

CASE STUDY

Synergetic SDGs national level inter-linkages implementation: “Environmental system: Observation Deforestation Effect in Global Tropical Forest”

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The Sustainable Development Goals (SDGs) forced the countries under UN to combat deforestation by approaching using Goal 15 of desertification, land degradation, and the biodiversity loss by accommodating the rule to protecting the forest for sustainable environment. It is followed by 10 targets, which includes the integration of ecosystem and biodiversity values into national planning, development processes, and poverty reduction strategies and accounts, and a target to mobilize and significantly increase from all sources financial resources to conserve and sustainably use biodiversity and ecosystems.

This case study reviewed the new possible approaches utilized to implement the inter-linkages of the critical component of Goal 15 for addressing forest development to tackle deforestation, land degradation, and the protection of biodiversity, especially the target 15.2 and 15.3. In present circumstances, two of the main issues in forestry mentioned by the SDGs 15 are the high number of deforestation activity in tropical forest and how to halt its effect on land degradation and biodiversity. Much of remaining tropical forest has been impacted by human activities and no longer retains its full function. Several international initiatives facilitate monitoring and evaluating the progress of this goal. These include the Indicators for the Annual change in forest area and land under cultivation. Area of forest under sustainable forest management as a percent of forest area, and annual change in degraded or desertification arable land (%or ha). Although, some indicators under the Strategic Plan of Reforestation address indigenous and traditional knowledge, new knowledge sharing system are needed to support process to address deforestation issues. More effort is needed on indicators that make sense at the local scale and this could be achieved through engaging local stakeholders, citizen groups and indigenous communities.

I. Synergetic Inter-linkages to reach SDGs (Goal 15)

- **Policy Coherence Tools:** Government power to provide prime regulation on deforestation.
- **Socio-Economic Tools:** Media power to bring the knowledge of deforestation impact.
- **Scientific Tools:** Analysis and monitoring methods to observe deforestation effect deply and discover new methods for restore the condition

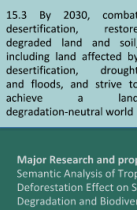


Fig. 1 The inter-linkages mind map of Deforestation Activity on Goal 15.3

II. Monitor SDGs Goal 15: Rate, Driver, and Impact

- **Economic impact:** Short-term economic boom and Decreasing GDP
- **Policy Coherence:** Policy to combat climate change and Restriction on forest land-use change

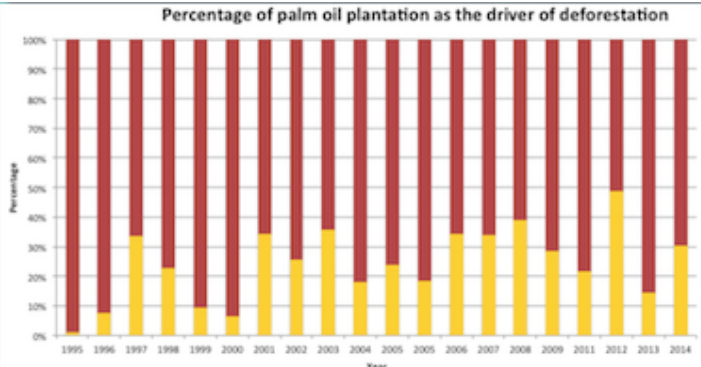


Fig. 2 Percentage of Palm Oil plantation as driver of deforestation in Malaysia. The sub-divided bar chart on right side drawn on a percentage basis of deforestation activity, red bar equals to 100 are the total deforestation activity and sub-divided yellow bar are the proportion of the percentage of palm oil plantation.

Tropical Deforestation on tropical forest region are mainly due to the conversion from forest area to commercial agriculture such palm oil, cocoa, rubber, etc. In middle of 90s, the trend of deforestation was not showing a big trend of the conversion of forest to palm oil plantation. But after 1997, the trend of deforestation rate was

increase, this is due to the economic crisis in 1997 Asean financial crisis [1]. As the deforestation shows the short-term economic boom, the actor of deforestation might continue to degrade our very vital tropical forest.

III. Study case Outline

Deforestation is a big nature issue that can effect directly on human society and way of living. It is still remain as a big enigma on how non-expert people can contribute and monitor the activity of deforestation easily. Indonesia is one of the countries which hosting big area of forest that contribute to all the environmental support on earth, but deforestation massively occurs on forest land In order to tackle this issue we proposed a new system to present the condition for deforestation after-effect. Deforestation word system from integrated multi-database map will be the expected outcomes of our research.

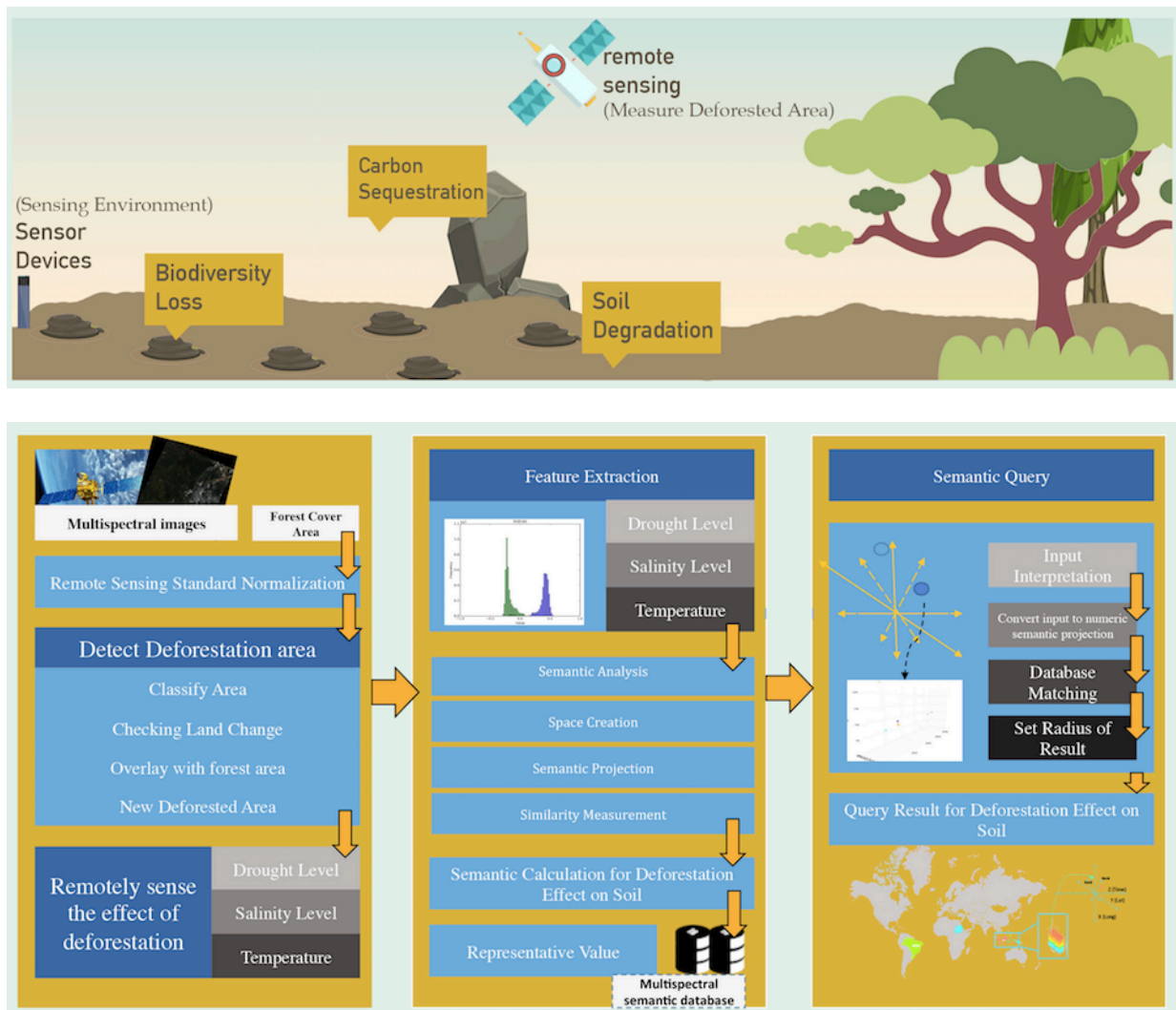


Fig. 3 ***

IV. Scientific Tools

5D World map has a valuable means to facilitate the visualization of deforestation activity in global scale. By mapping the detected deforestation area derived from Satellite observation, forestry organization and government can monitor the forest degradation caused by deforestation. The technology facilitation mechanism for deforestation detection could build the capacity for multi-stakeholder collaboration between civil society, governments and scientific community. 5D World map as sharing platform would create the media to facilitate the multi-stakeholders to achieve goal 15 for saving our forest from deforestation.

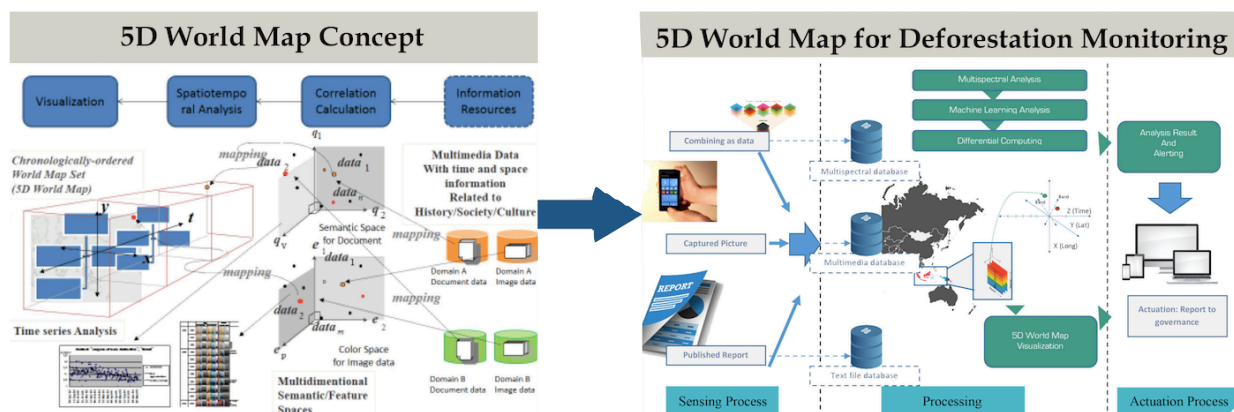


Fig. 4 Concept of 5D World Map System as facilitator and scientific tools to achieve goal 15. on saving forest from further deforestation and forest degradation.

V. Conclusion

In conclusion, different possible approach that may go beyond normative organizational are important, by the key role of scientist who dealing with real condition tends to be contributes high effectivity to develop the progress on tackling the problem of deforestation. Scientific Tools is one part of synergetic inter-linkage chain, that play a critical role to solve and discover new knowledge or solution for deforestation. nexus could be. To expand the research on deforestation, policy and socio-economics added as parameter in this research to bring deep analysis of deforestation.

References

[1] <http://www.un.org/press/en/1997/19971110.GAEF2790.html>