

Climate change: forestation research proposal examples

[Environment](#), [Climate Change](#)



Econometric investigation of climate change on forestation and its impact on international timber supply and demand (i. e. pricing) shows competitive advantage in wood-based biofuels, as well as potential positive effects on temperature and growth into the future (Chimeli et al. 2011). Although definitive arguments about the atmospheric relationship between GHG emissions, climate change and forestation are few, the potential for an ecological equilibrium relevant to an economic one is found in market relations.

Hypothesis

The general perspective that global climate change has an impact on forestation; and that this effect can be evidenced is found in scholarship within the field of Environmental Studies. This hypothesis is furthered by the claim that the composition and structure of forests has been significantly impacted by global climate change (Kirilenko and Sedjo 2007, Sierra Sun Times 2013). Null hypothesis states that there is no evidence that global climate change has affected forestation on planet Earth.

Research Aim

The aim of the research on forestation and climate change is directed at calculus of an environmental economy of commercial and ecological prediction of cost-benefit and risk.

Research Questions

Q1: It is likely that changing temperature and precipitation pattern and increasing concentration of atmospheric CO₂ are likely to drive significant

modifications in natural and modified forests?

Q2: Is there an impact of climate change on the forest sector due to change in supply as shown in yield models demonstrating that temperature change increases forestation?

Q3: Does conversion of increased forest growth to timber accelerate supply-sided economy through price?

Q4: Will timber conversion to energy economy (i. e. biomass energy) also impact the demand-sided economy (i. e. cellulose) and in turn contribute to the increase in climate temperature through gasification?

Research Problem

The research statement that global greenhouse gases (GHG) emissions are measurable; contributory to global climate change; and resultant of human and natural ecology reflects the general consensus of theses in the field of Environmental Studies in focus on atmospheric CO₂ impacts (Mills & MyiLibrary 2007, Turner & Minnesota Forest Resources Council 2006).

Correlation of the environmental studies thesis with parallel investigations in the atmospheric and environmental sciences as well in the commercial forestry sector, offers insight into econometric supply and demand modeling of forestation modification (Sathaye 2008, Sohngen & Sedjo nd.).

Some studies support the null hypothesis that forestation has not changed in response to global climate change. This is found in NASA atmospheric science publications evidencing that the extent of the effect of greenhouse gas (GHG) emissions from the unmet photosynthesis of carbon sinks may or may not affect climate change (Cook-Anderson 2009). Therefore, forestation

is not known to be affected by global climate change, nor is it necessarily a mechanism for controlling it.

Such inconsistencies are noted in comparison of the models employed by ecologists in estimation of the effects of climate change on forest production and composition and those used in research conducted by foresters in prediction of forest yield (Kirilenko and Sedjo 2007, Lubowskia et al. 2010).

Dynamic vegetation models offer a net production and forestry yield outcome that may add precision to predictions through simulation of the cycles of biomass production and overall composition of forests, as well as the varied effects of human and other intervention (i. e. fires) (UNECE 2006).

References

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