

Forest Rehabilitation Activity in the National park and Relationship with Local People



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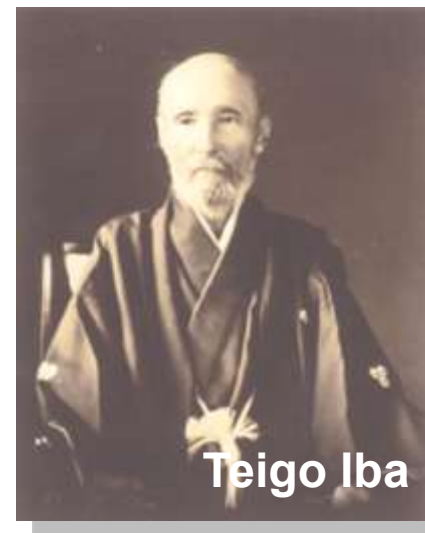
1. Origin of Sumitomo Forestry

In 1691,

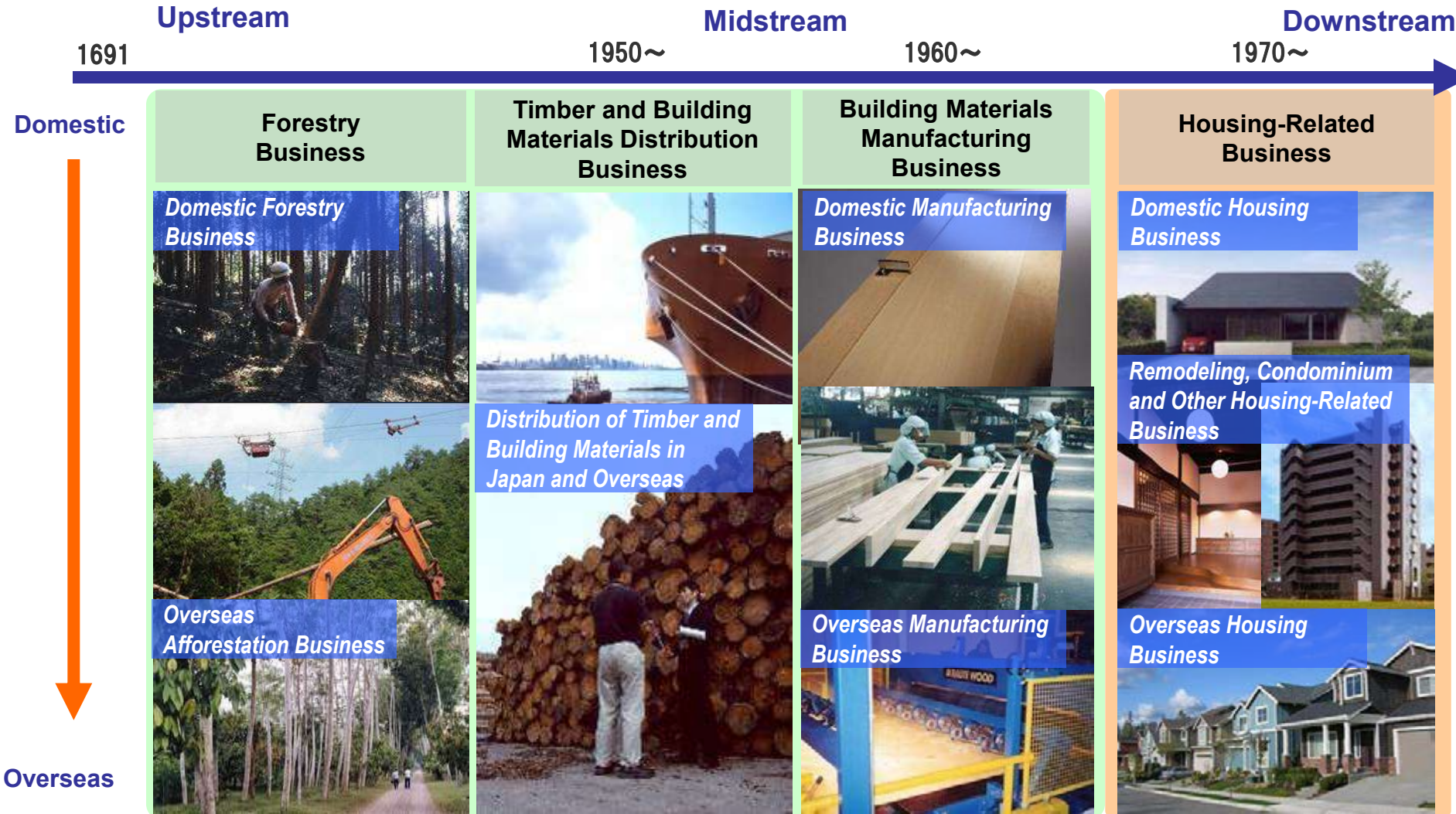
With the launch of Besshi Copper Mine in Shikoku, Sumitomo started to supply the harvested timbers for pit posts and fuel.

In 1894,

Teigo Iba (2nd director-general of Sumitomo) established and implemented the “Great Afforestation Plan”



<Business Fields>



2. Corporate Profile

<Consolidated Business Results>

Company Name: Sumitomo Forestry Co., Ltd.

Paid-in Capital: ¥27,672 million

Incorporated: Feb. 20, 1948

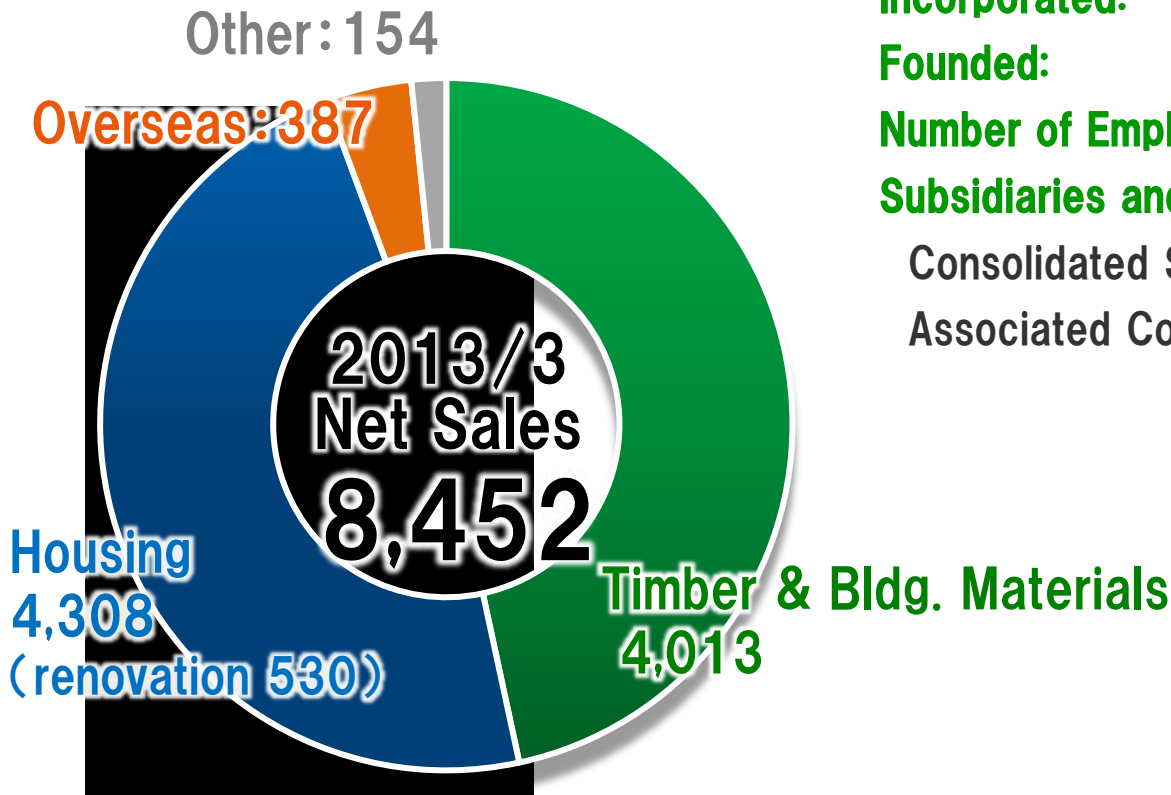
Founded: 1691

Number of Employees: 14,736

Subsidiaries and Associated Companies:

Consolidated Subsidiaries: 47 (Overseas 20)

Associated Companies: 23 (Overseas 21)



3. Afforestation and Reforestation

Company-Owned Forest in Japan



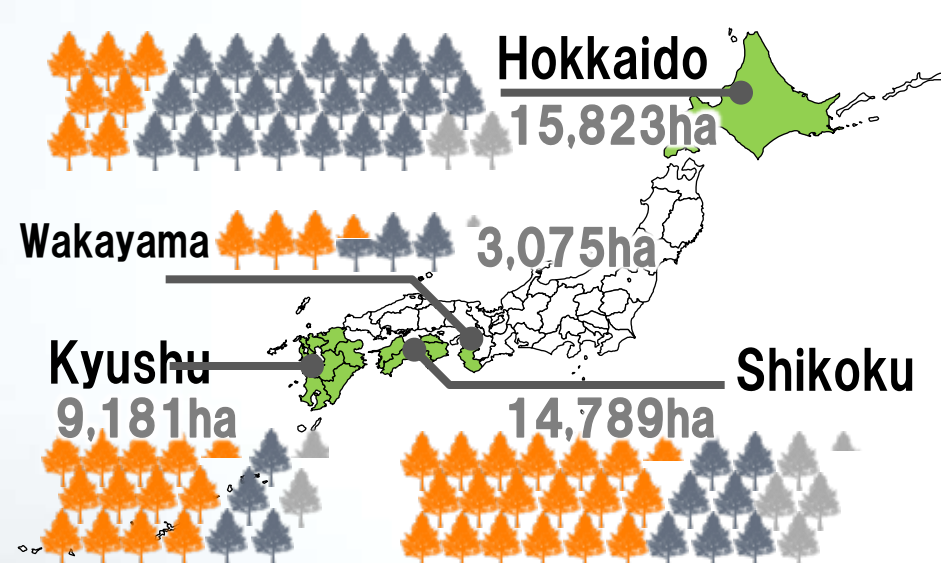
43,328ha

Overseas Forest Management



Approx. 200,000ha

= 500ha
 Planted Forest
 Natural Forest
 Other
 = 3,000ha



Indonesia
166,000ha



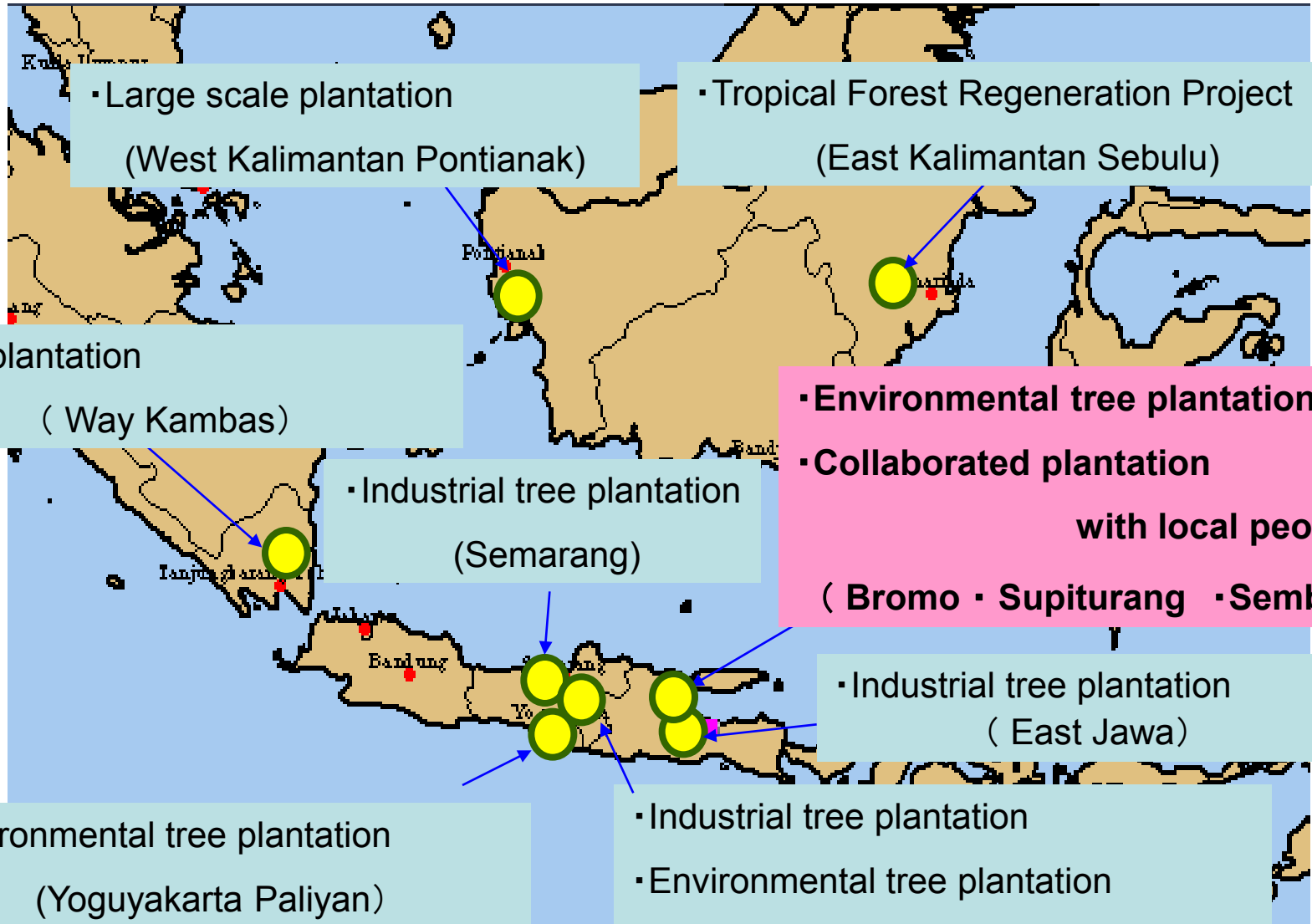
Papua New Guinea
31,000ha



New Zealand
5,100ha



<Tree-Planting in Indonesia>



4. Reforestation Project in Bromo Tengger Semeru National Park and Supiturang/Sember at the Foot of Mt.Semeru

The image is a composite of several elements related to a reforestation project. At the top left, a map of Indonesia has a red square highlighting the island of Java. An orange line connects this square to a larger map of East Java. On the East Java map, a blue circle highlights the Bromo Tengger Semeru National Park area. A yellow line connects this circle to a photograph of a mountain landscape with a blue sky. Another orange line connects a circle on the East Java map to a photograph of a reforestation site with young trees and workers. A blue line connects a circle on the East Java map to a small photograph of a building. The text 'Bromo Tengger Semeru National Park' is overlaid on the East Java map. The text 'Plantation activity by KT' is located at the bottom right of the composite image.

Supiturang/Sember at the foot of Mt. Semeru

(1) Bromo Tengger Semeru National Park

Environmental Tree Plantation

【Concept of environmental plantation】

- Reforestation of grassland
- Contribution for enrichment biodiversity
- Planting area more than 300ha
- CO₂ offset.

【 General Information of the National Park 】

History	Designated national park in 1982
Area	50,276ha
Altitude	750~3,676m
Biodiversity	Aves 137,Mammalia 22,Reptilia 4
Forest fire	2001~2005:185spots ttl2,584ha Cause : Charcoal,Collecting mushrooms

<Procedure of Plantation>

 A photograph showing a large, flat area of green rice seedlings in a nursery bed, with a white building in the background.	 A photograph showing several people carrying large white sacks of seedlings on their heads, walking along a dirt path.	 A photograph showing a hillside with rows of young trees planted in a grid pattern, with a dirt path winding through the rows.
<p>Seedbed in the flat area for effective management.</p>	<p>Delivering seedlings after six months.</p>	<p>Cultivating ground and plantation on some lines with an interval of 2m.</p>
 A photograph showing two people carrying large white sacks of fertilizer on their heads, walking along a dirt path.	 A photograph showing two people working in a field, one standing and one kneeling, with a mountain in the background.	 A photograph showing a wide view of a valley with green hills and a dirt path winding through the landscape.
<p>Additional fertilizer for poor soil after 1 year.</p>	<p>Raise the skill of local workers after 4 years.</p>	<p>Green belts of the valley in the plantation of 2010.</p>

<Progression>

- Eruption of Mt. Bromo in November 2010
- Height reached 5m of some Mimosa acacia trees after only 1year.

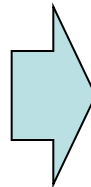
«Species»

Species	Ratio of Plantation,%			
Year	2009	2010	2011	2012
Mountain casuarina	35	87	82	70
Mimosa Acacia	—	6	13	14
Hibiscus department, Euphorbiaceae family, Chinese guger tree, and other native trees.	65	7	5	16
Total	100	100	100	100

《Plantation Site in 2009》



《Plantation Site in 2012》



(2)Supiturang and Semeru at the foot of Mt. Semeru

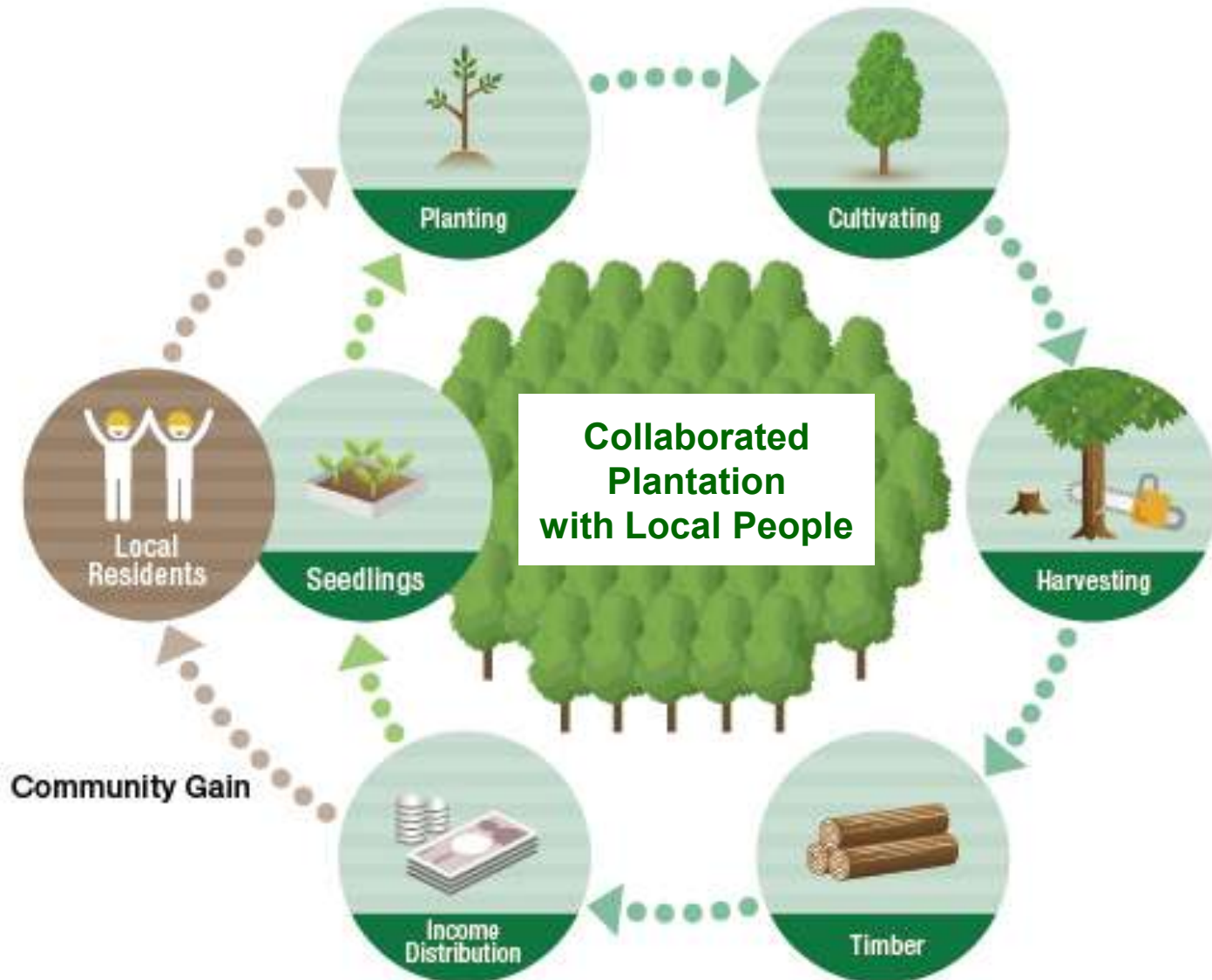
Collaborated Plantation with Local People

【Concept of collaborated plantation】

- Industrial plantation.
- Contribution for livelihood of local people by forest sustainable management and collaboration.
- Contribution for the local economy
- Contribution for the development of local community
- Planting area more than 1,200ha.
- CO₂ offset.

＊ Profit from harvested wood is used for reforestation and is contributed for community.

<The Cycle of Industrial Reforestation>



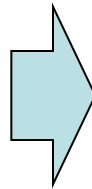
<Progression>

- Every tree is planted in their own land when the local people in the village communities agree.
- Cultivation in the plantation was started in the abandoned area of Supiturang and Sember.
- From the view point of tree growth and trasport routes, the Sember area is better than Supiturang .

«Species»

Planted species	Ratio of plantation, %			
	Year	2010	2011	2012
Falcataria		60	41	39
Labula(Kalampayang)		10	24	54
Balsa		30	25	7
<i>Trema orientalis</i>		-	10	-
Total		100	100	100

《Plantation Site in 2011》



< Plantation Area and Number of Trees >

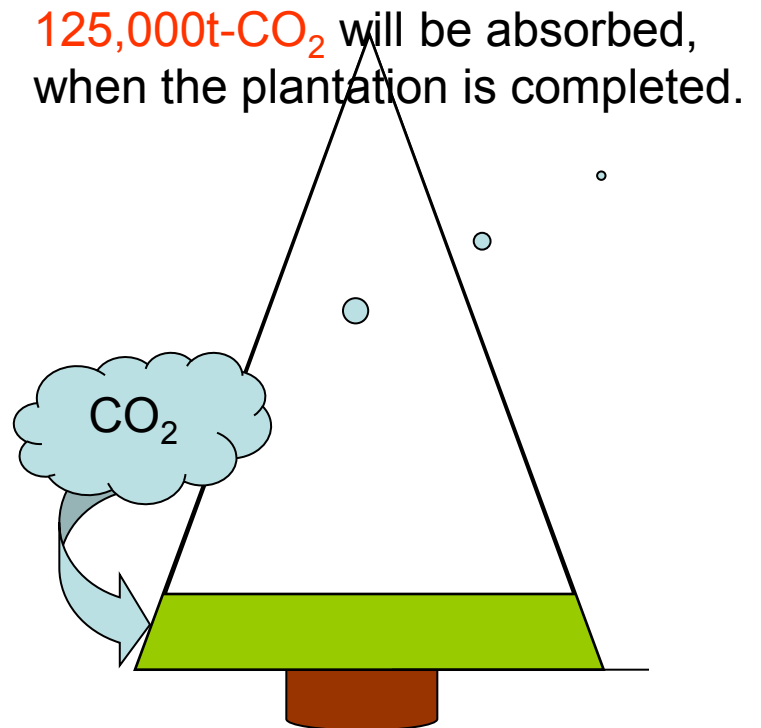
Year	Bromo			Supriturang and Sember		
	Environmental Tree Plantation			Collaborated Plantation with Local People		
	Area, ha	Number of Trees		Area, ha	Number of Trees	
		New	Added		New	Added
2009	171	194,176	84,753	0	0	0
2010	69	73,010	5,156	242	267,404	0
2011	70	75,500	0	300	259,155	0
2012	85	75,508	0	288	269,018	0
Total	385	418,194	89,909	830	795,577	0

<Monitoring Trees for Absorbed CO₂ Emission>



<Absorption of CO₂ by Planted Trees>

Year	Diameter, cm	Height, m	Absorption, t-CO ₂
2009	1.0	1.3	9
2010	1.7-6.1	1.8-2.8	1,372
2011	1.6-1.7	1.1-1.2	97
Total	-	-	1,477



Absorption of CO₂ was calculated at 1,500t up to 2011.

<Activity of Fire Prevention with JICA in Bromo>



Fire Prevention Training with JICA



Watchtower for Fire Prevention



Fire Fighting Training with JICA



Fire Prevention Zone
Width of 6m
/Distance of 12km

<Biodiversity Monitoring

for Animals and Insects in Bromo Area>



Java Leopard



***Prosoplus bromoensis* sp.**

↑Registered new type↑



Thank you for your attention.

