

## INTRODUCTION

In tune with the changes to suit the modern needs, the use of plastics in daily life is enormously significant. Plastics have made deep inroads in all form of the activities of the society. It is specially so, in the field of food handling system. Starting from purchase of seeds, application of fertilizers, irrigation activity, disease resistance programme, storage methods and ultimately distribution mode to reach the consumer, the role of plastic is predominant in each and every activity. The use of plastics in these activities is on the increase because of its convenience and the economic benefits thereof.

The following chain of activities and the thrust of plastics replacing the traditional relevant materials could be seen.

Seeds in small cloth bags or jute bags	→	Seeds in plastic pouches
Irrigation activity with GI pipes	→	Irrigation activity with PVC pipes
Spray of insecticides in metal sprayers	→	Sprayers are made of plastic materials
Grain harvesting and drying activity	→	Drying activity using plastic sheets
Grain storage in bins, jute bags etc	→	Grain storage in PWS
Trading of grains in jute bags	→	Trading of grains in PWS
Commercial activity in jute bags	→	Commercial activity in PWS
Retail trading at consumer end using jute bags / paper bags	→	Retail trading using plastic pouches

In view of this visible and significant change in the entire process of grain handling, it was felt desirable to scientifically assess the merits and demerits of using plastics for bulk packaging of common commodities that are conventionally packaging in jute sacks.

The Indian Center for Plastics in the Environment, Mumbai thought about the above and assigned the responsibilities to the Central Food Technological Research Institute, Mysore to carry out the detailed study on the use of plastic woven sacks for packaging wheat, paddy, rice and sugar.

Accordingly, the Institute undertook a planned detailed study and the enclosed are the outcome of the study.