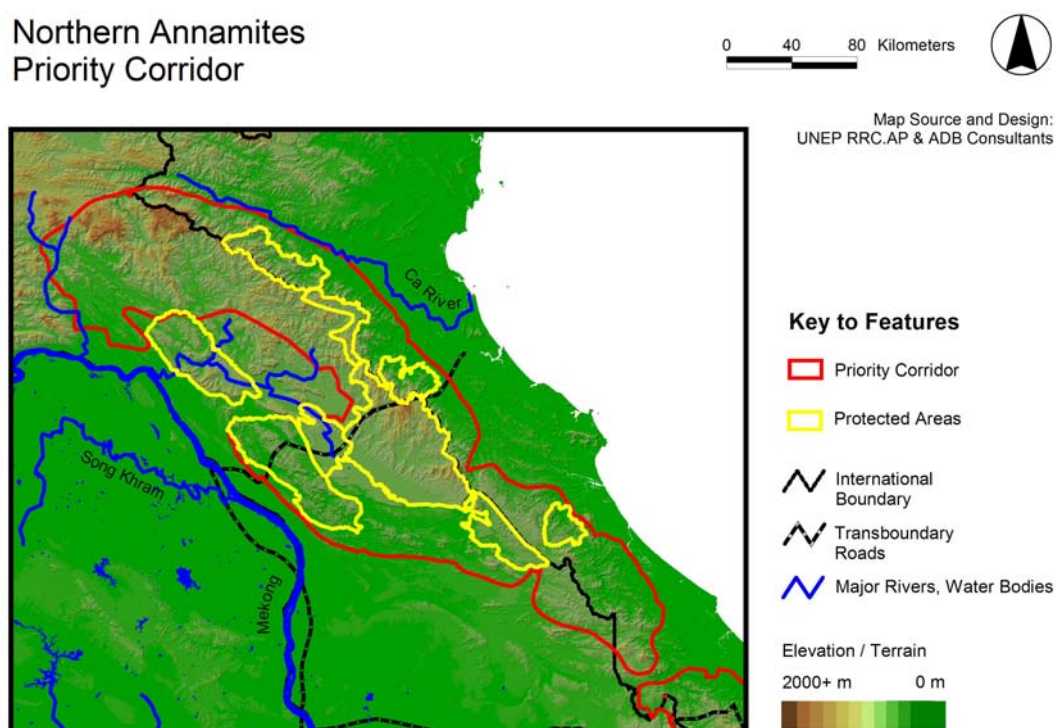


ANNEX 3.8 Description of GMS Priority Biodiversity Conservation Corridors

Figure 1: Northern Annamites (Vietnam, Laos)



Northern Annamites

Countries: Vietnam and Laos

Provinces: Nghe An, Ha Tinh, Quang Tri, and Quang Binh (Vietnam);
Xiangkhuang, Xaysomboun SR, Borikhamxay, Savannakhet, Khammuane (Laos)

Straddling the border between Lao PDR and Vietnam, this GMSBCC covers one of the most biologically important regions of the Annamite mountain range. It represents a large area of the Northern Annamites Rainforests ecoregion which is considered to be of global importance for biodiversity conservation. Because of the rugged nature of the mountains most of the area is inaccessible; thus the habitat is relatively intact—and biologically under-explored. In fact, over the last decade there have been several startling discoveries of species new to science, including several mid-sized mammals, such as the Sao La (*Pseudoryx nghetinhensis*), Giant Muntjac (*Muntiacus vuquangensis*), and Truongson Muntjac (*Muntiacus truongsonensis*), (Dung *et al.* 1994¹, Do Touc *et al.* 1994², Giao *et al.* 1998³).

¹ Vu Van Dung, Pham Mong Giao, Nguyen Ngoc Chinh, Do Tuoc and MacKinnon, J. (1994) Discovery and conservation of the Vu Quang Ox in Vietnam. *Oryx* 28: 16-21.

² Do Tuoc, Vu Van Dung, Dawson, S., Arctander, P. and MacKinnon, J. (1994) [Introduction of a new large mammal species in Vietnam]. Hanoi: Forest Inventory and Planning Institute. (In Vietnamese.)

³ Giao, P. M., Tuoc, D., Dung, V. V., Wikramanayake, E. D., Amato, G., Arctander, P. and MacKinnon, J. R. (1998) Description of *Muntiacus truongsonensis*, a new species of muntjac (Artiodactyla: Muntiacidae) from Central Vietnam, and implications for conservation. *Animal Conservation* 1: 61-68.

little ecological information is available. The landscape also supports small, but ecologically important populations of Asian Elephant in Laos. Although the area is considered to be a Level 1 Tiger Conservation Unit (Dinerstein *et al.* 1997), tiger densities are low because of hunting.

The limestone habitat is especially high in endemism, with many localized species. Some of these species include the Sooty Babbler, Sulphur-breasted Leaf-warbler, a squirrel, *Callosciurus finlaysoni*.

Key Conservation Issues And Threats To Biodiversity

The hydropower projects planned within this GMSBCC will undoubtedly have some effect on the connectivity among the protected areas, and will affect the movements and ecology of several species of mammals, especially the primates and elephants. Loss of habitat will also affect the birds and mammals that occur at low population densities (although most populations are maintained at very low densities due to hunting).

As common throughout the GMA, hunting remains a major threat in this landscape. Most forests, even though appearing intact, are stripped of the wildlife.

Shifting agriculture is widespread, but is especially so in Laos. In Vietnam, immigration of people from the lowlands into the mountains is resulting in an expansion of permanent agriculture and thus, fragmentation of the remaining submontane forests.

Impacts of the GMS

Only the extreme southern part of the GMSBCC falls within a GMSEC, but R2 (N) highway will bisect the Khammouane Limestone NBCA, Nakai Nam Theun Corridor and the Nakai Nam Theune NBCA. Although the road will run immediately outside the southern boundary of Vu Quang Nature Reserve in Vietnam, its zone of influence will include the entire nature reserve, and extend into the Nam Theun Extension that links Nakai Nam Thuen with Pu Mat Nature reserve in Vietnam (Figure 2).

There are eight dams planned or in various advanced stages of implementation within the GMSBCC, and another 2 within 10 km of it.

Because many of the species of conservation importance in this landscape are sensitive to habitat fragmentation the primary and secondary impacts from the roads and dams will have significant effects on the biodiversity.