 19.5 per cent and Lithuania by 20.8 per cent. For central Europeans, the increases in summer temperatures and reductions in winter temperatures come fairly close to levelling out over the year.

Foresight analysis for world agricultural markets (2020) and Europe (AG2020)

[01/01/2007 – 31/03/2010]

AG2020 will use an innovative scenario method to develop a range of policy scenarios that can meet EU targets of sustainability (economic, regional development, environment, and food safety and quality). Key indicators of these targets will be identified a nd used to assess the influence of world market developments in a range of policy scenarios both at the global level, and specifically for the EU.

To perform the analysis on an EU regional basis a number of case studies will be carried out representing the geographical variation and different challenges of agriculture. The analysis will incorporate findings and expertise of other foresight exercises on both national, EU and international level. The foresight methodology developed in this analysis is innovative because it allows the combination of qualitative knowledge and quantitative data so the conclusions from the individual analysis (WPs) can be converge into a variety of policy scenarios.

Further more the methodology allow for a sensitivity analysis on a regional basis, which so far has not been possible in the agriculture sector. Objectives: -to develop a foresight methodology enabling the study of the various types of agricultural systems and their specific challenges and constraints -to identify and a nalyse trends and influential factors (by use of participatory approaches) that may influence the possible future developments of EU agriculture in the various countries -to develop strategic policy scenarios (backcasting) based on the identified major dri vers of change for the impact assessment of the probable and desirable future directions of agriculture, including multifunctionality of rural areas and emergence of new agricultural exporting regions for the effective enforcement of the proposed alternative sets of policies -to develop indicators of EU sustainability targets in order to evaluate the different policies on a regional basis

Policy Incentives for climate change mitigation techniques (PICCMAT)

[01/01/2007 – 31/12/2008]

The PICCMAT project aimed to identify and promote changes in land management so as to reduce greenhouse gas (GHG) emissions, as well as to develop guidelines for the design of climate change mitigation policy incentives. The main scientific PICCMAT objectives were to:

1. provide scientific information for the development of policies related to agriculture and climate change alleviation;

2. reinforce the links between policy makers and scientists in the fields of interest;

3. raise farmer awareness on the impact of agriculture on climate change.

VOLONTARIATO

Capo Scout

[Firenze, 09/2000 – 10/2004]

HOBBY E INTERESSI

Musicista

Sono stato chitarrista e seconda voce deli Oscar Air-Co (2003-2019)

PRODOTTI SOFTWARE

Principali prodotti software realizzati

- Software per il monitoraggio dei consumi idrici in Toscana (ACQUA)
- Porting e miglioramento del modello ViteModel (Bindi et al 1996) in Python (ViteModel), e SSM-Wheat (Soltani & Sinclair 2011) in Python
- Software per la gestione di manoscritti (Blotius)
- Software per la gestione di turni di lavoro (FranGesty)
- Software gestionale per aziende (WebGesty)
- Software ERP (Glformax)
- Software per la consultazione di pratiche edilizie
- Software per la gestione di stakeholders e progetti
- Software per la generazione e la gestione di esami online (GeDeON)
- Software per la gestione degli oliveti con dati da satellite e stazioni meteo (Drolive)
- Software per il supporto alle decisioni campo agricolo (in particolare fertilizzazioni) basato su dati da satellite e modelli di simulazione delle colture (AGER)
- Software per la gestione delle segnalazioni di criticità sul territorio (PitCLEI)
- Software per l'inserimento e la gestione di schede di valutazione per l'inserimento lavorativo (VINIL)
- Software per la valutazione del danno da grandine su mais

Autorizzo il trattamento dei miei dati personali presenti nel CV ai sensi dell'art. 13 d. lgs. 30 giugno 2003 n. 196 - "Codice in materia di protezione dei dati personali" e dell'art. 13 GDPR 679/16 - "Regolamento europeo sulla protezione dei dati personali".

Padova 5 V 2023