

GHG Inventory and the Mitigation Achievement from Agriculture Sector in Indonesia (report 2021-2022)

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Abstract

Adaptation is a priority from agriculture sector in Indonesia as a sector that affect by climate change while the mitigation is a co-benefit of adaptation. Agriculture is a contributor gas that triggering the climate change. In 2022, agriculture sector contributes 114,56 million ton of CO₂-e comes from biomass burning, methane rice, liming, urea fertilizer, direct and indirect N₂O from soil and manure management, enteric fermentation. The main emission from agriculture sector in Indonesia is methane rice which contribute around 50,9 million ton CO₂-e or 44% from total agriculture emission. There are also some activities from agriculture sector that contribute on mitigating the emissions. Managing water level on peat is a main contribution to reduce 7,83 million ton CO₂-e emissions. Then, the second contribution on mitigation is low methane rice cultivars that contribute to reduce 5,03 million ton CO₂-e. Other activities contribute relatively low on emission reduction, however there is important regarding on resilience of agriculture sector on climate change. In 2022, we have done some measurement emission factor regarding carbon stock in some annual horticulture commodities which have a high carbon such as mangosteen, durian, mangos, bread fruit etc. Then, the sequestration stock is added as a mitigation action.