

## **Note on the Marketing of Tinnevelly Cotton.**

### **Introduction.**

What is known as Tinnevelly Cotton on the World's market consists of two distinct species identified by Gammie as *Gossypium obtusifolium* locally known as *Karunganni* cotton and *Gossypium Herbaceum* known as *Uppam* cotton. Of these, *Karunganni* cotton is the finer, longer, and stronger, but *Uppam* cotton is the whiter of the two. These cottons are grown under unirrigated conditions on deep black soils which enjoy an average rainfall of about 30 inches.

The average area grown under Tinnevelly cottons for the past five years is 674,100 acres and the average aggregate outturn marketed 97,339 bales of 400 lbs each. During the last few years an American cotton known as Cambodia has been grown in this tract on a fair scale; but it is mostly confined to the foot of the Western Ghats where it grows luxuriantly and yields heavily under unirrigated conditions. It is not infrequently found mixed with Tinnevellies on unirrigated black soils. Cambodia has the advantage of being a heavier yielder than the local cottons but is not well adapted to unirrigated conditions except on good soils where the rainfall exceeds 30 inches and is well distributed. The staple is also finer and the lint outturn higher than in the case of Tinnies.

### **Local practices in vogue for marketing Cotton.**

For the greater part the holdings in this tract are small and the ryot cultivates his own land, except in the case of Zemindari lands which, when they are not leased out in small lots to tenants, are cultivated as "*pannai*" or home farms by estate employees. It is only in very rare cases that the ryot sells his cotton direct to the local spinners or exporting firms. There are two causes which would prevent him from doing so:—(1) Because the firms generally refuse to deal in small lots of cotton and (2) because the dealer, unlike the firms, will advance him money on the standing crop on condition that the produce is sold to him. It is only the wealthier ryots, in addition to the dealers, that can afford to hold up their stocks of cotton in anticipation of a rising

market. The ryot may sell by forward contract to the dealer or he may sell at the market rate ruling on the date of delivery.

Originally all the cotton grown locally was hand-ginned. In the course of time hand gins were replaced by machine gins owned by the local spinning mills or by exporting firms. More recently small ginning factories owned by Indians have sprung up throughout the tract and their number is rapidly increasing. It is now the common practice to lease out these small gins to exporting firms. Though these small ginneries bring in handsome profits to their owners who frequently are not in the least interested in cotton, it is the experience of this Department that they act as an impediment to cotton improvement work.

As a rule, each purchasing firm has its favourite dealer who can be relied upon to deliver a specified quantity of cotton every year. But there are many dealers who supply purchasing firms indiscriminately. These latter keep in touch with the brokers of each firm and sell their stock to the highest bidder.

At the commencement of the season contracts are made with a dealer by the broker of a firm for relatively small quantities of cotton at a fixed rate. The quantity of cotton contracted for in one and the same contract averages about 10 candies of 500 lbs. Before this contract has been fulfilled a fresh contract may be made, at the same or at a different rate according to the market fluctuations. Over-deliveries on the first contract are carried on to the second contract. Allowances are frequently made for inferior quality but premiums are seldom given for superior quality.

The purchasing firms deal only in cotton, as distinguished from seed cotton. Most of these firms have their own ginning mills. A stipulated charge is made for ginning the cotton delivered against contracts made, and this charge is deducted from the value of the cotton delivered. The dealer takes possession of the seed obtained and removes it from the yards immediately after the ginning is completed. This seed is sold in retail for local consumption as cattle food or ex-

ported to other tracts for the same purpose. Though each firm prefers ginning its own seed cotton,—for clean ginning is thus ensured and profits made by charging for the ginning are thereby realised,—yet all the exporting firms will readily purchase cotton ginned elsewhere irrespective as to whether it is machine-ginned or hand-ginned. Machine-ginned cotton as a rule commands a higher price than the hand-ginned material because the latter generally contains a much higher percentage of seed. A feature of the small village ginneries is that in the absence of expert supervision the gins are seldom set properly and as a result the fibre is bruised and broken and its value materially depreciated.

Mixing of different grades of cotton is practised by all dealers, but this is only resorted to (i) in grading up cotton which would not otherwise be accepted by any firm owing to its inferior colour, or (ii) in palming off an inferior strain under the guise of “Tinnevellies.” This latter practice has become very common since measures have been adopted by the Agricultural Department to eradicate “Pulichai” cotton—an inferior strain—which all firms have refused to handle.

### **Improvements effected by the Agricultural Department in the Local Practices of Marketing Cotton.**

This Department has now been working at the Improvement of Tinnevelly cotton for some eight years. It was realised from the start that there were two key-stones, either of which would ensure the partial success of this improvement work. The one is the complement of the other. The more important of these entailed the selection and propagation of an improved strain of cotton of the local variety; and secondly, the institution of direct sales of cotton by the grower, thereby dispensing with the services of the dealer, or middleman, and assisting the dealer in appropriating the middleman's profits. It takes some 7 or 8 years to propagate a variety of cotton, originally obtained from a single plant, to such an extent that it will command the attention of exporting firms and outside markets. When this stage has been reached the profits that would be reaped by the growers of such a cotton would depend on three factors:—

- (a) Its acre-yield relative to that of ordinary country cotton ;
- (b) Its relative lint outturn ;
- (c) Its relative value ;

These three factors are noted in the order of their relative importance. Before the grower can realise the maximum profits to be made by cultivating an improved strain, arrangements have to be made by which he can market it direct to the local spinners or to exporting firms. In the case of the Tinnevely tract, this branch of the work was undertaken a few years previous to the time when the improved strains were ready for being marketed on a commercial scale. A start in joint sales by the growers was made with bulk selection Karunganni cotton. The firms are quite prepared to deal directly with the grower as long as he can bring in his produce in fair sized lots. This end can only be attained by inducing growers to co-operate by pooling their seed cotton and selling it direct to the firm under the supervision of an officer of the Agricultural Department. Having once realised the additional profits to be made from direct sales these ryots have since readily adhered to this practice which is now becoming more common every year and is about to assume large proportions. When, therefore, improved strains were placed on the market on a commercial scale (that is, to the extent of about 2,500 candies of lint of 500 lbs. in 1916), the delivery of a considerable portion of this cotton to the firms in its pure form direct by the grower was practically guaranteed. In the case of direct sales of bulk selection Karunganni cotton the excess profits realised by the grower were only those normally made by the middleman as this cotton neither commanded a premium nor was its lint outturn appreciably higher than that of ordinary Tinnies. But when he was supplied with an improved strain his excess profits included the profits made from (a) the high acre-yield, (b) the high lint outturn, (c) the premium obtained for this class and quality of cotton, (d) the premium obtained for superior quality seed to be sold for sowing purposes, and (e) the middleman's other profits which may be regarded as commission. It has been calculated that ryots who grew these improved strains of cotton last year realised



excess profits averaging between Rs. 10 and Rs. 12 per acre. And this, it must be remembered, on land paying an assessment varying from Rs. 1—4—0 to Rs. 2—8—0 per acre only. The *co-operative* sales of cotton as instituted locally would perhaps be better designated as *joint sales*. The transaction is exceedingly simple. A number of ryots are induced to deliver their seed cotton at a specified mill on a specified day. The weight of seed cotton delivered by each ryot is previously noted; the consignment is ginned in one lot; the weight of the cotton obtained is noted by the firm and payment is made at the ruling market rate for that day plus the premium offered by that firm, or at the contract rate previously arranged. Payment is made in one lump sum for the pooled consignment to a ryot who acts as spokesman for his friends. He distributes this money amongst them in direct proportion to the weight of seed cotton delivered by each. The same system of distribution is adopted with the *seed* obtained from the seed cotton, each ryot taking his proportionate share.

When once an improved strain of cotton was placed on the market some means had to be devised for ensuring its being delivered at the mills in a pure unadulterated state. It was only when the purity of the cotton could be guaranteed that the firms interested could be expected to pay the maximum premium offered by each. The necessary end was attained by instituting a system of certificates which would guarantee the purity of each consignment offered for sale. Details regarding the system of certifying cotton have appeared in a previous issue of this journal.

In 1916 the maximum premium offered was Rs. 16 per candy of 500 lbs. in excess of the ruling market rate for Tinnies on the date of delivery. The maximum premium was paid for the major portion of the cotton delivered under certificate last year. In the present season the premium has fluctuated considerably and the amount of premium now paid is invariably based on the colour and quality of the staple but mostly on colour. This year the colour and quality of practically all Tinnies is very much below the average for the past few years. This is entirely due to untimely rains when the

plants were in boll resulting in the cotton becoming badly stained and depreciating considerably in value.

The experience of other provinces in the propagation and marketing of improved strains of cotton had accentuated the necessity for adopting some such procedure as certifying of selected cotton in the Tinnevely tract. It is gratifying to note that the system instituted last year for the first time was eminently successful. But it has its limits. During last season, certificates were issued to 362 ryots. About 10,00,000 lbs. of seed cotton were thus delivered at a premium to the local firms. In the present season the system has been modified so as to entail less clerical work by issuing single certificates to members of Village Seed Unions who guarantee (a) to grow no other cotton than the improved strain offered to them by this Department, (b) to harvest it and deliver it unadulterated, (c) to sell it co-operatively or jointly (d) to pool their seed and sell it co-operatively. Since last season six such seed unions have been formed and their success for the future promises well. The assistance of the Registrar of Co-operative Credit Societies has been sought to organise Co-operative Societies in those seed union villages where Co-operative Societies were not already existent. The subjoined statement shows the progress made in Co-operative sales of cotton since the work was first instituted in this tract.

**Statement showing the Co-operative or joint sale of cotton  
during the past four years.**

Year.	No. of Villages.	No. of ryots who co-operated.	Average No. of ryots per Village.	Quantity of seed cotton so brought.	Quantity of good seed obtained.	Ample to sow about.
				lbs.	lbs.	acres.
1913	3	6	2	30,000	22,500	1,500
1914	20	63	3.1	1,32,750	97,500	6,500
1915	29	89	3.1	2,26,000	1,69,500	11,300
1916	71	362	5.0	10,04,299	7,03,002	46,900

### System of Seed Unions.

Previous to the 1916 season, the propagation and distribution of seed of improved strains of cotton devolved entirely upon the Agricultural Department who grew these strains on contract and purchased the seed cotton at a price profitable to both the grower and the purchaser. In view of the fact that the area under this type of cotton can increase about 20 fold every year the work arrived eventually at a stage when it became no longer possible for the department to handle all the cotton thus grown. In order to ensure that all the seed obtained from the crop would be utilised in the following season for seed purposes, a system of seed-unions was inaugurated whose functions have been noted above. In the past season (1916), these seed unions handled about 51,623 lbs. of seed of the improved strains supplied to them by the Department. In addition about 6,51,377 lbs. of similar seed was reserved for sale by other ryots who ginned co-operatively but who were not members of Seed-Unions. Practically the whole of the seed was sold at a premium which varied from Rs. 2 to Rs. 12 per pothie of 250 lbs. Assuming that 50 per cent of this seed has been utilised for sowing purposes and calculating at the average moderate premium of Rs. 3 per pothie then these ryots profited to the extent of Rs. 4,218—on the sales of their seed alone, in excess of the profits ordinarily realised by dealing in Bazaar Seed. By the co-operative sale of their cotton it is estimated that they made an additional Rs. 22,000 making a total of approximately Rs. 25,500. This distributed amongst 362 ryots works out to an individual average profit per ryot of Rs. 70.

The organization of seed unions is receiving special attention, for these will form a distributing agency which, when perfected, should control the supply of seed throughout the cotton tract. Assuming that the area under cotton belonging to members of a seed union averages 500 acres, then that seed union will be supplied from the Agricultural Station at Koilpatti with ample fresh seed every year to sow one-twentieth of its area under cotton. This proportionate area is designated *seed union seed-farm* and is under the direct control of the seed union but cultivated by one of its members.

The produce from this is ginned separately and the seed utilised in the subsequent season for distribution to seed union members. This seed should be ample to sow the whole of the area under cotton in the seed union village in that year, that is, 500 acres. In the next year, (that is the third year) the seed union will have enough seed to sell to all—comers, but it will continue with its seed-farm by means of which fresh blood is forthcoming from Koilpatti every year. It is proposed, in the course of time, to organise these seed unions in such a way as to control the whole of the Tinnevely tract. With the requisite organisation outlined above the supply of seed to the whole of the tract is not such a stupendous problem as it might appear at first sight. On the assumption that the area under cotton in each seed-union will average 500 acres, then each seed union would grow enough seed from this area to sow not less than 10,000 acres. And as the average area reported to have been cultivated with cotton for the past five years is 6,74,100 acres, then about 67 seed-unions should be ample to control the supply of seed for the whole of the cotton tract. This is well within the limits of practical organization provided the staff is adequate and efficient. To supply 67 seed-union seed-farms with ample seed it will be necessary for the Agricultural Department to grow improved strains of cotton on contract on its own seed-farms on an area of not less than one-twentieth of 67 times 50, or 118 acres. This is the outline of the scheme now being evolved. On paper it not only appears feasible, but relatively easy. Yet many factors have to be encountered in the villages which will make it impossible for such a scheme ever to be perfected. But though we have to work with illiterate men who mostly know the Government and its ways only through the acts of subordinate Revenue officials and who have the inherent tendency to regard all acts of a philanthropic nature with suspicion. None the less, the Tinnevely ryot is well aware that exactly sixteen annas make one rupee and when faced with a financial proposition which materially effects his interests he is amenable to reason. Once his confidence has been won, he not only readily adopts the recommendations of the Departmental officers but goes out of his way to

seek their advice. The Tinnevely ryot has learnt more in the past five years than he did in the previous fifty. He is beginning to realise that there is no longer any necessity for him to remain the dupe of the middleman. His main source of subsistence is cotton, and by marketing his cotton direct to the purchasing firm he is realising that he may now reap profits which were hitherto the exclusive privilege and the happy hunting ground of the cotton dealer.

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### **A note on the preparation of Crude nitre in villages round Coimbatore.**

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The manufacture of Nitre in India is an old industry. Though it is mostly carried on in parts of Upper India (Bihar and the United Provinces) yet it is not uncommon in the South. In many villages in and round Coimbatore its manufacture is quite a common thing. Enquiry shows that it was once the culinary salt of the people. That the people were acquainted with its preparation long ago is proved by the record by Buchanan of the fact that "In Tippu's reign, the makers of salt-petre received advances from the Government and prepared the salt-petre from the earth."

The source of this salt is the "Salt Earth" (*Tamil* uppu mannu). The wet dirty brown appearance in the morning is a characteristic indication of its presence. Lanes, *ittries*, dilapidated houses, neglected corners, stalls, mud walls and pials of villages are mostly the places where this earth is seen accumulating. It is, however a little different from the "Village Earth" or "Patimannu" used in the circars for paddy and sugarcane, for it contains little or no phosphoric acid. The occurrence of this salt in the soil is due to the decomposition of the solid and liquid excreta of cattle and man and other vegetable matter. The decomposition is brought about by two sets of Bacteria—the putrifying bacteria and the nitrifying bacteria. The former