

Workshops 1

Date 2020-01-20 00:00 - 2020-01-25 16:00

Venue University of Milano (UNIMI), Italy

Theme : The philosophical, legal, economical and agronomical perspective on Climate Change

The **Adaptnet Project** - *“Strengthening education, research and innovation for climate smart crops in India”* is a three year project (2018-2021) supported by the Erasmus+ programme. As a part of its commitment towards strengthening the competencies of Indian scientists on climate change-related topics and financially supporting their mobility, a four week training for 30 scientists from India was conducted during January 20th to February 16th 2020. The first of the four workshop series was organized between January 20th -25th ,2020, being coordinated by Prof. Carlo M. Pozzi and Mr. Angelo Gaiti from the Dept. of Agricultural and Environmental Sciences DISAA, University of Milano (UNIMI), Italy.

The workshop was organised on the broad thematic area of “The philosophical, legal, economical and agronomical perspective on Climate Change”. Day one of the workshop began with a lucid introduction by Prof Roberto Buizza, (Sant' Anna School of Advanced Study, Pisa, Italy) on how GHG emissions owing to increased anthropogenic activities have shaped Climate Change (CC) in the pre-and post-industrial era and the possible recourse and responsibilities one must assume to secure the future. This was followed by the Prof. Crovetto G. Matteo’s (UNIMI) lecture on the contributions of rearing livestock towards GHG emissions, deteriorating CC and ways and means for carrying forward this industry in a sustainable fashion. The afternoon session was delivered by Prof. Marco Fiala (UNIMI) through a hands-on training and modelling for conducting the cost-benefit analysis for practising mechanized agriculture, its impact assessment and sustainability.

The second day of the workshop began with a talk from Dr. Giuliana D’Imporzano (UNIMI) on the “Role of soil in the climate change challenge” which sought to highlight the concepts of Land use, land-use change, and forestry (LULUCF); Carbon Pools; Carbon in Soil (SOC); challenges from the CC perspective and the recommended good practices. This was supplemented by a hands-on demonstration of these concepts in the afternoon.

Day three began with Dr. Shouro Dasgupta (Ca' Foscari University of Venice, IT) who discussed the possibility of using computational modelling for assessing CC impacts on the labour productivity, hydro/wind power and methodological issues for investigating climate change impacts. The session also comprised of understanding these modelling approaches using R-Studio, using data sets generated from experimental findings. The post-lunch session comprised of discourse on Climate-economy dynamic modelling by Dr. Francesco Lamperti (Sant' Anna School of Advanced Study, IT) followed by a demonstration where he was joined by Prof. Andrea Roventini (Sant' Anna School of Advanced Study, IT). The demonstration outlined the impacts economic deterrents like of price-based policy for fossil fuel usage and Carbon Taxation for simulating the futuristic scenarios using interactive online tools.

Day four began with a tripartite lecture by Prof. Alberto Pirni (Sant' Anna School of Advanced Study, IT) that sought to address “Intergenerational justice issues related to climate

change” by analysing CC as a Quest for Justice; Justice and Intergenerational Justice and Ethical Approaches and Tools. This was followed by a lecture on Distributive Justice, ù by Dr. Fausto Corvino (Sant' Anna School of Advanced Study, IT). The afternoon hands-on session comprised the use of cooperative models in game theory and methods of role-playing or moral dilemma for climate negotiations. This was a well-illustrated example where the participants were educated on negotiating the carbon budget through distributive principles. The session also demonstrated why international climate negotiations are often unresolved, despite best efforts by countries, while trying to balance the scales of economic growth and climate security.

Day five marked the introduction to legal frameworks and scope of CC laws with Prof. Andrea de Guttry (Sant' Anna School of Advanced Study, IT) introducing the evolution of CC treaties, International laws and commitment of the signatory countries. This was followed by a detailed discussion led by Dr. Francesca Capone and Dr. Chiara Tea Antoniazzi (Sant' Anna School of Advanced Study, IT) on the *“consequences stemming from violations of International Environmental Law (IEL) and Climate Change Law (CCL), focussing in particular on the increasing relevance of climate change litigation and the role of domestic courts”*. The topic was addressed through outlining the key tenets of State Responsibility and their application to IEL and CCL; Climate Change litigation at the international level; and the increasing importance of domestic courts and how climate change litigation is developing at the national level. This was followed by a presentation on Climate change and the human right to food, with an overview of the obligations established at the international level by Dr. Mariagrazia Alabrese (Sant' Anna School of Advanced Study, IT). The afternoon session was a vibrant group activity wherein the participants were asked to formulate legal remedies for developing sustainable legal solutions to endemic industrial/socio-economic scenarios which threaten to aggravate CC, through active debate.

The workshop provided a broad overview of the problem of climate change and how it touches upon agriculture, live-stock breeding, carbon budget, energy needs/production in the years to come. It also provided background on climate economy modelling and the impact assessment of mitigation measures for climate change effects. The participants were asked to actively discuss the international obligations of the incumbent nations and the international legal framework, culminating with a role-playing approach for providing a realistic experience of climate negotiations.
