

**OLDEKOP, JOHAN** [S21-P89]

*International migration leads to reforestation in Nepal*

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Global international migration rates have increased by 33% over the last decade. Migration can substantially alter local, regional and national socioeconomic patterns through family cash transfers (remittances), and broader changes to population structures and labor markets in both countries of origin and destination. To date, studies on international migration have mainly tried to elucidate how migration patterns influence social and economic development processes through changes in the flows of capital and skills. However, how international migration patterns affect natural resources and their use remains largely unexplored. In this study, we estimate the impact of international emigration on forest cover change in Nepal. Nepal's population is predominantly rural and the country is covered by more than 4.3 million hectares of forest. Over the past decade, Nepal has witnessed a dramatic increase in the number of economic migrants to other Asian countries and the Middle East. We combine remote sensing data with data from the 2001 and 2011 Nepalese national census, and other publicly available socioeconomic and biophysical datasets. We perform a national level longitudinal analysis and control for the potential effect of confounding variables using a quasi-experimental matching-based approach. We show that 30% of households in 2011 have a household member living abroad and that areas with increased international migration levels since 2001 have seen net increases in forest cover. Furthermore, we find that the effect of migration on forest cover change is brought about by a reduction in agricultural efforts of households with migrating household members. In conclusion, we demonstrate that international migration patterns can have substantial impacts on natural resources in countries of origin through changes in household livelihood strategies. Collectively, our results highlight that migration patterns and their associated effects on household livelihood strategies must be considered in development, climate change adaptation and conservation practices, policies and interventions.