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Eco-Product

The focus of Environmental Information, Awareness, Capacity Building & Livelihood Programme (EIACP) scheme is to disseminate environmental information to decision makers, policy planners, scientists and researchers across the world.

CERC-EIACP, Programme Centre - Resource Partner to MoEF&CC works on the thematic mandate of 'Environment Literacy - Eco-labelling & Eco-friendly Products'. This bi-monthly e-bulletin features latest of Environment, developments and innovations.

Green Issue

Millets : A Sustainable Food

For over thousands of years, agriculture has been the basic source of survival and has provided livelihoods to many around the globe. There is also an ever-growing global population that needs satisfactory & healthy food amidst climate crisis and exhausting natural resources. With such challenges there is a need to transform food systems in sustainable ways. After green revolution was launched in India, significant increase in the production of food grains was attained through the use of improved crop varieties, fertilizers and plant protection chemicals.

Whereas, before green revolution farming was mainly decentralised with individual farmers deciding on the types of crops to grow depending on climate & soil conditions, methods of controlling pests and diseases, building soil fertility in their own ingenious ways, since farming did not include the use of chemical pesticides or fertilizers then. Soil health and pests control were achieved using practices such as shifting cultivation, conservation, use of animal manure, farm wastes and introduction of legumes into crop rotations.

On the other hand, Millet production is not dependent on the use of synthetic fertilizers and most millet farmers use farm yard manure, household produces and biofertilizers. Therefore, they can significantly reduce the huge burden of fertilizer. Millets are collective group of small seeded annual grasses that are grown as grain crops, primarily on marginal land in dry areas of temperate, sub-tropical and tropical regions. They are broadly grown around the globe as cereal crops or grains for human food and as fodder for animals providing food security to millions of households and contributing to the economic efficiency of farming. Millets are the first crops to be domesticated by the humans in Asia and Africa. Millets are group of small grained cereal food crops which are highly nutritious and are grown under marginal/low fertile soils.

India is the largest producer of millets in the world, and accounts for more than 40 per cent of the global consumption. Millet cultivation provides livelihood to nearly 50 per cent of total rural work force and sustain 60 per cent of cattle population in India. Based on area grown and its grain size the millets are classified as major millet and minor millets. The major millets include sorghum (jowar) and pearl millet (bajra). The finger millet (ragi/mandua), foxtail millet (kangni/Italian millet), little millet (kutki), kodo millet, barnyard millet (sawan/jhangora), proso millet (cheena/common millet), and brown top millet (korale) are categorized under minor millets.

Millets have the potential to help achieve the sustainable development goals (SDGs) —mainly SDG 2 (Zero Hunger), SDG3 (Good Health and Well-being), SDG 12 (Sustainable Consumption and Production), and SDG 13 (Climate Action).

Benefits of Millets:

- Pest-free crops
- Contributes to improved agro-biodiversity by their varietal diversity
- Provides minerals, protein and are easily digestible foods
- Allow multiple farm-revenue streams as they can be food, fodder, source of sugar production & biofuels
- Long-term option for combating climate change
- Affordable
- Survive in harsh climate & less fertile soil
- It helps in a slower release of glucose over a longer period of time, thus due to low glycemic index (GI), their habitual intake reduces the risk of diabetes mellitus.
- Rich sources of minerals like iron, calcium, zinc, magnesium, phosphorus and potassium.
- Provides multiple securities such as food, nutrition, financial, livelihood and ecology.
- Millets are anti-acidic, gluten free, detoxify body & Niacin (vitamin B3) in millet can help lower cholesterol
- It helps to prevent breast cancer, type 2 diabetes & heart diseases
- Effective in reducing blood pressure
- Aids in treating respiratory conditions such as asthma
- Helps to optimize kidney, liver and immune system
- Reduces risk of gastrointestinal conditions like gastric ulcers or colon cancer
- Eliminates problems like constipation, excess gas, bloating and cramping
- Millet acts as a prebiotic feeding microflora in your inner ecosystem



The United Nations General Assembly at its 75th session in March 2021 declared 2023 as the *International Year of Millets (IYM 2023)*. This will raise awareness of and direct policy attention to the nutritional and health benefits of millets and their suitability for cultivation under adverse and changing climatic conditions. This will also promote the sustainable production of millets, while highlighting their potential to provide new sustainable market opportunities for producers and consumers.

Source: www.millets.res.in ; www.fao.org ; <https://aim.gov.in/>

Eco-Tips

A sustainable diet leads to sustainable future.
Eat Millets, Stay Healthy, Live Sustainably.

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