

AFRICAN CASSAVA YIELDS CAN BE IMPROVED

African farmers could increase their cassava yield threefold if they improve their management and growing conditions.

This is the conclusion of a PhD study conducted by Joy Geraldine Adiele in West Africa. Adiele carried out field studies at six different locations in West Africa over a two-year time-span. She defended her thesis on 30 June. Her

supervisor is Ken Giller, professor of Plant-based Production Systems. One of the opponents is WUR President Louise Fresco, who also obtained her PhD in Wageningen on cassava research in Africa many years ago.

The cassava (*Manihot esculenta* Crantz) is an important food crop, as its roots are full of carbohydrates. It is cultivated in 40 of the 52 sub-Saharan countries in Africa, but the yield is generally low. Better growing conditions and nutrient management could increase the yield to 35 tons per hectare annually, showed field trials by Adiele and her colleagues.

CHIPS

The combination of the fertilizers nitrogen, phosphate and potassium, in particular, led to better harvests. The yield gap between

the potential and the actual yield turned out to be bigger than expected. The main reasons for the unsatisfactory harvests were the poor soil quality, mediocre planting material, bad weed management and wrongly applied fertilizer.

In spite of all this, cassava is still a good alternative to arable farming, claims says. This is because cassava utilizes nutrients more effectively, produces more crop per kilo of nitrogen and is more resilient to unfavourable weather conditions. If farmers become more skilled at cultivating and fertilizing the crop, cassava could play an important role in Africa's food supply. Adiele also recommends strengthening the value chains that process cassava into cakes, porridge and chips. **AS**

