MINOR MILLETS

enabling deployment of underutilized species
What are Minor Millets and where do they come from?

Minor millets are small-seeded species crops, grown around the world for food and fodder. Essential similarities of the members of this group of species are the resilience and ability to thrive in harsh environments, along with nutritious seed content. They have been cultivated since immemorial time.

Minor millets (as opposed to other millets like pearl millet and sorghum) are also described as nutritious millets and have received far less research and development attention than other crops with regard to crop improvement, cultivation practices and utilization. They include finger millet (Eleusine coracana), foxtail or Italian millet (Setaria italica), kodos millet (Paspalum scrobiculatum), common or proso millet (Panicum miliaceum), little millet (Panicum sumatrense), and barnyard or sawa millet (Echinochloa utilis). Minor millets account for less than one percent of the food grains produced in the world today. Thus they are not important in terms of the overall world food production, but they are strategic in terms of their nutritional contribution, and their role in local agro-ecosystems. They are mostly grown in marginal areas or under agricultural conditions where major cereals would fail to give sustainable yields.
PROPERTIES

Minor millets are used as food sources mainly in arid and semi-arid regions of the world thanks to their low water requirements and capacity to grow in marginal lands.

They can often be used in recipes instead of rice. The protein content in these species is very close to that of wheat, but in addition they are also rich in B vitamins, especially niacin, B6 and folacin, calcium, iron, potassium, magnesium, and zinc. Minor millets contain no gluten, so they cannot be used in raised bread making. For the same reason, they are appropriate foods for those with coeliac disease or other forms of allergies/wheat intolerance.

Food Preparation

In Western India, millet flour (called “Bajari” in Marathi) has been commonly used with “Jowar” (Sorghum) flour for hundreds of years to make the local staple flat bread known as “Bhakri”. Minor millets are traditionally important grains used in brewing millet beer in some cultures.

Health

Celiac patients can replace certain cereal grains in their diets by consuming millets in various forms including breakfast cereals.

Other Uses

Millet sprays are often recommended as healthy treats to finicky pet birds, as they are easily eaten and easily broken.
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GROWING
Minor millets are grown in rotation with wheat, using the same tillage, planting, and harvesting equipment that farmers use for wheat. Farmers can plant millet as a fill-in or as a catch crop on land to which their winter wheat crop, for one reason or another, was a failure. Reportedly, millet leaves the soil loose and relatively free of weeds, and provides a good residue cover.

HARVESTING
Harvesting millet involves cutting and windrow ing the plant for a period of additional drying. Then, the millet is picked up with a combine and thrashed. In rural communities where the farmers do not have modern harvesting equipment, the harvesting is a very time consuming task as the seed clusters must be cut stem by stem. When the harvest time approaches, as well as during the harvest time, family members must keep a round the clock watch to keep the predators such as monkeys from prowling the fields and feeding on the villagers’ crops.

PROCESSING
After the crops have been harvested comes the task of threshing the grain clusters. If there are no mechanical devices available for this purpose, it is accomplished manually with the help of animals or large poles. The next step is grinding it into flour. A major factor in discouraging minor millet cultivation and consumption is the drudgery associated with its processing. One of the main aims of an IFAD global project led by Bioversity International, has been to remove the drudgery associated with traditional house-hold processing by introducing mechanical processing. Thus small mills have been set up and groups of women organized as self-help groups.
Achieving social and ecological sustainability

There are ongoing projects for sustainable development involving millet production that aim to empower the rural poor (in particular, women, young people and farmers’ groups, associations, and communities). Inter alia, they promote the development of a better distribution system for agricultural inputs, in particular seeds. They also provide financial assistance so that communities can construct waterholes and boreholes, set up water-harvesting schemes for millet and home-garden production, and rehabilitate a few key rural and feeder roads to allow access to high-potential production zones. The projects also support the development of an appropriate and sustainable rural financial system (micro-credit schemes) capable of providing financial services to the rural poor, particularly women and youth, so they can effectively participate in determining which community projects should obtain project financing. Target communities and beneficiaries can thus plan and prioritize their needs and manage the resources received from the project. The managerial and technical capacities of farmers’ groups, associations and communities are strengthened and their negotiating skills reinforced.
The exhibits on show are just few of many commercial products made from Millets:

Little millet grain
Italian millet grain
Millet flour

SOME PRODUCERS / RETAILERS / DISTRIBUTORS

- Self Help Group of Minor Millet Growers, Chinnamangalam, Alathur Nadu, Kolli hills, India.
- Azienda Agricola Podere Pereto – www.poderepereto.it
- Alce Nero – www.alcenero.it
- Kl Group Spa – www.kigroup.com
- Il Fior di Loto Srl – www.fiordiloto.it

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