

Adopt Silviculture Study on Carbon Stock and Growth by INFAPRO at Ulu Segama Forest Reserve to Bukit Piton Forest Reserve

INFAPRO (Innoprise Face the Future Project) has conducted Carbon stock and growth of above ground and below ground living trees monitoring from year 2007 to 2010 at Ulu Segama Forest Reserve for comparison between treated silviculture (climber cutting) and baseline (control area). The Carbon monitoring executed over 264 plots of project scenario and 71 plots of baseline (control area). The result revealed that silviculture treatment (climber cutting) at open area shown Carbon growth of 17.4 tC/ha, in comparison with control area with 9.3 tC/ha. The information of the Carbon monitoring as shown at Table 1.

Type of treatment	Type of vegetation	Carbon stock (Ct/ha)		Carbon growth (Ct/ha)
		2007	2010	
Treated silviculture	Remnant forest	174.2	197.0	22.8
	Pioneer forest	134.7	152.6	17.9
	Open area	85.9	103.3	17.4
Untreated (control)	Remnant forest	126.0	146.0	20.0
	Pioneer forest	74.1	96.3	22.2
	Open area	16.3	25.6	9.3

Based on this result, as to improve and enhance the growth of planted trees (three to five years after planting) at Bukit Piton Forest Reserve, in 2015 Sabah Forestry Department has adopted the silviculture climber cutting at Compartment 109 (660 ha). Ecologically, the area is very open canopy and it has been restored with mixed pioneer species since year 2010 to 2012.



Picture 1: Compartment 109 (660 ha) was restored and planted in 2010 to 2012 with mixed pioneer species. Three to five years after planting, most of the planted trees were covered with climbers and lianas.



Picture 2: In 2015, as to enhance the growth of planted trees and increase above-below ground carbon stock, silviculture climber cutting treatment executed within the area.