## Effective way of transfer of technology to boost the groundnut yield under rainfed condition through frontline demonstration in Salem, Tamil Nadu

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## ABSTRACT

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farmers could not able to get high yield. Even sometime severe yield loss and cent per cent failure of crop occurred in some areas due to occurrence of severe drought and poor awareness on drought management technologies. Considering the importance of groundnut and other constraints, Krishi Vigyan Kendra, Salem facilitated front line demonstration (FLD ) funded by ICAR (TOT) New Delhi with performing improved technologies in different villages of Salem district during 1995-2007. 372 front line demonstrations were conducted in 90 hectares. Farmers were selected randomly and demonstration done in their field itself. Critical inputs were distributed to the farmers. In case of local check plots existing practices being used by farmers were followed. During the period under study, it was observed that the average yield of demonstration was significantly higher (1748kg/ha) than local check plots (1430kg/ha). However, fluctuations were observed mainly an account of variation in rainfall in terms of percentage yield improvement in demonstration was recorded from 14.7-29.5 % over local check. In field days, FLD farmers well explained the drought management practices followed for groundnut and experiences also shared among the farmers. Groundnut yield potential can be increased to a great extent by conducting effective front line demonstrations with proven technologies. The technologies suitable for the Tamil Nadu similar to Salem district of Tamil Nadu should be evolved and brought to the access of farmers transfer centres like KVKs.

Groundnut is a major oilseed crop grown under rainfed condition in Salem district. The majority of the

## **INTRODUCTION**

Groundnut (Arachis hypogea L.) also known as peanut and earthnut, is one of the major oilseeds in the world. India is amongst the largest producer, consumer and importer of vegetable oils in the world. India plays a major role in global oilseeds and vegetable oil economy contributing about 16% of world's oilseed crop area, 7% of world's oilseeds production and 6.7% of vegetable oils production. However, the productivity in India is only 1148 kg/ha as compared to the world average of 2593 kg/ha (FAOSTAT). In the domestic agricultural sector, oilseeds occupy a distinct position after cereals sharing 15% of the country's gross cropped area and accounting for nearly 3% of the gross national product and 9% of the value of all agricultural products. India has the largest area in groundnut. It is an annual soil enriching legume cum oil seeds crop. Groundnut oil is edible and oil content of groundnut seed varies form 44 to 50 per cent depending on varieties and agronomic practices. Groundnut oil finds extensive use as a cooking both as refined oil and Vanaspathi ghee. It is rich in protein, vitamin

A, B and B2. The coloritic value is 349/100g of nut weight.

In Salem district, Groundnut is a main oilseed crop gown under rain fed condition in vast areas. All the fields are not getting same yield. Even sometime severe yield loss and cent per cent failure of crop occur in some areas. Keeping these things in mind, KVK, Salem scientists were approached, the farmers were surveyed, group discussions were held etc. and the problems related to yield gap were put before. Then KVK short listed such problems related to low productivity as follows:

- Occurrence of severe drought during cropping period

- Non adoption of drought tolerant varieties and management practices viz., in situ moisture conservation and recommended fertilizer application.

To improve the productivity in groundnut, KVK have initiated front line demonstration programme funded by ICAR since 1995. In view of the encouraging results, demonstrations were continued in following years at farmers fields of Salem district.

Key words : Groundnut,

Drought, FLD, Field days, Yield

Accepted : September, 2009