

THE POSITION OF MADRAS IN THE TOBACCO INDUSTRY OF INDIA

BY Ch. V. SARVAYYA, B. Sc. Ag.,

Assistant to the Paddy Specialist, Madras

and Post-graduate Student in Economic Botany, Pusa.

Introduction. The tobacco plant has advanced from the status of a weed to that of a highly cultivated plant of major social and economic importance. As a source of revenue this has gradually become supreme so far as the plant products are concerned. In all civilised countries it is now an important source of revenue. The advancement of tobacco is due to its smoking qualities. A perusal of its history reveals the high place it occupied in religious ceremonies in the past, and the present high status in medical and social fields. It was introduced into India about 1605 (Watt), and the earliest experiments recorded on this crop date as far back as 1786 (O'Connor, 1873). The habit of smoking has increased so much that since 1914 there has been a sudden increase in the consumption of tobacco in the form of cigarettes.

The World position of Tobacco production. A glance at the figures of the tobacco production of the most important tobacco producing countries of the world shows the unique importance of India in the tobacco industry.

Table I. Tobacco production in the World- 1933.

Country.	Quantity in million lbs.	Percentage.
United States of America.	1298	28.2
India.	1000	21.7
China.	485	10.5
Russia.	386	8.4
Balkans.	341	7.4
Empire countries (except India).	83	1.8
Other countries.	1007	21.9
Total	4600	100.0

The above table shows that India ranks as the second largest producing country. She produced about 22% in 1926, and in 1933 28% of the total world production, and about 90% of the total colonial tobacco. The production in 1931 totalled 1281 million lbs, of which approximately 30 million lbs were exported, about four-fifths of the exports being consumed in the Empire.

Internal position of the Industry. The relative importance of the Madras presidency will be recognised when the position of the industry in the several provinces of India is discussed.

(i) *Acreage*.—Tobacco is grown over a million and a quarter of acres all over India, including the native states, the major portion being contributed by the several provinces of British India.

Table II. *Area in thousands of acres under tobacco in 1931-32.*

No.	Province.	Area in 000 acres.
<i>British Provinces.</i>		
1.	Bengal.	293
2.	Madras.	269
3.	Bombay including Sind.	155
4.	Bihar and Orissa.	141
5.	Burma.	87
6.	Punjab.	85
7.	United Provinces.	67
8.	Central Provinces and Berar.	76
9.	Assam.	14
10.	North West Frontier Province.	13
11.	Delhi.	1
<i>Total British Provinces.</i>		1141
<i>Indian States.</i>		
1.	Hyderabad.	78
2.	Baroda.	32
3.	Mysore.	25
<i>Total Native States.</i>		135
<i>Grand Total for India.</i>		1276

Analysing further, we find in the several provinces the following important districts having considerable areas under tobacco.

Table III. *The position of a few important districts.*

District.	Province.	Area in 000 acres.	Percent to total tobacco area in the Prov.	Percent to total tobacco area in India.
1. Rangpur.	Bengal	175.0	62.3	13.7
2. Guntur.	Madras.	103.0	38.1	8.1
3. Purnea.	Bihar & Orissa.	66.1	41.1	5.2
4. Vizagapatam.	Madras.	52.0	19.2	4.1
5. Muzaffarpur.	Bihar & Orissa.	41.3	25.6	3.4
6. Darbhanga.	" "	27.6	17.1	2.2
7. Coimbatore.	Madras.	33.0	12.2	2.6
8. Godavari East & West & Kistna.	" "	29.5	10.9	2.3
9. Dacca, Mymensingh, Jalpaiguri.	Bengal.	46.4	15.8	3.6

A brief explanation is necessary in the selection of the above districts from the several provinces. Items 1 to 4 indicate the districts which rank high from all considerations. Items 6, 8 and 9 are included with a view to give due importance for the agricultural tract represented by those districts (Items 1 to 4), though the area in the several districts represented by these items may be individually and relatively small. Rearranging the data according to representative

tracts e. g. Guntur, Godavari and Kistna areas, being added together as they form one tract, and similarly those of Purnea, Muzaffarpur, and Darbhanga their areas being totalled together as they form another tract, we have the following percentages of acreage of these tracts with reference to the total area in India under tobacco.

Tract.	Percentage to the total tobacco area in India.
1. Rangpur.	13.7
2. Muzaffarpur.	10.7
3. Guntur.	10.4
4. Vizagapatam.	4.1
5. Coimbatore.	2.6
6. Dacca.	3.6

It is obvious that the chief centres of tobacco cultivation in Madras contribute 17.1% of the total area under tobacco in India while those in Bengal contribute 17.3%, and Bihar and Orissa 10.7 per cent.

It will readily be seen from the following that Madras is the most important province on account of the *kind* and amount of tobacco (*Nicotiana tabacum*) grown or the 'Tobacco' of commerce, while in other tracts like Rangpur and Muzaffarpur, the tobacco grown is almost half and half of *Tabacum* and *Rustica* which are either grown for purposes of 'the Cigar' trade in the former tract, or for 'country smoking' and *hooka* in both the tracts.

(ii) *Uses of tobacco.*—It is however necessary at this stage to point out the several uses for which tobacco is put to so that the importance of the acreage of the tracts given in the table can be better appreciated. It is used for the following purposes

- (a) Cigarette.
- (b) Cigar, for refined tastes.—(of the 'Cigar Trade')
- (c) Pipe tobacco.
- (d) Beedies.
- (e) Cigar, for ordinary tastes.—(or country cigars)
- (f) Chewing.
- (h) Hooka.
- (i) Snuff.
- (j) Medicinal purposes.
- (k) Insecticidal purposes.

The order in which the several uses of tobacco have been mentioned is allotted from the considerations of financial importance. The advance of the cigarette in general favour can be made out from the world position given below.

	1907	1924	Remarks.
Cigarettes.	23.8%	58.5%	Annual consumption of cigarettes. India. { Pre war. 1000 millions { 1927 6500 cigarettes. United Kingdom 1929 42 598
Pipe tobaccos.	71.1%	40.0%	
Cigars.	5.1%	1.5%	

But as for the other items of use, though exact statistics are not available their effects are quite well recognised in each and every province. The habit of smoking is predominant all over India whether in the shape of cigarettes, cigars, beedies or hooka. The habit of chewing tobacco and the use of snuff, for which only minor quantities of tobacco are required occupy their ranks next in order. The quantity of tobacco used for medicinal and insecticidal purposes is almost insignificant. Further, since the manufacture of country cigars, beedies and hooka preparations takes place in the country side and as cottage industries, collection of their statistics is no easy task. Similarly the amount of tobacco used for chewing and snuff purposes cannot be correctly assessed. Again the demands of popular 'taste' in the several products (even in the country products) e.g. country cigars are different in different tracts. For instance, the people of Godavari, Vizagapatam, and Ganjam districts require mild flavour in the cigar as characteristic of the 'Lanka' cigars of the Godavari Dt., while those of the Kistna district appreciate a medium pungency as is provided by the Nuzvid (Kistna Dt.) tobacco. The people of Guntur and west of Guntur will not be satisfied unless the flavour be of a strong and pungent type, which is termed as bitter in the markets of Kistna districts. Similarly it may be instanced in the case of beedies, hooka and snuff as well.

When the standards of 'likes' and 'dislikes' differ so very widely even within the area of 4 to 5 adjacent districts it is not strange to expect sharply defined standards of flavour required in the 'tobacco of commerce' to prevail in the international markets. As indicated above, the volume of the tobacco trade is more towards the supplying of huge demands of the 'cigarette of the world'; naturally all attention towards the solution of the tobacco problem of India must, therefore, necessarily be directed to the improvement of the cigarette tobacco and its immediate relationship with the cultivator. The requirements of the pipe and cigar tobaccos deserve the next earliest attention.

It may appear to some that the cigar industry of India demands the earliest attention in preference to that of the cigarette. But excluding Burma, which is fairly well noted in the tobacco trade for its *cheroots*, the volume of tobacco trade of India is more in favour of the pipe and cigarette tobaccos. Many advantages, as for instance, the comparatively greater ease in cultivation and curing, the wider markets, and the higher price per pound of leaf of the cigarette tobacco, outweigh the importance of the cause of the cigar. Lastly, though not the least, the disabilities attending on the increase in duties on cigars in spite of the preference for the Empire tobacco preclude any further consideration for the cigar problem.

Having found that the problem of the cigarette tobacco claims more immediate attention, it is easy to make out that Madras is the largest

contributor towards the amount of production of the cigarette tobacco of India. In the Rangpur tract (Bengal) the tobacco grown is more suitable for cigars and *hookah*, and in the Muzaffarpur tract the tobacco grown is mostly for chewing and *hookah* purposes. So this situation makes Madras an uncompleted first in the order, where the tobacco is grown extensively for cigarette purposes.

(iii) *Financial aspects*.—A preference on Empire tobacco was accorded in September 1919 by the grant of a rebate of 1/6th of the full rate of the import duty. At that time this represented an advantage of 1 s. 4½ d. per pound of leaf. But in July 1925 the rebate was increased by 50% to one quarter of the full rate or 2 s. 5½ d. per pound and by the Finance Act of the following year the preference was stabilised at this figure for 10 years from 1st July, 1926. This preference represents in recent years more than the value of the leaf itself.

The Imperial Economic Committee, 1928 finds during the course of its labours that India has not derived much benefit from the preference. This is ascribed to some of the constitutional defects of the tobacco position in India. The committee classifies the tobacco growing colonies of the Empire under three categories.

- (a) India with a large home market and a surplus for export which though large, is yet small in proportion to the crop.
- (b) Canada and South Africa with considerable home market and considerable surplus for export
- (c) Nyasaland, Southern and Northern Rhodesia dependent almost entirely on export for disposal of their crops.

At this stage a consideration of the history of the cigarette tobacco in India helps to elucidate many points at issue. For finding suitable varieties of tobacco for cigarette purposes, the Botanical Section of the Imperial Institute of Agricultural Research, Pusa, gave extensive trial to a large number of the local varieties and found all of them to be unsuitable. The introduction of the exotic varieties from America was sufficiently experimented and it was found that Adcock would suit the Indian conditions to some extent. The later efforts were directed towards breeding better types of quality and quantity of leaf by hybridising Adcock with T. 28, an indigenous tobacco type. Meanwhile the designing of the tobacco flue-curing barn to suit Indian conditions, and for curing the leaf for cigarette purposes has been perfected since 1924. The results of the cross have been exceedingly successful in the evolution of some of the best hybrids H. 142, 156, 177, etc. which have received through tests and trials for the last 4 or 5 years.

But in Madras, though the Agricultural Department has been conducting *ad hoc* experiments since 1921 on the Agricultural Research Station, Guntur, to find out the suitability of three exotic

American varieties Adcock, White Burley etc. it was left to the hands of the Imperial Tobacco Leaf Trading Company, Calcutta, to record the further progress of the industry in Madras. The latter body took it up earnestly due to its interests in the trade, and established small model farms demonstrating better methods of growing seedbeds, curing the leaf etc. suitable to the Virginian types. The company did considerable propaganda and helped the ryot to grow Virginian types approved by them with the understanding that they would buy the leaf and which they would cure themselves in their own barns. This gradually led to the further education of the ryots, who have erected about 1400 barns (Gopalaratnam 1933) at present and learnt to cure the leaves themselves without much aid. The company has therefor automatically become a purchasing agency for the leaf, though it grows even at present quite a good area under its supervision and 'bond'.

In the light of this brief history it is easy to understand why India has not been able to derive full benefit from the preference. The want of suitable cigarette types, lack of proper methods of curing and absence of vigorous propaganda coupled with the easy buying of the leaf have all out weighed the advantages conferred by the preference and the prescribed time limit of 1936 for the preference to operate is approaching fast. It is therefore evident that India has not gained anything at all in this favourable period.

(iv) *Inadequacy of marketing facilities.*— It has been shown that the Indian Leaf Tobacco Development Company, Calcutta is the first and foremost buying agency in the market. Due to their propaganda, the area under cigarette tobacco has enormously increased. It has gained a firm stand in the cropping economy in the Guntur tract. But the provision of marketing facilities and the return of substantial profits for the ryot are yet to be realised. The I. L. T. D. Coy. being the solitary purchasing agency in the market till very recently, the ryot has been getting poor returns. When India is paying Rs. 2-8-0 to Rs. 3/- per pound of imported Virginian leaf, she is not able to pay a flat rate of even 12 annas per pound of her home-produced leaf, which as some authorities and tobacco experts conscientiously feel, approaches very near in body, flavour etc. to that of the imported leaf; and it is surprising that the price of the home produced stuff is kept at an incredibly low figure of a flat rate of 5 to 6 annas which is only a tenth of the price of the imported leaf. When the condition of the home market is so very deplorable, it is easy to visualise the state of Indian tobacco in the foreign markets.

Want of proper knowledge on the part of the ryot in correct methods of curing, grading and packing, the way in which the bales are presented for sale, and the lack of any interested organisation in the United Kingdom (the largest market for tobacco) to sponsor the

cause of the Indian tobacco do all prejudicially affect the market for Indian tobacco.

It is only of late that a few enthusiastic purchasing agencies have sprung up in the indigenous market; and a few more cigarette factories go to help the ryot to clear his produce. It is hardly understood whether this is all enthusiasm or money which is largely required in a substantial beginning of cigarette manufacture and allied branches of the tobacco trade.

It is painful to recall the days of 1928-29 when some of the chief purchasing agencies were paralysed due to some cause known only to themselves, and a difficulty was experienced to dispose the leaf in the hands of the ryot. It was lying in stock with him for over an year and the country (deshi) market could not find a way to help it. The ryot was hardpressed both for money and space in his humble hut, when the local Agricultural Department wisely advised him to use the stuff for manuring the paddy fields.

(v) *Cropping economy.*—It will be interesting to study the progress of the tobacco industry in the Guntur tract and incidentally the effect of the rebate of import duty on the industry. The progress will, as with any industry, be reflected in the acreage under tobacco which is noted below. The figures of the Guntur district alone rather than of the tract, are given to present a clearer perspective of the situation.

A. Pre-preference period.

Year.	1911-12.	12-13	13-14	14-15.	15-16.	16-17.	17-18.	18-19.
Acreage in thousands of acres	50.4	57.4	65.7	78.6	52.8	54.4	58.3	85.4
Mean acreage per year—62.9.								

B. One-sixth rebate on import duty.

Year.	1919-20.	20-21.	21-22.	22-23.	23-24.	24-25.	25-26
Acreage in thousands of acres	70.4	55.0	38.5	60.9	64.5	99.7	70.5
Mean acreage per year—65.6.							

C. One-fourth rebate on import duty.

Year.	1926-27.	27-28.	28-29.	29-30.	30-31.
Acreage in thousands of acres	66.3	110.3	98.2	100.6	65.3
Mean acreage per year—88.1.					

Though this indicates the growth in the area under tobacco, it is difficult to estimate the area under cigarette tobacco for want of adequate statistics, one of the great obstacles in the correct estimation of

the agricultural improvements in India. But the seasonal notes of the Madras Agricultural Department help us to some extent out of this impasse.

Year.	Acreage under cigarette tobacco.
1924-25.	5000 acres.

The increase in total area under cigarette tobacco and tobacco in general is therefore mainly the direct result of the Imperial preference for colonial tobacco. But the interactions of the other crops manifested in their prices in the trade, which immediately affect their acreage and consequently of other crops like tobacco in the rotation contribute no mean quota towards the increase of acreage under this crop. For example, tobacco was running a race with groundnut and cotton and at times chillies in the Guntur tract. In 1925-26 tobacco sowings were restricted in parts of Kurnool as the groundnut prices were more favourable. In 1926-27, 27-28 cotton was replaced to some extent by tobacco in parts of Guntur and Coimbatore; and groundnut continued to replace tobacco in Kurnool. In 1929-30 chillies was partly ousted by this crop. In 1930-31 tobacco was replaced in Guntur by other crops, as heavy stocks of leaf had been carried over from the two previous years resulting in slack buying of the leaf by the companies. Space will not permit to go into further details of the interactions of the other crops and other factors effecting the prospects of this crop, which, by its immensity and complications demand a separate study by itself. It will thus be seen that a large number of factors have been affecting and are likely to effect the prospects of this crop, which is just in the infancy of its expansion.

3. Scope for Future Expansion of the Tobacco Industry in Madras (a) Acreage:—Time has sufficiently proved that the climate of the Madras presidency is quite suitable for the cultivation of tobacco in the three chief tracts (1) Guntur comprising Guntur, Kistna and Godavari East and West districts (2) Vizagapatam, (3) Coimbatore. Their normal acreages under tobacco are

Guntur tract.	132,500 acres.
Vizagapatam. ..	52,000 ..
Coimbatore. ..	33,000 ..

The soils and conditions selected are also such that the crop suffers from few diseases as compared to other parts of India. Of the above it is only in the Guntur tract that extensive replacement of the indigenous tobacco with cigarette types has taken place due to the benevolent efforts of the I. L. T. D. company. The substitution has first to be stabilised before further expansion can be sought for. A firmer stand of the cultivation of the cigarette tobaccos in the presidency will be obtained only when the ease of sale and favourable prices are established. Towards achievement of these, some suggestions are tentatively discussed in a later para.

The replacement of the indigenous types in the Guntur tract can be furthered conveniently in such tracts as the Nuzvid and 'lanka' lands of the Kistna and Godavari districts. Nuzvid is noted for the production of mild flavoured tobaccos of the bright type, due to the light loamy soils of lighter colour. The lanka lands used to be auctioned on temporary leases; and the name of Mr. T. H. Barry, which is quite familiar to many, is associated for a long time with the cultivation of tobacco on these lanka lands. Unfortunately the propaganda and introduction of the cigarette tobaccos were not very vigorous then; or else these lankas would have been the nuclei of the cigarette tobacco plantations long ago. The soils are well drained light sandy loams retentive to moisture due to the silty nature of the soil and are frequently recouperated with silt in the flood time. The cool moist breeze in the day time from the Godavari river helps the crop to grow in excellent condition. These lands and old river and tank beds prove to be the best situations for the cigarette tobacco. The increasing patronisation of the L. L. T. D. Coy has kindled an extension of the tobacco cultivation in the bank canal area along the river Kistna in the villages of Parimi, Nerukonda etc.

The soils of the Vizagapatam district are light sandy loams. Though in general the soils of the Coimbatore district are heavy either being black cotton soils or red clayey loams attempts may be made to extend this crop on the lighter soils along the valleys and banks of the Noyal and Amaravati rivers. As the tobacco grown in Coimbatore district is largely by irrigation from wells, whose water is not so sweet as desired for the production of good cigarette tobaccos, it is worth while to plant tobacco, after a fallow, in the south-west monsoon season during which period the moisture is carefully conserved. As the climate of Coimbatore district is very well suited to the production of the high class cigarette tobacco by virtue of milder temperatures (the maximum temperature not rising far above 100°F in the hottest summer as compared to the climate of Guntur), more cloudy days in the year, and absence of winds which frequently visit Guntur in the growing period of tobacco a detailed survey of the tract to find more suitable areas for further extensions of this crop is worth the trouble. Tobacco produced on the red and black soils of the district may compare favourably with that in the Guntur district.

When the replacement of the indigenous types in these tracts has progressed to a large extent, it is not difficult to find suitable areas in other tracts as Madura, Kurnool and Arcot districts.

(b) *Suitable cigarette types.*--The extensive studies of the Botanical Section, Imperial Institute of Agricultural Research, Pusa, have resulted in the production of good cigarette types, e.g., H. 142, 156, 177; and these have won appreciation all over India for quality and

quantity of leaf per acre. Harrison's special of the I. L. T. D. Coy. has been found equally satisfactory and it is already largely grown.

(c) *Suitable designs for flue-curing barns.*—The initial difficulties of finding the suitable designs of barns have been overcome; and the large number of barns erected by the ryots themselves is a testimony to their intelligence. The Guntur ryot now-a-days feels the handling of the tobacco crop very easy, as with the help of barns the whole crop can be cured and prepared ready for bulking within a much shorter time than by the tedious process of rack curing in elaborate sheds resulting in lower net returns. During the off-season the barns are useful for seed-storing and other useful purposes.

(d) *Organisation for the disposal of the crop.*—The organisation must be built on sound economic premises. The stabilisation of any industry requires the development of a good home market with considerable surplus for export. It is most advantageous if the requirements of the home market do not clash with that of the foreign market, as in the event of the commodity not being able to find a ready sale in the foreign market, the home market must be able to consume the stuff. The problem may be studied under the two principal items.

(i) *Development of good home market.*—The steady growth of a good home market for cigarettes has already been indicated. In the earlier years a good amount of Virginian tobacco used to be imported into India for the manufacture of high class cigarettes.

Year.	Import of Tobacco into British India.	
	Quantity in lb.	Value in Rupees.
1928	10,498,497	Rs. 2,62,53,596
1929	10,690,846	2,65,40,564
1930	6,311,446	1,82,15,805
1931	4,980,241	1,23,00,048
1932	5,104,274	89,38,767

These figures indicate that the import of tobacco into British India is getting reduced gradually as a consequence of greater usage of home grown tobacco in the high class cigarettes.

With the increase in the import duty on tobacco, for the high class cigarettes, from April 1934, the quantity of imported tobacco will be reduced still further. Evidently the local manufacture has very well adapted itself to the greater use of Indian tobaccos in high class cigarettes.

The establishment of a large number of cigarette manufacturing concerns appears to be a secondary symptom of the growth of a strong home market.

Internal organisation of the market.—It has already been indicated that I. L. T. D. Coy. is the chief controlling factor in the market. The presence of such a strong firm in the market hampers the free growth of other newly established concerns. Consequently the ryot

is also at a disadvantage in not being able to effect a keen competition among the purchasing concerns so as to realise a fair price for his produce. Such a difficulty has already arisen in the case of the sugar industry, and it is wise to anticipate such a difficulty and devise suitable measures to protect the interests of the ryot and the manufacturer as well.

Such a situation may be improved by restricting (by Legislation) the quantities in the several grades of leaf purchased by the several purchasing concerns. Limits of their purchasing capacity both as regards the quantity and the prices paid to the ryot per pound of leaf may be fixed. The limits of quantities will of course be fixed from considerations of individual capacity for manufacture. This will be of advantage from many points of view :

1. It will allow a free growth of new concerns.
2. It will guarantee a minimum price to the ryot.
3. Since the quantity is limited, purchasing at a lower price and over-stocking leading to duller demands in the subsequent years and attendant effects are averted.

4. Since the quantity is limited, the ryots will begin to appreciate the production of only the best tobacco for sale on good suitable lands. This will automatically check the spread of cultivation on unsuitable lands. If necessary the quantity may be revised with the increase in the consumption of tobacco in the market.

5. Since the quantities in the several grades will be specified, the ryot will be able to exercise better judgment in grading; and the manufacturer is prevented from the bad practice of purchasing the best and rejecting the poorer stuff.

6. In view of unchecked growth of newer concerns, some more concerns will be established from the considerations of the profits the older concerns are making.

7. The manufacturer will be obliged to make use of all the stuff from the several tracts and blending will be developed to the highest pitch of excellence so as to accomodate all the kinds of leaf in his brand. This is a feature of far reaching consequences. It is seldom that the desired standard of flavour is found in any one tobacco, and blending is done from the stand point of

- (a) Economy.—A certain proportion of a perfect flavoured but high priced leaf is used to give quality and character to a cheaper tobacco with all the requirements except the flavour.

- (b) Safety.—If but only one tobacco be used in the manufacture of a particular brand and at any time this particular tobacco does not become available, the substitution of an entirely different tobacco at such a time would ruin the established reputation of the brand by changing its character. Four or five or even more grades of leaf are

blended together and the substitution of a different grade for any one of them does not radically change the character of that blend.

In the event of the adoption of efficient blending the capabilities of the individual concerns in the production of high class cigarettes will depend on the usage of correctly aged leaf, expert knowledge of flavouring and usage of efficient machinery etc. These will stimulate healthy competition among manufacturing concerns in the adoption of the best methods of manufacturing cigarettes. This will naturally prevent newer concerns from the temptation of using insufficiently aged leaf so as to make quick turn overs in the capital. Those concerns already equipped with all the necessary requirements for the production of high class cigarettes will earn larger profits till the newer concerns equip themselves efficiently,

8. When the quantity to be purchased by the firms is limited, the acreage will also be limited and this will naturally lead the ryots to form co-operative organisations for fixing up the areas among themselves. This will bring in judicious rotation, which in its turn helps to check the pests and diseases of the crop.

(ii) *Development of considerable surplus for export.*—The foreign policy of any industry must be guided on well-judged lines. One of the indirect results of the grant of preference to the Empire countries is not only to increase the inter-Imperial exchange of commodities, but, by stimulating the total production of goods of high quality at an economic price within the Empire, to place the Empire as a whole in a more favourable position for trading with the rest of the world.

The growth of the exports of tobacco to the United Kingdom can be gauged from the following:

Year.	Quantity in million lbs.	Average.	Quantity Used for Pipe Tobaccos.	Cigarette & Cigar.
1919	3.8	One-sixth rebate period.		
1920	9.6			
1921	1.4	5.6		
1922	3.9			
1923	4.6			
1924	8.4			
1925	7.8			
1926	11.9			
1927	8.4			7.7

This shows that most of the Indian tobacco is used for pipe tobaccos in the United Kingdom.

Further the following figures corroborate the fact that the colonial tobacco is coming into the cigarette market very recently, while a major portion is being utilised for the pipe tobacco.

Consumption in the United Kingdom.

Year.	Pipe tobacco.		Cigarette tobacco.	
	Colonial.	Foreign.	Colonial.	Foreign.
1924	22%	78%	...	100%
1927	37	63	1%	99
1932	65	35	10	90

These figures will mean that the colonial tobacco is being largely used in the pipe tobaccos, as the production of proper cigarette tobacco commenced only after sufficient researches, stimulated by the Imperial preference.

It is therefore clear that the production of tobacco suitable to the pipe is a safe policy, while a slow and steady policy must be pursued in the improvement and export of cigarette tobacco.

Having realised the position of India in the world markets we will proceed to study the requirements of the pipe tobacco trade.

Pipe tobacco trade.—For pipes a less bright leaf with less fine texture is required than for cigarettes. Some pipe mixtures contain a certain proportion of cigarette tobacco but a typical pipe tobacco is usually unsuited for cigarettes. In some kinds, however, it is possible to use certain of the leaves of the plant for cigarettes, while others are suitable for pipe tobacco.

However a distinction can be drawn broadly between cigarette and pipe tobaccos. Thus among American growths the brightest coloured tobaccos grown chiefly in the states of Georgia, north and south Carolina and to a lesser extent in Virginia are mainly used for cigarettes; while the darker tobaccos of the states as well as those of Kentucky and Tennessee are used for pipe and chewing.

Similarly the leaf of tracts like Saharanpur (U P.), Dalsingsarai (B. & O.), and Guntur may be used for cigarettes, while the darker shades of Guntur and other tracts e. g., Vizag and Coimbatore may be, for the present, used for pipe tobaccos.

The market for pipe tobacco is less fastidious than that for cigarette tobaccos. Moreover in the blending for pipe tobaccos a wider range of varieties and growths may be used than in blending for cigarettes. Thus it is easier for a tobacco from a new country to be tried in pipes than in cigarettes.

Cigarette tobacco trade.—Reviewing the position of cigarette tobacco it will be found that care of type and quality is of especial importance in cigarette tobacco, for in that section of the trade, American competition is likely to remain severe as the cigarette smokers appear to be more closely wedded to their favourite smokes than pipe smokers.

Indian growers of cigarette tobacco have not merely to meet the price competition from America but have also to persuade the British smoker that they can supply him with the type of leaf he likes. Given enterprise and a little time the distinctive flavour of the Indian

cigarette tobacco and the conservatism of the British smoker can be changed to some extent. There are several instances on record of considerable changes of prevalent tastes in relatively short periods. For example, in the United Kingdom there has been a large change from the cigarette of the Oriental to that of the Virginian type. In South Africa, cigarettes made of imported American leaf have been practically ousted by those made from the local leaf. A parallel change has taken place in United States of America where cigarettes of blended tobaccos of Virginian and Turkish types are gaining ground at the expense of those of pure American. "The prevalence of a taste for a particular tobacco is largely a matter of fashion and fashions are notoriously changeable."

It is none the less incumbent on the producer to endeavour to supply a tobacco to the British market by doing least violence to the established tastes, if only to shorten the distance through which the popular taste must travel in order to establish the new tobaccos in favour.

Having examined the requirements and positions of the pipe and cigarette tobacco trades, we shall proceed to discuss the organisation required for the guidance of the trade in proper channels leading to the best interests of India. As the tobacco trade is mainly concerned with fashions and tastes, quality of a high order in the produce is of the utmost importance. Further to sustain the interest of British firms in the Indian tobacco the quality must be kept up from year to year to certain standards of excellence. Such steady continuance of keeping up the quality must be entrusted to some agency which is not interested in the immediate profits of the business concerned, but in the slow and steady growth of trade of Indian tobacco in the world markets. That India, with her production of 1000 million lbs. (Table I.), second only to U. S. A. cannot possibly maintain a high rank in the world markets inspite of her vast resources of soils and climates reflects only on the lack of proper direction and organisation than to any of her inherent defects.

So to improve the position of the trade the purchase and sale of the leaf must be in the hands of some interested body; *e. g.* Government, the Imperial Council of Agricultural Research, or some Trade Commission organisation. In the absence of efficient advertisement and backing up of the cause of the Empire products by the Empire Marketing Board, intervention of some such public body is absolutely essential. The purchase may be effected to their approved standards either by private bodies, co-operative agencies or the tobacco firms most conveniently on commission basis. The leaf after having been collected and pooled at a central place, proper grading, drying and packing shall have to be done under the supervision of the purchasing agency recommended. This agency can establish suitable

connections or similiar agencies in the world markets (e. g. United Kingdom to start with) to work up the interests of the trade.

1. By such an agency the tone of the markets can be correctly studied and the amounts of the exports can be properly restricted to the demands of the market consistent with ultimate larger profits. Heavy stocks in the market will lead to dullness of demand and the disfavour of the stuff.

2. This arrangement coupled with that for local consumption will prevent the practice of larger buyers purchasing the leaf in the country of production (India). The act of larger buyers in buying the leaf in India in favourable years and stopping away therefrom is not conducive for sustaining the interest of the British smoker in the Indian produce.

3. To stimulate the demand for Indian tobacco it is possible only through such an agency to adopt any measures of striking a reduction in the price at which the goods are offered to the public. To meet any loss in the transaction any little cess raised on the Indian tobacco smoker will be able to keep such a central agency from any financial obligations.

4. It is through the medium of such an agency only, that sufficient scrutiny can be exercised on the proper usage of the Indian tobaccos in certain brands of cigarettes as opposed to the probable practice of the manufacturing concerns substituting high grade Indian tobaccos for Virginian leaf and put the lower grades into "Empire Brands" thereby indirectly discrediting the colonial stuff.

5. As the Indian tobacco will prove cheaper than the American on account of cheaper costs of production and preferential tariff it will be possible to sell the product from Indian leaf at a lower price, which during these days of economic depression must naturally attract the smoker if only the standards of excellence are kept up to those of the well established brands of cigarettes.

There are many such advantages in entrusting the purchase and sale of the Indian leaf in the hands of a central agency.

4. Conclusion. India with her large amount of production has been found to have relatively little surplus for export. The Guntur tract has been found to be the chief place of production of leaf which is largely consumed in manufacturing home-made cigarettes and in the export to the United Kingdom for the manufacture of pipe tobaccos. In discussing the internal position of the Industry some of the disabilities existing at present have been found to explain why India has not made much benefit from the Imperial preference of 1919 and 1926. The scope for the future expansion of the tobacco industry has been examined and tentative suggestions have been made for the organisation of the trade both for home and foreign markets.

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Appendix.

District.	Normal acreage.	Yield per acre (dry leaf) 1931—32.
1. Guntur.	103,000	1313 lbs.
2. Vizagapatam.	52,000	1119 "
3. Coimbatore.	33,000	1128 "
4. East Godavari.	14,500	1235 "
5. Madura.	10,000	1152 "
6. Kistna.	8,000	1404 "
7. West Godavari.	7,000	1157 "
8. Kurnool.	7,000	1090 "
9. Anantapur.	5,000	860 "
10. Salem.	5,000	1140 "
11. Ganjam	3,000	960 "
12. Trichinopoly.	3,000	1152 "
13. Bellary.	3,000	890 "
14. North Arcot.	3,000	970 "
15. Ramnad.	3,000	1164 "
16. Nellore.	2,600	1144 "
17. Tanjore.	1,900	960 "
18. South Arcot.	1,700	890 "
19. Cuddapah.	1,500	940 "
20. South Canara.	1,400	1164 "
21. Tinnevely.	1,300	1068 "
22. Chittoor.	500	1070 "
23. Chingelput.	50	1010 "
24. Malabar.	50	720 "
25. Nilgiris.	50	816 "

TOTAL. 27,550 acres.

YIELD. — Normal average for the Presidency — 1195 lbs. per acre.
Ranging from 1,000 to 1,300 lbs.

THE PREPARATION OF TIRUPATTUR DHALL

BY Md. ABBAS, B. Sc. Ag.

Agricultural Demonstrator, Tirupattur.

Introduction. Dhall is largely consumed by vegetarians in different forms either as such or in combination with vegetables etc. Red gram (*Cajanus indicus*) from which dhall is prepared occupied 28,88,98 acres in this presidency according to season and crop report for 1932-33. Out of this, North Arcot district had 21,958 acres, of which Tirupattur