

Ready to eat product from Ragi and Bajra -Sivmillk mixture

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Abstract

Sivagangai district is located in the southeast of the state and covers an area of 4468.11 square kilometers. Since canal irrigation is not available in this district, agriculture primarily depends on seasonal rainfall. The Vaigai River is the primary source of irrigation. The Vaigai River's water flow is only normal during the rainy season. The area typically experiences heat spells. The lowest mean daily temperature in January is 19.8oC, which is a cold month. In this district, agriculture provides a living for 75% of the population. This district mostly grows 80000–85000 hectares of paddy, along with groundnuts, sugarcane, pulses, and millets. Of the several types of millets, 475 and 326 hectares are cultivated for Ragi and Bajra, respectively. In that order. Products made from millet are in high demand all year round since the Sivagangai district contains traditional Chettinad dietary values derived from millets. Aiming to create entrepreneurs using millet goods from Ragi and Bajra, KVK did so with this in mind or lack of expertise with value-adding technologies for ragi and bajra; low farm gate price for the combination of ragi and bajra if KVK product is made separately. If ragi is the only ingredient used to produce the combination, it will be extremely hard and coarse. An end product that is soft and delicious will be produced by combining ragi and bajra in a 75–25 percent ratio. In addition, the product is called SIVMILLK Mixture. Millet-based items usually have a very limited shelf life and are eaten very away after preparation. There aren't many items on the market made from millet that combine ragi and other millets. It is inevitable that ragi-based combination snack products will fulfill the demand among millet products given the nutritious qualities of millets compared to other grains. In order to encourage entrepreneurship among farm women, KVK, Sivagangai proposes to run an EDP on SIVMILLK Mixture, a ready-to-eat (commercial) product made from Ragi and Bajra.

Keywords: Millets, entrepreneurship, farm women, value addition

Introduction

Sivagangai district is located in the southeast of the state and covers an area of 4468.11 square kilometers. Since canal irrigation is not available in this district, agriculture primarily depends on seasonal rainfall. The Vaigai River is the primary source of irrigation. During the rainy season, even the Vaigai River has a normal water flow. The area typically experiences heat spells. The lowest mean daily temperature in January is 19.8oC, which is a cold month. In this district, agriculture provides a living for 75% of the population. This district mostly grows 80000–85000 hectares of paddy, along with groundnuts, sugarcane, pulses, and millets. Of all the millets, 475 and 326 hectares, respectively, are planted for ragi and bajra. Traditional Chettinad cuisine, derived from millet, is highly valued in the Sivagangai district and is in high demand all year round. In light of this, KVK made an effort to train Ragi and Bajra residents to become millet product entrepreneurs.

Objectives

1. To guarantee Ragi and Bajra receive value addition
2. To evaluate price, marketing tactics, and consumer acceptability.
3. To build relationships with merchants and retailers in order to commercialize, popularize, and expand the reach of Ragi and Bajra goods.
4. To encourage commodity group entrepreneurship for sustainable income

Problem Definition

- Ragi and Bajra have little or no experience with value-adding technology.
- If KVK product is prepared separately, low farm gate pricing for the mixture of Ragi and Bajra.

Materials and Methods

Table 1: Ingredients required for SIV MILLK Mixture

S. No	Ingredient	Quantity (in g)
1	Ragi flour	750
2	Bajra flour	250
3	Chili powder	20
4	Cumin powder	5
5	Asafetida	5
6	Salt	10
7	Water	Required
8	Curry Leaf	Required
9	Oil	500ml (approx)

Table 2: Problems identified in utilization of millets by farmers
N=100

S. No	Problems	No. of farmers
1.	Lack of millet processing techniques	85 (85%)
2.	Problem in marketing of millet product	95 (95%)
3.	Lack of nutritional knowledge and health benefits	74 (74%)
4.	Lack of Acceptance	89 (89%)
5	Economic Returns	45 (45%)

Table 3: Parameters used to analyse the target group

S. No	Parameter	Factors
1	Quality	Protein, Fat, Fibre, Calcium, Iron, Magnesium, and Phosphorus
2	Economic	Cost benefit ratio for SIVMILLK Mixture
3	Socio Economic	Consumer preference for SIVMILLK Mixture and Socio-Economic growth of the Entrepreneurs

SIVMILLK Mixture



If ragi is the only ingredient used to produce the combination, it will be extremely hard and coarse. An end product that is soft and delicious will be produced by combining ragi and bajra in a 75–25 percent ratio. In addition, the product is called SIVMILLK Mixture. Millet-based items usually have a very limited shelf life and are eaten very away after preparation. There aren't many items on the market made from millet that combine ragi and other millets. Since millet is healthier than other grains, ragi-based combination snack products will inevitably be needed to satisfy the market for millet products. In order to encourage entrepreneurship among farm women, KVK, Sivagangai organised training in the display of SIVMILLK Mixture, a ready-to-eat product (commercial) made from Ragi and Bajra, using the EDP mode.

Product Definition

In ‘SIVMILLK’

SIV: Stands for Sivagangai District

MILL: Stands for Millet based product

K: Stands for KVK

Women empowerment through SIVMILLK Mixture

This EDP program was designed with twenty farm women as its target group. Success is measured by the training as well as the commercialization, popularization, and scaling up of products. The marketing and increased consumption of SIVMILLK combination were undoubtedly made possible by the involvement of rural women groups and SHGs. Through the programs for entrepreneurship development, their empowerment was the goal. Value addition and the preparation of value-added millet products are increasingly crucial since they will be distributed to increase revenue through product commercialization. There are a lot of opportunities in this particular location. Twenty farmwomen who were chosen were encouraged to produce and supply on a huge scale. Farm women are physically strong enough to perform any type of labor on par with men, but the majority of female labor is regarded as helping men, particularly in activities related to agriculture. The rural

farm women of Sivagangai District were guaranteed ongoing economic opportunities through this EDP initiative.

Table 4: Nutrient content of SIVMILLK per 100g

S. No	Parameters	Nutritional Value
1	Energy (Kilo calories)	387.39
2	Carbohydrates (g)	74.23
3	Protein (g)	13.10
4	Fat (g)	4.23
5	Calcium (mg)	217.29
6	Iron (mg)	12.41

Table 5: Mean value for sensory evaluation of SIV MILLK

Storage Days	Sensory Characteristics (out of 10)				
	Colour and appearance	Flavor	Texture (consistency)	Taste	Overall acceptability
Initial	9.5	9.5	9.5	9.5	9.5
7th day	9.5	9.5	9.5	9.5	9.5
15th day	9.5	9	9	9	9
22nd day	9	9	9	9	9

Branding

Branding is crucial to the selling of value-added products, farm entrepreneurs have become more aware of its significance. Branded as "SIVMILLK Mixture," the Ragi and Bajra millet-based mixed goods were created by KVK, Sivagangai. The rural women entrepreneurs were also given guidance by the KVK, Sivagangai, on how to establish their own brands, register them, get FSSAI licenses, and produce ads for efficient marketing.

Quality testing

The quality of the SIVMILLK mixture was examined at the Indian Institute of Crop Processing Technology (IICPT), located in Thanjavur. Prior to the product's official debut, the content of calcium, iron, magnesium, phosphorus, fat, protein, and fiber were the main elements examined.

Packaging, labelling and marketing

Process technology for product formulation underwent refinement and optimization. Products were made more well known in local, unconventional/non-millet marketplaces. The development of SIVMILLK mixture upscaling was based on market input. To increase marketability, appropriate packaging materials with labels were identified for various items. Additional upscaling and extension efforts were conducted by establishing connections with potential line departments, organizations, and institutions. Print and electronic media were used in the products' popularization and publicity campaigns. Development of entrepreneurship gave stakeholders more influence. In order to support self-employment seekers in agriculture and related fields and encourage entrepreneurship among farmers, the KVK, Shivagangai also developed a special KVK Sales unit on its property. The SIVMILLK combination items made by the farm women entrepreneurs are also displayed with assistance from the KVK Sales unit.

Findings of the study

The following observations were made in this study.

- The process of preparing the product was simple.
- The product's self-life and nutritional value remain consistent.
- Farmwives expressed satisfaction with the product.
- There are promising entrepreneurial potential and a guaranteed market for the value-added products.

Outcome

The purpose of the Entrepreneurial Development Programme (EDP) is to assist farm women in developing their entrepreneurial spirit and gaining the knowledge and talents needed to carry out their roles as entrepreneurs successfully. For this reason, it was imperative to advance knowledge of motivations and how they affect entrepreneurial values and conduct. With the help of this EDP, a group could grow, their perspective could be altered, and their ideas could be implemented through a planned and methodical program.

Conclusion

The EDP would assist the farm women in realizing that there exist options that, if taken advantage of, may yield financial gain. The worth of prizes was directly correlated with one's diligence, fortitude, and sound judgment.

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