



## Agroforestry and reforestation for sustainable coffee farming



PROJECT OFFICER, INDONESIA  
**Hendrika Fauzi**



Aceh region

### PROJECT TYPES

Agroforestry & Reforestation

### FARM PRODUCTIONS



### ACTIVITIES

- Agroforestry with perennial crops
- Beehives



### Context

Sumatra is the largest producer of Indonesian coffee. Small-holders grow Arabica coffee in the highlands (Aceh, North Sumatra), while Robusta is found in the lowlands (Lampung). The Indonesian coffee yield is one of the lowest in the world, this is strongly linked to local deforestation, a critical issue in Sumatra which has lost almost 50% of its tropical rainforest in the last 35 years.

The project's areas suffered also from inadequate agricultural practice (as opposed to Good Agricultural Practices), climate change and civil war. This has led to soil erosion, low soil fertility and poverty. Some farmers were also tempted to switch to other crops, such as palm oil, which can be damaging for the environment.



### Key goals

- **Preserve and regenerate the coffee ecosystem** to ensure sustainable arabica and robusta coffee production.
- Improve farmers' self-sufficiency (food, natural and financial resources, energy).
- Enable farmers' resilience and adaptation to developing and already felt climate change effects.
- Empower local communities on coffee production.



### SUSTAINABLE DEVELOPMENT GOALS

KBQB project seeks to support the following Sustainable Development Goals as set by the United Nations.





“I have received land that was previously abandoned in the internal conflict of Aceh province to establish a coffee farm with the help of KBQB. I am married and I have three children. I am clearing some exotic pine trees that had been planted there by a foreign company, but do not grow well and have no market...”

— M. Surmiadi



446009

Trees planted so far



452

Hectares of parcels impacted



592

Farmers involved



20

Technicians employed

## Planting models



### MODEL 2A

Planting trees within the crops, (8mx8m to 12mx12m), combining slow, medium and fast-growing trees.



### MODEL 2B

Planting trees in the field (8m x 8m to 12mx12m meters) and every 3 meter on the perimeter of the parcel, combining slow, medium and fast-growing trees.



### MODEL 3

Planting trees 3mx3m in an unused or degraded land, within the farm or in surrounding areas (landscape level), combining slow, medium and fast-growing trees.

### Local partners

KBQ  
Baburrayyan  
cooperative,  
groups of coffee  
farmers

### Key funders



CLARINS

Louis Dreyfus  
Fondation d'entreprise

We estimate that for 1,000 planted trees the results could be:

CLIMATE



429

Total estimated tCO2 removed from the atmosphere in the long term (LT)



32

tCO2 removed from the atmosphere/year



319

tCO2 removed from the atmosphere until now, if the plantation was in 2010

SOIL



1.2

Hectares of soil being restored



FOUR TIMES

Increase of earthworms in the long term

SOCIAL



2

Farmers involved



268

Additional total income (USD) per farmer per year in the long term

BIODIVERSITY



18

Different species planted or cultivated (minimum)



63%

Increase bird species in the long term



114%

Increase of pollinator insects in the long term

## Tree species



**MAHONI**  
Mahogani



**MINDI**  
Melia azedarach



**AVOCADO**  
Persea americana



**DURIAN**  
Durio zibethinus



**CITRUS**



**MANGO**



**DUKU**  
Lansium paraticum

