

PolicyPennings by Daryll E. Ray & Harwood D. Schaffer

A weed to us, a food to others

One of the nice things about our jobs as agricultural policy analysts is that it is never boring. We never know what issues will pop-up and grab our attention. Sometimes they are tragic issues like the E. coli outbreak in Germany and its implications for food safety in the US and around the world. At other times, the issues are of a regulatory nature, including the GIPSA rule and the controversy that surrounds its adoption.

Most recently, an issue came walking through our door by way of a graduate student from Kenya, Lilian Wanjiru Mbutia. She wanted to talk about stinging nettle as a food. Yes, stinging nettle as a food. That was a major surprise to us since we viewed the stinging nettle as an obnoxious weed prone to causing aggravation to those unfortunate enough to have to deal with it.

Harwood had encountered stinging nettle as a youth in short pants at summer camp. While walking through open woods in Ohio he literally ran into the plant. It left him with a long burning pain and red welt that ran the length of his exposed leg as he hit the needle-like structures on the stalk of the plant. While it didn't take "an ocean of calamine lotion," it did require an antihistamine cream to take away the sting and reduce the welt.

Daryll had to deal with stinging nettle, also called common nettle, in the hog lots on the farm where he grew up in Iowa. It was a stubborn weed that was difficult to eradicate.

The idea that this troublesome weed could be a food was—well—intriguing, so we listened.

Lilian said that nettle grows in the wild in the highlands of Kenya and is gathered by women who carefully harvest the nettle and set out the stalks—with leaves intact—into the sun to dry. When the moisture has evaporated, they use a grinding stone to turn the stalks and leaves into a powder, which they mix with millet or sorghum flour to make an enriched porridge for babies. It turns out that stinging nettle has a high protein content and also contains high levels of calcium and iron, as well as a wide range of vitamins and micronutrients.

She also told us that stinging nettle is used to make the traditional Kikuyu dish, irio. Irio is made by boiling dried maize and beans or peas until they are tender. Potatoes are then added and when they are cooked the leaves of the nettle or the powder is added to the mix and then mashed together making something that looks like green mashed potatoes. When the cooking is completed, it is used as a side dish that is considered to be a delicacy. In Kikuyu, irio translates into the English word "food."

With that background, along with Lilian, we did a little research and discovered that nettle has been used as a food, tea, source of fiber, and medicinal among many peoples around the world.

One of the advantages of nettle in Kenya and other parts of Africa is that it springs to life very quickly following the beginning of the rains and serves as a nutritious food source at a time when other food stocks are often at their lowest.

The popularity of nettle powder in Kenya has grown because of its nutritional qualities and a team of researchers led by Dr. Anne Muriuki is in the process of seeking funding for a project titled, "Improving nutrition and incomes for the poor: Domesticating the stinging nettle."

In the project description the authors note, "In recent years there has been concerted effort to commercialize indigenous vegetables because of their superior nutritional status. Consequently, they compete more favorably in markets compared to exotic vegetables like cabbage and kale indicating a huge market potential.

"Others like the stinging nettle and amaranth are being processed into powders for subsequent fortification of cereal flours in the hope that the flours will be used to enrich the diets of nutritionally vulnerable groups and people living in vulnerable environments such as in arid and semi-arid areas of Kenya. The stinging nettle requires special attention because it is nutritious and also reputed to have medicinal properties."

The National Research Council of the United States in its Lost Crops of Africa series as well as the International Assessment of Agricultural Knowledge, Science, and Technology for Development in its "Agriculture at a Crossroads" have called for increased investment in the research of lesser known crops as a way to increase food production among those most vulnerable to hunger.

The need to double the production of food in the world by 2050 in order to adequately feed 9 billion people has generated a lot of discussion about the need for increased investment in agriculture in order to achieve that goal. In January 2010, the World Bank, along with the United Nations Food and Agricultural Organization, the International Fund for Agricultural Development, and the United Nations Conference on Trade and Development released a "discussion note" titled, "Principles for Responsible Agricultural

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tural Investment that Respects Rights, Livelihoods, and Resources,” http://siteresources.worldbank.org/INTARD/214574-1111138388661/22453321/Principles_Extended.pdf.

Much of that paper deals with land investment in developing countries and its recommendations have been described as woefully inadequate to protect the most vulnerable populations. While the paper talks about the need for private investment in increasing food production, it ignores the need for public investment in crops of little interest to multinational genetic companies, but of great importance to the poor who depend upon foods like stinging nettle as an essential component of their diet.

We are old enough to recall a time in this country,

before the patenting of life forms, when farmers depended upon public research at Land Grant colleges and universities for improved seed varieties. After purchasing the seed, farmers could grow the crop and save seed from season to season until a better variety came along. This same model could serve to meet the needs of limited-resource farmers in the developing world.

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