

**TAMILNADU AGRICULTURAL UNIVERSITY****COIMBATORE- 641003****RAWE-RURAL AGRICULTURAL WORKING EXPERIENCE(0+6)****ANAMALAI BLOCK****INNOVATION IN TOMATO CULTIVATION****INTRODUCTION:**

***“ DO NOT GET OBSOLETE LIKE AN OLD TECHNOLOGY,KEEP INNOVATING YOURSELF ”***

Nowadays there is lot of damage in agricultural produce ,especially in vegetables such as tomato etc...of about 40-50%.These losses don't account not only during transportation or processing but also during harvesting of those produce and their environmental conditions. For example, in tomato there is a huge loss if rain occurs during harvesting, and it leads to lodging of branches and as a result it reduces the quality and yield. Heavy bearing also results in lodging and leads to the same.

**AN INNOVATIVE METHOD.**

Mr.Gopal , president of village Somanthuraisitthur and his wife cultivated gourds in an area of 2 acres. They cultivated bitter gourds and bottle gourds using Pandhal technique. After harvesting of gourds, they planned to cultivate tomato in the same field using a new method namely “PANDHAL TOMATO”

**SEEDLINGS.**

They bought hybrid NS501 seedlings in protrays from Namdhari seeds Pvt.Ltd. Kanavanaikkanpalayam, Udumalpet at the rate of Rs.1.25/seedling (15000 seedlings per acre).

**MAIN FIELD PREPARATION.**

They thoroughly ploughed the land to fine tilth condition and applied Farm Yard Manure at the rate of 6 tonnes/ acre. After FYM application, they formed broad ridges and furrows and irrigated the field before transplanting of seedlings.

**TRANSPLANTING:**

They transplanted single seedling at the age of 30 days after sowing at spacing of 60×60cm. After transplanting, they gave life irrigation at 2 DAT.

**IRRIGATION:**

In order to increase Water Use Efficiency they irrigated the field through drip irrigation at an interval of 4 days.

**WEED MANAGEMENT:**

They had done hand weeding at an interval of 30 days after transplanting. They also sprayed Pendimethalin at a rate of 1kg of a.i/ha.

**PANDHAL TECHNIQUE:**

Pandhal technique is a new method of staking in tomato. After 25 DAT, the plant began to produce productive branches. At these stages they started to tie one end of the thread at growing tip of the plant and the other end on the pandhal. On an average they tied around 6-8 threads per plant during its life cycle. As a result it prevents the plants from lodging and it also reduces

physical damages in fruits at field condition. And it also provides a lot of space for intercultural operations too.

#### **ADVANTAGES OF THIS TECHNIQUE:**

During the next ploughing the centre part of the pandhal is lifted and even a tractor can enter the field for land preparation. It also provides a lot of space for intercultural operations and also during harvest it results in easy picking of fruits by avoiding physical damages in fruits.



Though it needs more labour, it gives 20% higher yield than conventional method and gives yield of about 500 kg/acre/harvest. Harvesting is done once in 2 days.

They maintain those plants upto 6 months and replant the new one.