



1st International Symposium on Climate-Resilient Agri-Environmental Systems (IS CRAES 2020)

PROGRAMME

Virtual Interactive, 04-06 November 2020

Day 1:	Time	Category			
Wednesday 4th Nov 2020	09:00-09:10	Welcome speech: Prof. Mark Rogers, Registrar, Deputy President and Vice President for Academic Affairs, University College Dublin, Ireland.			
	09:10-09:25	Introduction of CRAES: A potential journey to IS CRAES: Dr. M. Ibrahim Khalil, Coordinator (CRAES) and Convenor (IS CRAES 2020).			
	09:25-09:40	Opening speech: 1. TBC			
	09:40-09:55	2. TBC			
	09:55-10:30	Coffee break			
Plenary speeches (25 min talk+5 min questions)					
	10:30-11:00	Dr. Federica Matteoli, FAO, Rome, Italy.	Global Perspectives and Inter-linkages of FAO's Climate-Smart Agriculture with UN SDGs. (P-1)		
	11:00-11:30	Prof. Nina Buchmann, ETH Zurich, Switzerland.	Agroecosystems today and in the future: Drivers of or driven by climate change. (P-2)		
	11:30-12:00	Prof. Alan Matthews, Trinity College Dublin, Ireland	Promoting Climate-Resilient Agri-Environmental Systems in the EU's Common Agricultural Policy. (P-3)		
	12:00-12:15	Ms. Laura Giappichelli, EASME, European Commission, Belgium (Invited)	LIFE and Climate Action in Agriculture (I-1)		
	12:15-13:00	Lunch break and Networking			
Parallel sessions: Keynote (20 min talk+ 5 min Q&A), Oral (12 + 3) and Flash (6 + 3)					
	13:00-13:05	Decision Support Tools (Sponsor: GFZ-Potsdam, Germany/GHG-Manage) Chair: Prof. Christoph Müller (J-L Univ. Giessen, Germany)		Agrometeorology (Sponsor: AGMET, Ireland) Chair: Dr. Klara Finkle (Met Eireann, Ireland)	
		Speaker	Title of presentation	Speaker	Title of presentation
	13:05-13:30	Keynote address: Dr. Jon Hillier, Edinburgh University, Scotland, UK.	Decision support tools for environmentally sustainable farming: How do they help? (K-1)	Keynote address: Dr. David B. Boorman, Centre for Ecology & Hydrology, UK.	Establishing a national soil moisture monitoring network for the UK – the good, the bad and the completely unexpected. (K-2)
	13:30-13:45	Theme 1, Session I (Oral) Gottschalk Pia , Syed Faiz-Ul Islam, Jon Hillier, Mohammad I. Khalil and Bruce Osborn: Evaluating aspects of the Cool-farm-tool: model assessments versus measurements. (O-1)		Theme 2, Session I (Oral) Maier Regine , Lukas Hörtnagl, Markus Staudinger, Valentin H Klaus and Nina Buchmann: Measuring nitrous oxide fluxes with a mobile eddy covariance system: First results across three Swiss croplands. (O-9)	
	13:45-14:00				

	14:00-14:15	Jonckheere Inge and Esther Mertens: On the use of (geo) spatial tools for support on national GHG-inventory reporting. (O-2)	Barron-Gafford Greg , Alyssa Salazar, Isaiah Bernet-Moreno, Moses Thompson, Blue Baldwin, Patrick Murphy and Jordan Macknick: Dryland Agrivoltaics: Co-locating food and renewable energy production creates a climate-resilient agri-environmental system for maximizing food production and water savings. (O-10)
	14:15-14:30	Kruijt Bart , Reinder Nouta, Cor Jacobs, Merit van den Berg, Christian Fritz, Ronald Hutjes, Wietse Franssen, Katja Klumpp and Bruce Osborne: Towards operational quantification of GHG exchange in heterogeneous agricultural landscapes and experimental plots. (O-3)	Ishola Kazeem A. , Reamonn M. Fealy, Gerald Mills and Rowan Fealy: Vegetation response to local surface-atmosphere feedbacks during 2018 summer heatwaves and droughts in Ireland. (O-11)
	14:30-14:45	Vanrespaille Helena , Mia Tits and Annemie Elsen: Developing carbon accounting at farm level to monitor C-storage and NO2-volatilization in agricultural soils. (O-4)	Logakrishnan Mohana Priya , Stuart Green, Tamara Hochstrasser and Reamonn Fealy: Assessing the impact of seasonal weather extremes on farm feed use in Irish dairy farms. (O-12)
	14:45-15:00	Yeluripati Jagadeesh , Ina Pohle and Miriam Glendell: Development of DNDC-meta-model to estimate GHG emissions from Norwegian organic soils. (O-5)	Murphy Darren J. , Philip Shine, Bernadette O' Brien and Michael D. Murphy: Investigating the efficacy of utilising meteorological data for modelling herbage mass on Irish pasture-based systems. (O-13)
	15:00-15:15	Shine Philip , Michael Breen, John Upton and Michael D. Murphy: A decision support system for energy efficient and renewable energy technologies on dairy farms. (O-6)	Raymond Joanna , Stephen Dorling, Andrew Lovett, Ian Mackay, Haidee Philpott and Steven Penfield: Weatherproofing for a smarter, resilient and more sustainable agri-sector. (O-14)
	15:15-15:30	Thomas Ian , Eva Mockler, Chris Werner, Fiachra O'Loughlin, Per-Erik Mellander and Michael Bruen: Next-generation national mapping of soil moisture deficits, runoff and diffuse phosphorus losses in Irish agricultural catchments for decision support. (O-7)	Mellander Per-Erik and Philip Jordan: Wicked problems and extreme weather: changing perspectives for nutrient pollution management. (O-15)
		Giannakopoulos Christos, Anna Karali , Christina Papadaskalopoulou, Giannis Lemesios, Konstantinos V. Varotsos, Despoina Charchousi, Marco Moriondo, Maria Papadopoulou, Marinos Markou and Maria Loizidou: LIFE ADAPT2CLIMA tool: A decision support tool for adaptation to climate change impacts on the Mediterranean islands' agriculture. (O-8)	Jarmain Caren , Eunice Avenant, Adriaan Van Niekerk, Pascalina Mohlotsane, Henry Jordaan, Carlos Poblete-Echeverría and Garth Stephenson: Water footprint as a sustainability indicator for table and wine grape production. (O-16)
	15:30-16:00	Coffee break and networking	
	16:00-16:05	Decision Support Tools (Sponsor: GFZ-Potsdam, Germany/GHG-Manage) Co-Chair: Dr. Inge Jonckheere (FAO, Italy)	Agrometeorology (Sponsor: AGMET, Ireland) Co-Chair: Prof. Owen Fenton (Teagasc, Ireland)
	16:05-16:14	Theme 1, Session II (Flash) Nieuwenhuis Maarten and Anders Lundholm: Alternative management models for Ireland's western peatland forests to improve the provision of Ecosystem Services. (F-1)	Theme 2, Session II (Flash) Minoli Sara , Femke Lutz and Christoph Müller. Do climate change impacts and adaptation modify the potential for agricultural intensification? (F-10)
	16:14-16:23	Ktenioudaki Anastasia , Haley Inselberg, Alyssa Smith, Natalia Peres, Colm O'Donnell and Maria Cecilia Do Nascimento Nunes: Innovative systems approach to address supply chain waste in strawberries. (F-2)	McAdam Jim , Steffi Carter, Anne Jungblut, Matt Aitkenhead, Chris Evans, Sergio Radic and Matthew McNee: A science-based policy response to predicted climate change in the Falkland Islands (52°S). (F-11)
	16:23-16:32	Khalil Mohammad I. and Bruce A. Osborne: Potential of the DNDC model to predict long-term changes in N2O emissions and SOC in permanent grassland. (F-3)	O'Flaherty Sile M. , Sarah Healion and Andy Fogarty: Investigation of the variation of environmental toxins on an Irish Bog System. (F-12)
	16:32-16:41	Moral Francisco J. , Francisco J. Rebollo and Joao Serrano: Hazard assessment of pasture soil fertility from an objective and probabilistic approach. (F-4)	Guisado Fulgencio Honorio , Abelardo García Martin, Carina de Nóbrega Barcelos, Adélia Oliveira de Sousa and José Rafael Marques da Silva: Analysis of meteorological variables and the vegetation index in vine cultivation: Adaptation and trend in the context of climate change. (F-13)
	16:41-16:50	Tsrybka Viktor , Hanna Ustsinava and Ilya Lahachou: The agrophysical properties of soils as the basis of soil protection agriculture (based on the example of the Braslaŭ region of the Republic of Belarus). (F-5)	Murphy Rachael , Karl Richards, Dominika Krol, Amanuel Grebremichael, Luis Lopez-Sangil, James Rambaud, Nicholas Cowan, Gary Lanigan and Matthew Saunders: Eddy covariance and static chamber nitrous oxide emissions from grassland silage production. (F-14)
	16:50-16:59	Del Rio Duque Martha Lilia , Michelle Bonatti, Katharina Löhr, Marcos Lana, Tatiana Rodriguez and Stefan Sieber: Scaling out sustainable land use systems in Colombia: Some insights and implications from two regional case studies. (F-6)	Hochstrasser Tamara , Klara Finklele, Paul Murphy, Owen Fenton, Karl Richards, Eve Daly, Matthew Saunders and Agmet Group: Towards an Irish National Soil Moisture Measurement Network. (F-15)

	16:59-17:08	Lessire Francoise and Isabelle Dufresne: Evolution of grazing practices in Belgian dairy farms: Results of two surveys. (F-7)	Simón Luis L. Paniagua, Abelardo García-Martín, M ^a Engracia Guerra Velo and Francisco J. Moral García : Winter chilling trends in the southwest of the Iberian Peninsula for plum tree hybrids under a climate change context. (F-16)
	17:08-17:17	Moral Francisco J. , Francisco J. Rebollo and Joao Serrano: Management zones delineation on grazed permanent pastures using low cost geophysical surveys. (F-8)	Martín Abelardo García , Luis L. Paniagua Simón, Fulgencio Honorio Guisado and M ^a Engracia Guerra Velo: Aridity seasons and climate change in main crop areas of template fruit tree in southwest of Iberian Peninsula (Spain). (F-17)
	17:17-17:26	O'Rourke Sharon M. and Nazish A. Amin: Assessment of carbon:nutrient stoichiometry to increase soil organic carbon sequestration in long-term studies. (F-9)	Walkiewicz Anna , Piotr Bulak, Mohammad Ibrahim Khalil and Bruce Osborne: Seasonal variability of CH ₄ uptake by various forest soils - the effect of temperature and precipitation. (F-18)
Day 2:	Time	Category	
Thursday 5th Nov 2020	Parallel sessions: Keynote (20 min talk+ 5 min Q&A), Oral (12 + 3) and Flash (6 + 3)		
		Speaker	Title of presentation
		Speaker	Title of presentation
	9:00-9:05	Arable Cropping Systems Chair: Prof. Kazuyuki Inubushi (Chiba Univ., Japan)	
	9:05-9:30	Keynote address Prof. Jørgen E. Olesen, Aarhus University, Denmark	What does it take to realize sustainable arable cropping systems? (K-3)
	9:30-9:15	Theme 3, Session I (Oral) Inubushi Kazuyuki , Hidetoshi Taira, Junya Baba, Satochi Togashi and Jolibekov Berdiyari: Chemical characteristics of degraded soils and remediation by cyanobacteria. (O-17)	
	9:30-9:45	Boeckx Pascal , Eunice A. Mutuku, Dries Roobroeck, Bernard Vanlauwe and Wim Cornelis: Maize production under combined Conservation Agriculture and Integrated Soil Fertility Management in the Sub-humid and Semi-arid regions of Kenya. (O-18)	
	9:45-10:00	O'Neill Macdara , Gary Lanigan, Dermot Forristal and Bruce Osborne: Effect of tillage practice and nitrogen rate on nitrous oxide emissions and emission factors in winter oilseed rape. (O-19)	
	10:00-10:15	Collins Chris , Sarah Duddigan, Zakir Hussain, Henny Osbahr, Vijay Thallam and Grady Walker: Understanding the biophysical processes and extension mechanisms of Zero Budget Natural Farming (ZBNF) to support its wider application. (O-20)	
	10:15-10:30	Banerjee HIRAK , Sukamal Sarkar, Sudarshan Dutta , Sourav Gorai, Krishnendu Ray, Shamie Zingore and Kaushik Majumdar: Nitrogen management for hybrid rice: Trade-offs between productivity, profitability, carbon sustainability and energy efficiency. (O-21)	
	10:30-10:45	Khalil Mohammad I. and Bruce A. Osborne: The mitigation potential of key gaseous nitrogen and the role of soil organic carbon for offsetting in arable cropping systems. (O-22)	
	10:45-11:15	Coffee break and Networking	
		Theme 3, Session I (Oral)	Theme 4, Session I (Oral)
		Grassland Systems Chair: Dr. Katja Klumpp (INRAE, France)	
	9:05-9:30	Keynote address Prof. Klaus Butterbach-Bahl, Karlsruhe Institute of Technology, Germany	Drivers of greenhouse gas footprints in grassland production systems. (K-4)
	9:30-9:15	Theme 4, Session I (Oral) Balasingham Nathan and Usha Amaranathan : A molecular pattern recognition receptor signalling compound (Biozest) presents an economically advantageous pastoral greenhouse gas emissions reduction solution. (O-25)	
	9:30-9:45	Finn John : Species richness increased yield stability in intensively managed grasslands subjected to experimental drought. (O-26)	
	9:45-10:00	Suter Matthias , Olivier Huguenin-Elie and Andreas Lüscher: Multifunctionality of sown grassland is enhanced by species diversity: a contribution to sustainable agriculture. (O-27)	
	10:00-10:15	Yearsley Jon , Hannah White, Lupe León-Sánchez, Dinara Sadykova, Maja Ilic, Mathew Magilton, Mark Emmerson, Paul Caplat and Willson Gaul: The resilience of plant productivity at a landscape scale using remotely sensed data. (O-28)	
	10:15-10:30	Bracken Conor , Gary Lanigan, Karl Richards, Christoph Müller, Saoirse Tracy and Paul Murphy: Effect of grassland sward composition and N fertiliser management on N ₂ O emission, NO ₃ -leaching, sward yield and N uptake. (O-29)	
	10:30-10:45	Grange Guylain , Caroline Brophy and John Finn: Multi-species grasslands open pathways for improving productivity and sustainability under intensive management. (O-30)	

	11:15-11:30	O'Reilly Alison and Dara Stanley: Do pollinator communities differ between early and late flowering varieties of a mass-flowering crop? (O-23)	Larkin Michelle and Dara Stanley : Does management at a local or landscape scale impact pollinator communities in semi-natural grasslands? (O-31)
	11:30-11:45	Manstretta Valentina , Vittorio Rossi, Giorgio Ragaglini, Alessandro Bosso, Gabriele Canali, Giovanni Laidò, Paola Cuttillo and Pierlugi Meriggi: LIFE AGRESTIC – Reduction of Agricultural Greenhouse gases Emissions Through Innovative Cropping systems. (O-24)	Mavrommatis Alexandros , Christina Mitsiopoulou, Thomas Bartzanas, Eleni Tsiplakou, George Zervas and Maria Teresa Pacchioli: Evaluation of the greenhouse gases emitted by different sheep and goat farming systems in Greece. (O-32)
	11:45-11:54	Arable Cropping Systems Co-Chair: Prof. Pascal Boeckx (Ghent University, Belgium)	Grassland Systems Co-Chair: Dr. Mhairi Coyle (James Hutton Institute, United Kingdom)
		Theme 3, Session II (Flash)	Theme 4, Session II (Flash)
	11:54-12:03	Siddique Md Noor E Alam : Field-scale quantification of soil organic carbon and nitrogen dynamics in rice-based cropping systems. (F-19)	Mbandlwa Philiswa, Catherine Stanton and Paul Ross : Refining direct Fed microbials (DFMs) and silage inoculants for reduction of methane emissions from ruminants. (F-27)
	12:03-12:12	Sato Makiba , János Kátai, Miwa Yashima and Kazuyuki Inubushi: Effect of pellet compost on CO ₂ and N ₂ O production and plant growth in Andosol and Chernozem. (F-20)	Coyle Mhairi , Jonathon Holland, Fiona Fraser, Madeline Giles, Roy Neilson, Helaina Black, Clare Cameron, Jagsdeesh Yeluripati, Dale King and Susan Mitchell: Impacts of liming on soil biodiversity and GHG emissions from permanent grassland in the heart of Scotland. (F-28)
	12:12-12:21	Breil Nicolas L. , Nathalie Jarosz-Pellé, Vincent Bustillo, Benoit Coudert, Solen Queguiner, Nicole Claverie and Thierry Lamaze: Heterogeneity of soil respiration on agroecological and conventional maize crops. (F-21)	Mitsiopoulou Christina , Alexandros Mavrommatis, Eleni Tsiplakou, George Zervas and Maria Teresa Pacchioli: Dietary nitrogen efficiency in dairy small ruminants under different farming systems. (F-29)
	12:21-12:30	Bakacsy László , Henrietta Kovács, Lilla Sípós, Anita Barta, Dóra Stefkó, Andrea Vasas and Ágnes Szepesi: Potential application of phenanthrenes from rushes as organic compounds for sustainable agriculture. (F-22)	McNee Matthew , Myrtille Lacoste, Simon Cook, Jim McAdam, Wesley Tourangeau and Kate Sherren: Farmer-based research in rangeland grazing systems on the Falkland Islands. (F-30)
	12:30-12:39	Nadiradze Kakha , Nana Phirosmanashvili, Tekla Nadiradze and Mariam Goginashvili: Agricultural and ecosystem restoration and climate change mitigation and adaptation in Georgia. (F-23)	Bracken Conor , Gary Lanigan, Karl Richards, Christoph Müller, Saoirse Tracy, James Grant, Dominika Krol, Helen Sheridan, Bridget Lynch, Cornelia Grace, Rochelle Fritch and Paul Murphy: N ₂ O emission and N cycling in mixed composition grassland swards with contrasting soil moisture conditions post urea fertiliser application. (F-31)
	12:39-12:48	Szepesi Ágnes , László Bakacsy, Henrietta Kovács, László Kredics, Tamás Marik, Péter Pálfi, Réka Szöllösi and Laura Zsigmond: Catabolism of polyamines as biostimulant plant growth regulators for improving salt stress tolerance of tomatoes. (F-24)	Cliquet Joséphine and Alice Poilane: Herby : Carbon storage and grazing management. (F-32)
	12:48-12:57	Peixoto Leanne , Lars Elsgaard, Jørgen Eivind Olesen, Jim Rasmussen and Yakov Kuzyakov: Carbon deposition and partitioning in the soil microbial biomass from three deep-rooted crops in 4-meter rhizoboxes. (F-25)	Jimenez Lizbeth E. Robles , Arni Xochitemol, Mohamed Benaouda, Jorge Osorio Avalos, Luis Corona, Epigmenio Castillo, Octavio Castelan Ortega and Manuel Gonzalez-Ronquillo: Concentrate supplementation on milk yield, methane and CO ₂ production in crossbred dairy cows in tropical climate regions. (F-33)
	12:57-13:06	Wesolowska Monika , Piotr Baranowski and Lech Schimmelpfennig: Slow-release fertilizers as a way to reduce ammonia and GHG emissions from agricultural sources. (F-26)	Klumpp Katja , Frederique Louault and Isabelle Bosio: Risk analysis of N leaching from grasslands under different management practices. (F-34)
	13:06-14:00	Lunch break and Networking	
Parallel sessions: Keynote (20 min talk+ 5 min Q&A), Oral (12 + 3) and Flash (6 + 3)			
	14:00-14:05	Socio-economic Costing Chair: Dr. Laurence Shalloo (Teagasc, Ireland).	Agro-Silvo-Pastoral Systems Chair: Prof. Gerardo Moreno (Univ. de Extremadura, Spain)
	14:05-14:30	Keynote address: Dr. Stephane De Cara, INRA-AgroParisTech, France. Mitigation of greenhouse gas emissions from agriculture: An economist's perspective. (K-5)	Keynote address: Prof. Jim McAdam OBE, Agri Food & Biosciences Institute, NI, UK. The potential of agro-silvo-pastoral systems to address climate resilience and mitigation. (K-6)

	14:30-14:45	Theme 5, Session I (Oral) Amin Md Nurul , Lisa Lobry de Bruyn, Md Sarwar Hossain, Andrew Lawson and Brian Wilson: Untangling the social ecological dynamics of soil carbon management in dryland agricultural systems of Australia. (O-33)	Theme 6, Session I (Oral) Norfolk Olivia , Markus Eichhorn and Francis Gilbert: Sustainable agroforestry in a drier world: lessons from Sinai. (O-40)
	14:45-15:00	Adenaueer Lucie , James Breen, Peter Witzke and Monika Kesting: The potential impact of an EU-wide agricultural mitigation target on the Irish agriculture sector. (O-34)	Llorente Mireia and Gerardo Moreno : Extensive livestock farming in Iberia Dehesa agroforestry system: food that mitigates climate change. (O-41)
	15:00-15:15	Ali Sahjahan, Md.Abul Kashem, Md. Golam Rabbani and Mohammad Ashraf Islam: Economic benefits of vermicomposting of different organic materials using epigeic earthworm <i>Eisenia fetida</i> . (O-35)	Kinsella James and Brian Tobin : The use of silvopastoral management at farm level to mitigate greenhouse gas emissions. (O-42)
	15:15-15:30	Doherty Edel : Exploring farmer preferences for insurance against extreme weather events: Results from a discrete choice experiment study of Irish farmers. (O-36)	Rakotovao Narindra , Tantely Razafimbelo, Angelina Rondrotsifantenana and Alain Albrecht: Impact of agroecological practices adopted by farmers on soil organic carbon stocks in the Central Highlands of Madagascar. (O-43)
	15:30-16:00	Coffee break and Networking	
	16:00-16:15	Theme 5, Session I (Oral) Rakotovao Narindra , Tiphaine Chevallier, Lydie Chapuis-Lardy, Sylvain Deffontaines, Syndhia Mathé, Mamonjiniaina Andriamirajo Ramarofidy, Tsifera Henintsoa Rakotoniamonjy, Adrien Lepage, Cargele Masso, Alain Albrecht and Tantely Maminiana Razafimbelo: Greenhouse-gas balance and economic analysis of agroecological-systems adoption at farm and regional scales using EX-ACT and TropiC Farm Tool. (O-37)	Theme 6, Session I (Oral) Courtney Daniel : Sustainability of Intensified Agricultural Production in the Boyne Catchment. (O-44)
	16:15-16:30	Deinert Lea , Israel Ikoyi and Achim Schmalenberger: Recycling-derived Phosphorus Fertilizers as Replacement for Triple Superphosphate – Impact on Soil Microbiota Functions and Plant Growth. (O-38)	Haughey Eamon , Nicholas C. Cryer and Lorna R.M. Wilson: A delay differential equation approach to modelling the effect of climate variability on smallholder cocoa yield in Ghana. (O-45)
	16:30-16:45	Rogozhin Eugene : A new approach to use biopesticides based on natural peptides in intensive agriculture. (O-39)	Teira-Esmatges M.R. , Felicidad Herralde, Xavier Aranda, Carmen Biel, Robert Savé and P. Sánchez-Calderer: Approximation to the greenhouse gases (GHG) emissions from Mediterranean dryland vineyards. (O-46)
	16:45-16:50	Socio-economic Costing Co-Chair: Dr. Joanne Fitzgerald (IT Carlow, Ireland)	Agro-Silvo-Pastoral Systems Co-Chair: Dr. Narindra H. Rakotovao (Univ. Antananarivo, Madagascar)
	16:50-16:59	Theme 5, Session II (Flash) Rajagopal Indumathi , Jesús Axayacatl Cuevas Sánchez, Jose Luis Romo Lozano, Teodoro Gomez Hernandez and Julio Baca del Moral: Integral resilience of traditional homegardens in face of climate change to contribute sustainable development in Mexico. (F-35)	Theme 6, Session II (Flash) Jimenez Lizbeth E. Robles, Maria D Celis-Alvarez, Sergio Radic , Einar Vargas-Bello-Perez and Manuel González-Ronquillo: Maize grain or maize silage supplementation on milk yield, methane and CO ₂ production in dairy cows grazing in temperate regions. (F-40)
	16:59-17:08	Islam Syed Faiz-Ul , Mohammad I. Khalil and Bruce Osborne: Reducing uncertainty in quantifying and reporting GHG emissions and carbon sequestration from European farming landscapes. (F-36)	Masanyu Julius , Doreen Mugabi, Kenneth Eryau, Sylvester Baguma and David Hafashimana: Juvenile tree seedlings' establishment in the dry lands of the Lake Albert Crescent Zone (LACZ) in Uganda, using hydrogels. (F-41)
	17:08-17:17	Hennesy Donagh and L Shaloo: Does the current use of land in Ireland result in feed food competition? (F-37)	McAdam Jim , Eugene Curran and Ian Short: Silvopasture as a climate-resilient sustainable grassland and forestry option. (F-42)
	17:17-17:26	Fitzgerald Joanne , Lynne Whelan, Colin Eyre, Nicola Dowdle, Chris Holtom and Brian Ogilvie: Supporting the three pillars of sustainability through innovation residencies with Irish and Welsh SMEs in the food and drink sector. (F-38)	McAdam Jim, John Gilliland and David Dillon: Sustainable silvopasture- A potential demonstration site at Dowth Estate, Ireland. (F-43)
	17:26-17:35	Kiernan Aoife and Sile O'Flaherty : The investigation of the effects of land management practices on the soil ecosystem. (F-39)	McAdam Jim , Eugene Curran, Ian Short, Tom Houlihan, Liam Kelly, John Brennan, Jennifer Byrne, Kevin Fagan, Sean McGloin, Imogen Rabone and Clive Bright: Irish Agroforestry Forum-promoting trees on farms on the island of Ireland. (F-44)

Day 3:	Time	Category	
Friday 6 th Nov 2020	Workshop (Sponsor: GHG-Manage)		
		Facilitators/Rapporteurs Dr. Bart Krujt (WUR, Netherlands), Dr. Jon Yearsley (UCD, Ireland), Dr. Anna Walkiewicz (IP, Poland) and Dr. Syed Islam (UCD, Ireland).	Land Use Mosaics and Greenhouse Gas Mitigation Roundtable multidisciplinary teams to discuss and explore scientific & technological ideas/thoughts and innovation policy for reducing GHGs from different landscape mosaics.
	9:00-9:10	Opening speech	Dr. Frank O'Mara, FACCE ERA-GAS Coordinator and Director Research, Teagasc, Ireland.
	9:10-10:30	Workshop	
	10:30-10:50	Coffee break and Networking	
	10:50-13:00	Workshop	Continues
	13:00-13:30	Lunch break and Networking	
	Panel discussion		
	13:30-15:30	Moderator Prof. Bruce Osborne (UCD, Ireland) Rapporteurs Prof. Mary Kelly-Quinn, Dr. Brian Tobin and Ms. Sinead McGinley (UCD)	Agricultural Systems as a Holistic Approach to Mitigate Climate Change and Environmental Pressures Panel members: <ul style="list-style-type: none"> • Dr. Frank O'Mara, FACCE ERA-GAS and Teagasc, Ireland. • Mr. Bill Callanan, Department of Food, Agriculture and the Marine, Ireland. • Dr. Bernard Hyde, Environmental Protection Agency, Ireland. • Dr. Andreas Pacholski, Institute for Climate-Smart Agriculture, Braunschweig, Germany. • Mr. Niek Bosma, The water authority of the province of Friesland, The Netherlands. • Stakeholder (Farmer representative): TBC
	15:30-15:45	Coffee break and Networking	
	15:45-17:30	Panel discussion	Continues
	17:30-17:40	Closing speech	Prof. Tasman Crowe, Director, UCD Earth Institute, University College Dublin, Ireland.
	17:40	Wrap-up	