The diversity of non-human primate is rich in Lao PDR. However, their exact distribution patterns have not been known. We studied habitat conditions and distribution pattern of non-human primate in Vientiane Prefecture, Vientiane and Xiengkhouang Provinces. We carried out interview, pet and market census; and field census from December 2008 to February 2010. Distribution pattern of nine primate species were delineated; slow and pigmy loris (Nycticebus bengalensis and N. pygmaeus); four spices of macaques (Macaca mulatta, M. nemestrina leonina, M. assamensis, and M. arctoides), two species of colobines (Trachypithecus phayrei and T. francoisi) and one species of gibbon (Nomascus leucogenys). Primate community differs with topography which appears to reflect their ecological preferences. In Kasee district with both less steep hills and steep limestone mountains, pig-tail in Pu Tane (Mt. Tane), small troop of stump-tail and sound of gibbons in Pu Kong Kao, and one troop of assamese in Pha Lak (limestone mountain) were found. In Moung Foung with only steep limestone mountains and Sangthong with low profile hills along tributaries of the Mekong River, we recorded footprints and feces and plants fed by macaques. In Phonsavan district with high profile hill, because of forest destruction by war and agriculture, wild primates were not observed. Although they appear incipient, habitat loss by agricultural encroachment (not only for subsistent but also for commodity crops) and hunting and trading (though banned) become extensive by increase of human population and immigrants and economical development.

Keywords: non-human primates, distribution, Lao PDR, ecological preference