

# Profitable Agro Based Projects with Project Profiles (Cereal Food Technology) (2nd Revised Edition)

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Cereal, also called grain, any grass yielding starchy seeds suitable for food. The cereals most commonly cultivated are wheat, rice, rye, oats, barley, corn (maize), and sorghum. As human food, cereals are usually marketed in their raw grain form (some are frozen or canned) or as ingredients of various food products; as animal feed, they are consumed mainly by livestock and poultry, which are eventually rendered as meat, dairy, and poultry products for human consumption; and they are used industrially in the production of a wide range of substances, such as glucose, adhesives, oils, and alcohols. Real processing, treatment of cereals and other plants is to prepare their starch for human food, animal feed, or industrial use. Cereals are used for both human and animal food and as an industrial raw material. Although milled white flour is largely used for bread production, especially in industrialized countries, the grain may be converted to food in other ways. The relatively minor use of cereals in nonfood products includes the cellulose in the straw of cereals by the paper industry, flour for manufacturing sticking pastes and industrial alcohol, and wheat gluten for core binders in the casting of metal. Rice chaff is often used as fuel in Asia.

Assuming a 50 percent increase in fertilizer use and that 41.5 percent of the cropped area is irrigated; projected 2020 food production would increase by 7.2 percent - from 251.0 million tons to 269.1 million tons. Future increases in the production of cereals and non-cereal agricultural commodities will have to be essentially achieved through increases in productivity, as the possibilities of expansion of area and livestock population are minimal. To meet the projected demand in the year 2020, country must attain a per hectare yield of 2.7 tons for rice, 3.1 tons for wheat, 2.1 tons for maize, 1.3 tons for coarse cereals, 2.4 tons for cereal, 1.3 tons for pulses, 22.3 tons for potato, 25.7 for vegetables, and 24.1 tons for fruits.

The content of the book includes information about cereal food technology. The major contents of this book are project profiles of projects like rice milling, rice products, rice flake (poha) and utilities of storage and preservation techniques of food grains, flour milling, wheat and flour products, maize processing, the dry milling of corn, rice starch, corn products, white oat processing, nutrition labeling, requirements of plant and machinery and address of plant and machinery suppliers.

This book is very useful for new entrepreneurs, technical institutions, existing units and technocrats.

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