FISEVIER

Contents lists available at ScienceDirect

Journal of Rural Studies

journal homepage: www.elsevier.com/locate/jrurstud



Gender, knowledge-sharing and management of shea (*Vitellaria* paradoxa) parklands in central-west Burkina Faso



Marlène Elias

Bioversity International, PO Box 236, UPM Post Office, Serdang, 43400 Selangor Darul Ehsan, Malaysia

ARTICLE INFO

Article history:
Received 25 September 2013
Received in revised form
12 January 2015
Accepted 26 January 2015
Available online 6 February 2015

Keywords: Shea Vitellaria paradoxa Burkina Faso Gender Indigenous knowledge Agroforestry

ABSTRACT

Research on agroforestry largely continues to ignore the significance of gender relations in shaping natural resource management processes. To contribute towards filling this gap, this study focuses on gender dynamics in Burkina Faso's centre-west region to examine how gendered knowledge and preferences affect the management and conservation of shea parklands. In-depth interviews and free-listing exercises with Gurunsi and Moose women and men from Léo, Lan and Prata reveal that despite a strongly gendered division of labour, women and men hold overlapping areas of knowledge about shea uses, yields and shea nut characteristics. Further, men and women farmers detailed the same management practices and factors guiding the selection and conservation of shea trees in cultivated fields. Similar fidelity levels (FLs) calculated from women's and men's responses show that top-cited uses, preferences and practices correspond across gender groups. This congruence is partly due to participants' personal experiences with the species, but also to knowledge sharing between the spouses that guides decisionmaking. Findings illustrate that the widely held assumption that men decide in matters of tree management overlooks the important contributions women may make to the process. The shea case suggests that intra-household knowledge sharing and collaboration may hold greater significance for achieving resilient resource management strategies than has been described in previous works on African agroforestry.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

Native fruit trees provide crucial benefits to local ecosystems and livelihoods (Kalaba et al., 2009; Faye et al., 2010; Bayala et al., 2011). In sub-Saharan Africa, the shea tree (*Vitellaria paradoxa* C.F. Gaertn.) is indigenous to 18 countries across a 5000-km long and 500-km wide expanse of semi-arid savanna (Hall et al., 1996). Due to its myriad uses, farmers have selectively protected the species in their fields since 1000 A.D. (Neumann et al., 1998; Kahlheber, 1999). The result has been a discontinuous cover of scattered shea trees under which crops are grown (Pullan, 1974; Boffa, 1999). In these agroforestry parklands, which contain fewer trees than uncultivated lands, the species grows in nearly pure stands, illustrating the role of humans in shaping tree densities (Harlan et al., 1976; Boffa, 1999; Lovett and Haq, 2000a).

Across the shea belt, shea trees are is prized for their nutritive fruit, medicinal properties, and hardwood, but also principally for

their nuts, which women collect and transform into butter (Burkill, 2000). This butter represents the primary source of dietary fat for many agriculturalists living in the species' range and serves important economic and cultural uses (Lykke et al., 2002; Paré et al., 2010). International demand for shea nuts and butter stems from their use in the agro-food and cosmetics industries, and provides significant export revenues to countries such as Burkina Faso, where shea nuts rank fourth among national export commodities (MEF, 2011).

Yet, within West Africa, the importance of shea largely rests in the highly gendered context of its production and trade (Elias and Carney, 2007). The collection and transformation of shea nuts into butter, as well as the local sale of shea nuts and butter, are strongly associated with the female sphere of activity (Chalfin, 2004; Elias, 2010). Nonetheless, shea agroforestry is arguably guided by the specialized and interlocking knowledge repertoires and practices of women and men, who both value and use the species. To date, research on indigenous knowledge and management of shea trees has been limited to the species' eastern variety, *V. paradoxa* subspecies *nilotica*, and has not identified any

differences in women's and men's knowledge and management of the species (Gwali et al., 2011a, 2011b). Yet, the gendered dynamics surrounding the selective conservation and management of sheatrees have not been systematically studied.

Consequently, the aim of this paper is to examine the gendered ethnobotanical knowledge, management, and conservation of V. paradoxa subspecies paradoxa in the province of Sissili. Burkina Faso, where shea represents the most prevalent parkland tree species. As Howard (2003: 33) contends, "some researchers have attempted to develop conceptual frameworks to assess which factors motivate indigenous or peasant farmers to conserve biodiversity, but to date these have neglected to consider gender relations as potentially significant." What is more, "examining gender helps us to understand how other forms of social difference influence rural environmental management, not just as 'proxy', but because other differences such as age, wealth or origins operate in genderdifferentiated ways" (Leach, 1994: 22). This paper draws attention not only to how women and men agriculturalists know, use, and manage shea trees, but also to how intra-conjugal knowledge sharing can inform decision-making and conservation strategies for the species.

The discussion begins with a review of the literature on gendered use and management of trees, before turning to Amartya Sen's intra-household bargaining model of 'cooperative-conflict' that can foster an improved understanding of the gendered shea agroforestry system. After describing the study's context and methodology, I analyse the main findings related to the gendered dimensions of shea tree knowledge, management and conservation. I then examine the implications of these findings and the value of Sen's notion of 'social connectedness' for better conceptualizing natural resource management systems, before providing brief concluding remarks.

2. Gendered ecological knowledge and management of trees

It is now widely acknowledged that gender is "a critical variable in shaping resource access and control, interacting with class, caste, race, ethnicity to shape processes of ecological change" (Rocheleau et al., 1996: 4). Throughout the world, use, knowledge, access, preferences and management of natural resources are primarily organized along gender lines. Historically-rooted and contextspecific norms and belief systems prescribe 'appropriate' behaviour for men and women and a gendered division of labour that guides resource use (Leach, 1994; Rocheleau et al., 1996). Largely due to their differentiated roles and responsibilities in production and reproduction, women generally collect forest products for food, fuel, fodder, medicine, and small-scale trade, whereas men contribute to these but also dominate the collection of animal products (e.g. through hunting) and the extraction of structural fibre such as timber for construction or sale (Jacobson, 1992; Gausset et al., 2005; Sunderland et al., 2014). In addition to gender specialization in the collection and processing of most types of forest products (Sunderland et al., 2014), gathering intensity differs as women collect a continuous flow of smaller quantities of forest products whereas men gather these sporadically and in larger quantities (Byers and Sainju, 1993).

Customary and formal laws, which are also gendered, structure rights to forests and trees and influence incentives and capacity to manage tree resources (Fortmann and Bruce, 1988; Meizen-Dick et al., 1997; Quisumbing et al., 2001). In patrilineal systems, men

have primary rights to land and natural resources whereas women's rights hinge upon their relationship with their male counterparts (Meizen-Dick et al., 1997). Men and women from the same household or community may have access to trees located in different spaces or even to different parts of the same tree. Hence, they often collect and use different products or gather the same products in different spaces (Wangari et al., 1996; Rocheleau and Edmunds, 1997; Howard, 2003). Gendered tenure regimes affect management strategies, as insecure access and control of forest and trees resources limits women's incentives to plant and manage trees to which their long-term rights are tenuous (Fortmann et al., 1997; Mukadasi and Nabalegwa, 2007; Howard, 2007).

This gendered division of labour, use, and access to forest products and the multiple layers of institutions described above influence the knowledge and skills women and men acquire about tree resources (Wezel and Haigis, 2000; Howard, 2003; Ayantunde et al., 2008; Dovie et al., 2008). Such ecological knowledge is gleaned through first-hand experience but also through intergenerational and inter-group transmission in a "mostly unconscious, activity-situated, verbally and non-verbally communicated, observer-activated and learner-directed" process (Zent, 2009: 52). Factors such as kinship, age, specialization, and "motivation, ability and opportunities to learn" more generally intersect with gender to affect its acquisition (Boster, 1986: 434).

Gendered patterns of ecological knowledge and resource use reflect and reinforce a gendered valuation of tree species, traits and products. Many authors have shown that preferences for tree species differ according to gender, with women often prioritizing species for household consumption and men those for sale (Kaur, 1991; Warner, 1993; Cavendish, 2000). Others suggest that this distinction has been overemphasized, but that gendered preferences do exist (Leach, 1994; Sunderland et al., 2014) and are conditioned by other factors of social differentiation such as marital status or age (Bonnard and Scherr, 1994).

Gender also affects decision-making processes related to natural resources. Women are generally shown to be constrained in their ability to make decisions related to natural resource management. This may result from gender norms or technological biases, among others, that hinder their participation in formal decision-making forums such as forest user groups (FUGs) (Agarwal, 2001; Das, 2011) or in household-level decision-making processes (Abbas, 1997; Rocheleau and Edmunds, 1997; Chikoko, 2002). When women do participate in forest management committees, however, these institutions have tended to promote sustainable management practices as well as improved incomes from the forest (Upadhyay, 2005; Agarwal, 2009, 2010; Mwangi et al., 2011). Women's participation in decision-making processes thus shows promise for encouraging ecologically and economically sound resource management strategies.

Drawing attention to these gendered specificities in natural resource systems is valuable for highlighting women's and men's respective contributions, opportunities and constraints in resource management processes. Yet, in this pursuit, the ways in which women and men often collaborate to help each other fulfil their gender-specific responsibilities remain poorly explored (Turner et al., 2000). This collaboration may represent a key feature of sustainable resource management strategies, and as such, requires further appreciation.

3. Sen's model

Key notions from Amartya Sen's (1990) model of intrahousehold bargaining can improve our analysis of how women and men both specialize and cooperate in shea tree agroforestry. In his revised model of household economics, Sen conceives of the

¹ Gwali et al. (2011a, 2011b) have shown that Ugandan farmers across three farming systems recognized 44 ethnovarieties for shea, used the species for 36 different purposes, and managed it using various traditional practices.

Download English Version:

https://daneshyari.com/en/article/92457

Download Persian Version:

https://daneshyari.com/article/92457

<u>Daneshyari.com</u>