

## **Public Briefing Paper: Rainforest Alliance Evaluation of The Forest Trust (TFT)/ATA MARIE Growth & Yield – Wood Supply Study Prepared for Asia Pulp and Paper**

### **Background**

In February 2013 Asia Pulp & Paper Group (APP) published its Forest Conservation Policy (FCP), announcing it as a key platform for improving forest conservation throughout its supply chain. At that time APP made a statement that *‘recent independent assessments of the growth and yields of APP suppliers’ plantation areas [in Indonesia] confirms that the company has sufficient plantation resources to meet the long term forecast demand for its pulp mills.’*

In response to specific requests from key partners – including Greenpeace and a number of paper buyers – for additional assurances that APP could meet its FCP commitments without using fiber from Indonesian sources linked to deforestation, APP commissioned a further Growth & Yield – Wood Supply Study (referred to as the Wood Supply Study) in February 2013. The Forest Trust (TFT) and ATA MARIE Forestry Experts (ATA MARIE) conducted this Wood Supply Study.

An independent review of this TFT/ATA MARIE Wood Supply Study was included in the evaluation process the Rainforest Alliance has conducted for APP. It was a separate piece of work from the Rainforest Alliance Evaluation of APP’s progress to meet its FCP Commitments published in February 2015. The Wood Supply Study evaluation was conducted as a desk-based exercise resulting in a confidential report to APP and this public summary of findings.

### **Scope of the Rainforest Alliance Evaluation**

APP commissioned TFT/ATA MARIE to conduct an independent growth and yield study to determine the capability of its current plantation base to provide sufficient pulpwood to its three pulp mills each year up until 2020. The objective of the TFT/ATA MARIE report was to analyze the wood supply from the Indonesian plantations, which supply APP’s mills in order to determine:

- The total potentially available plantation wood supplies;
- The sustainability of the plantation wood supply;
- Constraints and requirements on plantation wood supply.

A plantation estate model was prepared to describe the plantation resources and simulate plantation establishment, management, growth and yield, and harvesting.

The Rainforest Alliance was asked to evaluate the independence, technical robustness and therefore the reliability of the TFT/ATA MARIE Wood Supply Study.

### **The Rainforest Alliance Evaluation Process**

The Rainforest Alliance evaluation was a desk-based exercise conducted using established independent auditing procedures: documents, maps, calculations, and field notes were reviewed, including the Growth & Yield – Wood Supply Study report, and interviews of APP, TFT and ATA MARIE principals and staff were conducted. Fieldwork to verify the data provided by TFT was not undertaken. The evaluation criteria were based on the scope APP established for the Wood Supply Study. The evaluation team was also required to reference their collective expertise in plantation

management, plantation estate modeling and mensuration experience. There was no stakeholder consultation during this evaluation process.

## **Rainforest Alliance Findings**

### **Independence**

The Rainforest Alliance evaluation team found that TFT/ATA MARIE drew on a number of data sets including data collected from plots established by TFT and data provided by APP. TFT established these additional plantation inventory plots to address perceived gaps in APP's existing data set.

From the field data, TFT/ATA MARIE generated a series of yield curves. These identify the standing and recoverable volume available at a range of stand ages. Following recognized plantation estate modeling principles, ATA MARIE developed a wood flow model that incorporated the plantation age class distribution and yield curves. The model included acknowledgement of the loss factors that are demonstrated in the plantation production supply chain.

The Rainforest Alliance evaluation team considered that TFT's use of data it had collected alongside data provided by APP was sufficient to avoid bias in the results.

### **Technical Robustness**

The TFT/ATA MARIE study collected and analyzed data to explore the question of whether enough plantation wood could be produced from APP's existing Indonesian supplier concessions to meet the expected demands of the three pulp mills.

For the purposes of the study, TFT/ATA MARIE used a forecast to estimate the total pulpwood demands and supply. The study assumes that:

1. All plantation wood from APP's suppliers in Indonesia was equally available to meet the demand of APP's two existing pulp mills and the planned pulp mill in Sumatra as if it were a single plantation wood basket.
2. Total pulpwood demand estimates were calculated as if the three mills could run at 100 percent of the designed capacity.
3. APP would adopt a Business-As-Usual approach, based on historical information, to growth and yield projections, wood losses, etc.

The Rainforest Alliance evaluation team considered that given the scope of the Wood Supply Study and the variability in the growth and yield data TFT/ATA MARIE made reasonable assumptions and took a logical approach to calculating wood supply for the period to 2020.

### **Reliability**

The TFT/ATA MARIE Wood Supply Study was commissioned to answer a question asked by stakeholders in 2013: Will APP have sufficient plantation wood supply from its current Indonesian supplier concessions to meet the pulpwood demand of three pulp mills, enabling APP to continue to meet its FCP commitment of no natural forest fiber entering these mills?

The TFT/ATA MARIE Wood Supply Study acknowledges a possible gap in supply in 2020, based on the assumptions made above. APP's [\*FCP Implementation Plan 2015 and Beyond\*](#) includes measures to address these issues through improvements in silvicultural and harvesting practices.

The Rainforest Alliance evaluation team notes that plantations are a dynamic and ever changing resource, as a result, any modeling of potential growth and yield rates comes with an element of imprecision or estimation. Therefore a definitive answer of whether APP has enough plantation wood supply based on estimates from data gathered and analyzed 1.5 years ago is not possible. Rather, the TFT/ATA MARIE Wood Supply report presents a baseline from which APP can make management decisions to close any potential gap.

The Rainforest Alliance believes it important to consider any potential wood supply gap in the context of APP's broader FCP commitments, which commit it to responsible fiber sourcing irrespective of the source of the fiber – that is whether it comes from the Indonesian supplier concessions or from elsewhere globally<sup>1</sup>.

The Rainforest Alliance evaluation team considered the TFT/ATA MARIE study as a useful first step in developing a more comprehensive forest estate model or forest description system that provides for an ongoing program of monitoring plantation performance by APP and its supplier companies. The reliability of forest resource data diminishes over time until it is updated, a fact acknowledged within the TFT/ATA MARIE Wood Supply Study. Given short rotation times (five years), frequent monitoring is required to make management decisions to enhance productivity or to plan for potential threats to the supply. The question of whether APP has sufficient wood supply to meet the demands of its mills deserves to be continually asked particularly by APP management.

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<sup>1</sup> FCP Commitment Four states that: *APP sources fiber from all around the world and is developing measures to ensure that this sourcing supports responsible forest management.*