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# Sand mining from agricultural and common property lands in peri-urban areas: an assessment of economic loss and factors responsible for transformation from agriculture to mining

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### ABSTRACT

Sand mining in agricultural and common property lands (CPLs) is an emerging and peculiar type of land degradation activity practised in peri-urban areas of Karnataka state, India. The magnitude of mining in the study area was 5% of the total geographical area in one year. The supply and demand factors, policy bottlenecks, agro-socio-economic characters, institutional failures *etc.*, were responsible for sand mining from agricultural and CPLs. Direct valuation of benefits to different stakeholders revealed that farmers earn Rs.90/12m<sup>3</sup> of sand, whereas, the middlemen realized Rs.2150. The estimated direct loss from foregoing dry land crops and decline in livestock population due to sand mining was Rs.0.38 and Rs.1.83 million/year, respectively. The income loss that could have been averted if water used in sand mining was diverted to areca nut was Rs.7.49 million or Rs.0.84 million/year for paddy. The results of bivariate logit analysis revealed that age, education, proportion of dry land owned and social status of farmers were the significant factors that influenced parting of private owned land for sand mining. Besides direct action, the farmers and other stakeholders should be educated on the ill-effects of sand mining from agricultural and CPLs. The suggested reclamation measures would be to fill the mined areas with tank silt to restore agricultural activities or harvesting rainwater in mined pits for aquaculture.