

Can Mangroves Protect Coastal Communities in the Philippines from Super Typhoons?

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Anecdotal evidence suggesting that mangroves provide protection against typhoon-related disasters in coastal communities are abundant in the literature. Empirical evidence on this protective function, however is a bit limited. Hence, we empirically investigated the protection service provided by mangroves among coastal communities using the case after super typhoon devastated central Philippines in November 2013. We used data on more than 300 hundred coastal villages controlling for historical mangrove cover and other village level confounding characteristics. Results show that coastal villages with substantial mangrove cover suffered less damages compared to coastal communities with reduced mangrove cover. This life and property saving effects of mangroves are robust across several specifications suggesting that the remaining mangrove cover when the super typhoon hit central Philippines played a significant protective role. This suggests that nature-based solutions like mangrove conservation is a viable long term strategy in providing protection to coastal communities against the damaging effects of stronger and more frequent typhoons.



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