

## PREFACE

Sustenance of a desirable level of agricultural productivity requires efficient and timely use of inputs, safety and comfort of the agricultural worker, improvement in the quality and value addition to the produce. Out of the total geographical area of 349 million hectares, 156 million hectares are under the plough meeting the food, fibre, feed and fuel needs of over one billion people. It is also a documented fact that over 65 per cent of the population is dependent on agriculture for their livelihood. Indian agriculture is characterised by fragmented farm holding, over dependence on monsoons, lack of sophisticated inputs and farming practices. It is synonymous with the small farmer having a land holding of less than 1.5 hectares. It is a well-known fact that the knowledge residing in the National Agricultural Research System (NARS), if transferred effectively to the cultivators of 156 million hectares, spread across rich and diverse agro-climatic regions has the potential to not only meet the growing needs of the domestic market, but also be a competitive source for attractive global markets in the post WTO era. Agricultural Engineering provides the technology to facilitate agriculture through efficient utilisation of inputs and timeliness of operations besides reducing drudgery. It is generally believed that only the large farmers have availed of the benefits of modern farm technology. Small farmers have also been found to utilise selected farm equipment through custom hiring. Over the years, individuals and institutions have developed numerous designs of agricultural equipment and machinery in various parts of the country, depending upon the local demands.

For increasing production and productivity from the limited extent of agricultural land available in the country, it is of paramount importance to manage the available resources efficiently. This is possible only by having comprehensive information on the extent, nature and properties of various agricultural machinery and technologies available for production and processing. The sources of availability of these machines provided in a user-friendly manner is expected to go a long way in fulfilling the needs of the users spread all over the country.

This **Directory of Agricultural Machinery and Manufacturers** is an attempt to make available a comprehensive source of information on various agricultural machinery and their manufacturers in one place. The items have been categorised on the basis of chronology of farm operations and arranged on the basis of the power source used for operating them. These are, seed bed preparation, sowing, planting and transplanting, weeding and interculture, plant protection, harvesting and threshing, straw management, irrigation pumps, horticultural equipment, post harvest equipment, power units, equipment for renewable energy and miscellaneous equipment.

During the course of this work, the information provided by research workers and manufacturers through their publication, pamphlets, and personal correspondence have widely been adopted and edited for brevity and relevance. It is hoped that this compilation on agricultural machinery and manufacturers would be welcome by the farming community, extension workers, scientists, students, engineers, manufacturers and teachers resulting in the increased awareness about these items and pave the way for early adoption. The list of manufacturer provided in the end is aimed at creating a useful interface for direct interaction by the prospective users to further their knowledge and benefit by adopting them.

The information provided in this work has been drawn from various sources and every effort has been made to make it as comprehensive as possible without favour or prejudice. However, the inadvertent omission of some of the manufacturers does not imply their exclusion and they are requested to kindly bring it to our notice for inclusion in a future edition of this compilation.

**The Editors**