

General guidelines for implementing National Food Security Mission – Commercial crops -Cotton during 2014-15

During 12th plan period, cropping system approach has been given importance including commercial crops like Cotton, Jute and Sugarcane to meet the increased demand for both food and cash crops. Accordingly, the development activities of the commercial crops have been subsumed with the National Food Security Mission (NFSM) and a sub-Scheme, namely NFSM-Commercial Crops have been formulated and in Tamil Nadu it will be implemented for Cotton and Sugarcane crops.

The interventions under cotton to be implemented through State Department of Agriculture are

1. Front Line Demonstrations on Integrated Crop Management (ICM),
2. FLDs on Desi and ELS cotton/ELS Cotton Seed production,
3. FLDs on Intercropping and
4. Trials on High Density Planting System (HDPS).

Front Line Demonstrations on Integrated Crop Management

The implementing district has to identify the location specific production interventions for different types of FLDs.

The CICR, Nagpur, has suggested the following technologies which can also be demonstrated under FLDs wherever required.

- Refugee management of Bt cotton
- Preparation of ridges and furrow for in –situ moisture conservation.
- Adoption of alternate furrow irrigation.
- Adoption of drip system of irrigation with use of ferti-gation system.
- Maintaining of plant population by separately growing 2 to 5% seed in polythene bags during sowing and placing these seedling wherever plant in field not germinated.
- De-topping Control of Excess vertical growth by nipping 10th -12th buds.

- Sowing of Border/trap (Bhendi) crop to reduce the pest load on main crop and conservation of eco-friendly insects.
- Seed treatment with Bio-fertilizers, Azatobacter, Trichoderma viride.
- Application of FYM/Organic Manure/Green Manure, Azospirillum, PSB, Azatobacter in soil.
- Foliar application of 2% urea or DAP+1%MOP+1%MGSO₄ at 80 & 100DAS, spary of planofix @0.25ml/lit at 70&90 DAS and spray of 2% potassium nitrate (13:0:45).
- Use of Pheromone traps, light trap, Yellow sticky trap, Use of birds perches.
- Application of Bio pesticides likes neem oil, NSKE Trichoderma, etc.
- Stem application of pesticide monocrotophos / imidacloprid for controlling aphid/Jassids.
- Application of Weedicies – Pre emergent herbicides -1. Diuron (80%) – 1.25 kg/h, 2.Pendimethalin (35 Ec) – 5 ltr./h, 3. Alachlor (50 Ec-4 lts/ha), after 30-45 days -1 Glyphosate (3 ltrs./ha).

The assistance available for FLDs on ICM is Rs. 7000.00 / ha of which Rs. 6000/- for inputs and Rs. 1000/- for contingencies. The implementing agencies are suggested to identify the inputs of FLDs in consultation with SAU/**KVKs**.

FLDs on Intercropping

The common traditional practice adopted in cultivation of cotton in central and south India is strip cropping i.e 1 or 2 rows of pigeon pea, 3-5 rows of finger miller (ragi) or after every 8-10 rows of cotton. There is vast scope of cultivation of various crops as inter crop with cotton due to its slow initial growth and long duration. An amount of Rs. 7000/-per ha will be provided under the FLDs towards the cost of seed of intercrop, micronutrients, intercultural operations, pest management etc.

FLD on Desi and ELS (Extra Long staple) Cotton

Due to higher adoption of Bt-hybrids (more than 90%), the area under Desi & ELS Cotton reduced drastically and to encourage the same FLD on Desi & ELS is to be undertaken. An amount of Rs. 8000.00 per ha. is provided under the FLDs towards the cost of seed and other input component approved by ICAR/SAU as per local need of ELS and Desi cotton.

Trials on High Density Planting System (HDPS)

Regarding implementation of HDPS trials general instruction has been communicated vide this office endorsement Lr. No. CDC2/137088/13 dated 10.06.2014. An amount of Rs. 9000/-per ha. is provided under the HDPS towards the cost of inputs. The CICR, Nagpur has recommended the following input recommendation per acre for HDPS may be adopted:

Input	Quantity
Seed cost of variety	4-5 Kg/acre
Urea +SSP+Zn sulfate	50 Kg+100 Kg=5 Kg
Urea	25 Kg
Flonicamid-50 WG (at ETL)	80 g/acre
Clorantpriliprole – 18.5 SC (at ETL)	60 ml /acre
Flubendiamide -480 SC (at ETL)	50 ml /acre
Indoxacarb -14.5 SC 100 ml/acre (at ETL)or	
Spinosad – 45%SC 50 ml / acre (at ETL)	
Potassium nitrate, 2.0 Kg per 200 litres foliar spray	
Fenvalerate – 20 EC (at PBW ETL)	160 ml / acre.

- Wide publicity through media, TV, Kisan mela etc about these trials among the farmers shall be given so that non Bt growing farmers can be benefitted by adopting HDPS.