

## FIELD NOTES

## Seeking Women's Participation in Ethnoecological Fieldwork

JOCELYN MULLER

### Introduction

As studies increasingly show differences in human experiences according to sex and gender, researchers are recognizing the importance of equitable gender representation of research participants. In studies of traditional ecological knowledge, while it is accepted that differences exist between men's and women's physiology that may affect their ability to metabolize a medicine (Sica et al. 2005), concepts like *community* and *local* often mask the gendered nature of cultural knowledge. This is not to say that men and women cannot possess the same knowledge; however, there are often cultural factors that can lead to gendered knowledge spheres<sup>1</sup> especially in cultures where gender roles are clearly defined and interaction between genders is limited. While most researchers who seek to understand and document local knowledge aim to include both male and female participants, in societies with unequal and segregated gender dynamics this may be easier said than done. Women are often less educated, more reserved, and under cultural restraints that do not allow them to work alongside male researchers or participants.

Here I discuss some of the challenges I faced, how I overcame them, and what benefits I received by trying to include women in my field research. My hope is that readers can use this case to think of how it applies to their own research and how they can increase participation of persons from all genders or underrepresented groups. As ethnoecological research often seeks to assess the positive and negative impacts of human activities on socio-ecological systems, to disregard gender-differentiated activities could grossly underestimate socio-ecological effects,<sup>2</sup> and/or introduce a strong bias to the data. Some researchers choose to limit

the scope of their question to only one gender, but in ecological research, many effects are synergistic and limiting the scope of the question may actually limit the explanatory power of the results. Here I discuss the methods employed to engage women during my field research on how local knowledge can inform conservation in Niger's Park-W biosphere reserve. Although the challenges discussed are not unique to that location, I draw on examples from my fieldwork in southwest Niger, so I will first briefly explain key elements of the culture and history of this region.

Niger has a long history of gender segregation that at first glance seems to relegate women to a position lacking power and means. The national statistics often quoted to summarize the status of women are dreary: literate women make up only seven percent of the national population. Seventeen, the average age at which women get married, is one of the lowest in the region, and the average number of children (7.9) and maternal mortality rates (1/7) are among the highest (United Nations 2006:156-168). Unreported are some advantages for women such as their right to divorce and their right to separate incomes. In parliament, there are only a token number of women in positions that are culturally suited to and created for them. Yet at the same time, there are several powerful female leaders in both the traditional government and religious arenas. In fact, Niger has a dual governance policy in which there are traditional counterparts to any government officials at the state, regional and local level and policy making is split between these two arenas. The traditional governments have distinct male and female spheres of influence and power that operate simultaneously.

While these are important facts for practitioners, development agents, and aid workers, these also have implications for participatory researchers. The research project that provides the context for the analysis is situated in the tri-national biosphere reserve, Park W.<sup>3</sup> I work with a team of conservation agents, students and villagers to assess the conservation status of the region and ascertain the positive and negative impact of different human activities on the plant communities in and out of Park W. As a Euro-American female researcher I have immediate advantages over my male colleagues in my ability to move among women and engage them in dialogue, which makes it essential to have both men and women represented on the core team of researchers. But I was still not prepared for the way local gender relations would limit my research. Women were much more afraid than men of the repercussions of breaking conservation laws such that many had never ventured into Park W and thus had limited knowledge of the plants there. Married women are generally not allowed to travel away from settlements and into the "bush" with a group of mostly male participants. Lack of education made women uneasy with any methods that seemed to require literacy. When a woman was found who was willing to travel with us into the field, it became a challenge for team dynamics. These challenges really forced me to defend my reasons for including women and gave me the chance to reflect on different ways that I have had to go beyond simply being a female researcher in order to obtain truly equal male and female participation. Including women has been a challenge, but there have been clear benefits in the quality and quantity of data. Immediately after a woman joined the research team it was clear that her input was both different and critical to answering my research questions. I have summarized some of the successful approaches and strategies that I have gathered from various sources in the following segments to help others who face similar challenges think about effective ways to maximize women's involvement prior to entering the field. It is important to note that I invented none of these methods; researchers such as Richard Chambers (1998) have been promoting similar methods for many years. From talking to colleagues, I know that I am not alone in struggling with such challenges.

***Provide familiar instruments for data collection: The "stick and sand method"***

I planned to use standard participatory rural analysis techniques, which are intended to allow illiterate populations a way to express their needs and perceptions on paper. These are commonly used methods in development and participatory research circles, so I was surprised that it was at first unsuccessful. The task was to draw plant resources of value onto a seasonal calendar. But even though the task was to draw, everyone was afraid of being chosen to "write." Finally one woman got up, made some marks in the sand, and then declared she had drawn the map. I took this opportunity to follow her example by asking others to draw pictures in the sand and offered to copy those pictures to the paper map. The change from paper to sand seems small, but in Niger, people often draw on the sand to illustrate a point, to mark territories or even to talk to spirits, whereas pens are only used in school by those who know how to write. This small change meant more women participated. Although I took from that meeting only one photo and my hand-drawn copy of the works created by the women, what was lost in the replication was surely compensated for by vast differences highlighted in the male and female representations of the village. The male representation came much closer to what a cartographer would see in the landscape, while the female representation differed greatly in scale and precision but illuminated many of the realities of their world. The actual material used to represent information is of little importance; what is important is that participants feel comfortable with the materials present.

***Use age and personality as a bridge across the gender gap: The "old woman method"***

In many cultures people on either end of the age spectrum are not held to the same gender guidelines. In Niger, one can easily work with male and female children together, and women past menopause are also granted many more freedoms and command greater respect even within all male circles. In addition, some women are personally more open and brave. In the years of working in Niger I have always

found one or two women who, regardless of their age, would work outside their standard roles. In my field work, the assistance of one woman who possessed both advanced age and an outgoing personality has been invaluable. She not only has a great knowledge regarding plants, but also is feisty and proud, walking with men regardless of gender or education with her head held high and her flip flops flapping. Having her actively participate in the research has been a great opportunity for her to learn more about the land around her, as she gains access to lands otherwise prohibitively expensive to enter. She has also doubled the amount of information that I am able to gather on any habitat, as her nature is such that she makes sure I see every plant. There are women like Bali in almost any society, for even in the most segregated society there must be built-in bridges to allow for some household or community interaction. The key is to find and employ cultural bridges, such as the old, the young or the non-traditional, to increase female participation. As you observe and learn about your field site and the community you are working with, watch how men and women interact, who is willing to eat together, shake hands, or travel alone. Inquire about female leaders, griots, healers and those active in programs brought in by outsiders. Ethnicity, social rank and even marital status will all affect a woman's ability to be that cultural bridge, so be observant and patient. Also be aware that women who move freely outside of their gender boundaries due to social status may actually prohibit other women from participating so it is important to understand how all your participants interact with each other and with other non-participants.

***Be attentive to issues of miscommunication and dissent: The "peacemaker strategy"***

The preliminary days in the field after women were added to our research team were both challenging and rewarding. Because of the relation between plant use and knowledge, men and women often differed in their knowledge of certain plants, sometimes naming them differently or claiming different applications. In the field, discussions surrounding the mismatched responses were very informative as they allowed me to see how people

were identifying plants and what allowed them to recognize the different species. However, it also created tensions regarding the security of each member's place on the team. Although I do not regard local names as mutually exclusive, the participants often felt there had to be one right answer and the discourse started to veer away from the qualities of the plant and toward the qualifications of the person—whether so-and-so was a true plant expert. It was important for me, as the facilitator, to ensure that all team members felt comfortable to communicate their opinions and knowledge equally, so while the discourse was beneficial at first, I recognized that it threatened team dynamics and specifically the woman's place in the group as she was often targeted as the source of the tension.

Together the team members and I established an alternate pattern of knowledge documentation where the names and uses were independently recorded and then compared for consistency. When a species' name did not match, these were brought to experts outside the team for further discussion, thus avoiding direct confrontation. Since the experts who originally named the plants remained anonymous, later discussions focused more exclusively on the plants rather than on the qualifications of the participant. In this way, mistakes could be readily distinguished from qualitative differences in knowledge without directly challenging participants. This situation is not specific to this society or even gender, as you may find these same issues between people of different socio-economic class, education or ethnicity. However, as a team leader in participatory research, it is critical to remember that you are most importantly a facilitator and need to be attentive to issues that could limit participation of any team member.

***Be flexible to meet women during their free time: The "watch-free method"***

As the saying goes "a woman's work is never done;" as a result researchers across the globe need to employ strategies considerate of a woman's schedule to recruit women for research. In rural Niger this is pushed to an extreme, due to the sheer absence of time saving technology that revolutionized "women's work" in industrialized societies.

Regardless of how early I wake in the morning, I always hear the rhythmic sounds of women pounding grains to flour. I have often heard my neighbors scold their daughters saying "you are a girl; you don't have time like the boys to just wrestle and have fun." Due to the time constraints on women, long interviews and in-depth discussions are easily biased toward male participation. Except during the peak period of cultivation, men are simply easier to find unoccupied and often able to put down their activities for an interview, whereas women were rarely available, except after nightfall. So my first action to increase the number of women informants was to bring water, a flashlight, and insect repellent along with me, so that I was prepared to conduct an interview at night. The next step was finding times of the day when women are less active or participating in activities that could be combined with the interview. I began to target the hottest time of the day when the women were most likely to be doing work that could be conducted under a shade tree. In the cultivation season, I offered to accompany the women to their fields and work alongside them. They were often happy to sit for an interview in their field, while the midday heat made work difficult. Also, persistence is important; I returned multiple times until I learned the work pattern of each woman. This method also helped build rapport as it indicated that my interest was significant. So while male interviews can be timed around the researcher's schedule, interviews with female participants must be balanced with the work load of the women participants and the researcher's watch must be turned off.

***Attend functions or visit places that are frequented by mostly women: The "well method"***

There are often spaces or activities that are traditional meeting places for women that can be utilized to increase female participation. In much of rural Niger, wells and millet grinders are common locations for women to meet each other and share news, as they are places that women have to visit regularly. They may not be good locations for an in-depth interview as women are often concentrating on their work; however, they do serve as good places to

meet women and recruit additional participants and it is often possible to ask quick questions for clarification. If there are more than one of these facilities in the village it is important to visit several, as women will purposely choose one well over the other based on the how they will use the water and how they are related to the well owner. So if you preferentially use one well over others, you may find all of your informants may be related, or share some other cultural connection. The market is a great place to have informal discussions with women and to discuss plants of economic value. In Niger, sections of the market are divided by gender and place of origin, so it is easy to see how plant products are separated by gender and geography. And while there may not be wells, markets or millet grinders in your particular research context, if the culture divides women's work from men's work you will probably find places where women come together around certain time-saving technology or just socially to get work done.

***Speak the language and establish rapport: The "Babel-fish method"***

Language and rapport are important to any participatory research method, especially involving women. Speaking the local language was critical to my success at understanding cultural patterns and anomalies, fact-checking and problem-solving. In some cases there are too many languages in one region to really master them all, but in my experience any attempt is appreciated. Knowing how to congratulate a woman on the birth of a new child, how to joke with her about love and life, and how to speak her language opens so many new avenues for research and friendship it just cannot be understated.

**Conclusion**

In conclusion, the importance of having an equal balance of men and women in the team of researchers cannot be overstated. In gendered societies there are some places that men cannot go and certain questions they cannot ask. Furthermore, a diverse team is crucial but it is not sufficient, as many cultural factors limit women's participation beyond simply the gender of the researcher. One must strive to *be active* in seeking female participation, *be responsive* in one's schedule

and style of presentation to the realities of women, *be creative* in the setting, and use of materials and *be patient* as it often takes time to build rapport with any member of an underprivileged group. The value of equal gender participation in ethnoecological studies goes beyond the ability to work with female specialists such as traditional birth attendants or women healers. In many societies, even generalist knowledge can differ between genders. My results indicate that men and women have different uses for plants, different plant names and different patterns of historical ecological knowledge (Muller and Almedom 2006). Whether you actually perform a gendered analysis will depend on your research question, but in order to fully understand the relationship between a community and its local environment the full spectrum of knowledge must be uncovered.

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Jocelyn Muller, Tufts University, Biology Department  
jocelyn.muller@tufts.edu

### Notes

- <sup>1</sup> An excellent treatment of the intersection of gender and traditional knowledge is Carney (2001).
- <sup>2</sup> See also work by Dianne Rocheleau or Agrawal and Gibson's (2001) edited volume.
- <sup>3</sup> Park W, named after the w-formation of the Niger River, is made up of three sister parks in Niger, Benin and Burkina Faso. My work however is based in Niger, thus all references to the park refer to Park W Niger.

### References Cited:

- AGRAWAL, A. AND C.C. GIBSON.  
2001 *Communities and the environment: Ethnicity, gender, and the state in community-based conservation*. New Brunswick, NJ: Rutgers University Press.
- CARNEY, J.  
2001 *Black rice: The African origins of rice cultivation in the Americas*. Cambridge, MA: Harvard University Press.
- CHAMBERS, R.  
1998 Beyond "Whose reality counts?" New methods we now need? *Culture and Organization* 4:279-301.
- MULLER, J. AND A.M. ALMEDOM.  
2006 From Anza to Zinsan: Concepts of famine foods in Niger. Paper presented at the 66th Annual Meeting of the Society for Applied Anthropology. Vancouver, Canada.
- SICA, D.A., M. WOOD, AND M. HESS.  
2005 Gender and its effect in cardiovascular pharmacotherapeutics: Recent considerations. *Congestive Heart Failure* 11:163-6.
- UNITED NATIONS, DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS.  
2006 *The world's women 2005: Progress in statistics*. New York: United Nations.