

“Diversifying Food Systems: Horticultural Innovations and Learning for Improved Nutrition and Livelihood in East Africa”
(HORTINLEA)

JOINT INTERIM REPORT
(SP1)

01/01/2014 – 31/12/2014
FORMAL REPORT



Description of activities/milestones
SP1: Increasing water use efficiency in African leafy vegetable production systems
W1: Development of water conserving cropping technologies Experiments to develop water saving production technologies Experiments to evaluate water saving production technologies
W2: Determination of water use parameters as a basis for irrigation scheduling: Field study at the Experimental farm of JKUAT to determine Etc on African nightshade, spider plant and Ethiopian kale grown at different levels of irrigation
W3: Evaluation of genetic diversity in drought tolerance and compositional changes: Two container experiments to evaluate 150 - 200 lines of spiderplant under stress and non-stress conditions in Hannover
W4: Development of a cropping systems model for planning and evaluation
W5: To Development of irrigation strategies based on model results and experts' preferences.

The execution of the project could not be started before January 2014 when the PhD student had been recruited and could travel to Hannover after receiving his visa with delays in processing. In Hannover, the PhD student learned the major experimental and modeling methods and executed preliminary pot trials between January and June 2014. After his return to Kenya in July 2014 the experimental field was prepared and in October 2014 field experimentation could be started. Altogether four field experiments to develop water saving production technologies have been set up in 2014. The first set (2 experiments) had to be discarded due to insufficient crop establishment. The PhD student has meanwhile improved his sowing technology.