



THE ROAD OF DEFORESTATION IN INDONESIA

“Critical note about the loss of natural forests in Indonesia”

Since the last few decades, natural forests in Indonesia have continued to experience serious deforestation (loss of natural forest cover) and have experienced a decline in both quantity and quality. The condition of natural forests in 2017 was an accumulation of weak forest governance that occurred from time to time. Changes of regimes and policy developments in forest management have not been able to bring about the good forest governance. Slowly but surely, the natural forests continue to experience tremendous shrinkage. The results of the FWI analysis from year 2000 to 2017 have shown that the deforestation rate is still high. In the year 2000 to 2009, Indonesia lost natural forests of 1.4 million hectare per year. The period of year 2009 to 2013, the forest loss has decreased to 1.1 million hectare per year. It has increased again in the period of 2013-2017 to 1.4 million hectare per year.

In the past, timber commodification has always been the core of forest exploitation as the country's most reliable source of income and foreign exchange. The forestry sector once had a major role in the recovery of the national economy in the era of the 1970s, before it was taken over by the oil and gas sector. The forestry sector experienced rapid growth and drove the exports for the economy in the 1980s and 1990s, even though this expansion was achieved at the expense of forests, because forestry practices were not sustainable (PKHI, 2001). Forest destruction is caused by forest governance policies that are influenced by global economic forces. This is evident in the political economy policies that are pro-investment, for both foreign and domestic investments, in the forestry, agriculture and mining sectors. These policies aim to increase the economic development, which have contributed to forest destruction in Indonesia. This pro-investment political economy policy was very evident in the colonial era, New Order era and post-New Order era.¹

This shows that until now forest management policies have only viewed forests as an economic source. In fact, this view has existed since the colonial era. Meanwhile, forest protection efforts are often carried out only to secure and reserve this economic resource. It is not because of its nature where the forest is the source of life with various functions, from ecological to socio-cultural functions in supporting the life systems. On the other hand, marginalization of indigenous or local communities happens which then eliminates the communities' interaction with the forests and widens structural inequalities, such as lack of access for communities, politics of land allocation and distribution, commodity and land conversion. Moreover, local wisdom that has been passed down from generation to generation is slowly eroded and extinct.

The Ministry of Environment and Forestry (MoEF) stated that the forest area utilization for the community is only 4.14 percent, while the remaining 95.76 percent is controlled by private companies². As of 2018, mainland of Indonesia has been distributed to 541 permit holders from the forestry sector, 1,866 oil palm plantation permit holders, and 11,418 mining business license holders (FWI, 2019). This situation creates a high potential for conflicts. Even in 2018, there were 410 agrarian conflicts with an area of about 807 thousand hectares, involving 87,500 households (KPA, 2018).

¹ <https://indoprogress.com/2013/12/sejarah-ekonomi-politik-tata-kelola-hutan-di-indonesia/>

² KLHK. 2018. The statement of Siti Nurbaya in a discussion in a forum, Merdeka Barat 9, Tuesday, 3 April 2018.

The ongoing forest destruction, structural imbalances in forest management, rampant agrarian conflicts, pro-investment policies, the closure of data and information on forests and land, and information asymmetry that further obscures factual information regarding forest conditions and its management, and many other things, are the colors of Indonesia's current forest management situation.

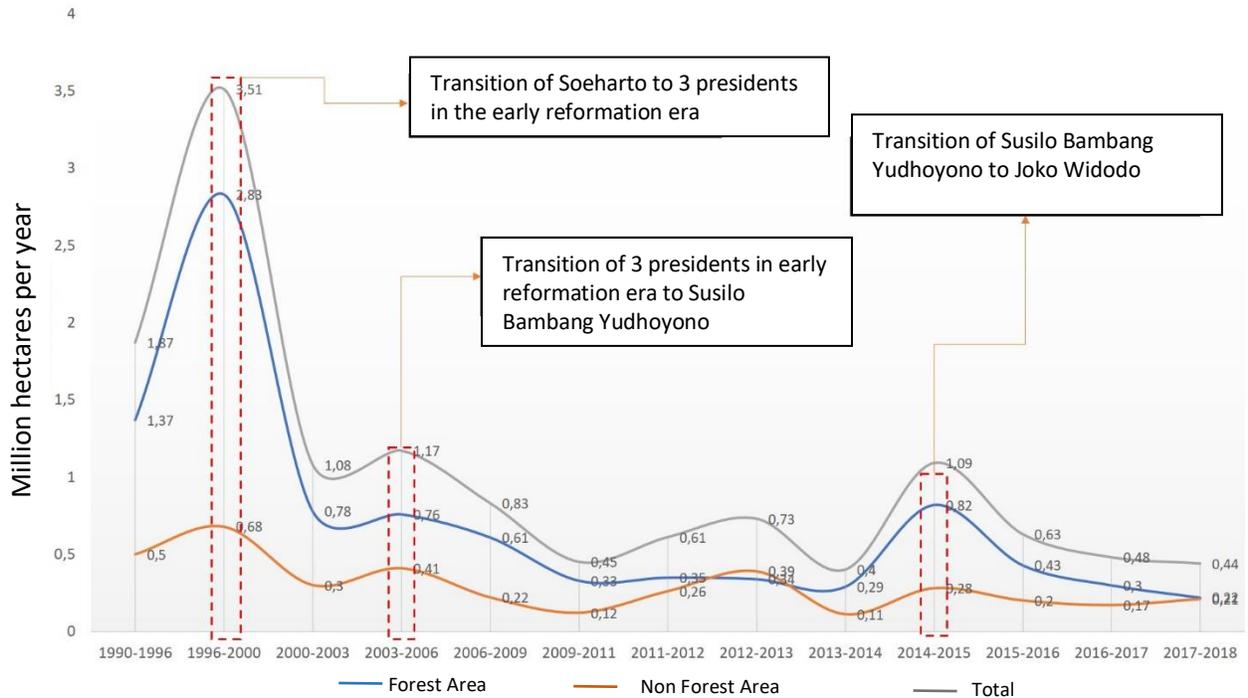


Figure 1. Chart of deforestation rate in Indonesia year 1990 to 2018 (source: Data processed from MoEF)

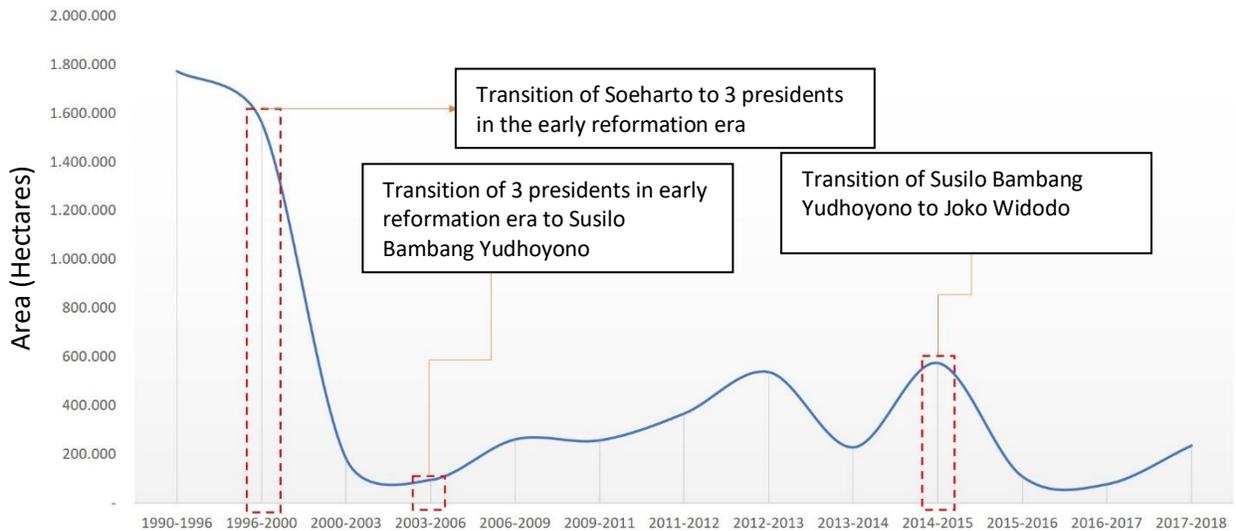


Figure 2. Chart of forest area release in year 1990 to 2018 (source: Data processed from MoEF)

Reviewing the deforestation data, there are several versions of data related to deforestation in Indonesia, from official government data issued by the Ministry of Environment and Forestry, GFW, Maryland University, FWI, and so on. However, this time, the author tries to analyze deeper into the deforestation data series that have been officially issued by the government or MoEF. The graph in Figure 1 shows a record deforestation that occurred with a rate of up to 3.5 million hectare / year, or 400 hectare / hour,

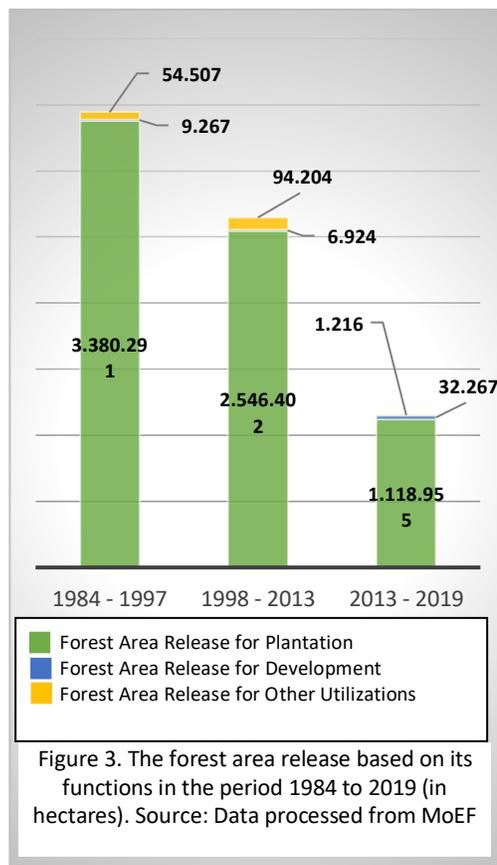
or 6.7 hectare / minute. For this record, it can be illustrated that in the period 1996 to 2000, the area of natural forest loss is equivalent to 9 times the area of a football field per minute. Even such an average deforestation area has never been previously issued by any independent institution such as GFW, Maryland University, or FWI.

Another interesting thing is that the number of deforestation rates from various government and non-government institutions that are different from each other has also triggered the discourse on defining forest and deforestation. The difference in defining the forest and deforestation eventually raises the presumption that the rate of deforestation has become a political tool for parties with an interest in forests and disguises the fact of the actual forest loss. The government comes with various definitions of deforestation such as gross deforestation and net deforestation. In the forest resource monitoring activities, the rate of deforestation is calculated as a supporting material in the implementation of forest management. The deforestation definition used is the 'net deforestation'. Meanwhile, the calculation of carbon and emission levels uses the definition of 'gross deforestation' (MoEF, 2018)³.

Apart from the different definitions of forest and deforestation, the fluctuation of the graph of the deforestation rate in Indonesia is also related to the release of forest areas in Indonesia. There is a similarity between the graphical deforestation figures and the area of forest released by the Government (Figure 2). As happened in the period 1996 to 2000. An even more similar pattern occurred in the period 2014 to 2015. From this similarity, it further strengthens the notion that the release of forest areas regardless of the purpose, although dominated for plantation areas, has a major contribution to the dynamics of deforestation (Figure 3).

If we take a closer look, the graph that showing the pattern of fluctuating rates of deforestation is also in line with the political momentum in Indonesia. It can be seen that the extent of deforested forest is also in line with the momentum of the regime change. It can be seen in the figure above, in the section marked with a dashed red box. **First**, in the range of 1996 to 2000, the rate of deforestation has increased very sharply, reaching 3.5 million hectare / year. This period was a period of transition from the Soeharto era to reformation era. **Second**, in the period of 2003 to 2006, this was a transition period between three presidents at the beginning of the reformation era, from President Habibie, President Gusdur, President Megawati to President Susilo Bambang Yudhoyono (SBY). As we know, during that period the presidential election was held in 2004. **Third**, in the 2014 to 2015 period, which was a transition period between SBY era and Joko Widodo era. The presidential election was held in 2014.

From these discrepancies, several allegations have emerged regarding what happened at that time. Those allegations that lead to an increase in the rate of deforestation in Indonesia during the transition period are illustrated into several assumptions. The assumptions are as follows:



³ MoEF, 2018. Status Hutan dan Kehutanan Indonesia. Page 24. Ministry of Environment and Forestry

1. The first assumption is that many licenses are issued in 1 to 2 years before the end of the term of government office. Ministries related to licensing are aggressively issuing licenses. This is done to meet the needs of high political costs, both legal and illegal political needs. Legal here means the need for a high budget in holding general elections by the government. Meanwhile, illegal means that there are allegations of illegal transactions in the process of granting permits to use natural resources, which are used for political capital by politicians or the political parties. The number of licenses issued was also strengthened by the data of the forest area release during the transitional period of the regime. Just a few months before the presidential succession, the release of forest areas soared. In February 1998, the government released a forest area of 275,929 hectares. Meanwhile, in September 2014, the government also released a forest area of 291,608 hectares.

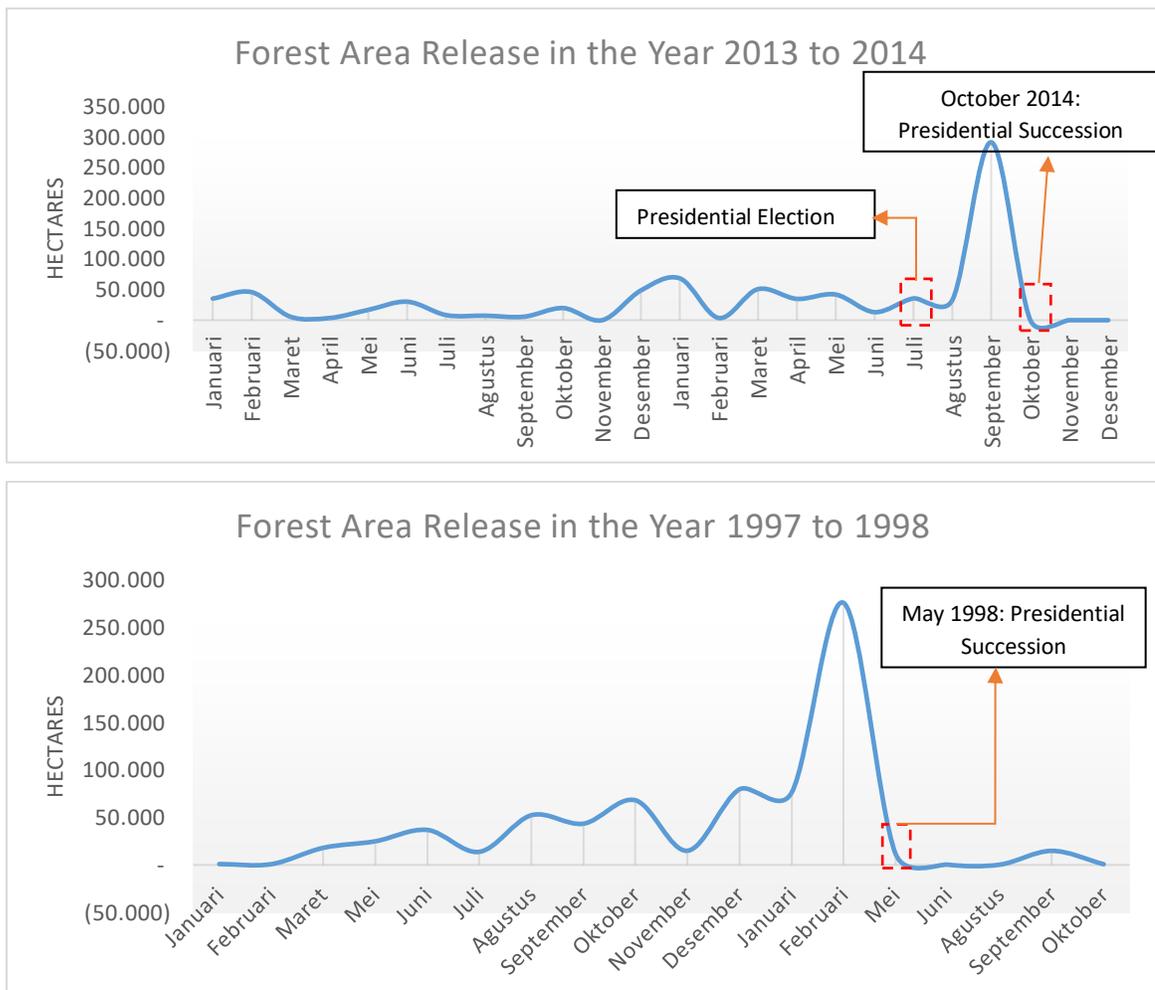


Figure 4. Forest Area Release during the transitional governmental period. Source: Data processed from MoEF

2. The second assumption is the corrupt and greedy behavior of the officials who try to get the maximum benefit by issuing permits and logging forests before the change of regime. In this case, the previous government no longer thought about a good image in saving the forests. Because it is certain that his term of office will end soon. Unlike the end of the first period of government, the rate of deforestation tends to decline. This could be done to build a positive image in saving

the forest, to ensure the continuation of a regime to a second period, as happened in the deforestation rate in 2009 and 2019.

3. The transition of the government period becomes a gray space for information on forest conditions. Practically, the previous government would not report the condition of the deforestation in Indonesia in that year. The deforestation rate can only be calculated in the later government era. So that there is an assumption that the deforestation rate during the transition period was intentionally increased. This is done so that there is a more sensible target in designing a reduction in the rate of deforestation in each era of government. It can be seen in the figure above for the deforestation rate in the year 2004 and 2014.

This possibility can also be seen from the statements of the government before and after the transition period. For example, during the transition of the administration of Susilo Bambang Yudhoyono and Joko Widodo. Quoted from an online news page⁴, in June 2013, Forestry Minister Zulkifli Hasan stated that the rate of deforestation in Indonesia continued to decline every year, from an average of 2.5 million hectares per year in the period of 1996 to 2003, to 1.15 million hectares / year in the period of 2003 to 2006. And now, the rate of deforestation is only 450 thousand hectares per year⁵. Likewise with the statement of the Minister of Environment and Forestry, Siti Nurbaya, in the last three years, Indonesia succeeded in reducing deforestation from 1.09 million hectares in 2015 to 0.61 million hectares in 2016 and 0.479 million hectares in 2017. From the statements, the two ministers from different government eras only mentioned their success in reducing the deforestation rate. However, there is no mention of an increase in the rate of deforestation during the transition period of government.

When viewed from the extent of claims for a deforestation reduction in each era of government, it can be seen that the numbers spoken are not much different. The difference is only the starting point or TO of each era of government to calculate the reduction in the rate of deforestation. Practically, the deforestation data during this transition period will be the gray data and free from accountability. The previous government would say that it did not happen during its administration, while the subsequent government would say that it happened in the previous administration. Even if averaged, deforestation in Indonesia from 2003 to 2018 stood at 0.68 million hectare / year. This figure is actually bigger than what Zulkifli Hasan said in 2013 which was 0.45 million hectares / year.

4. The fourth assumption is that the government does not focus on monitoring and protecting forests in Indonesia. This happened because the political situation was heating up. Law enforcers who are supposed to control illegal activities in the forest have instead diverted their work portion to prepare for the presidential election. Likewise, communities have been carried away by political conditions, resulting in reduced public control over forest utilization. This situation was exploited by irresponsible parties by logging forests which resulted in an increase in the rate of deforestation.

From the above assumptions, a strong assumption is increasingly justified that forests are only considered a natural resource that is often used to generate money. Especially for the sake of political interests at the national level. This also shows the high influence of national policies as well as the national political

⁴ <https://www.wartaekonomi.co.id/read12309/menurunkan-deforestasi-menjaga-keselamatan-bumi.html>

⁵ This statement was published in June 2013, referring to the government's deforestation data, the disclosed data should be the deforestation data for the year 2012 to 2013 which was 0.61 million hectare or around 610 thousand ha. However, if the government deforestation figures in the picture above are equated with the Minister of Forestry's statement, then the suitable data is the government's version of deforestation data for the period 2011 to 2012 (450 thousand hectares).

situation on forest conditions in the regions. Although there is regional autonomy, the central role for forest management is still very strong. So, with a situation like this, what will happen to the remaining forests in Indonesia?

The Wave of Deforestation Towards the Eastern Region

Practically, with a viewpoint that considers forests only as an economic resource, eastern Indonesia, which still has a lot of forest, will be the last "money barn (money storage)". This happened because the "barns" in other areas had been used up without any serious efforts to restore the damaged forest condition. By using the term "too late", the damaged forest has not been restored, but instead it has been converted into another form of land use.



Figure 5 Directions for Allocation of Production Forest Utilization in Each Region (top); Percentage of the total direction of the allocation of production forest utilization each year in each ecoregion (bottom). Source: Compilation of data processed from MoEF

The figure above is the result of data processing on the data of directions for the utilization of production forest areas. Or it could also be likened to a production forest area that is presented by the government to be "sold" and to be granted forest utilization permits in the form of IUPHHK-HA or HPH (Forest Concession), IUPHHK-HT or HTI (Forest Plantation Concession), and IUPHHK-RE (Ecosystem Restoration

Forest Concession). The two figures above show that the use of natural forests, especially those in production forests, is increasingly moving to the eastern region from year to year. From the direction of the utilization of production forests, the Kalimantan and Sumatra regions continue to experience a decline every year. In Kalimantan, in 2017, there were 1.6 million hectare of production forests that were directed to be used for HPH, HTI, and RE. The allocated production forest area has drastically reduced to 783 thousand hectare in 2020. Likewise, in Sumatra, in 2017, there were 561 thousand hectares of production forest that were directed to be used as HPH, HTI, and RE. The area of the allocation will be reduced to 156 thousand hectares in 2020.

The decrease in the allocation of utilizations in production forests in Kalimantan and Sumatra does not mean that the extractive industry for forest resources in Indonesia will decrease. Because from Figure 5, it can be seen that the area allocated has actually been moved to the eastern region of Indonesia, such as Sulawesi, Maluku and Papua. In terms of the area of production forest areas that are directed to be utilized, Sulawesi, Maluku and Papua look stable or there are no drastic increase. However, if viewed from the percentage point of view with other areas, the three regions show an increase in the direction of the utilization of production forest areas. In Papua, for example, in 2017, the region contributed 20% of all production forest that is directed to be utilized. This percentage has doubled to 40% in 2020. Likewise, the increase in the percentage that occurred in Sulawesi and Maluku.

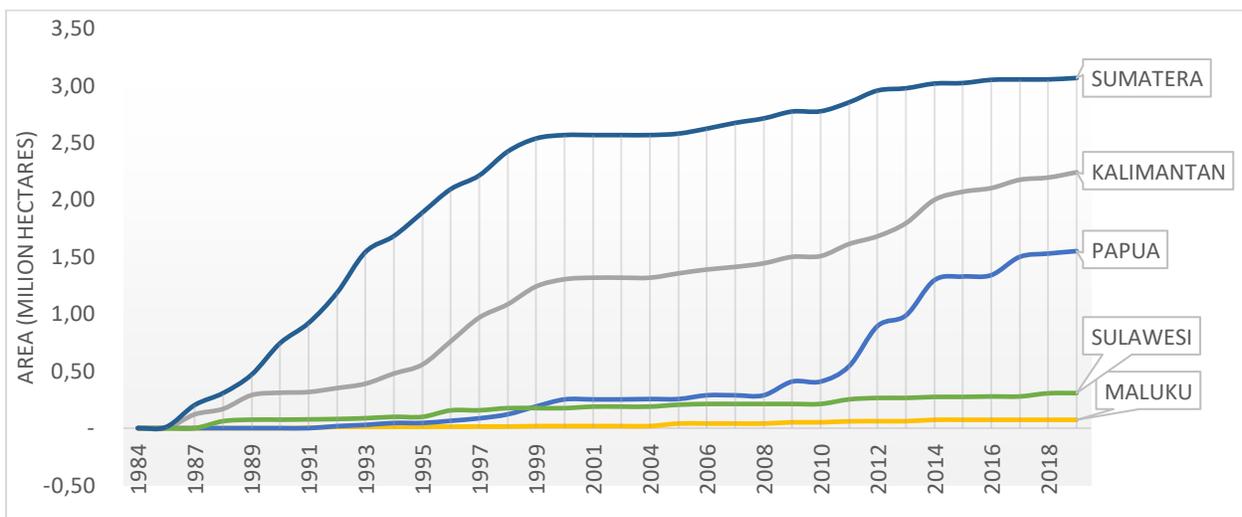


Figure 6. Accumulation of forest area release in each region. Source: Data processed from MoEF

If the explanation above concerns forest areas allocated for extractive industries in the forestry sector, then what about the fate of forests as a result of the rampant expansion of non-forestry extractive industries? As previously explained, the forest area release has contributed significantly to the pattern of deforestation in Indonesia. Figure 6 depicts the accumulated area of forest in each region that has been released from 1984 to 2019. In the Sumatra Region, the forest area release has significantly increased from 1984 to 1999. The increase in the release of forest areas in Sumatra continued until 2012 with a spike that was not as steep as the previous year. Meanwhile, from 2012 to 2019, the number of forest area release in Sumatra tended to have a sloping pattern. This marks the depletion of forest areas that can be released in the Sumatra region.

Similar to the Sumatra region, Kalimantan also shows the same pattern. The release of forest areas in Kalimantan has sharply increased from 1984 to 1999. After that, the increase continued, but not as steep as the previous year. This illustrates the same situation with Sumatra regarding the availability of forest areas that can be released. Something different actually happened in Papua, the release of forest areas in the region increased drastically starting from 2008, along with the depletion of forest areas that could be released in Sumatra and Kalimantan. The increase in the release of forest areas in Papua continues to increase even though there was a moratorium on permits for natural forests and peatlands in 2011. It is recorded that up to 2019, there have been 1.5 million hectares of forest areas that were released in Papua. In fact, 1.1 million hectares (74%) of forest areas released in Papua occurred in the 2011 to 2019 period, when there was a moratorium on permits for natural forests and peatlands.

The movement of deforestation based on FWI data has also begun to indicate growing deforestation rates in eastern regions, such as Papua, Maluku, and Sulawesi. Although the average deforestation value in the eastern region is not higher than in the western and central regions, the value of deforestation in the eastern region is increasing every year. This can be seen in the figure below for the Sulawesi, Maluku and Papua regions. This pattern also increases the presumption that areas where deforestation occurs will continue to move to eastern Indonesia, in accordance with the availability of natural forest reserves. As it is known that these islands are the remaining pockets of tropical rainforest in Indonesia.

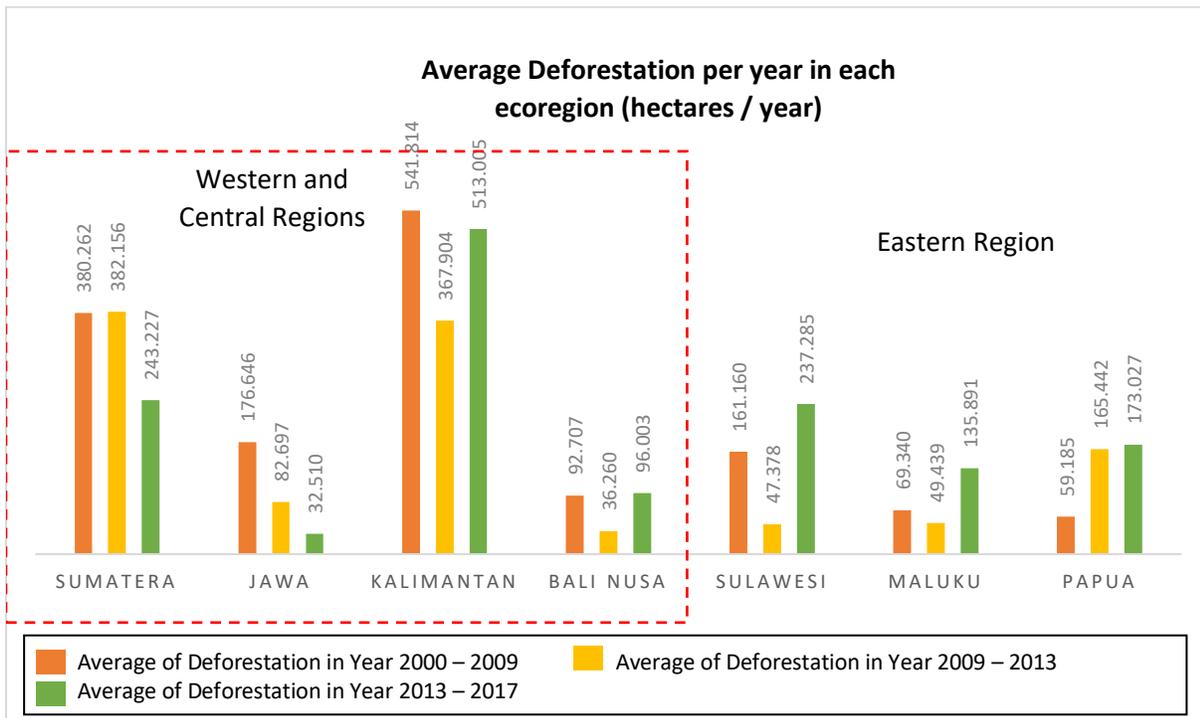


Figure 7. Deforestation in Indonesia in year 2000-2017. Note: Deforestation in the previous period becomes the baseline for the deforestation rate in the next period.

A data review of the directions for the utilization of production forests and the release of forest areas as well as the condition of deforestation, has reinforced the presumption that the road map for reducing deforestation in Indonesia has reached a dead end. This means that deforestation will still occur but in different locations. This situation illustrates that there will be a new era with the regions that the forest areas will be released, a new era for forest use permits, and also a new era of deforestation in Indonesia.

During the regime of Joko Widodo, the problems faced by the forestry sector were not much different from the previous period, which is also a legacy from the history of management from the past. The above patterns can be used as benchmarks and prediction tools for forest conditions at the end of Joko Widodo's administration. Of course, the authors do not hope that what happened in the last days of the previous administration will happen again, where many permits were issued towards the end of a regime and the impact on increasing the rate of deforestation. Even though at this time, the narrative related to investment continues to be echoed even more "spoiled" by the creation of a legal umbrella in the form of the Omnibus Bill on the Job Creation Bill and also other Bills. At least this is a reminder note that there are still many problems to be resolved. In this case the government should focus on resolving injustice control of natural resources, which actually already has a policy basis, in the form of social forestry, agrarian reform, accelerated recognition of customary territories, or other initiatives. Likewise, the commitment to reduce the rate of deforestation and improve forest governance (moratorium, one map policy, information disclosure, etc.) which should be a work priority, does not create opportunities for an increase in the number of permits at the end of his regime.