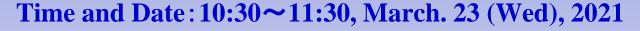
Laboratory of Bio-Sensing Engineering Open Seminar, 2021

Presenter: Dr. Njane Stephen. N

NARO: Hokkaido Agricultural Research Center, Division of Farming System Research,

ICT Farming Group

Room: S-174



Title: ICT-based Smart Farming Techniques for Large Scale Agricultural Production

Abstract: The application of ICT-based techniques in large scale farming is paramount in ensuring high-yield and high profit sustainable production. In Hokkaido, 1.147 million ha of cultivated land provides 80 % of potatoes, 72.8 % wheat, soy-beans, sugar beat thus the bread-basket of Japan. However, not only is the farmer population declining, but also there is an increase in ageing population, thus the need to develop labour-saving technologies. The use of UAVs has had a viable application in the precise monitoring of the growth of crops, detection of diseases thus saving losses, and also predicting the best time for harvesting thus ensuring high quality output. By utilising efficient crop rotation systems mitigation of pests and yield maximisation can be achieved. Furthermore, after harvesting it is important to ensure on time post harvest thus reducing wastage and food loss.

Anyone is welcome! This lecture will be conducted in English. Contact person: Prof. Naoshi Kondo (6170)

