











Dr. Ali M. Quoreshi, Research Scientist, Ecosystem Restoration **Environment and Life Sciences Research Center** Food Security Program **Kuwait Institute for Scientific Research** 

Ecological Monitoring and Evaluation of Large-Scale Revegetation of Degraded Terrestrial Ecosystems in Kuwait

## JEUDI 12 JUIN 2025 à 12 h 30

Pavillon Charles-Eugène-Marchand, salle Hydro-Québec (1210)

Abstract:

Ecological restoration aims to restore disturbed ecosystems, re-establishing their essential components and processes to a condition similar to pre-disturbed situation, enabling the return of normal revegetation process, ecological functions and services. Monitoring is a vital component of any restoration and revegetation program, offering key data sets to assess progress and success, while provide opportunities to adjust future efforts in restoring the ecosystem's pre-disturbance structure and functions. The surveillance monitoring any revegetation and restoration projects serves two basic purposes, such as establishing baseline data on ecosystem status and tracking changes over time, especially those related to revegetation efforts. Although most revegetation monitoring is limited to plant community composition monitoring, we propose a multi-perspective integrated approach including ecological processes indicators to be applied and to achieve effective monitoring reflecting changes in fundamental ecosystem attributes. A details surveillance monitoring plan and the monitoring implementation design presented here are a set of vital monitoring indicators and recommended methods for long-term monitoring of plant species diversity, plant productivity, soil characterization, soil and plant microbial community characterization, wildlife population and diversity, and climate data.

## Hôte: Damase P. Khasa

Responsables: Juan Carlos Villarreal Aguilar et Davoud Torkamaneh juan-carlos.villarreal-aguilar@bio.ulaval.ca et davoud.torkamaneh.1@ulaval.ca