This diploma thesis is based on three case studies discussing three native cultures and their ways of using ecosystem resources. The three studied tribes share following characteristics: they live in tropics, they represent Austronesian ethnolinguistic group and their habitat is a specific detached island. Studying the three chosen traditional island communities on Siberut, Tikopia and Pingelap give us detailed information about the local ways of living, traditional agriculture, land tenure, hunting, breeding and local trade. At the same time it helps us to discover differences of the three examples caused by number of socio-environmental factors as well as to characterize three types of interaction between people and their natural environment. Due to study of chosen tribes it was found out that local traditional way of using ecosystem resources not only allows inhabitants to survive but moreover sustains the natural environment. Therefore, it is proposed that applied principles could be adopted by other tropical places already more influenced by western culture. In such places the main source of food is conventional agriculture which is not perceived as fully sustainable. It was observed that studied communities were following some of the basic principles as tabus or agroforestry. Their main goal is to satisfy the needs of the society in a long term, not to maximize the harvest. They act locally and they are not dependant on import. The three ethnic groups can be described as autarchic. In line with the conducted research they can be recognized as a unique example of close coexistence of human and natural environment. As a result of the discussion this diploma thesis can enrich the idea of sustainable living in framework of social and cultural ecology.