Correspondence in forest species composition between the Vegetation Map of Africa and higher resolution maps for seven African countries

Introduction

Besides other application domains, such as planning for biodiversity conservation (e.g. Olson et al. 2001),
investigating land-use change (Börjeson 2009) and land-use planning (Langdale-Brown et al. 1964; Trapnell & Brunt 1987), vegetation maps can offer an indirect approach to species suitability mapping. Using vegetation maps as proxies for the suitability domain of those species that occur in specific vegetation types is an attractive approach, especially where point location data are limited. Since point location data are limited for the majority of tropical plant taxa (Kindt et al. 2007), vegetation maps therefore remain important tools for suitability mapping.
The Vegetation Map of Africa published by Frank White (hereafter: the African map) provides a method of inferring the distribution of tree species that are recorded in the descriptive memoir that accompanies this map (White 1983). However, the resolution of the map of 1:5,000,000 limits application for delineating areas where particular species are expected to be common. By using better resolution vegetation maps that are available at country-specific or sub-country-specific levels (hereafter: national maps), we have made an attempt to increase the resolution of the African map for an area covering Ethiopia, Kenya, Malawi, Rwanda, Tanzania, Uganda and Zambia (the VECEA region). Several of these maps were also consulted by White when developing the African map