

Han Knapen. *Forests of Fortune? The Environmental History of Southeast Borneo, 1600-1880*. Leiden: KITLV Press, 2001. 487 pp.

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This is one of the volumes published by the EDEN project (Ecology, Demography, and Economy in Nusantara), which has recently been completed at the Royal Netherlands Institute for Southeast Asian and Caribbean Studies (KITLV) in Leiden. Knapen's original brief was to reconstruct the environmental history of the entire island of Borneo between 1500 and 1800, a very tall order. The availability and accessibility of archival sources forced a change in both the time-span and geographical coverage—the resulting book focuses on “Banjarmasin and its hinterland” between 1600 and 1880. The primary sources for the period through the end of the eighteenth century were the documents of the Dutch East India Company (VOC), and for the nineteenth century Knapen relied on documents of the Ministry of Colonies. (The latter documents were explored in Indonesia as well as the Netherlands.) These sources were supplemented with additional Dutch materials, but no English or other European documents. Field visits brought an enhanced understanding of location (though little useable history), while secondary sources were comprehensive, approaching six hundred in number. Understandably, the book is much more thorough in its coverage of the nineteenth century than the earlier period, which reflects the nature of the sources available.

With its triple emphasis on environment, demography, and economy, the book is organized in a straightforward manner. After a general introduction to the project, location, and sources, the first substantive chapter attempts to re-create the natural environment, emphasizing the diverse ecological zones and the unpredictable rainfall, while the second moves to an outline of the region's history and a description of its peoples, especially the majority Banjarese and the various Dayak groups, such as Ngaju, Ma'anyan, and Bekumpai. Two demographic chapters follow, one discussing population measurement and fertility, the other mortality. The ensuing four chapters analyze components of the local economies. There are two on agriculture, and special attention is paid to the different conditions under which rice was grown. These are followed by a brief chapter on animal management and domestication, and a longer one on forest and marine resources. The final two chapters summarize the argument: the first, “Uncertainty, diversity, and adaptation,” looks at the uncertainties present in the physical, economic, and social environments, and the ways in which the population has adjusted to them, while the second takes the reverse approach, drawing together information on the impact of population on the environment.

Despite warning against the backwards projection of more recent happenings to explain the past, at times, Knapen is guilty of doing just that. Many sources in the section on traditional agriculture, for example, date from the 1930s. The discussion of climatic trends brings the story through to the modern period, as the author attempts to illuminate the past through modern comparisons. It is almost impossible for a historian to avoid this practice, despite its dangers, especially where contemporary information is sparse. One instance where it was inappropriate was the use of a 1930s source on the independence and individuality of the Banjarese to support an argument

that the earlier extended family grouping (*bubuhan*) was no longer present after the fall of the Banjarese Sultanate in 1860. The Banjarese migrations to Perak on the Malay Peninsula and Riau (Sumatra), which began in the 1880s, largely consisted of *bubuhan* (sometimes including entire hamlets under a charismatic leader), which provided sufficient labor for digging drains in swampy terrain, a characteristic Banjarese activity in new immigration zones.

In general, however, the book is a well-researched account and casts new light on many aspects of this important region, from the seventeenth-century beginnings of the pepper trade in Banjarmasin to the application of the Domain Declaration to the region in 1875 and the consequent expansion of European interests. Thomas Lindblad's economic history of Southeast Borneo, *Between Dayak and Dutch*, begins in 1880, the year Knapen's book ends.¹ Lindblad believed that the region's landscape and the range of its human activities had remained largely static before the end of the nineteenth century. Although Knapen acknowledges the increased tempo of change towards the modern period, he has comprehensively proved Lindblad wrong.

Given the problems with the unreliability or unavailability of population data, obviously a critical measure in this type of study, Knapen is able to utilize sales of salt, imports of which were controlled by the Dutch authorities, as a measure of population size during the nineteenth century. Assuming a fairly constant figure for consumption and one reasonably accurate population figure, he is then able to extrapolate backwards and calculate rough growth rates. A further extrapolation, using available census materials, produces a graph of estimated population from 1600 to 1990 (Fig. 10, p. 135), even though there are almost no data for the two centuries from 1600 to 1800. The rapidity of population increase after about 1875 is obvious and important, and reflects both inputs of western medicine (especially smallpox vaccination) and the *Pax Neerlandica*. In the illuminating "Overview of disasters, 1747-1880" (Appendix 1), smallpox was the most frequent cause of disaster, apart from the combined effects of excessive rain or drought.

It is indeed interesting that this relatively small group (a maximum population of 390,000 in 1872, only one-tenth of today's population) could effect considerable environmental change. That population was highly concentrated in the uniquely favorable Hulu Sungai region, where Knapen calculated it reached one hundred people/sq km in the most fertile areas and resulted in extensive wet rice development. Elsewhere, people were thinly spread. Some of the changes effected were long term, for example, the commercial pepper industry, in operation between 1620 and 1790, led to forest clearing and the eventual conversion of large areas to grassland, especially in mountain foothills. Such grassland was prized, and it was maintained by burning, especially for deer hunting purposes, a favorite pastime of the nobility of the Sultan's court. An export trade in deer meat arose from such hunting, but it disappeared quickly after the sultanate fell, though animal husbandry continued in a small way on the grasslands. The harvesting of forest products, especially rattan, may have brought about less visible environmental changes. Knapen has interesting material on indigenous efforts to maintain sustainable rattan production, but says little about gutta

¹J. Thomas Lindblad, *Between Dayak and Dutch: The Economic History of Southeast Kalimantan 1880-1942*, Verhandelingen 134 (Dordrecht: Foris, 1988).

percha, another important forest product from the mid-nineteenth century, in the harvesting of which the resin-bearing trees were simply felled. Removal of the tidal swamp forests and the digging of drains to plant rice and coconuts, an activity which was later to effect major changes in coastal areas, postdates the period covered by the book, although the digging of the Serapat Canal in 1879 made large swaths of swamp forest more accessible.

The volume is well illustrated, largely with plates from nineteenth- and early twentieth-century accounts, which add to the reader's understanding of the period and the people. Maps are also adequate and interesting, especially that of existing and former pepper areas in 1790. (Map 5, p. 259) Unfortunately, the editing is poor, a departure from the usual high standards of the KITLV. Some errors were quite misleading, for example, the Serapat Canal was said to link Banjarmasin, not with Kuala Kapuas but Kuala Lumpur! (p. 20) Infelicities in English expressions, such as "ambiguousness" for "ambiguity" (p. 26), "unsafety" instead of "insecurity" (p. 241), the "black salt market" instead of the "salt black market" (p. 111), perhaps to be expected where English is not the author's first language, were not picked up and corrected. These are minor imperfections, however, in a volume that is very readable and interesting, and impresses by the scale and depth of its scholarship.