

Existing Contents

ABM-304 FOOD PROCESSING AND FARM MACHINERY MANAGEMENT

Course Objective

The purpose of this course is to develop an understanding of the underlying concepts, strategies and issues involved in the management of food processing industries and farm machineries for enhancing agri-business efficiencies.

Course Contents

Unit-I: Present status of food industry in India, introduction to operations of food industry, basic principles of food processing and food preservation, packaging of foods, analysis of costs in food organisations

Unit-II: Risk management, Laws and regulations related to food industry, food production and marketing, quality management, quality standards, PFA, ISO, etc.

Unit-III: Farm machinery selection for different farm size and for different agro climatic conditions, scheduling of farm operations for higher efficiencies, indices of machine performance

Unit-IV: Cost analysis of operations using different implements, economic performance of machines, optimisation of tractor implement system and transport of farm produce

Unit-V: Case studies on project formulation in various types of food industries—cereals and pulses, milk and dairy products, processing of fruits and vegetables, egg and poultry processing; agricultural equipments industry- their production, marketing and constraints; establishment of agricultural engineering enterprise (agro service centres, etc.)

Suggested Readings

1. Potly, V.H. and Mulky, M.J. Food Processing, Oxford and IBH, New Delhi
2. Blackie, Jelen, P. Introduction to Food Processing, Reston Publishing
3. Hunt, D., Farm Power and Machinery Management, Iowa State University Press (Wiley-Blackwell, UK)
4. Carvilla, L.A., Selecting Farm Machinery, Louisiana Cooperative Extension Service Publication, USA
5. Bello, R.S. and Bello, M.B. Agricultural Machinery Management, Lambert, Germany

Contents after change

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The purpose of this course is to develop an understanding of the underlying concepts, strategies and issues involved in the management of food processing industries and farm machineries for enhancing agri-business efficiencies.

Course Contents

Food Processing

Unit-I: introduction to operations of food industry, present status of food industry in India, basic principles of food processing, food preservation and food packaging, Risk management, Laws and regulations related to food industry.

Unit-II: food production and marketing, quality management and quality control standards, FSSAI, ISO, CODEX. Case studies on project formulation in various types of food industries like cereals and pulses, milk and dairy products, processing of fruits and vegetables, meat and fish processing, processing of sugar, chocolate, bakery.

Farm Machinery

Unit-III: Farm machinery selection for different farm size and for different agro climatic regions, scheduling of farm operations for higher yield, indices of machine performance, agricultural equipments production and marketing.

Unit-IV: Cost analysis of different farm operations and their comparison, economic performance of machines, optimisation of different farm implement system, transport of farm produce.

Unit-V: Case studies on project formulation of different agricultural machine and equipment industries like tractor, machinery for tillage, planting, seeding, fertilizing, pest control, irrigation and harvesting; establishment of different agricultural engineering enterprises, agro service centres, etc.

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1. Potly, V.H. and Mulky, M.J. Food Processing, Oxford and IBH, New Delhi
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