MODERN METHODS OF TEA GROWING AND PROCESSING

The following description of current tea manufacture methods was obtained from a Tea Manager in Assam in 2001. Film of the processes which he describes can be seen on the ‘film’ section of this web-site.

Pickers take the first two leaves with the bud. The first flush is in March when they pick for 2-3 weeks with a short dormant spell before the second flush in May-June when they pick each of those months. There is also an autumn flush in November-December when they pick for a further 2-3 weeks. The rest of the time the bushes need to be weeded and pruned so they do not grow too long. In all, there is a ten month cycle and in the other two months the machines and factory are cleaned, repaired and painted. Orthodox (rolled) tea has a different production cycle.

Lorries bring tea from the garden to the factory. The process of making the dried tea leaf starts with the fresh leaves being emptied into troughs where they are allowed to go flaccid and dry a little before being moved on by human labour. This starts the process of breaking down the cells after which there is a 6-14 hour withering period using a rolling table or rotor wain. Oxidisation occurs when the cells are disturbed so the process is to literally break down the leaf. Fine tea is invariably CTC (prepared by the cut, tear, curl method) which sums up the stages. The rollers used are based on those used in flour mills and consist of a series of cutting edges that have to be kept sharp. These were introduced in the late 1950’s and 1960’s. Cutting and tearing gives a higher concentration of tea by volume. Both orthodox (rolled tea) and Darjeeling have less processing as the leaf is not cut so much and makes a weaker tea.

The CTC process takes 25-40 minutes and after that the marl, as it is now called, is allowed to cool so that the oxidation process can continue. Temperature is crucial here for if it exceeds 35 degrees centigrade then the marl will be spoilt. So cold air is blown onto the marl while it moves along a conveyer belt. Marl used to be left on the floor to oxidise but it was difficult to check the speed of oxidisation when in heaps. There is no machine that can tell when fermentation has finished. It is left to the skill and experience of the manager and his staff to halt the process at the right time before drying. This can take 45 minutes to 2.5 hours. The dryers are used to arrest the oxidation process. In the dryers, hot air blows through the marl and the chaff is separated from it by suction. Then it is run through rollers that are covered in plastic that creates static electricity to attract finer dust particles. The cleaned dried tea is sifted by size into different containers. Tea dust itself is wrongly assumed to be of very poor quality, but it can be better than others can as it dissolves faster in hot water and is much more concentrated. So it gives many more cups per leaf than ordinary tea.

The tea piled in this factory was worth 105 crore rs. and would fetch about 100rs. per kg at auction [approximately 70 rupees to the £]. This garden is among the top 25 in Assam. From here, 37% is exported. The year 2001 has been a bad one for tea and the price had slumped at auction. Indian tea used to be sold in Pakistan and Afghanistan. Now the border was sealed and Pakistan was buying tea from Sri Lanka. Good tea production in India had slumped 10%, poor teas by 25-40%, due to competition from elsewhere.