

## Millet Cookies - A successful Venture in Salem District, Tamil Nadu

Malathi G., P.Kalaiselvi, R. Jegathambal and M. Ravi

ICAR-Krishi Vigyan Kendra, Salem was established in the year 1994 for disseminating location specific technological modules at district level through technology assessment, refinement and demonstration and training the farmers, farm women and rural youth on agricultural production technologies and post-harvest technologies. KVK acts as a knowledge resource centre for agricultural technology by supporting initiatives of public, private and voluntary sector for improving the agricultural economy of the district.

Millets are traditional grains grown and consumed in the Indian Sub-Continent from the past more than 5000 years. Millets are highly tolerant to drought and other extreme weather conditions. They are popularly known as Nutricereals as they provide most of the nutrients required for normal functioning of human beings.

Salem District is well known for its millet production in an area of 1,09,927 ha and sorghum in an area of 50349 ha. The other millet crops grown in Salem are finger millet (1933 ha), ragi (8141 ha), maize (33447 ha), samai (780 ha) and other minor millets (1233 ha) with total production of about 4,07,692 metric tonnes per year.

Now a days, renewed interest among farmers and consumers on millets increased the are under millet cultivation.

Millets are highly nutritious with high calcium, iron, potassium, magnesium, and zinc contents, besides other essential molecules such as vitamins, amino acids, and fatty acids. Government of India has declared 10 crops as 'Nutri Cereals' for production and consumption which include three major millets i.e., pearl millet, sorghum and finger millet; five minor millets i.e., foxtail millet, proso millet, kodo millet,



barnyard millet, little millet; and two pseudo millets i.e., kuttu (buckwheat) and amaranthus.

Since millets have in-built tolerance to water stress and environmental stresses due to their morpho-physiological, molecular and biochemical characteristics, they are considered climate smart crops. Moreover, as millets are largely produced with low external inputs especially chemicals, they are considered as nature friendly. Several traits such as short stature, small leaf area, thickened cell walls, and dense root system also contribute to circumventing the stresses. Thirdly, being C4 crops, millets have greater potential to utilize atmospheric CO<sub>2</sub> in the accumulation of biomass per unit of water used and thus are recognized as crops with low carbon- and water-footprints. The short life cycle of millets (10–12 weeks) as compared to other major crops (20–24 weeks) also helps in stress mitigation. Because of these attributes millets are

Millets play a vital role in the livelihood of the poor and malnourished population, provide food and nutritional security, and help in achieving the first three sustainable development goals of the United



Nations i.e. reducing poverty, zero hunger and good health and well-being. However, despite such positive attributes and qualities of millets for the present and future agriculture, their cultivation in India has been on decline over the last few decades, which has attracted the attention of policy makers and India celebrated 2018 as the 'National Year of Millets' to create greater awareness about unparalleled attributes of millets.

The farmers growing millets in Salem district are only small and marginal farmers and are getting only marginal income because of the involvement of middleman in the supply chain of millets. Hence, the millet growers are motivated by KVK by conducting frequent trainings and demonstrations, entrepreneurship development programmes on value addition to make aware of farmers to increase their income.

Several hands-on trainings on production of millet cookies without including wheat or maida were conducted. Since 2019, the demonstrations and trainings on value addition of millets were regularly conducted at KVK for the benefit of farmers, farm women, rural youth and Farmer Producer Organizations.

Millet cookies are prepared with 100 percent ragi, pearl millet and tenai flour without addition of any preservatives. Multi grain cookies and millet cookies blended with flour of tapioca and banana preparation were also demonstrated to the stakeholders.

The post-harvest processing and value addition facilities available with KVK for post-harvest processing and value addition of millets was shared to farmers on minimal cost basis. Tribal groups of Shervaroy hills were got benefitted and they utilized processing machineries and baking units at KVK.

Moreover, KVK is regularly conducting the awareness programmes in collaboration with Integrated Child Development Scheme, Salem during every September months for creating awareness to famers, school and college students, anganwadi workers etc., by organising Mela and Exhibitions to



showcase the importance of millets in balanced diet of the children, women especially pregnant women as a part of Poshan Abhiyan and Poshan Maah Programmes.

Since 2018, the millet cookies produced by KVK, Salem is given as refreshment to the participants during all the training programmes and farmer melas and sold through sales counter to create awareness among different stakeholders about the nutritional aspects of the Nutri cereals.

Awareness creation as well as sale of millet cookies has been done in collaboration with Forest Department too by selling KVK prepared millet cookies at Kurumbapatti Park of Salem which is one of the important tourist places in Salem District

functioning under the Department of Forests. By this way Salem KVK is not only creating awareness but also demonstrated the successful venture of value addition of millets through preparation of millet cookies to not only to farmers of Salem District but also to farmers of other districts too.

#### **Profitable venture**

- Input Cost – Approximately Rs. 200/-
- TNAU KVK Sale Price for Millet Cookies - Rs. 350 – 400 /- per kg,
- KVK, Salem sold millet cookies worth Rs.2,42,980 /- with BCR is 3.5 to 4.0.

\* \* \* \* \*