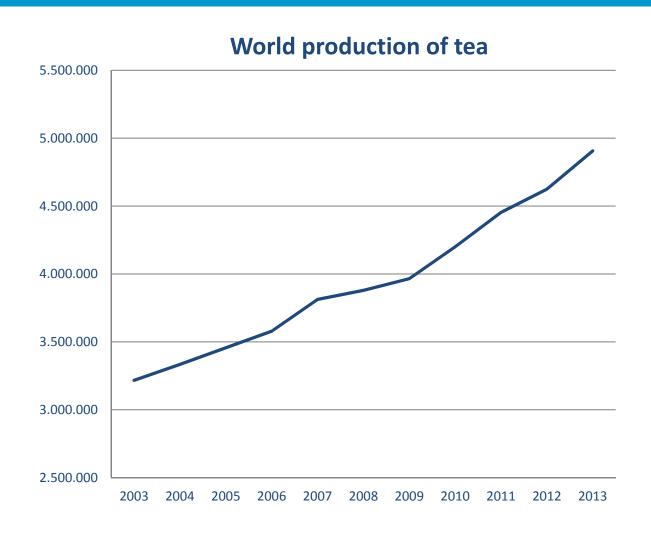


# The world of tea Global tea production





Tea production has known an annual average growth rate of 4,3% per year.

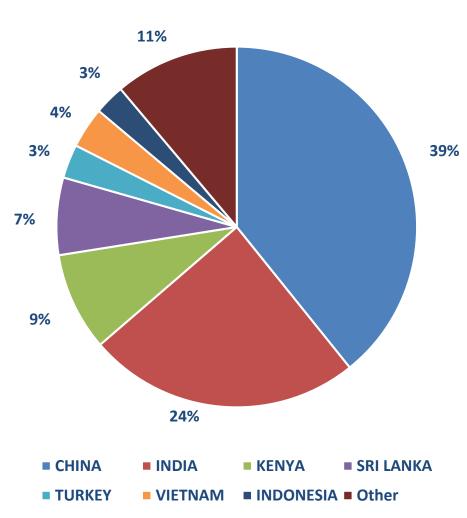
Average increase per country is:

- China +9,6%
- Vietnam +5,5%
- Kenya +4,6%
- India +3,3%
- Sri Lanka +1,3%
- Turkey +0,2%
- Indonesia -2,3%

# The world of tea Global tea production







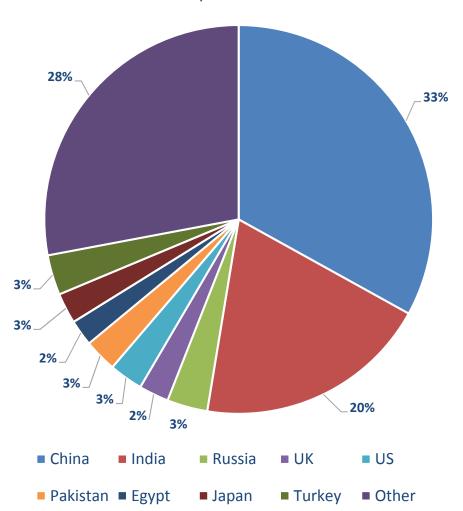
Tea production is primarily done in Asia:

- China and India combined produce 63% of the world's tea
- Indonesian tea represents 3% of the global production is primarily produced on the island of Java

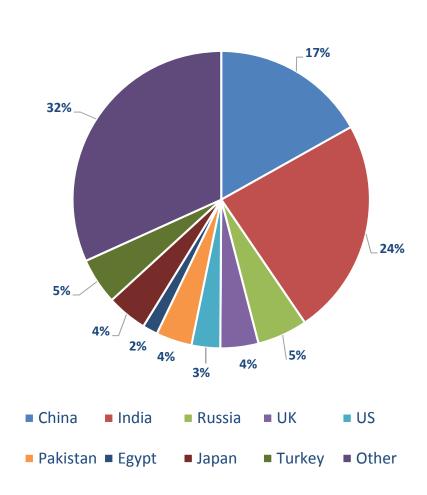
# The world of tea Global tea consumption





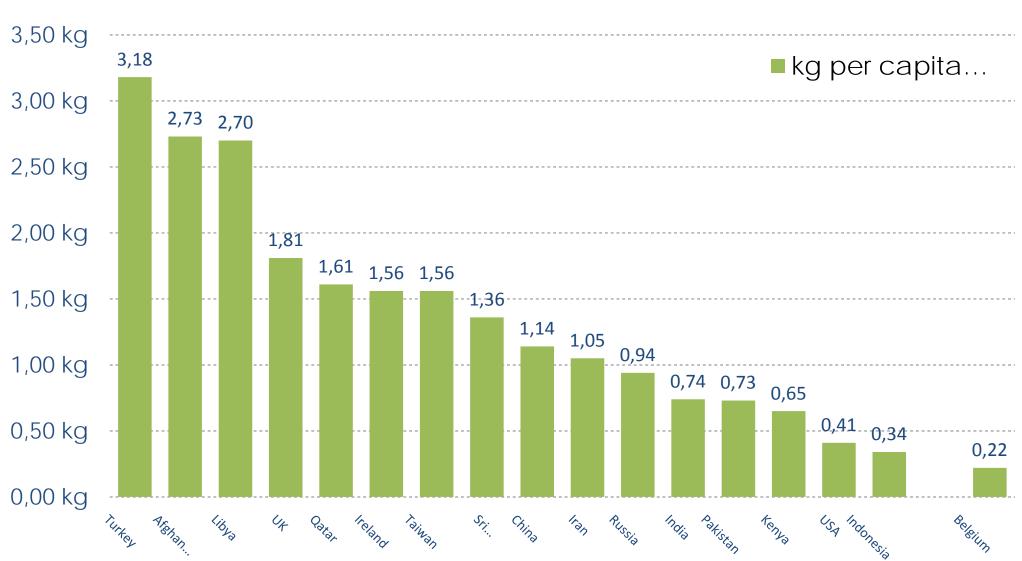


#### Tea consumption 2003: 3 024 KTON



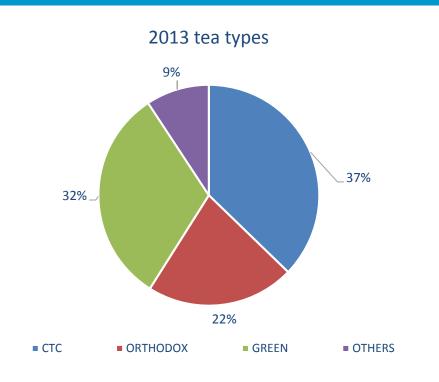
# The world of tea Tea consumption

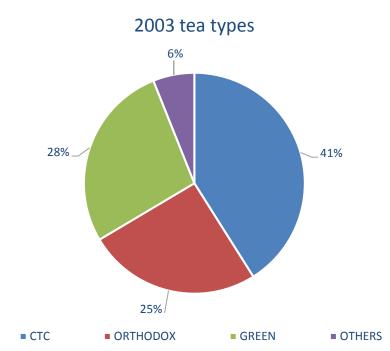




# The world of tea Types of tea

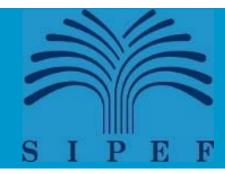




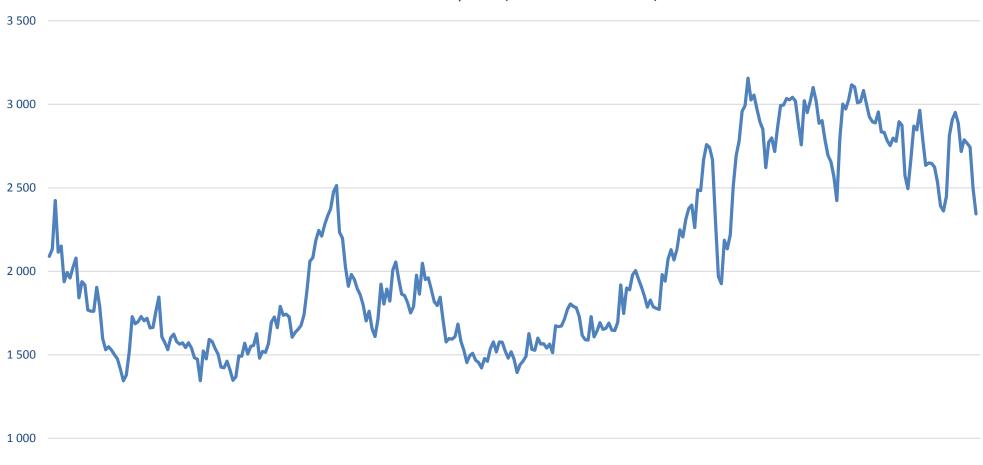


- Black tea is fermented tea and has two production methods:
  - CTC ("Cut-tear-curl") manufacturing: used in tea bags
  - Orthodox manufacturing: results in big leaves
- Green tea is non-fermented tea
- Other teas are e.g. Oolong tea (semi fermented), white tea and specialty tea

# The world of tea Tea prices



#### Historical tea price (Mombasa market)







# The world of tea Tea – history



TEA: CAMELLIA

(SINENSIS OR ASSAMICA)

FIRST DOCUMENTED "TEA": 1000 BCE IN YUNNAN.

OOLONG?

TEA IN INDONESIA

1684 FROM JAPAN: FAILED

1827 FROM CHINA: FAILED

1878 FROM ASSAM: SUCCEEDED (IN GAMBUNG)



### The world of tea Tea in Indonesia



**TOTAL AREA** : 121'000HA

**TOTAL PRODUCTION**: 132'000MT

(BLACK TEA: 101'000MT, GREEN TEA: 31'000MT)

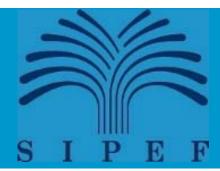
GOVERNMENT ESTATES : 31%

SMALLHOLDERS : 47%

PRIVATE ESTATES : 22%

**EMPLOYMENT:** ABOUT 1 MILLION PEOPLE.

## The world of tea Cibuni: the hidden river



CIBUNI: A BELGIAN TEA PLANTATION!

FOUNDED IN 1902 BY THE DE DECKER FAMILY.

STILL IN BELGIAN HANDS TODAY.

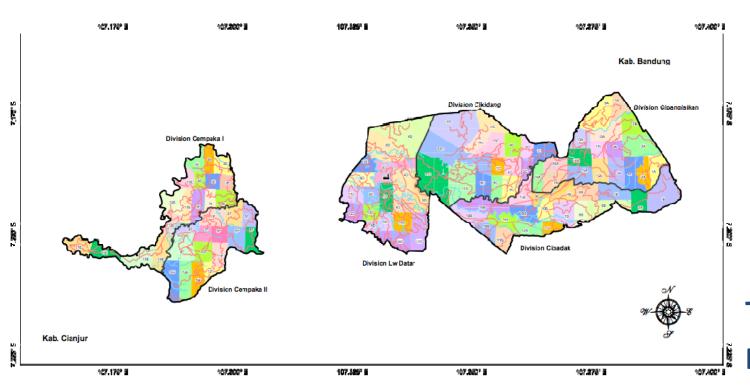
CIBUNI IS THE LARGEST PRIVATE SINGLE ESTATE IN INDONESIA.

THE ESTATE COVERS 2'000HA, EMPLOYS 2'500 PEOPLE.

THROUGH THEIR DEDICATION, THE ESTATE AND FACTORY TEAMS PRESERVE THE TRADITION OF *CIBUNI* TEA.

### The world of tea Cibuni Tea Estate





CIBUNI MANAGER RUSPANDI

TEA FACTORY
MANAGER
MASTRI

**TOTAL AREA: 2'052HA** 

PLANTED AREA: 1'777HA

**EMPLOYEES: 2'517** 

**ALTITUDE:** 1'000 TO 1'900M

7

## The world of tea Great Tea: great efforts



**GROWING CIBUNI TEA** 

**N**URSERY

**PLANTING** 

PESTS & DISEASES

"TABLES"

**PLUCKING** 

**PROCESSING CIBUNI TEA** 

RECEIVING/CONTROL

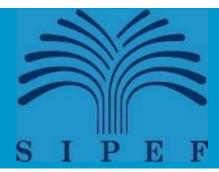
**WITHERING** 

C-T-C

"FERMENTATION"

**DRYING** 





#### **N**URSERY

PREPARING THE BUSHES FOR 80 YEARS (OR MORE)

"CUTTINGS" FROM KNOWN BUSHES.

INDIVIDUAL POLYBAGS, UNDER TUNNELS.

SHADE PROGRESSIVELY REDUCED.

TIME IN NURSERY: 8 MONTHS.





#### **PLANTING**

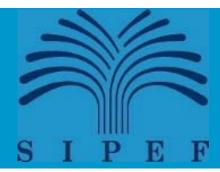
11'900 BUSHES/HA (0.7M x 1.2M)

**EROSION CONTROLS.** 

SHADE TREES.

IMMATURE PERIOD: 3 YEARS.





#### **PESTS AND DISEASES**

HELOPELTIS THEIVORA (1)

GREEN FLY (2)

WHITE ROOT DISEASE

BLISTER BLIGHT (3)

FIELD MONITORING DAILY BY
PLUCKERS AND
AGRONOMISTS.









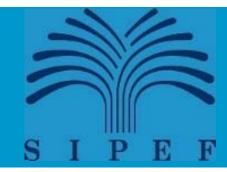
"TABLES"

CRITICAL FOR PRODUCTION.

"FORMING" DURING IMMATURE STAGE.

REGULAR PRUNING TO MAINTAIN TABLES.





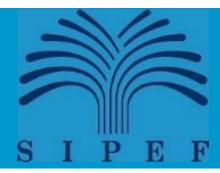
#### **PLUCKING**

PLUCKING BY HAND.

ONE PEKOE (BUD) + 3 LEAVES.

CAREFUL HANDLING OF LEAVES TO AVOID BRUISING.





#### **CERTIFYING OUR GOOD PRACTICES**

CIBUNI IS CERTIFIED UNDER TWO INTERNATIONAL STANDARDS FOR SUSTAINABLE FARMING.

CERTIFIED

EVERY YEAR, THIRD-PARTY CERTIFICATION BODIES AUDIT CIBUNI FOR COMPLIANCE.







#### This is a working estate!

PLEASE BE AWARE OF THE FOLLOWING POTENTIAL HAZARDS:

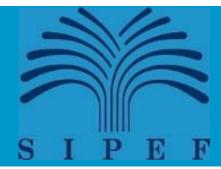
- ALWAYS BE AWARE OF YOUR SURROUNDINGS
- MIND YOUR FOOTING AT ALL TIMES
- WATCH FOR VEHICLES
- BE SUN SMART AND KEEP HYDRATED.

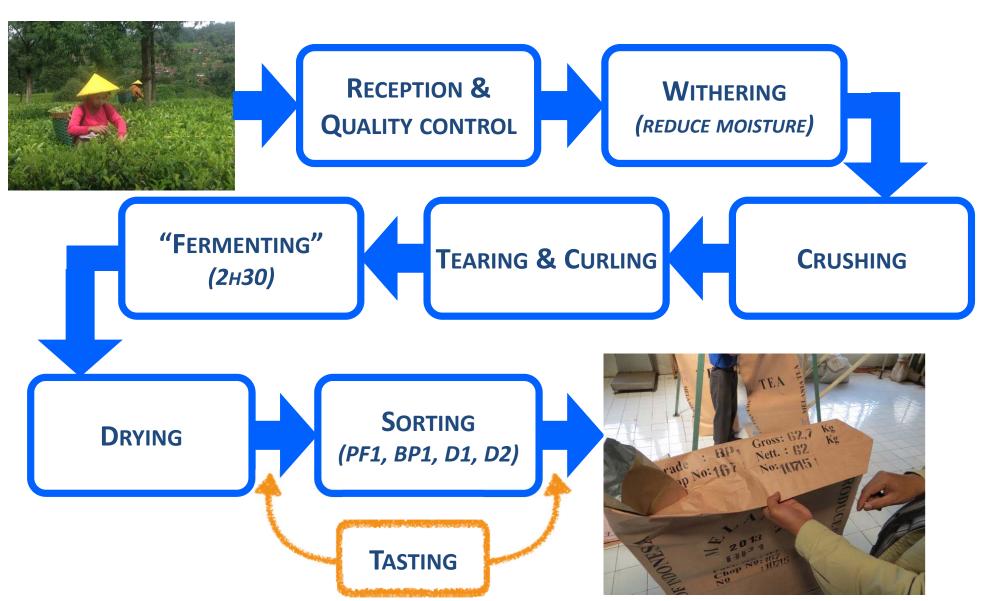














#### LEAF RECEPTION & QUALITY CONTROL

CHECK LEAF QUALITY

(% "MEDIUM", % "FAULTY")





#### **WITHERING**

"TROUGHS": 24.5M x 4M

(45 TROUGHS +/- 4'300SQM)

CONTROLLED MOISTURE REDUCTION.

AVOID BRUISING.



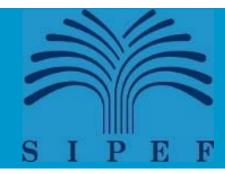


### CRUSHING ("C-")

ROTORVANE.

FUNCTION: START BREAKING CELL MEMBRANES.





#### TEARING AND CURLING ("-TC")

"CUTTING ROLLERS" MADE OF STAINLESS STEEL, 8-10 TEETH/INCH.

ROTATING IN OPPOSITE DIRECTIONS, AT DIFFERENT SPEEDS.

**DISTANCE** : **0.5-1.0**MM.

"TRIPLEX": 3 CONSECUTIVE CUTS.





#### "FERMENTING"

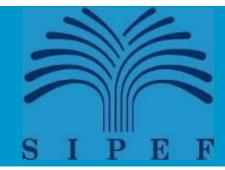
GENTLE PROCESS, 2 TO 2 ½ HOURS.

LOW TEMPERATURE (20-29 C) AND HIGH HUMIDITY (85-95% RH).

AROMAS DEVELOP.

COLOUR CHANGES TO BROWN.





#### **DRYING**

FLUIDISED BED DRIERS.

TIME: 20 MINUTES.

AIR TEMPERATURE: 120-150 C.

FUNCTION: STOP OXYDATION, MAKE DRY, STABLE TEA.





#### **SORTING**

MAGNETIC ROLLS: REMOVE STALKS AND FIBERS.

VIBRATING MESH: GRADING BY SIZE.

"MADE TEA" GRADES:

BP1, PF1

D1, D2.







## The world of tea Tea quality



#### **TEA TASTING**

EXPERIENCE, EXPERIENCE!

FIND DESIRABLE CHARACTERISTICS, IDENTIFY DEFECTS, PREPARE BLENDS.

1/ APPEARANCE
(FIBERS, STALKS, COLOUR)
2/ INFUSION
(BRIGHT/DULL, COPPERY)
3/ LIQUOR
(STRENGTH, GONE OFF,
HARSH, SMOKEY)







#### This is a working factory!

PLEASE BE AWARE OF THE FOLLOWING POTENTIAL HAZARDS:

- ALWAYS BE AWARE OF YOUR SURROUNDINGS
- MIND YOUR FOOTING AT ALL TIMES
- CHECK CEILING HEIGHT
- BE AWARE OF MACHINERY.



