

AI Pipeline Summary

The analysis utilized various datasets to assess environmental changes and management interventions in a specified area spanning approximately 103,179 hectares over the periods from 2000 to 2024. The study focused on evaluating fire risk, drought conditions, forest cover, land cover, and vegetation health, with particular attention to changes before and after an intervention that began in 2022.

Analysis of fire risk using the Terra and Aqua combined MCD64A1 Version 6.1 Burned Area data product revealed infrequent fire occurrences, with burned areas detected in only 8.33% of the years analyzed. Notably, post-intervention data from 2022 to 2024 showed no detected burned areas, suggesting a possible improvement in fire risk management or environmental conditions.

The Palmer Drought Severity Index (PDSI) analysis showed varying degrees of wet and dry conditions from 2000 to 2024. Post-intervention, 2022 was categorized as 'Slightly wet' and 2024 as 'Moderate wet', indicating improved water availability, though 2023 experienced a 'Mild drought'. This highlights the ongoing challenges in maintaining water balance despite positive trends.

Forest cover analysis using the Hansen dataset indicated a mean forest coverage of 98.51% with a negligible deforestation rate. Post-intervention data from 2022 to 2023 showed stable forest coverage percentages of 97.06% and 96.95%, respectively, suggesting continued stability in forest cover with no significant changes in deforestation rates observed.

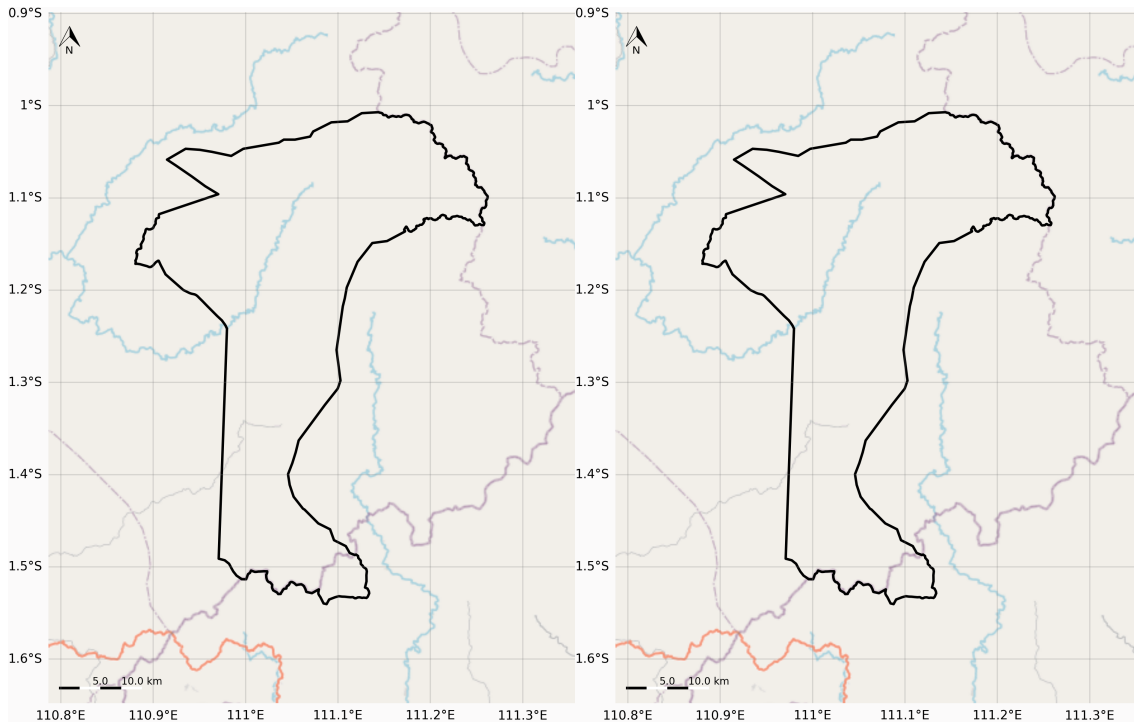
The Dynamic World dataset analysis from 2016 to 2024 indicated stable yet slightly declining tree coverage post-intervention, with a decrease from 96.73% in 2022 to 92.47% in 2024. Despite this decline, an overall increase of 34.15% in tree coverage was observed from 2016 to 2024, implying that interventions may have contributed to maintaining or enhancing tree coverage.

Vegetation health assessed through Sentinel-2 and Landsat imagery NDVI analysis showed an increase in dense vegetation coverage post-intervention, reaching up to 96.52% by 2024. Sparse vegetation coverage decreased significantly, suggesting a positive impact of the intervention on vegetation health. However, uncertainties due to data gaps and NDVI limitations mean these findings should be interpreted with caution.

In summary, the analysis reveals overall positive trends post-intervention, including reduced fire risk, improved water availability, stable forest cover, and healthier vegetation. Continued monitoring and adaptation strategies will be essential to sustain these environmental improvements in the long term.

Burned Area (MODIS)

Fire Risk Modis (2001 - 2024)



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Time Start	Time End	Burned Area %	Burned Area (ha)
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Time Start	Time End	Burned Area %	Burned Area (ha)
<i>This table was added to the appendix because the length of table exceeds 15 rows</i>			

The analysis employs the Terra and Aqua combined MCD64A1 Version 6.1 Burned Area data product to evaluate fire risk over a specified area using MODIS (Moderate Resolution Imaging Spectroradiometer) sensors. The dataset offers a global gridded 500-meter resolution product that identifies burned areas through changes in spectral signature, with validation involving cross-referencing with ground truth data. This ensures reliable and accurate mapping of burn areas.

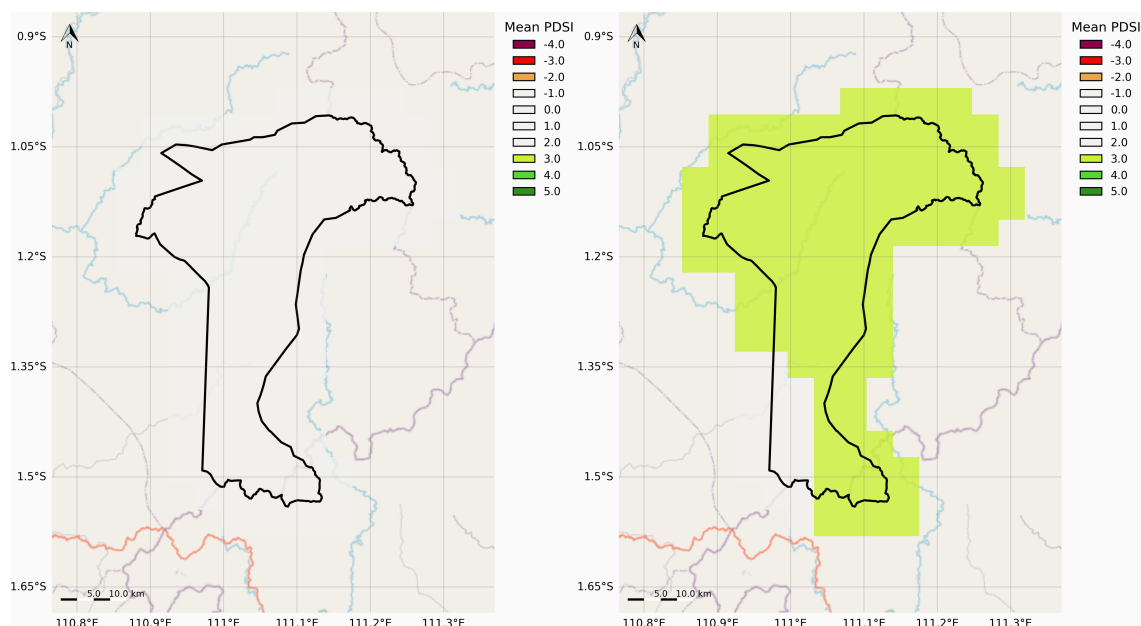
The area of interest spans approximately 103,179 hectares. The analysis covers the period from 2001 to 2024, with particular focus on the years before (2001-2021) and after the intervention (2022-2024). The dataset reveals that out of the 24 years analyzed, burned areas were detected in 8.33% of those years, indicating relatively infrequent fire occurrences. Notably, the maximum annual fire coverage occurred in 2004, with 100.17 hectares burned. In terms of temporal distribution, the data does not show any burned areas for most years except for 2004 and 2016, where 75.13 hectares were affected.

Post-intervention analysis from 2022 to 2024 shows no burned areas detected. This suggests a possible change in fire risk management or environmental conditions that have seemingly reduced the incidence of detectable fires in the area during this period. However, it is critical to note that the dataset does not account for fire duration and severity, and fire predictions are influenced by various factors including climate, fuel load, and human activities.

The uncertainty threshold applied removes any burn areas with uncertainty above 30%, enhancing the reliability of the results. The methodology also involves analyzing changes in spectral signatures, particularly focusing on post-fire vegetation recovery and soil changes to identify burned areas accurately. However, uncertain time frames are not included in the conclusion due to their exclusion in the analysis.

Drought Hazard (PDSI)

Drought Risk Pdsi (2000 - 2024)



Drought Risk Pdsi

Time Start	Time End	Mean PDSI
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The analysis uses the Palmer Drought Severity Index (PDSI) to evaluate drought risk in a specified area over a period from 2000 to 2024. The PDSI is derived from the TerraClimate dataset, which provides comprehensive monthly climate data for global terrestrial surfaces. This index is instrumental in assessing water availability and drought conditions, crucial for environmental and agricultural planning.

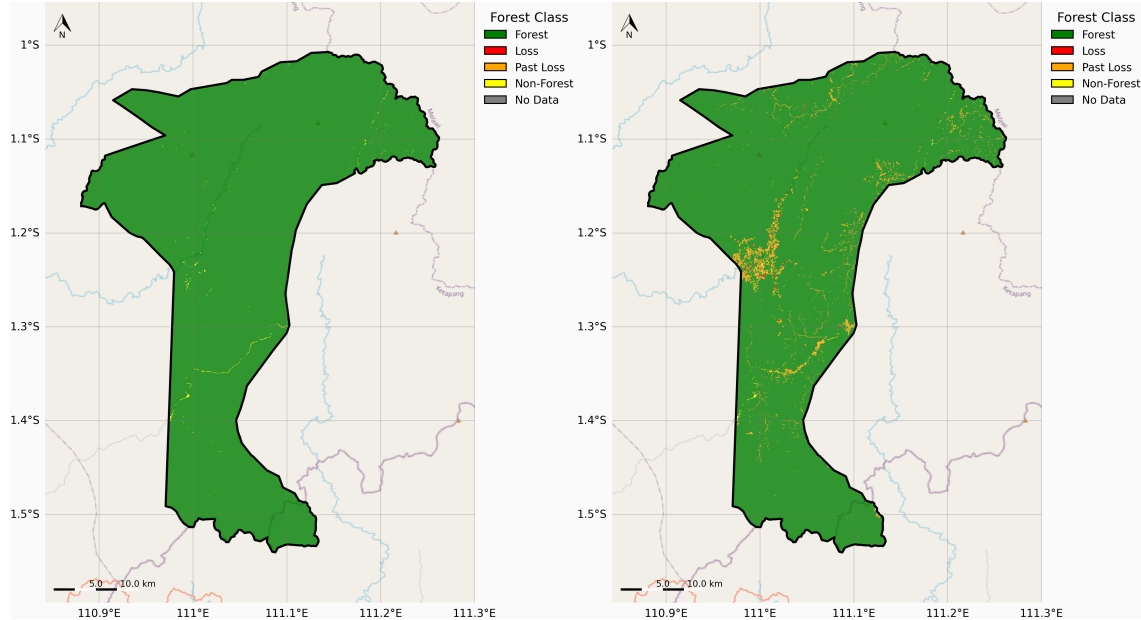
Prior to the intervention period, from 2000 to 2021, the region experienced varying degrees of wet and dry conditions. The years 2009 and 2017 were marked as 'Moderate wet', while 2010 was classified as 'Very wet', suggesting favorable conditions for water-dependent activities. Conversely, the area experienced 'Mild drought' in 2006, 2014, and 'Near normal' conditions in 2002, 2005, 2011, and 2015, indicating some variability in water availability but generally stable conditions overall.

After the intervention began in 2022, the PDSI indicates a mixed impact on drought conditions. The year 2022 was categorized as 'Slightly wet', suggesting a slight improvement in water availability. However, 2023 reverted to 'Mild drought', indicating challenges remain in maintaining water balance. In 2024, conditions improved to 'Moderate wet', marking a positive shift towards better water availability post-intervention.

The analysis highlights that while there are fluctuations in annual PDSI values, the overall trend post-intervention suggests a potential improvement in water availability, as evidenced by the shift from 'Mild drought' in 2023 to 'Moderate wet' in 2024. Nevertheless, the year-to-year variability underscores the complexity of regional climate patterns and the need for continued adaptation and management strategies to sustain environmental conditions.

Forest Cover (HANSEN)

Forest Cover Hansen (2000 - 2023)



Forest Cover Hansen

Time Start	Time End	Forest	Loss	Past Loss	Non-Forest	No Data	Deforestation Rate
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The analysis conducted using the Hansen forest loss dataset provides insights into forest cover changes over a period spanning from 2000 to 2023. This dataset, published by the University of Maryland, utilizes high-resolution satellite imagery from the Landsat series to detect changes in forest cover globally. The methodology involves using advanced algorithms to classify each pixel and identify forest loss, gain, and extent by comparing annual time-series data. It is important to note that the Hansen dataset's definition of forest loss includes not only the complete removal of tree cover but also any conversion from native forest to plantation, which is stricter than the IPCC definition.

The area analyzed measures approximately 103,180 hectares, and data was compiled for each year from 2000 through 2023. The analysis reveals a mean forest coverage of 98.51% across all years, with a mean annual deforestation rate of 0.12%, indicating a negligible deforestation rate overall. The maximum annual deforestation rate observed was 0.29%, which is also considered negligible, suggesting that the forest cover remained largely stable

within this area over the entire period.

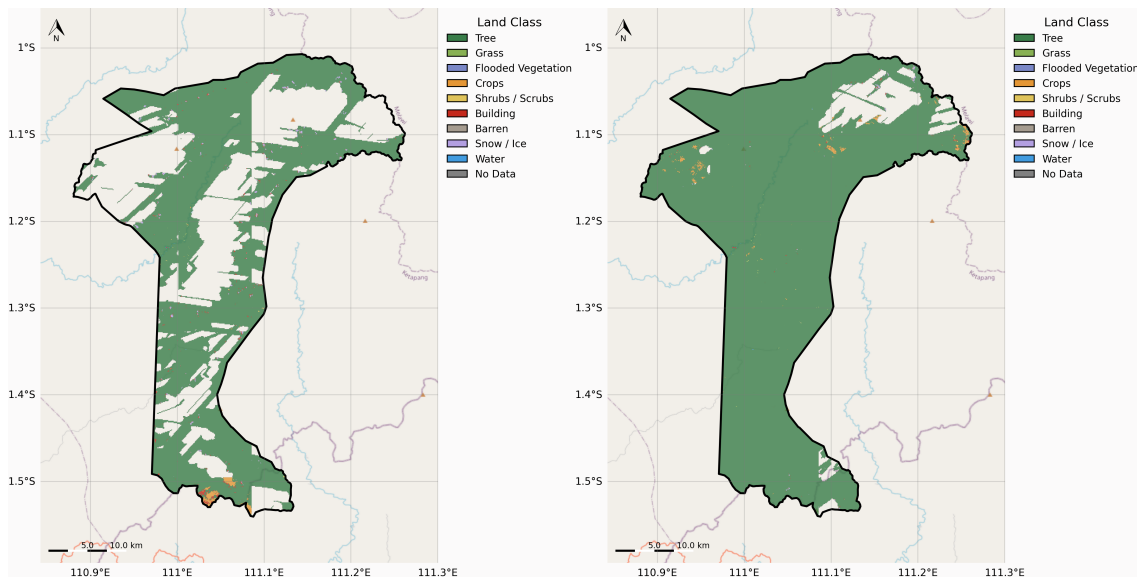
Focusing on the period before the intervention (2000-2021), the mean annual deforestation rate was consistently low, maintaining a stable forest coverage. During this time, the deforestation rate did not exceed 0.18% in any given year. The forest coverage percentage remained high, with minor fluctuations, indicating that the intervention was preceded by a period of relative stability in forest cover.

In the period after the intervention began in 2022, the data indicates a continuation of this stable trend. Specifically, in 2022 and 2023, the forest coverage percentages were 97.06% and 96.95%, respectively, with deforestation rates of 0.13% and 0.11%. These figures suggest that the intervention did not lead to significant changes in the rate or extent of forest loss compared to the preceding years. However, it is crucial to note that the timeframe post-intervention (2022-2023) is short, and long-term trends may require further monitoring to fully assess the intervention's impact.

While the results reflect a stable forest cover with negligible deforestation rates, the timeframe analyzed post-intervention is limited. Consequently, any long-term impacts of the intervention would need extended observation and analysis to be conclusively evaluated.

Land Cover (Dynamic World)

Land Cover Dynamic World (2016 - 2024)



Land Cover Dynamic World

Time Start	Time End	Tree	Grass	Flooded Vegetation	Crops	Shrubs / Scrubs	Building	Barren	Snow / Ice	Water	No Data
2016-01-01T00:00:00Z	2016-12-31T23:59:59Z	58.32	0.02	0.0	0.41	0.02	0.39	0.07	0.39	0.01	40.37
2017-01-01T00:00:00Z	2017-12-31T23:59:59Z	53.58	0.02	0.0	0.03	0.01	0.07	0.04	0.35	0.0	45.9
2018-01-01T00:00:00Z	2018-12-31T23:59:59Z	95.77	0.01	0.0	0.15	0.01	0.12	0.17	0.29	0.01	3.48
2019-01-01T00:00:00Z	2019-12-31T23:59:59Z	99.96	0.01	0.0	0.0	0.01	0.01	0.0	0.0	0.0	0.0
2020-01-01T00:00:00Z	2020-12-31T23:59:59Z	99.9	0.01	0.0	0.0	0.01	0.01	0.0	0.0	0.0	0.07
2021-01-01T00:00:00Z	2021-12-31T23:59:59Z	88.43	0.01	0.0	0.65	0.04	0.11	0.02	0.13	0.0	10.61
2022-01-01T00:00:00Z	2022-12-31T23:59:59Z	96.73	0.02	0.0	0.16	0.0	0.04	0.01	0.08	0.0	2.95

2023-01-01T00:00:00Z	2023-12-31T23:59:59Z	97.88	0.01	0.0	0.07	0.0	0.05	0.01	0.06	0.0	1.91
2024-01-01T00:00:00Z	2024-12-31T23:59:59Z	92.47	0.03	0.0	0.43	0.01	0.08	0.04	0.08	0.0	6.86

The Dynamic World dataset analysis provides a comprehensive view of land cover changes over the years 2016 to 2024, specifically focusing on tree coverage. The analysis excludes years 2016, 2017, and 2021 due to data uncertainty, thereby focusing on reliable data from 2018 to 2020 and 2022 to 2024.

During the reliable pre-intervention period, from 2018 to 2020, tree coverage was observed to be consistently high, peaking at 99.96% in 2019. This period shows a strong presence of tree cover, with 2019 being a particularly significant year due to its maximum forest coverage.

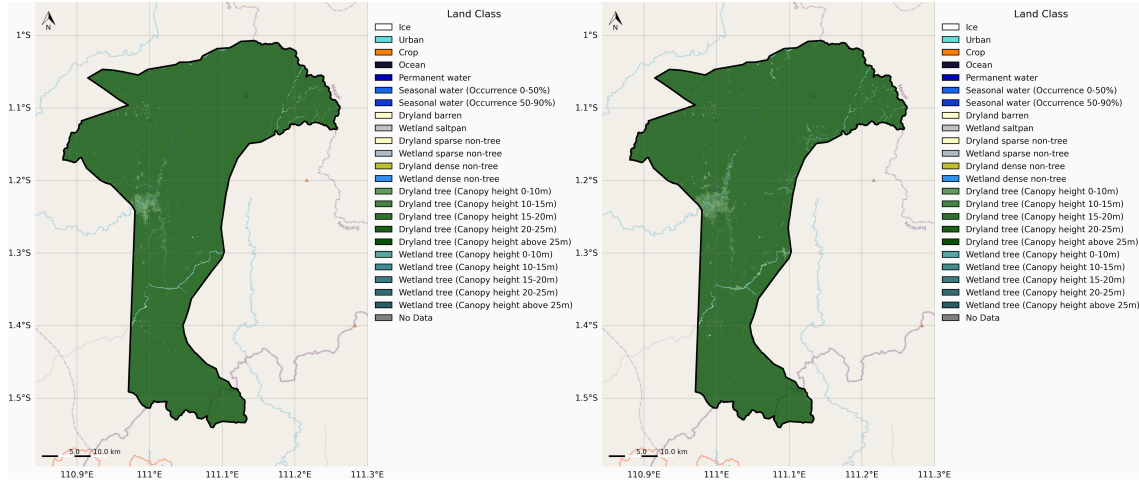
Post-intervention, starting from 2022, tree coverage remained robust but showed a slight decrease compared to the peak in 2019. Notably, in 2022, tree coverage was at 96.73%, and it slightly decreased to 92.47% by 2024. Despite this decrease, the tree coverage remained substantial, indicating a relatively stable forest environment post-intervention.

The overall change in forest coverage from the start of the reliable data period in 2018 to the end in 2024 shows a positive gain, with an overall increase of 34.15% from the beginning of the dataset in 2016 to the end in 2024. This suggests that the intervention may have contributed to maintaining or enhancing the tree coverage, although data from 2022 onwards indicate a slight decline.

In summary, the intervention period (2022-2024) has seen a stable yet slightly declining tree coverage compared to the pre-intervention period (2018-2020). The data indicates a significant forest presence throughout the years with an overall gain in tree coverage over the entire analysis period.

Landcover (GLAD - 24 Classes)

Land Cover Glad 24 (2000 - 2020)



Land Cover Glad 24

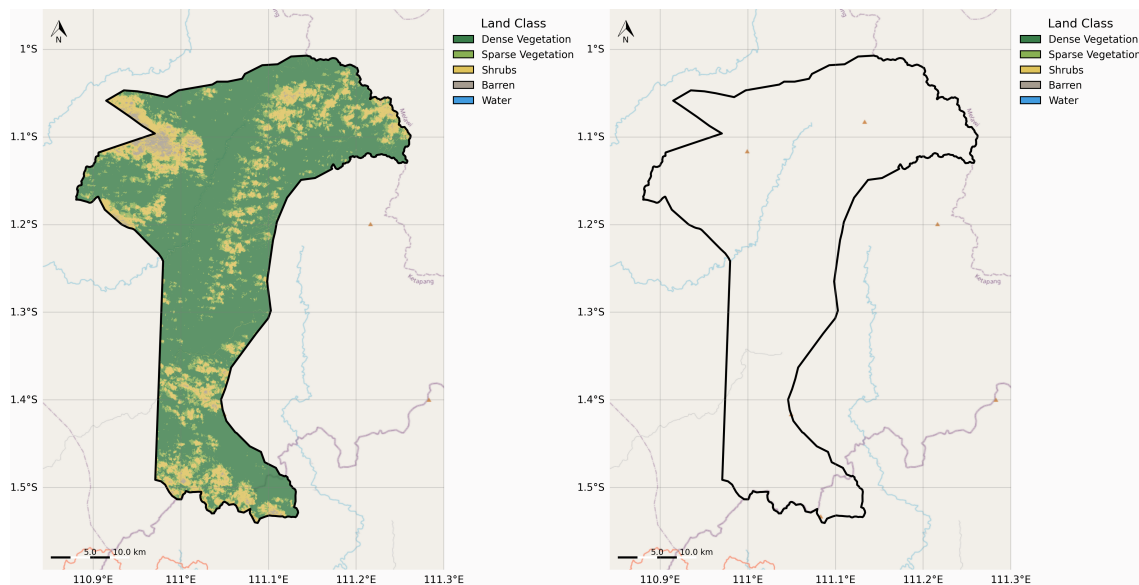
Time Start	Time End	Ice	Urban	Crop	Ocean	Permanent water	Seasonal water (Occurrence 0-50%)	Seasonal water (Occurrence 50-90%)	Dryland barren	Wetland saltpan	Wetland sparse non-tree	Dryland dense non-tree	Wetland dense non-tree	Dryland tree (Canopy height 0-10m)	Dryland tree (Canopy height 10-15m)	Dryland tree (Canopy height 15-20m)	Dryland tree (Canopy height 20-25m)	Dryland tree (Canopy height above 25m)	Wetland tree (Canopy height 0-10m)	Wetland tree (Canopy height 10-15m)	Wetland tree (Canopy height 15-20m)	Wetland tree (Canopy height 20-25m)	Wetland tree (Canopy height above 25m)	No Data
2000-01-01	2012-01-31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000-01-01	2012-01-31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

In terms of forest dynamics, the dataset highlights a forest gain area of 83.16 hectares and a forest loss area of 248.04 hectares between the first and last years of analysis. Additionally, forest degradation (areas where tree height loss was detected) was observed over 3,253.95 hectares, while forest regeneration (areas where tree height gain was detected) covered 2,157.75 hectares. These figures suggest that, prior to the intervention, forest loss and degradation were more prevalent than forest gain and regeneration.

Overall, the dataset indicates that prior to 2020, the study area experienced significant changes in forest structure, with a net loss in tree height and area despite some occurrences of forest regeneration. Since the data does not cover the period post-2021, any assessment of the impact of the 2022 intervention would require updated datasets that include the years following the intervention.

NDVI (Sentinel)

Ndvi Sentinel (2016-01 - 2024-10)



The analysis conducted using Sentinel-2 data offers insights into vegetation health and coverage over the specified timeframes. The dataset, part of the European Union's Copernicus program, utilizes high-resolution imagery to assess changes in vegetation using the Normalized Difference Vegetation Index (NDVI). This index, calculated from the Near-IR and Red bands, provides a quantifiable measure of vegetation health by differentiating between dense and sparse vegetation coverage.

The analysis focused on the time period from 2016 to 2024, with particular attention to timeframes before and after the intervention that began in 2022. Importantly, several timeframes were identified as uncertain due to data gaps, specifically affecting parts of 2016 to 2018, as well as some periods in 2022, 2023, and 2024. These uncertainties were

taken into account when evaluating the data.

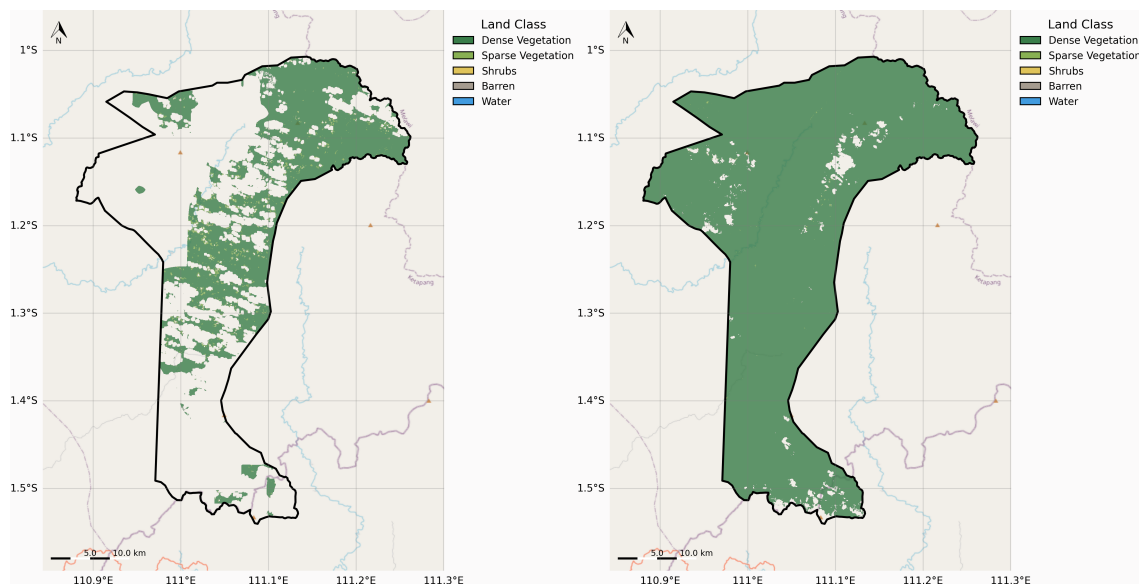
Prior to the intervention (2016–2021), the percentage of dense vegetation reached a maximum of 70.77% in the start year (2016). In contrast, sparse vegetation had a maximum coverage of 41.56% during the same period. These figures suggest a dominance of dense vegetation in the landscape before the intervention commenced.

Following the intervention, from 2022 to 2024, dense vegetation coverage reached a new maximum of 83.06%, while sparse vegetation coverage decreased, with a maximum of 20.58%. This indicates an increase in dense vegetation and a corresponding decrease in sparse vegetation coverage post-intervention.

Overall, the analysis demonstrates a clear shift in vegetation patterns before and after the intervention. While uncertainties in certain timeframes limit a comprehensive analysis, the available data suggests that the intervention was associated with increased dense vegetation coverage and reduced sparse vegetation coverage. These findings underscore the effectiveness of the intervention in promoting healthier vegetation over the studied area.

NDVI (Landsat)

Ndvi Landsat (1999-01 - 2024-10)



The analysis of vegetation coverage via the Normalized Difference Vegetation Index (NDVI) using Landsat imagery provides a comprehensive view of the changes in vegetation over a period spanning from 1999 to 2024. This analysis was divided into two distinct periods: before the intervention (1999–2021) and after the intervention (2022–2024).

In the period prior to the intervention (1999–2021), a variety of time frames were analyzed, though it is important to note that several epochs were identified as uncertain due to data gaps exceeding 10%. Consequently, these uncertain time frames were excluded from the analysis. During this period, the percentage of dense vegetation varied significantly, with values ranging from 6.24% to 82.38% in the initial year. Sparse vegetation coverage during this time was relatively low, ranging from 0.1% to 1.98%.

Following the intervention, from 2022 to 2024, the analysis showed a notable increase in dense vegetation coverage, reaching a range of 84.74% to 96.52% by the end of the period. Sparse vegetation coverage decreased further, ranging from 0.02% to 0.11%. This suggests an improvement in vegetation density post-intervention. However, it is crucial to consider that this change might not solely be attributed to the intervention due to the inherent limitations of NDVI data, such as sensitivity to seasonal changes and atmospheric conditions. Therefore, while there is an association between the time period post-intervention and increased dense vegetation, causality cannot be definitively established solely based on this data.

Appendix

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Time Start	Time End	Burned Area %	Burned Area (ha)
2001-01-01T00:00:00Z	2001-12-31T23:59:59Z	0.0	0.0
2002-01-01T00:00:00Z	2002-12-31T23:59:59Z	0.0	0.0
2003-01-01T00:00:00Z	2003-12-31T23:59:59Z	0.0	0.0
2004-01-01T00:00:00Z	2004-12-31T23:59:59Z	0.1	100.17
2005-01-01T00:00:00Z	2005-12-31T23:59:59Z	0.0	0.0
2006-01-01T00:00:00Z	2006-12-31T23:59:59Z	0.0	0.0
2007-01-01T00:00:00Z	2007-12-31T23:59:59Z	0.0	0.0
2008-01-01T00:00:00Z	2008-12-31T23:59:59Z	0.0	0.0
2009-01-01T00:00:00Z	2009-12-31T23:59:59Z	0.0	0.0
2010-01-01T00:00:00Z	2010-12-31T23:59:59Z	0.0	0.0
2011-01-01T00:00:00Z	2011-12-31T23:59:59Z	0.0	0.0
2012-01-01T00:00:00Z	2012-12-31T23:59:59Z	0.0	0.0
2013-01-01T00:00:00Z	2013-12-31T23:59:59Z	0.0	0.0
2014-01-01T00:00:00Z	2014-12-31T23:59:59Z	0.0	0.0
2015-01-01T00:00:00Z	2015-12-31T23:59:59Z	0.0	0.0
2016-01-01T00:00:00Z	2016-12-31T23:59:59Z	0.07	75.13

2017-01-01T00:00:00Z	2017-12-31T23:59:59Z	0.0	0.0
2018-01-01T00:00:00Z	2018-12-31T23:59:59Z	0.0	0.0
2019-01-01T00:00:00Z	2019-12-31T23:59:59Z	0.0	0.0
2020-01-01T00:00:00Z	2020-12-31T23:59:59Z	0.0	0.0
2021-01-01T00:00:00Z	2021-12-31T23:59:59Z	0.0	0.0
2022-01-01T00:00:00Z	2022-12-31T23:59:59Z	0.0	0.0
2023-01-01T00:00:00Z	2023-12-31T23:59:59Z	0.0	0.0
2024-01-01T00:00:00Z	2024-12-31T23:59:59Z	0.0	0.0

Buffered Aoi

Time Start	Time End	Burned Area %	Burned Area (ha)
2001-01-01T00:00:00Z	2001-12-31T23:59:59Z	0.0	0.0
2002-01-01T00:00:00Z	2002-12-31T23:59:59Z	0.0	0.0
2003-01-01T00:00:00Z	2003-12-31T23:59:59Z	0.0	0.0
2004-01-01T00:00:00Z	2004-12-31T23:59:59Z	0.24	500.04
2005-01-01T00:00:00Z	2005-12-31T23:59:59Z	0.0	0.0
2006-01-01T00:00:00Z	2006-12-31T23:59:59Z	0.0	0.0
2007-01-01T00:00:00Z	2007-12-31T23:59:59Z	0.0	0.0
2008-01-01T00:00:00Z	2008-12-31T23:59:59Z	0.0	0.0
2009-01-	2009-12-	0.0	0.0

01T00:00:00Z	31T23:59:59Z		
2010-01-01T00:00:00Z	2010-12-31T23:59:59Z	0.0	0.0
2011-01-01T00:00:00Z	2011-12-31T23:59:59Z	0.0	0.0
2012-01-01T00:00:00Z	2012-12-31T23:59:59Z	0.0	0.0
2013-01-01T00:00:00Z	2013-12-31T23:59:59Z	0.0	0.0
2014-01-01T00:00:00Z	2014-12-31T23:59:59Z	0.0	0.0
2015-01-01T00:00:00Z	2015-12-31T23:59:59Z	0.0	0.0
2016-01-01T00:00:00Z	2016-12-31T23:59:59Z	0.04	75.01
2017-01-01T00:00:00Z	2017-12-31T23:59:59Z	0.0	0.0
2018-01-01T00:00:00Z	2018-12-31T23:59:59Z	0.0	0.0
2019-01-01T00:00:00Z	2019-12-31T23:59:59Z	0.0	0.0
2020-01-01T00:00:00Z	2020-12-31T23:59:59Z	0.0	0.0
2021-01-01T00:00:00Z	2021-12-31T23:59:59Z	0.0	0.0
2022-01-01T00:00:00Z	2022-12-31T23:59:59Z	0.0	0.0
2023-01-01T00:00:00Z	2023-12-31T23:59:59Z	0.0	0.0
2024-01-01T00:00:00Z	2024-12-31T23:59:59Z	0.0	0.0

Drought Risk Pdsi

Time Start	Time End	Mean PDSI
2000-01-01T00:00:00Z	2000-12-31T23:59:59Z	1.16

2001-01-01T00:00:00Z	2001-12-31T23:59:59Z	0.93
2002-01-01T00:00:00Z	2002-12-31T23:59:59Z	0.22
2003-01-01T00:00:00Z	2003-12-31T23:59:59Z	1.1
2004-01-01T00:00:00Z	2004-12-31T23:59:59Z	0.78
2005-01-01T00:00:00Z	2005-12-31T23:59:59Z	-0.32
2006-01-01T00:00:00Z	2006-12-31T23:59:59Z	-1.99
2007-01-01T00:00:00Z	2007-12-31T23:59:59Z	1.58
2008-01-01T00:00:00Z	2008-12-31T23:59:59Z	1.22
2009-01-01T00:00:00Z	2009-12-31T23:59:59Z	2.73
2010-01-01T00:00:00Z	2010-12-31T23:59:59Z	3.57
2011-01-01T00:00:00Z	2011-12-31T23:59:59Z	-0.16
2012-01-01T00:00:00Z	2012-12-31T23:59:59Z	1.46
2013-01-01T00:00:00Z	2013-12-31T23:59:59Z	1.54
2014-01-01T00:00:00Z	2014-12-31T23:59:59Z	-1.31
2015-01-01T00:00:00Z	2015-12-31T23:59:59Z	0.03
2016-01-01T00:00:00Z	2016-12-31T23:59:59Z	4.37
2017-01-01T00:00:00Z	2017-12-31T23:59:59Z	2.37
2018-01-01T00:00:00Z	2018-12-31T23:59:59Z	1.49
2019-01-01T00:00:00Z	2019-12-31T23:59:59Z	1.2
2020-01-01T00:00:00Z	2020-12-31T23:59:59Z	3.01
2021-01-01T00:00:00Z	2021-12-31T23:59:59Z	1.37
2022-01-01T00:00:00Z	2022-12-31T23:59:59Z	1.94
2023-01-01T00:00:00Z	2023-12-31T23:59:59Z	-1.51
2024-01-01T00:00:00Z	2024-12-31T23:59:59Z	2.34

Forest Cover Hansen

Time Start	Time End	Forest	Loss	Past Loss	Non-Forest	No Data	Deforestation Rate
2000-01-01T00:00:00Z	2000-12-31T23:59:59Z	99.77	0.0	0.0	0.23	0	0.0
2001-01-01T00:00:00Z	2001-12-31T23:59:59Z	99.68	0.09	0.0	0.23	0	0.09
2002-01-01T00:00:00Z	2002-12-31T23:59:59Z	99.63	0.05	0.09	0.23	0	0.05
2003-01-01T00:00:00Z	2003-12-31T23:59:59Z	99.61	0.02	0.14	0.23	0	0.02
2004-01-01T00:00:00Z	2004-12-31T23:59:59Z	99.47	0.14	0.16	0.23	0	0.14
2005-01-01T00:00:00Z	2005-12-31T23:59:59Z	99.33	0.14	0.29	0.23	0	0.14
2006-01-01T00:00:00Z	2006-12-31T23:59:59Z	99.17	0.16	0.44	0.23	0	0.16
2007-01-01T00:00:00Z	2007-12-31T23:59:59Z	99.04	0.13	0.6	0.23	0	0.13
2008-01-01T00:00:00Z	2008-12-31T23:59:59Z	99.0	0.04	0.73	0.23	0	0.04
2009-01-01T00:00:00Z	2009-12-31T23:59:59Z	98.83	0.18	0.77	0.23	0	0.18

01-01T00:00:00Z	31T23:59:59Z						
2010-01-01T00:00:00Z	2010-12-31T23:59:59Z	98.82	0.01	0.94	0.23	0	0.01
2011-01-01T00:00:00Z	2011-12-31T23:59:59Z	98.78	0.04	0.95	0.23	0	0.04
2012-01-01T00:00:00Z	2012-12-31T23:59:59Z	98.67	0.11	0.99	0.23	0	0.12
2013-01-01T00:00:00Z	2013-12-31T23:59:59Z	98.57	0.1	1.1	0.23	0	0.1
2014-01-01T00:00:00Z	2014-12-31T23:59:59Z	98.42	0.15	1.2	0.23	0	0.15
2015-01-01T00:00:00Z	2015-12-31T23:59:59Z	98.22	0.2	1.35	0.23	0	0.2
2016-01-01T00:00:00Z	2016-12-31T23:59:59Z	97.93	0.29	1.55	0.23	0	0.29
2017-01-01T00:00:00Z	2017-12-31T23:59:59Z	97.78	0.15	1.84	0.23	0	0.15
2018-01-01T00:00:00Z	2018-12-31T23:59:59Z	97.66	0.13	1.99	0.23	0	0.13
2019-01-01T00:00:00Z	2019-12-31T23:59:59Z	97.39	0.27	2.11	0.23	0	0.27
2020-01-01T00:00:00Z	2020-12-31T23:59:59Z	97.29	0.1	2.38	0.23	0	0.1
2021-01-01T00:00:00Z	2021-12-31T23:59:59Z	97.19	0.1	2.48	0.23	0	0.11

:00Z	59Z						
2022-01-01T00:00:00Z	2022-12-31T23:59:59Z	97.06	0.13	2.58	0.23	0	0.13
2023-01-01T00:00:00Z	2023-12-31T23:59:59Z	96.95	0.11	2.71	0.23	0	0.11