Improving the assessment of pure ecological harm

IMPROVING THE ASSESSMENT OF PURE ECOLOGICAL HARM

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Summary

This research was inspired by a 2018 claim for environmental damage made by Costa Rica against Nicaragua before the International Court of Justice. In its claim, Costa Rica asserted that Nicaragua had caused pure ecological harm to protected rainforests and wetlands and substantiated this claim by way of valuation of individual ecosystem services that had been damaged or lost. This approach presented a novelty in international environmental damage litigation, but appeared somewhat unsuccessful. Of the total of $2,880,745.82 that Costa Rica claimed for all ecosystem services lost, the ICJ awarded a mere $120,000, corresponding to 4% of the original claim.

This event raised questions as to which frameworks courts have established for the valuation of pure ecological harm, meaning legal damages for those parts of the natural environment that, by nature, cannot have property rights vested in them. As well as, whether it is possible to fit pure ecological harm into our existing legal framework. And, if so, how? And, whether an ecosystem services approach aids in formulating pure ecological harm claims and adjudicating those claims in the courtroom. The overall research question being: *What is the optimal way for courts to deal with pure ecological damage assessment?*

In this thesis, the aforementioned questions were each addressed in separate chapters, with chapter 5 summing up all the answers, as well as answering the overall research question.

Through case law analyses an attempt was made at finding out whether courts have established frameworks for ecological damage valuation. It was found that – at least in the case law studied here – that was not the case, even though such frameworks did exist. Neither did the Courts in the cases under examination make use of independently appointed environmental damage valuation experts.

Subsequently, through a juxtaposition between the law and Kant's Rechtslehre, the possibilities of fitting pure ecological harm into our current legal system were examined. It was found that pure ecological harm does fit into our legal system, provided we work with a broader harm concept, in line with Kantian legal philosophy. Furthermore, inspired by Korsgaard's work on animal rights, it was concluded that ecosystems – just like humans – have moral status and thus certain legal rights.

Then, an analysis was provided of the concepts of Ecosystem Services (ES) and Payments for Ecosystem Services (PES). Also, their usefulness for the courtroom was addressed. It was found that the concept of ES and the methods that have been developed to calculate their value could – *prima facie* – aid both in formulating a claim based on pure ecological harm as well as adjudicating it. Such an approach would allow a claimant to first determine all ES harmed in a particular incident, apply the relevant, cumulative valuation methods, and calculate a total sum of harm.

Finally, it was found that, having conducted research into the chronological development in three prolific cases figuring ecological harm in which various assessment approaches were

applied, the normative foundations that should dictate our (interpretation of) the law, and the most recent policy concepts developed in economic valuation of nature (read: ES and PES), the most optimal way forward, for the moment, would seem to be the adoption of an ecosystem services approach for formulating claims for pure ecological harm.

While an ecosystem services approach does not offer an optimal solution to pure ecological harm, it does offer an optimal way forward relative to the *status quo*, which has been characterized by great uncertainties and difficulties when it comes to quantification of pure ecological harm in the courtroom.