Chapter 24
Trees and Tree-Planting in Southern Madagascar: Sacredness and Remembrance

Maria Tengö and Jacob von Heland

Abstract Maria Tengö and Jacob von Heland describe how the Tandroy people in Madagascar use tree-planting as a symbol of renewal, purification, agreement and boundary-making, and to generate ecosystem services in a fragmented landscape. Both cultural and ecological memory can serve as a source of resilience in the event of future crises.

Keywords Sacred forests • Tree-planting • Memory • Social-ecological resilience • Madagascar

Maria Tengö and Jacob von Heland describe how the Tandroy people in Madagascar use tree-planting as a symbol of renewal, purification, agreement and boundary-making, and to generate ecosystem services in a fragmented landscape. Both cultural and ecological memory can serve as a source of resilience in the event of future crises.

From Madagascar often emerges a discourse of conflict between interests in protecting unique forest biodiversity and rural people's land use practices perceived as destructive (e.g., Kull 2004). In a contrary mood, this story is about local groups that view certain trees as a protective symbol and tree-planting as a social mechanism for remembrance and reconciliation. We argue that the Tandroy in the extreme south of Madagascar are better understood as forest stewards whose histories and daily lives are intertwined with trees and forests. The southern part of the Androy region is scattered with pockets of woodland in an otherwise human-dominated agro-pastoral landscape (Fig. 24.1). These patches are biodiversity hotspots of dry spiny forest vegetation and have the highest endemic flora in all of Madagascar. They also are the home of several lemur species (Elmqvist et al. 2007).

M. Tengö (✉) • J. von Heland
Stockholm Resilience Centre, Stockholm University,
Kräftriket 2A, 106 91 Stockholm, Sweden
e-mail: maria.tengo@stockholmresilience.su.se; jacobvonheland@gmail.com

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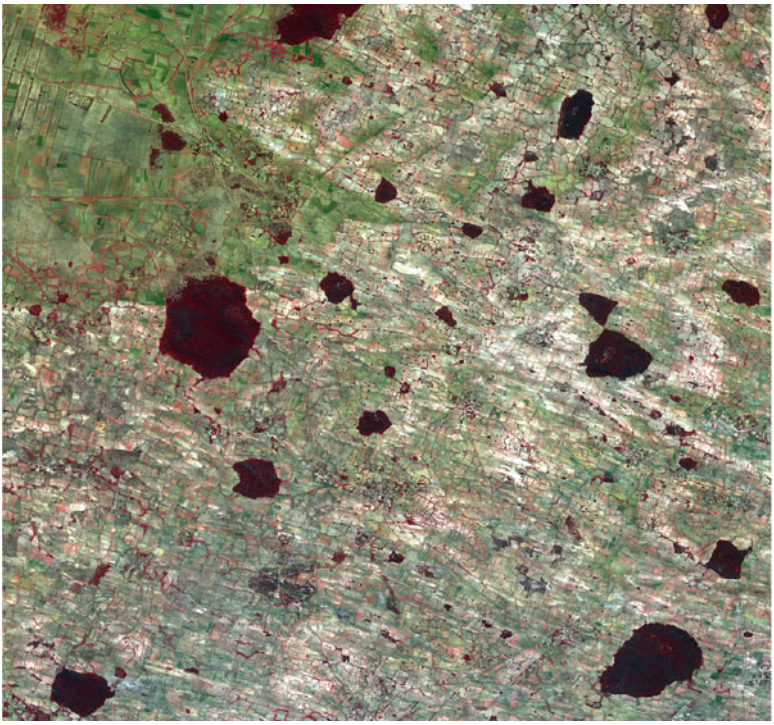

Fig. 24.1 Aerial photo of forest patches from southern Androy, Madagascar. IKONOS resolution

Further, the forest patches perform essential ecosystem services for the surrounding villages including crop pollination by bees (Andriamaparany 2008), regulating the microclimate and capturing moisture from the ocean, and providing habitat for seed dispersers, such as the Ring-tailed lemur, which are important for forest regeneration (Bodin et al. 2006).

The dry spiny forest in Androy is considered to be highly vulnerable for further fragmentation and deforestation. However, archaeological excavations suggest that rather than being remnants of a pristine nature that needs to be shielded from people, several of the old-growth forest patches were once settlements of the Tandroy kingdom that existed between the fifteenth and eighteenth century (Heurtebize 1986; Pearson 1994). The ancestral status of the settlements has been kept alive by the living descendants who consider them as sacred areas that should not be damaged. As a consequence, the forest has grown and expanded in these areas, now referred to as taboo forests or *ala faly* (Tengö et al. 2007; see Fig. 24.2). The role of trees and forest as a channel connecting the living with the ancestors and their spirits remains central in Tandroy culture. Around them, stories from the past proliferate and continue to be integrated into current use of the taboo forests, for funerals, honey harvesting, festivities, and ceremonies. We describe the role of trees and tree-planting in two symbolical domains that underpin the stewardship of the forests: remembrance and purification of fault and reconciliation.

Fig. 24.2 Transporting water in a dry landscape with taboo forest in the background (including Christian tomb at the edge of the patch)

The Tandroy and their livestock coexist with the highly endemic flora and fauna in an arid and drought prone environment. Their way of life and the associated values are challenged by biophysical stresses as well as by social conflicts and disruptions. Some are well known and expected, such as extended drought periods or the death of the chief elder, while others may by novel, such as the new forms of Christianity that confront customary rules, or chronic drought conditions occurring during the last 15 years (Elmqvist et al. 2007). The Tandroy have to reconcile need, conflict and disturbance in order to maintain the ability of these coupled social-ecological systems to continue to exist over time. Here as well as in most parts of Madagascar, social taboos play a key role in maintaining social order, and also impact the relationship between people and forest (Ruud 1970). The taboos and with them the taboo forests are upheld by social events and rituals. In this context, tree-planting has a double significance. Culturally, planting trees serves as a symbol of renewal, purification, agreement and boundary-making; ecologically, planting trees contributes to the generation of ecosystem services in a fragmented landscape.

Among the Tandory, trees are planted as sign posts or manifestations of remembrance of significant events involving death. Trees, most commonly *Alluaudia procera,* an endemic and red-listed species, are planted by the tomb of a buried person. The funeral is a central cultural ritual in which people restate

their relationship to the deceased and to one another through gifts (Fee 2000), as well as reinforce their connection with the forest where the body is buried. Cuttings of the same species are also planted along the last journey of the dead body, on the spots where the persons carrying the corps to the burial site are resting. According to the Tandroy, the trees grow with the spirit of the dead, mounting the significance of the groves and the strength of the taboos that protect them. Reverence of the forest further functions to establish and reinforce the legitimacy of land ownership and the place-based identity of the Tandroy. Thus, trees serve as symbols of rootedness and permanence (see Bloch 2005) as well as of the sacredness associated with the ancestral cult. In the past, groves have been planted to memorialize an historical battle field and widespread deaths from an epidemic disease (Tengö et al. 2007).

Violation of a forest taboo, for example cutting or burning at the edge of a forest in the otherwise denuded landscape, implies a pollution that distorts the relationship between the spirits and the living, with potential consequences for the perpetrators' well-being. To purify the transgressor and appease the spirits requires ceremonial sacrifice of at least one *zebu,* or local cattle. The sacrifice serves to restore order and cleanse the site as well as the person who committed the assault.

Trees are also planted as a symbol of sealing agreements or order in society. Many stories of taboo forests involve the planting of *A. procera* or tamarind (*Tamarindus indica*) as a symbol of a friendship or an alliance. For example, a burial forest called *Ankilivinelo* derives its name from the two tamarind trees (*kili*) planted by two brothers at a favorite spot where they would be buried. The tamarind, a common village tree, further provides an essential function in providing emergency food during famine. In another story, a baobab tree (*Adamsonia sp.* or *za*) was used as a ritual container of the signing of a pact between two clans, where the spit of the partners was mixed with blood from a *zebu* and poured into the tree (*Anzapenorora*). A current ongoing tension in Androy concerns where to bury Christian confessors, who belong with their ancestors in the *ala faly* but refuse to participate in the sacrifice ceremonies required to access the grove (Tengö and von Heland 2012). In several instances, the burial forest has been divided in two parts, one for Christians and one for the customary ancestral cult. Planted trees demarcate the border that symbolizes the resolution of the conflict within the clan.

These examples illustrate how tree-planting is a central mechanism (Folke 2006) in settling social tensions and disorder in southern Madagascar, while at the same time contributing to afforestation and ecosystem services in an otherwise denuded landscape with drifting sand dunes. Although not providing accessible resources such as food or fuel wood during extended droughts, the forest patches represent essential ecological capital for generation of ecosystem services and sustaining the social-ecological system of Androy. They also represent cultural reference and identity that is essential for the continuation of society. The trees and forests play a key role in maintaining well-being of the Tandroy, as a source of memory in the landscape of heritage, ancestry, and historical crises. This memory may contribute to resilience for dealing with and reorganizing following future crises.

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