



Does **ASIA PULP & PAPER** have sufficient plantation fiber supply to support its zero deforestation commitment?



- ***APP has sufficient plantation fiber to meet the needs of its new pulp mill, but it will not be able to operate at full capacity in its initial years of operation, at least in the period up to 2020***
- ***APP's zero deforestation policy has encouraged an increase in plantation fiber supply to its existing pulp mills***

PHOTOS:

*APP concession blocks in South Sumatra
(Greenomics Indonesia/2013)*

Background



On September 3, 2014, Asia Pulp and Paper (APP) published a press release titled "Independent study shows Asia Pulp and Paper has sufficient plantation for its Zero Deforestation commitment." This independent study was conducted by The Forest Trust (TFT) and Ata Marie.

In the APP press release, TFT states that "APP and its suppliers have sufficient resources for the company's 100 percent plantation target". In fact, it went so far as to say that the independent study had only identified "one minor gap in 2020 but this can be easily filled by increasing the productivity of the plantation operations between now and then." However, the independent study report was not provided with the press release.

Given that the said report has not been made available to the public, it is difficult to ascertain what is meant by "APP has sufficient plantation for its Zero Deforestation commitment." In the press release, APP stated that "the methodology and conclusions of the report will be evaluated by the Rainforest Alliance as part of the independent FCP evaluation it is currently carrying out."

This has prompted Greenomics Indonesia to study the relevant data related to the fiber supply available to APP's existing mills, including time-series spatial data on APP's concession operations over the last five years to ascertain the level of plantation fiber supply from APP's concessions in Sumatra and Borneo to the company's existing mills.

More specifically, Greenomics Indonesia looked into the level of plantation fiber supply from APP's concessions in the province of South Sumatra – where APP's new pulp mill, OKI Pulp and Paper, is currently under construction and will have a capacity of 2 million tons per year when completed. This analysis is very important, considering that the APP concessions operating in South Sumatra will be the key suppliers to the OKI mill.

TFT and Ata Marie used data from 2005-2012, whereas this report uses data from the last five years, i.e., 2009-2013. The 2013 data is particularly important as that was the year in which APP's zero deforestation policy was introduced. This report does not present the data in detail, but rather explains the key findings of the analysis conducted on the detailed data.

The main purpose of the report is to convey the conclusions that we derived from the aforesaid key findings by linking them to APP's zero deforestation policy, the implementation of which began in early February 2013. In addition, the report analyzes the extent to which APP's zero deforestation policy has helped improve the performance of APP concessions in supplying plantation fiber to the company's existing pulp mills.

The report provides specific recommendations in respect of the independent study conducted by TFT-Ata Marie, and sets out a number of conclusions that should be heeded by APP and the relevant stakeholders.

To what extent do APP's existing pulp mills need to be concerned about their plantation fiber supply after OKI Pulp and Paper commences operations?

Indah Kiat Pulp and Paper (IKPP)

IKPP – the largest of APP's existing pulp mills in Riau, Sumatra – only used natural forest fiber for 6% of its raw material needs in 2013, the first year of implementation of the zero deforestation policy.

The said natural forest fiber was sourced by IKPP from the clearance of natural forestland that continued up until the end of January 2013. In its 2014 operations, IKPP continues to use natural forest fiber in the form of unused stock left over from 2013.

By comparison, nearly 50% of IKPP's raw materials came from natural forest fiber in 2010, the year that marked the highest level of reliance by IKPP on natural forest fiber in the last five years (2009-2013).

Two years before the introduction of the zero deforestation policy, natural forest fiber accounted for 35% of IKPP's needs in 2011 and less than 30% in 2012.

Meanwhile, in terms of total plantation fiber supply, APP's concessions in Riau are the largest suppliers of plantation fiber to IKPP.

In 2012 alone, a year before the introduction of the zero deforestation policy, 70% of the raw materials used by IKPP consisted of plantation fiber, with more than 80% of this being sourced from APP concessions in Riau.

By contrast, in 2013, the first year of implementation of APP's zero deforestation policy, when natural forest fiber only accounted for 6% of IKPP's raw material needs and the remaining 94% were supplied by plantation fiber, APP's concessions in Riau accounted for more than 70% of such plantation fiber.

While in percentage terms this marked a decrease of more than 10%, in volume terms the plantation fiber supply to IKPP from APP's concessions in Riau increased significantly – by more than 17%.

In addition to the dominant role played by APP's concessions in Riau in supplying plantation fiber to IKPP, APP's concessions in South Sumatra also continued to increase their role in supplying plantation fiber to IKPP's operations during 2009-2013.

For example, while in 2009 the contribution of plantation fiber sourced from APP concessions in South Sumatra remained less than 10%, this had risen to more than 15% in 2012, one year prior to the implementation of APP's zero deforestation policy. By 2013 – the first year of implementation of the zero deforestation policy – APP concessions in South Sumatra accounted for more than 25% of the total plantation fiber supply to IKPP.

This trend certainly needs to be highlighted, given that the APP concessions in South Sumatra are playing an increasingly important role in the supply of plantation fiber to IKPP operations.

The trend also needs to be seriously heeded by IKPP as it will not be easy for the company to replace the plantation fiber supply from the APP concessions in South Sumatra when the new APP pulp mill (OKI Pulp and Paper) in South Sumatra commences operations, considering that the entire plantation fiber supply from the APP concessions in South Sumatra will be diverted to the OKI mill.

Lontar Papyrus Pulp & Paper Industries (LPPPI)

LPPPI is located in Jambi, Sumatra. In 2009, less than 20% of LPPPI's raw materials consisted of natural forest fiber. In 2012, one year before the introduction of APP's zero deforestation policy, this figure had fallen to only 5%. In 2013, the first year of implementation of the zero deforestation policy, LPPPI did not use any natural forest fiber.

Starting in 2011, LPPPI began to source plantation fiber from the APP concessions in South Sumatra, with the amount involved accounting for less than 10% of the total plantation fiber supply to LPPPI. More than 90% of the plantation fiber used by LPPPI in that year came from APP's concessions in Jambi.

In 2012, the use of plantation fiber sourced from the APP concessions in South Sumatra increased to more than 15%. Meanwhile, the contribution of LPPPI's plantation fiber from the APP's Jambi concessions amounted to almost 85%.

In 2013, the year in which the zero deforestation policy was introduced, the volume of plantation fiber sourced from APP's South Sumatra concession decreased to less than 10%, while the supply from the APP concessions in Jambi increased to more than 90% of the total plantation fiber supply to LPPPI.

Going forward to 2020, LPPPI will need to anticipate the annual loss of between 10-15 percent of its plantation fiber supply from the APP concessions in South Sumatra, whose production will be diverted to OKI Pulp and Paper.

The APP concessions operating in Jambi, including a concession that will begin production of plantation fiber in the period up to 2020, are expected to make up the loss of plantation fiber supply that over the last three years (2011-2013) has been sourced by LPPPI from the APP concessions in South Sumatra, given that the last two years (2012-2013) have seen an increase in the volume of plantation fiber supply sourced from APP's Jambi concessions.

What about the plantation fiber supply for OKI Pulp and Paper?

The plantation fiber supply used in the IKPP and LPPPI operations that is sourced from APP concessions in South Sumatra increased fivefold during the 2009-2013 period.

Despite the significant increase over the last five years, when viewed in terms of the volume and demand from the OKI mill, it may be concluded that the APP concessions in South Sumatra will not be able to supply sufficient plantation fiber if the new APP mill (OKI Pulp and Paper) operates at full capacity, at least in the period up to 2020.

In other words, the APP concessions in South Sumatra will only be able to supply the plantation fiber requirements of the OKI mill if it does not operate at full capacity in the early years after the start-up phase.

This means that the OKI mill may start operations by adjusting the level of plantation fiber supply that can be produced sustainably by the APP concessions in South Sumatra.

Are there other sources of plantation fiber that are managed by APP which can be used by the OKI mill? The answer is yes, even if in volume terms the amounts involved are not so great. Nevertheless, the additional supply can help increase the plantation fiber supply to the OKI mill during its initial years of operation.

This additional supply may be secured by APP if it diverts plantation fiber that is currently being exported to China to the OKI mill. If this is done, then the OKI mill will be able to operate at greater capacity, although still not at full capacity. Currently, APP concessions in East Kalimantan are significant suppliers of wood chips to China.

This report does not address the role of the APP concessions in East Kalimantan as the bulk of the plantation fiber produced by these concessions is exported to China.

Performance of APP concessions in supplying plantation fiber to existing pulp mills before and after the introduction of APP's Zero Deforestation policy

One of the main indicators in identifying the performance of APP concessions in supplying plantation fiber to the company's existing pulp mills is the level of divergence between the targeted and actual harvesting of plantation fiber.

The APP concessions in Riau have the best performance, compared with APP concessions operating in other provinces.

For example, two years before the implementation of APP's zero deforestation policy (2011-2012), the APP concessions in Riau successfully supplied the targeted volumes of plantation fiber, with the levels of divergence being less than 1.5% in 2011 and 0.1% in 2012. In 2013, when APP introduced its zero deforestation policy, the performance of the APP concessions in Riau declined somewhat, but may still be classified as "high performing" as the level of divergence from the planned supply was less than 10%.

By contrast, the APP concessions in Jambi may be said to be performing poorly, with the divergence from the targeted plantation fiber supply averaging nearly 50% per year in 2011 and 2012, before the introduction of APP's zero deforestation policy. In 2013, after the policy had been introduced, the performance of the APP concessions in Jambi improved somewhat, with the level of divergence dropping to around 35%.



Meanwhile, the APP concessions in South Sumatra may be said to be performing fairly, with the level of divergence in 2011-2012 averaging around 25%. After APP introduced its zero deforestation policy in 2013, the level of divergence dropped to 20%.

As regards the APP concession in West Kalimantan, in the two years prior to the introduction of APP's zero deforestation policy (2011-2012), this concession successfully met its plantation fiber supply targets, with almost no divergence.

After the zero deforestation policy was introduced in 2013, the performance of the APP concession in West Kalimantan improved in volume terms. Nevertheless, they fell short of their targets by around 30%.

Overall, if viewed in terms of the level of plantation fiber supply from the APP concessions in Riau, Jambi, South Sumatra and West Kalimantan, there has been a significant improvement in performance (*see chart*). This shows that APP's zero deforestation policy has encouraged an improved performance in the supply of plantation fiber to APP's existing mills.

Social conflict, a determining factor in the sustainability of plantation fiber supply to APP's existing and new mills

Currently, rotational harvesting and planting – in the case of acacia plantations, for example – is a key issue in determining the sustainability of a pulpwood plantation concession, given the increasing level of social conflict related to such concessions. For example, after an acacia plantation has been harvested, replanting may not proceed smoothly as it may be hampered by land claim disputes.

Many cases have occurred where, after the harvesting of acacia has been completed, a tussle for control of the land with 'local farmers' or squatters occurs, where the company (pulpwood plantation company) plants acacia as part of the rotation process, while the 'local farmers' or squatters plant oil palms.

This shows that the rotation of harvesting and planting in APP's pulpwood plantations is faced with complex social conflict issues.

This means that both the expansion of new planting in existing pulpwood plantations and replanting as part of the rotation system in existing pulpwood plantations may be disrupted.

The above analysis of the adequacy of plantation fiber supply to APP's existing and new mills is based on the assumption that social conflict will not cause significant disruption to the harvesting and planting rotation system in APP's existing pulpwood plantations. However, if the level of disruption to harvesting and planting rotation increases significantly, this could negatively affect the operations of APP's existing and new mills in terms of the level of sustainability of plantation fiber supply, especially up to 2020 and the years thereafter.

Conclusions



- APP's existing pulp mills (IKPP in Riau and LPPPI in Jambi) need to anticipate the loss of plantation fiber supply that is currently provided by the APP concessions operating in South Sumatra, given that the entire supply from this province will be diverted to the new mill (OKI Pulp and Paper) in South Sumatra. IKPP will need to pay special heed to this, bearing in mind that plantation fiber supplied by APP concessions in South Sumatra accounted for more than 25% of the total plantation fiber supply to IKPP in 2013 – the first year of APP's zero deforestation policy. As regards LPPPI, although its dependence on plantation fiber supplied by APP concessions in South Sumatra is relatively small compared with IKPP (the level of dependency in 2013 was less than 10% of LPPPI's raw materials), it still needs to be concerned as it will not be easy to replace this 10%.
- There was a significant improvement in the performance of APP concessions in supplying plantation fiber to the APP's existing pulp mills in 2013, when APP introduced its zero deforestation policy. This improvement can be seen from a comparison of plantation fiber supply in the periods before and after the introduction of the zero deforestation policy.
- APP has sufficient plantation fiber supply to operate the OKI Pulp and Paper mill, but it will not be able to run it at full capacity, but rather will have to increase production gradually. In line with this, APP needs to continue improving its plantation fiber supply performance so as to be able to meet the needs of both its existing pulp mills and the new OKI mill.
- The risk of social conflict represents a major challenge that will need to be seriously considered by APP. If the rotation of harvesting and planting in its pulpwood plantations is disrupted by social conflict, this will clearly affect the continuity of plantation fiber supply over the medium and long term, to the detriment of both APP's existing and new mills.

Recommendations



- TFT and Ata Marie need to explain at what level of production capacity APP's existing and new mills will be able to operate based on 100% plantation fiber raw materials up to 2020. This is particularly important, given that TFT in its statement in the APP press release made no mention of what level of production at APP's existing and new mills will be based on 100% plantation fiber raw materials in the period up to 2020.
- Production levels directly correlate to the level of plantation fiber supply. The Rainforest Alliance, which evaluated the methodology and conclusions of the independent report produced by TFT-Ata Marie, needs to specifically ascertain the production levels that are expected to be supplied by plantation fiber at APP's existing and new mills up to 2020.

APP concessions in South Sumatra are playing an increasingly important role in the supply of plantation fiber to APP's existing mills.



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