

Original Research Article

<https://doi.org/10.20546/ijcmas.2019.803.300>

## Food Products Produced, Quality Parameters Adopted Faced by Farm Entrepreneur Women

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### ABSTRACT

Agriculture and Food processing sector is the backbone of India's economy in terms of income, employment generation and ensuring food and nutritional security. A women entrepreneur is one who innovates, initiates or adopts a business activity. Women Entrepreneur is a person who accepts challenging role to meet her personal needs and become economically independent. The study was conducted in Hassan district of Karnataka state. The district Comprises of 8 taluk's viz., Hassan, Arakalagudu, Alur, Sakaleshpura, Channarayapatna, Holenarasipura, Belur and Arasikere. The farm women entrepreneurs from all these taluks were randomly selected for the study. Majority of the respondents (63 per cent) of farm women produces finger millet products like malt, hurihittu and papad. Majority of the women entrepreneurs procure raw materials from own source. Majority of the farm women entrepreneurs (63.33 per cent) considered physical parameters like size, shape, particle, and other appearance. Nearly one fifth of the women entrepreneurs (21.67 per cent) know about the shelf life of final products. For final product evaluation, more than one third of women entrepreneurs (31.67 per cent) use organoleptic evaluation (sensory evaluation) like taste, flavour, texture, crispiness and appearance. Awareness and technical knowledge on health and nutritional aspects of the farm women entrepreneurs helps in developing successful entrepreneurship.

#### Keywords

Food Products,  
Entrepreneur  
Women

#### Article Info

Accepted:  
26 February 2019  
Available Online:  
10 March 2019

### Introduction

A nation's development depends on the health and well being of the people who live in the country. Among the people, good health of woman is very important as women are not only the carriers of coming generation, but civilization and sustainable development rest on them (Jain and Parveen, 2014). They are the best upholders of environment, ecological and social balances and because of these

factors it is of great importance that women should get adequate care and attention in the matter of health, nutrition, education or matters related to their social and economic development.

Agriculture and Food processing sector is the backbone of India's economy in terms of income, employment generation and ensuring food and nutritional security. The strength of Indian food industry lies in the availability of

raw materials, flexibility of product mix, consumer awareness for safe and nutritious foods and well trained technical power. With economic liberalization, there are opportunities as well as challenges ahead, for this growing sector. Indian food industry can step forward through entrepreneurship, innovative approaches on technological and marketing aspects.

A women entrepreneur is one who innovates, initiates or adopts a business activity. Women Entrepreneur is a person who accepts challenging role to meet her personal needs and become economically independent. A strong desire to do something positive is an inbuilt quality of entrepreneurial women (Mohan *et al.*, 2013).

The most common and vital enterprising activity for women in rural and urban areas is food processing, and women being the traditional fore runners in food processing at household, draws a major attention in this sector. About 52.5 per cent of the total number of male is gainfully employed in India; the corresponding percentage of women is only 12 per cent.

Out of 1.8 million small scale units, those owned by women were not more than 0.15 million i.e., about 8 per cent only. Out of this, 25.5 per cent of women entrepreneurs are involved in manufacturing of food products, 16.11 and 14.15 per cent in chemical and textile units, respectively. Thus the proportion of women in food processing enterprises is higher as compared to other non-traditional enterprises in India (Ganesan *et al.*, 2010).

Hence an attempt was made to analyze the extent of involvement of Farm women's, their Food products produced, quality parameters adopted faced by farm women entrepreneurs in Hassan district.

## **Materials and Methods**

The study was conducted in Hassan district of Karnataka state. The district Comprises of 8 taluk`s viz., Hassan, Arakalagudu, Alur, Sakaleshpura, Channarayapatna, Holenarasipura, Belur and Arasikere. The farm women entrepreneurs from all these taluks were randomly selected for the study.

### **Existing information on entrepreneurial activities farm women entrepreneur**

Collected the information on existing women self-help groups in both the study area and their existing entrepreneurial activities through questionnaire.

### **Nutrition knowledge of farm women entrepreneur**

Formulated 20 statements related to basic nutrition and health concepts in assessing the knowledge of rural women through schedule - I by interview method before the training programme.

### **Training on value added products to farm women entrepreneur**

The training programmes were conducted on processing and value addition of finger millet, processing of tomato based products, utilization of baby corn/maize in the diet, cultivation and utilization of mushroom and fruits and vegetable processing. All together 200 SHG members were trained of which 50 women were willing to take up entrepreneurship activities in processing of finger millet value added products. Secondly intensive training on value added product trails both on and off the campus was conducted to select the suitable products having commercial potential income generation activities and facilitate enterprise building by the rural women. Training

programs were conducted in the villages and agro –processing unit was set up in common facility center at the villages and were provided with the basic equipments like milling unit, weighing balance, standard cups and spoons, sealing machine, handy gas, dryer, scientific severs and utensils.

### **Extension participation of farm women entrepreneur**

It is the degree to which the respondents (farm women) participated in different extension activities like Training, Meeting, Demonstration, Krishimela etc. The scoring pattern followed by Rattaiah (1979) was used i.e. 2, 1, 0 were assigned to ‘Regular’, ‘Occasionally’, and ‘Never’ participation in extension activities respectively. The respondents were classified into three categories based on Mean and half Standard Deviation

Categories	Score
Low < (Mean - 1/2 SD)	< 0.06
Medium (Mean - 1/2 SD to Mean + 1/2 SD)	0.06-1.65
High > (Mean + 1/2 SD)	> 1.65

### **Nutrient composition**

The nutrient composition of Value added products (protein, fat, energy, calcium and iron) were computed per 100 gm products using food composition tables (Gopalan *et al.*, 2004).

### **Marketing strategies adopted by Farm women entrepreneur**

Products were sold in the local markets, Krishimela, exhibitions, general stores, hospitals in Hobli’s Taluks and District areas. Based on the information obtained by the Farm women entrepreneurs marketing channels were grouped.

### **Results and Discussion**

Food product produced by women entrepreneurs was depicted in Table 1. Majority of the respondents (53.33 per cent) of farm women produces finger millet products like malt, Hurihittu and papad. Nearly half of the women entrepreneurs (32. per cent) are producing Snacks items, Soji rice nippattu, Kodbale, Chakkali, Groundnut masala, Shankar poli, Mixture, Potato chips, Banana chips, Bitter gourd chips, Tapioca chips, Red rice chakkali, Red rice kodbale. Rice papad and horse gram papad were produced (22.66 per cent). Only 7.33 (per cent) Masala powder like sambarmix, bisibelebath and pulivagre mix.

From the table, it is also evinced that nearly 14.66 per cent of the women entrepreneurs produce products Pickles. Only (6.33 percent) women entrepreneurs produce minor millets Harka (Kodomillet) papad, Harka chakkali, Harka roti Navane (Foxtail millet) laddu, Navane holige products. Ragi is one of the staple food crop grown in Hassan district. Since the raw materials are locally available at cheaper cost, finger millet products fetches more return compared to other products and these products are sold in Krishimela, district / taluk exhibitions, fairs and other gatherings. The masala powders like samber mix, bisibele bath and pulivagrane mix have more demand in the study area. Women entrepreneurs earning reasonably good return from these value added products.

Farm women entrepreneurs also fetching good returns from production of potato chips, chakkali, kodbale etc. since these snack items have more demand locally and sold in weekly Santhe and fairs. Farm women earns reasonably good income from these entrepreneurial activities which in turn helps to spent towards family requirements

Procurement and storage of raw materials for enterprise by women was depicted in Table 2. Majority of the women entrepreneurs procure raw materials from own source. It was very much clear that more than half of the women entrepreneurs also depend on local markets for purchase of raw materials for their enterprise. Nearly one tenth (10.33 per cent) of the farm women entrepreneurs depends on other sources like local Sandies or Hobli head quarters. More than half of the women entrepreneurs (60 per cent) use polyethylene bags for storage of raw materials like Ragi, Chilli, etc. Nearly half of the farm women entrepreneurs use aluminium or tin container for storing materials. Nearly one third of the women entrepreneurs stores third of the women entrepreneurs store their raw materials in steel containers followed by gunny bags (10 per cent). This may be due to the fact that women entrepreneurs use locally produced raw materials or locally available raw materials for production of value added products or food items. In order to enhance returns proportion in food enterprise, women entrepreneurs store their materials either in polythene bags or aluminium container in air tight condition. Some of the raw materials also stored in steel container and gunny gags for protecting against contamination and other storage losses. Similar findings were observed in the study of Chandrakala (2015) and Veena (2009).

Quality parameters adopted on final product assessment by women entrepreneurs depicted in Table 3. Majority of the women entrepreneurs (63.33 per cent) considered physical parameters like size, shape, particle, smell and other appearance. Nearly one fifth of the women entrepreneurs (21.67 per cent) knew about the shelf life of final products. For final product evaluation, more than one third of women entrepreneurs (31.67 per cent) use organoleptic evaluation (sensory

evaluation) like taste, flavor, texture, crispiness and appearance. Only 10.33 per cent of the farm women entrepreneurs used nutritional facts like protein, fat, calories etc. for final product evaluation. Similar findings were observed in the study conducted by Mamatha (2015).

Packaging and labeling adopted for final products by women entrepreneurs is shown in the Table 4. Majority of the women entrepreneurs (94.67 per cent) use locally available polythene covers for packing final products like chips, Chakkali, Ragi malt, Ragihurihittu etc. High density polythene covers are not used by any of the women entrepreneurs. Lack of awareness on importance of High Density Polythene covers and source of availability may be the reason for the above facts. More than one third of the women entrepreneurs use glass bottles for packaging of final products like pickle, sauce, fruit juice, etc. Two per cent of the women entrepreneurs sold their final product without any package.

Majority of the women entrepreneurs (70 per cent) does not use any label containing nutritional aspects of the product, date of manufacturing, date of expiry, how to use it, firm name etc. More than half of the women entrepreneurs use sticker labels containing information on nutritional aspects of the product, date of manufacturing, date of expiry, how to use it, firm name etc for final products. Only one fifth of the women entrepreneurs use printed labels to be inserted in polythene packages for their products like chips, chakkali, kodbale etc.

This clearly indicates that women entrepreneurs are not completely aware about scientific packaging methods and use the locally and cheaply available materials for package of food products.

**Table.1** Food products produced by women entrepreneurs

Food Products category	Number	Per cent	Varieties of products
Snacks	96	32.00	Soji rice nippattu, Kodbale, Chakkali, Groundnut masala, Shankar poli, Mixture, Potato chips, Banana chips, Bitter gourd chips, Tapioca chips, Red rice chakkali, Red rice kodbale
Papad	68	22.66	Blackgram dhalpapad, Fingermillet papad, Tomato papad, Rice papad, Horsegram dhal papad, Steamed rice papad, Masala papad
Fingermillet products	157	52.33	Finger millet malt, Finger millet hurihittu, Finger millet papad
Pickles	44	14.66	Mango pickle, Heralikai pickle ( <i>Citrus Indica</i> ), Lemon pickle, Mixed vegetable and Tomato pickle
Preserved foods	22	7.33	Majjigemenasenakai, Tomato sauce, Tomato chutney Amla jam, Amla Squash, Tamarind chutney, Tamarind pickle, Tamarind masala candy
Minor millets products	19	6.33	Harka (Kodomillet) papad, Harkachakkali, Harka roti Navane (Foxtailmillet) laddu, Navaneholige
Breakfast foods	01	0.33	Idli, Dosa
Bakery products	02	0.66	Butter and Masala biscuit
Masala powders	22	7.33	Sambar mix, Bisibelebath mix, Puliogare mix
Chutney products	14	4.66	Ground nut, Roasted Bengalgram and Coconut chutney powders
Sweets and Chocolates	17	5.66	Coconut holige (poli), Karjikai, Sweet Khoa, Peda, Laddu, Coconut laddu, Coconut burfi

@ - Multiple Response

**Table.2** Procurement and Storage of raw materials for enterprise by women Entrepreneurs

Particulars	Number	Per cent
<b>Procurement Of Raw Materials From Different Marketing Channels</b>		
Own produced	207	69
Local market	186	62
Other Sources	31	10.3
<b>Storage Containers For Raw Materials</b>		
Aluminum/Tin container	122	40.66
Polyethylene bags	180	60.00
Gunny bags	30	10.00
Steel container/ plastic container	95	31.67

@ - Multiple Response

**Table.3** Quality parameters adopted on final product assessment by Farm women Entrepreneur

Quality parameters	No.	Per cent
<b>Physical parameters</b>	190	63.33
<b>Shelf life</b>	65	21.67
<b>Organoleptic evaluation</b>	95	31.67
<b>Assessed Nutritional facts</b>	34	11.33

@ - Multiple Response

**Table.4** Packaging and labeling adopted for final product by entrepreneurs

Particulars	Number	Per cent
<b>Packaging of food products</b>		
<b>No packaging</b>	06	2.0
<b>Paper board</b>	12	4.0
<b>Polyethylene covers</b>	284	94.67
<b>Glass bottles</b>	95	31.67
<b>Labeling</b>		
<b>No labeling</b>	210	70.00
<b>Labeling</b>	165	55.00
<b>Printed on packaging material</b>	60	20.00
<b>Use of stickers</b>	180	60.00

@ - Multiple Response

Majority of the women entrepreneurs also lacks awareness on labeling of food products. Paper slips were enclosed in polythene packages instead of sticker labeling. Only few women entrepreneurs used scientific labeling for their products. The findings are line with the findings of Mamatha (2015).

In conclusion, the study provided information on existing status of processing methods, quality parameters adopted, labeling and awareness and adoption of nutritional aspects in food processing entrepreneurial activities by farm women entrepreneurs. Awareness and technical knowledge on health and nutritional aspects of the farm women entrepreneurs helps in developing successful entrepreneurship.

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**How to cite this article:**

Shivashankar, M., M.L. Revanna and Krishnareddy, G.S. 2019. Food Products Produced, Quality Parameters Adopted Faced by Farm Entrepreneur Women. *Int.J.Curr.Microbiol.App.Sci.* 8(03): 2529-2535. doi: <https://doi.org/10.20546/ijcmas.2019.803.300>