



**PCERP Seminar Proceedings**

**Book 11**

National Level Seminar

On

**Environmental Reengineering: Series 7**

**YEAR OF PULSES**



**Organized by**

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## Table of Contents

❖	<b>Preface</b>	01
❖	<b>Our Institution</b>	03
❖	<b>Sub-theme-1: Pulses for Ecological benefits and Economic benefits</b>	04
	<b>Guest Speaker: Dr. Seema Mishra</b>	
1.	A Study of the Indian Pulses Sector <i>-Dr. Celina Joy &amp; Dr. Betty Sibil</i>	09
2.	Pulses for Green Economy <i>-Dr. Sally Enos</i>	15
3.	Production of Pulses: Issues and Solutions <i>-Mrs. Geeta S. Thakur &amp; Mrs. Kalpana Kumari</i>	19
4.	Test the Pulse of Life – Protein or Poison <i>-Ms. Deepa Bal</i>	26
❖	<b>Sub-theme 2: Pulses Enhancing Health &amp; Food Security</b>	36
	<b>Guest Speaker: Mr. Shivshankar Timanpyati</b>	
1.	Health Benefits of Pulses <i>-Dr. Uma. A. Bhambhani</i>	43
2.	The Humble Pulse... <i>Mrs. Bindu S. Tambe</i>	46
3.	Pulses Food for the Future <i>Ms. M. N. Anuradha</i>	52
4.	Pulses - The New Age Tablet for Healthier Life <i>-Ms. Dipali S. Sapre</i>	57
5.	Benefits of Pulses in Human Diet <i>-Ms. Shifa Vartak</i>	62
6.	Pulses and Health <i>-Ms. Smitha Kurup</i>	66
7.	Nutrition Issues in Adolescents <i>-Mrs. Susan Jacob</i>	70
8.	Chickpea ( <i>Cicer Arietinum L.</i> ): The Pulse of Choice in Indian Festivals <i>-Mr. Moses Kolet &amp; Mrs. Jayashree Thakre</i>	75
9.	Pulses the pulse of cuisine- The Halba tribe of Nagpur <i>-Ms. Sheetal Kumbhare</i>	80
10.	Pulses as Dietary Requirement <i>-Ms. Puja Pushp</i>	89
11.	Integrating the Importance of Pulses in School Curriculum <i>-Ms. LopamudraDutta &amp; Ms. Khyati Raja</i>	95
12.	Pulses: For Healthy Life and For a Sustainable Environment <i>-Ms. Varsha Kosta</i>	98

## PREFACE

Re-engineering the environment means the act of living in our environment with intent. The intent is focused to prevent harm on the environment through our interactions with it. It goes beyond an idea and extends to actual practices that influence how we as communities and individuals conduct ourselves. It may be just as simple as turning off lights when we leave the room, changing our habits about eating, storing, driving, using water, using energy or following the mantra of reduce, reuse and recycle!- it is about changing the purpose of how we live! Therefore it's all about rethinking and reengineering our thoughts, actions and concern for our environment. The 68th UN General Assembly declared 2016-the International Year of Pulses (IYP). The Food and Agriculture Organization of the United Nations (FAO) was nominated to facilitate the implementation of the Year in collaboration with Governmental and non-governmental organizations. Its objectives are:

- Raise awareness about the important role of pulses in sustainable food production and healthy diets and their contribution to food security and nutrition;
- Promote the value and utilization of pulses throughout the food system, their benefits for soil fertility and climate change and for combating malnutrition;
- Encourage connections throughout the food chain to further global production of pulses, foster enhanced research, better utilize crop rotations and address the challenges in the trade of pulses.

Food insecurity is a major issue for many people and households in India. Millions of people are undernourished. Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Pulses can help contribute to food security in a number of ways. Appropriate orientation, awareness and training is needed for teachers and students in this regard. The objectives of organizing the seminar were:

1. To develop an awareness of the role of pulses in relation to ecological benefits and economic benefits.
2. To gain knowledge, insight and skills necessary to analyze the issues related to health and nutrition.
3. To evaluate actions and propose actions that will help to reduce malnutrition.

The first subtheme in the seminar was: "Pulses for Ecological benefits and Economic benefits." Pulses are economically affordable, use relatively little water during farming compared to other protein sources, and also reduce the need for industrial

fertilizers. Pulses can also fix hefty quantities of nitrogen in the soil, boosting fertility and reducing the need to apply the key nutrient for food crops. Pulses typically offer farmers higher profit margins than cereal grains and can thus play a key role not only in boosting human and ecological health but also in helping reduce rural poverty. We, the teaching fraternity need to understand the ecological and economic benefits of pulses and pass on this information to our students who in turn will give it to the community. Papers were invited to answer questions such as: How can pulse seed quality be improved? How can we enhance productivity of pulses? How can rotation of crops with pulses help ecology? What are the Indian Government policies w.r.t. the growth of pulses? How can we integrate this information with the school/college curriculum?

The second subtheme in the seminar was: “Pulses enhancing Health and Food Security.” One of the very significant challenges India has, is helping people get nutritional security. Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Health issues related to high cholesterol, diabetes or high/low blood pressure can be stabilized with pulse diet. This sub-theme promoted importance of pulses as a viable source of food security. Papers were invited to answer questions such as: What are the benefits of pulses beyond satisfying hunger? What practices can be integrated in the curriculum, content and pedagogy to sensitize students towards malnutrition? What strategies can parents use to get children excited about eating pulses? What combinations can we use to cook new pulses-based dishes?

Every year through this seminar series, all of us at PCER-Panvel, pick up few tips in different aspects of the environment and try to implement them. This year too there was a lot of take away for the participants at the end of the day. This seminar proceeding throws light on a wide range of topics related to Pulses and its deep connection with ecology, economy, our culture, nutrition, health and food security. Happy reading!!

Organizing Secretary

DR. Bhavna Dave