

## ***Tanzania – “Drip irrigation and fertilization of tea”, Tea Research Institute of Tanzania (TRIT)***

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- **Objectives:** Provide solutions to solve low water availability to tea producers, which led to the introduction of a drip irrigation model reducing water consumption.

- **Context:** Large estate and smallholder tea growers in the Tanzanian Tea industry have been seeking the introduction of low-cost irrigation systems, notably in the face of water shortages. Several irrigation systems were tested, but the results were not satisfactory.

- **Project Summary:** In the face of drastic water depletion, a decision was unanimously taken by all tea stakeholders, through the Tea Association of Tanzania (TAT), to embark in research activities on crop water management, including drip irrigation and fertilization of tea. The research was entirely demand driven by stakeholders (including founders, beneficiaries and funding members) who agreed on financial support to drip irrigation and fertilization. This was done through a contribution to the TRIT by fees levied on tea sales. This financial contribution allowed the good progress of field operations and the success of the study.

- **Impacts:** The project constitutes the first attempt at improving irrigation of tea and represents the largest experimental drip irrigation (9ha) in the world. The technology allows savings of water by up to 50%, savings of labour by 85% (2 men with drip system versus 13 with overhead sprinkler system) and a significant increase in yields (up to 6,07 kg dried tea/ha in 2004/2005, up 21%).

- **Main obstacles encountered:**

- High taxes and electricity fees together with escalating droughts hindered tea production and the envisaged development of tea industry, thereby impacting negatively on the project.

- **Scale:**

- A 9 ha experiment (which represents the largest experiment on drip irrigation in the world) was carried out.

- Unilever Tea Tanzania Ltd started an experimental trial on 10 ha

- Kibena Tea Ltd. has converted more than 200 ha under this experiment.

- **Agricultural producer organizations/villagers involvement:** The whole process is entirely demand driven and has been initiated by the stakeholders of the Tea industry grouped in the Tea Association of Tanzania (TAT).

- **Contribution to poverty reduction:**

- Optimized use of water and development of a solution for water shortage thus reducing plant deaths and crop losses.

- Reduction in labour needed.

- **Training:** On-site training was given.

- **Date of creation:** 2003

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