

# “Unjustified Perceptions” Explain Why Africa’s Indigenous Grains Are Not Well Known



**DR. DARYLL E. RAY**  
Agricultural Economist  
University of Tennessee



**DR. HARWOOD D. SCHAFFER**  
Research Assistant Professor at  
APAC, University of Tennessee

As we look at the issue of agricultural development in Sub-Saharan Africa (SSA), one area keeps cropping up (no pun intended). As introduced in last week’s column, that area is the role of indigenous crops in the lives of both subsistence farmers and market oriented farmers who live above the subsistence level.

One of the attributes that is a part of the right to food is the idea that the food that is grown/provided needs to be culturally appropriate. In this context certainly, indigenous crops, which have been grown by farmers in SSA for the last 6-8 thousand years fill the bill as culturally appropriate. And yet, they continue to be largely ignored by Western researchers. The question is why.

Certainly Western researchers who have received their degrees in developed nations have greater familiarity and experience with corn, soybeans, wheat, rice, barley, oats, grain sorghum, and canola than they do with African rice, finger millet, fonio, pearl millet, various sorghums, tef, Guinea millet, emmer, irregular barley, Ethiopian oats, and dozens of other grasses grown in limited areas in SSA.

The US National Research Council (USNCR), in its “Lost Crops of Africa: Volume I Grains,” writes, “It is fair to ask why Africa’s grains are not better known. At least in part, the reason can be attributed to several unjustified perceptions.” The authors then go on to identify and discuss six misperceptions that they feel limits the attention given to these crops: 1) inferiority of displaced crops, 2) misclassification, 3) poor people’s plants, 4) inferior yields, 5) unworthy foods, and 6) cost-effectiveness.

1) “Inferiority of Displaced Crops:” As colonialists moved into Africa after the continent was divided up among European powers following the Berlin Conference (1884-1885), they brought with them crops that they were familiar with: Asian rice, maize, and wheat. The colonialists also brought a sense of cultural superiority that extended to their crops. “As a result there is a strong inclination to consider the introduced crop superior and the native crop obsolete and unworthy of further development.

“This is illogical, ill-conceived, and even dangerous. All the world’s agriculture is dynamic and every crop gets displaced at certain times and certain places. In much of the United States, for instance, wheat was long ago replaced by soybeans in the Southeast, peanuts replaced rice; and in the Great Plains wheat has supplanted maize. But no one in America considers wheat, maize, or rice to be inferior, obsolete, or unworthy.”

2) “Misclassification:” By attaching labels to various indigenous crops, the value of those crops is minimized, resulting in less attention. Africa’s crops have variously been described as “coarse” grains (that is, not refined; fit for animal feed); ‘Minor’ crops (not worthy of major status); ‘Millets’ (seeds too small); ‘Famine’ foods (good for eating only when starving); and ‘Feed’

grains (suitable for animals only).”

3) “Poor People’s Plants:” The authors point out that many of the foods that are common in the Western diet were once considered poor people’s or slave food. These include peanuts, potatoes and rye bread. “Cultural biases against peasant crops is a tragedy; the plants poor people grow are usually robust, productive, self-reliant, and useful – the very types needed to feed the hungriest mouths on the planet.” And yet they are ignored by many development programs that are oriented toward crops that have export markets: wheat, maize, and rice.

4) “Inferior Yield: Low yield is perhaps the most frequent comment made about Africa’s grains. Yet these grains are now mostly cultivated in marginal lands under less than optimal management and the yields therefore do not reflect their true potential.

“Moreover, the use of yield figures can be totally misleading. Maize may be able to outyield finger millet, pearl millet, hungry rice, and tef, but only when soil fertility, moisture, and other conditions are good. Under poor conditions, African grains often outyield the best products of modern science.” Again, if these crops had received the level of research that has gone into wheat, maize and Asian rice over the last 50-70 years, they might be competitive under the best of conditions as well.

5) “Unworthy foods:” The issue of culturally appropriate foods works both ways, and as a result indigenous foods made with local grains were often foreign to the palates of colonialists and foreign researchers and thus were considered unworthy foods because they could not be fashioned into products that were familiar to Western palates. For instance; “millets are mainly used for making porridges, fermented products, couscous, and other foods that are alien and therefore somewhat suspect to non-Africans, especially Westerners. This has led outsiders, who often serve as ‘decision makers,’ to direct resources away from native grains.

6) “Cost-Effectiveness:” One of the big issues with cost-effectiveness is the lack of production budgets for subsistence households. In addition food that is produced and consumed within a household and never reaches the market is often beyond the view of official production statistics. “Thus, a crop with no baseline data is at a disadvantage,” despite the fact that “it may be helping feed millions.” When looking for research funding, “maize or wheat researchers can pull out impressive figures to justify the promise of their proposed studies. Finger-millet or fonio researchers can only come up with guesses. To the hard-pressed, cost-conscious administrator – ever fearful of accusations that public funds may be misspent – the decision on which proposal to support is inevitably biased.”

The USNRC authors conclude: “these ‘lost’ crops have much to offer, and not just to Africa. Indeed, they represent an exceptional cluster of cereal biodiversity with particular promise for solving some of the greatest food-production problems that will arise in the twenty-first century.... For thousands of years they have yielded grain even where land preparation was minimal and management poor. They combine well with other crops in mixed stands. Some types mature rapidly. They tend to be nutritious. [They store well over long periods of time]. And at least one is reported to be better tasting than most of the world’s well-known grains.” △

*DR. DARYLL E. RAY: Blasingame Chair of Excellence in Agricultural Policy, Institute of Agriculture, University of Tennessee*

*DR. HARWOOD D. SCHAFFER: Research Assistant Professor at APAC, University of Tennessee*