International Gender Equity in Soil Science: A Social Equity Issue

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Gender equity is a concern in many scientific fields, including soil science. Lower percentages of women work as soil scientists than we have in the general population; fewer opportunities to serve on committees or as invited speakers at scientific meetings; lower selection rates for scientific awards; unconscious bias; tension with work-life balance; poor funding and pay; lack of career progression and a lack of networking opportunities. Advances have been made in many countries, although major discrepancies still exist and women are overall still a minority in soil science and related fields.

A review of international gender equity issues in soil science was undertaken by requesting gender data from 70 national soil science societies around the world; forty-three societies responded. Female members ranged from 0% to 69%. Thirty-six of the 43 societies had more male than female members; the global average was 68% male and 32% female. Some societies noted that women make up a majority of the younger soil science generation or women make up a larger percentage of the younger membership than of the total membership in their society. These findings indicate there is some progress in gender equity in these countries. However, higher numbers of women do not always mean the reasons for those higher numbers are positive. For example, the Bulgarian Soil Science Society mentioned that women were a majority of their soil scientists because soil science did not pay well and men would not take such a low-paying job. Twenty percent of the national soil science societies belonging to the International Union of Soil Sciences (IUSS) have a woman as their president. However, this is lower than the average female membership (32%) in these societies. This is an indication that women are underrepresented in leadership roles.

A rethink of gender equity is needed to create a new paradigm that allows us:

1. To create an inclusive perspective that encourages respect, collaboration and solidarity between the genders. An education based on the full understanding that “equality does not mean that women and men will become the same but that women’s and men’s rights, responsibilities and opportunities will not depend on whether they are born male or female.”

2. An education that recognizes that soil is not only a natural resource, but also provides social,
economic, cultural, political and patrimonial good. The soil not only allows humans to live on it, it supplies food, water and a legitimate sustenance to overcome poverty and to construct an identity, cultural and economic independence.

Therefore, legitimate land ownership is a key element in achieving gender equality for the construction of a just and equitable life, but also the only real way to end all forms of discrimination against women and girls. To improve equity in the sciences, including soil science, we need to educate in a way that changes the gender stereotypes that link science to stereotypes about masculinity. There is no equality without economic independence, and there is no economic independence without equal access to land ownership and land care.