

Dear all,

I hope this email finds you well.

I would like to take the opportunity to convey warm greetings to all of you from the Secretariats of OJeong Resilience Institute (OJERI) and the Mid Latitude Region Network (MLRN) at Korea University, Seoul, Republic of Korea. May I also avail myself of this opportunity to heartily thank you all for your contributions to the MLRN and its global activities, especially your participation in the webinars. Despite the restrictions imposed by the COVID-19 pandemic, webinars have provided us an effective platform to continue to interact virtually, share information, and engage in intellectual discourses.

To continue with this highly engaging and productive interaction, the MLRN Secretariat in partnership with UN Economic and Social Commission for Asia and the Pacific East and North-East Office (ESCAP ENEA) with financial and logistical support from OJERI is organizing a webinar on an very important and exciting theme, "**Carbon Emissions from Land Use and Management in East and North-East Asia: Linking Desertification, land degradation and climate change**" on September 15 (15:00 to 18:00 hours) 2021. Some of the top experts in this sector will be speaking at this webinar, and we would like to invite you all to attend.

We would like to request all the members and non-members to kindly register for the Webinar by completing the form at: <https://forms.gle/PzkQXE88pJ5HYt1B8>

The link to the zoom webinar is attached below for you.:

<https://us05web.zoom.us/j/88012025737?pwd=bEdpYTZXK2l3RHp6a1FKcDdLdkl0QT09>

Please kindly share the link with your links and colleagues, so that they can also participate in this interesting webinar.

Please contact Miss YanYan (yanyanbuer@naver.com), or Sonam Wang (coordinator MLRN) if you have further questions.

Best wishes,
LEE Woo-Kyun
Director

OJERI-MLRN-UNESCAP Web-seminar 02

Carbon Emissions from Land Use and Management in East and North-East Asia: Linking Desertification, land degradation and climate change

Draft Concept Note

15:00 – 18:00 (GMT+9), 15 September 2021 (tentative)

Jointly organized by OJEong Resilience Institute (OJERI), Mid-Latitude Regional Network (MLRN), Korea University, and UN Economic and Social Commission for Asia and the Pacific East and North-East Office (ESCAP ENEA)

Background

Global land represents an inevitable resource that human civilization cannot do away with. In addition, it stores huge amount of carbon thereby mitigating global warming.

However, global land and soils are continuously desertifying, and degrading jeopardizing its ability to support life and sequester carbon. Desertification and land degradation (DLD) is driven by two major forces: i) land use and land management alternatively known as Land use, land use change, and forestry (LULUCF: includes factors such as deforestation, overgrazing of livestock, over-cultivation of crops and inappropriate irrigation. ii) climatic forces (variability in climate and global warming as a result of human-caused greenhouse gas emissions). For instance, agriculture, forestry and other land use (AFOLU) activities accounted for around 13 percent of CO₂, 44 percent of methane (CH₄), and 82 percent of nitrous oxide (N₂O) emissions from human activities globally during 2007-2016. The Intergovernmental Panel on Climate Change (IPCC) Special Report on Climate Change and Land identifies AFOLU sector as a significant net source of Greenhouse gas (GHG) emissions contribute to about 23% of anthropogenic emissions of CO₂ equivalents during the same time period (IPCC, 2020).

Meanwhile, climate change creates additional stress on land and vegetation including extreme weather events, exacerbating existing risks to livelihoods, biodiversity, human and ecosystem health, infrastructure, and food systems. Drought and warming exacerbates evaporation of soil moisture while loss of vegetation cover exposes soil to erosion thereby leading to loss soil fertility and utility. Forest fires whose frequencies are rapidly increasingly globally are responsible for DLD and associated emission of carbon. According to the global assessment report of the Intergovernmental Science – Policy Platform on Biodiversity and Ecosystem Services (IPBES, 2019) land degradation has contributed over 4.4 billion tons of CO₂ from 2000-2009 making it a major contributor to climate change. The assessment also reported that 24 million ha of land is affected by DLD of which 12 million ha is lost to DLD.

The IPCC Report (2019) acknowledges that many interventions (such as sustainable land and management, sustainable forest management, etc) to achieve land degradation neutrality (LDN) commonly deliver adaptation and mitigation benefits and produce co-benefits to combat desertification and land degradation, and vice versa. Such responses also contribute to halting biodiversity loss with sustainable development co-benefits to society. Addressing DLD will also contribute towards meeting key objectives of global development including the LDN targets, the post-2020 global biodiversity framework

k, SDGs and Paris Climate agreements.

North-East Asian (NEA) region is very vulnerable to DLD due to arid and semi-arid land with high exposure. Under the North-East Asian Subregional Programme for Environmental Cooperation (NEASPEC¹) member countries aim to develop a subregional approach to create the synergies among actions on addressing DLD and climate change. The ESCAP ENEA Office as the secretariat of NEASPEC has launched a subregional stock-taking study to examine the main methodologies for quantifying the GHG emissions from the land sector and review the relevant mitigation options.

To facilitate knowledge sharing amongst experts from North-East Asia on the interlinkage between DLD and climate change, ESCAP ENEA Office and Mid Latitude Region Network supported by OJERI are co-organizing an expert group meeting to share current status of CO₂ emissions from land use management and responses and solicit expert inputs on the preliminary findings of the subregional stock-taking study.

Objectives and Outputs

The Expert Group Meeting also as MLRN Series Webinar aims to provide an opportunity to discuss the role of LULUCF emissions at the subregional level and primarily review methodologies. The meeting will focus on the following topics:

- Sharing current status of CO₂ emission from land uses and land management and responses in North-East Asian Countries.
- Challenges and opportunities in mitigating and adapting to DLD and associated CO₂ emissions.

The proceedings of the meeting will be compiled and published as an individual manuscript and shared openly.

¹ NEASPEC is an inter-governmental environmental cooperation mechanism established by China, the Democratic People's Republic of Korea (DPRK), Japan, Mongolia, the Republic of Korea, and the Russian Federation in 1993

Tentative Agenda

Theme: CO₂ emissions from land use and management: Linking Desertification, land degradation and climate change	
Wednesday, 15 September 2021, 15:00 – 18:30 (GMT+9)	
15:00 – 15:05	Welcome Remarks - Professor Woo-Kyun Lee, Director of OJEong Resilience Institute (OJERI) Director of Mid-Latitude Regional Network (MLRN)
15:05 – 15:15	Introductory remarks Dr. Sangmin Nam, Deputy Head, ESCAP ENEA
15:15 – 15:35	Initial review of main methodologies and suggestions for subregional approach in East and North-East Asia Dr. Sonam Wangyel Wang, Research Professor, OJERI, Coordinator – MLRN and SDSN Research Group, Korea University Q&A
15:35 – 16:45	Country presentations with focus on CO₂ emissions from and mitigation options of land use and management
15:35-16:05	Russia Professor German Kust (Institute of Geography, Russian Academy of Sciences) Professor Irina Kurganova (Pushchino Scientific Center for Biological Research of the Russian Academy of Sciences)
16:05-16:35	Mongolia Professor Anarmaa Sharkhuu, (National University of Mongolia, Mongolia)
16:35-17:05	South & North Korea Dr. Song Cholho (OJERI, Korea University, Korea)
17:05-17:35	China Professor Hangnan Yu (Yanbian University, China)
17:35-18:05	Q&A