Population structure and natural regeneration of Brazil-nuts (*Bertholletia excelsa,* Bonpl.) in the extractive reserve of Rio Cajari, Amapá, Brazil

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Brazil-nut is considered a cornerstone of the extractive economy in much of the Amazon, while combining the forest use with biodiversity conservation. However, there is no consensus as to weather or not current harvest levels affect seedling recruitment. Some studies indicate that seed removal may compromise the natural regeneration as populations subjected to intensive levels of persistent exploitation lack juvenile trees. Our study evaluate the proportion of seedlings, saplings, juveniles and adults trees in natural stands located near to communities with long history of extractive tradition, easily accessible and close to a main road. Such stands are chronically and systematically exploited, even in the low price years, when it is not worth to harvest from remote stands. The inventory of the Brazil-nut population included all adults and juvenile trees larger than 10 cm BHD found in three square plots of 9 ha each. Seedlings and saplings were sampled within 16 subplots of 25 m x 25 m, randomly distributed on each of the 9 ha plot. The 27 ha inventory resulted in 183 individuals (BHD $\geq$ 10 cm), an average density of 6,78 ind.ha-1. The population size structure showed individuals distributed in all diameter classes, including juveniles (10 < BHD $\leq$ 60 cm), representing 23%, 34% and 49% of the individuals on each plot respectively. This, along with an average density of 11 seedlings (< 1,5 m) per hectare, indicates that neither the long history nor the present levels of intensive harvest have compromised the seed availability to the natural disperser. Our result rejects the alarming and largely disseminated conclusion that exploited Brazil-nut populations are condemned to demographical collapse