



Situation Analysis for SME Sector

Jorhat Cluster

*Submitted to
TERI*

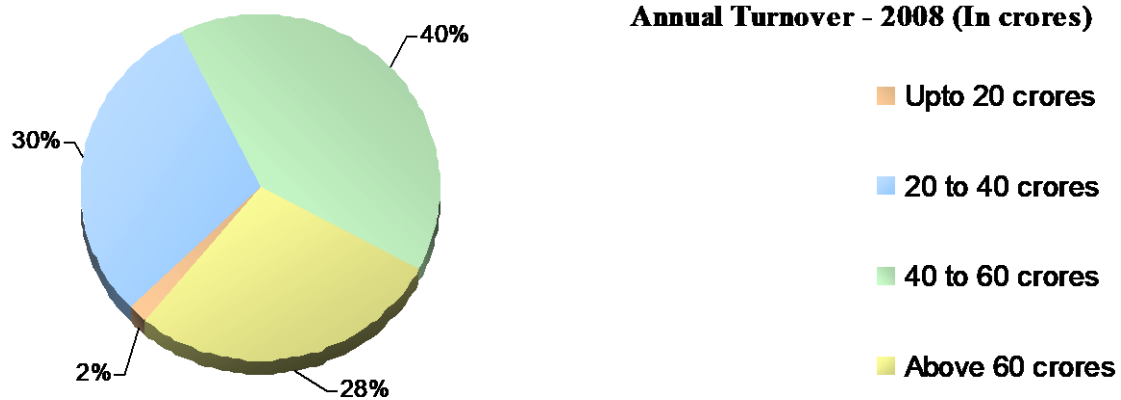
By

 **ACNielsen ORG-MARG**

SUMMARY OF FINDINGS

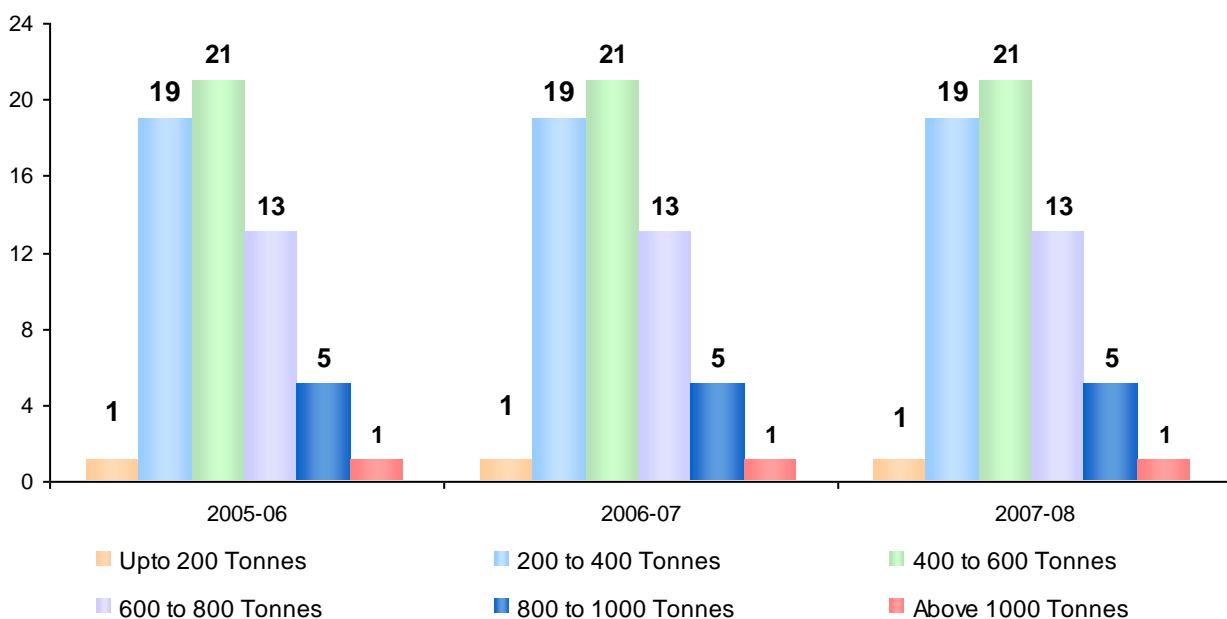
- There are approximately 55 units spread across the tea processing cluster of Jorhat.

➤ **ANNUAL TURNOVER**



➤ **PRODUCTION**

Annual Production (In Tonnes)

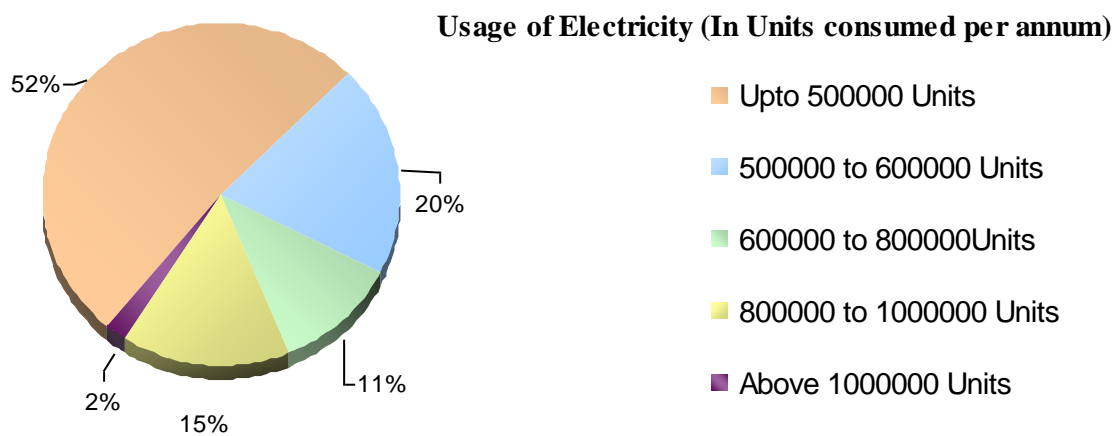


➤ **ENERGY REQUIREMENTS**

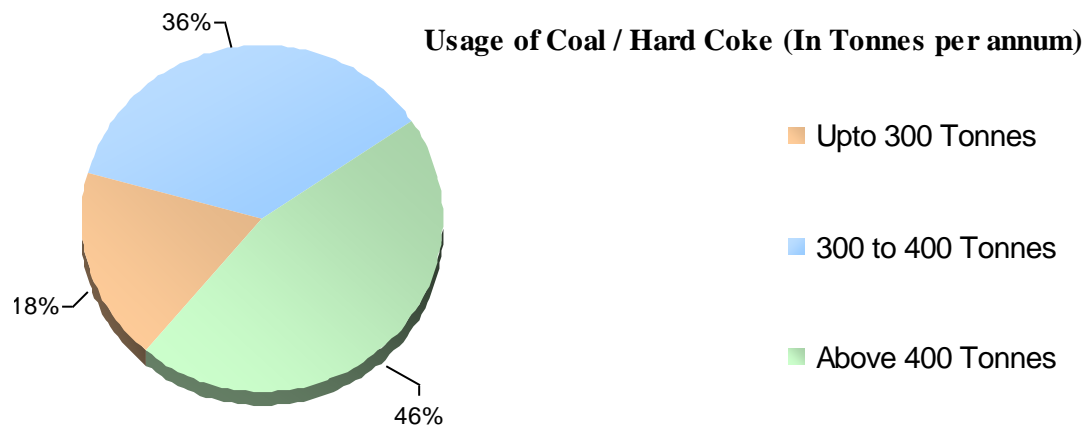
• CUMULATIVE FUEL USAGE

	<i>Qty consumer per annum</i>	<i>Number of Units using the fuel</i>
<i>Electricity</i>	<i>40041600 Units</i>	<i>60</i>
<i>Coal / Hard Coke</i>	<i>8460Tonnes</i>	<i>22</i>
<i>HSD</i>	<i>5235600 Liters</i>	<i>60</i>
<i>LPG</i>	<i>95190 Tonnes</i>	<i>52</i>

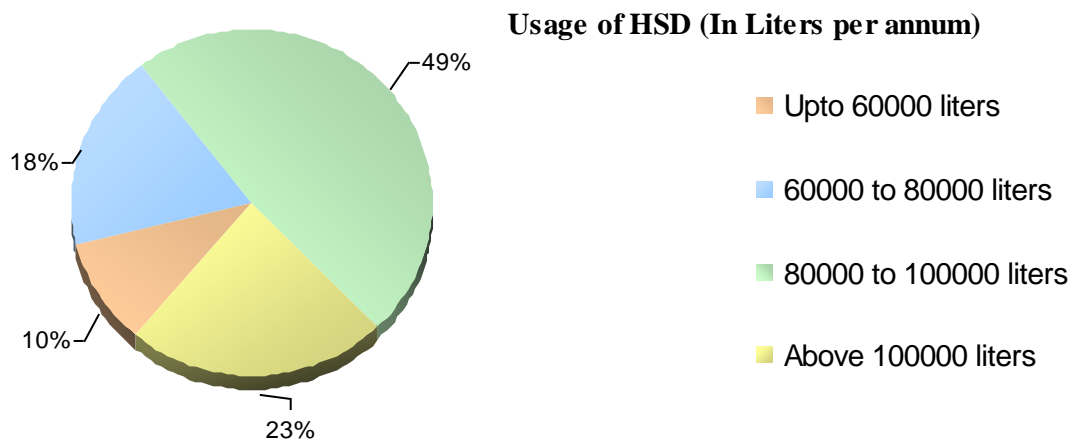
• USAGE OF ELECTRICITY (IN UNITS CONSUMED PER ANNUM)



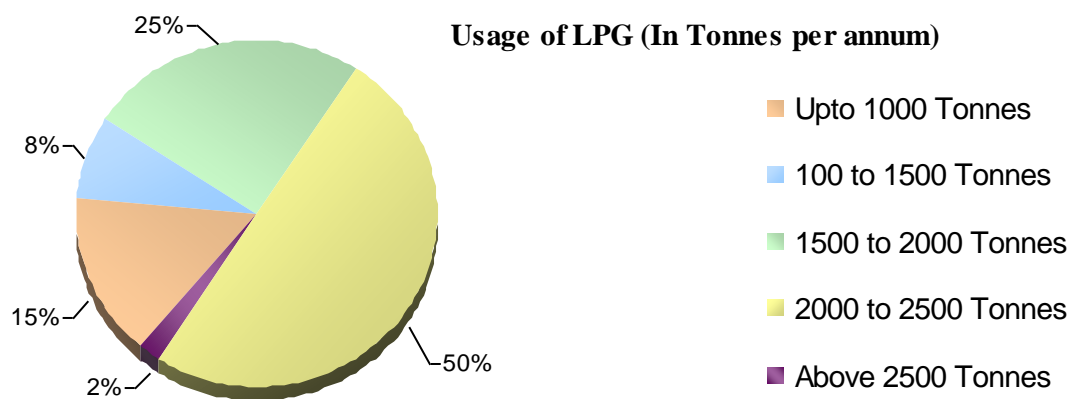
• USAGE OF COAL / HARD COKE (IN TONNES PER ANNUM)



- USAGE OF HSD (IN LITERS PER ANNUM)



- USAGE OF LPG (IN TONNES PER ANNUM)

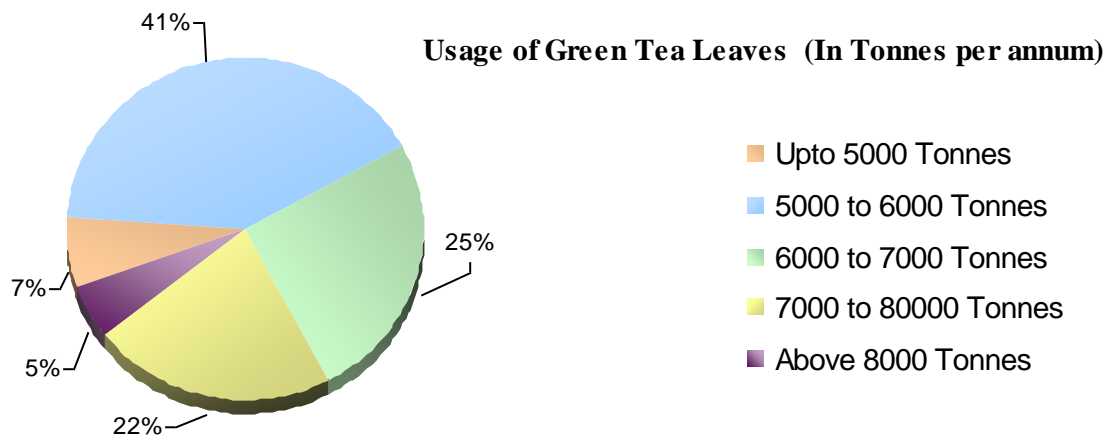


➤ **RAW MATERIAL REQUIREMENT**

• CUMULATIVE RAW MATERIAL USAGE

	<i>Qty consumed per annum</i>	<i>Number of Units using the raw material</i>
<i>Green Tea Leaves</i>	<i>374580 Tonnes</i>	<i>59</i>

• USAGE OF GREEN TEA LEAVES (IN TONNES PER ANNUM)



FIELD OBSERVATIONS

- Jorhat is famous for tea gardens.
- The factories, with processing capacity range from 200 kg to 1,000 kg a day.
- Maximum units are functioning from last 20 to 25 years
- The manufacturing process is more or less mechanized & the units are running in 3 shifts
- Major energy consuming equipment is Driers
- The total energy cost is app 20% of the total production cost.
- The units get the supply from Assam State Electricity Board. All the units are having grid connection & power is available for 24 hr. The per unit rate is Rs. 4/-.
- Some units are having alternate power source -DG sets.
- The units
- Labour is not an issue as local labour from nearby villages is available.
- Naga Liberation front - NNSG is a major problem and threat.

Major equipment required for Tea processing

- Cutting, Turning & Curling, (CTC operated by 4 motors, The motor capacity maximum 80 HP.)
- Driers - FVD Driers (Vibro Fluid Driers)
- Quality Driers
- Roller (Operated by 2.5 hp motor)
- Withering (Withering two type - Open Traff & Closed Traff. Withering used for removing moisture from green leafs. In open traff time taken 10 to 16 hr. & in closed traff time taken 6 hr. for removing moisture.
- Motors (Kirloskar, Comptron)
- Conveyors

Raw materials

Tea leaf (Collect from local garden, maximum have own gardens.)

Finish products

- ❖ Black Tea
- ❖ Dust Tea (The smallest and usually lower quality grade of tea commonly used in commercial teabags.)
- ❖ Green Tea

The Processing of Black Tea

The processing of black tea requires full oxidation of the leaves. After the leaves are plucked, they are laid out to wither for about 8 to 24 hours. Most of the water is evaporated.

Then the leaves are rolled in order to crack up the surface so that oxygen will react with the enzymes and begin the oxidation process. The leaves are left for complete oxidation, thus turning the leaves to a deep black color.

After that, a final drying takes place. From there, it goes off to be sorted, graded, and packed.

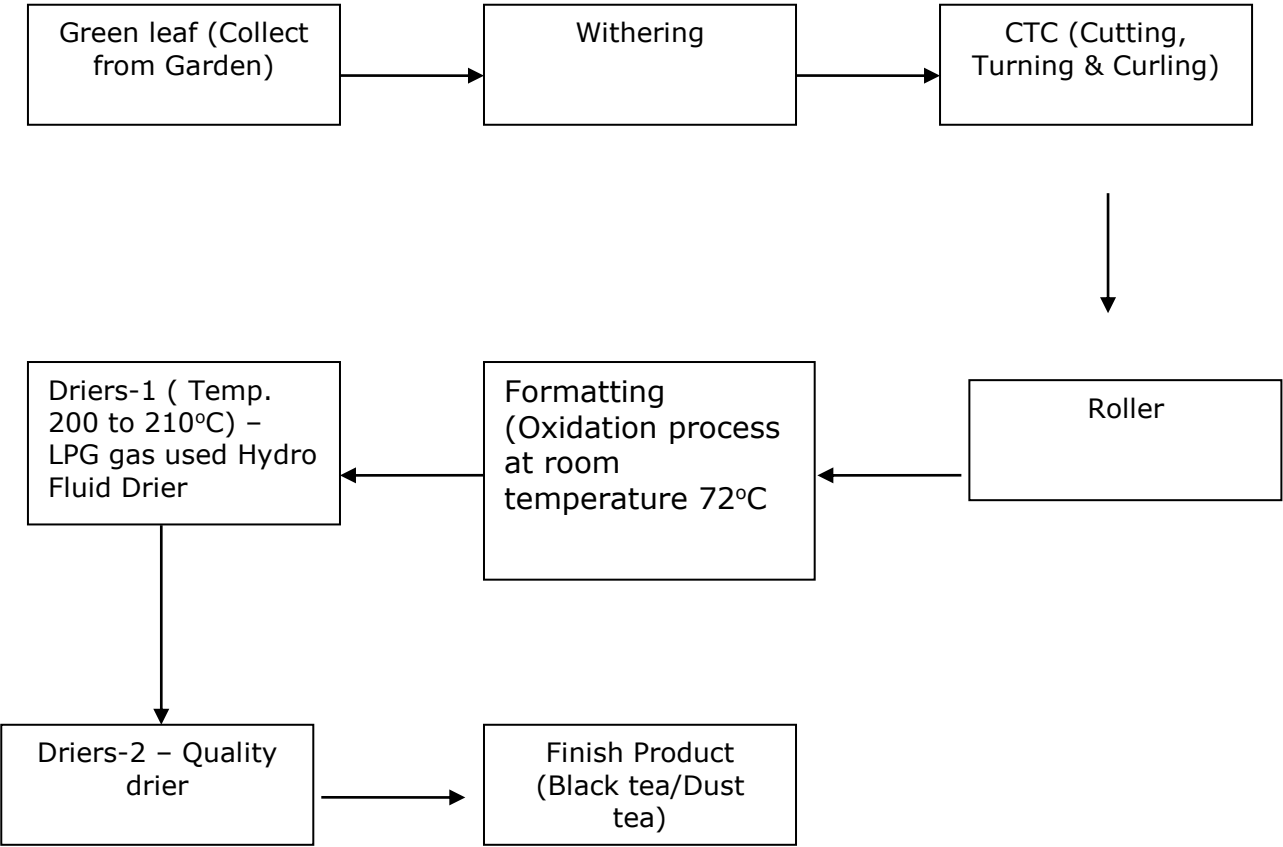
The Processing of Green Tea

The processing of green tea is similar to that of white tea in that it does not oxidize. After the leaves are plucked, they are (sometimes) laid out to wither for about 8 to 24 hours. This lets most of the water evaporate.

Then, in order to neutralize the enzymes thus preventing oxidation, the leaves are steamed or pan fried.

Next the leaves are rolled up in various ways and tightness. After that, a final drying takes place. Since no oxidation takes place, the tea has more of a green appearance. From there, it goes off to be sorted, graded, and packaged.

Process



SERVICE PROVIDERS

Equipment supplier

Andrew wood
Four mango lane,
Kolkatta-1,
Mr. Surendra Mohan Gosh

Marshal Tea Process ltd
Kolkatta-1,

Kiran Meters
Hospital road,
Tezpur-784001, Assam
Ph-03712-221714,230952

Das Vulcanizing Works
At - Mariani,
Jorhat
Mr. Tapan Das

Punjab Engineering Company
Mariani Road, Rajabari,
Jorhat,
Assam - 785 014
Ph-0376-2323380
Mr. Rajgurmeet Singh

Fuel used

LPG	-	Supply by ONGC
Char coal	-	Supply by Tinsukia coal mines
Diesel	-	Supply by Assam Oil.

Association

Tea Research Association (TRA)

Tocklai Experimental Station Jorhat -785 008

Ph-0376-360467

Assam Tea Planters Association

A.T.Road, Tarajan, Jorhat

Ph- 0376-2371557

Bankers

- ✓ Though there are several banks none of the units are associated with the banks

KANAKLATA Mahila Urban Co-operative bank

Jorhat Unnayan Bhavan, A.T Road, Jorhat, Ph-0376-2322436

Union Bank of India

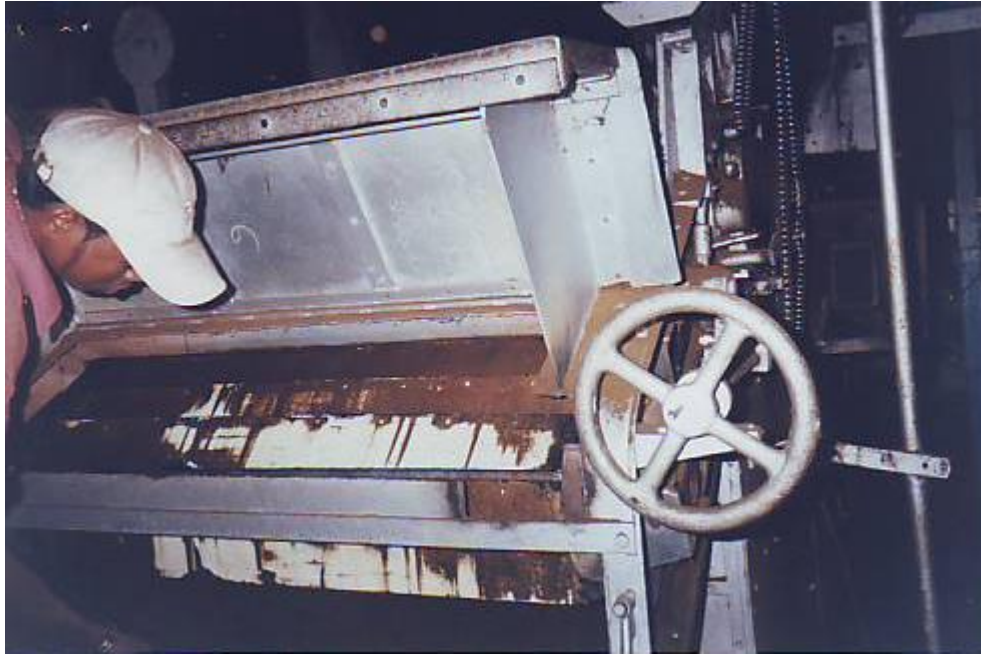
A.T. Road, Jorhat, ph-2320545



Tea Garden



Tea garden



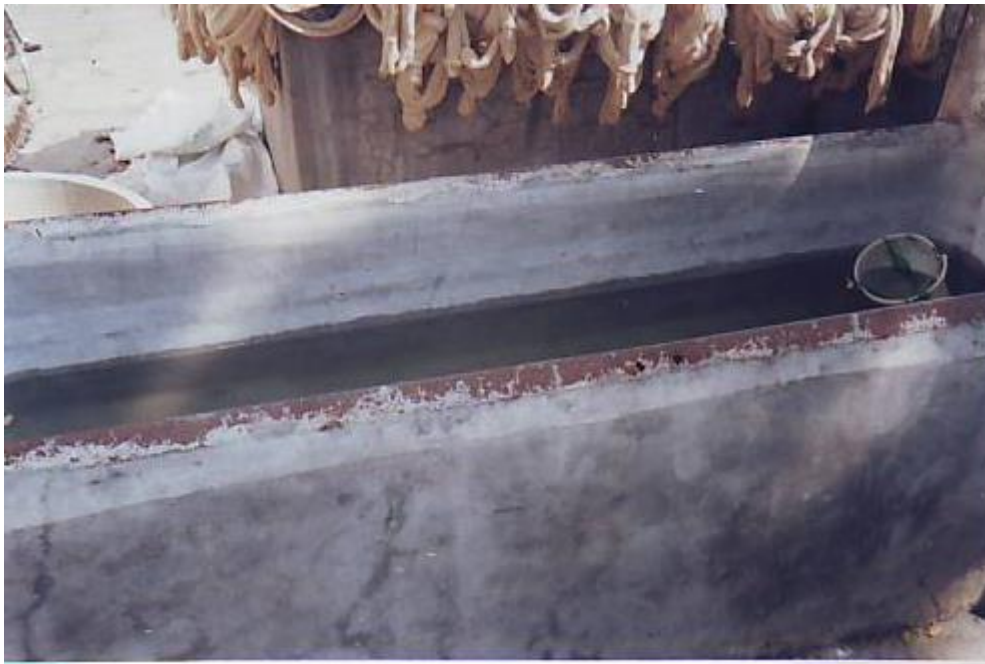
Withering tray



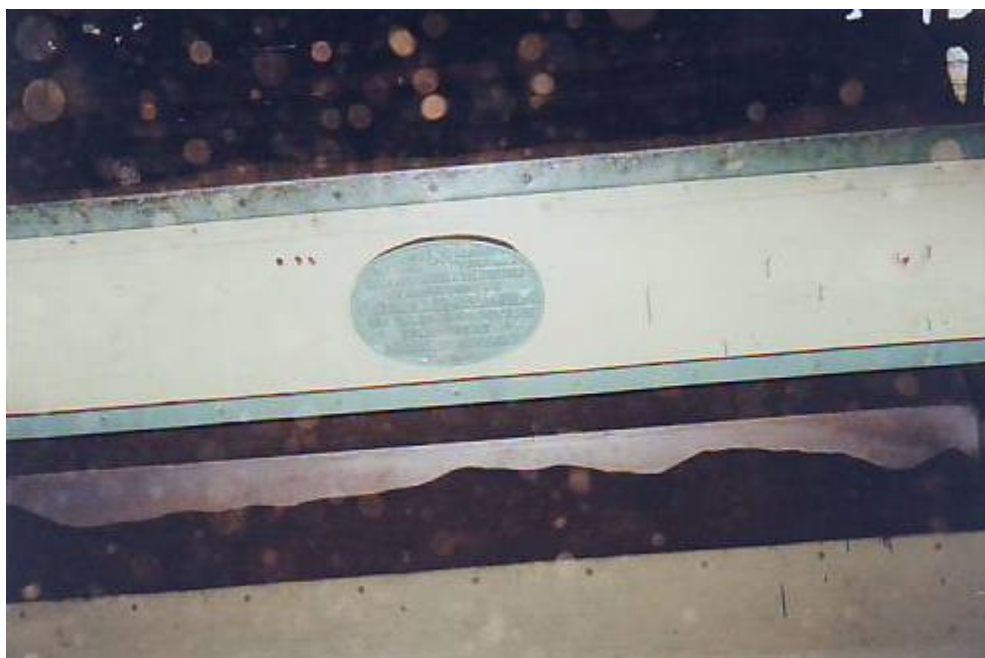
Drier



Tea processing



Tea processing



Tea Processing



Collect final product



Collect final product



Tea finish product