

A Report on Millets Value Addition and Recipes Training Program program for VO members of Seethampeta Mandal, Srikakulam District, Andhra Pradesh | 21<sup>st</sup> February 2022

WASSAN has been involved in piloting several innovations in the tribal area towards easing natural farming and raising household income through integrated farming approaches. With the support of HDFC Bank Parivarthan, WASSAN has targeted to upscale them in 5 Tribal Gram Panchayats in Srikakulam district of Andhra Pradesh to enhance income, ecological health and food & nutrition security. As part of execution of the project, a stakeholders meeting was held with VO members of Pedagarama GP of Seethampeta mandal on 9th February 2022 in Navguda village and discussed how to build nutrition security among tribal women who were suffering from anemia. VO members, Health and nutrition fellows and ICDS field cadre shared their findings that calcium and iron deficiency is severe among tribal women, they expressed that to address malnutrition women should be aware of the importance of millet food and its value addition particularly recipes. The meeting concluded with key decisions like finding suitable institutions who could provide recipe training to VO members and targeted to reach 800 families to grow at least 1 quintal Millet additionally to use for household consumption.

In the above context, WASSAN has organized a one-day training program for VO members at Agricultural Research Station (ARS) Viziangaram on 21st February 2022. A total of 20 tribal women from Pedarama GP participated in the training. Dr. Hema Malini (Home Science & nutritionist) facilitated the training program. The core objective of the training was to get hands-on experiences on preparation of millet recipes which are formulated and standardized particularly to address malnutrition.

#### INTRODUCTION OF PARTICIPANTS

Participants assembled in the training hall which is equipped with a gas stove and other ingredients for practical demonstration. Dr. Hemamalini (trainer) introduced herself and asked the participants to introduce themselves. In the introduction part asked about the status of growing millets in their villages and consumption pattern. Ragi crop is commonly grown in uplands in Kharif and some farmers grow ragi in rice fallow lands in rabi season. Women said that they generally consume ragi in the form of "Ambali" (fermented ragi malt) weekly twice or thrice however children are not fond of it.

#### **EXPECTATIONS FROM THE PARTICIPANTS**

Ms. Ashalatha NFF health said that as per the ICDS data, adult women of Pedarama GP are under malnutrition and suffering with anemia, so to address anemia among women looking for standardized formulation with the combination of millets and pulse etc. VO members also said that they would like to know if any item which is suitable for children.

#### MILLET FORMULATIONS TO ADDRESS ANEMIA

The facilitator Ms. Hema Malini planned to give a demo on ragi based recipes which are good for adult women who are suffering with anemia. Women actively involved in the preparation of below listed recipes and gained knowledge and hands-on experience in making millet-based foods.

#### PRACTICAL DEMONSTRATIONS DONE FOR BELOW LISTED RECIPES



# **RAGI MILK SHAKE**

(RAGI PALA AMBALI)

#### INGREDIENTS

- Ragi flour-250g
- Jaggery\_300g
- Milk\_ 250 ml
- Elaichi 1 or 2 g
- Patika bellam (Mishri) 100g
- Water 500ml

#### PREPARATION

Mix ragi flour in hot water, mix thoroughly and add this mixture into milk. Add Jaggery powder, Mishri powder and Elichi powder. Boil it in a low flame by stirring occasionally for 20 min.

#### STORAGE

It can be stored for 10 hours.

#### SERVE

Ready to drink



## **RAGI LADDUS**

#### INGREDIENTS

- Ragi flour-1kg
- Jaggery- 500g
- Ghee 500g
- Elaichi powder -10g
- Sesame seeds / Cashew / Groundnut as needed.

#### PREPARATION

Fry ragi flour with Ghee on a pan and keep a side and also fry cashew in Ghee. Mix fried ragi flour with Jaggery powder, Elaichi powder and cashew nuts and finally add ghee into it and make small size laddus as per our choice.

Some fruits like Groundnut and Sesame seeds can be fried on a plain pan in case cashew is not available.

#### STORAGE

Laddus can be stored for a week. If ghee is not mixed, then laddus can be stored for up to 10 days.

#### SERVE

Ready eat one or two laddus per serve.



### **RAGI MURUKULU**

#### INGREDIENTS

- Ragi flour -1kg
- Senaga flour -250g
- Nuvvulu 50g
- Karam (Mirch powder)-5g
- Salt\_ as needed |Water as needed
- Cooking oil\_ 250 ml

#### PREPARATION

To a mixing bowl, add ragi flour, fried Senaga flour, mirch powder, salt and then add sesame seeds for more taste and nutrition. Mix all ingredients well. Pour water little by little as needed and make the dough. Dough must be non-sticky and crack free. Fill the mould (an instrument which is used for making murukulu) with dough. Press the dough on a clean damp cloth or butter paper. Heat oil in a pan and check if the oil is hot enough, dropping a small piece of dough. If the dough rises it means the oil is hot enough to fry. Deep fry them in hot oil. We can also press the dough in the hot oil directly. Murukulu will break on their own and fall. Fry until golden brown on a medium flame, stirring occasionally for even frying. Drain them on a kitchen towel

#### STORAGE

Store murukulu in an airtight bottle and it can be stored for 2 weeks.

#### SERVE

Serve as ready to eat snacks.



#### INGREDIENTS

- Ragi grain -250g
- Milk- 500ml

#### PREPARATION

Soak ragi grain in water for 9 hours and tie them in cotton cloth after sprouts observe sun dry them to make powder with the help of mixie. Mix 10g of ragi sprouts powder into one glass of milk to serve children who are in the age range from 2 to 6 years.

#### STORAGE

Laddus can be stored for a week. If ghee is not mixed, then laddus can be stored for up to 10 days.

#### SERVE

Ready eat one or two laddus per serve.

### WEANING POWDER [2]

#### INGREDIENTS

- Little millet powder-100g
- Foxtail millet powder-100g
- Ragi powder-100g
- Ground nut-50g

#### PREPARATION

Flour of Little Millet, Foxtail Millet and Ragi can mix together and add fried groundnut powder and mix thoroughly.

#### STORAGE

1 tsp of powder can be mixed into one glass of milk and boiled for 10 minutes to serve children.

#### SERVE

Powder can be stored for a week.



# **VEGETABLE CURRY** With drumstick leaves

Ms Hema Malini described the usage of drumstick leaves. She has suggested to use tender leaves of drumstick and cook them as leafy vegetables along with dal. Pregnant and lactating women can consume twice in a week. Good for them to get rid of anemia.



All the women who have joined this training program practiced in formulation and preparation.

#### **FIELD OBSERVATIONS**

Women went to the field along with local agriculture experts to see various millet crops. They observed the varieties among Ragi and found out the duration of crop, panicle size and yield etc. apart from agronomy practices. Among the Ragi varieties observed performance of the newly released variety known as *"Indravati"* which is high in Iron and calcium. The VOs have planned to get seeds for multiplication locally.



Mr. Bhargavi field coordinator, Bhamini Mandal gave vote of thanks and closed the session.

#### WAY FORWARD

VO leaders have planned to demonstrate recipes in their SHG meetings and in the occasion of international women's day celebrations planned to organize millet recipe demonstrations. They have targeted 800 families to build nutritional security through promotion of millets and increase its consumption. Detailed action plan to be developed to monitor monthly progress.



#### ACKNOWLEDGEMENTS

We thank Dr. Samuel Patro, Principal Scientist, Agricultural Research Station, Vizianagaram for immediate acceptance to host the training program in their campus.

We would like to thank Ms Hema Malini, Home Science and Nutritionist for facilitating the training and demonstration of millet recipes.

WASSAN would also thank the HDFC Bank Parivarthan for financial support to build the capacities of tribal women to address malnutrition.

WASSAN would like to thank the field cadre of RYSS who are dealing with VOs for mobilizing them to attend the training program.

### LIST OF PARTICIPANTS

	List of participants:				
SI.No	Participants	Designation	Place/Area	Gender	Contact No
1	P Asalatha	Hnmt (APCNF)	Seethampeta	F	6304031173
2	Sk Meerabai	Hnmt (APCNF)	Seethampeta	F	8500937350
3	K Amala	VOEC	Pedharama	F	9391300186
4	S Yasodha	VOEC	Goidi	F	9014227346
5	B Subhadra	VOEC	Goidi	F	
6	S Suseela	VOEC	ADDAKULAGUDA	F	9502637465
7	S Sasivarna	VOEC	Mogadhara	F	
8	N Klapana	VOEC	Mogadhara	F	8341469048
9	M Ramya	VOEC	Isukagedda	F	9502699608
10	N Suvarna	VOEC	Mogadhara	F	8331917709
11	T Varahalamma	VOEC	Goidi	F	8106342103
12	K Ramadevi	VOEC	Goidi	F	
13	P Venkata Laxmi	NFMT	Seethampeta	F	8985063500
14	G Nirmaladevi	MT marketing	Seethampeta	F	6303654367
15	M Bhargavi	CC(BHAMINI)	BHAMINI	F	6300107439
16	M Swapna	FRP	Veeragattam	F	9908669135
17	K Ravikumar	CC (Veeragattam)	Veeragattam	М	9491542102
18	Ch Hema Malini	Reaserch Associat	Vizianagaram	F	9550261638
19	Anil Kumar	wassan staff	vizag(Araku)	М	9010620803
20	ML Sanyasi Rao	WASSAN	vizag	М	9989977835
21	Ms Hemamalini	Nutritionist	RARS, VZM	F	
22	Dr. Samuel Patro	Principal Scientist	RARS, VZM	М	

