change. The conventional wisdom that subsistence farming in Africa degrades the environment needs to give way to an understanding of how agricultural land uses represent trade-offs between potential services[9], and how African farmer–foresters seek to optimize long-term agricultural and forest production via rational decision-making, given their local environmental, sociological and economic constraints[10].

The satellite-based view presented by Brandt and colleagues[1] reveals the continental-scale patterns in tree cover that emerge from countless individual and very localized trade-offs made by West African farmers in search of improved and sustainable food security and resilient livelihoods. ❐

Niall P. Hanan

Department of Plant and Environmental Sciences, New Mexico State University, Las Cruces, NM, USA.
e-mail: nhanan@nmsu.edu

Published online: 16 April 2018
https://doi.org/10.1038/s41561-018-0112-x

References

1. Brandt, M. et al. *Nat. Geosci.* https://doi.org/10.1038/s41561-018-0092-x (2018).
2. Leach, M. & Mearns, R. *The Lie of the Land: Challenging Received Wisdom on the African Environment* (James Currey Press, Oxford, 1996).
3. Garrity, D. P. et al. *Food Sec.* **2**, 197–214 (2010).
4. Mbow, C. et al. *Curr. Opin. Environ. Sustain.* **6**, 61–67 (2014).
5. Sankaran, M. et al. *Nature* **438**, 846–849 (2005).
6. Bayala, J., Sanou, J., Teklehaimanot, Z., Kalinganire, A. & Ouedraogo, S. *J. Curr. Opin. Environ. Sustain* **6**, 28–34 (2014).
7. Dohn, J. et al. *J. Ecol.* **101**, 202–209 (2013).
8. Waldron, A. et al. *Trop. Conserv. Sci.* http://doi.org/gbxdpc (2017).
9. DeFries, R. S., Asner, G. P. & Houghton, R. (eds) in *Ecosystems and Land Use Change* 1–9 (American Geophysical Union, Washington, DC, 2004).
10. Klapwijk, C. J. et al. *Curr. Opin. Environ. Sustain.* **6**,

GENDER BIAS

Convene to combat gender bias

Unconscious bias in both men and women has been associated with disadvantaging women in their career opportunities in science. There are diverse examples of such unconscious gender bias, for example in the wording of recommendation letters in the geosciences specifically (*Nat. Geosci.* **9**, 805–808; 2016), as well as in the perceived competence and hireability of job seekers and in offers for career mentoring and starting salaries (*Proc. Natl Acad. Sci. USA* **109**, 16474–16479; 2012). Although, at least in the United States, geoscience PhD recipients are now much more balanced in terms of their gender than 40 years ago (see s41561-018-0116-6, this issue), unconscious bias has probably contributed to the persistent gender gap in geoscience faculty.

As Heather Ford and colleagues have now discovered (*Nat. Commun.* https://doi.org/10.1038/s41467-018-03809-5; 2018), the allocation of speaking opportunities at the American Geophysical Union (AGU) Fall Meeting follows a different pattern: men and women as primary conveners differ significantly in their allocation of oral conference contributions between the genders. According to the analysis by Ford and colleagues for the years 2014 to 2016, women conveners were more likely to offer oral presentations to women, compared to their male counterparts.

Chances to present one's research at key conferences in a talk — usually to a larger audience than would be reached through a poster — can be an important career enhancer. Being seen by an audience of people who work in the same field can open up networking opportunities and

Credit: Kakimage2 / Alamy Stock Photo

cooperation. And more prominence of women in speaking roles at conferences could help not only in advancing their own careers. Women speakers also serve as role models for the next generation. Encouragement seems necessary: Ford and colleagues found that women are more likely than men to opt for poster-only presentations when submitting their abstract, possibly because of a lack of confidence.

Perhaps most worryingly, the gender difference in promoting woman speakers at the AGU Fall Meeting held across the career stages of primary conveners. If the pattern that early career male convenors are as unlikely as their more advanced male peers to promote women speakers holds more widely, then there is little hope in simply waiting for change as the next generation of geoscientists takes over.

It seems that we need more women to take on the responsibility of primary convenor — at the AGU Fall Meeting and elsewhere — to even out the opportunities between the genders. ❐

Heike Langenberg

Published online: 30 April 2018
https://doi.org/10.1038/s41561-018-0123-7