

Cultivation of Cambodia Cotton in Avanashi Taluk

by

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Introduction : Irrigated Winter Cambodia cotton is cultivated in Madras State over an area of 3.5 lakh acres. The area is mostly confined to the districts of Coimbatore, Tiruchi and Salem. Yet, different systems of cultivation are in vogue. Avanashi, a taluk of Coimbatore district forms a distinct subzone of the Irrigated Cambodia tract where cotton is planted late in October after the harvest of Ragi. The seedcotton from Avanashi area is much sought after in trade and goes by the special name as "Avanashi Cambodia" and is valued higher.

Soils and climate : In Avanashi tract, cotton is raised in garden lands. The soil is mostly blackloam with a few patches of red loam. The water table is low, being 25 to 30 feet and in summer it may go down to 40 feet even. A total rainfall of 28" is received annually.

Cotton cultivation : (a) *Preparatory cultivation :* American cotton is raised after the harvest of ragi in the garden lands under irrigation from wells.

The preparation of land for sowing Cambodia cotton depends upon the receipt of rain. Usually it commences from the first week of October and prolongs till the end of the month depending upon the rainfall. Immediately after the receipt of rain, the field is ploughed twice. If the monsoon or the harvest of the previous ragi crop is delayed, cotton seeds are dibbled in ragi stubbles. In either case, there is no preparatory cultivation.

(b) *Manuring :* The cotton crop is not usually manured. Only the previous crop of ragi is manured. Farm yard manure, compost and tank silt are the manures applied. The manuring is done heavily. Normally, 75 cartloads are applied per acre. It is not uncommon to apply even 125 cart loads per acre. Sheep penning is also practised rarely. Of late, some of the enterprising ryots are applying Ammonium Sulphate as a top dressing at the rate of 20 lb. Nitrogen per acre. Some ryots apply 2 to 3 bags of groundnut cake as a basal dressing, in addition.

c) *Seeds and sowing*: MCU. 1 is the common variety grown in this tract. Occasionally, Cambodia 2 is met with. A heavy seed rate of 20 to 25 lbs. is used per acre. The seeds are sown mostly broadcast and covered. Dibbling is also practised. After sowing, beds are formed with channels for irrigation. Forming ridges and furrows and dibbling seeds on the sides of the ridges are uncommon.

(d) *Intercultivation*: Hand weeding is not usually done to the cotton crop unless the field becomes weedy. Two mammaty hoeings are given, the first, after one month and the second two months after sowings.

The cotton grower of this area is interested in the proprietary compounds of insecticides, now available in the market and uses them freely in protecting his crop. "Endrin" and "Folidol" are freely used. Jassids, aphids and boll-worms are the common pests affecting the cambodia cotton in this tract. Two sprayings are usually given and three sprayings at times depending upon the prevalence of pests.

The black arm disease is rare in this area.

(e) *Irrigation*: The irrigation is from wells. Cheap electricity is available even in remote villages. Usually each well is fitted with electric motor and pumpset. Still, mhots are functioning side by side. The mhots are used to supplement the irrigation by the electric motors and pumpset. The mhots are put to the maximum use in summer months when it has become common to impose restrictions on the consumption of electricity and hence mhots have become indispensable.

Normally, the cotton crop is irrigated 10 to 15 times depending upon the rainfall received during the crop growth. The usual interval between 2 irrigations is about 16 days and at the time of flowering and during the period of drought, the crop will be irrigated at an interval of 10 days.

(f) *Harvest*: The Cambodia cotton crop raised in the month of October starts flowering in December, January and is ready for harvest by March. The harvest is done by hired labourers who attend to their work from 8-00 A. M. to 6-00 P. M. with an interval of an hour. The burst boll is snapped by hand, the *kapas* is collected in the folds of their lap. After a sizable quantity

is obtained, they are put in a basket and carried to the house of the cultivator where the harvested produce is heaped in a corner of his house. The picking is done as and when required usually at an interval of 3 to 4 days. The *kapas* is not left to remain on the plant unnecessarily due to the menace of field rats. It is the usual practice to harvest the good and stained *kapas* separately. If the sowing of cotton is delayed and the season for planting of Ragi in July is nearing, all the green bolls left over on the cotton crop are harvested, dried in the sun, beaten with a stick, *kapas* collected and mixed with the produce or sold separately

Four pothies (of 280 lbs.) of *kapas* is obtained, on an average per acre. The *kapas* is sold away to the merchants from Tiruppur and locally to the ginning factories. The small land holders and peasant proprietors sell away their *kapas* as and when they are harvested to clear off the debts incurred for cultivation expenses and to eke out their livelihood. The medium and big land-lords wait till the entire harvest is over and sell away their produce when the market is favourable.

(g) *Cost of cultivation*: The cost of cultivation of an acre of irrigated cambodia cotton in the Avanashi Tract amounts, on an average, to Rs. 228 and the net profit obtained therefrom is Rs. 308 as shown below:—

Expenditure.		Rs.	nP.
1. Preparatory cultivation (2 ploughings) ...	...	32	50
2. Cost of 20 lbs, of seed and sowing ...	...	3	50
3. After cultivation (one hand hoeing) ...	...	15	50
4. do. (two mammatty hoeings) ...	...	30	00
5. Cost of Endrin or Folidol and spraying twice ...	...	30	50
6. Irrigation (12 at Rs. 5/- per irrigation) ...	...	60	00
7. Harvest ...	...	45	75
8. Pulling out stalks ...	...	12	35
Total ...		228	25
Receipts.			
Cost of 4 <i>pothies</i> of <i>kapas</i> per acre at Rs. 130/- per pothy		520	00
Cost of 4 cart loads of stalks at Rs. 4/- per cart load ...	...	16	00
Total ...		536	00
Total expenditure Rs.	...	228	25
Profit ...	...	307	75

Suggestions and Recommendations

1. Some of ryots are still in the habit of raising Cambodia 2. The advantages of growing MCU. 1 in the place of Cambodia 2 should be brought home to these ryots.
 2. Many of the ryots still depend upon bazaar seeds. Sustained propaganda is necessary for the use of improved seeds supplied by the Agricultural Department.
 3. The advantages of line sowing should be demonstrated to the cultivators.
 4. Installation of electric motors in wells will reduce the cost of irrigation.
 5. Shortage of bulky organic manure is keenly felt. It is, therefore, suggested that green manure crop be grown and incorporated in the fields.
 6. The application of 200 lbs. of Ammonium Sulphate per acre in two split doses may be advocated.
 7. All the growers of MCU. 1 cotton may be advised to register their crop and sell away the produce after the entire harvest is over.
 8. To infuse the bargaining power among the ryots and to enable them to wait till the entire harvest is over, arrangements should be made to give them interest free loans.
 9. Measures should be taken to control the menace of field rats.
 10. Picking kapas in the cool hours of the morning, drying it in the sun before storage and storing the produce in rat-proof godowns should be advocated.
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