North American Millets Alliance (NAMA) – FAQ

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1. What is NAMA? North American Millets Alliance is a social-benefit (non-profit) initiative. It is dedicated to promoting millets as resilient crops and nutritious foods in the US and its neighbors. At this time, NAMA is neither incorporated nor affiliated with any other organization.

NAMA has been described as a "neutral" party, as it advocates for millets in general, as well as the range of sectors and organizations working on or with one or more of them.

- **2. Who is NAMA?** The initiative is currently run by its three co-founders, Joni Kindwall-Moore (RN), Jonathon Landeck (PhD), and Don Osborn (PhD). They are contributing their time on a volunteer / *pro-bono* basis. They are joined by other millets advocates in regular online meetings.
- **3. When was NAMA created?** The first discussions date back to autumn 2021. The current initiative was begun in January 2022. The declaration by the UN General Assembly in March 2021 of the International Year of Millets (IYM) for the year 2023 was the impetus for developing this initiative.
- **4. Why North America?** Basically, NAMA is intended first of all as a regional effort to complement the globally oriented IYM, which will naturally will focus on the major millets-producing regions in Asia and Africa. Secondly, there are clear similarities in how millets are grown and used between Canada and the US, especially; and together with Mexico, they form a common trade market.

Millets are still relatively minor crops in North America. However, the configurations of what millets are grown for what is somewhat particular to the region, and there is potential to build on that. Also, this region – especially the US – represents a small but significant import market for millets grown and processed elsewhere as food. Add to that the fact that there is some significant research being done here on millets, and one can argue that North America has a unique role to play in promotion of these grains during the IYM and beyond.

- **5. Why "alliance"?** The word alliance is used in the names of a range of organizations and associations of organizations dealing with grains, for example: Common Grain Alliance, Northeast Grainshed Alliance, Maine Grain Alliance, Specialty Soya and Grains Alliance, and KANSAS WHEAT ALLIANCE INC. While these tend to focus on value chains and marketing, we find the alliance concept appropriate for our current focus on networking among people and organizations that work in one way or another with millets, with the object of cooperation on raising broader awareness and interest in millets as crops and food.
- **6. Why "millets" and not just "millet"?** Without getting into the etymology, the singular form "millet" in English plays a double role as a singular (some particular millet), or as an uncountable or "mass" noun (millets in general). However, we find that the plural "millets" clearly and unambiguously communicates the fact that we are talking about a number of different species of crops, domesticated in different regions, that we group together because of some shared characteristics (notably that most have small round grains). Also, the plural form is increasingly used in communications about these grains, such as in the name, International Year of Millets.

- **7. What are "millets"?** The term is used to cover a number of distinct plants in the grass family (the same family as wheat, corn and rice) that have small round edible seeds. Most discussion currently focuses on about a dozen species cultivated to some significant degree as grain and fodder crops:
 - Pearl millet (Pennisetum glaucum)
 - Foxtail millet (Setaria italica)
 - Finger millet (Eleusine coracana)
 - Proso millet (Panicum miliaceum)
 - Little millet (Panicum sumatrense)
- Kodo millet (Paspalum scrobiculatum)
- Barnyard millet (2 species of *Echinochloa*)
- Browntop millet (Brachiaria ramosa)
- Guinea millet (Brachiaria deflexa)

The following are sometimes or usually also considered millets ("millets-with-their-own-names"):

- Sorghum (Sorghum bicolor)
- Fonio, or acha (2 species of *Digitaria*)
- Raishan (Digitaria compacta)
- Teff (Eragrostis tef)
- Job's tears, or adlay millet (Coix lacrymaiobi)

Of the last five, inclusion of sorghum and teff among the grains addressed by IYM, was apparently discussed and approved by the Food and Agriculture Organization (FAO, the UN's coordinating body for IYM).

There are also a few other small millets that are or were cultivated only in certain localities, or in the distant past. Including these, there are almost 20 millet species.

The "pseudocereals" – amaranth, buckwheat, and quinoa – are not millets.

8. What is the future of millets in North America? We expect that in the coming years, there will be more cultivation of millets for diverse uses, and more consumption of millets as food from diverse sources.

What does this mean? First, cultivation of millets has already been increasing in the region. The greatest proportion of acreage planted in millets, and the widest variety of species grown, are for animal forage and feed. As with any crops for such use, each millet may have its advantages and disadvantages, expanding the range of options for growers. But generally, millets are less demanding of water and inputs, which are big plusses in our changing climate.

Second, the general interest in healthy foods has included attention to millets, and that attention can't but increase as a result of the IYM. However, since the variety of millets grown in the region is limited (in the US, only sorghum, proso, and teff are grown for comestible grain on commercial scales), imports will be the main source for many other millets, which are already available in specialty food stores and online. There are some nice tie-ins here with international programs to benefit smallholder farmers of millets.

Third, there will at the same time be increasing opportunities for specialty farming and small-scale processing operations in the region to meet emerging demand for millets as food.

9. What millets are currently farmed in North America? Although there are nearly 20 different species of millets cultivated in various parts of the world, not all of them are grown in this region.

In the following list for the US, all are grown for animal consumption, and sometimes other uses like cover crops and wildlife. Only three of these are also grown on commercial scales for grain for human consumption – sorghum, proso millet (in the US often labeled simply as "millet"), and teff.

- Sorghum (Sorghum bicolor)
- Proso millet (Panicum miliaceum)
- Teff (Eragrostis tef)
- Foxtail millet (Setaria italica)
- Pearl millet (Pennisetum glaucum)
- Japanese barnyard millet (Echinochloa esculenta)
- Indian barnyard millet, aka billion-dollar grass (E. frumentacea)
- Browntop millet (Brachiaria ramosa)

Finger millet (*Eleusine coracana*) has only been grown in field trials and one experiment we are aware of using the plant to feed dairy cattle. (Ornamental varieties of this and some others of the abovementioned millets are sometimes also planted in gardens in the US.)

Sorghum and proso are grown commercially in Canada, although some others like foxtail (for forage) are apparently grown on smaller scales. In Mexico, sorghum is a significant crop, and there is interest both proso and foxtail.

10. Are any millets native to North America? All of the millet species mentioned above originated in Asia or Africa. However, there is one native millet – *Panicum hirticaule*, Sonoran panic grass – cultivated on a small scale by some Native Americans, mainly in Sonora, Mexico, and it once was grown more widely in the Colorado River delta area.

It is known that the first peoples in North America gathered or cultivated a few other species of *Panicum* as well as s few of *Setaria*, especially in the times before the spread of corn culture.

- **11. Who grows grain millets in North America?** The number of growers farming millets for grain commercially in the region is not known with any precision. One estimate is that in the US, there are less than 100 growers of teff, less than 1000 of proso millet, and less than 10,000 of sorghum.
- **12. What millets are imported into North America?** Probably every species of cultivated millet is imported into the region in one form or another, although generally in very small volume, typically in the form of packaged or processed consumer products. Information on that diversity is based on observation in retail settings, plus descriptive information in bills of lading, since statistics do not disaggregate by type of millet. From that informal research, it appears that food-grade millets and products made with them (although the latter may not be tracked by main ingredients) come mainly from India and China, with some coming from Africa. These are destined for specialty food stores or for sale online. The US, in particular, represents a significant market for this "niche" trade.

Cursory research on importers of millets for retail from China (foxtail and proso) revealed that these US-based companies, which also deal in other foods, often had total value of \$0.5-1.0 million.

Statistics aggregation sites, some of which require paid subscription for full access, seem to tell a different story, perhaps because their focus is bulk trade. While the overall volume of imports to the US, for example, is quite small, the main sources are indicated as France, Canada, China, and South Africa. All this information varies somewhat by site. Again, these figures are for "millet," without disaggregation by species - a critical consideration as the market grows and diversifies.

And all the above does not include data on millets imports in Canada or Mexico.

Being able to more clearly and accurately document the millets import sector is an important part of evaluating changes food habits and the impact of the IYM in the region.

13. What is NAMA doing in the Year of Millets? There are several efforts underway in 2023:

- NAMA's principal project currently is the monthly Millets Webinar Series, hosted by the FEAST Lab at the University of Missouri, with additional support from the Center for Regenerative Agriculture at the University of Missouri. The topics are:
 - o Jan. Intro and tour of the millets
 - o Feb. Really Ancient Grains: Millets from the dawn of agriculture
 - Mar. Modern history of millets: Trends in agriculture and food preferences
 - o Apr. Are millets the ideal crops for Anthropocene conditions?
 - May Processing millets: From the field to the kitchen
 - o Jun. Tasty grains: What millets bring to the table
 - Jul. Millets as nutrition powerhouses
 - Aug. On and off the shelf: Millet products in markets today
 - o Sep. Drink up! Millet beverages, alcoholic and non-alcoholic
 - o Oct. More than small change: Millets in community and economic development
 - Nov. Not just for the birds: Millets and animal farming
 - o Dec. Brooms, biofuel, and pillow-fill: Millets' other uses
- Millet-of-the-month calendar, highlighting 1 (or 2 closely-related) millet(s) monthly
- Social media channels for exchange of information and planning
- Periodic online meetings concerning activities, including organization of topical groups
- Planning for one or more conferences during IYM and the following year
- **14. What else is NAMA planning?** In addition to ongoing networking, NAMA is developing and/or discussing project proposals and concepts for 2023 and beyond. A sample of these follows:
 - US land grant schools showcasing selected millets in demo fields and in food services
 - Press package, with information on millets in N. America (supplemental to FAO materials)
 - Millet-of-the-month information bulletins, perhaps as part of press materials development
 - Millets "triangle" diagram for better understanding millets as a group across contexts
 - Schools packages for teachers at selected grade levels within the K-12 range
 - "Millets sampler box" making it easy for consumers to try meal-sized quantities of millets
 - Work with food museums and chefs to spotlight traditional and new ways of eating millets
- **15.** How is NAMA financed? NAMA currently functions without external funding.
- **16. More questions and answers.** This compilation is a work in progress. If you have more or different information than what appears above, we are eager to learn of it. Thank you.

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