**JAN 10**

Model must be validating for yield, n, c and/or water dynamics

Must know types of grass species to model grassland systems

We can work at grid cell level and combine all these different data sources

Cell5m may be a good place to look for crop area and yield data

She uses the basic version of DNDC.

**JAN 16**

DNDC can also model crop rotations

Can consider irrigation using an index (% of area irrigated)

Simulates data data for up to 3 years

Does not include soil organic matter as an output

Need to identify correct simulation unit

Need to choose this in combo with simulation area to not overload the model

Some parameters such as water demand must be obtained from literature

Some parameters may need to have uncertainty analysis (this is done automatically using MC sims in DNDC). E.g. potential yield, crop water demand.

We may need to revise the research topic if we work in Africa or SA

Previously: conversion of low productivity cropland to grassland

**Jan 25**

M agrees we can work in Africa

The fact that some areas are becoming more arid motivates the original research question. Can we shift from crops to grasses without exacerbating environmental pressures?

Yihe will have to re submit the proposal but the tweaks should only be minor

We can re-orient the proposal to a developing country context

Mariana suggests RHOMIS data could also be used

The scenarios can look at a statis baseline, cropland constant vs shifts to grassland