Millets: Reservoir of Nutrients ISBN: 978-81-969534-6-1

# 8. Millets: Boon for Life

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#### 8.1 Introduction:

The basis of our life is "Tamaso Ma Jyotirgamaya" which tells us that we move from darkness to light and with this light the darkness in the entire creation disappears when the rays of the sun illuminate the earth.

The basis of our life is the energy of the Sun, and this energy is stored in our food and agricultural products.

Cereals are food agricultural products, which are the biggest source of energy for us. According to Atharvaveda, food is the basis of life of all living beings. Without grains a creature cannot survive. Among grains, 'coarse grain' is an important grain which has a very notable place in our lives. Coarse grains are also known as 'Shri Anna' and 'Millets'.

'Shri Anna' is not limited to just farming or eating. People familiar with Indian tradition are well aware that where there is Shri, there is prosperity as well as integrity. Now "Shri Anna" is also becoming a medium for overall development in India. The village is also connected to this, the poor are also connected to it.

"Shri Anna" is the gateway to prosperity of small farmers of the country, the leader of nutrition of crores of people of the country, respect of the society, higher crop yield in less water, a major basis of chemical free farming, and helpful in dealing with the challenge of climate change.

These grains grow even in less water and less fertile land. Compared to paddy and wheat, water consumption is much less in the production of coarse grains. There is no need of urea and other chemicals in their cultivation. These are better for the environment.

India declared 2018 as the National Year of Millets to promote the production and consumption of nutrient-rich millets and the agro- industries involved.

Indian Council of Agricultural Co-operation (ICAR), Indian Institute of Millets Research (IIMR), Hyderabad, Department of Agriculture, Cooperation and Farmers Welfare launched the Millet Mission and National Millet Year 2018 under the National Food Security Mission (NFSM).

During times of distress in India, grains were also imported. The journey from that situation to the present is a journey of determination for self-reliance. Due to this resolution, on the request of the Honorable Prime Minister of India, Shri Narendra Modi, the United Nations has declared the year 2023 as the "International Year of Food". Prime Minister Shri Narendra Modi has said in his message that India will take forward the celebration of 'International Millet Year 2023" and will run a campaign to promote the cultivation and consumption of nutritious grains. India is making efforts to popularize what has been called "Shri Anna" across the world. On the basis of grain size, coarse grains are divided into two parts-First, large grained coarse grains which include jowar and millet,

- Second small grains - which include very small grained coarse grains like ragi, sava, cheena, kodo, kagni.

Table 8.1: Ten crops are included under coarse grains/Shree Anna.

> Jowar	➤ Chenna/Barri
> Bajra	> Kakum
> Ragi	Kutki (Small grains)
> Sawan (Sama)	> Kudu
> Cagney	> Kodon

### 8.2 Nutritional Features of Coarse Grains/Millets/Shri Anna:

- a. Millets are rich in nutrients. These are a good source of micronutrients.
- b. Millets also contain high amounts of iron and other minerals.
- c. Millets removes the acidity present in the body which causes disadvantages of acidity.

- d. Millets contain Vitamin B2 which is metabolized in the body. Keeps the process fine.
- e. It is capable of preventing type 1 and type 2 diabetes. Millets are beneficial in diseases related to thyroid, uric acid, kidney, liver, lipid diseases and pancreas because it is helpful in removing metabolic syndrome.
- f. Today starvation and malnutrition are becoming a problem not only in India but in the entire world. In such a situation, coarse grains are being seen as the only solution to prevent malnutrition.
  - These grains are a treasure trove of nutrients like protein, dietary fiber, calcium, iron, manganese, phosphorus, potassium and vitamin B complex. For countries with huge population like India, these grains are no less than a boon.
  - By including these grains in the daily diet, the problem of malnutrition can be solved.
- g. Millets are gluten free and have low glycemic index as well as being rich in protein, fiber and various nutrients due to which they protect against diseases like diabetes, cancer and high blood pressure etc.
- h. Apart from this, millets are also very helpful in reducing cholesterol and obesity.
- i. Millets help in improving the digestive system. Eating these does not cause any stomach diseases like gas, constipation, acidity.
- j. Coarse grains contain antioxidant elements which protect against free radicals in the body.

These crops are grown on marginal and less irrigated lands. Their produce encourages sustainable farming and crop diversification. Coarse grains are also called 'poor man's grains'.

Thus, millets have great potential to contribute to nutritional security. Though millets have many benefits but if India becomes the global center of millets production, then the export of agricultural products will increase rapidly. Because at present the demand for coarse grains is increasing rapidly. In such a situation, increasing exports will have a positive impact on the country's economy and will also bring about a revolutionary change in the income of farmers. Apart from this, in completing the phase from production to export of these grains, many sources of direct and indirect employment will also increase, which will also reduce unemployment in the country. The 'International Millet Year' is expected to have a significant impact on the millet industry, further boosting its growth and development in the global market. Today, India has the potential to lead the world as a major country in the global supply chain of millets and its value-added products.

India is rich with unique varieties of value-added products of millets which can be used as millet pizza base, millet ice cream, ice cream cones and cups, millet cakes and brownies, traditional Indian dosa, poha, upma, pasta etc.

Coarse grains are being used in making Idli, Dosa, Idiyappam, Roti, Upma, Chapati, Pancake, Halwa, Kheer, Bajra Laddu, Coarse Cereal Rusk snacks and some edible biscuits etc. Sprouted ragi also has an important place among coarse grains.

Apart from these, some other food items made from millets include biryani, weaning food/infant food, chaat mix etc.

## Other Important Features of Coarse Grains (Shri Anna):

- a. These grains are climate tolerant and are not easily affected by rapid climate change.
- b. These grains cost less to produce.
- c. These grains, rich in nutrients, give good yield even in less fertile and infertile soils. If put in simple words, these grains are the friends of the farmer who produce good production at low cost and with less labour.

#### **B.** India's Contribution:

India is the largest producer of coarse grains in the world. There are some states which cultivate millets on large scale such as Maharashtra, Rajasthan, Madhya Pradesh, Uttar Pradesh, Haryana, Jharkhand, Andhra Pradesh, Telangana, and Karnataka. Maximum consumption of coarse grains is in Assam and Bihar.

Along with the Central Government, the State Governments have also started the "Millet Mission" scheme to promote millet grains. Under this, input assistance and technical information is provided to the farmers growing millets. India is the hub of coarse grains i.e., millets. By increasing its production in India, the country will be made the global center of millets.

Apart from this, Millets Research Center will also be established in the country to increase research work in the field of millets production.

The year 2023 has been declared 'International Millet Year' by the United Nations General Assembly on 05 March 2021. Therefore, the government is especially working towards promoting their production and use.

### **8.3 Conclusions:**

Today the demand for coarse grains has increased and startups are making value added products keeping every age group in mind. India grains is thus making a valuable contribution towards a prosperous future for Indian farmers and achieving food and nutritional security. Millets need promotion in production, consumption, value addition and processing in order to contribute global food and nutrition security. On the other hand, promotion and adoption of millets on large scale will also reduce burden of lifestyle diseases among vast section of population and revitalize Mother Earth.

### 8.4 References:

- 1. Majid A, Priyadarshini CG, P. Millet derived bioactive peptides: A review on their functional properties and health benefits. Critical Reviews in Food Science and Nutrition. 2020; 60(19):3342-3351.
- 2. Obilana AB, Manyasa E. Millets. In: P. S. Belton and J. R. N Taylor (Eds.). 2002; 177-217.
- 3. Rao BR, Nagasampige MH, Ravikiran M. Evaluation of nutraceutical properties of selected small millets. Journal of Pharmacy and Bioallied Sciences. 2011; 3(2):277-279.
- 4. Thapliyal V, Singh K. Finger millet: Potential millet for food security and powerhouse of nutrients. International or Research in Agriculture and Forestry. 2015;2(2).
- 5. Yang X, Wan Z, Perry L, Lu H, Wang Q, Hao C, Li J, Xie F, Yu J, Cui T, Wang T, Li M, Ge QH. Early millet uses in northern China. Proc. Nat. Acad. Sci. USA. 2012;1-5.