



Awareness Among Pre Service Teachers Regarding Millets

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Abstract

This research paper aims to study the level of awareness among pre-service teachers regarding millets. A survey was conducted among pre-service teachers to gather data on their understanding of basic concept, and practices towards millets, awareness about inclusion of content related to Millets in Social Science Geography text books, and opinion about methods of creating awareness regarding millets. The findings shows that pre-service teachers are aware about basic concept, nutritional benefits of the millets. The frequency of millets consumption is satisfactory, level of awareness among pre service teachers is low regarding inclusion of content related to millets in Geography text books.

Key Words : Millets, Pre Service Teachers, Awareness

Introduction:

In recent years, there has been a growing recognition of the importance of sustainable and healthy food choices for human well-being. As the global population continually rising, the need for nutritious and climate-resilient food sources has become more important than ever. In this context, millets have emerged as an invaluable resource, offering numerous benefits in terms of nutrition, sustainability, and agricultural resilience.

Millets are a diverse group of small-seeded grains that have been cultivated for thousands of years, in different parts of the world and particularly in India. They are highly nutritious, gluten-free, and have a low glycemic index, making them suitable for people with dietary restrictions and those seeking healthier alternatives. Moreover, millets are known for their ability to thrive in harsh environmental conditions, requiring minimal water and exhibiting natural resistance to pests and diseases. These qualities make millets a promising solution for achieving food security and promoting sustainable agriculture.

While millets have long been a staple food in various parts of India, their consumption and cultivation is stagnant over the years due to changing dietary preferences, and the promotion of high-yielding cereal crops. As a result, millets have received limited attention in mainstream discourse, including educational curricula. This lack of awareness, particularly among pre-service teachers who play a crucial role in shaping the knowledge and attitudes of future generations, presents a significant challenge.

This research paper aims to investigate the awareness levels among pre-service teachers in India regarding millets and their potential as a sustainable nutrition source. By examining the knowledge, attitudes, and perceptions of these pre-service teachers, the researcher seeks to identify gaps in their understanding and explore strategies to enhance their awareness and promote the integration of millet-related content into the educational system.

Need and Significance of the Study:

The significance of this study lies in the transformative power of education and its capacity to drive social change. By equipping pre-service teachers with accurate and up-to-date knowledge about millets, we can empower them to become advocates for sustainable nutrition and active agents in promoting the cultivation, consumption, and preservation of these ancient grains. Moreover, through their future roles as educators, pre-service teachers can inspire students to make informed choices about food, foster ecological consciousness, and contribute to the development of a more sustainable and resilient food system.

In the subsequent sections of this research paper, we will delve into the current state of millet awareness among pre-service teachers in India, explore the potential benefits of incorporating millet-related content into teacher education programs, and propose strategies to bridge the awareness gap. By shedding light on this crucial issue, we aspire to ignite a meaningful dialogue and inspire concrete actions that can lead to a more sustainable and nutritious future for India and beyond.

Review of the Related Literature:

Ambati and Sucharitha (2019) reviewed nutritional profiles and Health benefits of Millets with and aim to help the people to recognize the importance of millets as a nutritious food and recommended that the Nutritionist/ Dieticians must make an effort to encourage the public to consume more millets in general and particular. Singh, Rizwana Ahalya & Mohansundaram (2022) examined the degree of knowledge amongst Indian women about millet grain and its nutritional advantages. They used survey method with a sample of 855 women in Bangalore. Findings show that more number of women have awareness is more than number of women who consume millets, demographic factors such as age, qualification and income have a direct influence on millet consumption. According to Singh, R. P. Qidwai, S (2022) 'Millets are climate-resilient crops. They require 70 per cent less water, are easy to cultivate, and use 40 per cent less energy to process compared with other cereals such as wheat and rice'.

Statement of the Problem: To study the Awareness among Pre service Teachers regarding millets with respect to Knowledge, Consumption Pattern and the Role of teachers in creating awareness.

Objectives of the Study:

- To study the awareness among Pre service teachers about Millets

Scope and Limitation:

The present study focuses on awareness among Pre service teachers about millets. The study is limited to student teachers in one teacher education institute in Pune City.

Methodology:

The present research is carried out by using Survey Method. A questionnaire containing 12 questions was developed and was distributed among 150 students of first and Second year Bachelor of Education Two Years Program enrolled in a teacher education institute in Pune. The questionnaire contained the questions related to checking awareness about Millets. All the questions were multiple choice questions. Researcher received 98 filled questionnaire. The following table gives the distribution of questions in the questionnaire.

Table 1

Question No	Aspect
1,2,3	Demographic Characteristics
4,5,6,7	Millets – Basic Concept and Related Information
8,9	awareness regarding benefits of Millets, and frequency of its consumption
10,11	awareness regarding inclusion of the content related to Millets in the Geography text books
12	Teachers role regarding creating awareness among school students

Data Analysis :

To know the demographic Characteristics of Pre service teachers three questions were asked. The responses are represented in following Figure Number 1 to 3.

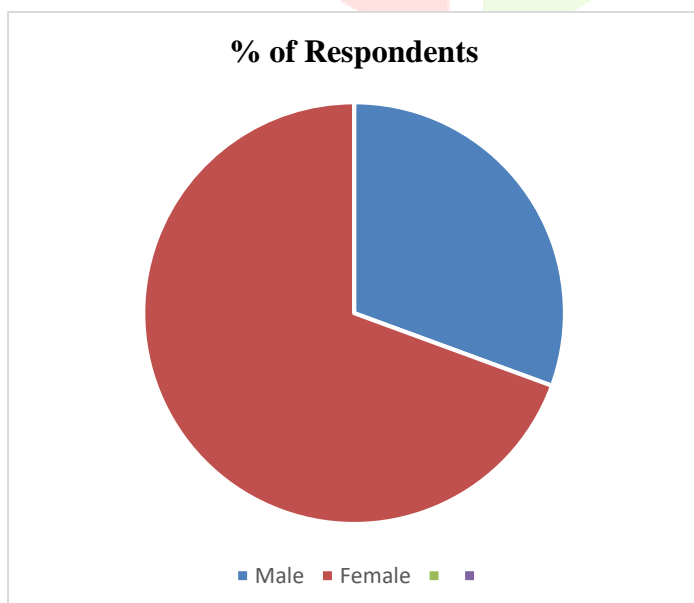


Figure 1: Gender wise Distribution

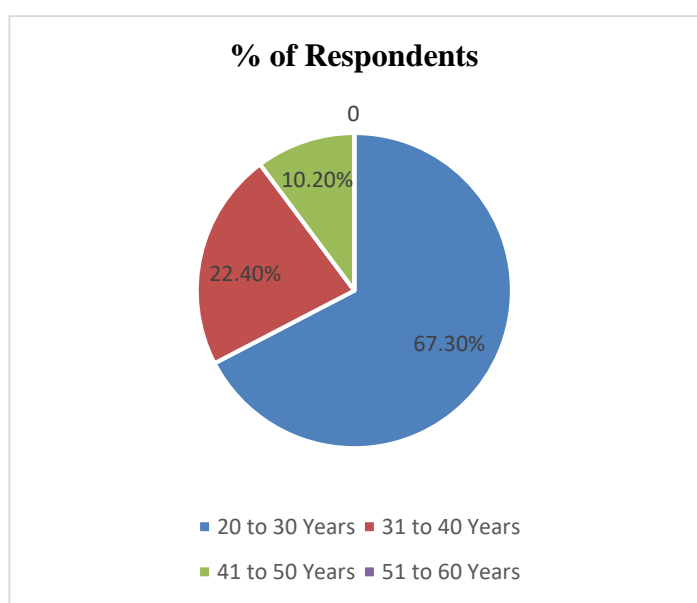


Figure 2 Age Group of the Pre Service Teacher

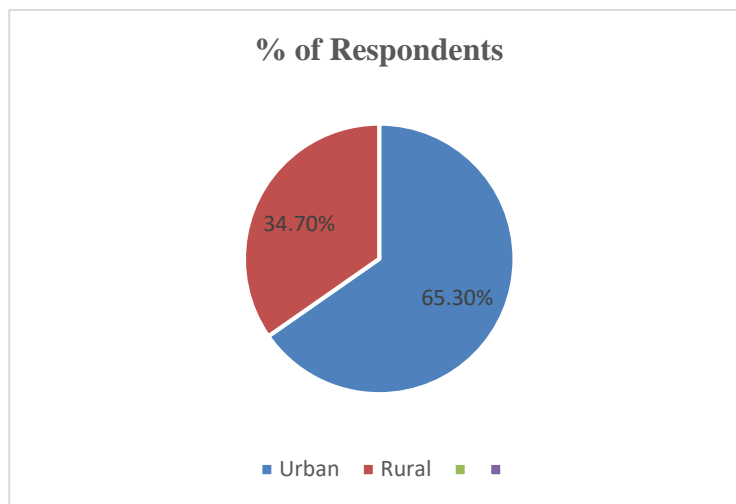


Figure 3: Area of Family Residence

Observations: The data represented in above three figures indicate that the sample was quite comprehensive and representative.

To know about concept and basic information about millets the pre service teacher was asked to respond to four questions. The responses of the student teachers are tabulated as follows –

Table 1 to 4 depict the awareness among pre service teachers regarding Millets.

Table 1
Group of Crops representing Millets

Crops	% of Respondents
Rice, Wheat	10.2
Sorghum, Pearl Millet, Finger Millet, Little Millet	87.8
Sugarcane, Tobacco, Cotton, Tea	0.00
Maize. Sago	2.00

Observations: From above Table Number 1 it can be seen that significant percent of student teachers i.e.87.8 % are quite aware about group of crops representing millets. Only 12.2% student teachers are not aware of it.

Table 2
Climate essential for the cultivation of Millets

Type of Climate	% of Respondents
Tropical Sub tropical Arid or Semi-arid with 500-900 mm rainfall	77.6
Equatorial with Rainfall more than 2000 mm	16.3
Polar Climate with rainfall between 500 – 90 mm	6.1
Desert Climate	0.00

Observations: From Table 2 it can be seen that majority of student teachers i.e. 77.6% are aware of the climate that is essential for the cultivation of Millets.

Table 3**Nation which is largest producer of Millets in Asia**

Nation	% of Respondents
Malayasia	2
India	95.9
Saudi Arabia	0.0
Japan	2

Observations: From Table 3 it can be seen that most of the student teachers i.e. 95.9% are aware of leading producer of Millets in Asia continent.

Table 4**Institute working for Millets research in India**

Name of the Institute	% of Respondents
University Grants Commission	0.0
Indian Institute of Technology	6.1
Indian Institute of Management	6.1
Indian Institute of Millets Research	87.8

Observations: 87.8 % respondents have recorded their response that Indian Institute of Millets Research is working for Millets research in India. Each 6.1% respondents feel that Indian Institute of Technology or Indian Institute of Management are working for Millets research in India.

Interpretation: The data from Table 1 to 4 indicates that the level of awareness regarding Group of Crops representing millets, climate essential for the cultivation of Millets and leading producer of millets in Asia and an agency / institute working in the area of Millets research is quite high among pre service teachers.

To know about awareness regarding benefits of Millets, and frequency of its consumption, pre service teacher was asked to respond to two questions. The responses are tabulated as follows -

Table 5**Need to consume grains (Millets) other than Rice and Wheat in our diet**

Reason to Consume Millets	% of Respondents
Gluten Free	18.4
Helps in controlling increasing level of Cholesterol	30.6
Contains copper manganese and Phosphorous	34.7
Rich source of Protein, Dietary Fibres	49

Observations: From Table 5, it can be seen that nearly half of the student teachers i.e. 49% feel that need to consume millets as it is a rich source of protein and dietary fibres. 34.7% student teachers feel the need to consume millets as it contain copper ,manganese and Phosphorous followed by 30.6% student teachers

who feels the need to consume as it helps in controlling increasing level of Cholesterol. 18% student teachers feel the need as it is gluten free.

Table 6
Frequency of Grain Consumption

Frequency of Millets Consumption	% of Respondents
Daily	59.2
Once a Week	30.6
Once a month	10.2
Never	0.0

Observations: From Table 6, it could be seen that more than half of the student teachers i.e. 59.2% consume millets daily. 36.6 % student teachers consume millets once in a Week and 10.2% student teachers consumes millets once in a month. There is no student teacher who does not eat millets.

Interpretation: From the data tabulated in the Table 4 & 5 indicates that student teachers are quite aware of nutritional benefits of consumption of Millets and the frequency of the millets consumption is also satisfactory.

To know about awareness among pre service teachers regarding inclusion of the content related to Millets in text books two questions were asked. One questions for CBSE Geography (Social Science) Text books and another question for Maharashtra State Borad Geography text books. In the question related to CBSE text books the choices were provided where student teachers can select more than one option. The responses are tabulated as follows -

Table 7

Content related to Millets in CBSE Social Science (Geography) Text books

Text Book Standard	% of the respondents
VI	20.4
VII	22.4
VIII	36.7
IX	18.4
X	25.4
Not Included in any of the	20.4

Observations: Respondents have recorded multiple options. 36.7% student teachers mentioned that Std VIII Social Science (Geography) text book of CBSE have content related to millets. 25.4 % student teaches have opinion that Std X Social Science (Geography) text book have content related to Millets. 20.4% respondents feel that content related to millets is included in Std VI Social Science (Geography) text book. While selecting multiple

Table 8**Content related to Millets in Maharashtra State Board Text books**

Text Book Standard	% of Respondents
VI	14.3
VII	12.2
VIII	36.7
IX	4.1
X	14.3
Not Included	18.4

Observations: Only 14.3 % Pre service teachers were able to identify that content related to Millets is included in Std X text book of the Maharashtra State Board. 67.3 % respondents have opinion that content related to millets included in the Geography text book of Maharashtra State Board other than Std X. 18.4 % respondents feel that Content related to Millets not included in any of the Geography text books.

Interpretation: The level of awareness among pre service teachers regarding inclusion of content related to Millets in Maharashtra State Board and CBSE Geography (Social Science) text books is quite low.

To know the opinion of Pre service teachers regarding role of teacher in creating awareness about Millets among school students, one question was asked. In this question choices were provided where student teachers can select more than one option. The responses are tabulated as follows -

Table 9**Teachers role in creating awareness regarding Millets among school students**

Methods of creating awareness	% of Respondents
Expert Lectures	20.4
Visit to Govt of India Millets Portal	32.7
Assigning a Project on Millets	59.2
Additional Information during Lectures	51.0

Observations: From Table 9 it can be seen that there are mixed opinions of student teachers. 59.2% as assigning a project of millets and 51% as additional information during lectures) in creating awareness regarding millets among school students. 20.4% and 32.7% student teachers thinks that organizing expert lectures and visits to Gove of Indian Millets Portal can be helpful in creating awarenss regarding Millets among school students.

Interpretation: Student teachers are aware about various ways to create an awareness regarding Millets and the responses show that the Project Method is the most useful method to create awareness among school students.

Findings:

- Pre service teachers are aware about basic concepts of Millets which includes crops placed under the category of Millets, Climate essential for the growth of Millets, Leading Producer of millets in Asia continent and institute working for Millets research in India.
- Pre service teachers are aware about nutritional benefits of millets and also the consumption pattern of millets among pre service teachers is a satisfactory.
- The level of awareness among pre service teachers is low regarding inclusion of content related to millets in Geography text books.

Conclusion: Awareness regarding Millets among pre service teachers is high.

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