

# AGRIBUSINESS MANAGEMENT



Dr. Mukesh Yadav  
Dr. A.K. Singh



ALEXIS PRESS  
JERSEY CITY, USA

# **AGRIBUSINESS MANAGEMENT**



# AGRIBUSINESS MANAGEMENT

Dr. Mukesh Yadav

Dr. A.K. Singh





ALEXIS PRESS

*Published by:* Alexis Press, LLC, Jersey City, USA  
[www.alexispress.us](http://www.alexispress.us)

© RESERVED

This book contains information obtained from highly regarded resources.  
Copyright for individual contents remains with the authors.  
A wide variety of references are listed. Reasonable efforts have been made  
to publish reliable data and information, but the author and the publisher  
cannot assume responsibility for the validity of  
all materials or for the consequences of their use.

No part of this book may be reprinted, reproduced, transmitted,  
or utilized in any form by any electronic, mechanical, or other means,  
now known or hereinafter invented, including photocopying,  
microfilming and recording, or any information storage or retrieval system,  
without permission from the publishers.

For permission to photocopy or use material electronically  
from this work please access [alexispress.us](http://alexispress.us)

First Published 2022

*A catalogue record for this publication is available from the British Library*

*Library of Congress Cataloguing in Publication Data*

Includes bibliographical references and index.

Agribusiness Management by *Dr. Mukesh Yadav, Dr. A.K. Singh*

ISBN 978-1-64532-767-7

# CONTENTS

<b>Chapter 1.</b> Foundations of Effective Agribusiness Management: Key Concepts.....	1
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 2.</b> Navigating the Managerial Environment: Essential Concepts.....	8
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 3.</b> Agricultural Industry Decision-Making: Key Concepts and Strategies .....	17
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 4.</b> Effective Organizing and Staffing: Essential Management Concepts .....	24
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 5.</b> Leading, Leadership, and Marketing Techniques: Management Essentials .....	33
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 6.</b> Marketing Environment and Product Development:Essential Management Aspects .....	41
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 7.</b> Product Pricing and Distribution Decisions:Strategic Management Approaches .....	48
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 8.</b> Characteristics of Agribusiness:Key Management Insights .....	56
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 9.</b> Supply Chain and Strategic Management:Driving Organizational Success .....	63
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 10.</b> Contract Farming and Risk Management:Enhancing Agribusiness Efficiency .....	71
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 11.</b> Agricultural Marketing: Strategies for Successful Sales and Distribution .....	78
– <i>Dr.Mukesh yadav,</i>	
<b>Chapter 12.</b> Classification of Markets:Understanding Types and Market Structures .....	85
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 13.</b> Regulated and Cooperative Agricultural Marketing.....	91
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 14.</b> Understanding Financial Statements: Analyzing Business Performance.....	97
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 15.</b> Analyzing Financial Statements:Key Insights for Decision-Making.....	106
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 16.</b> Financing the Agribusiness: Strategies for Sustainable Growth .....	113
– <i>Dr.Mukesh yadav</i>	
<b>Chapter 17.</b> Leveraging Debt: Using Leverage to Finance Developments .....	121
– <i>Dr.Mukesh yadav</i>	

<b>Chapter 18.</b> Tools for Evaluating Operating Decisions:Optimizing Agribusiness Performance .....	129
— <i>Dr.Mukesh yadav</i>	
<b>Chapter 19.</b> Tools for Evaluating Capital investment Decisions .....	136
— <i>Dr.Mukesh yadav</i>	
<b>Chapter 20.</b> Production Planning andManagement:Efficient Agribusiness Operation.....	144
— <i>Dr.Mukesh yadav</i>	
<b>Chapter 21.</b> Real-Time Data Exchange and Supply Chain:Enhancing Agribusiness Efficiency.....	152
— <i>Dr.A.K.Singh</i>	

## CHAPTER 1

### FOUNDATIONS OF EFFECTIVE AGRIBUSINESS MANAGEMENT: KEY CONCEPTS

---

Dr. Mukesh yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### **ABSTRACT:**

Management in the agribusiness industry involves planning, organizing, coordinating, and regulating resources to achieve goals and objectives. It involves establishing strategic visions, evaluating resource availability, and developing strategies to increase productivity, profitability, and sustainability. Effective leadership involves direction-giving, encouraging cooperation, and fostering a workplace culture. Controlling ensures the agribusiness is on track, monitoring performance, and taking corrective action as needed. Risk management identifies and reduces hazards, while sustainable practices integrate agricultural activities into a socially and environmentally responsible way. These fundamental ideas help agribusiness managers navigate challenges, maximize resources, and promote the success and sustainability of their operations.

#### **KEYWORDS::**

Management, Organization, Process, Resources, Result.

#### **INTRODUCTION**

Management entails establishing an internal environment. Management is responsible for using the many production elements. Therefore, it is the duty of management to establish environments that encourage maximal effort so that workers may do their tasks successfully and efficiently. It involves making sure that raw resources are available, setting wages and salaries, creating rules and regulations, etc. As a result, we may assert that effective and efficient management practices are necessary. Being efficient entails carrying out the proper duty, inserting round pegs into round holes and square pegs into square holes. Being efficient involves doing the work effectively, for the least amount of money and with the least amount of resource waste [1]–[3].

#### **Definition of Management**

Management is a term used to describe a group of interconnected tasks. According to George R. Terry, Management is a distinct process consisting of planning, organizing, actuating and controlling, performed to determine and accomplish stated objective by the use of human beings and other resources, it is the process by which management creates, operates, and directs purposeful organization through systematic, coordinated, and cooperative human efforts. Three elements make up management as a process. Management is a social activity: Since people are the most essential component among the others, management is concerned with fostering relationships between individuals. It is the responsibility of management to make interpersonal interactions fruitful and beneficial for achieving corporate objectives. Management is an integrating process. Management is tasked with the task of coordinating people, material, and financial resources to fulfill organizational goals. so serves a crucial purpose in bringing many components into harmony. Management is an ongoing activity. It is a process that never ends. It is focused with consistently recognizing the issues and finding appropriate solutions. It's a



continuous process [4]–[7]. Management as an Activity. Because a manager is someone who achieves the goals by supervising the work of others, management is an activity much like the many other activities carried out by humans, such as writing, playing, eating, cooking, etc. Koontz asserts that management is what a manager does. As a management-related activity, in order for a firm to run well, the management must continually receive and impart information, either verbally or in writing. For an organization to run well, a line of communication must be kept open with both superiors and deputies. Almost every sort of managerial activity is based on a particular choice. As a result, managers are always involved in making decisions of all types since the judgments made by one manager serve as the foundation for the actions that other managers will do. For instance, the sales manager chooses the channel & substance of the advertisement. A key component of management is using people to achieve objectives. As a result, managers must communicate both with their superiors and with their subordinates. They need to keep a positive relationship with them. Dealing with the issue and interacting with the subordinates are examples of interpersonal actions.

The field of study associated to the study of fundamental administrative concepts and practices is referred to as management. It outlines a certain code of behavior that the manager must adhere to as well as several strategies for effectively managing resources. The discipline of management outlines a specific code of behavior for managers and suggests numerous approaches to managing an organization. A person can become a manager by finishing a required course or by earning a degree or certification in management, which is a field of study that is now professionally taught in institutes and universities. Any field of knowledge that satisfies the two criteria below is referred to be a discipline. There must be academics and writers who disseminate pertinent information through their studies and writings. Education and training programs should explicitly transmit the information. Management fits the definition of a discipline since it addresses both of these issues. Even though it is a relatively young discipline, it is expanding more quickly. The context in which these phrases are used affects how they should be understood. There are three main categories of managers.

These individuals have managerial positions as a result of owning or descended from the company's owners. Those who have been hired due to their education and specific skills. People in charge of running government-run businesses. Due to their superior level of life in society, managers have joined the elite group of society. A systematic body of information that pertains to a particular field of study and comprises general truths that explain a phenomenon is known as science. It demonstrates the rules regulating the interaction between two or more variables and establishes a cause-and-effect link between them. These principles were created using the scientific technique of observation and experimentation. Scientific principles describe the fundamental truths of a certain area of study. These concepts are applicable in all circumstances, at all times, and everywhere. For instance, the law of gravity, which is applicable in all nations and at all times. Additionally, management encompasses some fundamental ideas that are applicable to all situations, such as the notion of unity of command, or one man, one boss. This idea is relevant to all kinds of organizations, whether they are for profit or not.

Experimentation and Observation. Scientific principles are founded on logic since they are the result of scientific study and research. The idea that the earth revolves around the sun, for instance, has been demonstrated scientifically. In addition to Henry Fayol's perspective, management concepts are also founded on scientific investigation and observation. They were created as a result of several managers' experiments and real-world experiences. For instance, it

has been found that paying employees fairly contributes to a happy workforce. Cause and Effect connection. Science is based on the idea that different factors have a cause and effect connection. For instance, metals expand when heated. Expansion is the effect of heating. Management establishes a cause and effect link since the same is true of it. For instance, ineffectiveness will result from a lack of parity between authority and duty. Knowing the source, which is an imbalance, makes it simple to determine the outcome, which is efficacy. Similar to this, if employees receive incentives and fair pay, they will work hard, but when they are not treated justly and fairly, an organization's productivity suffers.

Validity and Predictability Tests. Scientific concepts may be proven true at any point in time or over an infinite number of occasions, proving their validity. These tests will consistently yield the same results. Furthermore, using scientific concepts, future occurrences may be anticipated with some degree of accuracy. The validity of management principles can also be examined. By contrasting two people, one with a single boss and the other with two superiors, the idea of unity of command, for instance, may be evaluated. First individual will do better than second. Management has a systematic body of knowledge, which cannot be disputed, although it is not as precise as other physical disciplines like biology, physics, and chemistry. The fact that management science works with people and finds it challenging to precisely forecast their behavior is the fundamental cause of its imprecision. It belongs to the field of social sciences because it is a social process. It is a flexible science, and as a consequence, various results from applying its ideas and principles at different periods will indicate that it is a behavior science. It is what Ernest Dale refers to as a Soft Science [8]–[11].

## DISCUSSION

Art means the use of knowledge and expertise to attempt to achieve desired results. A definition of an art might be the unique application of broad theoretical ideas to get the finest outcomes. The following people appear in Art. Practical Knowledge. Since practical knowledge is a prerequisite for all artistic endeavors, studying theory alone is insufficient. The actual application of theoretical ideas must be understood. For instance, to become a competent painter, a person may need to know not just many colors and brushes, but also various patterns, proportions, circumstances, etc. to apply them well. A manager cannot be effective only by earning a degree or diploma in management; he must also understand how to apply different ideas in practical settings while acting in the role of manager. Personal Skill: Each artist has their unique style and method of working, despite the fact that their theoretical foundations may be similar. Because of this, success and performance standards vary from person to person. For instance, there are a number of talented painters, but M.F. Hussain is known for his aesthetic. The art of managing is also customized. Every manager has a unique management style based on his or her expertise, experience, and personality; as a result, certain managers such as Aditya Birla and Rahul Bajaj are regarded as good managers, while others are not.

Every artist possesses a certain level of inventiveness. He wants to create something that has never existed before, which calls for both brains and imagination. Like all forms of creativity, management is a creative endeavor. It effectively mixes human and non-human resources to get the desired results. It makes an effort to create beautiful music by effectively mixing chords. Practice makes a man perfect. Practice makes a guy perfect. Every artist improves their craft over time by continually putting their skills to use. In a similar vein, managers initially learn through a process of trial and error, but with time, with the application of management

principles, they become expert managers. Every kind of art is goal-oriented because it aims to produce tangible outcomes. In a similar way, management is focused on achieving predetermined objectives. To encourage the growth of a company, managers employ a variety of resources, including people, money, materials, machines, and processes. As a result, we may conclude that management is an art and that it necessitates the application of certain principles. It is also an art of the greatest caliber since it involves influencing employees' attitudes and behaviors at work in order to achieve specific objectives.

**Management as a Profession:** Over the past few decades, issues including expanding company units, separating ownership and management, escalating competitiveness, etc. have boosted need for managers with professional qualifications. The manager's job has become quite specialized. These changes have brought management to the point where everything must be handled properly. A profession might be described as a line of work that needs extensive academic training, specialized expertise, and regulation of admission by a representative group. A profession has to have an organized body of information that can be applied to professional development. Every professional needs to make an effort to get knowledgeable about the ideas and procedures. Similar to this, a manager needs commitment and engagement to become an expert in the management sciences. **Formal Education & Training.** Numerous institutions and colleges provide education & training for various professions. No one is allowed to practice a profession without first completing a required course. There are several management training and education institutions in existence. For instance, a CA cannot audit the A/Cs unless he has obtained a degree or certification for the same, but there are no legal minimum requirements or required courses of study for managers. For instance, while not required, an MBA may be desired.

**Social Obligations:** Although a profession might provide a means of support, those who work in it are largely driven by a desire to give back to society. Social expectations and ideals have an impact on their behavior. Similar to owners, a manager is accountable to the community as well, thus he is required to give the community high-quality items at fair pricing. **Code of Conduct.** Members of a profession are required to follow by a code of conduct, which incorporates specific guidelines, standards of integrity, honesty, and unique ethics. A representative association enforces a code of behavior to maintain self-control among its members. Any member who violates the code of conduct may be penalized and/or have his membership revoked. Although the AIMA has established a code of conduct for managers, it lacks the authority to prosecute any managers who break it. **Representative Association** A representative body must exist in order for professions to be regulated. For instance, the Institute of Chartered Accountants of India (AIMA) creates and maintains standards of competence for auditors, but it has any statutory authority to control manager activity.

It is abundantly evident from the explanation above that management satisfies some requirements for a profession, yet it is not a fully fledged profession. It does not restrict applicants for managerial positions on the basis of one standard or another. No prerequisites for managers have been established. No management association has the right to provide different managers a certificate of practice. All managers are expected to adhere to the AIMA's code of conduct. 5. Competent education and training facilities are lacking. Managers have obligations to a variety of constituencies, including society, employees, and shareholders. A governing code

could limit their freedom. Performance, not only academic credentials, determines a manager's worth. Making the most money, not promoting social welfare, is the ultimate purpose of business. That is why Haymes is correct when he says, He who serves best, also profits most is becoming the managerial catchphrase.

### Features of Management

The following figure will help you understand different features of management.

1. **Management is Goal-Oriented:** Any management activity's success is judged by how well it accomplishes the set goals or objectives. It serves a function to manage. It is a tool that facilitates the utilization of material and human resources in order to achieve certain objectives. For instance, a business may want to provide high-quality products at competitive pricing in order to achieve maximum client happiness. This may be accomplished by hiring capable individuals and making better use of limited resources.
2. **Management Coordinates:** Management coordinates the use of physical, financial, and human resources. Within an organization, people interact with machines and other non-human resources. Buildings, resources, and other things. Human efforts are integrated with those resources via management. It creates balance between the available physical, financial, and human resources.
3. **Continuous Management:** Management is a continuous process. It entails managing concerns and problems continuously. It is focused with locating the issue and implementing the necessary solutions. For instance, a firm can aim for maximum production. Numerous policies must be developed in order to reach this goal, but that is not the end of the process. Additionally, marketing and advertising must be done. To do this, policies must be reframed. Therefore, this is a continuous process.
4. **Management Is Everywhere:** Management is necessary in all kinds of organizations, whether they are political, social, cultural, or commercial, since it aids and guides varied activities toward a certain goal. Therefore, administration is necessary for clubs, hospitals, political parties, colleges, hospitals, and business organizations. Management is required whenever more than one individual is working toward a single objective. Management is necessary everywhere, regardless of size or type of activity, whether it be a small commercial organization that may be involved in trade or a major corporation like Tata Iron & Steel.
5. **Management is a Group Activity:** Individual efforts are very much less important in management. It is more focused on social groupings. Management of ABC & Co. is good refers to a group of people managing the business. It involves the utilization of collaborative effort to achieve predefined aim.

### Importance of Management

It assists in achieving group objectives by setting up the production elements, assembling and arranging the resources, and integrating the resources efficiently. It focuses collective efforts on achieving predetermined objectives.

There would be no loss of time, money, or effort by clearly outlining the organization's goals. Management transforms unorganized human, financial, and technological resources into productive business. These resources are managed, directed, and coordinated in a way that helps the business achieve its objectives.

**Maximum Resource Utilization:** Management makes productive use of all available material and human resources. As a result, management is more effective. Management chooses the best alternate use in industry out of a variety of applications to maximize the exploitation of scarce resources. It employs specialists and professionals, and these services enable the use of their expertise, knowledge, and effective use while preventing waste. There is no underuse of any resource if workers and equipment are operating at their optimum capacity.

**Reduces Costs:** It achieves maximum outcomes with the least amount of input through careful planning, minimal input, and maximum output. Management makes the greatest possible use of its physical, human, and financial resources. This contributes to cost savings.

**Establishes Sound Organization:** There is no duplication of effort the functions are seamless and coordinated. One of management's goals that is in line with the goals of the organization is to create a sound organizational structure. To achieve this, management establishes effective authority and responsibility relationships, or who is responsible to whom, who can give instructions to whom, and who is a superior & who is a subordinate. Management hires qualified candidates with the appropriate skills, education, and experience for a variety of jobs. All positions ought to be open to everyone. Equilibrium is established, allowing the organization to adapt to a changing environment. It keeps up with how the environment is evolving. The original coordination of the organization must evolve as the external environment changes. As a result, it adjusts the organization to changing societal needs and commercial demands. It oversees the development and continuation of the organization.

**Essentials for Society's Prosperity:** Effective management produces improved economic output, which contributes to raising human welfare. By preventing the squandering of limited resources, good management makes a challenging work simpler. The standard of living is raised. By establishing jobs that produce revenue in the hands, it raises the profit, which is advantageous to business and society since it ensures that the maximum amount of product is produced for the lowest possible cost. Organization develops novel items and societally useful research.

## CONCLUSION

Agribusiness is the commercial sector that includes agricultural and farming-related industries. It includes all of the procedures involved in getting an agricultural product to market, such as production, processing, and distribution. To be successful, the agribusiness manager must be able to do the five responsibilities for each of the agribusiness's four core functions: marketing and selling, production and operations, financial management and planning, and human resource management. At its most basic, management is a discipline comprised of five broad functions: planning, organizing, staffing, leading, and controlling. These five functions are part of a larger set of practices and beliefs on how to be a good manager.

## REFERENCES:

- [1] S. T. Maryam, A. Robiansyah, R. Jao, U. Niarti, M. R. Purwanto, and P. T. Nguyen, Evolution of risk management, *Journal of Critical Reviews*. 2020. doi: 10.31838/jcr.07.01.52.
- [2] G. Kovacs and N. Sowers, Airway Management in Trauma, *Emergency Medicine Clinics of North America*. 2018. doi: 10.1016/j.emc.2017.08.006.

- [3] S. Mohanty and B. B. Pradhan, Introduction to management, *Int. J. Psychosoc. Rehabil.*, 2019, doi: 10.37200/IJPR/V23I6/PR190775.
- [4] B. Gyawali, K. Ramakrishna, and A. S. Dhamoon, Sepsis: The evolution in definition, pathophysiology, and management, *SAGE Open Medicine*. 2019. doi: 10.1177/2050312119835043.
- [5] H. Mustafa, Definition of Management, *J. Manage.*, 2019.
- [6] L. McArthur, D. Sakthivel, R. Ataide, F. Chan, J. S. Richards, and C. A. Narh, Review of burden, clinical definitions, and management of Covid-19 cases, *American Journal of Tropical Medicine and Hygiene*. 2020. doi: 10.4269/ajtmh.20-0564.
- [7] C. Coughlan *et al.*, Recurrent implantation failure: Definition and management, *Reproductive BioMedicine Online*. 2014. doi: 10.1016/j.rbmo.2013.08.011.
- [8] N. S. Joseph, S. Gentili, J. L. Kaufman, S. Lonial, and A. K. Nooka, High-risk Multiple Myeloma: Definition and Management, *Clinical Lymphoma, Myeloma and Leukemia*. 2017. doi: 10.1016/j.clml.2017.02.018.
- [9] J. W. Denbo and J. B. Fleming, Definition and Management of Borderline Resectable Pancreatic Cancer, *Surgical Clinics of North America*. 2016. doi: 10.1016/j.suc.2016.07.008.
- [10] A. Amin and R. P. Mookerjee, Acute-on- chronic liver failure: Definition, prognosis and management, *Frontline Gastroenterology*. 2020. doi: 10.1136/flgastro-2018-101103.
- [11] J. R. Stock and S. L. Boyer, Developing a consensus definition of supply chain management: A qualitative study, *Int. J. Phys. Distrib. Logist. Manag.*, 2009, doi: 10.1108/09600030910996323.



## CHAPTER 2

### NAVIGATING THE MANAGERIAL ENVIRONMENT: ESSENTIAL CONCEPTS

---

Dr. Mukesh yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### **ABSTRACT:**

The managerial environment in the agricultural business is influenced by both internal and external factors. External factors include economic factors, such as commodity prices, market demand, inflation, and government regulations, which impact profitability and viability. Technological advancements, regulatory frameworks, and social and consumer trends also impact agribusiness management. Internal factors include organizational culture, human resources, financial resources, and supply chain management. Managers must adapt to economic trends, adopt effective human resource management techniques, and manage financial resources to support operational requirements and strategic ambitions. Lastly, effective supply chain management is crucial for timely delivery and quality assurance, ensuring product availability and reducing costs.

#### **KEYWORDS:**

Corporation, Environment, Management, Organizational, Resources.

#### **INTRODUCTION**

A corporation requires capable managers to guide its personnel in achieving its objectives in the challenging and uncertain economy of today. However, managers are problem solvers, motivators, and planners in addition to being leaders. Additionally, there is no one size fits all when it comes to management. At every level of management within an organization, managers play many functions and carry out a variety of duties. In today's culture, organizations are everywhere. Individuals frequently work together in groups to achieve shared objectives. These groups occasionally have financial objectives, such as chain restaurants or clothes stores. Some objectives, like those of non-profit churches or public schools, are more philanthropic. However, regardless of their objectives, all of these groups have two things in common: they are made up of people, and certain persons are in control of these people. There are managers. Every business has managers, at least those that strive for success. These people often have the unpleasant responsibility of making decisions, resolving complex issues, establishing objectives, formulating plans of action, and motivating others. And they are only some of the duties they have! Managers, specifically, effectively and efficiently administer and organize resources to accomplish an organization's goals. In essence, managers use other people to complete their tasks [1]–[4].

#### **The Intricacies of Management**

No matter what kind of company they are employed in, managers are often in charge of a team's performance. As leaders, managers must motivate this team to accomplish shared objectives, like launching a new product on schedule. Managers utilize a variety of material resources, including technology, in addition to their human resources to achieve these aims. Consider a team as an

illustration. A manager could be in charge of a certain department that is responsible for creating new products. The manager is responsible for organizing the team members in his department and providing them with the resources they require to do their jobs properly. In the end, the manager is accountable for the team's performance.

### Levels of Management

Within the same organization, two managers who are also leaders may have completely distinct responsibilities and designations. Because there are so many more people to manage in large companies, it is possible for there to be several levels of management. The following categories describe typical management levels:

1. **Top Level:** Managers at this level make ensuring that significant performance goals are defined and met. Top managers frequently have the positions of president, vice president, chief operating officer, and chief executive officer. These senior managers are regarded as executives who are in charge of a company's overall performance or that of one of its key divisions.
2. **Middle Level:** Middle managers answer to senior managers and are in charge of sizable divisions or departments made up of several smaller units. Hospital clinic directors, university deans, company division managers, factory managers, and branch sales managers are a few examples of middle managers. Middle managers create and carry out action plans that support corporate goals including boosting market presence.
3. **Low Level:** The first management role that the majority of individuals hold is often a firstline management position, such as a team leader or supervisor a person in charge of smaller work units made up of hands-on employees. These first-line managers have a wide range of job titles, including department head, group leader, and unit leader. First-line managers make sure that their teams or units produce a certain quantity of things of a certain quality in accordance with the plans of middle and senior management [5]–[8].

### Functions of Managers

Simply said, managers don't carry out their duties carelessly:

1. **Planning:** Planning, organizing, staffing, leading, and regulating are the five fundamental management tasks that good managers learn to master.
2. **Organizing:** This phase entails outlining precisely how to accomplish a given goal. Say, for instance, that increasing firm sales is the organization's main objective. The management must first choose the actions required to achieve that aim. These actions can entail expanding advertising, merchandise, and sales personnel. The strategy is created using these essential actions. The manager can follow the strategy after it is set up to achieve the objective of increasing business sales. After putting a strategy in place, a manager must arrange her team and resources in accordance with the plan. Two crucial components of organization are delegating tasks and granting power.
3. **Staffing:** After determining the needs in his region, a manager may opt to hire more people and invest in their training and development. In order to achieve this objective, a manager frequently collaborates with the human resources division of a major corporation.



4. **Leading:** To achieve a goal, a manager must do more than merely plan, organize, and staff her team. She has to be the leader. Motivating, communicating, directing, and encouraging are all aspects of leading. It calls on the manager to mentor, help, and resolve issues with staff members.
5. **Controlling:** A manager's work is not done once the other components are in place.

To keep the plans for his region on track, he must constantly compare results to the goals and take any required corrective action. These tasks are carried out by all managers at all levels in every company, however how much time is spent on them varies depending on the organization and management level.

### **Roles Performed by Managers**

A manager has numerous hats to wear. A manager is not just a team leader, but also a planner, an organizer, a motivator, a coach, a problem-solver, and a decision-maker all wrapped into one. These are only a handful of the responsibilities a manager has. Additionally, managers typically have extremely busy schedules. Managers sometimes have little free time on their calendars due to staff meetings, unforeseen issues, or strategy discussions. And that's without even addressing email responseS Henry Mintzberg lists eleven functions that managers do in his seminal work, *The Nature of Managerial Work*. These jobs may be divided into three groups:

1. **Interpersonal:** This position requires interacting with others.
2. **Informational:** This responsibility entails exchanging and evaluating information.
3. **Decision-Making:** It is a part of this job.

Each type of jobs that assist managers in doing all five of the tasks listed in the previous section on the Functions of Managers is further examined below. Seek and receive information scan periodicals and reports. Forward information to organization members via memos, calls and reports.

Transit information via reports or memos. Perform ceremonial and symbolic duties. Direct and motivate subordinates. Maintain information links both inside and outside organization via calls and meetings. Initiate improvement projects identify new ideas and delegate to others. Take corrective action during disputes or crises resolve conflict Decide who gets resources; prepares budgets set schedules and priorities. Represent department during negotiation of union contracts.

## **DISCUSSION**

### **Skills Needed by Managers**

Everyone cannot succeed as a manager. To increase the productivity of other employees, certain skills or the capacity to apply knowledge to action must be present. These abilities fall under the following groups:

1. **Technical:** This talent calls for the use of a particular aptitude or area of experience to carry out certain duties. Technical skills are possessed by, for instance, accountants, engineers, market analysts, and computer scientists. These talents are originally acquired by managers through formal education, and they are then further developed through training and work experience. The importance of technical abilities increases as management levels decrease.

2. **Human:** This skill shows the capacity to collaborate well with others. The spirit of trust, excitement, and sincere engagement in interpersonal interactions are examples of human talents that manifest in the workplace. A manager with strong interpersonal abilities is very self-aware and able to comprehend or relate to the sentiments of others. While some managers are gifted with excellent people skills by birth, others develop these abilities via training or work experience. Due to the extremely interpersonal nature of management work, human skills, regardless of how they are obtained, are essential for all managers. Everyone cannot succeed as a manager. To increase the productivity of other employees, certain skills nor the capacity to apply knowledge to action must be present. These abilities fall under the following groups:

### Technical

This talent calls for the use of a particular aptitude or area of experience to carry out certain duties. Technical skills are possessed by, for instance, accountants, engineers, market analysts, and computer scientists. These talents are originally acquired by managers through formal education, and they are then further developed through training and work experience. The importance of technical abilities increases as management levels decrease. This skill shows the capacity to collaborate well with others. The spirit of trust, excitement, and sincere engagement in interpersonal interactions are examples of human talents that manifest in the workplace. A manager with strong interpersonal abilities is very self-aware and able to comprehend or relate to the sentiments of others. While some managers are gifted with excellent people skills by birth, others develop these abilities via training or work experience. Due to the extremely interpersonal nature of management work, human skills, regardless of how they are obtained, are essential for all managers.

### The External Environment

The external environment is made up of all external elements that might have an impact on a company. There are two components to the environment outside:

1. **Directly Interactive:** The organization is directly and immediately affected by this environment. An illustration would be a new competitor entering the market.
2. **Indirectly Interactive:** The organization is impacted by this environment in a more indirect way. The implementation of new legislation might have a major impact. For instance, firms must adapt their facilities to accommodate people with disabilities in order to comply with the Americans with Disabilities Act.
3. **Directly Interdependent Forces:** Directly interdependent forces include employers, workers, consumers, suppliers, rivals, and employee unions. Each of these groupings is within management's obligation. Here are a few instances:
  - a. Owners depend on management to protect their interests and generate a profit.
  - b. Customers expect complete satisfaction from the goods and services they use and buy.
  - c. To offer the necessary resources, suppliers need clear communication, prompt payment, and a solid working relationship.
  - d. Competitors provide difficulties because they fight for clients in a market where there are similar goods and services.  
Employees and employee unions supply management with both the labor force to carry out the duties and the representation of labor issues.

### **Indirectly Interactive Forces**

The second category of external environment consists of forces that interact indirectly. Sociocultural, political and legal, technical, economic, and international impacts are some of these causes. Due to the nature of a specific industry, one company may be more negatively impacted by indirectly interacting factors than another. For instance, a business that utilizes several computers will be more impacted by software changes than a business that just uses one computer. Even if they are farther away, indirect factors are nevertheless crucial to an organization's participatory character. Because it affects what society values in terms of products, services, and norms, the sociocultural factor is particularly significant. The sociocultural force also incorporates the values and demographics of a certain client group. Measures of the many traits of the individuals and social groupings that make up a society are known as demographics. Some examples of often utilized demographic characteristics are age, gender, and income. The political and legal aspects of the outside environment include the legal and political boundaries that an organization must work inside. Business owners are required to adhere by the laws that political parties develop or have an influence on. A few political and legal concerns that may have an impact on an organization's operations are tax policies, trade restrictions, and minimum wage laws. The external environment's technology component has an influence on the scientific procedures used to convert inputs resources, labor, and money into outputs goods and services. The ability of many businesses to recognize and adapt to external technology developments is essential to their success [9], [10]. An important technical development during the past few decades, for instance, has been the rise in accessibility and cost of management information systems also known as MIS. Managers have access to information through these technologies that may help them manage and operate their organizations better. The economic component represents the state of the global economy. Interest rates, inflation, unemployment rates, gross domestic product, and the exchange rate of the dollar versus other currencies are a few economic factors that particularly worry corporations. A positive economic environment typically gives chances for development in a variety of businesses, including sales of apparel, jewelry, and new vehicles. However, certain firms have historically benefited from difficult economic times. For instance, the alcoholic beverage business often does well while the economy is struggling. The elements in other nations that have an impact on American enterprises are referred to as the global dimension of the environment. Although a corporation can operate locally or globally and still performs the same core management tasks of planning, organizing, staffing, leading, and managing, managers face challenges and dangers when doing so. Managers deal with hazards abroad that they probably wouldn't have dealt with if they had stayed on their own turf, whether it be cultural or linguistic differences, issues with the country itself think mad cow disease, or any combination of these.

### **The Internal Environment**

The components of an organization's internal environment include its present workers, management, and, in particular, the corporate culture, which establishes employee behavior. Although some factors simply have an impact on the manager, others have an impact on the entire business. Employees are immediately impacted by the leadership philosophy or style of a manager. Progressive managers allow workers more freedom to make decisions than traditional bosses who give them clear instructions. The manager is in charge of changing one's leadership style and/or ideology. Some of the components that make up the internal environment are described in the sections that follow.

## Organizational Mission Statements

The mission statement of an organization outlines its values and the reason for being. It comprises the qualities that set it apart from other organizations of its kind and defines the organization's general goal. A company's philosophy and purpose should be revealed in a mission statement, which should be more than just words on paper. This proclamation ought to be an active, dynamic document that informs and inspires the organization's members. The issues of What are our values? and What do we stand for? should be addressed in the mission statement. This declaration gives an organization direction by encouraging its members to collaborate in order to accomplish its stated objectives. However, not all mission statements in American firms are successful. Successful mission statements result in successful endeavors. Serving the demands of consumers is the primary goal of a successful mission statement in today's quality-conscious and fiercely competitive markets. The following corporate goals may be precisely identified by a strong mission statement:

1. Those who will be assisted.
2. What will be created in terms of goods and services.
3. Location the facility where the goods or services will be rendered.
4. What philosophy will be adhered to?

## Company Policies

Company rules serve as recommendations for how certain organizational issues should be handled. Companies adopt rules to give advice to managers who must make judgments concerning situations that occur regularly inside their firm, much like institutions maintain regulations for admission, grade appeals, requirements, and exemptions. Company policies should be consistent with the mission statement of the organization since they reveal the personality of the latter.

## Formal Structures

The hierarchical arrangement of roles and responsibilities constitutes an organization's formal structure. This organizational structure dictates how information is shared inside the company, which departments are in charge of what tasks, and who has the final say. To make the breakdown of their formal structure more understandable, some organizations utilize a chart. An organizational chart is a visual representation of the formal channels of power and communication inside a company.

## Organizational Cultures

An organization's personality may be found in its organizational culture. Every corporation has a unique personality, just like every individual does. An organization's culture sets it apart from others and influences how its members behave. The culture of an organization is made up of four key elements:

1. Values.
2. Heroes.
3. Rituals and rites.
4. Social media.

Values are the fundamental principles that characterize an organization's successful personnel. For instance, having published academics is highly valued by many colleges. For instance, a faculty member may have a better chance of getting tenure if they publish in a reputable magazine. The university values a professor's ability to write for periodicals and wants to make sure that they continue with them for the rest of their academic careers. The heroes are the second element. An exceptional individual who represents the company's image, attitudes, or ideals and serves as an example to other employees is referred to as a hero. A company's founder can also be a hero Sam Walton of Wal-Mart comes to mind. The creator need not be the company's hero, though; a regular employee might still make a significant contribution, as the tenacious paralegal Erin Brockovich. The third element is rites and rituals, which are ceremonies or routines that the business utilizes to honor exceptional workers. Awarded personnel can be recognized for exceptional service at award dinners, business events, and quarterly meetings. The awardees are intended to serve as role models and inspiration for the remainder of the year for all corporate personnel. The social network, the last element, is the unofficial channel of communication within an organization. This network, often known as the corporate grapevine, disseminates tales of both successful people and failures. Employees gain a true understanding of the organization's culture and values through this network.

### **Organizational Climates**

The organizational environment is a result of the company's culture. Elements of the everyday atmosphere include the general vibe of the office and employee morale. The kind of atmosphere that exists in the workplace depends on the attitudes of the employees. The interactions and connections that employees have on a regular basis reveal the culture of a firm.

### **Resources**

The people, knowledge, facilities, infrastructure, equipment, supplies, and money at an organization's disposal are referred to as resources. The most valuable resource for every firm is its people. Non-human supporting resources that aid employees in achieving the organization's objective include information, facilities, machinery, equipment, materials, supplies, and money. The resources that are available and how managers evaluate both human and nonhuman resources have an influence on the environment of the firm.

### **Managerial Philosophies**

The manager has influence over their personal set of values and views towards people and their job since they make up their management philosophy. McGregor stressed that a manager's guiding principles might result in a self-fulfilling prophesy. While Theory X managers see staff members nearly like toddlers who require continual guidance, Theory Y managers view staff members as responsible adults who can take part in making choices regarding the company's operations. The ensuing impact of these managerial ideologies on employee behavior results in the self-fulfilling prophesy. Consequently, alignment between organizational and managerial ideologies is necessary.

### **Managerial Leadership Styles**

A manager's leadership style can be inferred from the number of employees who participate in problem-solving or decision-making processes. Delegating decision-making authority, independence, knowledge, autonomy, and skills to subordinates is empowerment. Fortunately,

the majority of businesses and management are moving toward the collaboration and active engagement that come with empowerment. When effectively managed, an empowered workforce may result in increased productivity and quality, lower costs, more innovation, better customer service, and a higher level of dedication among the staff members of the company. Additionally, since information and choices do not need to be transferred up and down the hierarchy, reaction times could be improved. Giving employees more autonomy makes sense since they can more readily make the appropriate judgments than a supervisor or manager who is distant from the real problem to be solved or the client to be serviced.

### **Adapting to Environments**

A manager's job is to keep an eye on, influence, and predict change in both the internal and external contexts. Boundary spanning, a method of obtaining information on events that could have an influence on the organization's future, allows managers to keep an eye on the surroundings. Customers' and suppliers' comments, professional, trade, and government periodicals, industry groups, and personal relationships are just a few of the information sources available to managers. Additionally, managers can actively try to change their external settings by voting, lobbying, and swaying public opinion through the media.

The organization is composed of internal components. Internal transformation results through organizational actions and choices. Managers can obtain information by thoroughly assessing the internal workings of the company. This internal analysis's goal is to pinpoint the organizational assets, resources, expertise, and procedures that either reflect strengths or weaknesses. Weaknesses are areas that require development, whereas strengths are features of an organization's operations that constitute potential competitive advantages any feature that sets it apart from its rivals in a favorable way. An internal review of the organization's activities should focus on a few important areas. The marketing, finance, research and development, production, and general management competencies are important areas to evaluate. These categories are often assessed based on how much they promote quality and support the organizational goal of competitive advantage.

## **CONCLUSION**

To sum up, the management environment in the agricultural sector is a complex and dynamic setting driven by a variety of internal and external influences. Agribusiness managers must balance internal elements like corporate culture, human resources, financial resources, and supply chain management with external factors like economic volatility, technology breakthroughs, regulatory frameworks, and shifting consumer preferences.

In order to maximize production, profitability, and sustainability, successful agribusiness managers adapt to the changing environment, take wise decisions, and put their ideas into practice. Agribusinesses may succeed in a cutthroat market and support the expansion and development of the agriculture sector by comprehending and adapting to the management environment.

### **REFERENCES:**

- [1] I. Borisov and S. Vinogradov, The Relationship Among Collaboration-Oriented Managerial Environment, Job Satisfaction, and Workplace Creativity., *Soc. Econ. Rev.*, 2019.



- [2] B. Roxas and A. Coetzer, Institutional Environment, Managerial Attitudes and Environmental Sustainability Orientation of Small Firms, *J. Bus. Ethics*, 2012, doi: 10.1007/s10551-012-1211-z.
- [3] Z. He, C. Luo, C. H. Tan, H. Wu, and B. Fan, Simulating an agent's decision-making process in black-box managerial environment: An estimation-and-optimisation approach, *J. Simul.*, 2019, doi: 10.1080/17477778.2018.1440946.
- [4] B. Baik, P. A. Brockman, D. B. Farber, and S. S. Lee, Managerial ability and the quality of firms' information environment, *J. Accounting, Audit. Financ.*, 2018, doi: 10.1177/0148558X17742820.
- [5] W. L. Swann, Examining the Impact of Local Collaborative Tools on Urban Sustainability Efforts: Does the Managerial Environment Matter?, *Am. Rev. Public Adm.*, 2017, doi: 10.1177/0275074015598576.
- [6] C. Simard and R. E. Rice, Managerial information behaviour: Relationships among Total Quality Management orientation, information use environments, and managerial roles, *Total Qual. Manag. Bus. Excell.*, 2006, doi: 10.1080/14783360500249620.
- [7] M. T. Luth and D. J. Schepker, Antecedents of corporate social performance: The effects of task environment managerial discretion, *Soc. Responsib. J.*, 2017, doi: 10.1108/SRJ-03-2016-0038.
- [8] Z. Rylkova and J. Sebestova, Managerial Decision on Strategic Objectives in Global Environment, *SHS Web Conf.*, 2020, doi: 10.1051/shsconf/20207401029.
- [9] S. Misra, P. Roberts, and M. Rhodes, Information overload, stress, and emergency managerial thinking, *Int. J. Disaster Risk Reduct.*, 2020, doi: 10.1016/j.ijdr.2020.101762.
- [10] T. Simons, Behavioral Integrity: The perceived alignment between managers' words and deeds as a research focus, *Organ. Sci.*, 2002, doi: 10.1287/orsc.13.1.18.543.

## CHAPTER 3

### AGRICULTURAL INDUSTRY DECISION-MAKING: KEY CONCEPTS AND STRATEGIES

---

Dr. Mukesh yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### ABSTRACT:

Decision-making in the agricultural industry involves a methodical strategy to discover, assess, and select among possible courses of action. This involves considering various circumstances, obtaining information, interpreting data, and making educated decisions. The process involves problem identification, information gathering, alternative generation, evaluating options' practicality, effects, risks, and advantages, making a decision, implementation, evaluation, and feedback. Problem identification involves identifying issues or opportunities for change, while information gathering involves compiling relevant facts and information. Alternative generation involves brainstorming and considering various solutions. Decision-making involves choosing the best course of action based on the results of evaluation and analysis, weighing trade-offs, dangers, and benefits. Implementation involves creating an action plan, assigning resources, and executing required actions. Evaluation and feedback are essential for determining potential changes or enhancements and providing information for further decision-making. Agribusiness decision-making is influenced by various variables, such as market circumstances, economic trends, technical developments, legal constraints, and stakeholder expectations. Balancing strategic thinking, analytical reasoning, and adaptability is crucial for successful agricultural decision-making.

#### KEYWORDS:

Decision-Making, Goals, Managers, Planning, Time.

#### INTRODUCTION

Organizations actually depend on individuals to make choices. By carrying out her choices, a manager plans, organizes, staffs, leads, and manages her team. How successful a manager is depending on how well and how well those judgments are made. Managers are frequently need to make choices in order to address issues. Decision-making and problem-solving are continuing processes that involve analyzing circumstances or issues, taking into account options, making decisions, and then acting on those decisions. There are instances when making a decision requires only a brief period of mental reflection almost an instant. In other circumstances, the procedure can take weeks or even months to complete [1]–[4].

#### Steps involved in Decision Making Process

The proper information having to be available to the right individuals at the right times is essential to the entire decision-making process. The following steps are included in the decision-making process:

1. Identify the issue.
2. Define the constraints.



3. Create potential substitutes.
4. Consider the options.
5. Decide which option is best.
6. Put the choice into action.
7. Set up a method for monitoring and evaluating.

**Define the Problem**

When a management recognizes the actual issue, decision-making may start. All subsequent phases are influenced by how properly the problem is characterized; if the problem is poorly defined, each step in the decision-making process will be built around a flawed premise. By distinguishing the issue from its symptoms, a manager may assist in finding the underlying issue in a scenario. Usually, the most blatantly worrisome circumstances inside an organization may be recognized as signs of deeper issues. For some instances of symptoms, see Table 1. All of these signs point to a problem within an organization, but they do not pinpoint the underlying causes. A good manager looks for the causes of the symptoms rather than merely treating the symptoms.

**Table 1: Symptoms and their Real Causes.**

Symptoms	Underlying Problem
Low profits and/or declining sales.	Poor market research.
High Costs	Poor design process; poorly trained employees
Low Morale	Lack of communication between management and subordinates
High employee turnover	Rate of pay too low; job design not suitable
High Rate of Absenteeism	Employees believe that they are not valued.

**Identify Limiting Factors**

Every manager aspires to make the best choices. Managers must identify any restricting issues and have the optimal resources, including knowledge, time, people, equipment, and supplies. Realistically, managers work in a setting that frequently lacks the best resources. For instance, they could not have the necessary funds, the most up-to-date knowledge, or extra time. In order to make the best choice feasible given the knowledge, resources, and time at hand, people must decide to satisfice [5]–[8].

**Develop Potential Alternatives**

Time constraints usually force a management to make a decision after merely evaluating the first or most obvious options. However, effective problem resolution necessitates a careful analysis of the issue; a hasty response could not produce a long-lasting fix. As a result, before making a snap judgment, a manager should carefully consider and research multiple potential solutions to a single problem. Brainstorming is one of the most popular techniques for coming up with alternatives, in which a group of people collaborate to produce ideas and potential solutions. The premise behind brainstorming is that the dynamics of the group encourage creative thought; any

idea, no matter how outlandish, can inspire others to come up with their own. Ideally, this idea-spawning spreads quickly and results in a flood of recommendations and concepts. It normally takes between 30 and 60 minutes to brainstorm. The Delphi method. This method involves a group leader conducting the decision-making using written questionnaires without the members ever meeting. Group decision-making, when opposed to solo decision-making, has certain benefits and drawbacks regardless of the approach employed. The benefits include the following:

1. Groups offer a bigger picture perspective.
2. Employee support and satisfaction with the choice are more probable.

Opportunities for conversation aid in reducing uncertainty for the decision-makers and providing answers to queries. The following are some drawbacks:

1. This approach could take longer than one person making the choice alone.
2. The choice made might not be the best one, but rather a compromise.
3. People are culpable of groupthink, which is the propensity of group members to concur with the group's prevalent viewpoints.
4. Because decisions are made by the group as a whole rather than by a single person, there may be uncertainty when it comes time to put the choice into action and assess it.

Numerous studies comparing individual and group performance have found that groups not only make better judgments than an individual working alone, but also tend to motivate top performers to even greater levels of output. Are two or more heads thus preferable to one? The nature of the assignment, the skills of the group members, and the type of interaction all play a role in the solution. A manager has to be aware of the benefits and drawbacks of group decision making since she frequently has to choose between making decisions alone and consulting others.

### **Analyze the Alternatives**

Choosing the relative qualities of each proposal is the goal of this stage. Before choosing one of the potential solutions, managers must weigh the benefits and drawbacks of each. There are several methods for evaluating the choices. Here are some potential examples:

1. List the advantages and disadvantages of each option.
2. Weight each component that is crucial to the choice, rating each alternative according to how well it satisfies each need, and then multiply the result by a probability factor to get a final value for each option.
3. Regardless of the approach, a manager must assess each option in terms of its Feasibility - is it possible?
4. How successfully does it address the issue at hand?
5. What financial and nonfinancial costs would it have on the organization?

### **Selecting the Best Alternative**

A management must select the best option after considering all the options. The option with the greatest number of benefits and the fewest significant drawbacks is the ideal one. The decision-making process can occasionally be pretty simple, such as choosing the option with the majority of benefits and the fewest drawbacks. Other times, combining a number of different solutions yields the best result. But occasionally, the ideal choice might not be evident. At that point, a

manager must choose which option is the most practical, efficient, and cost-efficient for the firm. At this stage of the decision-making process, probability estimations, which analyze the prospects of each choice, are frequently used. In certain circumstances, a manager just chooses the option with the best chance of success.

### **Implement the Decision**

In addition to being paid to make decisions, managers are also rewarded for the outcomes of their decisions. Decisions must be followed with fruitful outcomes. The effectiveness of the choice depends on everyone engaged understanding their part in it. Managers must carefully design programs, processes, regulations, or policies to assist workers in the problem-solving process in order to ensure that they are aware of their responsibilities [9]–[12].

## **DISCUSSION**

### **Planning**

Planning refers to both identifying the organization's objectives and specifying the strategies for accomplishing them. Instead of only responding to the environment, planning gives managers the chance to adapt to it. Planning raises the likelihood that a firm will survive by proactively identifying and reducing potential hazards. Planning is essentially getting ready for tomorrow now. Managers may decide what they want and how they will get it through this action. Planning not only gives businesses direction and a sense of purpose, but it also responds to six fundamental issues about every activity:

1. What tasks must be completed?
2. What time is the cutoff?
3. Where will it be completed?
4. Who will be in charge of it?
5. How will it be completed?
6. How much effort, time, and money will it take to complete this task?

### **Recognize the Advantages of Planning**

The adage, If you don't plan, you plan to fail, is especially true in the military. Without a strategy, managers open themselves up for mistakes, waste, and delays. A plan, on the other hand, assists a manager in efficiently and effectively allocating resources and activities to accomplish goals. There are several benefits to planning. Planning achieves the following goals:

1. Provides direction for an organization. Without plans and objectives, companies essentially respond to everyday events without taking the long view. For instance, the answer that makes sense in the present may not always make sense in the future. Plans prevent this drift condition and guarantee that immediate actions will complement and work in harmony with long-term objectives.
2. Focuses emphasis on goals and outcomes. Plans help those who execute them stay focused on the desired outcomes. Maintaining focus on the objective also inspires workers.
3. Creates the foundation for collaboration. Without a comprehensive strategy, diverse organizations cannot collaborate on shared tasks in an efficient manner. There are several

instances: Without plans, plumbers, carpenters, and electricians cannot construct a house. Additionally, coordination between Army, Navy, and Air Force units is necessary for military operations.

4. Aids in anticipating issues and adjusting to change. Planning ahead can help managers anticipate issues and make whatever adjustments needed to prevent them. Of course, unexpected events, like the quadrupling of oil prices in 1973, can always catch a company off guard, but many changes are simpler to anticipate. Making preparations for these probable issues might assist to lessen errors and the inevitable surprises that arise.
5. Provides principles for making decisions. Decisions are based on the future. Management will have little parameters for making current judgments if they don't have any long-term strategies. A company's management must be conscious of the choices they make today if they want to launch a new product in three years. Plans assist both managers and staff in maintaining a broad perspective.
6. Is necessary before doing any other managerial duties. Planning is essential because management cannot properly engage in any of the other fundamental administrative functions, such as organizing, staffing, leading, or regulating, without first knowing what an organization intends to accomplish.

### **Using Plans to Achieve Goals**

Planning is an essential activity because it creates the framework for all other activities by designing the map. The plan itself lays out who should do what and where and when and how. From the tiniest restaurant to the biggest global enterprise, all businesses must create plans for success. However, an organization must first decide what it intends to accomplish before formulating a plan of action. The mission statement of the organization serves as the foundation for objectives, which are the results the organization hopes to achieve. The organization's values and purpose are stated in the mission statement. A compelling mission statement communicates credibility to external audiences including investors, clients, and suppliers. The same goes for workers, who may commit to upholding the organization's overarching purpose by connecting with its mission statement. All of the organization's goals and plans are built around its mission statement. Therefore, managers must guarantee that internal policies, responsibilities, performances, structures, products, and expenditures are in accordance with the organization's objective by using effective planning and goal-setting processes.

### **Criteria for Effective Goals**

Managers must embrace specific traits and rules to ensure that goal setting helps the business. These standards are described as follows:

1. Goals ought to be quantifiable and explicit. When expressing goals, try to be as specific as you can, such as increase profits by 2% or decrease student enrollment by 1%.
2. Key result areas should be covered by goals. Managers should choose a few important outcome areas since goals cannot be set for every facet of employee or organizational performance. These critical areas include the tasks that have the biggest impact on a company's performance, including customer service or sales.
3. Goals should be demanding but not impossible. Unrealistic goals put workers at risk of failure and lower morale among staff members. However, if objectives are too simple, workers might not feel motivated. The team's time, resources, and financial capacity must

be taken into consideration while setting goals, and managers must make sure that these goals are not exceeded.

4. The time frame during which a goal will be accomplished should be included in the goal. Deadlines provide team members a goal to strive towards and support ongoing growth.
5. At the same time, managers should establish interim goals along the way to prevent their employees from feeling overburdened by a single, apparently insurmountable objective. A shorter-term objective, such as Establish a customer database by June 30, might be more acceptable. Rewards should be connected to goals. Goal-related rewards should be given to people who achieve their objectives. Employees will not only feel appreciated for their work, but they will also have something concrete to look forward to in the future.

### **Coordination of Goals**

Plans that coordinate among all levels of management should be in place to carry out the mission of the company. To accomplish the main objective, an organization's top, middle, and first-level management should coordinate their plans. Although the general planning process is the same for all managers, there are differences in the types of plans and the amount of time spent on planning. Here are a few instances:

1. Larger organizational units and strategies for longer time horizons are of importance to top-level managers. Their planning include creating the organizational aim, important policy areas, and missions for the organizational units. These objectives are referred to as strategic goals.
2. The main task of middle-level managers' planning duties is to transform the general aims of top-level management into more precise objectives for work units. These objectives are referred to as tactical goals.
3. First-level managers are involved in making day-to-day decisions, such as setting up structures to achieve these objectives and organizing work hours and tasks. These objectives are referred to as operational goals.
4. Conflicts will arise if a first-level manager creates a set of plans that are in opposition to those of a middle-level management. As a result, when organizing their own activities as well as the actions of others, all managers must collaborate.

### **CONCLUSION**

As a result, choosing among alternatives to handle problems and take advantage of opportunities in the agricultural industry is a vital and methodical part of the decision-making process in agribusiness.

Agribusiness managers must obtain pertinent data, create and assess alternatives, and reach well-informed choices that are consistent with the company's aims and objectives.

Decision-making in the agricultural sector must take into account a variety of elements, including stakeholder expectations, market conditions, economic trends, and technology improvements.

Agribusiness managers may maximize resource allocation, reduce risks, and grab opportunities for development and sustainability by adhering to a systematic decision-making process in the dynamic and ever-changing agricultural world.

**REFERENCES:**

- [1] J. P. Vasconez, J. Delpiano, S. Vougioukas, and F. Auat Cheein, Comparison of convolutional neural networks in fruit detection and counting: A comprehensive evaluation, *Comput. Electron. Agric.*, 2020, doi: 10.1016/j.compag.2020.105348.
- [2] S. S. Padhi, R. K. Pati, and A. Rajeev, Framework for selecting sustainable supply chain processes and industries using an integrated approach, *J. Clean. Prod.*, 2018, doi: 10.1016/j.jclepro.2018.02.306.
- [3] E. S. Ersoz, N. F. Martin, and A. E. Stapleton, On to the next chapter for crop breeding: Convergence with data science, *Crop Sci.*, 2020, doi: 10.1002/csc2.20054.
- [4] M. Walton *et al.*, Applying one health methods to improve cocoa production in Bougainville: A case study, *One Heal.*, 2020, doi: 10.1016/j.onehlt.2020.100143.
- [5] D. van Vugt and A. C. Franke, Exploring the yield gap of orange-fleshed sweet potato varieties on smallholder farmers' fields in Malawi, *F. Crop. Res.*, 2018, doi: 10.1016/j.fcr.2017.11.028.
- [6] T. Baasch and J. Dual, Acoustofluidic particle dynamics: Beyond the Rayleigh limit, *J. Acoust. Soc. Am.*, 2018, doi: 10.1121/1.5021339.
- [7] L. Eash *et al.*, Factors contributing to maize and bean yield gaps in Central America vary with site and agroecological conditions, *J. Agric. Sci.*, 2019, doi: 10.1017/S0021859619000571.
- [8] B. J. Clemens *et al.*, Marine biology of the pacific lamprey *Entosphenus tridentatus*, *Reviews in Fish Biology and Fisheries*. 2019. doi: 10.1007/s11160-019-09578-8.
- [9] V. S. JADHAV, L. V. SUKANE, and V. H. BAJAJ, Selecting the best alternatives of multi - criteria decision making problem based on fuzzy TOPSIS method, *Int. J. Commer. Bus. Manag.*, 2015, doi: 10.15740/has/ijcbm/8.1/1-6.
- [10] R. M. Zulqarnain, X. L. Xin, M. Saeed, F. Smarandache, and N. Ahmad, Generalized Neutrosophic TOPSIS to Solve Multi-Criteria Decision-Making Problems, *Neutrosophic Sets Syst.*, 2020, doi: 10.5281/zenodo.4300512.
- [11] U. Nzotcha, J. Kenfack, and M. Blanche Manjia, Integrated multi-criteria decision making methodology for pumped hydro-energy storage plant site selection from a sustainable development perspective with an application, *Renew. Sustain. Energy Rev.*, 2019, doi: 10.1016/j.rser.2019.06.035.
- [12] F. H. Barron, Selecting a best multiattribute alternative with partial information about attribute weights, *Acta Psychol. (Amst.)*, 1992.



## CHAPTER 4

### EFFECTIVE ORGANIZING AND STAFFING: ESSENTIAL MANAGEMENT CONCEPTS

---

Dr. Mukesh yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### ABSTRACT:

Organizational management, particularly in agribusinesses, involves organizing and staffing. Organizing involves creating a clear structure, identifying responsibilities, and coordinating activities, ensuring efficient resource allocation, communication, and collaboration. Staffing focuses on hiring, training, and managing employees, determining competences and abilities, choosing competent candidates, and offering training and development opportunities. Efficient organization and staffing procedures in agriculture improve output, expedite processes, and foster a pleasant workplace. Clear organizational structures encourage decision-making, teamwork, and efficient workflow. Staffing with capable and driven personnel boosts performance, innovation, and a competitive edge. Combining organizing and staffing processes improves overall performance, achieving organizational objectives, boosting operational effectiveness, and promoting sustainable growth. In a competitive market, effective organization and staffing strategies are crucial for agribusinesses' long-term success and survival.

#### KEYWORDS:

Authority, Employees, Management, Organizational, Work.

#### INTRODUCTION

Organizing is management's second job function. A manager may organize her staff and resources if she has a strategy in place. The success of a business may be significantly impacted by this crucial phase. The organizational design of a company not only influences how effectively personnel make decisions, but also how effectively they solve issues. Over time, these reactions have the power to create or ruin an organization. The organizational structure also affects how people feel about their jobs. A business's capacity to compete in a global economy is increased by an organizational structure that minimizes costs and maximizes efficiency. Due to these factors, several companies have made changes to their organizational structures recently in an effort to increase profitability and gain a competitive advantage. An organization requires individuals with the necessary talents, knowledge, and skills to fill out its structural design [1]–[4]. Because people may either enhance or diminish an organization's reputation for high-quality goods and services, people are its most valuable resource.

Additionally, in order to be competitive, a business must adapt to change well. An company may survive a time of transition and maintain its success in the future with the help of the proper personnel. Effective human resource management is essential to the success of every firm since it is important to hire and keep a dedicated and qualified personnel. When managers have their plans in place, they must then coordinate the resources needed to carry them out. The second of the four universal management roles, organizing, is the act of allocating and coordinating tasks to create an orderly utilization of resources. The organizing process turns goals into reality by

strategically allocating personnel and assets within the organizational structure, a framework for making decisions. The definition of the organizational structure is the list of official duties delegated to people and departments, The formal reporting arrangements, including the chain of command, the scope of management supervision, the number of levels in the hierarchy, and the responsibility for making decisions, the development of procedures to guarantee efficient cross-departmental coordination of staff, The hierarchy, or vertical structure, of the organization is supported by the organizational structure. The visual depiction of this vertical structure is an organizational chart [5]–[7].

### The Organizational Process

Planning and organizing both need considerable thought and execution. This method entails identifying the activities that must be completed in order to achieve the objective, distributing those duties to persons, and placing those individuals in an organizational structure to facilitate decision-making. The final product of the organizing process is an organization, which is a cohesive whole made up of pieces working in unison to carry out duties and accomplish goals in an effective and efficient manner. All team members should be aware of their roles in a work environment created by a properly executed organizing procedure. Confusion, dissatisfaction, a loss of efficiency, and reduced efficacy might arise from a poorly executed organizing procedure.



**Figure 1: Representing the Organizational Process components [The investors Book].**

1. **Review Plans and Objectives:** The exact tasks that must be carried out in order to accomplish goals are called objectives. The actions required to accomplish such goals are shaped by plans. Managers must first review plans and keep doing so as they alter and new goals are created.
2. **Determining the Work Activities Necessary to Accomplish Objectives:** Although some managers might find this duty to be burdensome, it doesn't have to be. Managers simply make a list of all the activities that must be completed in order to achieve corporate objectives and examine them.



3. **Work Activities:** Sort and classify the required work activities into manageable groups. Four forms of departmentalization—functional, geographical, product, and customer—can be used by a management to organize tasks.
4. **Assign Activities and Delegate Authority:** The stated job activities are delegated by managers to certain employees. They also grant each person the authorization to do the responsibilities that have been given to them.
5. **Establish A Connection Hierarchy:** An organization's overall vertical decision-making and horizontal coordinating linkages should be identified by a manager. The linkages should then be diagrammed by the management using the organizational chart.

### Concepts of Organizing

Half of the concepts will be discussed in the next section.

1. **Work Specialization:** One well-liked organizational idea is based on the core idea that allowing people to specialize will increase productivity. The degree to which organizational duties are separated into distinct occupations is referred to as work specialization, often known as division of labor. Each department's employees solely carry out the duties associated with their specialized duty. When specialization is extensive, workers become experts in a single activity, such as operating a specific equipment on an assembly line in a factory. Jobs are frequently brief, yet workers are capable of completing them quickly. In contrast, the outcomes would be wasteful if a single worker in a factory manufactured a whole car or carried out several unconnected tasks in a bottling plant. Despite the obvious benefits of specialization, many businesses are abandoning this idea. Employees that are overly specialized are isolated and only conduct menial, uninteresting work. Additionally, his specific expertise can vanish as well if he departs the organization. Many businesses are growing employment to give employees more challenges and building teams so they may switch between different tasks.
2. **Chain of Command:** The chain of command is a continuous line of command that connects every individual in an organization and establishes who is responsible for what. Unity of command and the scalar principle are the two basic concepts of this chain. Unified command According to this rule, a worker should only report to one supervisor, and that supervisor should be the only one. No employee should have more than two supervisors. Otherwise, the worker can simultaneously receive requests or priorities from numerous supervisors that clash, putting the worker in an impossible scenario. But on sometimes, a company willfully disrupts the chain of command, like when a project team is formed to work on a unique project. In such circumstances, team members are required to report to both a team project leader and their immediate supervisor. Another instance is when a sales representative works in the home office and reports to both the immediate district supervisor and the marketing expert who is in charge of organizing the launch of a new product. These are the exceptions to the norm, though, not the rule itself. They take place in unique situations and typically just inside a certain kind of work group. The majority of the time, however, management should make sure that each person has one boss, and only one boss, to whom they directly report whether assigning work to individuals or grouping assignments.

3. **Authority:** To make decisions, give instructions, and distribute resources in order to achieve organizational goals, a manager must have official, legal authority. The authority of a manager is specified in the job description. Organizational authority is underpinned by three key ideas. Anyone holding the same organizational position has the same authority, which is based on position.

Subordinates respect authority. Because they feel that managers have a legal authority to give commands, subordinates obey. The vertical hierarchy distributes authority downward. More formal power is granted to posts at the top of the hierarchy than to ones at the bottom. The three different sorts of authority are as follows. A manager who has line authority is able to control the work of their staff members and make numerous decisions alone. Line managers are always in charge of crucial tasks, like sales, and they have the authority to give commands to subordinates lower on the organizational chart. Staff authority serves to complement line authority by providing guidance, support, and assistance; nevertheless, this kind of power is often constrained. The department head's assistant, for instance, has staff authority since that person serves as an extension of that authority. These helpers may provide recommendations and advise, but they are not required to be followed. The assistant may also be granted the power to take action by the department head, such as the power to approve memoranda or expenditure reports.

In these situations, the boss's line authority governs the directions that are provided. Functional authority is the control given to a person or organization over certain tasks carried out by employees in other departments. Depending on how far their functional authority extends, staff managers may be able to give instructions lower in the chain of command. For instance, managers in a manufacturing facility could discover that they have line authority over their direct reports, but that someone in corporate headquarters might also have line authority over certain of their actions or choices. Delegation is a notion connected to authority. The downward transfer of power from a manager to a subordinate is called delegation. The majority of firms nowadays urge managers to distribute power in order to provide them the most freedom possible to satisfy client requirements. Delegation also results in empowerment since workers are free to provide suggestions and carry out their tasks as effectively as possible. This participation can improve an individual's job happiness and typically leads to improved job performance.

Managers that don't delegate leave their staff underutilized since they do everything themselves. The success of a management depends on their ability to delegate. If managers wish to properly assign tasks to their teams, they must follow four procedures. Clearly delegate work to each team member. The management needs to make sure that staff members are aware that they are ultimately in charge of completing particular tasks. Give team members the appropriate level of power to complete tasks. An employee typically receives authority appropriate to the work. A fundamental organizational concept cautions managers against assigning tasks to subordinates without first providing them the power to carry them out. It is doable yet challenging to complete the work when an employee has minimal power and accountability for the task output. Without authority, the subordinate is forced to rely on chance and persuasion in order to perform to expectations. When a worker's authority exceeds their level of accountability, they run the risk of turning into tyrants who abuse their power for selfish ends. Ensure that team members take ownership of their roles. Authority has a reverse side called responsibility. Responsibility is the obligation to carry out the work or activity that has been delegated to an employee. Authority is delegated by the supervisor, but accountability is shared, which is a crucial distinction between the two. A subordinate who has been given power is able to commit to things, utilize things, and

do things in accordance to the tasks they have been given. The responsibility established by this delegation, however, is shared rather than transferred from the supervisor to the subordinate. A supervisor will always be partially responsible for the job done by lower-level units or people. Members of the team must understand that they are responsible for their projects. Accountability entails taking responsibility for one's actions and dealing with the fallout. Team members could be required to inform and defend work results to supervisors. By keeping an eye on performances and recognizing positive results, managers may instill responsibility into their organizational structures.

Planning, which is necessary for delegation, takes time. Managers have been known to remark things like, By the time I explain this task to someone, I could do it myself. This manager is oblivious to the possibility that the time invested initially educating someone to do a task might ultimately result in a significant time savings. Once an employee has mastered a task, the management won't need to spend the time again teaching them how to perform it. The procedure then moves along more smoothly as a result of this. It's possible for managers to just lack faith in their employees' talents. A circumstance like this encourages the mentality If you want it done well, do it yourself. If supervisors believe their employees lack the necessary skills, they must give them the necessary training so that everyone feels confident carrying out their responsibilities. Dual responsibility is experienced by managers. Managers are responsible for both their own behavior and that of the employees they supervise. The manager is ultimately accountable for a subordinate's inability to complete a job or bad performance on it. Conversely, if a subordinate succeeds, the boss benefits from it as well, which increases the department's productivity. Finally, managers who are unsure about their contribution to the company may avoid delegation. However, managers must understand that as their employees develop in skill and productivity, they become more valuable.

Despite the alleged drawbacks of delegation, a manager might empower subordinates through efficient delegation to boost the performance of his or her work groups. Few managers achieve long-term success without knowing how to assign well. The term span of control also known as span of management describes the number of employees who are directly under a single manager. Theorists have been looking for the perfect span of control for many centuries. No ideal number of employees for a manager to handle emerged, so they focused on the more general question of whether the span should be wide or tight. The scope of control is often broad when both the boss and the subordinates are highly competent. There are defined standard operating procedures inside the company. We don't expect many new issues. When a manager only has a few direct reports, the management span is small. When Workers are apart from one another physically, the spread should be small. In addition to overseeing employees, the manager has a lot of work to accomplish. The supervisor and employees must communicate often. There are always new issues. Remember that within the same organization, the management responsibilities may vary by department [8]–[11].

## **DISCUSSION**

### **Centralization versus Decentralization**

The degree to which an organization is centralized or decentralized is determined by the overall arrangement of power within that organization. A centralized organization deliberately seeks to concentrate power at the top. In a decentralized company, management intentionally works to

distribute power to the lowest levels of the hierarchy. The degree to which a corporation is centralized or decentralized might depend on a number of different variables.

### **Potential Factors**

The potential factors are as follows:

1. The environment outside of which a company works. It is more likely that senior management will delegate significant decision-making to low-level managers in a complicated and uncertain setting. After all, because they are more likely to interact directly with clients and staff, low-level managers are closer to the issues. As a result, they can identify issues and concerns more easily.
2. The decision's actual character. The inclination to centralize decision-making is higher the riskier or more significant the choice.
3. A low-level manager's skills. Top managers will be hesitant to decentralize if these managers lack the ability to make sound decisions. Decentralization is encouraged by strong low-level decision-making abilities.
4. The managerial history of the company. The typical centralization or decentralization practices of an organization are likely to continue in the future.

### **Organizational Design Defined**

Few things last for a very long time without being altered. In today's evolving society, even well-known company names, well-known slogans, and timeless music must be updated. Organizations must adapt to changes in their environments just like individuals do. Managers must be ready and able to cope with the problems of change, whether it is technological changes to fulfill client expectations or policy adjustments to support staff growth. The arrangement and interactions of jobs and departments within an organization establish its structure. The establishment or modification of an organization's structure is known as organizational design. A company's organizational structure reveals its attempts to adapt to changes, incorporate new ideas, foster cooperation, and provide flexibility.

Setting up a business is challenging. Making a plan a reality is the next stage for an organization. In many respects, the key elements of organizational structure are similar to the crucial pieces of a jigsaw puzzle you have to identify them one at a time. Staffing, often known as human resource management (HRM), is the managerial task concerned with finding, developing, monitoring, and rewarding personnel. Despite the fact that some of these tasks may be carried out by human resource experts in large businesses, all managers are effectively human resource managers. A company's workforce may be transformed by good HRM practices into a devoted and motivated team that can successfully manage change and accomplish organizational goals. Any manager may lead more skillfully if they comprehend the foundations of HRM. Each manager has to be aware of the following three guidelines:

1. Human resource managers are all managers.
2. Employees are a company's most valuable asset; they provide it a competitive edge over buildings or equipment.
3. The goal of human resource management is to match the objectives of the employer with the needs of the employee.
4. Finding the Needs for Human Resources.

Finding the appropriate personnel via careful planning, recruiting, and selection is the first step in the continual process of staffing. However, staffing doesn't end with hiring; management must maintain and develop its workforce through training, evaluation, compensation, and implementation of employment choices that impact things like promotions, transfers, and layoffs.

### **Human Resource Planning**

Human resource planning comes first in the hiring process. In order to produce descriptions of all occupations and the credentials required for each position, a job analysis is the first step in the human resource planning process. A written declaration of what a jobholder does, how it's done, and why it's done is called a job description. It often depicts the nature, setting, and working circumstances of the profession. The minimal acceptable qualifications an incumbent must possess to properly execute a particular job are specified in the job specification. It outlines the knowledge, talents, and skills required to carry out the task successfully. An inventory of human resources is conducted after a job analysis to record skills and preferences. The firm then creates a human resource projection to determine its future personnel needs based on its strategic initiatives and average attrition. The organization's staffing requirements are then compared to the forecast and inventory to assess if existing employees will be able to cover those demands, or if management will need to hire new hires or fire existing ones.

### **Recruiting Strategies**

All of the strategies a business may employ to draw in a pool of qualified individuals are referred to as recruitment. Remember that every business has a different approach to hiring. Although university recruitment may come to mind as a normal recruiting strategy, many companies actually employ internal recruiting or policies that promote from within to fill their high-level roles. When roles become available, they are advertised and current employees are given precedence. An internal search is less expensive than an external one. Because it gives workers rather than outsiders options for professional progression, it also results in increased employee dedication, development, and happiness. Many external recruitment tactics are available if internal sources are unable to deliver a suitable applicant, including the following:

1. Advertising in newspapers.
2. Private, public, or temporary employment agency.
3. Executive searchers, often known as headhunters.
4. Unions.
5. Employee recommendations.
6. Programs for internships.
7. Internet job boards.

However, recruitment involves more than just luring applicants; managers also need to be able to screen out the best ones. A manager can start the hiring process after they have a pool of candidates.

### **Selection Techniques**

1. **Fillable Applications:** The application form is typically the initial stage in the hiring process for businesses. In addition to providing data for personnel research, application forms keep track of important information about job seekers. The answers provided on the application may be used by interviewers to formulate follow-up inquiries. These

forms range from requests for the most basic data names, addresses, and phone numbers to detailed personal history profiles that include candidates' qualifications, accomplishments, and work history.

2. **Testing:** Testing is another technique for choosing future employees who will be competent. Despite fluctuations over the previous two decades, more than 80% of companies still utilize testing as a component of their hiring process, according to recent surveys. Once more, these tests must be dependable and valid. As a result, a manager must ensure that the exam only evaluates candidate traits that are pertinent to the position. Most examinations concentrate on certain abilities and skills connected to a particular vocation, such as arithmetic or motor skills.
3. **Interviews:** The interview, a formal, in-depth discussion held to gauge a candidate's acceptability, is another often utilized selection process. The interviewer generally aims to respond to three general inquiries:
  - a. Can the candidate perform the job?
  - b. Can the candidate complete the task?
  - c. How does the candidate stack up against the other candidates being considered for the position?

Due to their adaptability, interviews are common. They may be modified for managerial, staff, and employees of all ability levels. Additionally, they enable a two-way informational exchange in which both the interviewer and the candidate may learn about the other party. However, there are certain drawbacks to interviews. The validity and dependability issues are the ones that are the most obvious. When an interview's results are interpreted consistently from interview to interview, dependability is high. When the same questions are asked repeatedly, reliability is increased. Few departments employ standardized questions, therefore the veracity of interviews is frequently called into doubt. Planning the interviews, building rapport, leaving time for questions at the end of the interview, and analyzing the interview as soon as possible after it is over are all ways that managers may increase the reliability and validity of selection interviews.

### CONCLUSION

In summary, planning and staffing are essential elements of successful management in the agriculture sector. In order to maximize resource allocation and allow effective operations, organizing creates a clear framework and organizes activities. The relevant individuals with the essential abilities and talents to contribute to the success of the agribusiness are present thanks to effective staffing. For fostering cooperation, fostering a healthy work atmosphere, and increasing efficiency, organizing and staffing processes are critical. When done well, staffing and organizing may help the agriculture industry accomplish its objectives while also improving operational effectiveness and long-term sustainability. Two more crucial selection methods that support the hiring choice are reference checks and physicals. Employers can verify information provided by an applicant by verifying references. To get information on potential applicants, meanwhile, is sometimes challenging due to privacy rules and company worries about libel charges. Examinations for illnesses that the applicant may not be aware of help discover health issues that promote absenteeism and accidents.

### REFERENCES:

- [1] Health Services Management, *Health Care Manage. Rev.*, 1979, doi: 10.1097/00004010-197924000-00015.



- [2] M. Somantri, RESEARCH AREAS IN THE DEVELOPMENT OF EDUCATIONAL MANAGEMENT, *Int. J. Educ. Manag. Innov.*, 2020, doi: 10.12928/ijemi.v1i2.1684.
- [3] A. Kadir, S. Syahrul, and L. Fauzia, Problems identification in application of management functions in management of nursing services: A descriptive study of a public hospital in South Sulawesi Province, *Enferm. Clin.*, 2020, doi: 10.1016/j.enfcli.2019.07.067.
- [4] S. C. J. Palvia and S. S. Sharma, E-Government and E-Governance: Definitions/Domain Framework and Status around the World, *Found. E-government*, 2007, doi: 10.3991/ijac.v5i1.1887.
- [5] W. B. Utami, Y. H. Amir, P. Ponoharjo, and F. Aulia, PENGEMBANGAN MODEL MANAJEMEN KURIKULUM 2013, *QUALITY*, 2019, doi: 10.21043/quality.v7i2.5792.
- [6] H. Wehrich and H. Koontz1, Major Principles or Guides for the Managerial Functions of Planning, Organizing, Staffing, Leading, and Controlling, *New York McGraw-Hill*, 2008.
- [7] D. F. Wulandari and H. Handiyani, Pengembangan Dokumentasi Keperawatan Berbasis Elektronik Di RS X Kota Depok Dengan Menggunakan Teori Perubahan Lewins, *J. KEPERAWATAN Glob.*, 2019, doi: 10.37341/jkg.v4i1.66.
- [8] A. C. Chu and C. C. Yang, Fiscal centralization versus decentralization: Growth and welfare effects of spillovers, Leviathan taxation, and capital mobility, *J. Urban Econ.*, 2012, doi: 10.1016/j.jue.2011.10.003.
- [9] H. Kubicek, Introduction: conceptual framework and research design for a comparative analysis of national eID Management Systems in selected European countries, *Identity Inf. Soc.*, 2010, doi: 10.1007/s12394-010-0052-0.
- [10] C. Mazzaferro and A. Zanardi, Centralisation versus decentralisation of public policies: Does the heterogeneity of individual preferences matter?, *Fisc. Stud.*, 2008, doi: 10.1111/j.1475-5890.2008.00068.x.
- [11] S. G. Lowrie, Centralization versus Decentralization, *Am. Polit. Sci. Rev.*, 1922, doi: 10.2307/1943727.

## CHAPTER 5

### LEADING, LEADERSHIP, AND MARKETING TECHNIQUES: MANAGEMENT ESSENTIALS

---

Dr. Mukesh yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### ABSTRACT:

Effective leadership and marketing strategies are crucial for businesses, especially in the agriculture industry, to succeed and thrive. Leadership involves creating a clear vision and strategy, defining target audiences, developing marketing strategies, and coordinating activities with corporate goals. Effective team management is essential, as is making informed decisions based on market data, consumer insights, and industry trends. Innovative leaders can adapt to changing market conditions and new technical developments, promoting experimentation and new marketing strategies. Marketing techniques include understanding consumer requirements, tastes, and habits through market research, creating targeted campaigns, and establishing a distinctive brand identity. Digital marketing, including websites, social media, email marketing, and search engine optimization, helps businesses reach and interact with target audiences. Advertising and promotional strategies, such as print, radio, and television, can increase awareness and spark interest in goods and services. Customer relationship management (CRM) focuses on fostering client connections through efficient communication, individualized advertising, and first-rate customer support. Establishing trusting customer relationships leads to patronage, repeat sales, and favorable word-of-mouth.

#### KEYWORDS:

Customer, Leadership, Marketing, Management, Team.

#### INTRODUCTION

Establishing direction and encouraging people to follow it are both aspects of leadership. However, despite how straightforward this concept may seem, there are several variants and diverse areas of concentration in leadership. The idea that leaders are persons who, via their actions, drive a group of people toward a similar or shared purpose is present in all definitions of leadership. According to this concept, influence is a key component of leadership. Although crucial, the difference between a leader and leadership may be unclear. Leadership is the task or action carried out by the leader, who is an individual. Regardless of how they behave in such roles, the terms leader and manager are sometimes used interchangeably to describe those who have formal positions of control inside an organization. The fact that a manager is a formal leader in an organization does not, however, imply that the manager actually practices leadership [1]–[4].

Is there a difference between management and leadership as a function and activity? This is a topic that business experts frequently disagree on. John Kotter, a Harvard professor, claims that leadership is about coping with change while management is about managing complexity. He adds that although leadership is a crucial component of management, it is just one of several; the others include planning, organizing, staffing, and managing. A certain amount of predictability



and order is produced through management. Change results from leadership. According to Kotter, the majority of organizations are both overmanaged and underled. He believes that for a company to operate at its best, both excellent management and strong leadership are required [5]–[8].

### **Leadership Traits**

There are many theories that attempt to define what makes a good leader. The first ideas make an effort to pinpoint the characteristics or abilities that all successful leaders share. Theories and theorists of today place more emphasis on the actions of leaders than on their traits. A multitude of characteristics, such as ambition, vigor, the desire to lead, self-confidence, and intellect, are frequently seen in leaders. Even while some characteristics are advantageous, they do not ensure that a person will make a good leader. The premise of the characteristic approach is that certain people are born leaders and are equipped with particular features that distinguish them from other people. This study contrasted successful and failed leaders to examine how their physical traits, personalities, and capacities varied. Six key attributes that the majority of good leaders share were discovered in a recent examination of leadership traits:

1. Drive Leaders have high aspirations and take charge.
2. Leaders are ready to assume control and have a desire to lead.
3. Leaders are sincere and carry out their commitments.
4. Leaders are bold, decisive, and willing to take chances. They promote trust and dedication to a goal while acknowledging their errors. Leaders have emotional stability as opposed to being irrationally daring.
5. Leaders are cognitively adept, sensitive, and clever, but they are not always geniuses. They exhibit intellectual prowess, sound judgment, and the capability for strategic thought.
6. Leaders frequently possess technical knowledge of their industries.

Instead of truly identifying a successful or ineffective leader, traits are better at predicting whether a manager would be a good leader. Leadership needs vary because workplace circumstances differ. As a result, instead of focusing on what effective leaders are, experts started to look at what they do.

### **Leadership Skills**

While a leader's attributes are what make them who they are, their talents are their knowledge and competences. Depending on the circumstance, a leader may require different skills. These competences rely on a number of variables, including:

1. The quantity of followers of the leader.
2. The depth of a leader's capacity for leadership.
3. The character and values of the leader.
4. The history of the group or organization, including whether it is for profit or not, new or long-established, big or tiny.
5. The specific culture or ideals and accompanying actions of the person leading.

Leadership-training programs often suggest standards for making choices, solving issues, using power and influence, and developing trust in order to aid managers in honing these abilities. One of the most well-known modern management theorists, Peter Drucker, gives a practical approach

to leadership in the workplace. He thinks that consistency, which is founded on what he calls good old-fashioned hard work, is the key to effective leadership, and that great leaders have the following three skills:

- a. To develop a feeling of goal and define it. Good leaders establish objectives, priorities, and standards and ensure that they are not only conveyed but also upheld.
- b. To gain and maintain other people's trust. Good leaders conduct in a way that is consistent with their words and generate trust among their followers.

Effective leadership, in Drucker's words, is not based on being clever; it is based principally on being consistent. Simply described, leadership involves setting a course of action and persuading others to follow it. Because no two great leaders are identical, no comprehensive list of leadership qualities and abilities exists. What matters is that leaders have some favorable traits that enable them to be successful managers at any level within a company.

### **Leadership Style**

Whatever their qualities or abilities, leaders perform their jobs in a broad range of approaches. There are authoritarian leaders. Many people are democratic. Some include participation, while others are passive. The situation, especially where the company is in its life cycle, might have an impact on the leadership style. These are typical leadership philosophies. The manager controls the team and makes all the decisions. Team members typically passively reject this strategy, necessitating constant leadership push and guidance to move things forward. In general, this strategy does not work well for getting a team to perform at its best. However, this approach could be suitable when immediate action is required or when subordinates truly like this approach. While still exercising control, the manager consults the team to include the subordinates in decision-making, which promotes employee ownership of the outcomes. A competent participatory leader promotes participation and makes judicious delegations, but he or she never loses sight of the reality that it is ultimately up to them to exercise effective leadership.

In order to get the most performance out of the team as a whole, the leader cherishes team meetings and member feedback. He or she also makes the most of each person's strengths. The participatory leader inspires team members by giving them the freedom to make their own decisions; they are led with a light hand. On the flip side, team members may perceive a participatory leader as uncertain and believe that all decisions should be made by consensus. Let things be also known as free rein. The team leader encourages team members to work freely and solve their own problems while being accessible for guidance and support in this hands-off approach. The team's leader often has minimal authority over the team members, thus they are left to choose their responsibilities and do their tasks without personal involvement. This strategy typically results in the team being aimless and unmotivated. Laissez faire is typically only applicable in situations when the team is highly talented, highly driven, and has a track record of providing good work. Many experts feel that a manager's views, values, and presumptions have a significant role in determining their overall leadership style. Managers' leadership philosophies are influenced by how they address the following three factors: task orientation, decision-making, and motivation.

**Motivation.** By using several methods of motivation, leaders may motivate people to accomplish their goals. They may be motivated by either good or negative factors. A positive management

style improves employee security and responsibility and makes use of praise, recognition, and awards. A negative approach involves reprimands, threats of termination, suspension, and punishment. Creating decisions. The second aspect of a manager's leadership style is the level of decision-making power they provide their staff, which can range from no involvement to group decision-making. Employee and task orientation. The manager's opinion on the most efficient approach to complete the task is the final component of leadership style. Task-oriented managers place a strong emphasis on getting work done by utilizing improved tools or procedures, managing the workplace, allocating and organizing tasks, and keeping track of performance. Managers that value employee orientation place a strong emphasis on completing tasks while attending to the requirements of subordinates. The key areas of concentration for the employee-oriented manager are problem resolution, trust, teamwork, and positive connections [9]–[11].

Keep in mind that managers may have a combination of task and employee orientations. Robert Blake and Jane Mouton's managerial grid model, identifies five leadership styles with differing priorities for people and output. A manager's main goal in the impoverished style, which is represented by point in the lower left corner of the grid, is to avoid difficulty. It is characterized by a lack of care for both people and output.

The country club style, which can be found at grid point in the upper left-hand corner, is characterized by a high concern for people and a low concern for production. Its main goal is to create a safe and comfortable environment where managers are confident that their subordinates will respond positively. The authoritarian style, which is represented by point in the lower right corner of the grid, is characterized by a high concern for output and a low care for people. Its main purpose is the accomplishment of the organization's objectives, and employee needs are irrelevant to this process. The middle-of-the-road style, located at point on the grid, strikes a balance between employees' demands and the company's productivity goals. Its major purpose is to keep staff morale high enough to complete the organization's task. The team style, located at point , in the top right corner of the grid, is defined by great concern for people and productivity. Its main goal is to create cohesiveness and encourage a sense of commitment among employees [2], [3].

## DISCUSSION

The term market is derived from the Latin word markets, which refers to a place for trading goods or conducting business. Market in an economic sense means one of two things:

1. A space where factors that affect pricing operate.
2. A market where the forces of supply and demand converge to set a single price.
3. The term market refers to a commodity or commodities, as well as buyers and sellers who participate in a free exchange of goods and services.

Thus, the definition of a market is based on the existence of the fundamental dynamics of supply and demand, and it is not necessarily limited to a specific geographic area.

### Elements of The Market

1. An item or a commodity for trade.
2. Buyers and sellers are real.
3. The interaction of buyers and sellers in business.
4. The location of the transaction.

## Marketing and Marketing Management

Any time a person or organization tries to exchange something valuable with another person or organization, marketing is taking place. Marketing is therefore fundamentally a transaction or trade.

1. Marketing, in its broadest definition, encompasses actions created to produce and facilities meant to fulfill human or organizational much or want.
2. The goal of marketing is to recognize and satisfy societal and human needs.
3. Meeting needs profitably is the shortest definition.
4. United States Marketing Association For an organization to create, communicate, and deliver value to consumers, as well as to manage customer relationships in a way that benefits the company and its stockholders, marketing is a function.

In order to accomplish organizational goals, marketing is a comprehensive system of commercial operations meant to develop, advertise, and distribute items that fulfill consumer needs to target audiences. Two important consequences flow from this definition.

1. **Focus:** Every aspect of your business operations should be customer-focused. The needs of the customer must be understood and met.
2. **Duration:** Marketing should begin with the notion of a product that satisfies consumer needs and should continue until all of the customer's needs are met, which may need a temporary exchange of goods.

Marketing management is the creation, delivery, and communication of better customer value in order to choose target markets and acquire, retain, and develop a customer base.

## What is Marketed?

Products, services, events, experiences, people, locations, properties, organizations, information, and ideas are the top ten categories of entities that are marketed. Below are some instances of these entities.

1. Physical commodities make up the majority of production and marketing activities in the majority of nations. such is a car, television, or machinery.
2. Services like those provided by hotels, hospitals, attorneys, barbers, banks, and insurance firms.
3. Events, include trade exhibitions, artistic presentations, movie awards, the Olympics, and world cups.
4. A company may design, arrange, and sell experiences by coordinating a variety of services and products. Examples include amusement parks, water parks, and hotels with a rural feel in Mumbai.
5. Celebrity marketing is a significant industry. CEOs, singers, and artists all benefit from celebrity marketing. Examples include Amitabh Bachchan, Aamir Khan, and Sachin Tendulkar.
6. To draw tourists, cities, states, regions, and countries engage in active competition. For instance, Kerala is sold as God's own country in the software sector, while India is promoting itself as a tourist destination with the Incredible India advertising campaign.

7. Intangible ownership rights to real land or financial assets like stocks and bonds are referred to as properties.
8. Businesses actively try to create a strong, positive, and distinctive image in the eyes of target publics. Examples include universities and art organizations.
9. Books, schools, and colleges basically generate, sell, and transmit information to parents, students, and communities for a fee.
10. Every product on the market has a fundamental concept. AIDS education, family planning, anti-smoking campaigns, etc.

### Evolution of Marketing Concepts

What marketing philosophy should a business follow? More and more, marketers conduct their business in accordance with a holistic marketing philosophy. The development of previous marketing concepts or ideas is reviewed here. One of the earliest business notions is production. According to this theory, buyers favor readily available and affordable goods. Production-oriented company managers focus on attaining high production effectiveness, low costs, and widespread distribution.

**Product Idea:** This idea contends that consumers favor goods with the highest levels of performance, quality, or novel characteristics. Managers in these organizations put a priority on creating outstanding goods and continuously enhancing them. **Selling Concept:** According to this, if businesses and customers are left alone, they won't purchase enough of the organization's goods. Therefore, the organization must make a vigorous effort at marketing and promoting. The selling technique is most actively used with unintended purchases items that consumers often do not consider buying like insurance and encyclopedias. Most businesses also engage in idea sales when they are overcapacity. Instead of producing what the market demands, their goal is to sell what they produce.

**Marketing Concept:** Business switched to a customer-centered and sense-and-respond mindset from a product-centered, make-and-sell attitude. The goal of the work is to identify the best items for your customers, not the best consumers for your products. For instance, Dell Computers doesn't build the ideal computer for its intended market. Instead, it offers product platforms on which each customer may personalize the computer characteristics he wants. The conception, planning, and execution of marketing programs, processes, and activities that take into account their breadth and interdependencies are the foundation of the holistic marketing idea. Thus, holistic marketing is a strategy that makes an effort to acknowledge and balance the extent and complexity of marketing efforts. Relationship marketing, integrated marketing, internal marketing, and performance marketing are the four key elements that define this idea.

**Relationship Marketing:** It seeks to create lasting connections with important stakeholders in order to attract and keep business. Customers, workers, marketing partners channels, suppliers, distributors, dealers, and agencies, and members of the financial community shareholders, investors, and analysts) are the four main components of relationship marketing. In order to design policies and plans that balance returns to all important stakeholders, marketers must acknowledge the need to foster prosperity among all of their constituencies. The goal of integrated marketing is to generate, convey, and provide value to customers. Marketing operations and initiatives must be fully connected. The four basic categories of marketing mix tools, or the four Ps of marketing product, pricing, location, and promotion, are how marketing activities are categorized.

Internal marketing entails making sure that everyone in the organization, especially senior management, adheres to sound marketing practices. Hiring, educating, and inspiring competent staff members who desire to provide excellent customer service is the responsibility of internal marketing. A two-level internal marketing strategy is required. Sales force, advertising, customer service, product management, and marketing research all need to cooperate on some degree. Second-level divisions must embrace marketing and think customer at the same time. As a result, it needs horizontal alignment with our departments and vertical alignment with top management.

**Performance Marketing:** Holistic marketing takes into account issues with legal, moral, social, and environmental implications in addition to resolving problems and analyzing the financial returns to businesses through marketing activities and programs.

### CONCLUSION

To sum up, marketing and leadership are two interrelated components that are essential for the success of all kinds of organizations, including those in the agriculture industry. Successful leadership gives the vision, direction, and strategic focus required for marketing initiatives to succeed. Leaders make wise judgments, empower their staff, and promote an innovative and adaptable culture. On the other side, marketing concepts give firms the structure and tactics they need to comprehend client wants, advertise their goods or services, and create distinctive brand identities. Marketing includes a variety of strategies that help companies contact and interact with their target consumers, including market research, branding, digital marketing, advertising, and customer relationship management. Agribusinesses may develop their market presence, set themselves apart from rivals, and draw and keep clients by fusing strong leadership with efficient marketing strategies. Businesses can negotiate the dynamic market environment, adjust to shifting consumer tastes, and promote sustainable growth in the agriculture sector with the help of a strong leadership strategy that emphasizes innovation, teamwork, and adaptation.

### REFERENCES:

- [1] Marketing Insights from A to Z: 80 Concepts Every Manager Needs to Know, *J. Consum. Mark.*, 2004, doi: 10.1108/07363760410542200.
- [2] K. Jamil, M. A. Ali, and N. Akram, A Study of Factors Affecting Consumer<sup>TM</sup>s Willingness to buy Counterfeit Products, *Inf. Manag. Bus. Rev.*, 2018, doi: 10.22610/imbr.v9i6.2038.
- [3] H. Fertig, A view from the edge, *Physics (College. Park. Md.)*, 2009, doi: 10.1103/physics.2.15.
- [4] I. Diachuk, I. Britchenko, and M. Bezpartochnyi, Content marketing model for leading web content management, 2019. doi: 10.2991/icseal-19.2019.21.
- [5] Focus on Authors, *Mark. Sci.*, 2013, doi: 10.1287/mksc.2013.0819.
- [6] L. Drugus, Experience Based Management - A Post/ Trans/ Modern Vision, *Econ. Transdiscipl. Cogn.*, 2009.
- [7] J. F. Diouf, The luxury metaphor of alcoholic beverages marketing: a necessary focus and understanding to help public health, *J. Gest. d'économie médicales*, 2014, doi: 10.3917/jgem.143.0209.

- [8] J. A. Henschke, Review: Extension Handbook: Processes and Practices, *Adult Learn.*, 1995, doi: 10.1177/104515959500600403.
- [9] S. Kasiewicz, New trends in the system regulating the market of bank services, *Kwart. Nauk o Przedsiębiorstwie*, 2017, doi: 10.5604/01.3001.0010.7450.
- [10] D. L. Brien, Climate Change and the Contemporary Evolution of Foodways, *M/C J.*, 2009, doi: 10.5204/mcj.177.
- [11] S. Obara and D. Wilburn, *TOYOTA by TOYOTA*. 2012. doi: 10.1201/b11902.



## CHAPTER 6

### MARKETING ENVIRONMENT AND PRODUCT DEVELOPMENT: ESSENTIAL MANAGEMENT ASPECTS

---

Dr. Mukesh yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### **ABSTRACT:**

Product development and marketing management are essential components of a company's success, focusing on generating and refining goods or services to meet consumer wants and preferences. Marketing management involves studying target markets, customer behavior, and market trends, creating powerful marketing strategies, and developing thorough marketing plans. The four Ps of marketing are managed through the marketing mix, including product characteristics, price strategies, distribution methods, and promotional activities. Brand management involves creating and sustaining a powerful brand identity that appeals to the target market, including brand strategy, positioning, and communication. Product development involves idea generation, refinement, testing, and development of the product or service. This process includes prototyping, engineering, and quality control. Product testing and launch involve rigorous testing and quality control to ensure product satisfaction with consumer expectations and legal standards. The marketing team is essential for positioning the product, determining market demands, and creating successful marketing campaigns

#### **KEYWORDS:**

Business, Development, Environment, Marketing, Product.

#### **INTRODUCTION**

Building connections with consumers, coworkers, and outside partners is a skill that marketers need to master. They need to be aware of the key environmental factors that influence each of these interactions in order to do this successfully. The characters and factors outside of marketing that have an impact on a company's capacity to develop and sustain effective connections with target consumers are referred to as the marketing environment. A microenvironment and a macroenvironment together make up the marketing environment. The actors near to the firm that have an impact on how well it can service its customers make up the microenvironment. These actors include the company, suppliers, marketing intermediaries, customer marketplaces, rivals, and publics. The macro-environment is made up of the most significant social forces demographic, economic, environmental, technical, political, and cultural that have an impact on the micro-environment. Let's start by examining the microenvironment of the firm [1]–[4].

#### **Company's Microenvironment**

Building relationships with consumers via the creation of customer value and satisfaction is the responsibility of marketing management. But marketing managers can't accomplish this on their own. Building connections with other corporate departments, suppliers, marketing intermediaries, consumers, rivals, and various publics is necessary for marketing success since

these groups together make up the company's value delivery network. These key players in the marketer's microenvironment are depicted in Figure 1.



**Figure 1: Representing the key players in the marketer's microenvironment [Word Press].**

**The Business:** Marketing management considers other firm groups, including top management, finance, research and development (R&D), buying, operations, and accounting, while creating marketing strategy. The company's top management determines its mission, goals, general strategy, and policies. Within the framework of senior management's strategy and plans, marketing managers make decisions. The marketing management team must collaborate closely with different corporate divisions.

**Suppliers:** Suppliers are a crucial component of the company's entire system for delivering value to customers. They give the business the resources it needs to generate its goods and services. Supplier issues can have a significant impact on marketing. Marketing managers must monitor supply availability since supply delays or shortages, labor disputes, and other occurrences can reduce consumer satisfaction over the long term and hurt sales in the short term. Today, the majority of marketers view their suppliers as collaborators in developing and providing value to customers [5]–[8].

**Intermediaries in Marketing:** Marketing Companies use intermediaries to market, sell, and distribute their products to end users. They consist of financial intermediaries, physical distribution companies, marketing services providers, and resellers. Resellers are businesses that act as distribution channels for a corporation, assisting in client acquisition or sales to them. Retailers and wholesalers who purchase goods to resale among them. Physical distribution companies assist the business in stocking and transporting items from points of origin to final destinations.

A corporation must decide the best means to store and distribute items while balancing considerations including cost, delivery, speed, and safety, working with warehouse and transportation companies. In order to target and promote a company's products to the appropriate markets, marketing services organizations work with advertising, media, and marketing consultancy companies. Banks, credit firms, insurance providers, and other entities that assist in

financing transactions or provide protection against the risks involved in the buying and selling of products are examples of financial intermediates.

**Customers:** The Company should carefully research the following categories of customer markets. Markets for consumers, businesses, governments, and goods and services are all present. Every market type has unique features that the vendor should carefully research.

**Competitors:** According to the marketing principle, a business must offer higher consumer value and satisfaction than its rivals do in order to succeed. Thus, marketers need to take action beyond just adapting to the demands of their target audience. They must also position their products aggressively in comparison to those of their rivals in order to achieve a strategic edge.

**Public:** The term public refers to a group that may have actual or potential stakes in or influence over an organization's capacity to accomplish its goals. Financial publics, media publics, government publics, citizen-action publics, local publics, general publics, and internal publics are the different categories of public.

### **The Company's Macro Environment**

Demography is the study of human populations' number, density, location, age, gender, races, occupations, and other characteristics. Demographic factors shape possibilities and provide challenges for organizations. Demographics include changing age composition, family systems, migration, economic environment, natural environment, technological environment, political environment, cultural environment, language differences, values, aesthetics, time, business norms, religious beliefs, and social structures. Demographics are crucial in understanding how people make up markets and their demands. The changing age composition affects customer demands, with children having different demands than adults and the elderly. A successful business should research the age range of customers it wishes to appeal to. For example, India has one of the highest rates of youth in the world, so a successful business should provide products that meet this group's needs.

Changing family systems also impact consumer spending patterns. As income increases, the percentage spent on food declines, while housing remains constant, and both percentage spent on most other categories and savings increases. Value-added products like fruits, vegetables, eggs, and meat are more expensive. Natural resources are needed as inputs by marketers or affected by marketing activities. Technological environment creates new technologies and market opportunities, while political environment influences or limits various organizations and individuals in a given society [9]–[11]. Cultural environment shapes basic beliefs, values, perceptions, preferences, and behaviors. People grow up in a particular society that shapes their basic beliefs and values. Language differences, customs, taboos, values, aesthetics, time, business norms, and religious beliefs can all influence marketing strategies. In the U.S., punctuality and deadlines are routine business practices, but in the Middle East and Latin America, salespeople from these cultures have more time on their hands.

Business norms vary from country to country, and foreigners may face challenges operating within the particular norms of the host country. Religious beliefs can affect shopping patterns and products purchased, as well as consumers' values. In the U.S., Christmas time is a major sales period, but in other religions, religious holidays do not serve as popular times for purchasing products. Every culture has a social structure, but some seem less widely defined than

others. It is more difficult to move upward in a rigid social structure, such as the two-wage-earner family in the U.S., where women work outside the home. Overall, understanding and adapting to the diverse macroenvironment of forces is essential for businesses to succeed in today's competitive market.

## DISCUSSION

### Product and Levels of Product

Anything that may be supplied to a market for consideration, acquisition, usage, or consumption in order to potentially satisfy a need or want is referred to as a product. Products don't merely refer to material items. Products can be broadly characterized as tangible items, services, occasions, people, locations, organizations, ideas, or combinations of these things. Product planners must consider items from three perspectives. Each stage raises the value to the consumer.

The core benefit, which answers the query of what the consumer is actually purchasing, is the most fundamental. Before creating a product, marketers must identify the essential, problem-solving features that consumers want. Product planners must translate the primary benefit into a tangible product at the second level.

They need to create design, quality standards, brand names, packaging, and features for their goods and services. Finally, by providing extra customer services and advantages, product planners must create an augmented product around the primary benefit and real product.

### Product Classification

Depending on the kinds of consumers who utilize the items, products may be divided into two major categories. They are both industrial and consumer goods. Consumer Products: Goods purchased by consumers for their own use. Marketers typically further categorize these goods based on how customers choose to purchase them. Here are some of them:

**Consumer Goods:** Consumer goods that are often purchased frequently, right away, and with the least amount of research and comparative shopping. Soap, newspapers, fast food, and more examples are provided. Convenience goods are often inexpensive, and marketers distribute them widely so that customers may easily find them when they need them.

**Shopping Product:** A consumer good that a customer compares typically throughout the selecting and purchasing process based on factors including appropriateness, quality, price, and style. For instance, furniture, attire, large appliances, etc.

**Specialty Products:** Consumer goods having distinctive qualities or brand recognition that a sizable segment of consumers is willing to make an extra effort to obtain. Examples include certain automobile brands, designer clothing, professional medical and legal services, etc.

**Unsought Products:** Consumer goods that consumers are either unaware of or aware of but do not typically consider purchasing. Example, insurance.

**Industrial Products:** Goods purchased by people and organizations for use in running a business or for further processing. The three categories of industrial products are supply and services, capital goods, and materials and parts.

### Terminologies used in Product Mix Decisions

A collection of goods that are closely connected to one another because they serve the same consumer segments, are advertised via comparable channels, or are within the same price range. Nike, for instance, manufactures various kinds of athletic clothing and shoes. The length of the product line is the total number of products. The collection of all product categories and goods that a certain seller provides for sale is known as the product mix or product portfolio. Product mix width. This is the number of various product lines that the business carries. The length of the product mix is the total number of goods that the business carries across all of its product lines. The amount of variations supplied for each product in the line is referred to as the product mix depth. The consistency of the product mix describes how closely connected the different product lines are in terms of manufacturing needs, distribution methods, or other factors.

### New Product Development Process

A corporation has two options for acquiring new products: through acquisitions or through in-house R&D department new product development. Here, the term new product refers to the creation of unique products, product enhancements, product alterations, and new brands using internal R&D resources of the company. Do new goods always succeed? The answer is obviously no. According to studies, 90% of all new consumer products fail. Of the 3000 new food, beverage, and cosmetic items introduced each year, 70-90% fail within just one year, according to the Harvard Business Review of 2006. The reason they fall short is in debate. The following are some potential causes.

1. Though the concept may be sound, the corporation can overestimate the size of the market.
2. The final product might not be well planned.
3. Product placement might be off.
4. maybe introduced at a bad moment.
5. A product's pricing could not be appropriate.
6. Possibly not well publicized, etc.
7. All of this increases the importance of studying the new product development process.

The steps in the process of developing a new product are as follows. A systematic search for fresh product ideas is called idea generation.

Here, the management will put the most focus on gathering as many suggestions as they can. Ideas may come from internal sources such as executives, scientists, engineers, production employees, and sales representatives or external sources such as customers, rivals, distributors, suppliers, periodicals, exhibitions, and seminars as well as research organizations, universities, market research companies, etc.

The focus of the second stage, concept screening, is to curtail the quantity of ideas that are created. Finding good ideas and discarding bad ones as quickly as possible is the goal. Concept development and testing.

A product concept is a thorough description of a new product idea that is expressed in words that are relevant to the target market. Upon completion of the product concept, step market strategy and development Business analysis, product development, test marketing, and commercialization are the next steps.

## CONCLUSION

A successful business strategy consists of two essential elements: marketing management and product creation. Marketing management involves planning, executing, and controlling marketing operations, while product development involves creating and enhancing goods or services to satisfy customer needs. Good marketing management involves market analysis, planning, and brand management, emphasizing target market comprehension, value propositions, and marketing mix components. Product development involves developing original ideas, honing them through concept development and testing, and designing and launching the finished product. Both are interrelated and necessary for corporate success.

High-quality products or services are essential for marketing management to convey value and satisfy client expectations. Merging marketing management with product development can help businesses establish a strong market presence, provide customer-centric services, and gain a competitive edge. This synergy enables organizations to target customers, differentiate their products, and achieve sustainable development and profitability.

## REFERENCES:

- [1] Y. Petrunia, V. Chentsov, N. Życzyński, and V. Petrunia, Marketing environment and marketing management of universities in Ukraine: National and regional dominants, *Innov. Mark.*, 2019, doi: 10.21511/im.15(1).2019.01.
- [2] M. E. Agwu and H. N. Onwuegbuzie, Effects of international marketing environments on entrepreneurship development, *Journal of Innovation and Entrepreneurship*. 2018. doi: 10.1186/s13731-018-0093-4.
- [3] M. A. Camilleri, The Marketing Environment, in *Tourism, Hospitality and Event Management*, 2018. doi: 10.1007/978-3-319-49849-2\_3.
- [4] C. David and A. Shameem, The Marketing Environment and Intention to Adoption of Green Banking: Does it have a Relationships?, *Glob. Bus. Manag. Res. An Int. J.*, 2017.
- [5] S. Nwankwo, Assessing the marketing environment in sub-Saharan Africa: opportunities and threats analysis, *Marketing Intelligence & Planning*. 2000. doi: 10.1108/02634500010327935.
- [6] M. A. Camilleri, The marketing environment of tourist destinations, in *The Branding of Tourist Destinations: Theoretical and Empirical Insights*, 2018. doi: 10.1108/978-1-78769-373-920181001.
- [7] W. Bin Latif and I. Mdnoor, Building Brand Awareness in the Modern Marketing Environment: A Conceptual Model, *Int. J. Bus. Technopreurchip*, 2014.
- [8] K. L. Keller, Building strong brands in a modern marketing communications environment, *J. Mark. Commun.*, 2009, doi: 10.1080/13527260902757530.
- [9] R. Alassani and J. Göretz, Product placements by micro and macro influencers on instagram, in *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 2019. doi: 10.1007/978-3-030-21905-5\_20.

- [10] L. H. N. Nobre, J. E. Grable, W. V. da Silva, and F. C. Nobre, Managerial risk taking: a conceptual model for business use, *Manag. Decis.*, 2018, doi: 10.1108/MD-09-2017-0892.
- [11] J. Zhang and R. Wang, Research on the Marketing Strategy of New Energy Vehicles in SL Company, *Am. J. Ind. Bus. Manag.*, 2019, doi: 10.4236/ajibm.2019.92020.



## CHAPTER 7

### PRODUCT PRICING AND DISTRIBUTION DECISIONS: STRATEGIC MANAGEMENT APPROACHES

---

Dr. Mukesh Yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### ABSTRACT:

Decisions on product price and distribution are crucial for a company's marketing plan. Pricing determines the worth and cost of a good or service, while distribution is the means through which it is delivered to the intended audience.

Companies consider factors like manufacturing costs, competitive pricing, client demand, and perceived value when setting prices. The goal is to balance profitability with market competitiveness. Cost-based techniques and value-based approaches can be used for pricing strategies.

Distribution plans involve selecting the best channels for customer contact, including direct sales, brick-and-mortar businesses, online shopping portals, wholesalers, and distributors. Client preferences, geographic reach, channel costs, and effectiveness are also considered when choosing distribution plans. Both pricing and distribution strategies must work together to ensure a product's proper market positioning, consumer demand, and corporate goals.

#### KEYWORDS:

Customers, Channel, Consumer, Market, Pricing.

#### INTRODUCTION

The company is characterized by intense rivalry and a dynamic environment. The greatest strategy for competing with the competition is not usually to lower prices. Unnecessary price cuts might result in a loss of revenue. Customers can even get the impression that price is more significant than value as a result. The smallest definition of price is the sum of money charged for a good or service. In a larger sense, though, it is the total of all the values that consumers forgo in exchange for the advantages of owning or utilizing a good or service [1]–[3].

#### Factors to be Considered while Setting Prices

The company's price is in the middle between those that are too high to generate any demand and those that are too low to generate profit. As a result, the floor price is determined by manufacturing costs, while the ceiling price is determined by how much consumers value the product.

1. **Customer Perception of Value:** A thorough grasp of the value that a good or service produces for customers is the foundation of good pricing. The product won't be sold in the market if the price established for it exceeds the value that consumers estimate it to be worth. As a result, the product's price should be less than or the same as what the consumer thinks the thing is worth. As a result, it establishes the price's maximum. The value-based pricing method is made with this into account. This method states that a

marketer cannot first create a product and a marketing strategy before deciding on a pricing. Prior to the marketing program, price is taken into account together with the other elements of the marketing mix.

2. **Production Costs:** Over the long term, production costs determine the price's minimum. If a product is sold for less than what it costs to produce, the company will lose money and eventually may go out of business. This is taken into account by the cost-based pricing strategy. Pricing must be based on the expenses of making, distributing, and selling the product in addition to a reasonable rate of return on investment and risk [4]–[7].

### **Additional Internal and External Factors**

Overall marketing goals, strategy, and mix. The company's larger marketing plan includes more than just price. The company's marketing plan will be simple if it has properly chosen its target market and positioning. Price is based on the goal that the firm wishes to accomplish. It could be about surviving, making the most money possible, dominating the market, keeping customers, and developing relationships. To create consistent and successful integrated marketing programs, price considerations must be linked with decisions regarding product design, distribution, and promotion. The individual in the organization who sets the price also affects the pricing. The market and demand. Prior to deciding on a price, it is evident that the anticipated demand for the product must be taken into account. For many market types, this price-demand connection varies.

### **Pricing in Different Types of Markets**

1. **Pricing Choice:** This sort of market is one where there are numerous sellers and many customers. The current market pricing cannot be influenced by a single buyer or seller. This pricing choice should thus be made in accordance with the current market conditions.
2. **Monopolistic Competition:** The market has a large number of customers and sellers who trade different products at a variety of prices. Physical goods are distinguished by their quality, features, style, and services, among other things.
3. **Oligopolistic competition:** The market is dominated by a small number of vendors who are acutely aware of one another's pricing and marketing tactics. In the event that a steel manufacturer lowers its pricing, customers will move to this item. As a result, other businesses must lower their rates.
4. **Pure Monopoly:** There is only one vendor and numerous customers in the market. A government monopoly, a private controlled monopoly, or a private non-regulated monopoly might be the seller. In each situation, pricing is handled differently. In a controlled monopoly, the government gives the business the right to establish prices that produce a just return. Monopolies that are not controlled are allowed to set prices as high as the market will bear.

Analyzing the link between price and demand: The demand curve illustrates this relationship. a curve that displays the volume of goods the market will purchase over a specific time period at various prices that are subject to change. The relationship between price and demand is often inverse. Thus, if a firm raised its price, fewer people would buy it. However, the demand curve is upwardly sloping for prestige products. Consumers believe that greater prices equate to better quality. Price elasticity of demand. A measurement of how responsive demand is to price changes. The vendor may consider decreasing their pricing if demand is elastic. More money

will be made overall if the price is lower. Pricing and approach of competitors. The costs, pricing, and market offers of competitors must be taken into account while determining prices. Other external influences, such as the country's economic situation, the government, social issues, etc.

### **New Product Pricing Strategies**

Setting a high price for a new product in order to collect as much money as possible from the market segments prepared to pay a high price. Here, the business generates fewer but higher-profit sales. HDTV and Blackberry mobile phones are two examples. The product has to meet the following requirements in order for this tactic to work.

1. Product image and quality must justify high price.
2. The product must have enough customers.
3. Low production costs are required, and competitors shouldn't be able to enter the market with ease and undercut the high price.
4. Pricing for market penetration: Low starting price to quickly and thoroughly enter the market. The following circumstances must be true for this method to be successful.
5. The market must be very sensitive to price.
6. As sales volume rises, production and delivery costs must decrease.
7. A low price must deter rivals.

### **Price Adjustment Strategies**

Companies typically modify their pricing to take into consideration a wide range of client variations and shifting circumstances. Here are seven price adjustment techniques that are briefly covered.

1. **Reduced Price and Allowance Pricing:** The majority of businesses modify their base prices to offer discounts to consumers who pay their bills on time, buy in bulk, or shop outside of peak times. Discounts and allowances are the names for these pricing changes. Discount refers to a simple decrease in price on purchases made within a given time frame. Another way to lower the stated price is through allowances. For instance, trade-in allowances are discounts offered for returning an old item while purchasing a new one. Following this are several durable items.
2. **Segmented Pricing:** Businesses frequently modify their prices to account for variations in consumers, goods, and regions. In segmented pricing, the business offers a good or service at two or more price points, even when the variations in cost are not the cause of the price variances. A pricing strategy that takes into account the psychology of prices as well as just economics; the price is utilized to communicate something about the product. For instance, customers frequently believe that things with greater prices are of superior quality. Reference price is an additional component of psychological pricing. For instance, the presence of a product at a prominent department store may indicate that it is more expensively priced.
3. **Promotional Pricing:** Pricing goods temporarily below list price, and occasionally even below cost, in an effort to boost immediate sales.
4. **Geographical Pricing:** Geographical pricing refers to determining costs for clients in various regions of the nation or the globe. A business must also choose how to price its goods for buyers in various regions of the nation or the world. Should the firm risk losing more distant clients' business by raising the pricing on them to compensate the rising

shipping costs? Or should the business impose the same charges on every consumer, no matter where they are? The pricing technique that takes these factors into account is regional pricing.

5. **Dynamic Pricing:** Constantly changing rates to accommodate the preferences and requirements of certain clients and circumstances.
6. **International Pricing:** Businesses that sell their goods globally must choose the pricing to charge in the many nations where they conduct business. The price that a business should charge in a particular nation relies on a variety of elements, including the local economy, the level of competition, governing laws and regulations, and the evolution of wholesale and retailing systems [8]–[11].

## DISCUSSION

A company's created goods must eventually go to the consumer. The manufacturer and consumer are separated geographically, nevertheless. In order to eventually bridge the gap between these two, it is necessary. Although a producer's ultimate goal is for a product to reach the market, it is more crucial that it does so more successfully and efficiently than its rivals. The definitions of distribution channels, their roles, and the variables affecting a channel's selection will all be covered in this chapter.

### Concept of Distribution Channels

A product's title is transferred as it goes from the producer or maker to the customer through the distribution route, also known as the marketing channel. As a result, a distribution channel serves a number of purposes but is largely concerned with moving commodities from the site of production to the point of consumption. The makers, middlemen, facilitating agencies, and consumers are the primary actors in the distribution system. Those who manufacture the products. This is where the distribution system's chain of command begins. Whether or whether they take ownership to the products, intermediaries, who make up the second group of players, are involved in the direct negotiation between buyers and sellers. These middlemen track down the suppliers of different items, pinpoint consumer demands, and distribute the commodities. They carry out a variety of tasks throughout the process, including purchasing, selling, assembling, standardizing and grading, packing and packaging, taking on risk, etc. Other than intermediaries, facilitating agencies are autonomous commercial organizations.

These organizations aid in the efficient transfer of commodities from producers to consumers via middlemen. The main facilitating organizations include financial institutions, insurance providers, travel agents, and storage facilities. Consumers, who make up the fourth group of players in the distribution system, are where the items in the system ultimately end up. A channel of distribution is primarily focused on the intermediaries, or second participant. 'Channel of Distribution' describes the path that products travel as they go from the manufacturer to the consumer. This movement of the products might refer to either a physical distribution or a change in ownership. The transfer of title to a product, which may be accomplished directly or through a series of intermediaries, is the core focus of distribution channels. You are aware that the majority of producers do not offer things to customers directly. They utilize a variety of middlemen, sometimes known as intermediaries. The channel of distribution refers to these intermediaries who help transmit title to commodities as they go from the manufacturer to the consumer.

Distribution channel is a network of organizations that facilitates the transportation of commodities from producers to consumers by carrying out a number of connected and coordinated tasks. A distribution channel provides the items with the utilities of location, time, form, and possession by quickly and effectively carrying out the physical distribution function. A distribution channel facilitates the transfer of commodities from the producer to the customer, giving the finished product usefulness in the marketplace. Consumers may obtain the goods anytime they want thanks to distribution channels, which results in the creation of temporal utility. Similar to this, a distribution channel enables customers to purchase goods in a useful shape, unit size, style, and packaging.

As a result, it adds value for convenience. The customer can also purchase items through a distribution channel at a cost he is prepared to pay and under circumstances that make him happy and proud to own them. As a result, it produces possession utility.

### **Functions of Distribution Channels**

In general, distribution channels carry out transactional, logistical, and enabling tasks. Distribution channels specifically carry out the following tasks:

1. Being nearby to consumers will help with sales.
2. By cost-effectively connecting the maker and the user, you may improve distributional efficiency.
3. Break up the mass and satisfy customers' smaller needs.
4. Create assortments of items based on the demands of the buyer;
5. Maintain a portion of the physical distribution
6. Share the cost of the principal, make deposits, finance the stocks until they are sold to the final customers, and provide the merchants and customers' credit.
7. Offer sales expertise and post-purchase support.
8. Aid in the promotion of sales.
9. Help with merchandising.
10. Aid in the launch of new items.

### **Channels for Consumer Products**

Consumer durable products that are directly consumed by households are sold through these channels. For instance, a television, a vehicle, food, etc. For this, the channel's lower levels are utilized. Consumer producer. There are no intermediaries in the shortest, simplest distribution path for consumer products. Producers have two sales options door-to-door and mail. Producer-retailer-consumer. Large merchants frequently purchase products directly from manufacturers and farmers. Wal-Mart has boosted its direct interactions with producers, much to the dismay of different wholesaling intermediaries. If there is a conventional route for consumer products, it is producer-wholesaler-retailer-consumer.

These channels are the only ones that small manufacturers and merchants discover to be financially viable. Producer-agent-retailer-consumer. To access the retail market, particularly major retailers, many producers choose to utilize agent intermediaries as opposed to wholesalers. Producer-agent-wholesaler-retailer-consumer. In order to connect with small retailers, producers frequently utilize agent intermediaries, who then contact wholesalers that supply big-box retailers and independent shops.

## Channels for Industrial Products

Organizations who utilize the items in their operations or integrate them into their production processes can be reached through a number of avenues. Industrial distributor and merchant wholesaler are interchangeable phrases when referring to the distribution of commercial products. The following four channels are typical for commercial goods. Producer-user. More business items are distributed through the direct channel than through any other channel in terms of dollar volume. Large installations like heating plants and generators for airplanes are often sold directly to consumers by their manufacturers. Producer, industrial distributor, and consumer. Industrial distributors are regularly used by manufacturers of minor supplemental equipment and operational supplies to reach their customers. Manufacturers of air conditioning and building supplies are two examples of companies that frequently utilize industrial wholesalers. Producers, agents, and users. This is a route that businesses without their own sales department like to use. Additionally, a business that wants to launch a new product or enter a new market may choose using agents over its own sales team. User, producer, agents, and industrial distributor: This channel is comparable to the one before it. When selling directly to the business user through agents is not practical for any reason, this method is employed. For direct selling, the unit sale can be too little. Or dispersed inventory can be needed to quickly supply consumers, in which case an industrial distributor's storage services might be necessary.

## Factors Influencing the Choice of Channel

There are several channels, some of which are brief while others are lengthy, as this chapter has shown. Which one to employ is determined by a variety of variables, including the type of market, the type of goods, intermediaries, and corporate concerns. These elements are covered below;

### Product Considerations

Perishability: items like milk, eggs, and other dairy items are provided directly or through short channels.

1. **Bulkiness:** Short channels are recommended for heavy and bulky goods, such as cement, steel, large machinery, etc., where handling and distribution expenses are higher.
2. **Technical Characteristics of The Product:** Complex electrical and electronic equipment that needs to be handled carefully is typically provided directly or through small channels.
3. **Product value:** For items with low unit values, wider distribution channels are typically recommended. Short channels, however, could be just as cost-effective if these goods are mixed with other goods or sold in large quantities.

### Market Consideration

1. **Potential Sales Volume:** The channel selection is based on the desired level of business. The amount of sales and the capacity to contact target clients varied between different channels. More channels must be employed if one outlet is insufficient for reaching the goal.
2. **Buyer Concentration:** If the buyers are concentrated in a small number of locations, the manufacturer may be able to create sales divisions there and conduct direct business with



the customers. Therefore, when buyers are concentrated in fewer areas, short channels may be possible. On the other hand, if customers are dispersed across a wide region, short channels may no longer be profitable, forcing the producer to use long and many channels.

- 3. Size of the Purchase Order:** For large-scale clients, the manufacturer can distribute either directly or through a short channel. In the event of customers whose purchase orders are often too little to warrant direct selling, typically extended routes are efficient and inexpensive.

### CONCLUSION

In summary, decisions on product price and distribution are extremely important in determining a company's marketing strategy and overall performance. Finding the ideal balance between profitability and competitiveness in pricing decisions requires taking into account elements including production costs, consumer demand, and perceived value.

Choosing the best routes to reach clients and deliver the goods, on the other hand, is the main consideration in distribution decisions.

Decisions regarding price and distribution must be carefully analyzed and taken into consideration because of their connection. To accomplish corporate goals, it is crucial to match both the pricing strategy and the distribution plan because they can both have an impact on one another. Pricing and distribution must be balanced properly in order to successfully place the product in the market, satisfy consumer demand, and increase profitability.

### REFERENCES:

- [1] A. Basu and S. D. Sullivan, Toward a Hedonic Value Framework in Health Care, *Value Heal.*, 2017, doi: 10.1016/j.jval.2016.11.022.
- [2] X. Xu, Optimal price and product quality decisions in a distribution channel, *Manage. Sci.*, 2009, doi: 10.1287/mnsc.1090.1023.
- [3] L. Zhu, Supply chain product quality control strategy in three types of distribution channels, *PLoS One*, 2020, doi: 10.1371/journal.pone.0231699.
- [4] R. Ishfaq, U. Raja, and S. Rao, Seller-induced scarcity and price-leadership: Impact on product returns in the internet retail supply chain, *Int. J. Logist. Manag.*, 2016, doi: 10.1108/IJLM-05-2014-0073.
- [5] B. Tuttle, M. Collier, and R. D. Plumlee, The effect of misstatements on decisions of financial statement users: An experimental investigation of auditor materiality thresholds, *Auditing*, 2002, doi: 10.2308/aud.2002.21.1.11.
- [6] A. Sasse and R. Carmo, Sorafenib for advanced hepatocellular carcinoma (HCC) in the public health setting in Brazil: a cost-effectiveness analysis, *Ann. Oncol.*, 2019, doi: 10.1093/annonc/mdz155.238.
- [7] O. Biloukha and V. Utermohlen, Healthy eating in Ukraine: attitudes, barriers and information sources, *Public Health Nutr.*, 2001, doi: 10.1079/phn200059.



- [8] C. H. Wu and J. Y. Lai, Dynamic pricing and competitive time-to-market strategy of new product launch under a multistage duopoly, *Eur. J. Oper. Res.*, 2019, doi: 10.1016/j.ejor.2019.02.012.
- [9] P. M. Noble and T. S. Gruca, Industrial pricing: Theory and managerial practice, *Mark. Sci.*, 1999, doi: 10.1287/mksc.18.3.435.
- [10] L. Zhou and S. M. Gupta, Marketing research and life cycle pricing strategies for new and remanufactured products, *J. Remanufacturing*, 2019, doi: 10.1007/s13243-018-0054-x.
- [11] J. G. Smith and F. E. Clark, Principles of Marketing., *Econ. J.*, 1928, doi: 10.2307/2224326.

## CHAPTER 8

### CHARACTERISTICS OF AGRIBUSINESS:KEY MANAGEMENT INSIGHTS

---

Dr.Mukesh yadav, Asstt.Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### **ABSTRACT:**

Agribusiness is a specialized industry that involves the production, processing, and distribution of agricultural goods and services. It is heavily reliant on weather and natural resources, requiring efficient risk management techniques. The industry has an extensive supply chain, with various phases including input providers, farmers, processors, distributors, and retailers. Government laws and rules significantly influence agribusinesses' profitability and competitiveness. Seasonal fluctuations and cyclicity also impact agricultural productivity, labor needs, and pricing dynamics. Agribusiness is closely linked to social issues and rural areas, contributing to economic and social development by providing employment and subsistence for rural inhabitants. Agribusinesses are responsible for sustainable activities, such as social responsibility and environmental stewardship. Technology plays a crucial role in contemporary agriculture, with advancements in biotechnology, data analytics, automation, and precision agriculture promoting innovation and competitiveness.

#### **KEYWORDS:**

Agricultural, Business, Industry, Management, Production.

#### **INTRODUCTION**

After talking about the foundations of management and marketing in general, the next chapters will focus on how these ideas are applied in the agriculture sector. You will learn about the definition of agribusiness, its components, how it differs from other industries, its scope, and its organizational structure in this chapter. There are several meanings of agribusiness in the literature. According to the dictionary definition of agribusiness, it is agriculture operated by business specifically, a part of a modern economy devoted to the production, processing, and distribution of food, fiber products, and by-products, including the financial institutions that fund these activities [1]–[4]. The term agro-industry refers to the creation of connections between businesses and supply chains with the purpose of creating, modifying, and distributing particular inputs and products in the agriculture sector. As a result, the agribusiness sector includes agro-industries. Agro-industry and agribusiness both entail the commercialization of agricultural and post-production firms, the addition of value, and the development of connections among agricultural enterprises. Large-scale farming operations or businesses engaged in the production, processing, distribution, and quality control of agricultural goods are sometimes referred to as agrobusinesses or agro-industries. Although smaller farms, processors, and other agriculture-related enterprises are less frequently termed agribusinesses or agro-industries, they should technically speaking also be included in the definition, as addressed in this research.

According to a brief definition, agribusiness is any industry that deals with agriculture, including farming, processing, exporting, suppliers of inputs, trade, and retailing (USAID, 2008). The term

agribusiness is frequently used to describe an overall perspective of agricultural and business-related operations, including the numerous roles and procedures involved in the production and delivery of contemporary food. Agribusiness refers to all commercial operations carried out from farm to table for the purposes of this study. It includes producers, distributors, traders, exporters, retailers, and consumers as well as the providers of agricultural inputs [5]–[8]. The book *A concept of Agri-business* by John David and A. Gold Berg, published in 1957, is credited with giving rise to the idea of agri-business. It was first taught in the Philippines in early 1966 when the University of the Philippines started offering an undergraduate degree in agri-business management (ABM). The first seminar on advanced agribusiness management took place in Manila in 1969. There are now several agribusiness programs available all around the world, although agribusiness was originally not even a phrase. Agribusiness is a concept of economics that includes the sum total of all operations involved in the manufacturing and distribution of farm supplies; production operations on the farm; and the storage, processing, and distribution of farm commodities and items made from them, according to Goldberg and Davis. Three sectors are involved in agribusiness:

1. The input sector. This industry works with providing farmers with the inputs they need to raise crops, animals, and other related enterprises. Seeds, fertilizer, chemicals, equipment, and gasoline are a few of these.
2. The agricultural sector tries to produce crops, livestock, and other goods.
3. Product sector it deals with a variety of issues such product storage, processing, and marketing to satisfy changing customer demands.

Agribusiness is the culmination of all operations or activities engaged in the business of producing and marketing agricultural goods and supplies in order to achieve the desired goals.

### **Dimensions of Agribusiness**

1. It discusses the many elements of both the agricultural and industrial sectors, their connection, and how one sector affects the other.
2. It addresses the private or public decision-making processes of farms in connection to the production and marketing issues.
3. It discusses a project's advantages and disadvantages, as well as how competitively viable.
4. Agribusiness is constantly focused on the market.
5. Agribusiness structure is typically vertical and consists of the following:
  - i. Government policies and programs pertaining to growing crops, starting businesses, etc.
  - ii. Government research and extension programs.
  - iii. Farm inputs or supplies.
  - iv. The production of agriculture.
  - v. Processing.
  - vi. Agriculture product marketing.

### **Agribusiness and Other Industries**

The management style used in other industries is different from that used in agribusiness. Agribusiness has a few unique characteristics that set it apart from other sectors. Agriculture and the monsoon are a gamble. The nature of agricultural production makes it highly reliant on the weather. Agriculture is a dangerous industry since it interacts with living things that might pose

health risks. Around 60% of India's agricultural land is used for rainfed farming, which significantly depends on timely rain and makes production even more unpredictable. As a result, compared to other businesses, agriculture is more exposed to risk and unpredictability. Smaller land holdings. In 2002–03, the average operating area per holding was 1.06 hectares, compared to 1.34 hectares in 1991–92 and 1.67 hectares in 1981–82. The information shows that the operating land holdings have been shrinking over time as a result of land division and fragmentation. Increased marginal holdings are the effect of this. According to the data, marginal holdings size 1 hectare or less made up 70% of all operational holdings in 2002–2003, followed by small holdings 1 to 2 hectares, semi-medium holdings 2 to 4 hectares, medium holdings 4 to 10 hectares, and large holdings over 10 hectares, which made up less than 1% of all operational holdings.

Since 1991–1992, the proportion of marginal holdings in the total operational area has increased by 6–7 percentage points, reaching 22–23%, bringing it on par with the shares of semi-medium and medium holdings, which had the highest shares in 1991–1992. Therefore, it should come as no surprise that farmers in India are resource poor. While the majority of agricultural goods are seasonal, demand for them is essentially constant. Consider the seasonal output of perishable goods like tomatoes, potatoes, onions, milk, etc. vs their year-round consumption. As a result, prices are lower when overall output is higher and higher when production is lower. Prices will be lower during harvest season and higher during sowing season even for less perishable crops like wheat, maize, paddy, etc. As a result, price changes have an impact on the decisions made by various agricultural agencies on when and where to sell or acquire. Other sectors hardly ever see price fluctuations of this magnitude. Agricultural items are bulkier than the majority of other goods. It has an impact on marketing activities involving physical handling since bulkiness necessitates substantial storage capabilities. Transporting and storing items that take up a lot of room relative to their worth is costly.

The marketing of food goods is influenced by perishability. Fruits and vegetables, which are very perishable goods, must be delivered to consumers very rapidly in order to prevent them from losing all of their value. These product attributes have an impact on the infrastructure required to sell agricultural products. Products that spoil quickly require quick handling and a well-functioning cold chain. Unlike products from other industries, agricultural products lack uniformity, which has a significant impact on marketing decisions. A same product might vary greatly in size, shape, color, flavor, and other aspects. You can find variations in the aforementioned qualities in every vegetable at the nearby market. Agricultural goods' quality fluctuates not just from year to year but also from season to season. As a result, agricultural product grading and standards became more expensive and complicated.

As was already said, there is more risk and unpredictability in agriculture. With that said, farmers who have little resources typically conduct this industry. Therefore, Due to the dependency of agricultural output on natural circumstances, the supply of agricultural goods is unpredictable and erratic. A result of the fluctuating supply and nearly continuous demand for agricultural goods, prices vary widely. Before being consumed by the final customers, the majority of farm goods must be processed. The price gap of agricultural commodities widens as a result of this processing function. Processing companies benefit from market monopsony, oligopsony, or duopsony. The producers are faced with disincentives in this position, which might negatively impact output over the coming year. The law of diminishing returns states that increasing one element of production while maintaining the others constant will eventually result in reduced

per-unit returns. This law applies to all productive processes. Agriculture experiences an early onset of the law of diminishing returns, unlike other industries. For instance, using fertilizer increases crop output on farms and in gardens; yet, when fertilizer is added in increasing amounts, the yield improves less per unit of fertilizer and can even decrease in excess. As a result, consumers won't drastically alter their consumption in reaction to changes in the sale prices of agricultural goods [9]–[12].

## DISCUSSION

### Scope of Agribusiness

1. The efficient and hard work of several business professionals in input, farm and food production as well as in selling them results in the availability of our daily needs for food and fiber goods at the desired location at the needed form and time. Agribusiness is the short name for the entire system.
2. Agribusiness, which uses a diversified combination of labor, materials, money, and technology, has recently combined many commercial operations.
3. It is a vibrant industry that consistently satisfies customer expectations in both home and international markets.
4. The emergence of an agribusiness promotes the development of local infrastructure, the growth of credit, the formation of agencies for the procurement of raw materials, and the use of cutting-edge technology in the production and distribution of agricultural goods.
5. Agribusiness offers vital links that go both ways. Input supply, credit, production methods, agricultural services, etc. are examples of backward links. A forward link comprises features of storage, processing, shipping, and marketing.
6. Potential job prospects are created through agribusiness.
7. It enhances the worth of the items and consequently the net earnings.

### Structure of Agribusiness

The agribusiness industry, as previously indicated, offers essential backward and forward links. There are two significant industries involved. Agriculture-based industries that provide chemicals, feed, fertilizers, seeds, and other farm inputs are included in this sector. The sectors that provide tools, fuel, and other supplies are also crucial in this sense. This industry deals with the production and sale of agricultural products. While big cooperative organizations do exist in the agrobusiness sector, they are scarce in comparison to the enormous number of small scale agroindustry. Poultry, fruit, and vegetable farms are all extremely popular examples of vertically integrated farms.

### Importance

1. Agro-based enterprises can only be established if the necessary raw materials are available.
2. In order to boost the rural economy, agro-based enterprises must be established in rural regions where raw materials may be abundant.
3. Give rural residents a chance to find work.
4. Increase income and, in turn, people's standard of living, which opens the door for demand-based enterprises.
5. Instead, than concentrating industries in one location, give them the chance to spread out.

6. Deal with the issue of traders and intermediaries taking advantage of the rural community.
7. Farmers may be guaranteed a higher price for their goods.
8. Encourage the planting of diverse crops in more and more places to boost agricultural output and the economy of the country.
9. Agricultural products' transportation costs can be reduced, which will aid in lowering the price of completed items.
10. Avoid wasting agricultural items that are perishable.

### **Industries are divided into four groups**

1. Based on resources.
2. Demand-driven.
3. Ability-based.
4. Adjunct.

Once more, the resource-based businesses are broken down into agro, forest, animal husbandry and poultry, mineral, marine, etc. Agro-based industries are those that are directly or indirectly related to agriculture. Agrobased industries include those that are based on agricultural products and those that support agriculture.

### **Types of Agro-based Industries**

There are four types of agro-based industries.

1. **Agro-produce Processing Units:** They just refine the basic material so that it can be delivered and maintained more affordably. There is no production of new goods. Examples are dal and rice mills.
2. **Agro-produce Manufacturing Units:** Make completely original items. The final product will be completely different from the basic material. For instance, sugar plants, bakeries, solvent extraction facilities, and textile mills.
3. **Agro-Inputs Manufacturing Units:** This category includes industrial facilities that generate items for agricultural mechanization or productivity enhancement. An example would be agricultural equipment, the seed industry, a pumpset, and pesticide and fertilizer units.
4. **Argo Service Centers:** Pumpsets, diesel engines, tractors, and other forms of agricultural equipment are repaired and serviced at agro service centers, which are shops and service facilities.

### **Need for Agro-Based Industries**

1. Suitable for rural locations because they are focused on raw materials.
2. To improve the rural economy.
3. In order to address the issue of unemployment.
4. To earn money and raise the level of living.
5. For the spreading and decentralization of industries.
6. To lessen the gap between urban and rural communities.
7. To promote balanced growth in both industry and agriculture.
8. To address the issue of agricultural community exploitation.

9. To save money on transportation.
10. To serve as a source of supply and demand while also giving agriculture a major boost.

### **Institutional Arrangements for Promotion of Agro-Based Industries**

The development of agro-based industries is now being overseen by the following Ministries and Departments at the Center and State levels.

1. **Ministry of Agriculture:** Has to do with bakeries, cold storage, rice mills, oil mills, sugar mills, etc.
2. **Khadi and Village Industries Board:** This board deals with traditional agricultural-based businesses such as gur, handicrafts, khandasari, etc.
3. **Director General of Trade and Development:** Oversees the businesses that produce tractors, power tillers, diesel engines, pump sets, and other agricultural and industrial equipment.
4. **Agro-industries Development Corporation:** In each state, this organization primarily provides farmers with agricultural equipment, inputs, and consultancy services. In the agro-industries sector, certain businesses have also engaged in specific industrial operations.
5. **Small Industry Development Organization:** This organization works with small agro-industries such hosiery, beverage processing, food and fruit preservation, agricultural equipment, pesticide formulations, and other related fields.

### **Constraints in Establishing Agro-Based Industries**

1. Entrepreneurs cannot get the right advice.
2. It requires taking some sort of risk.
3. Modification of crops or cropping patterns
4. A change in crop variety brought on by technical advancement
5. A monsoon failure might affect the availability of raw materials.
6. There is a lack of appropriate direction and training for contemporary, advanced agro-industries.
7. Because modern small enterprises require a lot of cash, the availability of financing will be a major issue.
8. Promotional actions including running extensive campaigns, choosing potential sectors, and outlining opportunities to business owners are insufficient.
9. Uncertainty over upcoming consumer trends.
10. Lack of knowledge regarding the size and caliber of the market.

### **CONCLUSION**

In conclusion, agribusiness demonstrates distinctive qualities that set it apart from other industries. The unique characteristics of agriculture are influenced by its reliance on natural resources, complicated supply networks, governmental laws, seasonality, connections to rural areas, and technology breakthroughs.

To prosper in a competitive and dynamic agricultural market, agribusinesses must recognize and manage these qualities successfully. Agribusinesses may overcome obstacles and take advantage of chances for expansion and long-term success by embracing innovation, sustainability, and effective resource management.



**REFERENCES:**

- [1] O. A. Kusraeva, The Business Model Characteristics of Russian Agribusiness Companies, *Probl. Econ. Transit.*, 2018, doi: 10.1080/10611991.2018.1497275.
- [2] A. R. Al Rasyid Shodiq, W. Budi Priatna, and N. Kusnadi, Faktor-Faktor Yang Memengaruhi Tingkat Pemanfaatan E-Marketing Tani Niaga Oleh Petani Kabupaten Grobogan, *Forum Agribisnis*, 2019, doi: 10.29244/fagb.9.2.107-122.
- [3] T. O. Mgeni and P. Nayak, Impact of Structural Firm characteristics on Business Performance of SMEs: Evidence from agribusiness firms in Dar es salaam , Tanzania, *Arab. J. Bus. Manag. Rev.*, 2016.
- [4] A. M. Ibrahim, M. S. Hassan, and A. L. Gusau, Factors influencing acceptance and use of ICT innovations by agribusinesses, *J. Glob. Inf. Manag.*, 2018, doi: 10.4018/JGIM.2018100107.
- [5] O. Anwarudin, S. Sumardjo, A. Satria, and A. Fatchiya, The Entrepreneurial Capacity of Young Farmers on Agribusiness Activities in West Java, *J. Penyul.*, 2020, doi: 10.25015/16202031039.
- [6] A. M. Nuryadi, L. Sara, L. Rianda, and A. Bafadal, A model for developing seaweed agribusiness in South Konawe, Southeast Sulawesi, Indonesia, *AAFL Bioflux*, 2019.
- [7] M. O. Adnyana, Pengembangan Sistem Usaha Pertanian Berkelanjutan, *Forum Penelit. Agro Ekon.*, 2016, doi: 10.21082/fae.v19n2.2001.38-49.
- [8] H. A. Fachriyan and I. P. E. Wijaya, Aplikasi Model E-Marketplace Dalam E-Agribusiness, *Mediagro*, 2019, doi: 10.31942/md.v14i01.2614.
- [9] R. Mastuti *et al.*, Sustainability of technological dimension in dairy agribusiness, in *Journal of Physics: Conference Series*, 2019. doi: 10.1088/1742-6596/1375/1/012043.
- [10] A. Soldi, M. J. A. Meza, M. Guareschi, M. Donati, and A. I. Ortiz, Sustainability assessment of agricultural systems in Paraguay: A comparative study using FAO's SAFA framework, *Sustain.*, 2019, doi: 10.3390/su11133745.
- [11] P. Mac Clay and R. Feeney, Analyzing agribusiness value chains: A literature review, *International Food and Agribusiness Management Review*. 2019. doi: 10.22434/IFAMR2018.0089.
- [12] A. Nursidiq, T. I. Noor, and L. Trimo, Analisis Keberlanjutan Agribisnis Paprika di Bandung Barat, *J. Penelit. Pertan. Terap.*, 2019, doi: 10.25181/jppt.v19i3.1317.

## CHAPTER 9

### SUPPLY CHAIN AND STRATEGIC MANAGEMENT: DRIVING ORGANIZATIONAL SUCCESS

---

Dr. Mukesh Yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### ABSTRACT:

Agribusiness supply chain management and strategic management are crucial for successful operations, informed decisions, and overall success. These components involve the coordination and integration of various operations, parties, and resources, such as materials, manufacturing, logistics, holding products, and shipping. Effective supply chain management ensures timely availability of high-quality products, reduces waste, maximizes resource use, and improves customer satisfaction. Agribusiness strategic management focuses on establishing long-term objectives, developing strategies, and making defensible choices. It also covers product positioning, branding, price, market segmentation, and market growth. To succeed, agribusinesses must integrate supply chain management with strategic management. This enables companies to improve operational effectiveness, save costs, and decrease risks. Efficient supply chains enable agile reactions to market shifts and demand variations. Agribusinesses can differentiate themselves, add value to clients, and achieve a competitive edge by coordinating supply chain decisions with strategic goals. Companies must implement cutting-edge procedures and technology to improve supply chain collaboration, visibility, and traceability. Real-time monitoring, data analytics, and automation can help in decision-making and supply chain effectiveness. Sustainable practices, such as waste reduction, eco-friendly packaging, and responsible sourcing, are increasingly important for agribusinesses to meet customer expectations and comply with laws.

#### KEYWORDS:

Agribusiness, Businesses, Chain, Supply, Strategic.

#### INTRODUCTION

Agribusiness is a general phrase that covers a wide range of companies engaged in the food production industry. Businesses don't operate in a vacuum; they all have suppliers of the products they require and customers for the things they produce or sell. These partners share the same driving factors and important considerations. A chain of firms is the name given to this collection of organizations, which frequently reflects the sector in which they operate. The agri-industry sector is a vast, multifaceted industry that operates on a global scale. It includes a variety of companies that build industry-specific chains that frequently cross national borders, such as those for grains, sugar cane, timber, dairy, cattle/meat, fruit and vegetables, cotton, and wool, to name a few [1]–[4].

#### Supply Chains

When several actors are connected from farm to fork to create a more efficient and customer-focused flow of products, we refer to this as a supply chain. Growers, pickers, packers, processors, storage and transit facilitators, marketers, exporters, importers, distributors,

wholesalers, and retailers may all be a part of such supply networks. Thus, supply chain growth may help both rural and urban sectors of society in emerging nations. Upstream, internal, and downstream are the three main segments of a supply chain. The actions of a business a milk producer in our example with its first-tier suppliers and their connections to their suppliers referred to as second-tier and third-tier suppliers are included in the upstream portion of the supply chain. The supplier connection may go down multiple levels, all the way to the source of the material such as the mining of ores or the cultivation of crops. The procurement process is the main activity in the upstream supply chain.

The internal operations that turn the inputs from the suppliers into the outputs for the company are all included in the supply chain's internal component. It lasts from the point at which inputs enter a company to the point at which the finished goods are distributed outside of the company. Inventory control, manufacturing, and production management are the primary concerns of the internal supply chain. The operations involved in getting the items to their intended clients are all included in the supply chain's downstream segment. The downstream supply chain focuses on after-sale services, distribution, warehousing, and transportation. Chain of Supply Management Supply chain management (SCM) is the process of organizing, planning, and coordinating the many supply chain operations. SCM is now used to describe a comprehensive systems approach to managing the complete supply chain. [5], [6]

### **The Supply Chain Flows**

In the supply chain, there are normally three different sorts of flows: material, informational, and monetary. Coordinating all of the flows among all of the chain's participants is essential for managing the supply chain. All of these tangible goods, including raw materials, suppliers, and so on, travel through the chain. Reverse flows, such as returned goods, recycled goods, and product waste, are also included in the idea of material flows. Thus, a supply chain incorporates a dirt to dust approach to the product life cycle. This covers all information on demand, shipments, orders, returns, scheduling, and data updates. It also contains information to customers, suggestions from manufacturers to suppliers, order flows, credit flows, and so forth. Financial flows include all cash transfers, payments, credit card authorizations, payment schedules, e-payments, and information pertaining to credit.

### **Supply Chain Management and its Benefits**

From farm to fork, or from the suppliers of raw materials to the ultimate customers and vice versa, chain participants must collectively plan and regulate the movement of commodities, information, technology, and money in order to successfully manage supply chains. Supply chain management is customer-focused to respond quickly and efficiently to consumer demand. The coordination of the industrial processes is its goal. Margin expansion and decreased transaction costs are two benefits of supply chain management. It necessitates a multidisciplinary approach and lasting trade connections due to the numerous activities and factors involved. Partnerships in the supply chain are built on dependency, trust, honest communication, and mutual gain. The supply chain management strategy has a lot of benefits. One of the main benefits is

1. The decrease in product losses during storage and transportation.
2. A rise in sales.
3. Knowledge, cash, and sophisticated methods are shared across the chain partners.
4. Better knowledge of how goods, markets, and technology move.

5. The supply chain's transparency.
6. Tracing the problem back to its source.
7. Better quality and safety control over the products.
8. Partners in the chain share significant investments and risks.

### **Supply Chain Management Tools**

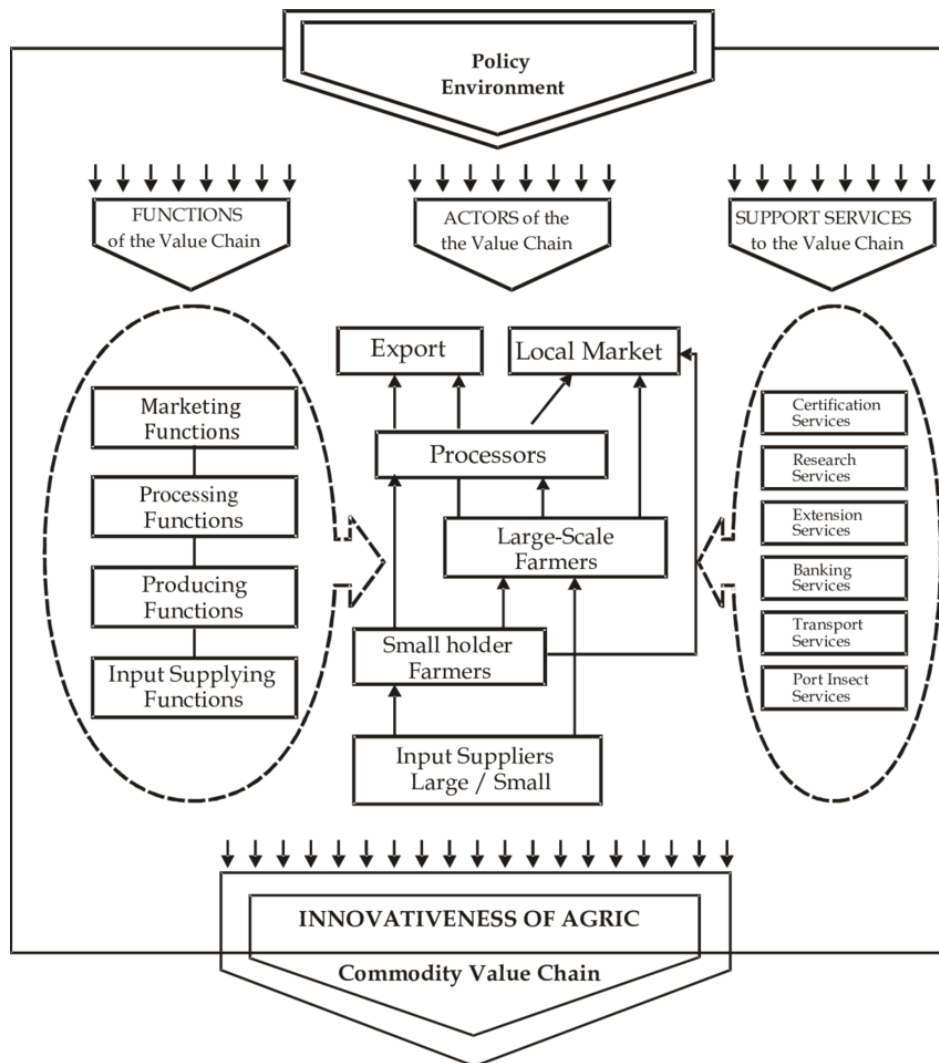
Over the past ten years, a variety of innovative supply chain management solutions have been created. In order to improve supply chains' customer orientation and cost-effectiveness, efficient consumer response (ECR) has been established. In order to enhance logistics, utilization of information and communications technologies, and quality management, new management systems have been put in place. Farmers' organizations' positions are being strengthened by the emergence of new generation cooperatives, and vertical alliances and strategic partnering are securing long-lasting coalitions across the whole supply chain. The creation of integral chain-care methods including social responsibility, good agricultural practice (GAP), total quality management, and HACCP (hazard analysis at key control points) as a result of concerns about food safety.

A cross-border supply chain's participants may assure the quality and safety of their products and acceptable social chain performance by implementing such tools across the chain. For example, supermarkets in Brazil and Thailand have started TQM systems and HACCP regulations for perishables like fresh fish and meat. Retailers including Walmart, Carrefour, Royal Ahold, Tesco, and Sainsbury have progressively set their own quality requirements for suppliers, such as EUREP-GAP and BRC2. Throughout the supply chain, tracking and tracing methods are employed to validate the quality of items and maintain transparency. The structure of supply chains is impacted by the implementation of such standards and systems, as are the financial elements of chain collaboration. The agriculture industry is currently using these standards and procedures, which have already shown their usefulness in international initiatives. Sharper standards requirements have driven both public and commercial players to launch a number of projects to expand or fortify agri-supply chains.

### **Value Chain**

The term value chain refers to the entire set of activities needed to take a good or service from conception through all stages of production which include both physical transformation and the input of different producer services, delivery to customers, and eventual disposal after use. Figure 1 displays the value chain's schematic representation. From the farmer to the customer, a product travels via a value chain. It covers input providers, financing, and research and development. To create goods, the farmer combines these resources with land, labor, and capital. Farmers generate goods that are pushed into the market under the conventional selling system. Farmers have little influence over input costs or the money they get in exchange for their commodities since they are cut off from the final customer. Farmers are connected to customer requirements through a value chain marketing structure, working closely with suppliers and processors to generate the precise items people want. Similar to this, consumers and farmers' demands are connected through flows of information and goods (Figure 1). With this strategy and ongoing innovation, farmers' returns may be raised and their means of subsistence improved. Players at all points along the value chain can profit rather than just one or two links concentrating all the earnings. The agricultural supply chain is a crucial part of the value chain,

and in the literature, the phrases value chain and supply chain are occasionally used interchangeably or at least closely related [7]–[10].



**Figure 1: Represtign a overview of Conceptual Value Chain [Research Gate].**

## DISCUSSION

### Similarities and Differences between a Supply Chain and a Value Chain

In the 1980s, a new, integrative concept called supply chain management (SCM) was developed to control the whole flow of products from suppliers to the final consumer. As time went on, SCM expanded to take into account a wide range of business operations throughout the chain of supply. The phrase supply chain management was first used by Keith Oliver in 1982. at order to reconcile trade-offs between his customers' intended inventory and customer service goals, Oliver, a vice president at Booz Allen Hamilton's London office, designed an integrated inventory management approach. The initial goal was to correct the inefficient inventory and capacity deployment brought on by disputes between functional units inside the organization by managing a chain of supply as though it were a single entity, not a group of disparate

functions. With the introduction of fast response efforts in the textile and food industries in the 1990s, SCM evolved swiftly. Wal-Mart, a major retailer, enhanced it by using point-of-sale data to enable continuous replenishment. Across borders, the phrase supply chain is increasingly frequently used to refer to all activities that go into creating and delivering a final good or service, from the supplier's supplier to the customer's customer. Supply chains, as their name suggests, are primarily concerned with the costs and efficiency of supply as well as the movement of goods from their many origins to their final destinations. A smooth supply chain that moves items quickly from its different origins to their intended destinations. Supply networks that are effective cut expenses.

In everyday speech, a supply chain and a value chain are complimentary perspectives of an extended firm with integrated business processes that enable the flows of goods and services in one direction and value, which is symbolized by demand and cash flow in the other, in the other. Overlaying the same network of businesses are both chains. Both are composed of businesses that work together to offer goods and services. However, when we discuss supply chains, we often refer to a downstream flow of products and materials from the source to the client. The opposite value flow occurs. Value originates with the client and is transferred to the provider in the form of demand from the customer. This movement of demand sometimes referred to as a demand chain is represented by the flows of orders and money, which parallel the flow of value and move in the opposite direction of the flow of supply. As a result, the main distinction between a supply chain and a value chain is the fundamental change in emphasis from the source base to the consumer. Value chains concentrate downstream on generating value in the perspective of the client, whereas supply chains concentrate upstream on integrating supplier and producer operations, enhancing efficiency, and eliminating waste. The terminology employed in business and research journals frequently omits this difference.

### **Importance of Value Chain**

In current era of fast globalization, value chain analysis is significant for three key reasons. As follows:

1. Systemic competitiveness has grown more crucial as a result of the expanding division of labor and the globalization of component manufacturing.
2. Production efficiency is merely a prerequisite for effectively entering international markets.
3. In order to successfully enter global markets and achieve sustainable revenue development, or to make the most of globalization, it is necessary to comprehend the dynamic elements present along the whole value chain.

### **Traditional Selling Systems v/s Value Chain Marketing System**

Farmers generate goods that are pushed into the market under the conventional selling system. Farmers typically lack access to the bulk of end consumers and have little influence over the input costs or manufacturing processes used to produce their commodities. The main exception is when local farmers sell their goods in nearby marketplaces and there is a direct line between the producer and the customer. In the majority of conventional selling methods, farmers and manufacturers often only make a small profit. Any integration along or above the value chain can be beneficial. Market Push is frequently based on individual transactions between each node or at each phase. Products could frequently be marketed into a crowded, cutthroat market. Farmers are



generally cut off from consumer wants and preferences as well as consumer behavior. Research and development may not take into consideration other phases, connections, or dependencies in the chain such as environmental or social costs since it is concentrated on manufacturing and lowering production costs. Farmers in a value chain marketing system collaborate closely with suppliers and processors to generate the precise items that customers are looking for. The farmer's market power and profitability may be increased by using this strategy as well as ongoing innovation and feedback across various stages throughout the value chain.

Players at all points along the value chain can profit rather than just one or two links concentrating all the earnings. The growth of value chains should benefit all players, including small-scale producers and low-income consumers, because it is believed that well-functioning value networks are more effective at getting items to customers. The Pull of the market is based on integrated transactions and data. Customers buy goods that are made based on their choices. Research and development, while incorporating methods aimed at increasing production, is also focused on consumer needs and makes an effort to take into account all of the links and dependencies in the value chain, including processing, environmental and social costs or considerations, as well as factors like health impacts, education, and learning. There is two-way communication. In the same way that farmers and other producers should be made aware of consumer demands, it is crucial that consumers and processors be made aware of problems that are restricting output.

### **Importance of Strategic Management**

Strategic management is the process by which managers create and put into action plans designed to maximize goal attainment within the environmental and internal constraints that are present. The collection of managerial choices and activities known as strategic management influences how well a business will function over the long term. It includes all four fundamental management tasks: organizing, leading, and regulating. There are various parts that make up the strategic management process.

1. Identifying the purpose and strategic goals is just one step in the strategy creation process of strategic management.
2. Conducting a study of the competition; Creating particular tactics. The phase of the strategic management process that is focused on carrying out strategic plans and maintaining control over their execution is known as strategy implementation.

### **Environmental Scanning and Industry Analysis**

In order to keep employees inside the company, environmental scanning involves tracking, analyzing, and distributing information from both the internal and external settings. It's a technique that businesses employ to prevent strategic surprises and maintain long-term viability. Examining the effects of the external environment The external environment includes broad influences that don't specifically affect an organization's short-term operations, but they may and frequently do affect its long-term choices. These factors include sociocultural, political-legal, technical, and economic ones.

### **SWOT Analysis**

In the SWOT analysis, organizational strengths and weaknesses are evaluated, as well as environmental possibilities and threats.



1. Internal traits are the basis for strengths and shortcomings.
  - a. A strength is an internal quality that has the ability to enhance the competitive position of the business.
  - b. A weakness is an internal quality that leaves the company open to potential strategic maneuvers by rivals.
2. The outside environment has both opportunities and dangers.
  - a. An opportunity is a circumstance in the environment that presents a considerable chance to advance an organization's position in comparison to its rivals.
  - b. A threat is an environmental factor that has the potential to seriously harm an organization's ability to compete.

### CONCLUSION

In summary, strategic management and supply chain management are crucial to the success of agribusinesses.

The efficient flow of agricultural goods is guaranteed, waste is reduced, and customer satisfaction is increased. Strategic management enables agribusinesses to stand out from the competition, provide value, and acquire a competitive edge by lining up long-term objectives with market demands.

Agribusinesses may streamline their operations, take well-informed choices, and stimulate growth in the dynamic agriculture industry by merging these two disciplines, embracing contemporary technology, and adopting sustainable practices.

### REFERENCES:

- [1] K. A. Mukhamedjanova, Concept of supply chain management, *J. Crit. Rev.*, 2020, doi: 10.31838/jcr.07.02.139.
- [2] S. K. Samal, Logistics and supply chain management, *Int. J. Psychosoc. Rehabil.*, 2019, doi: 10.37200/IJPR/V23I6/PR190779.
- [3] E. Koberg and A. Longoni, A systematic review of sustainable supply chain management in global supply chains, *Journal of Cleaner Production*. 2019. doi: 10.1016/j.jclepro.2018.10.033.
- [4] S. Saberi, M. Kouhizadeh, J. Sarkis, and L. Shen, Blockchain technology and its relationships to sustainable supply chain management, *Int. J. Prod. Res.*, 2019, doi: 10.1080/00207543.2018.1533261.
- [5] M. A. Saeed and W. Kersten, Drivers of sustainable supply chain management: Identification and classification, *Sustainability (Switzerland)*. 2019. doi: 10.3390/su11041137.
- [6] M. Farooque, A. Zhang, M. Thürer, T. Qu, and D. Huisingh, Circular supply chain management: A definition and structured literature review, *Journal of Cleaner Production*. 2019. doi: 10.1016/j.jclepro.2019.04.303.
- [7] Rustamadji and C. M. Z. B. C. Omar, The effect of strategic management and organizational commitment on employees' work achievement, *Manag. Sci. Lett.*, 2019, doi: 10.5267/j.msl.2018.12.009.

- [8] S. Engert, R. Rauter, and R. J. Baumgartner, Exploring the integration of corporate sustainability into strategic management: A literature review, *J. Clean. Prod.*, 2016, doi: 10.1016/j.jclepro.2015.08.031.
- [9] I. B. Demir and O. Ugurluoglu, Evaluation of the Use of Strategic Management Tools by Hospital Executives in Turkey, *J. Health Manag.*, 2019, doi: 10.1177/0972063418822216.
- [10] L. Á. Guerras-Martín, A. Madhok, and Á. Montoro-Sánchez, The evolution of strategic management research: Recent trends and current directions, *BRQ Bus. Res. Q.*, 2014, doi: 10.1016/j.brq.2014.03.001.

## CHAPTER 10

### CONTRACT FARMING AND RISK MANAGEMENT: ENHANCING AGRIBUSINESS EFFICIENCY

---

Dr. Mukesh Yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email Id- mukeshyadav@jnujaipur.ac.in

#### ABSTRACT:

Contract farming is a commercial arrangement where farmers and agribusiness companies produce agricultural goods in exchange for inputs, technical support, and a guaranteed market. This connection reduces risks and uncertainties, while also promoting risk management. By providing farmers with essential inputs, technical expertise, and financial resources, contract farming helps reduce risks from erratic output, price changes, and market access. Agribusiness companies benefit from a reliable and high-quality supply of agricultural goods, reducing supply chain risks. Contract farming simplifies risk sharing between farmers and agribusiness companies, laying out obligations and responsibilities. It also promotes a more organized and predictable business environment by specifying parameters related to costs, product quality, and delivery timetables.

#### KEYWORDS:

Agricultural, Farming, Market, Price, Risk.

#### INTRODUCTION

For millions of Indians, farming is a traditional source of income. However, there aren't many systems or models that guarantee farmers a market for their goods, let alone a fair price. Farmers have occasionally been forced to discard their produce due to a lack of customers. One aspect of the coin is this. The agri-based and food industries, on the other hand, need timely and sufficient inputs of high-quality agricultural products. This fundamental contradiction of the Indian agricultural system gave rise to the idea of contract farming, which aims to establish a suitable connection between farm and market [1]–[4].

#### Meaning and Features of Contract Farming

A system for the production and supply of agricultural and horticultural products under forward contracts between producers/suppliers and purchasers is referred to as contract farming. The key component of this agreement is the producer/seller's promise to provide an agricultural product of a specific kind, caliber, price, and quantity to a known and committed customer. According to some writers, the fundamentals of contract farming date back to the 19th century, when the mechanism was employed in Taiwan for the production of sugar during Japanese colonial control as well as in the United States for the processing of products like peaches and sugar beets. Later, it was used in several food and textile industries [5]–[8].

#### Salient Features of Contract Farming

A contract is made between the industry or potential customer and the farmer. The business guarantees to purchase the farmer's goods. Based on the expected output and the

contractual acreage, the farmer harvests and delivers a quantity of produce to the contractor. The farmer and the buyer pre-negotiate the price and other terms and conditions. The buyer provides the necessary agricultural inputs at the appropriate time. Additionally, sponsors may offer free training and extension as well as assistance with clearing land, cultivating fields, and harvesting. This is crucial to ensuring that the right crop husbandry techniques are used in order to provide the anticipated yields and necessary quality.

Farmers won't plant or diversify into new crops unless they are confident in their ability to sell them, and traders or processors won't invest in projects unless it is anticipated that the necessary commodities can be produced reliably. By giving farmers market assurances and ensuring supply for the buyers, contract farming is a potential remedy to this problem. Farmers that engage in contract farming typically have access to credit of some kind to pay for production inputs. The sponsors are often those that extend credit through their managers.

However, the contract, which is the sponsor, guarantees the liens, which are used as collateral. Because some farmers have a propensity to abuse credit agreements by selling crops to consumers other than the sponsor extra-contractual marketing or by diverting inputs supplied by management to other uses, some sponsors have decided against supplying the majority of inputs and instead choose to only provide seeds and necessary agrochemicals [9], [10].

### **Models in Contract Farming**

Depending on the crop, the aims and resources of the sponsor, as well as the expertise of the farmers, contract farming can be set up in a number of ways. Outsourcing production is a business choice that enables a sufficient supply within a specified timeframe and at a reasonable cost.

Theoretically, any agricultural or livestock product may be leased out using any of the models; however, some goods benefit from particular strategies. Schematic representations of the most prevalent contract farming schemes are shown below.

### **Advantages and Disadvantages of Contract Farming**

Now let's look at the possible benefits and drawbacks of this form of governance for the parties to the transactions. Stakeholder analysis, which among other things aims to determine who stands to profit or lose from a policy option and assess what is the magnitude of their possible gains and losses, offers a helpful tool for public policy formulation.

#### **For Farmers**

##### **1. Advantages**

- i.** Agribusiness companies may offer inputs, lowering the uncertainties related to input availability, quality, and cost. greater productivity and greater returns are the results of ensuring that the input quality and sufficiency to the agricultural or livestock activity contracted are met.
- ii.** Agribusiness companies may offer services like transportation and automation.
- iii.** The contracting company may provide technological support to encourage the production of more expensive, frequently riskier crops and animals.

- iv. Facilitating the transition from subsistence to commercial farming is a related advantage. By securing a market outlet for the contractual output, the uncertainty and transaction costs associated with the search for markets are diminished. Reduced marketing risks are especially beneficial to small-scale farmers since they frequently have less access to markets.
- v. Since contracts often stipulate at the beginning of the growth cycle the prices to be paid upon product delivery, the ambiguity over the sales price is frequently eliminated.

## 2. Disadvantages

Even though contracting can lower agricultural risks, the contracts themselves operate as a risk source in the farm business, which could be detrimental to farmers. As we shall see, the majority of these drawbacks are. The following are possible drawbacks:

- i. If market conditions change or if additional factors favoring opportunistic conduct emerge, businesses may violate contractual obligations. There is nothing a farmer can do to prevent the detrimental effects of contractual hold-ups in the absence of efficient enforcement tools.
- ii. Farmers are subject to agribusiness companies' manipulation of production and productivity due to their reliance on a mandated technological package.
- iii. Companies may decide on delivery timetables to affect the prices given to farmers.
- iv. The price calculation process of the contract may be purposefully opaque due to the use of sophisticated formulae or measurements of quantity and quality that farmers may not fully comprehend. For instance, formula pricing for quality parameters like fat content, somatic cell counts, sucrose content, bacterial counts, and other requirements that call for laboratory testing are vulnerable to fraud and manipulation.

## For Agricultural Firms

It is guaranteed that the company will receive agricultural products more often. It is encouraged to correspond more closely to safety regulations and desirable product quality characteristics. Land access is made easier. Because of economies of scale, input costs per unit are decreased. It is made easier to get agricultural finance as well as future financial incentives and subsidies. Possibility of contractual delays. A farmer may be forced to sell all or a portion of his or her crop to a third party when prices are considered to be better outside the contractual bond, just as a corporation may be prone to breaking its contractual obligations when market conditions change. Dealing with a big number of farmers has expensive transaction costs. Risk of improper usage or departure in terms of both final goods and inputs supplied. Inability to search for alternate supply sources.

## Advantages to Government

Through contract farming or cooperative farming, the government has made a concerted effort to encourage private sector involvement in the provision of extension services. As a result of effective percolation brought on by services offered by the private sector industry, it will assist the government in addressing issues with food sufficiency, increasing the disposable income of small farmers in particular, increasing the funds available to farmers enabling them to use better farm inputs, and leading to the adoption of cutting-edge agricultural technologies. The Indian

farming community will flourish and thrive as a result. In conclusion, contract farming has potential costs and advantages as well as less obvious gains and drawbacks for all parties engaged. The current return of contracting in agri-food systems indicates that the players have benefited from the balance. Nevertheless, in order for a contract to be successful, certain prerequisites must exist. These are discussed in the next section.

## **DISCUSSION**

### **Risk and Uncertainty**

When all potential outcomes and the accompanying probabilities are known for a certain management choice, the situation is said to exist. This is quantifiable using probability theory. For instance, the occurrence of pests and diseases, price changes in the market, etc. When all of the potential outcomes of an event are unknown, neither the probability nor the results are known. It cannot be measured, such as the occurrence of floods or droughts.

### **Dimensions of Agricultural Risk**

Many of the dangers that farmers confront are related. According to various sources, agriculture normally takes into account five different forms of risk:

1. Risks related to production that relate to fluctuations in agricultural yields and livestock output, which are influenced by a variety of factors. Pests, illnesses, changes in technology, and the management of natural resources like water in the face of changing weather and climate.
2. Market hazards include input price fluctuation, output price variability primarily, and supply chain integration in terms of product quality, safety, new goods, etc.
3. Laws such as subsidies, rules governing food safety, and environmental laws are associated with hazards related to the impact of changes in agricultural policy. or trade policies: if the government takes action that is contrary to what farmers anticipated, it may have a detrimental effect on their revenue.
4. Financial risks associated with various agricultural financing strategies, depending on factors including loan availability, interest rates, and currency exchange rates.
5. Risks to human resources related to staffing shortages.

The three risks that are often seen as being most significant in agriculture—production risk, market risk, and financial risk—are covered here. Policies have a role in mitigating these hazards, but they also come with regulatory concerns.

### **Production Risks or Technical Risk**

Technical input-output relationships exist in industrial business, meaning that standardized production processes are used to produce a specified amount of output for a given quantity of input.

Agriculture production does not include this kind of interaction. Crop and animal production might vary as a result of weather, illnesses, insects, weeds, and outdated technologies. Because of the difficulty in precisely predicting these variables, the output is unpredictable. As a result, a number of diverse factors combine to create the production risk. However, the most crucial aspects of production hazards are weather risk and technical risk.

## Market and Price Risk

Risks in the market may be divided into three categories: institutional risk, price risk, and physical risk.

Quantity and quality loss constitutes physical danger. It could be caused by a fire, pests like rats or insects, too much moisture or heat, reckless handling, poor storage, looting, or intentional burning. Price risk refers to price variations from one year to the next or within a single year. Any policies, laws, or regulations governing the marketing elements are changing.

## Financial Risk

This form of risk is exacerbated by the agricultural business's growing borrowing levels, which are necessary to fund production operations and store goods under scientific supervision. Therefore, a detailed study must be done taking into account all potential dangers.

## Measures to Manage Production Risks

1. **Diversification:** Farmers, cooperatives, and corporations engaged in the production of basic agricultural products are subject to this regulation. The primary goal of diversification is to ensure that any losses in one business are offset by gains in other businesses. The first stage in diversification is choosing the best agricultural and livestock enterprises. Corporate farming businesses may utilize risk programming models and game theory models to create full farm plans under various risk scenarios. The enterprise with the lowest income variability should be chosen.
2. **Insurance:** A contract that provides insurance is one in which one party promises to defend or compensate the other in the event of a loss arising from the contract's provisions. The risk to productivity and revenue coming from diverse natural and man-made catastrophes is seen to be efficiently addressed by agricultural insurance, which is regarded as a key mechanism. Agricultural insurance serves as a way of defending farmers against monetary losses brought on by unanticipated risks that are beyond their control or those that are specifically identified (AIC, 2008). One strategy used by farmers to maintain farm income and investment and protect against the catastrophic effects of losses caused by natural disasters or low market prices is agricultural insurance. In addition to stabilizing farm revenue, crop insurance enables farmers to resume production following a difficult agricultural year. By offering farmers a minimal level of protection, it lessens the impact of crop losses. It helps farmers spend more in agriculture and spreads out crop losses over time and area. It plays a significant role in safety-net programs, as seen in many industrialized nations including the United States, Canada, and the European Union.
3. **Agronomic Practices:** Agronomic methods such crop rotation, mulching, and proper variety selection should be used to lower production risk.

## Measures to Manage Market Risks

1. **Physical Risk**
  - a. Physical loss is decreased by using fireproof storage, good packaging, and improved transportation.
  - b. Transfer of tangible losses to insurance firms.
  - c. Both farmers and other businesses, such processors, must abide by these regulations.



## 2. Price Risk

- a. A crucial instrument for assisting farmers and consumers in attaining food security is the Minimum Support Price (MSP), which also provides farmers with fair pricing for their goods.
- b. Dissemination of pricing information over both geography and time to all societal segments.
- c. Effective advertisement and the creation of a favorable environment for the good.

In the event that there is a need, the establishment of a Credit Risk Management Fund model for plantation crops aims to institutionalize the credit risk of farmers. Operation of futures trading and the forward market as hedging and speculation.

**Speculation:** : The purchase or sale of a commodity at the current market value with the intention of sale or purchase at a later time for a profit.

- i. Hedging is a trading strategy used to shift price risk. The act of hedging is To counter an equal and opposite position in the cash market and reduce the risk of unknown price swings, one might purchase or sell futures (Hoffman).
- ii. It serves as a safeguard against price swings that frequently occur during the selling of commodities. Futures contracts are used by stockists, processors, and manufacturers to transfer the pricing risks they face.
- iii. Another solution that protects both farmers and agribusiness companies from production and market risks is contract farming.
- iv. Farmers and industry have a bilateral agreement to provide the agreed-upon amount at the designated time. The services offered by sponsoring businesses include the provision of inputs, extension services, quality assurance, and the purchase of product. However, the lack of a single, legally enforceable commercial agreement leaves room for contract violations on both sides.

## CONCLUSION

The processing company's improved technology and management techniques help farmers reduce their production risk, while pre-agreed rates help farmers reduce their price risk. Due to the lack of timely and high-quality raw materials for processing in the absence of contract farming, processing companies typically also suffer risk. This danger may also be reduced by the contract farming system. Finally, contract farming is a useful tool for controlling risks in the agricultural industry. It creates a partnership that benefits both farmers and agribusiness companies, giving farmers the support they need and a reliable market while reducing supply chain risks for agribusinesses. Contract farming reduces production, price variations, and market access concerns by facilitating risk sharing, diversification, and structured business structures. Both farmers and agribusiness companies may increase their profitability, sustainability, and general performance in the changing agricultural market by successfully managing risks through contract farming.

## REFERENCES:

- [1] K. M. M. Adnan *et al.*, Risk management strategies to cope catastrophic risks in agriculture: The case of contract farming, diversification and precautionary savings,

- Agric.*, 2020, doi: 10.3390/agriculture10080351.
- [2] H. Holly Wang, Y. Zhang, and L. Wu, Is contract farming a risk management instrument for Chinese farmers?: Evidence from a survey of vegetable farmers in Shandong, *China Agricultural Economic Review*. 2011. doi: 10.1108/17561371111192347.
- [3] H. Holly Wang, Y. Zhang, and L. Wu, Is contract farming a risk management instrument for Chinese farmers?, *China Agric. Econ. Rev.*, 2011, doi: 10.1108/17561371111192347.
- [4] K. M. M. Adnan, L. Ying, S. A. Sarker, M. Hafeez, A. Razzaq, and M. H. Raza, Adoption of contract farming and precautionary savings to manage the catastrophic risk of maize farming: Evidence from Bangladesh, *Sustain.*, 2019, doi: 10.3390/su11010029.
- [5] C. H. Liao, H. E. Lin, and S. M. Yuan, Blockchain-Enabled Integrated Market Platform for Contract Production, *IEEE Access*, 2020, doi: 10.1109/ACCESS.2020.3039620.
- [6] E. Wauters, F. Van Winsen, Y. De Mey, and L. Lauwers, Risk perception, Attitudes towards risk and risk management: Evidence and implications, *Agric. Econ. (Czech Republic)*, 2014, doi: 10.17221/176/2013-agricecon.
- [7] C. B. D. P. Mahardika, Pemberdayaan Peternak Ayam Ras Pedaging Sistem Kemitraandengan Penguatan Komitmen Kerjasama Inti-Plasma, *Partner*, 2018, doi: 10.35726/jp.v23i1.296.
- [8] M. J. Carrer, R. L. F. da Silveira, and H. M. de Souza Filho, Factors influencing hedging decision: evidence from Brazilian citrus growers, *Aust. J. Agric. Resour. Econ.*, 2019, doi: 10.1111/1467-8489.12282.
- [9] G. Ton, W. Vellema, M. D'Haese, and S. Desiere, Systematic Review of the Effectiveness of Contract Farming for Income and Food Security of Smallholder Farmers in Low- and Middle Income Countries, *Campbell Collab.*, 2015.
- [10] D. A. Ahsan, Farmers' motivations, risk perceptions and risk management strategies in a developing economy: Bangladesh experience, *J. Risk Res.*, 2011, doi: 10.1080/13669877.2010.541558.

## CHAPTER 11

### AGRICULTURAL MARKETING: STRATEGIES FOR SUCCESSFUL SALES AND DISTRIBUTION

---

Dr. Mukesh yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### ABSTRACT:

Agricultural marketing involves promoting, selling, and distributing agricultural products from producers to consumers or end-users. It involves understanding market dynamics, identifying customer needs, and implementing strategies to create value and facilitate exchange. Effective agricultural marketing requires a deep understanding of target markets, consumer preferences, purchasing behavior, and market trends. Market research and analysis help develop tailored marketing strategies for specific customer segments. Product positioning and branding are crucial in agricultural marketing, as differentiating products based on quality, origin, sustainability, or other unique attributes can create a competitive advantage. Building a strong brand identity and effectively communicating the value proposition can enhance product recognition, trust, and loyalty. Distribution channels and logistics are critical components of agricultural marketing, with efficient supply chains and timely product delivery essential. Pricing strategies are influenced by factors like production costs, competition, supply and demand dynamics, and customer perception of value. Effective marketing communication strategies help convey product benefits, build brand awareness, and establish a strong market presence. Sustainable and ethical practices are gaining prominence in agricultural marketing, as consumers increasingly seek products produced responsibly, align with environmental standards, and support social well-being. Communicating sustainability and ethical attributes can be a valuable marketing strategy to differentiate products and capture the growing demand for sustainable agriculture.

#### KEYWORDS:

Agriculture, company, Farmers, Marketing, Products.

#### INTRODUCTION

For every producer, whether a farmer or an agricultural company, production constitutes the majority of their labour. The marketing of the product to get it in front of the consumer makes up the other half. The agricultural marketing will be covered in detail in the chapters that follow. We shall comprehend the idea and significance of agricultural marketing, as well as its range and significance, in this chapter [1]–[4]. Agriculture and marketing come together to form the phrase agricultural marketing. In its widest meaning, agriculture refers to all primary production activities that are intended to employ natural resources for the wellbeing of humans. But often, it refers to cultivating and/or rearing cattle and crops. Moving products from the point of production to the point of consumption involves a number of actions, which are together referred to as marketing. It covers all the processes that go into producing time, location, form, and function of possession. The movement of farm-produced foods, raw materials, and their derivatives, such as textiles, from the farms to the final consumers, as well as the effects of such

operations on farmers, middlemen, and consumers, are all included in the study of agricultural marketing, according to Thomsen. This definition excludes agriculture's input component.

Agricultural marketing is the study of all the procedures, organizations, and laws related to farmers' purchases of agricultural inputs and the transportation of those goods to consumers. The agricultural marketing system serves as a bridge between the agricultural and non-agricultural sectors. It entails planning the distribution of agricultural raw materials to processing businesses, gauging the level of demand for farm inputs and raw materials, and formulating marketing rules for farm inputs and outputs. A decision to produce a marketable farm product is the first step in the agricultural marketing process, according to the National Commission on Agriculture's (XII Report), which also includes pre- and post-harvest operations, assembly, grading, storage, transportation, and distribution. This process also involves all institutional and functional aspects of the market structure or system [5]–[8].

### **Objectives of the Study of Agricultural Marketing**

In order to provide effective services in the transfer of farm goods and inputs from farmers to consumers, it is important to comprehend the complexity involved in the agricultural marketing system and identify bottlenecks. A successful marketing strategy reduces expenses and helps every sector of society. The system's expectations vary depending on the group, and the goals are often in conflict. Producer-farmers want the marketing system to quickly buy their goods and give them the largest possible proportion of the consumer's money. They want to receive the highest price for the system's surplus production. They also want the system to provide them with the inputs at the most affordable pricing. Customers of agricultural goods are interested in a marketing system that can deliver food and other products in the quantities and of the quality they demand at the most affordable price. The goal of marketing to consumers, however, is at odds with the goal of marketing to farmers and producers.

Market middlemen and traders are looking for a marketing strategy that will allow them to buy and sell agricultural commodities for a consistent and growing profit. It is possible for market intermediaries to accomplish this goal by paying farmers low prices for agricultural goods and charging consumers exorbitant rates for them. There is a contradiction between the goals and expectations of the three social classes: producers, consumers, and market intermediaries. Each of the three categories is essential to society. To protect the interests of all the parties involved in marketing, the government needs to play the role of a watchdog. It aims to give the producer the largest possible share of the consumer's rupee, food of the necessary quality at the lowest price, and enough margin to the marketing middlemen so that they can continue in the trade and not consider quitting and endangering the entire marketing mechanism. Therefore, the government desires that the marketing system should be such that it may result in the general welfare of all societal sectors.

### **Scope and Subject Matter of Agricultural Marketing**

In a broader sense, agricultural marketing refers to the sale of farm goods made by farmers as well as the farm inputs such farmers need to make those items. As a result, both product marketing and input marketing fall under the umbrella of agricultural marketing. Output marketing is a topic that has existed for as long as civilisation. With the rising marketable excess of the crops as a result of the technical advance, the significance of output marketing has recently been more apparent. For the marketplace, farmers generate their goods. Farming starts to focus

on the market. The topic of input marketing is quite recent. Inputs from the agricultural sector, including local seeds and farmyard waste, were once utilised by farmers. These inputs were already in their possession; farmers seldom ever bought inputs for crop cultivation from the market. Farm inputs, such as better seeds, fertilizers, insecticides, and pesticides, as well as farm equipment, implements, and finance, are now more crucial than ever in the production of agricultural goods. The most recent agricultural technology responds to input. As a result, both product marketing and input marketing must be included in agricultural marketing. The topic of agricultural marketing has been covered in this book from both academic and practical angles. It discusses the nature of the system, how it works, and how the suggested approach or procedures could be adjusted to achieve the best results. Specifically, the topic of agricultural marketing covers marketing roles, organizations, channels, effectiveness, and costs, along with price spread and market integration, producer surplus, public policy, academic research, training, and statistics [9], [10].

## DISCUSSION

### Importance of Agricultural Marketing

Agricultural marketing is crucial for boosting consumption and output as well as for quickening the pace of economic growth. Its dynamic capabilities are crucial for advancing economic progress. It has been referred to as the most significant multiplier of agricultural progress for this reason. The lines that follow make mention of how crucial agricultural marketing is to the growth of the economy. Resource management and output optimization Resource usage and production management are optimized through an effective agricultural marketing system. By reducing the losses brought on by inefficient processing, storage, and transportation, an effective marketing strategy may also help to enhance the marketable surplus. A well-planned marketing strategy may efficiently disperse the stock of current inputs and support a higher pace of growth in the agricultural industry.

**Increased Farm revenue:** An effective marketing system guarantees greater levels of revenue for the farmers by lowering the number of intermediaries or by limiting the commission on marketing services and the unethical marketing tactics they use. An effective system ensures farmers higher pricing for their produce and encourages them to utilize their surplus funds to buy cutting-edge inputs that will boost productivity and output. The marketable surplus and farmers' income both rise as a result of this. The producer has no motivation to create more if there is no readily available market outlet where he may sell his excess produce. Therefore, it is crucial to provide sufficient incentives for higher output, and this can only be done by simplifying the marketing system.

**Expanding Markets:** A well-organized marketing strategy expands the market for the goods by bringing them to places distant from the points of production, both inside and beyond the nation. A better revenue for the producer is therefore assured by the market's expansion, which contributes to ongoing demand growth.

**Growth of Agro-based industry:** A more effective and enhanced agricultural marketing system promotes the expansion of Agro-based industry and the economy as a whole. Agricultural production is a major source of raw materials for many businesses.

**Price Signals:** Farmers may organize their output in accordance with the demands of the economy with the aid of an effective marketing strategy. Price signals are used to do this task.

**Technology Adoption and Spread:** The marketing system aids farmers in embracing new scientific and technological information. Farmers would only make a larger investment in new technologies if they were guaranteed market clearance. Millions of people working in operations including packing, shipping, storage, and processing are employed by the marketing system. The marketing system directly employs people like commission agents, brokers, traders, merchants, weigh-men, hamals, packagers, and regulatory employees. Aside from this, many other people work in the provision of the goods and services needed by the marketing system.

**Increase in National Income:** Marketing operations increase the product's value, which raises the country's gross and net national products.

**Better Living:** The marketing system is crucial to the success of development programs intended to improve the quality of life for the entire population. Any economic development strategy that aims to reduce food prices for consumers, increase foreign exchange earnings, or reduce economic waste must therefore pay special attention to the creation of an effective marketing strategy for food and agricultural products.

**Utility Creation:** Marketing is profitable and essential to agricultural productivity. In actuality, it is a component of the manufacturing process itself because the product is only considered to have reached its destination in the form and at the time that the consumer has specified. While marketing increases the price of the goods, it also gives it more benefits. Marketing creates the following four categories of product utilities:

**Shape Utility:** By transforming the raw material into a final shape, the processing function increases the product's form utility. The product is now more useful than it was when it was being produced by the farmer as a result of this transformation. For instance, oil seeds are transformed into oil, sugarcane into sugar, cotton into fabric, and wheat into flour and bread by processing. The refined versions are more beneficial than the raw ingredients themselves.

**Area Utility:** By moving goods from an area of abundance to a place of need, the transportation function increases the place utility of things. Due to the enhanced usefulness of the product, prices are higher where there is a need than they are at the point of production.

**Time Utility:** By making the items accessible when they are needed, the storage function increases the products' time utility.

**Possession Utility:** The purchasing and selling activities associated with marketing assist in the transfer of ownership from one individual to another. Product transfers occur through marketing to consumers with higher utility levels from those with lower utility levels.

## **Classification of Marketing Functions**

### **Packaging**

The first task in the marketing of agricultural products is packaging. At every level of the marketing process, it is necessary for almost all agricultural goods. Depending on the commodity's kind and marketing stage, many types of containers are employed in the packaging of goods. Gunny bags, for instance, are used to transport grains, pulses, and oilseeds from the farm to the market. Glass, tin, plastic, or polythene containers are commonly used for packing milk or milk-related goods. Fruits and vegetables are packed in wooden boxes or straw baskets.



### Meaning of Packing and Packaging

Before being delivered, products are packaged by being wrapped and crated. The packaging of goods is necessary for both preservation and delivery to customers. Packaging is a component of packing, which is arranging the items in compact packages like bags, cartons, bottles, or parcels for sale to the final consumers. In other terms, it refers to offering products in sizes and packaging that are practical for customers.

### Advantages of Packing and Packaging

The function of packaging is highly helpful in the marketing of agricultural products. Most goods are packaged with the intention of maintaining and safeguarding their quality and quantity during the course of travel and storage. The way a product is packaged may be a very effective marketing point. The following are the main benefits of packing and packaging:

1. It shields the products from damage, spoilage, leakage, or theft while they are being transported from the place of production to the point of consumption.
2. Some products, including cotton, jute, and wool, are compressed before packaging to minimize bulk.
3. It makes handling the product easier during storage and transit, especially for fruits like apples, mangoes, etc.
4. It aids in identifying product quality, differentiating products, branding, and advertising the product, such as Nandini milk and Amul butter.
5. By lowering handling and retailing costs, packaging aids in lowering marketing expenses.

### Transportation

From the threshing floor to the point of consumption, transportation, or the transfer of goods between locations, is one of the most crucial marketing activities. Most products are not used in the country where they are manufactured. All agricultural products must be transported from the farm to the neighborhood market, where they are then distributed to primary wholesale markets, secondary wholesale markets, retail markets, and eventually consumers. The factory's produce must be transported to the warehouses, which must then be delivered to wholesalers, retailers, and ultimately, customers. Transportation gives commodities more location usefulness. Transport is a crucial marketing activity. Urbanization has enhanced its significance. Transport is a requirement for the growth of trade in any item or region. Transport and trade are interdependent; each supports and enhances the other. The main advantages are:

1. **Widening of the Market:** By bridging the gap between producers and customers who are dispersed across the country, transportation aids in the growth or expansion of markets.
2. **Narrowing the Price Gap Over Space:** The movement of products from surplus to scarce regions helps prevent price increases in scarce areas and price decreases in surplus areas.
3. **Employment Creation:** The transport function creates jobs for many people by building roads, loading and unloading cargo, operating transportation equipment, etc.
4. **Facilitation of Specialized Farming:** Farmers can choose to specialize in the crop that is most appropriate for their region and trade the items they need from other regions at a lower cost than their own production costs.



- 5. Economic Transformation:** Transportation has a role in moving the economy from the subsistence to the sophisticated commercial stages.

### **Grading and Standardization**

Produce mobility is facilitated by the marketing function of grading and standardization. Without standards, misunderstanding and injustice prevail along with the caveat emptor let the buyer beware principle. The word standardization has several meanings. Prior to sorting commodities based on established criteria, grade standards for various commodities are established. Products are ranked based on quality requirements.

However, there would be a great deal of uncertainty regarding its grade if these quality requirements varied from seller to seller. One seller's top grade can be inferior to another's second grade. Because of this, consumers have less faith in grades. To prevent this from happening, there must be set grading criteria that are adhered to by all professionals in the field. The choice of the standards to be developed for various commodities is known as standardization.

### **Types of Grading**

Fixed grading, often known as mandatory grading, is the process of classifying products based on Size, quality, and other criteria that must meet predetermined requirements. These remain constant over both time and space. Permissive Variable Grading. In this approach, the products are rated in accordance with norms that change over time.

The grade standards in this situation are constant throughout time and space, but they are modified annually to reflect the caliber of the produce produced during that year. The program may be divided into centralized and decentralized grading based on the level of government agency oversight applied to the grading of different farm products. Under the centralized grading system, a licensed packer can either build up a lab staffed by competent chemists or request access to one that has been approved and set up by the state authorities, co-operatives, organizations, or commercial agencies.

State Marketing Authorities carry out the decentralized grading system under the general direction and control of the Directorate of Marketing and Inspection. Those commodities that don't require complex testing setups for quality evaluation adhere to this.

### **Advantages of Grading**

The following benefits of grading are available to various groups of people:

1. Before selling, producers might grade their produce to increase the price they receive.
2. Grading simplifies marketing because both parties are aware of the product's size, color, characteristics, and other grade designations, negating the need for the seller to provide any assurances on the product's quality.
3. Grading expands the product's market.
4. By decreasing the costs associated with the physical examination of the produce, lowering storage losses, reducing its size, minimizing advertisement costs, and removing the cost of handling and weighing at every stage, grading lowers the cost of marketing.
5. Grading enables customers to purchase items of uniform quality at reasonable costs.
6. Grading supports price effectiveness and market competitiveness.

## CONCLUSION

In conclusion, agricultural marketing is essential for bridging the gap between farmers and consumers and end users. Agricultural marketers may create efficient strategies to advertise, sell, and distribute agricultural products by having a thorough awareness of market dynamics, customer preferences, and trends. Product positioning, branding, price plans, effective distribution, and sustainable business practices are all important components of effective agriculture marketing. Agricultural marketers may provide value, satisfy customer needs, establish a strong market presence, and support the agricultural industry's profitability and sustainability by utilizing these tactics.

## REFERENCES:

- [1] H. P. Yueh and Y. L. Zheng, Effectiveness of storytelling in agricultural marketing: Scale development and model evaluation, *Front. Psychol.*, 2019, doi: 10.3389/fpsyg.2019.00452.
- [2] H. J. Hu and L. S. Lu, Use of an interdisciplinary teaching to innovation model for an agricultural marketing, *Int. J. Inf. Educ. Technol.*, 2019, doi: 10.18178/ijiet.2019.9.1.1164.
- [3] A. Umar, I. U. Kontagora, H. S. Kuta, and N. Umar, Agricultural Marketing Information System, *Int. J. Res. Sustain. Dev.*, 2020.
- [4] S. Sachan, S. K. Jawla, and T. Kumar, The scenario of agricultural marketing in India- A review, *Plant Arch.*, 2019.
- [5] S. J. Alavion, M. S. Allahyari, A. S. Al-Rimawi, and J. Surujlal, Adoption of Agricultural E-Marketing: Application of the Theory of Planned Behavior, *J. Int. Food Agribus. Mark.*, 2017, doi: 10.1080/08974438.2016.1229242.
- [6] H. Sekabira and M. Qaim, Mobile money, agricultural marketing, and off-farm income in Uganda, *Agric. Econ. (United Kingdom)*, 2017, doi: 10.1111/agec.12360.
- [7] S. Shrivastava and S. N. Pal, A framework for next generation agricultural marketing system in Indian context, in *2019 5th IEEE International WIE Conference on Electrical and Computer Engineering, WIECON-ECE 2019 - Proceedings*, 2019. doi: 10.1109/WIECON-ECE48653.2019.9019983.
- [8] B. Lal, Agricultural Marketing as a Catalyst for Rural Marketing in India: A Descriptive Study, *Int. J. Res. Manag.*, 2017.
- [9] G. Griffith and A. Watson, Agricultural markets and marketing policies, *Aust. J. Agric. Resour. Econ.*, 2016, doi: 10.1111/1467-8489.12161.
- [10] J. Bisen and R. Kumar, Agricultural marketing reforms and e-national agricultural market (e-NAM) in India: a review, *Agric. Econ. Res. Rev.*, 2018, doi: 10.5958/0974-0279.2018.00032.0.

## CHAPTER 12

### CLASSIFICATION OF MARKETS: UNDERSTANDING TYPES AND MARKET STRUCTURES

---

Dr. Mukesh yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### ABSTRACT:

Market categorization is a method for grouping diverse market types based on traits and criteria. It can be categorized by geographical size, product type, client categories, and level of competition. Geographical categorization separates markets by regions they serve, while industry-based categorization focuses on market segments based on customer preferences and needs. Customer-based categorization focuses on specialist markets, B2B markets, or sales primarily to consumers, helping businesses tailor marketing strategies and product offerings. Competition-based categorization helps understand industry rivalry, price dynamics, and market structure. Market categorization helps businesses and governments analyze, identify target audiences, develop marketing strategies, and understand industry dynamics. By understanding market characteristics and classification, businesses can make informed decisions and navigate unique market settings effectively.

#### KEYWORDS:

Commission, Farmers, Market, Products, Sell.

#### INTRODUCTION

Various forms are used in agricultural markets. They may be divided into many groups based on some of the parameters. Location, area, time, transaction volume, transaction type, degree of competition, and others are some of the variables that were taken into account in this lesson. We will go into more depth about these in the paragraphs that follow [1]–[4]. These marketplaces are situated close to the agricultural product producing hubs in large towns. The producer-farmers themselves bring the majority of the food to these marketplaces for sale. In these markets, farmers and traders often do business. These marketplaces are typically found close to railroad intersections, in district administrative areas, or in significant commercial hubs. The main commodity exchanges happen between wholesalers and rural merchants. These markets receive the majority of their arrivals from other markets. A terminal market is one where the produce is either assembled for export or eventually disposed of to consumers or processors. The businesses are well-run and employ contemporary marketing strategies. In these markets, there are commodity exchanges that offer services for the forward trading of certain commodities. These marketplaces may be found in Bombay, Madras, Calcutta, and Delhi, either in seaports or major cities. Seaboard markets are those that are close to the coast and designed primarily for the import and export of commodities. These marketplaces may be found throughout India in places like Bombay, Madras, and Calcutta [5]–[8].

A market where the buying and selling is restricted to participants who come from the same village or surrounding communities. The village markets mostly sell perishable goods in small

quantities, such as local milk or vegetables. A market where buyers and sellers of a certain item come from a wider geographic region than the local markets. For food grains, India often has regional markets. National Markets whose participants are on a national scale. There are national markets for long-lasting products like jute and tea. World Market where participants come from all around the world to purchase and sell. According to the region, these are the largest marketplaces. These markets exist for commodities like coffee, equipment, gold, silver, and other items that have a global demand or supply. A lot of nations have recently shifted toward a system of open international commerce in agricultural commodities such raw cotton, sugar, rice, and wheat.

There are two types of markets on the basis of volume of transactions at a time. Commodities are bought and sold in bulk or in huge amounts on a wholesale market. In these marketplaces, trades mostly occur between dealers. A retail market is one where goods are purchased by and sold to people based on their needs. In these markets, consumers and retailers transact with one another. Retailers buy on the wholesale market and distribute to customers in small amounts. The customers can easily access these markets. There are two sorts of marketplaces that are based on the kinds of transactions that individuals participate in a market where products are traded for cash right away after a sale is referred to as a spot or cash market. A market in which a commodity is bought or sold at time  $t$ , but exchanged at a later date, or at time  $t + 1$ , is known as a forward market. There may occasionally be no transaction of the commodity even on the designated date in the future ( $t+1$ ). The discrepancies between the purchase and selling prices are instead compensated or taken.

### **On the Basis of Degree of Competition**

A continuous scale that ranges from a fully competitive point to a pure monopoly or monopsony situation may be used to classify each market. Extreme forms are seldom ever seen. However, understanding their traits is helpful. Numerous midpoints of this continuum, in addition to these two extremes, have been found. Markets can be divided into the following groups based on competition. In a monopoly market, there is only one seller of a given good. He is the only one who can decide how much or how much the commodity costs.

The cost of commodities is often greater in this market than in other marketplaces. Indian farmers purchase power for irrigation in a monopolistic market. A market is referred to be a monopsony market when there is just one consumer for a given good.

Only two vendors compete in a duopoly market, which is defined as such. They could both agree to charge a common price that is greater than the price that would hypothetically be found in a similar market.

The duopsony market is a scenario when there are only two consumers of a given good. An oligopoly market is one where there are more than two, but only a few, sellers of a given good. Oligopsony markets are those with a few buyers. Monopolistic competition occurs when several sellers engage in the sale of a product in diverse and diversified forms. Different trade markings on the goods draw attention to the distinction. Prices for the same basic product vary widely. The input marketplaces can serve as examples of the monopolistic competition that farmers must contend with. For instance, they must select from a variety of brands of pesticides, pump sets, fertilizers, and equipment [9], [10].

## DISCUSSION

### Market Functionaries

The following market actors and marketing organizations are involved in the marketing of agricultural commodities:

1. **Producers:** The majority of farmers and other producers carry out one or more marketing tasks. They may sell the excess in the market or in the community. Some farmers, particularly the big ones, gather the goods from small farmers, move them to the local market, and then sell them there for a profit. These farmers may boost their incomes thanks to this practice. They gain a basic understanding of market processes via frequent trips to marketplaces and continual contact with market officials. They can thus act as market intermediaries since they have access to knowledge about the market.
2. **Middlemen:** Middlemen are those people or companies who focus on carrying out the numerous marketing tasks and providing the services required for the marketing of goods. At various points along the marketing process, they do this. Therefore, the following categories can be used to group middlemen in the marketing of food grains

**Merchant Middlemen:** Middlemen in commerce are persons who claim ownership of the products they handle. They independently buy and sell, and the difference between the selling and purchase prices determines whether they profit or lose. In addition, they can lose money if the product's price drops. Two categories of merchant intermediaries exist. The merchant intermediaries known as wholesalers are individuals who buy and sell big amounts of food grains. Farmers or other wholesalers may be the sources of their purchases. Foodgrains are offered for sale either inside the same market or in different marketplaces. They market to processors, retailers, and other wholesalers. The final customers do not purchase them in large quantities. They have their own godowns where the product is kept. The following marketing tasks are carried out by wholesalers. They gather products from various locales and regions to satisfy consumer demands, separate the products into lots according to quality and get them ready for market. balance the flow of products by storing them during peak arrival season and releasing them during off-season, regulate the flow of products by trading with buyers and sellers in various markets; and finance the farmers so that the latter can satisfy consumer demands.

Retailers purchase products from wholesalers and sell them in small amounts to customers. They serve as the customers' close proxies for producers. Within the marketing channel, retailers are the ones closest to customers. Village merchants and itinerant traders are minor dealers who travel from village to village and buy the produce directly from the growers. They move it there and sell it in the neighborhood primary or secondary market. Villages are home to the modest businesses of village merchants. They buy the goods from farmers who have either borrowed money from them or who are unable to get to markets. Farmers are also supplied with necessary consumer products by village merchants. They assist struggling farmers with financing. They frequently visit adjacent marketplaces to stay up to date on market pricing. They may save the harvested produce for subsequent sale in the community or sell it at the local market.

Agent middlemen advocate their clients on their behalf. They do not claim ownership of the produce since they do not acquire title to it. They only discuss the selling or buy. Instead of selling commodities or items to their principals, they sell services. They are compensated through commission or brokerage. They participate in successful negotiation as either buyers or

sellers. There are two sorts of agent intermediaries. An individual working in the wholesale market who represents a seller or a buyer is known as a commission agent. Those who order the purchase or consign things typically give him sweeping rights. A commission agent manages the actual handling of the produce, makes the necessary arrangements for its sale, collects the purchase price from the customer, subtracts his costs and commission, and then transfers the remaining funds to the seller. If requested, all these services are also provided to buyer-firms. There are two sorts of commission agents, or arhatias, in unregulated markets: *pacca arhatias* and *kaccha arhatias*. Farmers included; *kaccha arhatias* mostly represent the sellers. They occasionally provide farmers and entrepreneurial dealers early payments in exchange for the produce's disposal through them. In addition to the standard rate of interest, *kaccha arhatias* levy an *arhat* or commission on the money they lend. An agent for the traders in the consumer market is called a *pacca arhatia*.

For the acquisition of a certain number of commodities within a set price range, the processors (rice millers, oil millers, and cotton or jute merchants) and large wholesalers in the consuming markets use *pacca arhatias* as their agents. In regulated markets, there is only one type of commission agent known as a *A class trader*. For his clients, the commission agent maintains a business, including a shop, a godown, and a rest area. He offers his clients every amenity. As a result, for the aim of selling the farmers' produce, the farmers prefer him over the cooperative marketing group. The following services are provided by commission agents to their clients. They serve as the farmers' bankers by lending them 40 to 50 percent of the anticipated crop value in order to help them pay their production costs. They keep the sale proceeds and pay the farmers as and when they need the money. They also provide advice to farmers regarding input purchases and product sales. They give farmers empty bags to help them transport their produce to markets. They feed and house farmers and their animals when they come to markets to sell their produce. They provide storage space and advance loans against the stored product up to a certain point.

**Brokers:** In contrast to commission agents, brokers do not physically control the commodity they are selling; instead, they provide personal services to their customers in the market. A broker's primary job is to bring buyers and sellers together for talks on a single platform. Brokerage is the price they charge. Depending on the state of the market and the quality of the service, they may want brokerage from the buyer, the seller, or both. They provide a crucial service to potential buyers and sellers since they are fully informed about the market, including the amount available and the going rates. Brokers don't have a presence in the market. They merely saunter about the marketplace, serving customers. They are not at risk. In addition to bringing buyers and sellers together on one platform, they offer no additional services. Since most regulated markets conduct open auction sales of their products, brokers are rarely involved. Their participation in the food grain marketing trade is dwindling. However, they continue to play an important part in the selling of other agricultural products including *gur*, sugar, oil, cottonseed, and chillies.

Speculative middlemen are those intermediaries who acquire ownership of the goods with the intention of profiting from it. They don't frequently buy or sell produce. They are experts at taking risks. They purchase at bargain prices when there are lots of arrivals and sell at high prices during the off-season. They handle items as little as possible. They earn from both short-term and long-term price changes. Processors operate either independently or according to client requests. Some processors hire agents to get food for them in the growing regions, store it, and



process it continuously all year round. Additionally, they participate in advertising campaigns to generate interest in their processed goods. Some intermediaries aid in the marketing process rather than engaging in direct purchase and sale. Even when they are not actively marketing, it can still happen. But when they conduct business, the system becomes more effective. These intermediaries get paid by those who use their services in the form of fees or service charges.

They carry the products around the marketplace physically. Bullock carts or trucks are loaded and then unloaded by them. They help with the bag weighing. They sew the bags and carry out cleaning, sifting, and refilling tasks. The center of the marketing wheel is hammers. The marketing system would not run successfully without their enthusiastic cooperation. They assist in accurately weighing the product. When the quantity is tiny, they employ a pan balance. The scalebeam balance is typically employed. The commission agent is the one who pays them for their services. Large marketplaces also use the weighbridge weighing mechanism. These intermediaries classify the goods into various categories according to a set of criteria before organizing them for sale. They aid in the process of the buyer and seller settling their pricing. Produce is moved from one market to another with the help of the transport service.

Trucks and railroads are the primary modes of transportation. In communities, food grains are also transported by bullock carts, camel carts, or tractor trolleys. Communication Agency. It aids in spreading information about the going rates and quantity of goods accessible on the market. The transactions can occasionally be conducted over the phone. The primary means of communication in agricultural marketing include the post office and telegraph, telephone, newspapers, radio, television, internet, and unofficial connections. It gives potential customers the knowledge they need to judge a product's quality and make a purchasing decision. The primary medium for ads are newspapers, radio, cinema slides, television, and the Internet. By offering the produce up for auction and allowing potential purchasers to place bids, auctioneers aid in the trade process.

## CONCLUSION

In summary, the categorization of markets offers a framework for comprehending the diverse traits and dynamics of different types of markets. Businesses may get insights that aid in the customization of their strategies and the making of wise decisions by classifying markets based on the geographic extent, product type, client groups, and competition. The market's producers and customers are connected via middlemen, also known as intermediates. They contribute value through facilitating the exchange of commodities and services and adding value to the distribution of those goods and services. Depending on the precise job they perform in the supply chain, middlemen can be categorized as wholesalers, retailers, agents, or distributors, among other terms.

## REFERENCES:

- [1] K. Krenn, Markets and classifications - Constructing market orders in the digital age. An introduction, *Historical Social Research*. 2017. doi: 10.12759/hsr.42.2017.1.7-22.
- [2] S. Li, Q. Liu, and J. Refalo, Industry classification, product market competition, and firm characteristics, *Financ. Res. Lett.*, 2020, doi: 10.1016/j.frl.2019.101319.
- [3] R. L. Breiger, Culture and classification in markets: An introduction, *Poetics*, 2005, doi: 10.1016/j.poetic.2005.10.003.



- [4] G. A. A. J. Alkubaisi, S. S. Kamaruddin, and H. Husni, Conceptual framework for stock market classification model using sentiment analysis on twitter based on Hybrid Naïve Bayes Classifiers, *Int. J. Eng. Technol.*, 2018, doi: 10.14419/ijet.v7i2.14.11156.
- [5] MSCI, MSCI Market Classification Framework, *MSCI Mark. Access. Rev.*, 2013.
- [6] M. A. K. Anshary and B. R. Trilaksono, Tweet-based target market classification using ensemble method, *J. ICT Res. Appl.*, 2016, doi: 10.5614/itbj.ict.res.appl.2016.10.2.3.
- [7] B. V. M. Mendes and R. A. C. Martins, Determinants of stock market classifications, *Appl. Econ. Lett.*, 2018, doi: 10.1080/13504851.2017.1414927.
- [8] L. C. Yu, J. L. Wu, P. C. Chang, and H. S. Chu, Using a contextual entropy model to expand emotion words and their intensity for the sentiment classification of stock market news, *Knowledge-Based Syst.*, 2013, doi: 10.1016/j.knosys.2013.01.001.
- [9] S. G. Ryan, J. W. Tucker, and P. A. Zarowin, Classification and market pricing of the cash flows and accruals on trading positions, *Accounting Review*. 2006. doi: 10.2308/accr.2006.81.2.443.
- [10] G. A. A. Jabbar Alkubaisi, S. S. Kamaruddin, and H. Husni, Stock Market Classification Model Using Sentiment Analysis on Twitter Based on Hybrid Naive Bayes Classifiers, *Comput. Inf. Sci.*, 2018, doi: 10.5539/cis.v11n1p52.

## CHAPTER 13

### REGULATED AND COOPERATIVE AGRICULTURAL MARKETING

---

Dr.Mukesh yadav, Asstt.Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### ABSTRACT:

Regulatory markets and cooperative agricultural marketing are two strategies for planning and promoting agricultural trade and marketing operations. Regulated markets, governed by government rules, aim to uphold fair trade principles, encourage transparency, and protect producers and consumers' interests. They may involve real marketplaces or auction yards, licensing criteria, pricing structures, and dispute resolution procedures. These markets create a fair playing field for market players and a controlled environment for agricultural commerce. Cooperative agricultural marketing involves farmers forming cooperatives or producer associations to market and sell their goods collectively. These cooperatives manage various marketing tasks, enabling economies of scale, access to greater market prospects, fair pricing, and increased negotiating strength in the supply chain. Both strategies improve price realization, reduce market inefficiencies, and boost the agricultural industry's competitiveness and sustainability.

#### KEYWORDS:

Agricultural, Cooperatives, Farmers, Marketing, Regulated.

#### INTRODUCTION

Despite the fact that agricultural marketing falls under the purview of the States, the Government of India has a significant role to play in establishing a general policy framework, establishing quality standards, carrying out surveys and research, and offering advice, technical assistance, and financial support to the State Governments. Two entities under its authority, the Directorate of Marketing and Inspection (DMI) and the National Institute of Agricultural Marketing (NIAM), Jaipur, assist and advise the Central Government [1]–[4]. It is a department inside the Ministry and is run by the Government of India's agricultural marketing adviser. The primary responsibilities include providing advice on statutory regulation, developing and managing agricultural produce markets for the States and Union Territories, promoting the grading and standardization of agricultural and related products under the Agricultural Produce (Grading & Marketing) Act of 1937, conducting market research, surveys, and planning, training staff in agricultural marketing, and administering the Cold Storage Order of 1980 except for regulatory functions and measuring.

**National Institute of Agricultural Marketing (NIAM)** has started functioning at Jaipur with effect from 8<sup>th</sup> August, 1988. The objectives of NIAM are,

To improve the nation's agricultural marketing infrastructure through teaching, research, and consulting programs; To create and deliver training sessions that are appropriate for the personnel, businesses, and institutions that they serve; To conduct research to show and replicate better management techniques in the field of agricultural marketing; To offer consulting services for developing investment projects [5]–[8].

## **Regulated Market**

Producer-sellers suffered from exorbitant marketing costs, improper deductions of marketing expenses, and the prevalence of different malpractices within the conventional method of selling agricultural goods. The growth in producer-sellers' bargaining power was seen as the most crucial condition of orderly marketing in order to enhance marketing circumstances and with a view to generating fair competitive conditions. By exercising public control over markets, i.e., by creating regulated markets in the nation, the majority of the flaws and malpractices in the then-existing marketing system for agricultural goods have been more or less eliminated.

### **Definition of Regulated Market**

A market that is controlled attempts to do away with unhealthy and dishonest activities, lower marketing costs, and give producer-sellers in the market facilities. Any legislative initiative that tries to control the marketing of agricultural products in order to develop, enhance, and enforce uniform marketing standards and fees may be referred to as creating regulated markets. State governments have created regulated marketplaces and developed rules and regulations on how to conduct business there. A different marketing system is not what is supposed to be created by the introduction of a controlled market. The main goal has been to encourage open and informal competition in order to foster the environment for effective private commerce.

In controlled marketplaces, the farmer can conduct an open and competitive bidding process to sell his market excess in front of a number of purchasers.

The legislation for the formation of regulated markets does not require the farmer to sell his product in the regulated market make it mandatory for the farmer to sell his produce in the regulated market yard. Instead, it is anticipated that the farmers will act voluntarily to benefit from such a market. The fundamental tenet of established, regulated markets is the removal of systemic abuses and the delegation of controlling authority to farmers or their representatives in the operation of the markets.

### **Objectives of Regulated Markets**

The objectives of regulated markets are

1. To prevent exploitation of farmers by overcoming the handicaps in the marketing of their products.
2. To improve the effectiveness and efficiency of the marketing system so that farmers may receive higher prices for their produce and the products are made available to consumers at fair pricing.
3. To offer farmers incentive pricing to encourage them to enhance output both quantitatively and qualitatively;
4. To encourage an organized selling of agricultural products by enhancing the infrastructure.

### **Important Features of Regulated Markets**

According to the provisions of the agricultural produce market act, the state government notifies the market areas, market yard, main assembling market, and sub market yard, if any, under the principle controlled, of its intention to bring a specific area under regulation market. The following paragraph explains what these phrases signify:

1. **Market Area:**The region from which produce flows naturally and abundantly to a commercial hub, such as the market, and which ensures the market committee has enough business and income.
2. **Primary Market:**The primary market for assembly: Based on transactions and income generated for the market committee, the main market is designated as a key market yard.
3. **Submarket Yard:** This is the principal assembly market's submarket. This is a tiny market with insufficient revenue to be designated as a primary assembling market.
4. **Market Yard:**This is a designated part of the market area where any of the listed agricultural goods are sold, purchased, stored, and processed.

### Cooperative Market Meaning

Cooperative marketing organizations are groups of farmers who band together to market their products collectively and to gain for themselves the benefits of large-scale business that a single farmer is unable to obtain due to his meager marketable surplus. In a cooperative marketing association, the farmers are in charge of running the business, and each member has one vote, regardless of how many shares he has purchased. Depending on how much of the produce he markets, the society divides the profit it makes among its members. In other words, cooperative marketing societies are created with the intention of marketing the farmers who are members' products jointly. The idea of commercialization is emphasized. Its character and economic motivations set it apart from other associations. These societies operate similarly to private businesses in terms of structure, but they diverge significantly from the market economy in terms of goals and structures. The Indian dairy industry is a prime example of a cooperative that has achieved success and received praise from all around the world [9], [10].

### DISCUSSION

The primary duties of cooperative marketing organizations include:

1. Marketing the products of the society's members at reasonable rates; Protecting the members from excessive marketing expenses and unethical tactics;
2. To give credit facilities to members against the security of the produce brought in for sale; to establish provisions for the scientific storage of members' produce; to offer facilities for grading and market information that may help members receive a good price for their produce.
3. Establishing a pooling system in order to have greater bargaining power than individual members who only have a small amount of produce for marketing;
4. Serving as a government representative in the purchase of food grains and the implementation of the price support policy.
5. To make plans for the members' produce to be exported so they can receive better returns.
6. To arrange for the collective transportation of the members' produce from the villages to the market and reduce the amount of transportation.
7. To make arrangements for the delivery of the supplies that farmers need, such as better seeds, fertilizer, insecticides, and pesticides.

There are several benefits that cooperative marketing can give to farmers, some of which are described below:

- 1. Increases the Farmers' Bargaining Power:** The current agricultural marketing system has several flaws since it frequently pits one naïve, illiterate farmer against a well-organized mass of shrewd intermediaries. Naturally, if the farmers band together and form a cooperative, they will be less vulnerable to fraud and abuse. They will jointly advertise their produce through one agency as opposed to marketing it independently.
- 2. Direct Interaction With Consumers:** The co-operatives have the option to completely cut out the middlemen and deal directly with the end consumers. By using this method, exploiters will be stopped and fair prices for both producers and customers would be guaranteed.
- 3. Giving Credit:** The marketing cooperative organizations give credit to the farmers so they don't have to sell their produce as soon as it's harvested. The farmers will receive better returns as a result. Bulk transport of agricultural products by societies is frequently simpler and less expensive. Societies occasionally have their own modes of transportation. Storage facilities are typically provided by cooperative marketing societies. Farmers can thus wait for higher prices.
- 4. Grading and Standardization:** A cooperative organization may complete this activity more quickly and efficiently than a single farmer. They can ask the government for help or even develop their own grading systems for this reason.
- 5. Market Intelligence:** The cooperatives can organize to regularly get information from the markets on market prices, demand and supply, and other relevant information so they can plan their activities properly. Strong marketing cooperatives have negotiated and succeeded in getting better prices for their agricultural produce wherever they are active.
- 6. Input and Consumer Good Provision:** The cooperative marketing societies can readily arrange for bulk purchases of agricultural inputs, such as seeds, manures, fertilizers, etc., and consumer goods at comparatively reduced prices and can subsequently distribute them to the members.
- 7. Processing of agricultural products:** Cooperative societies are able to carry out processing tasks like crushing seeds, cotton pressing, and ginning. In addition to all of these benefits, the co-operative marketing system encourages farmers to act together and with self-assurance, without which no matter how well-planned and carried out an agricultural development program may be.

### **National Agricultural Cooperative Marketing Federation**

Under the Multi State Co-operative Societies Act, Nafed is registered. In order to help farmers, Nafed was founded with the goal of promoting cooperative sale of agricultural products. Farmers who work in agriculture constitute the majority of Nafed's members and have voting rights as members of the General Body.

### **Objectives**

The objectives of the NAFED shall be:

1. Organization, promotion, and development of agricultural, horticultural, and forest products' marketing, processing, and storage.
2. In order to deliver agricultural equipment, tools, and other inputs,
3. Engage in interstate, import-export, wholesale, or retail trade, as appropriate.

4. To promote and support the operations of its members and cooperative marketing, processing, and supply societies in India by providing technical advise in agricultural production.

The NAFED may carry out one or more of the following duties or actions to promote these goals:

1. To assist, coordinate, and advance the cooperative institutions' marketing and trade activities for agricultural and other commodities, items, and goods;
2. To engage in or promote interstate and international trade and commerce on its own or on behalf of its member institutions, the government, or government organizations, and to sell, buy, import, export, and distribute agricultural products, horticultural products, and forest products as needed.
3. To act as a warehouseman under the Warehousing Act and own and build its own godowns and cold storages. To undertake the purchase, sale, and supply of agricultural products; marketing and processing requirements, such as manure, seeds, fertiliser, agricultural implements and machinery; packing machinery; construction requirements; and processing machinery for agricultural commodities, forest produce, dairy, wool, and other animal products.
4. To plan consulting work in a range of topics for the cooperative institutions generally and its members specifically;
5. To manufacture agricultural equipment, packing, processing, and other consumer goods, as well as other industry necessities.
6. To establish storage facilities for a variety of commodities and goods, either alone or in cooperation with any other organization in India or abroad;
7. To maintain transportation facilities for the transfer of products by land, sea, air, etc., either alone or in cooperation with any other organization in India or overseas.
8. To work together with any international organization or foreign entity to create cooperative marketing, processing, and other activities in India for the benefit of both parties.
9. To conduct market research and disseminate market intelligence; To invest in the stock of other cooperative organizations as well as other public, joint, and private sector enterprises, as deemed necessary for achieving NAFED's goals.
10. To arrange for the training of cooperative supply, processing, and marketing societies' staff;
11. To establish processing facilities for the processing of agricultural, horticultural, and forest products as well as wool; to engage in the grading, packing, and standardization of agricultural products as well as other articles; to acquire, take on lease from, or hire lands, buildings, fixtures, and vehicles and to sell, lease from, or hire them.
12. To make loans available to its members and other cooperative institutions, whether or whether they are secured by collateral.
13. To support the development or expansion of any Society or Company in which the Federation has a shareholding or financial engagement as a promoter, or to provide undertakings to such SocietiesCompanies for the launch of any Industrial Project;
14. To provide guarantees for loans or advances or undertakings on behalf of any of the aforementioned societies or businesses to any financial institutions:

15. To carry out all actions or engage in all endeavors that may be incidental or helpful to the accomplishment of any or all of the aforementioned goals.

### CONCLUSION

To improve agricultural trade effectiveness and fairness, two strategies have been proposed: regulated markets and cooperative agricultural marketing. Government action in regulated markets creates guidelines, benchmarks, and control systems to maintain market stability, ensure honest competition, and protect farmers from exploitation. However, bureaucracy, inefficiency, and lack of flexibility can hinder creativity and market response. Cooperative agricultural marketing involves farmers pooling resources to market and sell their produce, increasing farmer control and bargaining strength. Both strategies have benefits and drawbacks, and their effectiveness depends on factors like local environment, government support, and farmer involvement.

### REFERENCES:

- [1] J. Chacón-García, Geomarketing techniques to locate retail companies in regulated markets, *Australas. Mark. J.*, 2017, doi: 10.1016/j.ausmj.2017.06.001.
- [2] J. B. Grandy and S. R. Hiatt, State Agency Discretion and Entrepreneurship in Regulated Markets, *Adm. Sci. Q.*, 2020, doi: 10.1177/0001839220911022.
- [3] J. Pierk, IPOs and IFRS in European exchange-regulated markets: A research note, *J. Account. Public Policy*, 2018, doi: 10.1016/j.jaccpubpol.2018.09.005.
- [4] A. Marshall, H. Pinto, and L. Tang, Executive compensation in less regulated markets: the impact of debt monitoring, *Eur. J. Financ.*, 2019, doi: 10.1080/1351847X.2019.1668448.
- [5] T. Bernard and D. J. Spielman, Reaching the rural poor through rural producer organizations? A study of agricultural marketing cooperatives in Ethiopia, *Food Policy*, 2009, doi: 10.1016/j.foodpol.2008.08.001.
- [6] M. Agbo, D. Rousseliere, and J. Salanii, A Theory of Agricultural Marketing Cooperatives with Direct Selling, *SSRN Electron. J.*, 2013, doi: 10.2139/ssrn.2357440.
- [7] A. D. Nugroho, L. R. Waluyati, and J. Jamhari, Upaya Memikat Generasi Muda Bekerja Pada Sektor Pertanian di Daerah Istimewa Yogyakarta, *JPPUMA J. Ilmu Pemerintah. dan Sos. Polit. Univ. Medan Area*, 2018, doi: 10.31289/jppuma.v6i1.1252.
- [8] W. Nnyanja, The Role of Saving and Credit Cooperatives in Improving Household Income: the Case for Teachers in Mukono District, *Master itthesis Monit. Eval. Ugandan Technol. Manag. Univ.*, 2017.
- [9] M. Agbo, D. Rousseliire, and J. Salanii, Agricultural Marketing Cooperatives with Direct Selling: A Cooperative Non Cooperative Game, *SSRN Electron. J.*, 2015, doi: 10.2139/ssrn.2556117.
- [10] R. J. Sexton, Cooperatives and the Forces Shaping Agricultural Marketing, *Am. J. Agric. Econ.*, 1986, doi: 10.2307/1241869.



## CHAPTER 14

### UNDERSTANDING FINANCIAL STATEMENTS: ANALYZING BUSINESS PERFORMANCE

---

Dr. Mukesh yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### ABSTRACT:

For enterprises, investors, and stakeholders to evaluate a company's financial performance and health, they must have a thorough understanding of its financial statements. A company's assets, liabilities, revenues, expenses, and cash flow are all detailed in financial statements like the balance sheet, income statement, and cash flow statement. One can assess the company's profitability, liquidity, solvency, and overall financial soundness by looking at these statements. Making informed decisions, such as determining a company's ability to pay off debt, gauging its profitability, and estimating its development potential, are made easier with the help of financial statement interpretation. It enables management to find areas for improvement and make strategic decisions, and it enables investors to evaluate the value and risk of an investment.

#### KEYWORDS:

Business, Balance, Company, Financial, Recodes

#### INTRODUCTION

There is probably no phrase that managers use more frequently than profit, or the bottom line. The income statement's bottom line is very important for every organization. This graph summarizes the company's and its management's performance over the previous 12 months. It serves as a benchmark for assessing the company's relative success or failure throughout this time. Profit, or the amount from a sale left over after operational costs and product costs have been covered, is frequently used as a historical benchmark to show the expertise and aptitude displayed by decision-makers inside a business. The management team, corporate board members, and CEO (chief executive officer) of the company are all smitten with this word profit. It is possible to link the significance of this figure over time to the firm's capacity to expand, penetrate new markets, and roll out new goods [1]–[4]. Even if the bottom line is crucial in and of itself, other forms of financial information are also required to accurately assess a firm's performance. The successful agribusiness manager must comprehend what the company did that resulted in the bottom line. The manager then uses this information to improve the bottom line going forward. This is the main focus of the study of financial management. The effective manager is familiar enough with the company's financial operations to be able to use this knowledge as a tool for enhancing organizational performance. Although the bottom line serves as a point of reference, competent agribusiness managers must comprehend how the other accounts on the balance sheet and income statement relate to one another in order to run the company effectively [5]–[8].

#### The Importance of Financial Statements

Financial management necessitates having a working understanding of how to decipher financial data from a company's records. The agricultural firm uses this information to meet two different

purposes. The first, and arguably more crucial, requirement is the need for information that managers may use internally when making decisions. Second, information is required for financial reporting, including disclosing financial performance to stockholders, outside parties like lenders, and other parties with an interest in the company. Agribusiness managers at all levels find it challenging to successfully pursue the organization's goals and objectives in the absence of financial information. As a result, any agribusiness enterprise needs to compile historical records of financial data that are essential to its ongoing performance.

The mountains of paper, the trillions of forms, the millions of computers, and the hundreds of thousands of individuals working in documenting business activity across the nation serve as evidence of the significance of financial information and records. Italy is where modern financial record keeping first emerged about six centuries ago. The expansion of commerce in Venice and Genoa, two important commercial hubs, prompted a demand for corporate records. This demand led to the creation of a record-keeping and bookkeeping system that is still commonly used today. This technique divides a firm's records into two main documents and then summarizes them. The balance sheet and the income statement are the names of these files. They combine to form the company's main financial statements. The importance of these financial statements will be covered in more detail in the next chapters, along with examples of how agribusiness managers can utilize them to inform their choices [9]–[11].

### **Correct information at the Proper Time**

The goal of agribusinesses is to maximize returns on their available resources. A number of other goals are connected to the profit goal, including delivering high-quality goods or services, rewarding the company's employees, fostering business expansion, pursuing environmental stewardship, and fostering the firm's reputation as a good citizen of the neighborhood. All commercial groups, from the large food corporation to the rural, small-town feed dealer, share these kinds of goals. Such goals are typically not achieved by a single, spectacular tactical move, but rather by consistently using resources to the fullest extent possible over an extended period of time. Managers must have pertinent and up-to-date financial information and records in order to consistently allocate resources to achieve the company's goals. organization records are instruments that managers can use to intelligently direct the operation of the firm and make wise management decisions that are consistent with the requirements, goals, and objectives of the organization. The process of gathering and using data supplied for these uses is frequently referred to as managerial accounting.

Firms must also comply with the reporting obligations set forth by various outside authorities. Every agribusiness, for instance, is required to monitor sales, purchases, expenses, and profit or loss. To satisfy the reporting needs of governmental bodies, lending institutions, investors, and company suppliers, records that detail these areas are required. Financial accounting is the term used to describe the gathering and utilization of information reported for these reasons. Although a records system must be created to satisfy the firm's managerial and financial reporting requirements, it should be based on the following standards:

1. It must be clear and straightforward to grasp.
2. It must be prompt, accurate, dependable, and consistent.
3. It ought to be dependent on how special the specific company is.
4. It should be affordable to maintain and implement.

5. It is typically advised to hire knowledgeable outside consultants or advisers who are not employees of the company while building the records system for an agribusiness.

These experts can assist in determining which system of records best suits the demands of the company. In addition, to maintain their managerial and financial reporting system, all but the smallest agricultural firms require experienced and qualified bookkeepers and/or accountants.

### Uses of a Good Accounting System

The accounting system also serves to secure an agribusiness's resources and prevent errors. To do this, records must be upheld honestly and accurately by qualified employees. A system of checks and balances should be put in place as the company expands to make sure that no one person has total authority over any transaction. Employees who are cashiers or money collectors, for instance, shouldn't be involved in bookkeeping. It is improper for the person in charge of purchasing to also handle bookkeeping and check writing. Records, reports, and controls should always and everywhere be the responsibility of at least two persons. The organization's financial records are often audited by external auditors to ensure their accuracy and integrity. All of this is done to confirm the legitimacy and integrity of everyone involved and to ensure that accurate records are being preserved, not so much to infer dishonesty. There is minimal cause to suspect fraud when an accounting system has the necessary checks in place. Financially sound records should serve as the foundation for:

1. Evaluating the business's performance in terms of its capacity to maintain a profit during particular time periods or cycles.
2. Determining the business's current overall financial status or health.
3. Projecting the business's capacity to satisfy future demands from creditors, change, and expansion.
4. Examining performance trends in relation to managerial skills and the success or failure of previous decisions and accomplishments.
5. Deciding between the many options for future resource utilisation within the company.

### Working with Accountants

Some agricultural managers admit to having a phobia of financial management and accounting simply because they are not familiar with how the system functions. Chuck Altman, the owner and president of a big wholesale fertilizer company, is one of these managers. Chuck's lack of familiarity is a result of the fact that his business began out tiny and that his financial knowledge and abilities did not advance alongside it. In larger businesses, numerous additional managers have risen through the ranks from the departments of sales, production, and operations. Additionally, they are unaware of the financial aspect of the company. It is not necessary for the manager to be proficient in accounting or to keep track of an organization's records. Instead, the agribusiness manager should focus on comprehending the operation of the system and what data the record-keeping procedure generates that might be beneficial for financial reporting, forecasting, and decision-making. The management of an agricultural business is likely to encounter many controllers, accountants, and bookkeepers who have conceptual views of the world. Although accurate and interesting, the information produced by these professionals' methods might not be clear or useful to those in charge of running the business. The manager is in charge of deciding what data is required and how it should be presented.

Each manager examines the data provided by the organization's records and decides if it should be used only for managerial decision-making. If so, the data should be compared to the specification that was previously given. Then, he or she must pose queries like, Will this information or data enable management to make better decisions?, Is the information prepared in such a way that managers can readily grasp and evaluate it? and Is this information something that the specific agribusiness really needs? Records that don't pass these checks ought to be changed or removed. However, data that will be used in financial reporting to governmental entities, lenders, and others is typically much more standardized in terms of criteria such as profitability, liquidity, and solvency and measures such as rates of return on assets and equity, solvency ratios, liquidity measures. This data must be reported in line with generally recognized accounting principles and practices.

### **The Accounting Process**

The organization's founding documents serve as a major source of inspiration for the record-keeping procedure. These records contain things like receipts, cheques, invoices, time sheets for employees, and bills. Such early records could be thought of as the foundation of the entire record-keeping system. Chuck Altman's fertilizer company has more expenses than sales every day, as can be seen if we take a detailed look at it. These regular transactions are noted in a journal, which can be either a physical book or an electronic file. The business's first entry book is another name for the journal. All business transactions are listed here in reverse chronological order. Thus, the journal offers a running record of the daily transactions or operations of the company. One book, computer file, or general journal may be all that is needed in a small business to keep track of all financial activities. As a company like Chuck Altman's expands, it becomes important to have a number of specialist journals or computer files for specific parts of the firm to track distinct categories like sales, purchases, and available cash. While the journal chronologically captures the business's transactions or operations, it does not organize them in a way that allows the manager to analyze or make sense of the data. Financial statements that are created utilizing the data entered in the journal serve as the source of this information.

## **DISCUSSION**

### **Financial Statements**

Financial statements are a brief summary of a company's financial situation, typically provided as a ledger account summary. The balance sheet and income statement make up the fundamental financial statements in most cases. A balance sheet, as was previously said, displays the assets, liabilities, and ownership stake of a company. It can be compared to a snapshot that reveals the business's financial structure and state at a certain moment in time. Contrarily, the income statement is a summary of the company's operations for a specific time period, typically the interval between the dates of two balance sheets. It may be likened to a film of the company that shows the financial actions as they took place throughout time. The balance sheet typically depicts the company's present financial situation. Instead, the income statement shows how the company's finances have changed since the last time a balance sheet was created. The operating statement, profit and loss statement, or just P&L statement are other names for the income statement. In agribusinesses that are primarily seasonal in nature, the duration of the accounting period and the dates for publishing financial statements are particularly crucial. In the majority of the nation, the three to four months leading up to and during the planting season represent a significant chunk of the business year for fertilizer and chemical companies. For instance, a

financial sheet prepared immediately before the busy season is likely to show substantial stockpiles of fertilizer and low customer debt. This same statement will probably show less fertilizer on hand and higher amounts due by customers if it is prepared just after the busy season. If such financial figures are not understood in light of the seasonal characteristics of the business, they can be quite deceptive. As a result, the agribusiness manager must comprehend why changes in financial statements are unavoidable in agribusinesses that are very seasonal. Financial statements from prior years can offer a more reliable comparison than a straightforward month-by-month comparison.

### **Brookstone Feed and Grain Company**

Many smaller agricultural firms, such as Brookstone Feed and Grain (BF&G), fit this description. BF&G is a Midwest-based retail agribusiness company. It offers a huge selection of farm products, chemicals, feed, and fertilizers. Additionally, BF&G sells grain, particularly corn and soybeans. The company offers a range of services to its clients, including the supply of feed, the application of fertilizer, the drying of grain, and the storage of grain. In order to meet the demands of each individual customer, BF&G obtains fertilizer from national manufacturers and blends goods. The Gulf and Southeast receive unit trains of corn from BF&G, which is situated on a rail line. The company has a grain market region that is around 25 miles long. Tables 1 and 2 list the activities of BF&G throughout the past year.

### **The Balance Sheet**

As previously mentioned, the balance sheet is a financial summary of the assets and liabilities of the company as well as the owners' financial investment in the company (Figure 1. Assets are financial resources with monetary value. On a balance sheet, assets are typically listed at the top or on the left side (Figure 1, a to s). Liabilities are the sums owed to creditors by the company. In Figure 1 (aa to ll), liabilities are often found in the middle or on the right side of the balance sheet. Legally, the business's creditors would have priority over any of its assets. Owner's equity, also known as the owner's claim against the assets, is the worth of the assets above and beyond the firm's liabilities. Owner's equity, which is also known as net worth (mm), is the total of a number of distinct accounts. On the balance sheet, the owner's equity column often appears immediately below the liability portion (Figure 1, mm to qq). This brings up the balance sheet's dual-aspect idea. The balance sheet is designed to show two sides of every entry or transaction that is made. There is an offsetting claim against every item or resource of value. The accounting equation follows from understanding this concept:

$$\text{Assets} = \text{Liabilities} + \text{Owner's Equity}$$

An examination of the following case will clarify this concept.

Jody Snyder put \$2,000 in cash in the bank when she made the decision to launch her gardening company. She had invested \$1,000 of her own money and another \$1,000 that she had gotten on a bank loan. A balance sheet that Jody would have created at that time would have revealed assets of \$2,000 in cash balanced against liabilities of \$1,000 to the bank and \$1,000 to the owner. Using the formula for the balance sheet:

$$\text{Assets} = \text{Liabilities} + \text{Owner's Equity}$$

$$\$2,000 = \$1,000 + \$1,000$$



(a)	<b>Assets</b>		
(b)	<b>Current Assets:</b>		
(c)	Cash		175,000
(d)	Accounts Receivable		1,600,000
(e)	Inventory		2,500,000
(f)	Prepaid Expenses		7,000
(g)	<u>Other</u>		<u>5,000</u>
(h)	Total Current Assets		\$4,287,000
(i)	<b>Fixed Assets:</b>		
(j)	Land		1,150,000
(k)	Building	600,000	
(l)	<u>Less: Accumulated Depreciation</u>	<u>150,000</u>	450,000
(m)			
(n)	Equipment	1,300,000	
(o)	<u>Less: Accumulated Depreciation</u>	<u>520,000</u>	<u>780,000</u>
(p)			
(q)	Total Fixed Assets		\$2,380,000
(r)	<b>Other Assets</b>		<u>10,000</u>
(s)	<b>Total Assets</b>		<b>\$6,677,000</b>
(aa)	<b>Liabilities</b>		
(bb)	<b>Current Liabilities:</b>		
(cc)	Accounts Payable		800,000
(dd)	Notes Payable		1,000,000
(ee)	Accrued Expenses		35,000
(ff)	<u>Advances</u>		<u>27,000</u>
(gg)	Total Current Liabilities		\$1,862,000
(hh)	<b>Long-Term Liabilities:</b>		
(ii)	Mortgages		1,000,000
(jj)	<u>Other</u>		<u>150,000</u>
(kk)	Total Long-Term Liabilities		<u>\$1,150,000</u>
(ll)	<b>Total Liabilities</b>		<b>\$3,012,000</b>
(mm)	<b>Owner's Equity</b>		
(nn)	<b>Owner-invested Capital:</b>		
(oo)	Common Stock		1,885,000
(pp)	<u>Retained Earnings</u>		<u>1,780,000</u>
(qq)	<b>Total Owner Equity</b>		<b>\$3,665,000</b>
(rr)	<b>Total Liabilities and Owner Equity</b>		<b>\$6,677,000</b>

**Figure 1:** Balance sheet for Brookstone Feed and Grain Company, [Research gate.Net].

As this equation liabilities plus owner's equity shows, there will always be a balance between the financial resources' assets and the claims made against them.

The balance sheet constantly balances, hence its name. The next section lists all of the components.

	<b>Sales:</b>		
	Grain and Soybeans	\$8,146,000	
	Seed	670,500	
	Fertilizer and Chemicals	2,213,000	
	Feed	1,810,000	
	Miscellaneous Supplies	402,300	
	<u>Service Income</u>	<u>268,200</u>	
	<b>Gross Sales</b>	\$13,510,000	
	Less Returns, Allowances, and Discounts	<u>100,000</u>	
(a)	<b>Net Sales</b>	\$13,410,000	100.00%
(b)	<b>Cost of Goods Sold:</b>		
	Grain and Soybeans	7,556,900	
	Seed	511,650	
	Fertilizer and Chemicals	1,791,420	
	Feed	1,534,380	
	Miscellaneous Supplies	330,650	
	<u>Service Expense</u>	<u>0</u>	
	<b>Total Cost of Goods Sold</b>	<u>11,725,000</u>	87.43%
(c)	<b>Gross Profit (Margin)</b>	\$1,685,000	12.57%
(d)	<b>Operating Expenses:</b>		
(e)	Salaries and Benefits	210,000	1.57%
(f)	Full-time Wages	166,000	1.24%
(g)	Part-time Wages	10,400	0.08%
(h)	Commissions	42,740	0.32%
(i)	Depreciation	290,000	2.16%
(j)	Maintenance and Repairs	58,000	0.43%
(k)	Utilities	56,990	0.42%
(l)	Insurance	71,200	0.53%
(m)	Office Supplies/Expense	26,820	0.20%
(n)	Advertising/Promotion	6,400	0.05%
(o)	Gas and Oil	48,600	0.36%
(p)	Delivery and Freight	156,710	1.17%
(q)	Rent	6,300	0.05%
(r)	Taxes, Licenses, Fees	48,160	0.36%
(s)	Miscellaneous	3,300	0.02%
(t)	Payroll Tax	10,900	0.08%
(u)	<u>Bad Debt</u>	<u>3,290</u>	<u>0.02%</u>
(v)	<b>Total Operating Expenses</b>	<u>\$1,215,810</u>	<u>9.07%</u>
(w)	<b>Net Operating Income</b>	\$469,190	3.50%
(x)	Other Revenue	18,200	0.14%
(y)	<u>Interest Expense</u>	<u>230,840</u>	<u>1.72%</u>
(z)	<b>Net Income Before Taxes</b>	\$256,550	1.91%
(aa)	<u>Taxes</u>	<u>59,900</u>	<u>0.45%</u>
(bb)	<b>Net Income After Taxes</b>	\$196,650	1.47%

**Figure 2: Income statement for Brookstone Feed and Grain Company, [Reserch Gate.Net].**

### Asset

As was said earlier, assets are valuable resources that the company controls. Of course, unless the company is set up as a corporation, it has no legal ownership over anything. Regardless of how the business is set up, whether it is a sole proprietorship, partnership, or corporation, all



bookkeeping for the firm should be kept separately from the personal assets and funds of the owner or owners. Small agricultural firms that combine personal and company assets struggle to clearly define actual business performance. Current assets, fixed assets, and other assets are the three categories into which business assets are commonly divided. Current assets are defined as cash or assets that will be converted to cash during one normal business operating cycle, which is typically one year, for accounting purposes. Lenders and other parties pay close attention to the entire value of current assets, so it is critical to distinguish between current assets and fixed and other assets. This figure at the very least approximates the firm's potential for cash flow generation. A

s the amount of money that can be swiftly raised to cover current obligations, the value of current assets has a significant bearing on the stability of the company. For instance, a nursery might find that fumigating a sizable area is required before planting nursery stock. Due to their low existing assets, owners may have a difficult time raising the money for this emergency. The following is a list of possible main current asset accounts. Cash money are those that can be used without limitation right now. These funds are typically available in the form of cashier's checks, petty cash, and checking account deposits at banks. Cash reserves should be sufficient to cover any obligations that are due right away. As of December 31, BF&G had only \$175,000 in cash on hand (see Figure 2). BF&G might need to borrow more short-term funds in order to meet its purchase obligations as carloads of fertilizer or deliveries of seed start to come in soon after the first of the year.

The total sum that clients owe the business for previous purchases is shown as accounts receivable. In essence, these accounts are a result of giving clients credit. They could be interest-bearing accounts with no service fees or interest assessed, or they could be charge accounts. They reduce the firm's cash position in either scenario. The less money the company has available to address immediate demands, the greater the amount of outstanding accounts receivable. The quantity in this account is determined by the firm's credit policy, which refers to how much credit is given to consumers and how well the company collects these unpaid bills. Some agricultural firms rely significantly on credit as a marketing strategy. Due to the seasonal nature of agricultural production, many clients prefer to wait to make payments until after the harvest and sale of their crops. BF&G operates in a sector where selling on credit is typical. As shown in Figure 1, as of December 31 customers of Brookstone still owed a total of \$1,600,000 from purchases made within the previous year or earlier. Management and creditors of BF&G will be keeping a close eye on this indicator because borrowing money to cover the firm's commitments is an additional cost that lowers the business's profitability.

The difficulty for BF&G is to maintain a credit policy that is both stringent enough to protect its own cash flow position and generous enough to extend credit without harming sales. The term inventory refers to items that are kept on hand for regular company sales or that must be consumed during the production of goods and services that will be sold. Items in inventory are typically valued at the lower of cost real money spent or market value what they are worth. At cost, BF&G had inventory valued at \$2,500,000 as of December 31. The company might already be stocking up for the upcoming spring discounts. Its managers strive to maintain as little inventory as possible in order to reduce cash outlay while still having enough products available to satisfy client demand. One of management's most crucial responsibilities, especially for merchants, is the control of inventory and related expenses. Controlling inventory benefits greatly from having accurate accounting records. BF&G will reduce its inventory investment and

raise its return on investment in inventory as it gets better at aligning product supplies with customer requests.

### CONCLUSION

In order to gain significant insights into a company's financial performance and health, it is essential for both individuals and organizations to understand financial statements. A company's financial situation, profitability, and cash flow are all thoroughly outlined in financial statements including the balance sheet, income statement, and cash flow statement. Stakeholders can evaluate a company's capacity for generating profits, handling debt, and preserving liquidity by examining these statements. This knowledge enables stakeholders to evaluate a company's overall financial stability and prospects, assists management in identifying areas for development, and enables investors to make knowledgeable decisions.

### REFERENCES:

- [1] D. P. Tarantino, Understanding financial statements., *Physician Exec.*, 2001, doi: 10.4324/9781315709420-22.
- [2] E. E. Nusbaum, Understanding your financial statements, *J. Med. Pract. Manag.*, 1989.
- [3] S. A. Zeff and J. B. Ross, Understanding Financial Statements and Corporate Annual Reports (Book), *Account. Rev.*, 1962.
- [4] PwC, Understanding a financial statement audit, *Ann. Univ. Apulensis Ser. Oeconomica*, 2017.
- [5] D. H. Boylan and C. L. Boylan, Technology in accounting: Social media as effective platform for financial disclosures, *Int. J. Digit. Account. Res.*, 2017, doi: 10.4192/1577-8517-v17\_4.
- [6] A. I. Budiman *et al.*, Factors Affecting Understandability of Micro, Small, and Medium Enterprises in Preparation of Financial Statement Based on SAK ETAP in Palembang, *Sriwij. Int. J. Dyn. Econ. Bus.*, 2017, doi: 10.29259/sijdeb.v1i3.37.
- [7] S. N. Wisnantiasri, I. P. Sofia, F. Nurhidayah, and K. Sunaryo, Pelatihan Pembuatan Laporan Keuangan Bagi UMKM Sebagai Informasi Untuk Pengambilan Keputusan, *J. Pemberdaya. Masy. Madani*, 2018, doi: 10.21009/jpmm.002.1.05.
- [8] R. Tuti and P. F. Dwijayanti, Rias Tuti, *J. Akunt. Kontemporer*, 2016.
- [9] S. Ozlen and U. Ergun, Internal Determinants of the Stock Price Movements on Sector Basis The Importance of Financial Statements in the Evaluation of Stocks, *Int. Res. J. Financ. Econ.*, 2012.
- [10] A. Parés, The Return on Equity Decomposition (Roed) and Its Importance to Financial Statement Analysis, *J. Bus. Financ. Account.*, 1980, doi: 10.1111/j.1468-5957.1980.tb00206.x.
- [11] F. Firnanti and A. Karmudiandri, Corporate Governance and Financial Ratios Effect on Audit Report Lag, *GATR Account. Financ. Rev.*, 2020, doi: 10.35609/afr.2020.5.1(2).

## CHAPTER 15

### ANALYZING FINANCIAL STATEMENTS: KEY INSIGHTS FOR DECISION-MAKING

---

Dr. Mukesh yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### **ABSTRACT:**

For people and organizations involved in evaluating the financial performance and health of a company, the ability to analyze financial documents is a crucial one. A company's profitability, liquidity, solvency, and general financial stability can be learned by carefully examining its financial documents, including the balance sheet, income statement, and cash flow statement. Through financial statement analysis, stakeholders can review the company's financial performance and contrast it with industry norms or rivals by looking at important financial ratios, trends, and benchmarks. Making informed judgments, such as evaluating investment opportunities, detecting hazards, and figuring out the company's capacity to pay debts, are made easier with the use of this study. In general, financial statement analysis helps stakeholders understand a company's financial status better, create wise opinions, and support strategic decision-making.

#### **KEYWORDS:**

Analysis, Current, Company, Data, Management.

#### **INTRODUCTION**

Managers, owners, lending institutions, and the government can learn a lot from an agribusiness' financial statements. Some of this data doesn't need much interpretation, but a lot of it is useless without the right context. Many managers who look at a financial statement are like the explorer who first sees an iceberg and doesn't realize that what is seen is only the tip and that 90% of the iceberg is concealed under water; they fail to grasp that what is seen is only the tip. Financial statements contain a wealth of information, but the average person may not always realize it. Financial statements may be little more than meaningless bits of paper without competent examination [1].

Financial analysis can be compared to a person's annual physical, when much more than a cursory examination from the doctor is anticipated. Physicians must run a number of tests and ask a lot of questions in order to determine whether or where an issue might be present. The same process must be followed by those who are concerned about the business's financial health and development.

Agribusiness firms that thrive and survive require managers who use financial analysis tools to assess the firm's vital financial functions and overall health before recommending changes that will keep the enterprise on track to achieve its objectives and continue to be viable and competitive in the future. This chapter discusses tools that enable those with an interest in the business to use financial analysis to assess how well the business has performed, what opportunities or problems exist, and what alternative or corrective courses of action might improve performance in the future [2], [3].

### **Financial Statements: their use in evaluating performance**

A company's financial statements should offer enough viewpoints to satisfy all interested parties because they can be evaluated from several angles. The neighborhood takes a look at how much the agricultural company invests in community service. Cooperative members are interested in the savings and efficiency that come from patronage. Suppliers are curious about the company's capacity for marketing and paying for goods. Customers are concerned with the company's long-term viability and its capacity to deliver goods in a timely way and for a fair price. While the board of directors is interested in how effectively the management team is using the firm's financial resources, employees are engaged in achieving firm goals because doing so should boost their income. Barry Meade, president of Meade Food Brokerage, is an example of a manager who is prone to approaching the company's financial figures largely from two angles. First, to assess the company's performance and identify potential applications of financial data to future decision-making. The main indicator of success or failure is profit.

To make this analysis more convenient, some businesses will divide their offices into distinct profit centers. Second, the manager must keep in mind that the financial statements and their analysis should give lenders, investors, and the government complete, accurate, and timely information because success depends on their approval. Pilar Fernandez invested in ConAgra because she was very concerned about the company's performance and overall health. She was primarily concerned with the rate of return on the money she had invested in the company's stock, though. She anticipated that her investment would be on par with or better than equivalent risk alternative investment alternatives [4]–[7]. Cooperative members, on the other hand, focus their attention on the effectiveness of the business and the discounts they receive as a result of their patronage. As mentioned in Chapter 4, these are the implied returns for patron members. In the meantime, Mary Hartman, who oversees Farmers' Bank and Trust's commercial loan division, is interested in a company's profits as well as cash flow because it serves as a key indicator of its capacity to repay loans. She, like all lenders, places greater emphasis on the firm's assets vs liabilities since she is concerned with safeguarding the loan from loss.

Depending on their specific requirements, governmental entities are interested in financial accounts from a variety of angles. For instance, the tax assessor is interested in asset appraisal, the Internal Revenue Service is interested in profits, and the Labor Department is interested in wages and employee data. The business will be required to provide specific types of information in the right manner to each of the numerous governmental entities. When creating and evaluating the financial statements of the company, the agribusiness manager must be aware of all aspects. The first crucial step is to construct these assertions in a format that the agriculture firm can use. The second crucial element in efficient financial management is the evaluation of agribusiness performance, which is covered in this chapter [8]–[11].

### **Timely Analysis**

Management planning is crucial to the success of an agribusiness. However, as planning necessitates taking the future into mind, even the best management strategies can go wrong. The management team must therefore keep track of the firm's advancement or lack thereof against previously set objectives. Because management found out too late that objectives weren't being met, many agribusinesses collapse. Management might have identified the issue while it was growing by routinely reviewing financial records, which would have given enough time for

corrective action. This is presuming the records were accurate and comprehensive. An accurate and prompt review enables management to start enacting backup measures as needed.

The use of financial information in firm evaluation is comparable to checking the oil in a car. When the oil level is too low, a pressure gauge warns the user. However, the prudent driver will routinely check the oil to avoid such issues. The same is true for company records. These documents ought to be kept up to date enough to stop major issues from arising. The health of the company should be periodically checked on the spot. Most organizations should compile and evaluate their financial accounts on a monthly basis, or at least once every three months, to identify potential issues or opportunities before they arise or are lost. The risk of learning too late that issues or possibilities have gone unnoticed makes the procedure's cost insignificant.

### What areas require analysis?

Data collection might evolve into an endless process with rising expenses and declining benefits. In general, for data to be valuable for management, it must be pertinent to the decision-making process. Ratios can be used by agribusiness managers to track their company's financial health and performance. Financial ratios are typically used to examine a company in four different categories. Profitability, liquidity, solvency, and efficiency are these areas. The following lists the details that have been supplied about the firm in each of these categories.

**Profitability Ratios:** Revenue and expense trends, including those related to sales, operational costs, overhead costs, and wages  
Success of the company as measured by actual profitability, trends in profitability, and how the company's profitability stacks up against that of other businesses  
Utilization of resources by the business to provide a return on equity high enough to please both current and potential investors  
Ability of business to pay off long-term debts.

**Liquidity Ratios:** The company's liquidity, or its capacity to pay current obligations like salaries and supplier purchases. The business's capacity to respond to market unpredictability.

**Solvency Ratios:** The capital structure of the company and its capacity to carry out any future changes or expansions. The business's capacity to manage risk and compensate for potential losses.

**Efficiency Ratios:** Trends in performance and production, as assessed by previously established efficiency standards. The management team's capability to use the company's resources in a financial and operational manner that is appropriate. The business's capacity to remain globally competitive in a market that is always changing.

### Begin by Establishing Benchmarks

Financial data interpretation doesn't have to be a difficult procedure. The creation of benchmarks or points of reference is at its core. Simple processes can secure a lot of information. Comparing the current era with earlier periods that are comparable to it is one of the simplest methods to spot trends and spot issues or possibilities. It may be helpful to make comparisons between data from the previous year and the current period, with an average figure, or between the current month and the same month from the previous year, or to trends.

An important idea should be highlighted at this moment. People are the ones that solve issues and seize opportunities, not financial analyses and records. The manager can only uncover issues and opportunities by asking the right questions, which can only be assisted by record analysis.

Alternative strategies or limitations on activity may be proposed and identified, but these records by themselves lack cognitive value. For this procedure to be effective, the management must take specific measures based on his or her financial analysis. Consider that the Dixie Manufacturing Company's controller, Neil Gray, reports that the company's receivables for December are \$349,000 in total. That figure might not be very significant by itself. He can be made aware of a potential issue or opportunity if he notices that the accounts receivable balance in December of the previous year was \$270,000 (Figure 1).

<i>Current Assets</i>	<i>December 31, 2010 (\$)</i>	<i>December 31, 2009 (\$)</i>
Cash	272,000	210,000
Marketable Securities	380,000	395,000
Accounts Receivable	349,000	270,000
Inventory	550,000	610,000
<b>Total Current Assets</b>	<b>1,551,000</b>	<b>1,485,000</b>

**Figure 1: Dixie manufacturing company comparative balance sheets [Research gate.Net].**

There are a lot of potential causes for this transformation. It's possible that more inquiries and responses are required to provide the management all the information they require. The value of accounts receivable might have easily increased by 29 percent by raising product prices, or the year's total sales could have increased by 29 percent. However, Neil would need to pay closer attention to how the accounts receivable are being paid before thinking about altering the firm's credit policy. The crucial problem is that the figure gained additional significance as compared to a previous time period. One of the greatest ways to pinpoint areas where the manager should ask questions is to use this straightforward and quick comparison. Neil needs the responses to a few questions in order to properly assess this. Has the company's credit policy changed? Have sales significantly increased throughout this time?

Which Dixie accounts make for the most of the \$349,000 in receivables owed to their company? Has anything changed in a year? Neil will be able to evaluate whether any action is required by the responses to these and comparable questions. Neil would then determine the cause of the deviation, find the answers to the questions, and then, if necessary, take the necessary corrective action. Additionally, industry averages can be used to compare performance metrics. Industry data is gathered, compiled, and analyzed by several trade groups, colleges, governmental bodies, consulting firms, etc. These reports can also be used to make comparisons. Another great contrast is between the financial statements and the estimates that were included in the budget. In particular, if the first statement is an income statement, this is true. For comparative purposes, Figure 2 provides information from the income statement in an effective manner. The first column includes the actual figures from the prior year for sales, cost of goods, gross margin, and expense information.

The budgeted figures for this year are listed in the second set of columns. In other words, these numbers show Pacey's financial objectives for the current time frame. The actual amounts for the current year are shown in the third set of financial data columns. Budgeted and actual data are shown in the final two sets of columns for the most recent quarter. To gauge relative success in cost control, buying, and pricing, Pacey Farm Store management can compare actual operating results to the budget and previous year's figures. According to a cursory examination, Pacey has



a significant gross margin issue. Gross margin as of this point in the period is currently \$4,600 below the budgeted target (\$42,810 actual versus \$47,439 budget) (\$47,439 actual versus budget). For the purpose of identifying any specific issues, both pricing choices and purchasing procedures must be examined.

Table 10.2 Pacey farm store expense budget and control report

	Last year to date (Actual)		This year to date (Budget)		This year to date (Actual)		90-day (Budget)		90-day (Actual)	
	Dollars	Percent of Sales	Dollars	Percent of Sales	Dollars	Percent of Sales	Dollars	Percent of Sales	Dollars	Percent of Sales
Nets sales	175,502	100.0	180,000	100.0	185,310	100.0	81,889	100.0	85,305	100.0
Cost of goods sold	131,566	75.0	132,561	73.6	142,500	76.9	62,185	75.9	66,847	78.4
Gross margin	43,936	25.0	47,439	26.4	42,810	23.1	19,704	24.1	18,458	21.6
Full-time labor	19,764	11.3	20,500	11.4	19,764	10.7	9,882	12.1	9,527	11.2
Part-time labor	4,392	2.5	5,000	2.8	4,392	2.4	2,196	2.7	1,929	2.3
Overtime labor	0	0	0	0	0	0	0	0	0	0
Management fee	4,500	2.6	4,500	2.5	4,569	2.5	2,000	2.4	2,031	2.4
Total property expenses	1,800	1.0	1,800	1.0	1,800	.9	900	1.1	900	1.0
Warehouse expenses	550	.3	500	.3	580	.3	250	.3	290	.3
Advance and sales promotion	4,725	2.7	4,500	2.5	5,374	2.9	2,000	2.4	1,388	1.6
Interest	3,750	2.1	3,750	2.1	3,583	1.9	1,875	2.3	1,592	1.9
Other general expenses	365	.2	500	.3	1,244	.7	165	.2	411	.5
Total expenses*	39,846	22.7	41,050	22.9	41,306	22.3	19,268	23.5	18,068	21.2
Net operating margin	4,090	2.3	6,389	3.5	1,504	.8	436	.6	390	.4

Figure 2: Pacey farm store expense budget and control report [Research Gate.Net].

## DISCUSSION

### Ratio Analysis

Ratio analysis is one of the most crucial instruments for financial analysis. The advantage of financial ratio analysis is that the connections between the data on financial statements minimize the limitations of monetary comparisons, which can occasionally be not only confusing but also deceptive. Important financial data and relationships can be compared relative to one another thanks to ratio analysis, and these comparative analyses can be highly instructive. For two firms, we could take into account, for instance, the following relationships: Keep in mind that net working capital refers to the difference between current assets and current liabilities. The net working capital for both businesses is \$100,000. Even still, Firm A has a better financial situation than Firm B because its current ratio, which measures liquidity current assets minus current liabilities is 2:1 for Firm A while it is just 1.1:1 for Firm B. The amount of current assets that can be used to pay bills that are due in the following year is known as the current ratio. Instead of a simple dollar comparison, the ratio of current assets to current liabilities gives a more accurate picture of the situation in this scenario.

### Why use financial ration analysis?

The performance of the different components of the firm listed in the chapter's opening are frequently evaluated using financial ratio analysis. This financial management tool can be a very beneficial management tool when utilized appropriately and with its limitations acknowledged. Ratio analysis is often used by agribusiness managers since it not only offers superior indications for managerial decisions but also serves the following purposes. Simple to calculate. The majority of ratios compare two accounts that are typically given by the income statement or balance sheet. Because these data are easily accessible, calculating a financial ratio



doesn't take much time or money. Ratios make it simple to compare past and present performance, as well as those two entities with similar businesses. The importance of ratios is particularly important to business boards of directors. Ratios provide overview information simply and plainly for all management employees because not all members of the management team are financially sophisticated. Capable of conveying a company's financial status and performance to interested parties outside the company: Financial authorities, stockholders, patrons of cooperatives, or investors, for instance, may rely on ratios to assess a company's creditworthiness and success in allocating its resources.

Managers and analysts in the agribusiness are likely to build their own preferred set of financial indicators. Additionally, lenders may utilize specific ratios to assess a firm's creditworthiness; hence, management would need to keep an eye on those ratios. Given the wide range in size and kind of agribusiness firms, it would be unproductive to offer an exhaustive collection of ratios or to suggest that we can create a select selection of ratios that will be useful to each firm. We provide some of the most popular and widely-used financial ratios that address the four evaluation criteria below. The ratios presented can frequently be calculated before or after taxes, interest, and other modifications. The ratios presented in the subsequent sections are computed net of taxes and interest. However, it's important to be consistent with the method used to determine the comparison benchmarks when comparing and analyzing ratios.

### Selecting the Proper Ratios

Agribusiness managers should take care while choosing the ratios that offer information that is pertinent to their particular operations. Expert counsel from outside the company is frequently very beneficial. When choosing key ratios, the first thing to think about is if the ratios cover the areas of the business where knowledge is essential for making wise business decisions. Because its fertilizer and grain businesses are so seasonal, Brookstone Feed and Grain (BF&G) would be highly interested in ratios related to accounts receivable and inventory. Losing control of one or both of these crucial accounts might make it impossible to keep the company's liquidity intact. Large changes across time periods are thus a crucial factor in choosing which explanations to examine. The size of the account itself is another aspect. Since direct labor and raw material expenses make up the majority of manufacturing costs, a corn processor like National Starch would be keenly aware of variations in those costs. Agribusiness managers need to analyze their own operations to determine which financial ratios are most appropriate for the particular type of business at hand. The following section discusses just a few of the most beneficial and widely used ratios. From a manager's perspective, there are four main metrics to track and, thus, four different ratio kinds to investigate:

1. Profitability ratios.
2. Ratios of liquid assets.
3. Solvency ratios.
4. Ratios of operation or efficiency.

### CONCLUSION

In conclusion, understanding a company's financial performance and health requires close attention to its financial statements. It offers insightful data on the profitability, liquidity, solvency, and overall stability of the financial system. Stakeholders can analyze investment opportunities, detect dangers, and make well-informed decisions by looking at financial ratios,

trends, and benchmarks. A thorough understanding of a company's financial status is possible through the analysis of financial statements, enabling the ability to make wise decisions and supporting them. It is an essential tool for people and organizations trying to evaluate and handle a company's financial elements.

#### REFERENCES:

- [1] K. Szegedi, Y. Khan, and C. Lentner, Corporate social responsibility and financial performance: Evidence from Pakistani listed banks, *Sustain.*, 2020, doi: 10.3390/SU12104080.
- [2] S. Oh, A. Hong, and J. Hwang, An analysis of CSR on firm financial performance in stakeholder perspectives, *Sustain.*, 2017, doi: 10.3390/su9061023.
- [3] J. Shaoul, Critical financial analysis and accounting for stakeholders, *Crit. Perspect. Account.*, 1998, doi: 10.1006/cpac.1997.0172.
- [4] I. E. Aigwi, T. Egbelakin, J. Ingham, R. Phipps, J. Rotimi, and O. Filippova, A performance-based framework to prioritise underutilised historical buildings for adaptive reuse interventions in New Zealand, *Sustain. Cities Soc.*, 2019, doi: 10.1016/j.scs.2019.101547.
- [5] B. Caulfield, B. Reginatto, and P. Slevin, Not all sensors are created equal: a framework for evaluating human performance measurement technologies, *npj Digital Medicine*. 2019. doi: 10.1038/s41746-019-0082-4.
- [6] O. Okfalisa, H. Simaremare, R. Abdillah, and N. F. Najwa, Result Based Manajemen Sistem untuk Monitoring dan Evaluasi Kegiatan Bimbingan Dasar Keislaman, *J. Sist. Inf. BISNIS*, 2019, doi: 10.21456/vol9iss1pp77-85.
- [7] M. J. Martinez-Harms *et al.*, Making decisions for managing ecosystem services, *Biological Conservation*. 2015. doi: 10.1016/j.biocon.2015.01.024.
- [8] M. E. Clarkson, A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance, *Acad. Manag. Rev.*, 1995, doi: 10.5465/amr.1995.9503271994.
- [9] M. B. E. Clarkson, A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance, *Acad. Manag. Rev.*, 1995, doi: 10.2307/258888.
- [10] M. Sigala, Evaluating the performance of destination marketing systems (DMS): Stakeholder perspective, *Mark. Intell. Plan.*, 2014, doi: 10.1108/MIP-08-2013-0131.
- [11] A. Karatas and K. El-Rayes, Evaluating the performance of sustainable development in urban neighborhoods based on the feedback of multiple stakeholders, *Sustain. Cities Soc.*, 2015, doi: 10.1016/j.scs.2014.05.011.

## CHAPTER 16

### FINANCING THE AGRIBUSINESS: STRATEGIES FOR SUSTAINABLE GROWTH

---

Dr. Mukesh yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### ABSTRACT:

A major component of agribusiness that supports the expansion and operation of agricultural firms is financing. Capital is frequently needed by agribusinesses for a variety of reasons, including buying land, tools, seeds, fertilizer, animals, and other inputs, as well as for managing cash flow, growing operations, and introducing new technology. Traditional financial institutions including banks, agricultural cooperatives, government initiatives, venture capital firms, and private investors are just a few of the places where agribusiness finance can be obtained. Depending on the demands and conditions of the agribusiness, these financing solutions could offer various maturities, interest rates, and repayment plans. Agribusiness financing frequently faces particular difficulties because of factors including seasonality in production, price volatility, weather hazards, and the long-term nature of agricultural investments. As a result, it's critical for agribusiness owners and operators to thoroughly evaluate their financial needs, create solid business plans, and build partnerships with financiers or investors who are familiar with the dynamics of the agricultural sector.

#### KEYWORDS:

Agribusiness, Business, Capital, Financial, Loans.

#### INTRODUCTION

Money is king. Any agribusiness depends on effective cash management. Money reflects the amount of capital a company could control, despite the fact that money itself is not capital. Assets including machinery and equipment, accounts receivable, materials, and supplies must be financed with cash. Because of this, agribusiness managers are required to be specialists in cash management. Managers must ensure that credit sales accounts receivable produce cash for the company, that inventories are kept in good condition and sold to create cash, and that there is enough cash on hand to cover short-term financial commitments, both anticipated and unanticipated. Money is employed in the business whenever and wherever financial resources are obtained with the full intention that it would be paid back with a profit. The viability of the firm depends on this ability to make profits, and a management lacking in it will find their agribusiness struggling to make ends meet [1]-[4]. The manager can obtain the money required to run an agribusiness from one of three sources: Owner investments, Borrowing, Profits created and kept in the company. The majority of medium-to-large enterprises rely heavily on the owner's stock in the company, commonly known as owned capital. The greater the company's reliance on owner's equity as a source of capital, the more so. One key factor in this is that larger companies frequently have access to public offers for their stock or equity and have the capacity to draw investors, whereas smaller companies do not. The quantity of money made available for a business to use will ultimately depend on how profitable it is, regardless of the type or size of the business [5], [6].

### **Reasons for Increasing Financial Resources**

The main goal of growing an agribusiness' financial resources is to enhance its profits by bringing in more customers, which will boost revenues. Extra money is utilized for expansion and growth, to improve liquidity or the cash situation, or for general uses. An agricultural business may discover that its funds are restricted to current or fixed assets and that it is unable to pay its regular bills. Such non-liquid assets as accounts receivable, inventory, new orders, or a piece of equipment cannot be used to pay bills. As a result, cash is needed as working capital for an agribusiness. The primary source of cash must come from the company's own revenue, but in urgent situations more funds can be needed to cover the company's ongoing liabilities.

This is especially true for the numerous agriculture-related enterprises that are mostly seasonal in nature. In this situation, financial resources may become constrained by inventory and accounts receivable, which won't be converted to cash right away. Generally speaking, many agribusinesses find it prudent to hold onto 20 to 25 percent of their existing liabilities in cash.

This makes it more likely that the company will be able to meet both its current obligations and any unforeseen ones.

Expansion is the primary purpose of greater financial resources. Either a short- or long-term financial commitment is possible for expansion. Increased labor, inventories, and accounts receivable are a few examples of things that play a role in short-term expansion. Long-term growth supports bigger initiatives including the acquisition of new machinery, structures, and properties. An agribusiness's goal in raising capital is to enhance its sales volume, revenues, and ultimately profit through the judicious use of more resources. In its broadest meaning, capital, or a company's financial resources, refers to all of the company's assets and includes both monies contributed by the owners of the business and outside funds.

### **Determining when financial resources should be increased**

Agribusiness managers should carefully analyze the following concerns before considering the prospect of gaining more financial resources:

1. Why are more finances required?
2. How does the usage of extra money fit in with the business's ultimate mission?
3. Which increases in sales, profits, and/or net cash flow would the extra money bring about?
4. From what sources may we obtain additional funding?
5. How much would the agribusiness be required to pay for these extra funds?
6. How much more money is required in terms of resources?
7. When should we expect this rise in revenue flow?
8. When will these extra resources be required?
9. For how long will these extra cash be required?
10. How will the debt be repaid if the money is borrowed?
11. How would this debt impact business?
12. What impact will this debt have on liquidity and solvency?
13. What danger exists that could lengthen the time until money can be repaid?

The manager of the agribusiness should use the information above as a checklist to choose the option that is most likely to be advantageous to the company when looking for more financial resources.

## Davies Farm Structures

With \$1,000 in cash that he had saved and \$1,000 that he borrowed from the bank, Doug Davies launched his farm-building business around 20 years ago. Today, family members own the majority of Doug's corporation, which is a corporation. Doug is looking into a business growth potential, and his investigation will be used to highlight some of the choices an agribusiness must make when financing it. Despite the fact that Doug now constructs some public and commercial buildings, his primary source of income remains the sale of various types of farm buildings. His current yearly sales surpass \$2 million. His staff frequently numbers more than 50. Doug recently received an offer to buy a small lumberyard in Roland, a 6,500-person town. The lumberyard generated over \$750,000 in annual revenue and earned a net profit after taxes of 15% on owner equity and 5% on sales. Doug believed the lumberyard would be an excellent opportunity to expand and incorporate into his own firm after using the financial tools covered in earlier chapters to examine the company. He was aware that he had two options for growth: either he could increase his current operation or he could diversify his company. The lumberyard presented him with the chance to accomplish both.

Doug looked at a few benefits. According to his research of the lumberyard, it would be advantageous to enhance inventory turnover. He could boost the lumberyard's sales volume by around 70% by merging the demands for lumber from his construction company with those of the lumberyard. The construction company's increased purchasing power would enable him to purchase lumber more affordably because he could do so in larger amounts and in full carloads. He would be situated on a train siding, which would allow him to streamline his handling and storage activities and work more effectively. He realized that his offices and complete operation could be housed in one place and that consolidating the business would reduce administrative costs. He saw the possibility of lowering the costs for both enterprises and being more competitive in both marketplaces with reductions in cost of products sold and administrative expenses, combined with greater operational efficiency.

His calculations revealed that he could maintain current gross margins even if he reduced prices by 5% and presupposed existing sales volumes for the two operations. But due to his fierce price competition and his favorable reputation in the farm structure industry, he thought that the lower price would eventually assist sales increase by up to 50% to 75%. At this moment, Doug and his family's future appeared to be quite promising. The first two questions—Why are additional funds needed? and How does the use of additional funds fit with the overall mission of the business?—were ones they believed they had satisfactorily answered. and What improvements in sales, profits, and/or cash flow will be produced by the additional funds? Although Doug's own business was in a very good financial situation, he was aware that he would need to find additional funding to buy and run the lumberyard. The remainder of this chapter will discuss the key resources and options that Doug Davies should take into account while deciding whether to expand [7]–[10].

## Debt or Equity Financing

What resources are accessible to offer the additional monies was the second query Doug had to ask himself. There are basically four different types of capital:

1. Quick loans of one year or less.
2. Loans with an intermediate term of one to five years.

3. Loans with terms longer than five years.
4. No due deadline for equity capital.

### Short-Term Loans

When a temporary need for additional finances arises, short-term loans generally defined as those lasting one year or less are used. In order to expand inventories for the spring and summer, when the building industry is at its seasonal height, Doug realized the need for additional funding. As inventory is sold to customers, some of these money would also be required to finance accounts receivable. Short-term loans have the significant quality of typically being self-liquidating, which means they frequently set off a series of events that lead to their repayment:

Loan => inventories => receivables => cash => repay loan

Even while short-term loans can be given unsecured to well-established businesses, there is frequently a need for collateral or for the loan to be secured by some of the business's assets. Although collateral can take many different forms, it typically takes the shape of existing assets for short-term loans. Inventory, accounts receivable, warehouse receipts, and marketable securities are a few of the most popular types of collateral. Smaller agribusiness operators frequently seek a personal guarantee of the loan. In other words, if the business is unable to make the payment, the owner or owners endorse the commitment to repay the debt and take personal responsibility. Short-term loans can be revolving or line of credit loans, or they might be regular-term loans with a specific amount due at a specific time. Managers who foresee a need for quick cash frequently ask for a line of credit ahead of time.

A line of credit is the lender's promise to make a specific amount of money available to the business at any time it needs a loan, often for a year at a set interest rate. Usually, the loan has to be paid back during the company's fiscal year. With a line of credit, a manager is guaranteed protection in the form of cash that is readily available as needed. As an added bonus, interest is not charged on the borrowed money until it is actually used. A monthly copy of the company's financial statements must frequently be sent to lenders who provide lines of credit to agricultural businesses so that they can keep track of the firm's financial situation. When Doug Davies needed quick cash for seasonal necessities, he decided to use a line of credit. He didn't think he'd have any trouble getting these cash because he could use his inventory and accounts receivable as security for any loans that were still due.

### Intermediate-Term Loans

Loans with an intermediate duration are frequently used to finance projects lasting one to five years. Such a loan is typically amortized, which is the process by which the amount of a loan is decreased through equal, regular loan payments such as monthly, quarterly, annual, etc. These payments cover the principle as well as interest. It offers a straightforward illustration. The goal of the intermediate-term loan is to give the agricultural business a source of funding that will enable growth or modernization without requiring the proprietors to give up ownership of the company. The extra working capital that can be obtained through these loans can be used to boost sales and revenue, which will in turn enable the loan to be repaid.

The intermediate-term loan and the short-term loan are comparable in many ways. If such is the goal of the loan, the majority demand some form of security against fixed assets and/or collateral. When larger stocks, larger accounts receivable, new equipment, and/or modernization



are necessary for the growth and profitability of the business, intermediate-term loans offer permanent increases in capital for the agricultural industry. Doug Davies anticipated the requirement for an interim loan. As he bought the lumberyard, he sought to expand both his inventory and accounts receivable. Additionally, he required money to pay for the relocation and consolidation of his business at the new central location.

### **Long-Term Loans**

Long-term loans typically last for more than five years. Depending on the philosophies and practices of the lender and borrower, there is some overlap in the functions of intermediate- and long-term loans, and the time divisions between these loans are sometimes arbitrary. However, the true distinction between intermediate-term and long-term loans typically depends on the intended use of the funds as well as the firm's long-term viability and solvency. The majority of the time, a long-term loan is used for real estate, which includes both land and structures. When reviewing requests for long-term loans, the lender becomes extremely concerned with assessing the firm's track record, the management team's expertise, and the viability of the company operation. Long-term loans typically have a mortgage or other claim on the firm's fixed assets as security, and the longer the loan term, the riskier it is for the lender. There is always a danger that a shaky business would be compelled to sell fixed assets at a forced auction, where the assets might only fetch a small portion of what they were worth when the loan was completed. Long-term loans are almost always secured by a mortgage or claim on a particular fixed asset and are typically amortized over the loan term. Bonds are occasionally used to acquire long-term funding, but a small business is rarely large enough or financially stable enough to sell a bond issuance. Doug Davies will also require a long-term loan because he intends to expand his office building to suit the merged operation and develop new storage facilities at his new location.

### **Equity Capital**

The agribusiness may need to turn to equity capital to meet its long-term demands if it does not have a strong financial position or is unable to satisfy the strict collateral criteria set by lenders. While equity capital can be employed for the same purposes as borrowed cash, there is one crucial distinction between the two: equity capital is not subject to repayment. It becomes a permanent component of the company's capital. Reinvesting corporate profits or finding investors ready to put more money into the company are two ways to secure equity capital. When making long-term loan commitments, lenders pay special attention to equity and may require that the owner's capital be invested in the agribusiness to a greater extent than their own.

This is especially true for start-up companies because calculating risks can be challenging. For a variety of reasons, some owners do not want to raise their stock, yet it can be the only sensible method to secure long-term capital funds. Expanding his equity base is something Doug Davies will seriously examine. His company is already set up as a corporation, so if he decides to change it, it will be simpler for him to do so.

## **DISCUSSION**

### **The Cost of Capital**

When a company borrows money, it is required to pay the lender additional fees. One of these is interest, but borrowing money has other costs as well. The following variables influence the net cost of borrowed capital:



1. Conditions for repayment.
2. Stock investments, points, and compensatory balances.
3. The company's income tax rate.

### Repayment Terms

The real rate of interest paid is directly impacted by the terms and conditions of repayment. Doug Davies would have to pay \$8,000 in interest if he borrowed \$100,000 for a year at the stated interest rate of 8%. Since Doug utilized the entire \$100,000 for the entire year, his interest rate would have been the same as the advertised rate of 8% when he made his final payment of \$108,000 to the lender. Simple interest is the name given to this form of interest. For simple interest, use the formula:

$$(\text{Amount of Interest Paid} / \text{Amount of Available Capital}) \times 100 = \text{Annual Interest Rate}$$

$$(\$8,000 / \$100,000) \times 100 = 8\%$$

However, loans are occasionally discounted, which means that the amount the lender makes available to the borrower is reduced by the amount of interest that must be paid. In Doug's situation, if this technique had been applied, the \$8,000 in interest that would have had to be paid, or 0.08 \$100,000, would have been subtracted from the loan amount, leaving Doug with only \$92,000 in capital. The following is the discounted loan formula:

$$(\text{Amount of Interest Paid} / \text{Amount of Available Capital}) \times 100 = \text{Annual Effective Interest Rate}$$

$$(\$8,000 / \$92,000) \times 100 = 8.7\%$$

Since Doug did not use the entire amount borrowed, even though he paid interest on the entire amount for the entire time the money was borrowed, the cost of interest on this discounted loan was 8.7 percent rather than the stated rate of 8 percent.

Banks frequently demand that borrowers maintain a compensatory balance in their lending bank accounts. Doug might be needed to keep a minimum of \$20,000 in his business bank account at all times while the loan is open in order to qualify for a \$100,000 loan. As a result, he would only be able to use \$80,000 of the loan's increased capital, and he would be responsible for paying interest on the full amount borrowed for the entire borrowing period. In this situation, the effective rate of interest is determined using the following formula:

$$(\text{Amount of Interest Paid} / \text{Amount of Available Capital}) \times 100 = \text{Annual Effective Interest Rate}$$

$$(\$8,000 / \$80,000) \times 100 = 10\%$$

This sum could be subtracted from the compensatory balance if Doug typically carries a cash balance to reduce the rise in the effective interest expense.

Lending institutions will occasionally ask for a certain amount of points (service fees depending on the loan's face value) in order to approve the loan. These upfront fees for risk management and loan servicing are often subtracted from the total amount borrowed at the time the loan is made. Doug's total loan costs if he took out a \$100,000 loan at 8 percent with two points. A point is therefore equal to one percent of the loan's value. Another condition that lenders occasionally impose is that the borrower buy a specific quantity of stock in the lending company, the amount of which is based on the loan's value. For every \$1,000 loaned, the lender may demand the

purchase of one share of stock with a \$10 value. This is actually a method of discounting that can be used to calculate the true cost of the loan. Federal truth-in-lending regulations require commercial lenders to disclose individual borrowers' actual or effective interest rates; nevertheless, this law only applies to consumer loans and time purchases. The majority of commercial and business transactions are exempt. The effective rate of interest would significantly rise if the loan were paid back in monthly installments. The annual percentage rate of interest, or APR, is the name given to this interest rate. The following equation can be used to determine an installment loan's APR:

$$\text{APR} = \left( \frac{2 \times P \times F}{B \times (T + 1)} \right) \times 100$$

Where:

APR = annual percentage rate of interest

P = payments per year

F = Dollars paid in interest

B = amount of capital borrowed

T = total number of payments

IF the terms on Doug's loan included an 8 percent interest rate and monthly installment payments, the APR calculation would be:

$$\text{APR} = \left( \frac{2 \times 12 \times \$8,000}{\$100,000(12 + 1)} \right) \times 100$$

$$\text{APR} = \left( \frac{\$192,000}{\$1,300,000} \right) \times 100 = 14.8\%$$

The borrower has access to the most borrowed money for the longest duration with a simple interest loan. The amount of borrowed money is slightly reduced as a result of discounted and compensating balance loans, but the annual percentage rate that the borrower must pay is larger because interest is charged on the entire loan amount for its entire term. Since the entire loan amount is only accessible for one month with an installment loan, the APR is maximum. A portion of the principal is paid back to the lender at the conclusion of the first month.

### CONCLUSION

In conclusion, agribusiness's ability to finance its expansion, operations, and sustainability is a key factor. Agribusinesses need money for a variety of reasons, and finding the correct financing alternatives is crucial for gathering supplies, controlling risks, and taking advantage of opportunities. Due to the particular difficulties faced by the agricultural sector, including seasonality, price volatility, and long-term investments, rigorous financial planning and

connections with lenders or investors who are familiar with the sector are essential. Agricultural businesses that receive effective agribusiness financing can prosper and help the industry expand and develop.

#### REFERENCES:

- [1] P. MATVIEIEV, Investment mechanisms and institutional conditions for the development of the technical and technological component of the resource potential of agricultural enterprises, *Actual Probl. Innov. Econ.*, 2020, doi: 10.36887/2524-0455-2020-1-6.
- [2] Y. VITKOVSKYI, The direction of innovation and investment activity of agribusiness entities as the main sphere of their economic potential mobilization, *Actual Probl. Innov. Econ.*, 2020, doi: 10.36887/2524-0455-2020-1-8.
- [3] V. Swamy and D. Dharani, Analyzing the agricultural value chain financing: approaches and tools in India, *Agric. Financ. Rev.*, 2016, doi: 10.1108/AFR-11-2015-0051.
- [4] S. N. Siriwardena, Role of freshwater fish seed supply in rural aquaculture, in *Assessment of freshwater fish seed resources for sustainable aquaculture. FAO fisheries technical paper*, 2007.
- [5] M. R. A. Inayatul Ummah, Augmented Reality Sebagai Media Pendukung Pembelajaran Masa Pandemi Covid-19 Augmented Reality as Learning Support Media for Covid-19 Pandemic, *Hum. Relations*, 2020.
- [6] P. Sukhdev, P. May, and A. Müller, Fix food matrix, *Nature*, 2016.
- [7] R. Van der Velden, Low cost or cost effective? Managing cost through the fit for purpose principle, *Hydro Int.*, 2006.
- [8] E. S. Atwood and C. P. Pond, A polydactylous family, *J. Hered.*, 1917, doi: 10.1093/oxfordjournals.jhered.a111721.
- [9] R. E. Beck, Computing for the social good, *ACM SIGCAS Comput. Soc.*, 2015, doi: 10.1145/2809957.2809973.
- [10] A. Caliman, A. Hector, and R. Hooper, Adriano Caliman Biólogo, *Science (80-. )*, 2002.

## CHAPTER 17

### LEVERAGING DEBT: USING LEVERAGE TO FINANCE DEVELOPMENTS

---

Dr. Mukesh yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### ABSTRACT:

The idea of leveraging debt or leverage to finance developments and operations in a corporation is known as the leverage principle in financing decisions. To optimize a company's financial structure, it entails identifying the ideal ratio of debt and equity funding. Both potential rewards and risks can be amplified by leverage. A business can gain tax breaks, a higher return on equity, and enhanced profitability by taking on debt. However, high leverage can also raise the likelihood of financial trouble, interest costs, and financial danger. Companies can use a variety of tools to make smart financial decisions. These instruments include both equity and debt instruments, such as venture capital and debt instruments like loans, bonds, and credit lines. Each type of funding has distinct benefits, expenses, and ownership and control ramifications. A company's financial health and leverage position can also be assessed using financial measures including the debt-to-equity ratio, interest coverage ratio, and return on equity. These statistics shed light on a company's capacity for meeting its debt commitments, degree of leverage, and capital utilization effectiveness.

#### KEYWORDS:

Capital, Company, Debt, Flow, Financial.

#### INTRODUCTION

The leverage principle is a cornerstone of finance and advocates using debt or borrowed money to fund operations and projects. It is predicated on the notion that by using leverage, which increases the impact of a company's investments, it can increase returns and profitability. According to the guiding concept, a corporation may be able to acquire more capital by borrowing than through equity financing alone. A business can gain a number of benefits by using leverage. First off, debt financing frequently offers tax benefits, such as the ability to deduct interest payments from taxable income. This may lead to lower tax obligations and more cash flow for the company. Leverage also enables a business to increase its return on equity. The company's equity investors stand to gain if the investments financed by debt produce higher returns than the cost of borrowing. It's crucial to remember that the leveraging concept has risks as well. Increased debt levels increase the company's financial risk since it becomes more important to pay interest and principal back. High levels of leverage can put a burden on a company's financial resources and, if it cannot pay its debts, could result in financial crisis [1]–[4].

Applying the leverage concept requires striking the right balance between debt and equity finance. The company's risk appetite, profitability, cash flow stability, and market dynamics must all be carefully taken into account. In order to maximize the advantages of leverage while minimizing potential hazards, a balance must be found between the proper level of leverage,

which differs among businesses and industries. Overall, the leverage principle recognizes the advantages of borrowing money to finance operations and developments. Companies can optimize their financial structures, improve returns, and support their goals for growth and profitability by comprehending and managing leverage efficiently. Leverage refers to the idea of financing via long-term debt rather than equity capital. To maximize the amount of assets or capital at their disposal, many managers prefer to use debt as a lever against equity as much as they can. The leverage principle is impacted by a number of things.

First, it should be kept in mind that lenders will likely raise the cost of providing borrowed money as the ratio of debt to equity rises due to the deterioration in solvency measures and the ensuing increase in risk. It is important to realize that as debt grows, so do the dangers for stock investors, who have a last-place claim on the company's assets in the event that those assets must be sold in order to pay off debt. Equity capital is often considered to be risk capital since, in the event of financial difficulties, all other creditors are paid before equity owners are compensated. Leverage, or raising the ratio of debt to equity, might be decided on the basis of a profitable or without one. Generally speaking, the agribusiness' after-tax rate of return on capital must be greater than the after-tax cost of the debt it took on to boost profits. For instance, if the firm's ability to return on borrowed capital is 10 percent overall and the cost of borrowing that capital, or money, is 6 percent after taxes, borrowing more money should boost profits [5].

### **Determining Agribusiness**

A common query among managers of agricultural businesses is how much money should be borrowed. One response may be, All I can get, while another might be, Let's pay off the mortgage and get rid of our long-term debt. The amount that an agribusiness should borrow cannot be determined using these philosophical generalizations. A smart manager constantly creates standards and a framework for making such choices. Since it is anticipated that short-term debt will be repaid from the conversion of current assets to cash, this section will focus mostly on intermediate- and long-term debt. Several elements, some of which have already been covered, determine the ideal level of debt. Many of these variables are simple to assess, while others are more challenging.

The agribusiness's ability to earn money for loan repayment and debt servicing is the first thing to take into account. Depreciation and net operating income for the year are typically regarded as the two main inputs for debt servicing, while available funds can also be computed from all sources of cash flow. Any unpaid interest, tax obligations, owner equity dividends, or patronage refunds in the case of a cooperative must also be deducted from net operating incomes. Doug Davies, for instance, would have an initial \$75,000 in cash if he had a net operating income of \$50,000 and a depreciation expense of \$25,000. Since depreciation is a non-cash operating expense, it is removed from gross margin in order to compute net operating income. Depreciation expenses, on the other hand, are not paid to a third party; therefore, the money can be used to settle debts. He would have to subtract the \$8,000 in interest costs, the \$25,000 in taxes, and the \$5,000 in stock dividends, leaving the company with only \$37,000 to pay the debts:

Doug would also have to take into account additional potential uses for these cash, such as increasing stockholder dividends, improving working capital, and reinvesting capital stocks. Due to the likelihood of missing budgeted goals or unexpected circumstances, many lending institutions apply the guideline that only 50 to 60 percent of the total amount should realistically

be counted on as available for debt servicing. The amount to be borrowed can be increased if the extra funds will boost profits and sales, which will increase the company's ability to pay off its debt. Accurately predicting such increased earnings is essential. Overly optimistic managers are common, especially in the short term. In this regard, keep in mind Murphy's Law: If anything can possibly go wrong, it will. If the manager underestimates his or her profit expectation, the risk can be significantly reduced. For instance, if Doug believes that the loan will increase his ability to pay off debt by \$10,000, he should only plan to have \$5,000 available for debt repayment for the first year at the very least. When evaluating his borrowing capability, Doug must also take a number of other aspects into account. Debt servicing expenses may be increased above the permitted maximums if:

1. If the company experiences unfavorable market or competitive conditions, investors agree not to withdraw their money.
2. The business has a strong working capital position or a favorable debt-to-equity ratio.
3. The company has fixed assets that are easily convertible to cash without suffering significant losses.
4. Sellable fixed assets that are redundant
5. The asset is not at high risk, such as with a new piece of equipment that will reduce labor costs.

The amount available for debt servicing must be taken into account in this context if accelerated depreciation or special depreciation measures are used to increase the amount of depreciation that is taken each accounting period. The manager may want to increase the amount of this specific contribution to debt servicing. The ability to service the debt in the future could be less than in the short term, though, if the firm's long-term plans do not call for those rates of depreciation to continue throughout the balance of the loan's tenure. Last but not least, the manager will want to examine the firm's overall stability and success, as well as that of its management team. The most important elements in deciding how much capital the company should borrow will be profits, inventory control, accounts receivable, asset turnover, and efficiency [6]–[8].

### **Other tools for financing decisions**

Two more methods or tools are crucial in helping to finance the agricultural company. These are the cash budget, often known as a cash flow statement, and pro forma financial statements, both of which can greatly enhance the agribusiness manager's ability to make informed decisions. We will go into greater detail in the next section.

## **DISCUSSION**

### **Cash Flow Statement**

A cash flow statement is actually an estimate of the firm's future cash inflows and outflows. The manager can use it to calculate how much money is required to expand, take advantage of cash discounts, pay for seasonal demands, create effective borrowing programs, and plan for debt servicing. The specifics of the agribusiness will determine the time period covered by the cash flow statement. The business's seasonality of cash inflows and outflows, the distribution of transactions over the time, and the current supply of cash are the main factors to be taken into account. Agribusinesses that experience high seasonality may need to construct their cash flow



statements across longer time periods than those whose economic activity is more consistent. Doug Davies will adhere to the procedures described in the next section on budgeting when he creates his cash flow statement. He will estimate his cash receipts and cash payments from both his current firm and the one he plans to buy with the aid of his planning group.

Since these projections ultimately become goals or budgeted figures, careful and truthful input is required. The cash balance at the end of the term is the consequence of recording both cash inflows and outflows on a month-by-month basis throughout the period. To assess whether the amount is sufficient, a goal must be established. For instance, Doug might decide that the benchmark or goal would be the cash equivalent of a specific number of sales days or a specific proportion of current obligations. If the cash balance is insufficient, it may be necessary to borrow money on short terms or make other modifications. If the cash balance is greater than what is required, it can be temporarily invested in marketable securities, other assets that generate income, or it can be used to pay down short-term or long-term debt. The manager can use the cash flow statement to determine whether short-, intermediate-, or long-term loans or equity capital are required. If the cash flow is enough at times but insufficient at others, short-term capital is required. Long- or intermediate-term capital is required if there is a recurring tendency on the inadequate side.

### **Budgeting: a tool used to determine future borrowing needs**

A budget is a detailed projection of financial performance used to run a firm as well as determine future borrowing requirements and payback schedules. A company could have a budget for finances, for investments, for marketing, and for research and development. The types of budgets required for success will depend on the organization's size and complexity. A small company might merely require an overall budget that is divided into parts for sales, production, and finances. Budgets for departments, divisions, regions, products, etc. may exist in a major company. Long-term or short-term budgets are both acceptable.

A short-term budget is one that will typically be implemented within a year and has lower reporting requirements. A long-range budget is one that is implemented over a period of two years or longer and is often published on a semi-annual or annual basis. As a result, the short-term budget becomes a part of achieving the long-term budget goals. Additionally, budgets can be created for particular projects. Building a new structure, starting a new program, or releasing a new product are a few examples that come to mind.

Budgets play a role in determining the course of an organization, and this must be acknowledged. The route the company will take in the long run with regard to expansion, the development of new products, and size will depend on whether financial and human resources allocated to the various agribusiness segments are increased or decreased. Managers realize the company's vision and objectives through allocating resources. Budgets should reflect the company's priorities and overall objectives. For instance, the management group might choose to actively pursue a larger part of the commercial building market as Doug Davies explores buying the lumberyard. The capital, marketing, and cash budgets would then have to reflect this goal. Doug's capital budget may need to be adjusted to include more funds for the establishment of production facilities to cater to the need for commercial buildings. The marketing budget might include increased spending on advertising and promotion as well as more salespeople who would target the market for commercial buildings. The effect of this modification on cash flows both in and out would then be reflected in the cash budget.

## **Budgets and Forecasts**

What differentiates a forecast from a budget? Although it is true that not all forecasts are budgets and not all budgets are forecasts, in management a forecast often refers to some type of future prediction. We might have a prediction for the state of the economy as a whole or a sales prediction for a particular region. As mentioned above, the budget serves as a tool for control and to estimate cash flows and outflows. It is often a detailed forecast of financial performance. For instance, Doug Davies' company might have a sales projection or a prediction of how much business it anticipates doing during a specific time frame. Along with this, Doug would create a budget for the advertising and promotion costs required to achieve the anticipated sales. The budget and the sales forecast are linked since the ability of revenues to exceed expenses determines whether a company will survive.

## **Proforma Financial Statements**

It is advisable to go one step further and create a pro forma balance sheet and income statement because the cash flow statement only deals with one account. The best projections of the future state of the business are essentially what these statements are doing. However, Doug Davies' lender could also benefit from knowing that information in addition to Doug Davies. For an operating year, pro forma financial statements are often issued on a quarterly basis. Again, the more frequently pro forma statements should be created, the more seasonal the agribusiness. The pro forma financial statements will offer a glimpse into the company's future and assist the manager in estimating the company's financial requirements now and at the end of the operating period. Doug might not identify issues until they really happen, at which point it might be too late to take corrective action. If he doesn't use this tool. Estimated sales are the most crucial factor in the creation of these pro forma figures. In this case, as many informed individuals as possible should become involved.

Doug may well consult with his loved ones, the lumberyard's bookkeeper, salespeople from both firms, representatives from suppliers, and his lender, to mention a few. Key components include past performance, anticipated price trends, anticipated rivalry from nearby businesses, and overall economic conditions.

These two tools must be founded on clear objectives for cash balances, inventory turnover, accounts receivable collection times, revenues, and expenses. These objectives support the manager's forecasting and budgeting efforts. Specific objectives also entail the existence of a management strategy that can be impartially assessed at the conclusion of the time period. When goals are set and documented, management can monitor progress by comparing it to estimates and assumptions using the interim cash flow statement and financial statements. If actual and anticipated performances diverge significantly at any point, the cause can be determined and the flaws fixed.

As his new business takes off, Doug Davies, a qualified manager, will make use of all these financial resources to be as prepared and future-proof as possible.

## **External Sources of Financing**

Any agribusiness has access to a wide range of funding options. While some of these sources are only used in certain circumstances, others are used more frequently. The next sections will go through the most crucial sources of funding for an agribusiness.

### **Trade Credit**

One of the most underutilized sources of funding available to managers of agribusinesses is trade credit. It is the credit extended by the agricultural firm's vendors and suppliers. Most suppliers and vendors will accept credit terms if they believe the agribusiness is creditworthy. Longer credit terms than are typically granted can frequently be negotiated by the manager. For instance, Doug Davies was able to convince his supplier to increase his standard 30-day credit terms to 90 days from invoice because he was such a consistent buyer of treated lumber. In Doug's case, the lumber supplier in a very real sense also became a supplier of Doug's business capital since he frequently collected for the farm building ahead to the 90-day credit period. However, Doug was not charged for this service. In other situations, a vendor can be eager to work on a consignment basis with an agribusiness. In other words, the company waits to pay for supplies until it can really sell them. The manager of an agricultural business should ensure that suppliers and vendors are giving the maximum amount of credit terms and that the process for paying accounts payable makes the most of all credit terms given.

### **Commercial Banks**

With the exception of trade credit, commercial banks are the primary source of borrowed money for the majority of agricultural firms. A comprehensive range of banking services, such as checking accounts, savings accounts, and loans, are often provided by commercial banks. Short-, intermediate-, and long-term loans, lines of credit, and special loans are just a few of the several types of loans that banks make. Along with numerous other secured loans like mortgages against real estate, chattel mortgages against tools and equipment, loans against the owner's life insurance policies, stocks and bonds, etc., banks also offer personal unsecured loans to business owners. A bank will frequently offer to assist in the selling of a product by purchasing sales installment contracts from the vendor. Contracts for sales installment payments are agreements the buyer makes to pay for the product in a specific way over time. Payments are made straight to the financial institution that purchases the contract. The company receives its funds right away. This process facilitates the customer's ability to finance the transaction and improves the company's cash flow. This is especially useful for merchants selling things that are relatively expensive, such tractors, combines, and farm equipment.

### **Insurance Companies**

Insurance providers are constantly searching for opportunities to invest money they have obtained from policyholders. Most insurance companies are looking for medium- and long-term loans on fixed assets like real estate or equipment. Large loans and mortgages are preferred as collateral. If the owners or the agribusiness itself has insurance policies with a certain company, that company will typically lend the agribusiness money at extremely advantageous interest rates equal to the cash value of the policy.

### **Commercial Finance Companies**

Companies that focus on business and commercial loans are known as commercial finance companies. They should not be confused with personal finance businesses, which lend money to private citizens. Therefore, commercial finance organizations typically demand higher interest rates than banks since they frequently make riskier loans than those that banks will approve. Additionally, commercial finance corporations may seek a significant amount of control over

managerial choices. This is especially true if the debt at issue carries a significant degree of risk. In some cases, commercial finance organizations would settle all of a company's debts in order to combine them into a single loan under their control. This can be especially useful if there are issues with cash flow because it allows for the reconstruction of payment schedules within the limitations of the agribusiness's cash flow.

### Cooperative Borrowing

Agribusiness cooperatives can borrow through CoBank, a member of the Farm Credit System, in addition to the traditional borrowing options available to cooperatives. In cooperative borrowing, these unique banks are owned by the cooperative's patrons, who are also its borrowers. The bank lends to its customers on a short-, medium-, and long-term basis. A cooperative must buy a quantity of membership shares equal to the loan amount in order to be approved for one. When the loan is paid off and the company has money to do so, this stock is rotated or repurchased. Because CoBank is a non-profit organization run only for the benefit of its members, it frequently offers better interest rates than some commercial banks. The staff at the bank is frequently in a position to provide member-borrowers with management advice and support because they specialize in lending to cooperatives.

### CONCLUSION

In order to increase returns and profitability, the leverage principle in financing decisions entails using debt to finance investments and operations. Risks include heightened financial commitments and potential financial difficulties, though. Companies can use a variety of tools, such as debt and equity instruments, to make efficient financial decisions, and to strike the ideal balance between debt and equity financing. Financial ratios are also crucial tools for assessing a company's financial stability and leverage position. Businesses can establish the best possible financial structure and strike the right balance between risk and profit in their operations by carefully controlling leverage and using the right financing options.

### REFERENCES:

- [1] Mary Ruckelshaus *et al.*, "a method for sustainable development Module 5," *UNEP Inq.*, 2016.
- [2] K. Sander and M. Cranford, *Financing Environmental Services in Developing Countries*. 2010. doi: 10.1596/27443.
- [3] IMF, "Debt Bias and Other Distortions□: Crisis-Related Issues in Tax Policy," 2009.
- [4] C. Cottarelli, "Debt Bias and Other Distortions□: Crisis-Related Issues in Tax Policy," 2009.
- [5] R. A. M. Vieira, A. J. Cabral, P. M. de Souza, A. M. Fernandes, D. S. Henrique, and G. S. C. P. C. Real, "A caprinocultura leiteira na agricultura familiar: índices zootécnicos e econômicos de um estudo de caso no estado do Rio de Janeiro, Brasil," *Rev. Bras. Zootec.*, 2009, doi: 10.1590/S1516-35982009000100025.
- [6] A. V. Obydenkova and V. G. Rodrigues Vieira, "The limits of collective financial statecraft: Regional development banks and voting alignment with the United States at the United Nations General Assembly," *Int. Stud. Q.*, 2020, doi: 10.1093/isq/sqz080.

- [7] C. A. Robb, S. Chatterjee, N. Porto, and B. J. Cude, "The Influence of Student Loan Debt on Financial Satisfaction," *J. Fam. Econ. Issues*, 2019, doi: 10.1007/s10834-018-9599-y.
- [8] A. Dong, M. Garbuio, and D. Lovallo, "Generative sensing: A design perspective on the microfoundations of sensing capabilities," *Calif. Manage. Rev.*, 2016, doi: 10.1525/cm.2016.58.4.97.

## CHAPTER 18

### TOOLS FOR EVALUATING OPERATING DECISIONS: OPTIMIZING AGRIBUSINESS PERFORMANCE

---

Dr. Mukesh Yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### ABSTRACT:

Businesses require tools for analyzing operating decisions to determine efficiency, effectiveness, and profitability. Cost-volume-profit (CVP) analysis helps businesses make price decisions, identify breakeven points, and assess the effects of production levels on profitability. Variance analysis compares actual performance with anticipated or budgeted performance, identifying areas of success or concern. Key performance indicators (KPIs) are used to track the effectiveness of operational areas or procedures, including inventory turnover, customer happiness, and employee productivity. Monitoring KPIs helps businesses gain insights into operational performance and identify areas for improvement. Process mapping and flowcharting tools provide visual representations of operational processes, allowing firms to assess and improve workflows, identify bottlenecks, and streamline operations. These solutions support increased production while enhancing efficiency and lowering costs.

#### KEYWORDS:

Analysis, Costs, Fixed, Sales, Variable

#### INTRODUCTION

An essential skill of a successful food and agribusiness management is effective decision-making. The management of an agribusiness must make numerous decisions every day at various levels, regardless of the commodities, services, products, and activities the company concentrates on. These choices might be anything from deciding where to go lunch for the staff meeting to deciding where to put the next manufacturing site. Additionally, it is the manager's duty to decide effectively, promptly, and wisely for the long-term benefit of the company. Professional managers use a methodical approach to this decision-making process. Identifying the issue, summarizing the information, locating and evaluating options, coming to a choice, acting, and assessing the outcomes are all steps in the decision-making process. This chapter looks at a few of those crucial decision-making phases and the resources available to help. In this chapter, operating or shorter-term decisions are the main focus. We focus on decisions regarding longer-term investments in the following chapter [1]–[4].

#### Perfect Pallet

Over the past ten years, The Perfect Pallet Company has steadily expanded, and its management has been satisfied with its track record of performance. However, a recent sale of the company to a multinational food corporation. Since taking over, the new owners have started to exert pressure for improved performance and a greater return on their investment. Sandy Johnson, the company's recently hired general manager, is grappling with a variety of issues, options, and suggestions for enhancing profits. Even while she has some useful accounting data, she is unsure of the best ways to apply it to resolve challenging managerial challenges like:



1. How much must Perfect Pallet sell to pay all costs?
2. How much revenue must be generated to achieve a 10% ROE?
3. Will this be a profitable if prices are reduced by 5% to increase sales volume?
4. Do we have the funds to bring on a new salesperson?
5. Can Perfect Pallet afford brand-new electronic saws with computer control?
6. What information should be provided to the board of directors regarding the greatest alternative expansion investments?

Some of these issues are used to frame operational decisions or decisions with a shorter time horizon often one year or fewer. Some of these inquiries help investors make choices that will have effects that persist for many years rather than just one. Professional agricultural managers view decision-making as a process and employ analytical tools to aid in decision-making wherever practical, regardless of focus, operating, or investment. Then they add their own knowledge, judgment, and intuitive understanding of the problem to formal analyses and judgments. Managers today rely considerably more heavily on computer-generated spreadsheets and database analysis systems to assist them make better management decisions since they have greater access to various sources of information, both financial and marketing-related [5]–[8].

### **Decision Making**

Making decisions is the process of deciding amongst several options in order to accomplish desired outcomes. We shall examine this definition in greater detail in the sections that follow. First and foremost, it's crucial to understand that decision-making comprises a process. The word process connotes action or doing. It is critical to understand that making sound decisions requires the manager to engage actively and personally. Of course, choices can be made automatically; that is, one can choose to do nothing for a very long time before having to make a choice. The issue of delaying decisions until it is too late is one that most individuals are familiar with. However, efficient decision-making involves a proactive participant who takes timely action. It is significant to remember that choosing not to act is not always the best course of action. Choosing to wait and see might be a sensible and wise move. A default choice is a decision that was not made. Even while the outcome can be perfectly fine, any good that comes from a default choice is merely accidental. Since most professional managers do not adopt default policies, any success is due to factors other than management.

Choosing is the second crucial concept in the definition of decision-making. Selecting suggests that there are options available from which to choose. There is no decision to be made if there are no other options. The alternatives must be practical as well. They need to be attainable and reasonable. For instance, leaving or giving up is always an option, but it is rarely a practical one. Selecting from the various options is another step in the decision-making process. The act of selecting the best option lies at the core of decision-making. Decision-making is also intentional. A specific aim must be kept in mind at all times to ensure effective decision-making. It is hard to evaluate success at the end of the year if management refuses to set specific goals at the start of the year. Performance of the company should be assessed similarly to how employees would be. To allow for performance evaluation at the end of the year, goals or anticipated results should be clearly stated and quantified as much as feasible. Similarly, making a successful choice necessitates the application of selection criteria, such as goals. Goals must be specific and attainable, much like alternatives. When running a sizable California vegetable growers hipper enterprise, saying My goal is to make as much profit as possible is not really helpful. This

objective is far too broad to be very helpful. But a clear objective will be extremely useful in directing and assessing daily choices, such as To generate a 15% after-tax return on investment, maintain an annual growth rate of 5%, and provide an opportunity for meaningful employment for family members.

### **The Decision-Making Process**

Simply said, the decision-making process is a rational process for locating a problem, understanding it, and finding a solution. This can be done formally, with many people working on its various elements, spending weeks or months doing analysis, spending a lot of money, and publishing extensive papers that detail suggested solutions. Or the procedure can be carried out quickly and casually over coffee with no written report at all. The likelihood that the procedure will be codified increases with the importance of the issue. In any case, creating excellent decisions is a systematic process that includes a few crucial components and a few rather specific phases. The decision-making process has three essential components.

First, facts serve as the foundation for decision-making. The decision-making process becomes more difficult the less pertinent, factual information is provided. Second, analysis of this factual knowledge is required for making decisions. Analysis can involve extensive statistical processing on big computer spreadsheets or it can just be a process of logical thought. Making decisions necessitates a thorough analysis of the available data in both scenarios. The final step in the decision-making process is judgment, or a subjective assessment of the circumstance based on knowledge and common sense. Although it is theoretically feasible to make decisions purely mechanically, this rarely, if ever, happens since there aren't enough facts, resources, or time to fully assess the case. A crucial component of professional decision-making is human judgment. Let's examine the processes in the decision-making process while keeping these three factors in mind:

1. Identification of the issue. The hardest aspect of decision-making is frequently this. It is simple to mistake symptoms for the actual issue. Low profits may appear to be the issue, but they are really just the outcome of an expensive, inefficient distribution system. The issue is typically easier to address once it has been precisely defined.
2. Facts are outlined and brought to light in this step in relation to the issue and potential solutions. It may be crucial to record the overall objectives of the organization, the effect of the issue on the company, environmental constraints on potential solutions, or technical details that influence the result.
3. Identifying alternatives. This step explores numerous options to identify and list workable alternatives. Only workable options ought to be taken into account.
4. Careful consideration and a comparison of the advantages and disadvantages of each option may be necessary at this stage. Analysis takes into account the company's short- and long-term aims. The final selection procedure should contain some subjective appraisal of the choices even though analysis should be objective.
5. Implementing the selected alternative is one of the most important elements in the decision-making process. This often necessitates thorough planning before the execution, but it is an important step. Responsibility in management is more than just making decisions; it also calls for action and output.

6. This procedure' final stage takes place after some time has passed since the activity was taken. Management must determine whether the measure performed has improved the firm. If things have gotten better, no more intervention is required. However, management must repeat this process and look for new action alternatives if the given action did not produce the expected results [9]–[11].

## DISCUSSION

### Decision Tools

Making management decisions can be done using a variety of tools, and this selection is expanding quickly. Some of these instruments are intricate, while others are straightforward. In and of itself, the decision-making procedure just outlined is a decision instrument. Volume-cost or breakeven analysis, however, is one of the more crucial decision-making instruments utilized by agricultural managers. This is due to the fact that the majority of agricultural and food-related businesses require sizable financial inputs in the form of purchases of land, plants, and machinery. Because the food and agricultural sectors are so seasonal, many businesses may only utilize such substantial investments for very brief periods of time, as during planting or harvesting. The fact that this sector requires a lot of money highlights the significance of investment choices and the effective management of fixed assets. The explanation of this crucial management tool takes up the remainder of this chapter. A methodology for using this tool is offered, and volume-cost analysis methods are addressed. We will utilize numerical examples from Brookstone Feed and Grain (BF&G), to demonstrate the application of breakeven analysis and the numerous issues that this management tool may assist with.

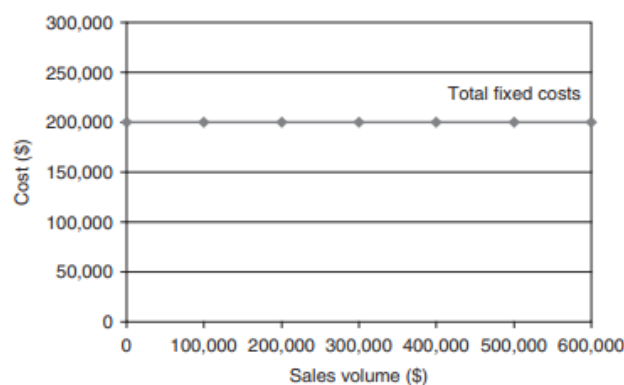
### Volume-Cost Analysis

A tool for analyzing the link between costs and the amount of revenue generated by the company is termed a volume-cost analysis, or breakeven analysis. This tool examines the variations in the costs that each agribusiness faces and how their amount of business impacts them. Under various cost and pricing hypotheses, volume-cost analysis illustrates the volume of business required to break even and/or generate a specific amount of profit. The effect of changes in selling price on the amount of business required to achieve a specific level of profitability can be demonstrated using volume-cost analysis. It can show specifically how expected price changes would impact revenue levels. It can be helpful in assessing different marketing tactics, such as spending on advertising and promotion, choosing the appropriate price for each product, and calculating the volume of sales a new salesperson needs to make in order to pay for her salary and other expenses. The division of costs into fixed and variable categories forms the basis for volume-cost analysis. Costs that are fixed do not fluctuate based on the volume of business. For instance, depreciation, interest, and insurance are examples of fixed costs. Costs that vary based on sales volume are known as variable costs. Examples include commissions, overtime, and cost of products sold. The main consideration when dividing costs into these two categories is whether the cost is directly impacted by the volume of sales. In other words, fixed costs exist independent of the volume of sales. Whether or whether a company earns any sales, once it is set up for a given level of revenue, it starts to suffer costs. These expenses are fixed or sunk. On the other hand, as merchandise is sold, certain extra costs are incurred. If the sale is not completed, these additional costs are not included on the income statement. These expenses are varying. Keep in mind that the deal is being emphasized. This cost is calculated based on the actual sales of a good or service. The critical moment is the actual sale, even in a manufacturing or processing

facility where costs are incurred throughout the production process. No costs are recorded as expenses and are not shown on the income statement prior to the conclusion of the sales transaction. They are still listed in inventory and only appear on the balance sheet. By definition, there are no variable expenses if there are no sales during a given time frame. The variable costs are really incurred as a result of selling anything. Variable costs and controllable costs are two different concepts that some people try to conflate. While management may influence certain variable costs, it cannot influence others. For instance, the cost of fuel used to convey goods is variable because it is only charged when goods are actually sold and delivered. However, management typically has limited control over it. Conversely, while normally within control, advertising expenses are unrelated to sales. At least theoretically, advertising increases sales, which is the opposite of what happens with a variable cost. Whether or not sales occur after the advertising expense has been made has no bearing on paying the advertising bill. Therefore, even if it can be controlled, advertising costs are fixed. These crucial fixed and variable cost principles might be better understood with the help of a graphical representation. Assume that LCM Nursery, Inc. has annual fixed expenditures totaling \$200,000 (also known as overhead).

**Fixed Costs**

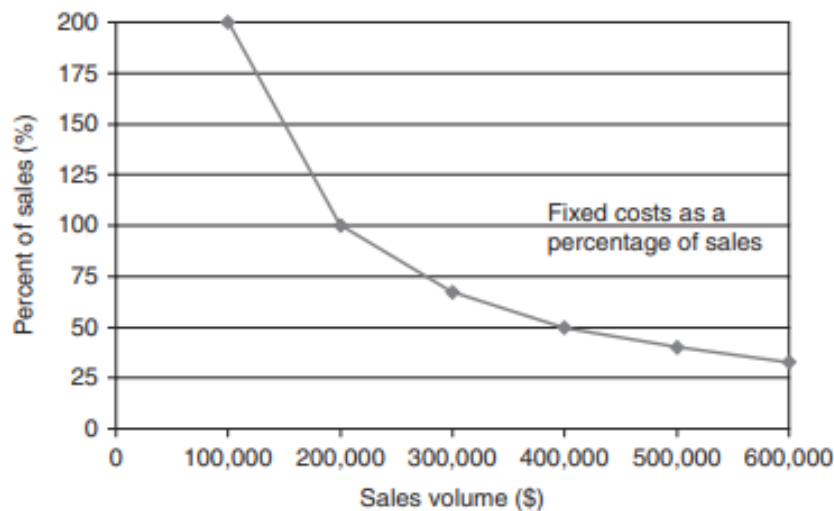
No matter how many units were sold during the period, fixed costs remained the same. LCM, Inc.'s total fixed costs are \$200,000 if company launches operations but generates zero sales. Its fixed expenditures stay at \$200,000 regardless of its sales volume, which is \$200,000. If it generates sales of \$500,000, its fixed costs will remain at \$200,000. According to the horizontal line in Figure 1, fixed costs will always be \$200,000, regardless of sales amount. Look at fixed costs as a share of revenue now. LCM, Inc.'s fixed cost per dollar of sales is equal to 100 percent (\$200,000 fixed costs \$200,000 sales 100) if it only sells \$200,000 worth of nursery items throughout the year. Fixed costs decrease to 50% of sales at \$400,000 in sales. The fixed cost ratio reduces to 40% of sales when sales reach \$500,000. Fixed costs fall to 20% of sales at \$1 million in sales. As volume increases in the same physical facility, this fixed cost percentage keeps declining. For any agricultural firm to operate efficiently, fixed costs as a percentage of revenue must decline quickly as sales rise. These economies of scale effectiveness is frequently taken into account when businesses decide to expand. The farmer grows and is able to reduce average fixed cost as long as no more assets are needed to farm an additional 80 acres. Naturally, this cannot continue indefinitely; eventually, resource constraints compel the addition of further capacity additions, which raises total fixed costs.



**Figure 1: Representing the data about total fixed costs, LCM nursery [Research Gate.Net].**

**Variable Costs**

On the other hand, variable costs behave very differently. Assume that for LCM, Inc., the variable cost per unit of sales averages at 60% of each dollar of sales, meaning that every time a dollar's worth of merchandise is sold, a cost of 60% including the cost of goods is incurred. The initial total variable cost is zero since LCM, Inc. has no variable costs while there are no sales. Total variable expenses for the time would be \$120,000 (0.60 \$200,000) if sales are \$200,000 and variable costs are \$60 for every dollar of sales. Total variable cost at \$400,000 in sales is \$240,000 (0.60 \$400,000) (Figure 2). Taking a look at variable costs as a percentage of sales, if LCM, Inc. sells \$200,000, its variable cost as a percentage of sales is 60%. Its variable cost per dollar is 60% if its sales are \$400,000. In fact, when expressed as a percentage of sales, the variable cost per dollar sales stays nearly constant (Figure 2), regardless of the volume of sales, at 60%. These graphs' main concepts can be summed up as follows total fixed costs rise as sales rise, but fixed costs as a percentage of sales decline. Total variable costs rise as sales rise, but variable costs as a percentage of sales do not change.



**Figure 2: Representing the total variable cost at \$400,000 in sales is \$240,000 [Research Gate.Net].**

**CONCLUSION**

For firms looking to improve their operations and boost performance, tools for analyzing operational decisions are essential. These instruments, which include key performance indicators, variance analysis, cost-volume-profit analysis, and process mapping, offer insightful information about effectiveness, efficiency, and profitability. Businesses can increase operational efficiency, identify areas for improvement, and make educated decisions by using these tools. These tools are essential for coordinating operational choices with overarching business objectives, boosting productivity, cutting costs, and preserving a market advantage.

**REFERENCES:**

[1] F. L. Barnard, J. Foltz, E. A. Yeager, and B. Brewer, Tools for evaluating operating decisions, in *Agribusiness Management*, 2020. doi: 10.4324/9780429324420-16.

- [2] D. Goksuluk, S. Korkmaz, G. Zararsiz, and A. E. Karaagaoglu, EasyROC: An interactive web-tool for roc curve analysis using r language environment, *R J.*, 2016, doi: 10.32614/rj-2016-042.
- [3] S. Jansen, A focus area maturity model for software ecosystem governance, *Inf. Softw. Technol.*, 2020, doi: 10.1016/j.infsof.2019.106219.
- [4] Z. Jabrayilova, The principles of developing a management decision support system for scientific employees, *EUREKA, Phys. Eng.*, 2019, doi: 10.21303/2461-4262.2019.00951.
- [5] J. Wu, J. Ren, B. Liu, and T. Lu, Deterministic and multi-scenario models for pallet allocation over a pallet pool in a city joint distribution system, *Adv. Mech. Eng.*, 2016, doi: 10.1177/1687814015623693.
- [6] D. King, Does wood make a perfect pallet?, *Packag. News*, 2011.
- [7] J. Singh, E. Olsen, K. Vorst, and K. Tripp, RFID Tag readability issues with palletized loads of consumer goods, *Packag. Technol. Sci.*, 2009, doi: 10.1002/pts.864.
- [8] J. J. Borckardt and M. R. Nash, Simulation modelling analysis for small sets of single-subject data collected over time, *Neuropsychol. Rehabil.*, 2014, doi: 10.1080/09602011.2014.895390.
- [9] F. Zhong *et al.*, Cutaneous Haptic Feedback in Robotic Teleoperation, *Proc. - IEEE Int. Conf. Robot. Autom.*, 2014.
- [10] R. Franks, A Taste for Murder: The Curious Case of Crime Fiction, *M/C J.*, 2014, doi: 10.5204/mcj.770.
- [11] M. Goodwin, Screen Circuits: Fear and Paranoia in the Sprawl (circa 1995), *M/C J.*, 2018, doi: 10.5204/mcj.1488.



## CHAPTER 19

### TOOLS FOR EVALUATING CAPITAL INVESTMENT DECISIONS

---

Dr. Mukesh yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### ABSTRACT:

Organizations must have the right tools for analyzing capital investment decisions when considering long-term assets and projects. These instruments help businesses evaluate the viability, profitability, and risks associated with potential capital investments. Net present value (NPV) analysis estimates the present value of anticipated cash flows from a project and compares it to the initial investment. A positive NPV indicates a project is financially viable and expected to provide more cash inflows than the initial investment. The internal rate of return (IRR) gauges the expected rate of return from a project, with an IRR higher than the company's needed rate of return. A shorter payback period is preferred for faster return on investment. Sensitivity analysis and scenario analysis help businesses understand a project's sensitivity to changes in important elements by examining various possible outcomes and the associated risks.

#### KEYWORDS:

Capital, Future, Money, Time, Value.

#### INTRODUCTION

Making choices on capital investments is a crucial task for managers of agricultural businesses. The addition of durable assets to an agricultural business properties that typically demand substantial financial outlays but will last for a very long time is referred to as capital investment. An example of a typical capital investment would be a fleet of trucks, industrial machinery, or storage facilities. Even relatively modest businesses can invest millions of dollars annually. These investments lock up money for protracted periods of time and release it gradually when the investment generates income. These investing choices could have a long-term impact on the company. The agribusiness management must choose how to finance the investment in addition to whether or not to make a certain investment. Financing options for capital purchases include cash purchases, borrowing, and leasing. The tools for assessing capital investment decisions will be covered in this chapter. Both highly complex and very simple tools will be covered. Another crucial trait of a successful manager is the ability to carefully analyze capital investment decisions given the enormous sums of money at stake and the long-term nature of the investments [1]–[4].

#### Capital Budgeting

Brookstone Feed and Grain (BF&G) may have to make a number of investment decisions in the normal course of business. A few of these are:

1. Expansion initiatives. Would it be wise to enlarge the grain handling and storage facilities at this time?
2. Projects involving replacement. Should the custom application fertilizer applicator be changed right away or should it wait another year?



3. Other investment opportunities. Would stainless steel or mild steel storage tanks be more professional?

Capital budgeting or investment analysis is the process for determining how an agribusiness manager's investment decisions will affect the profitability, risk, and liquidity of a company. An organized series of activities called capital budgeting creates data that can be used to make investment decisions. They are as follows:

1. Identification of potential investment options.
2. Choosing a suitable capital budgeting evaluation technique.
3. Gathering pertinent information.
4. Data analysis.
5. Interpretation of the findings.

### **Identification of Investment Alternatives**

Finding potential professional investment options is a crucial management task. This is a crucial function because, even if an investment may be valuable and profitable today, it may lose value in the near future due to capital obsolescence and even price decreases. As a result, management must constantly look for new investment opportunities. Management anticipates making a profit on a capital investment when funds are committed to a project. The return is the difference between income and expense. The return should be more than what the same amount of money could bring in by investing in safe options like savings accounts or government bonds. The return should compensate owners of capital for any increased risk connected with the investment in addition to generating a return for the use of the money that is similar to other investment alternatives. Here, the concept is rather simple to understand. How much more than a 2 percent return would a person need to invest in a food or agribusiness firm if they could earn as much on a bank certificate of deposit (CD)? Although the CD's return is not very high, the risk is.

At the conclusion of the year, the person will receive their principal back along with the 2% interest. The riskier investment is in the agricultural industry. The return on investment from the agribusiness will depend on a variety of things, including the overall market, the competition, the management, and many more. Due to the increased risk, investors will need a far higher return than 2% to invest in a food or agricultural company [5]–[7]. Some individuals believe that by taking out a loan to finance the acquisition of new equipment for their company, they have passed the risk to the lender. This is untrue in practice because, barring the worst-case scenario of bankruptcy, the bank is nearly certain to be paid back. Because the loan will be repaid from other, more profitable enterprises, if the manager makes a poor choice, the entire organization will suffer. Therefore, managers need a methodical strategy to finding investing opportunities. Additionally, they must be aware that borrowing money or using financial leverage to buy investments might alter the firm's risk and liquidity positions. Investment opportunities are classified into one of the four categories stated below:

1. Upkeep and replacement of capital goods that depreciate.
2. Investments that lower costs.
3. Investments that increase returns.
4. A mix of the aforementioned areas.

Consider a labor-intensive swine finishing process as an illustration. The management is assessing the adjustments required to replace dated facilities. A robotic feeding system is one option for an investment to take into account. To effectively utilize the mechanized system, the operation must, however, grow in scale. The manager must have a better understanding of the costs associated with running the automated system because this investment ought to reduce labor costs. Additionally, the technology might enable improved management of the nutrition strategy, which might enable the producer to better oversee carcass quality. If the producer sells the hogs based on carcass merit (quality), this can boost profits. The management in this scenario needs a methodical process to assess the investment alternative due to the complexity of the decision.

### Concepts of the time value of money

Net present value and internal rate of return, two of the four techniques for assessing capital investments, are based on the time value of money. So before considering the evaluation methods, it is necessary to introduce the ideas of time value of money. The fundamental concepts underlying the time value of money are developed in this section. The first of these hypotheses is that the time value of money is priced using an interest rate. The exchange rate between money received today and money received in the future is determined by the interest rate, which reflects investors' desires for money in terms of time. In effect, a dollar received now can be traded for a dollar plus the interest  $(1 + i)$  that will be paid one period from now. The amount of the investment would be multiplied by  $(1 + i)^n$ , where  $n$  is the number of periods, to get the value for the dollar invested over a number of periods with interest added to the principal to earn interest. Thus, the following formula is employed to determine the future value:

$$\text{Future Value of the Investment} = (\text{Present Value of the Investment}) \times (1 + i)^n$$

Where:  $i$  = Interest Rate

$n$  = Number of Periods

Alternatively, one dollar received one period in the future exchanges for  $1/(1 + i)$ , or the amount of the investment multiplied by  $(1 + i)^{-n}$ . The amount in today's dollars is normally referred to as the present value. The formula used to calculate present value is:

$$\begin{aligned} \text{Present Value of Investment} &= (\text{Future Value of Investment}) / (1 + i)^n \text{ or} \\ &= (\text{Future Value of Investment}) \times (1 + i)^{-n} \end{aligned}$$

Where:  $i$  = Interest Rate and

$n$  = number of periods

If you invest \$1,000 now for a year at 10%, for instance, it will be worth \$1,100 at the end of the year. Therefore, \$1,000 would be the present value of \$1,100 received in one year at a 10% discount rate. The investment of \$1,100 has been discounted to its \$1,000 present value. To give an example:

$$\text{Future Value} = \$1,000 (1 + 0.10)^1 = \$1,100$$

and

$$\text{Present Value} = \$1,000 / (1 + 0.10)^1 = \$1,000 / 1.10 = \$909.09$$

or

$$\text{Present Value} = \$1,100 \times (1 + 0.10)^{-1}$$

The time value of money so has two components. One method is to take a current sum and calculate what it would be if invested at a certain interest rate or compounding over time. The second is to take a future sum and calculate what it would be worth in today's money at a specific interest rate or discount rate, or discounting. The parts that follow go through both facets [8]–[11].

## DISCUSSION

### Compounding

When interest is periodically generated and added to the principal to form a component of the principal base from which future interest is earned, the practice is known as compounding. This technique is demonstrated using a straightforward example. Consider a scenario in which a family member of a high school graduate makes a \$1,000 investment at the time of graduation with the intention of leaving it there for the following four years while the graduate attends college. The \$1,000, as well as the interest accrued after four years, will be given to the college graduate by the relative as a graduation gift. At the end of four years, how much will \$1,000 be worth if interest is compounded annually at a rate of 5%? Compounded annually means that the interest earned in the first year of our example ( $\$1,000.00 \times 0.05 = \$50.00$ ) will be added to the initial investment (principal) ( $\$1,000.00 + \$50.00 = \$1,050.00$ ), resulting in interest on the entire principal investment ( $\$1,050.00$ ) at the rate of 5 percent in the second year. The investment is increased by the interest accrued over the previous year, and it too accrues interest. The outcome of applying the formula mentioned above would be as follows:

$$\$1,000(1 + 0.05)^4 = \$1,215.50$$

Managers frequently utilize financial calculators, spreadsheets, or tables of future values (Figure 1) to swiftly determine the future worth of an investment. The tables' factors are just the results of factor calculations using the appropriate interest rates and number of periods. The factor for our case would be 1.2155 for 5 percent interest and 4 periods. Therefore, the equation would be:

$$\$1,000(1.2155) = \$1,215.50$$

### Discounting

By adjusting the future value by its discount rate, discounting is a technique for transforming a future value to a present value. In this scenario, let's say a relative sends a recent high school grad a note offering \$1,000 upon completion of college in four years. What is the present worth of such gift, assuming the time value of money is 5% (interest rate)? Even though the formula is the same as previously, this calculation is more challenging.

$$\begin{aligned} \text{Present Value} &= \$1,000 / (1 + 0.05)^4 \\ &= \$1,000 / (1.05 \times 1.05 \times 1.05 \times 1.05) \\ &= \$1,000 / 1.2155 = \$822.70 \end{aligned}$$

Year (N)	$(1 + i)^n$				
	1%	3%	5%	6%	7%
1	1.0100	1.0300	1.0500	1.0600	1.0700
2	1.0201	1.0609	1.1025	1.1236	1.1449
3	1.0303	1.0927	1.1576	1.1910	1.2250
4	1.0406	1.1255	1.2155	1.2625	1.3108
5	1.0510	1.1593	1.2763	1.3382	1.4026
6	1.0615	1.1941	1.3401	1.4185	1.5007
7	1.0721	1.2299	1.4071	1.5036	1.6058
8	1.0829	1.2668	1.4775	1.5938	1.7182
9	1.0937	1.3048	1.5513	1.6895	1.8385
10	1.1046	1.3439	1.5259	1.7908	1.9672
15	1.1610	1.5580	2.0789	2.3966	2.7590
20	1.2202	1.8061	2.6533	3.2071	3.8697
25	1.2824	2.0938	3.3864	4.2919	5.4274

Year (N)	$(1 + i)^n$				
	8%	9%	10%	12%	14%
1	1.0800	1.0900	1.1000	1.1200	1.1400
2	1.1664	1.1881	1.2100	1.2544	1.2996
3	1.2597	1.2950	1.3310	1.4049	1.4815
4	1.3605	1.4116	1.4641	1.5735	1.6890
5	1.4693	1.5386	1.6105	1.7623	1.9254
6	1.5869	1.6771	1.7716	1.9738	2.1950
7	1.7138	1.8280	1.9487	2.2107	2.5023
8	1.8509	1.9926	2.1436	2.4760	2.8526
9	1.9990	2.1719	2.3579	2.7731	3.2519
10	2.1589	2.3674	2.5937	3.1058	3.7072
15	3.1722	3.6425	4.1772	5.4736	7.1379
20	4.6610	5.6044	6.7275	9.6463	13.7430
25	6.8485	8.6231	10.8340	17.0000	26.4610

**Figure 1: Representing the data of future value of \$1 compounded annually [Research Gate.Net].**

Again, to simplify things, tables of present values can be employed, or one can rapidly determine the present value of the investment by using a financial calculator or spreadsheet. The present value table in this example gives the present value of \$1 at a rate of 5 percent as 0.8227, meaning that the present value of \$1,000 would be as follows:

$$\text{Present Value} = \$1,000 \times 0.8277 = \$822.70$$

In other words, if the relative invests \$822.70 today at 5 percent interest, compounded annually, that investment will be worth \$1,000 in four years.

### **Annuities**

A stream of equal quantities of income and/or expenses for each of the many evaluation periods makes up an annuity.

The quantity of the stream at some future time can then be calculated using the time value of money idea, as well as the present value of a future stream. The future value of a stream of income can be useful in many situations, such as calculating how much needs to be saved in order to have enough money to retire, how much needs to be saved each month in order to pay for a child's education, and how much needs to be saved in order to have enough money for a down payment on a home or a business. Figure 2 lists the formulas for compounding a sequence of payments at various interest rates.

For example, if someone saved \$1,000 each year for the next 25 years and invested that amount at 6 percent and the interest earned each year remained invested the amount at the end of 25 years would be:

$$\text{Future value} = \$1,000 (54.864) = \$54,864.$$

The factor, 54.864 is the factor for 25 years and 6 percent. Also, if an individual wanted to accumulate \$1,000,000 over a 25-year career in order to retire and the interest rate was assumed to be 5 percent, the amount could be calculated as shown below:

$$\$1,000,000 = \text{Amount needed to invest each year} (47.726)$$

$$\$20,953 = \text{Amount needed to invest each year.}$$

The factor, 47.726, which represents 25 years and 5%, was obtained.

Of course, finding the present value of the income or expense each year and then adding the present values for all the years is one method for figuring out the present value of the entire stream.

Alternately, employing discount factors for an annuity can simplify the computation process when there are equal periodic amounts with a constant discount factor. There are instances where a succession of future financial payments must be discounted to their present value. This can be used to calculate the value of a series of payments that will be received from an annuity that is being considered for retirement or a series of equal loan installments over a repayment plan. Figure 4 lists the discount factors for various interest rates and time periods.

The amount of the annual payment, for instance, may be computed as follows if a person borrows \$100,000 to buy a house, with a 25-year repayment period and a 5% interest rate:

$$\$100,000 = \text{Annual Payment} (14.0939)$$

$$\$7,095.27 = \text{Annual Payment}$$

Again, the factor, 14.0939, was taken from and is the discount factor for a uniform series of 25 years and for 5 percent.

<i>Year(N)</i>	<i>1%</i>	<i>3%</i>	<i>5%</i>	<i>6%</i>	<i>7%</i>
1	1.0000	1.0000	1.0000	1.0000	1.0000
2	2.0100	2.0300	2.0500	2.0600	2.0700
3	3.0301	3.0909	3.1525	3.1836	3.2149
4	4.0604	4.1836	4.3101	4.3746	4.4399
5	5.1010	5.3091	5.5256	5.6371	5.7507
6	6.1520	6.4684	6.8019	6.9753	7.1533
7	7.2135	7.6625	8.1420	8.3938	8.6540
8	8.2857	8.8923	9.5491	9.8975	10.260
9	9.3685	10.159	11.027	11.491	11.978
10	10.462	11.464	12.578	13.181	13.816
15	16.097	18.599	21.578	23.276	25.129
20	22.019	26.870	33.066	36.785	40.995
25	28.243	36.459	47.726	54.864	63.248

<i>Year(N)</i>	<i>8%</i>	<i>9%</i>	<i>10%</i>	<i>12%</i>	<i>14%</i>
1	1.0000	1.0000	1.0000	1.0000	1.0000
2	2.0800	2.0900	2.1000	2.1200	2.1400
3	3.2464	3.2781	3.3100	3.3744	3.4396
4	4.5061	4.5731	4.6410	4.7793	4.9211
5	5.8666	5.9847	6.1051	6.3528	6.6101
6	7.3359	7.5233	7.7156	8.1152	8.5355
7	8.9229	9.2004	9.4872	10.089	10.730
8	10.637	11.028	11.436	12.300	13.233
9	12.488	13.021	13.579	14.776	16.085
10	14.487	15.193	15.937	17.549	19.337
15	27.152	29.361	31.772	37.280	43.842
20	45.762	51.159	57.274	72.052	91.024
25	73.105	84.699	98.346	133.333	181.867

**Figure 2: Future value of \$1 at compounded interest for an equal series of payments [Research gate.Net].**

**CONCLUSION**

In conclusion, it is essential for organizations to have methods for assessing capital investment decisions in order to evaluate the viability, profitability, and risks involved with possible investments. Companies can make well-informed capital allocation decisions by using methods like net present value (NPV), internal rate of return (IRR), payback time, sensitivity analysis, and scenario analysis. These tools give companies the capacity to assess the financial sustainability of projects, calculate predicted returns on investment, and study the effects of altering factors and



scenarios. Businesses may maximize long-term value, optimize capital investment decisions, and allocate resources wisely by properly using these technologies.

#### REFERENCES:

- [1] Y. A. AlKulaib, S. A. Al-Jassar, and K. Al-Saad, Theory and practice in capital budgeting: Evidence from Kuwait, *J. Appl. Bus. Res.*, 2016, doi: 10.19030/jabr.v32i4.9736.
- [2] P. Alleyne, S. Armstrong, and M. Chandler, A survey of capital budgeting practices used by firms in Barbados, *J. Financ. Report. Account.*, 2018, doi: 10.1108/JFRA-07-2017-0061.
- [3] F. Chittenden and M. Derregia, Uncertainty, irreversibility and the use of ‘rules of thumb’ in capital budgeting, *Br. Account. Rev.*, 2015, doi: 10.1016/j.bar.2013.12.003.
- [4] A. Mubashar and Y. Bin Tariq, Capital budgeting decision-making practices: evidence from Pakistan, *J. Adv. Manag. Res.*, 2019, doi: 10.1108/JAMR-07-2018-0055.
- [5] P. de Souza and R. J. Lunkes, Capital budgeting practices by large Brazilian companies, *Contaduria y Adm.*, 2016, doi: 10.1016/j.cya.2016.01.001.
- [6] R. Batra and S. Verma, Capital budgeting practices in Indian companies, *IIMB Manag. Rev.*, 2017, doi: 10.1016/j.iimb.2017.02.001.
- [7] P. J. Graham and M. Sathye, Does national culture impact capital budgeting systems?, *Australas. Accounting, Bus. Financ. J.*, 2017, doi: 10.14453/aabfj.v11i2.4.
- [8] M. Khoir, Nilai Waktu Dari Uang Dalam Perspektif Ekonomi Islam, *JES (Jurnal Ekon. Syariah)*, 2016, doi: 10.30736/jes.v1i1.5.
- [9] S. Mujibatun, INKONSISTENSI PRINSIP TIME VALUE OF MONEY DALAM OPERASIONAL TRANSAKSI KEUANGAN SYARIAH DAN SOLUSINYA, *Econ. J. Ekon. Islam*, 2016, doi: 10.21580/economica.2016.7.2.1159.
- [10] M. A. K. Fairouz, The Concept Of The Time Value Of Money: A Shari’Ah Viewpoint International Journal of Islamic Banking & Finance, *Int. J. Islam. Bank. Financ.*, 2013.
- [11] M. Rahman, Time value of money: A case study on its concept and its application in real life problems, *18 ~ Int. J. Res. Financ. Manag.*, 2018.



## CHAPTER 20

### PRODUCTION PLANNING AND MANAGEMENT: EFFICIENT AGRIBUSINESS OPERATION

---

Dr. Mukesh yadav, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-mukeshyadav@jnujaipur.ac.in](mailto:Id-mukeshyadav@jnujaipur.ac.in)

#### ABSTRACT:

Production planning and management are essential components of operations management, focusing on managing processes and resources involved in producing goods or services. Production planning involves predicting demand, planning production, and coordinating personnel, machinery, and raw supplies. Production management monitors real-time performance, ensures smooth operations, and manages resources. It involves managing production lines, quality assurance, and addressing potential problems or bottlenecks. A comprehensive strategy considering costs, efficiency, quality control, inventory management, and on-time delivery is necessary for effective production planning and management. Utilizing cutting-edge technologies and lean manufacturing concepts maximizes productivity and reduces waste. This approach enables businesses to quickly respond to customer requests, adapt to market developments, and gain an edge over rivals.

#### KEYWORDS:

Businesses, Foods, Management, Operations, Planning.

#### INTRODUCTION

Operations management is the planning and supervision of the procedures used by food and agribusiness companies to create their products and services. Operations management used to be primarily focused on factory manufacturing. We now understand that service managers in supermarkets, financial institutions, web-based businesses, and agribusiness consulting firms face the same issues and concerns as those in the manufacturing sector with regard to job design, location selection, facility design, purchasing, transportation, and scheduling [1]–[3]. Production planning and supply chain management are two separate facets of operations management for food and agriculture firms.

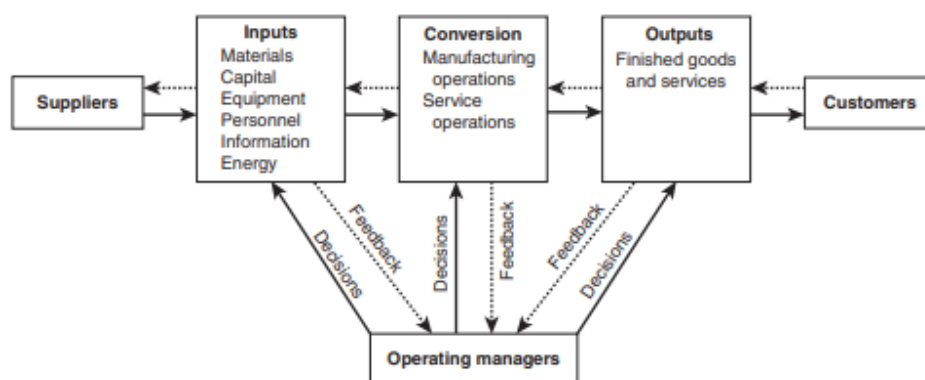
Frederick W. Taylor's contributions to modern operations management go back to the early 1900s, when he first popularized the idea of scientific management. Taylor watched and researched production, paying particular attention to the people doing the work, the processes used, and the wages given for higher output. Using his scientific or analytical approach, Taylor created a fundamental set of principles for scientific management based on these discoveries. Taylor held the following beliefs:

1. A set of guidelines that must be followed every time a task is carried out.
2. Selecting the most effective methods for each task using scientific comparison testing.
3. Careful employee selection, hiring, and training to place them in the most suitable position.

4. An efficient division of labor that enables each individual to carry out the most appropriate task in the production process, with management and employees mutually determining the optimal division of labor system.

After Taylor's initial work, there was a period of intensive operations management research. Operations management was significantly advanced in the 1940s with the creation of contemporary computers. The first machines substantially expanded the breadth of numerical computations and quantitative models, despite being both expensive and challenging to use. In the 1940s, George Dantzig developed linear programming, a mathematical method that chooses the most efficient distribution of resources in circumstances including transportation, least expensive feed rations, and crop acreage distributions. The 1950s saw the development of critical path techniques and production scheduling models. Computer simulations were created in the 1960s, and materials requirement planning (MRP), a potent materials management system, was introduced in the 1970s. Robotics, flexible manufacturing systems, and computer integrated manufacturing systems were all integrated into operations management during the 1980s and 1990s.

Enterprise requirement planning (ERP), a more recent development in operations management information technology, is now used. ERP systems integrate internal and external information across the entire business by connecting a company's production systems with other functional areas including finance, customer relationship management, human resources, and supply chain management [4]–[7]. A wide number of choices and actions are part of operations management's production planning process. Creating a quality program, locating a plant, selecting the proper capacity, planning the operation's layout, selecting the process design, and specifying job duties and responsibilities are all necessary. The following chapter goes into great detail about the operations management task of supply chain management. Production planning and supply chain management must be taken into account together because they are both essential components of operations management. Purchasing production materials, production scheduling, managing inventories of different types, managing transportation, and distributing the finished goods or services are just a few of the decisions and actions that make up supply chain management in operations management.



**Figure 1: Representing the overview about Operations Management System [Research Gate.Net].**

As seen in Figure 1, operations management involves a system of connected tasks and participants. The system's inputs come from suppliers. The timely supply of high-quality inputs

has an impact on all system activities. To create the intended outputs, inputs must include the human resources (skilled laborers and management), capital (equipment), materials, information, and energy. In order to generate goods and services, a system of facilities, processes, and procedures must be used. This process is known as the conversion or transformation of inputs into outputs [8]–[11]. Customers buy the system's outputs, and their feedback to the other system components is crucial for developing and producing new goods and services. Finally, in order to ensure that the entire production system runs well, managers make decisions and seek feedback on those decisions. One significant difference is that whereas supply chain management aims to improve activities along the value chain, from suppliers to customers, production management concentrates on managing the company's conversion process. A dairy, for instance, can start with raw milk and end up with a variety of milk, cheeses, ice cream, and other goods. Although the technology used to sell crop protection chemicals and offer agronomic services is very different from that used in a dairy, the scheduling, controlling, storing, shipping, and general management issues are very similar between the two processes. In Figure 2, several examples are displayed.

<i>Manager</i>	<i>Suppliers</i>	<i>Inputs</i>	<i>Conversion</i>	<i>Outputs</i>	<i>Customers</i>
Restaurant Manager	Food Distributors Meat Suppliers Equipment Mfrs Packaging	Meats Vegetables Food Servers Utensils Equipment	Cooking Meal Preparation Serving	Prepared Foods Satisfied Customers	Hungry Diners
Crop Farm Producer	Equipment Dealer Seed Firms Chemical Mfrs	Land Labor Equipment Seed Chemicals Fertilizer	Tilling Planting Spraying Harvesting	Fruits Vegetables Grains	Food Processors Ethanol Plants Livestock Farms Exporters

**Figure 2: Examples of production systems and components[Research Gate.Net].**

**Issues in Operations Management**

Five concerns affect operations management for the food and agriculture industries, as opposed to the previous focus on cost and efficiency:

1. Productivity growth.
2. The expanding service sector.
3. Time-based competitiveness.
4. Global rivalry.
5. Superior.

**The Growing Service Sector**

Due to its emphasis on the industrial sector, operations management was formerly referred to as production management. However, the service sector, which accounts for over 62 percent of the U.S. GDP (U.S. Department of Commerce 2011), is currently the one with the fastest rate of growth in the American economy. There are differences between manufacturing and service organizations, of course, but these differences are fading as management strategies for manufacturing companies find their way to service companies and vice versa. In Figure 3, some traits that set the two sectors apart are listed. Because their products are tangible, long-lasting,

and inventoriable, goods producers can be separated from service providers. Service businesses create ideas, information, performances, and other intangibles. Some service businesses, such as restaurants, often provide both a good and a service, namely food and service. Numerous suppliers of farm supplies offer services including product information, shipping, product assembly, and finance in addition to high-quality products. Unlike manufacturers, service providers frequently interact with clients, and their reaction times are sometimes measured in minutes rather than days or weeks as they would be for goods makers. While service providers typically cannot ship their products, producers of goods frequently serve local, national, and even international markets. Instead, service providers are more likely to be found close to the consumer although this is changing with web services like Amazon. Since quality can be evaluated and tested, it is easier to measure quality with products producers. Since client views, communications, and time are all subject to subjectivity, it is challenging to quantify quality in service producers.

<i>More Like a Goods Producer</i>	<i>More Like a Service Provider</i>
Physical, durable product	Intangible, perishable product
Output can be inventoried	Output cannot be inventoried
Low customer contact	High customer contact
Long response time	Short response time
Large facilities	Small facilities
Capital intensive	Labor intensive
Quality easily measured	Quality not easily measured

**Figure 3: Characteristics of goods producers and service providers [Research Gate.Net].**

## DISCUSSION

### Time based Competition

In time-based competition, the dimension of time is used as a source of competitive advantage in the battle for customers and market share. One illustration of time-based competitiveness is a quicker reaction to shifting client needs. Technology advancements, particularly the Internet, have made it possible for businesses to compete on the basis of speed. Other factors include increased customer demands and global competitiveness. The amount of time it takes to create and launch new goods or services is decreasing in agribusinesses. They are also responding to consumer orders, delivery, service requests, and issues more quickly.

### Productivity

Productivity is defined as the amount of resources materials, labour, equipment costs consumed divided by the amount of output goods and services generated. Because employee pay are typically decided by the productivity of human resources, productivity is the key factor in determining a country's standard of living. The transition to a service-oriented economy is partly to blame for the increase in concern over productivity. Many economists think that increasing productivity in the service industry will be more difficult than increasing productivity in the industrial sector. Between 1948 and 2008, the productivity of the agricultural sector was almost

half that of the non-farm sector. Agricultural output in the United States increased at an average annual rate of 1.6 percent between 1948 and 2008 compared to 3.6 percent for the non-farm sector. Additionally, there have been huge variations in the pace of productivity growth in agriculture. Some believe that U.S. agriculture is losing its advantage overseas.

The increasing use of marginal land, actual price increases for water and energy, tighter regulations on the use of pesticides and other chemicals, tighter regulations on confinement animal feeding operations, and the lingering effects of declining real investment in agricultural research as a public good are among the reasons given. Due to substantial mechanization and advancements in technology, labor productivity in the retail food industry has improved moderately but irregularly. Digital data processing and computer-assisted checkouts are examples of technological advancements in supermarkets. Productivity has also increased as a result of new store ideas, such as food warehouses, that offer fewer services. However, some food merchants' efficiency has also decreased as a result of the addition of labor-intensive extended services like salad bars, delicatessens, and in-store bakeries. Due to improved customer service and longer store hours which result in revenues that are just slightly greater than input rates, certain eating and drinking establishments have also seen dropping productivity rates.

### **Global Competition**

The management of agriculture operations is being impacted by globalization. Trade is essential to the agricultural economy of this country. According to the World Agricultural Outlook Board (2011), the United States exports around 34% of its agricultural production, and imports make up a diverse but expanding portion of the country's consumption of agricultural goods. In fiscal 2010, exports of American agricultural goods including food, feed, and drinks totaled about \$108 billion. Managers of operations must consider the effects of globalization while making decisions. Making decisions like where to locate a new manufacturing facility is more difficult because nations with prospective markets and/or inexpensive inputs should be taken into account. The potential rapid expansion of exports must also be taken into account when deciding on the size or capacity of a plant. Plant layouts and equipment must be adaptable since exported products may need to be modified to meet the needs of a different consumer. Domestic markets no longer automatically imply domestic rivals. For instance, affiliates of foreign-owned businesses make up seven of the top 30 food stores in the United States. Retail food operations' operations managers must decide how to effectively counteract these new foreign rivals.

### **Quality**

Many food and agribusiness firms have found success by offering high-quality goods and services at competitive rates, but the value of quality has grown as competition has grown. Poor quality frequently leads to higher manufacturing costs and a loss of market share. Quality of food products is additionally linked to expectations of food safety. Sales for entire industries may suffer as the UDSA and FDA work to find the cause of an e-coli outbreak. One of the biggest challenges facing operations managers today is how to deliver premium goods or services effectively. However, quality without a context is a vague phrase. Similar to comfort and beauty, everyone has a different definition of quality. Understanding the kind or degree of quality that their consumers require, desire, or expect falls under the purview of the management.

Any product must have quality in order to be marketed, but the questions are what sort and how much quality. Managing that quality is a crucial component of every successful food and

agriculture enterprise from a planning standpoint. These kinds of problems, such a new definition of convenience, the abundance of options, and a relentless desire for value in purchases, have put unprecedented demands on operations managers. The problem facing the operations manager is to make sure that quality is consistently and successfully delivered at a cost that customers are prepared to pay. Depending on whom one is talking to, the definition of quality may change. Quality is often defined by consumers as fitness for usage. Nowadays, a lot of businesses define fitness for use as meeting or exceeding customer expectations. Consumers also frequently discuss value, which refers to how well a good or service fulfills its function for the price a customer is willing to pay. Manufacturing managers, on the other hand, give a distinct definition of quality: compliance to specifications.

The essential foundation for managing operations to produce quality products is provided by fitness for use and compliance to specifications. Understanding consumer wants and converting them into appropriate specifications for products and services are the roles of marketing and design. The manufacturing or service operation is responsible for ensuring that certain specifications are met or exceeded. Quality issues can arise from poor communication between marketing, design, and operations. What effects do high-quality goods and services have? A greater quality can boost profits and/or market share from a marketing perspective. Getting and keeping clients is a key factor in market share. According to a recent survey, more than half of customers who file complaints will give the company another chance if the issue is remedied. If the complaint is promptly resolved, the figure increases to 95%. Because high-quality goods and services may often be priced higher than similarly priced but lower-quality goods, higher profits are achieved. Defective goods or services might raise manufacturing costs from a financial point of view. The following production expenses are connected to quality:

1. Costs of prevention.
2. Fees for appraisal.
3. Costs of internal failure.
4. Costs of external failure.

Costs of prevention are those incurred when defects are prevented from occurring. Monitoring the level of product and service quality as it is being produced results in appraisal expenses. Internal failure costs are the expenses incurred when defective components and services are produced and reworked. Finally, when a good or service fails after it is in the hands of the customer, external failure costs are incurred. Food and agriculture companies have significantly improved the quality of their goods and services since the 1980s, which has given many of them a significant advantage over rivals. The comprehensive quality management movement of the 1980s can be linked to the current emphasis on Six Sigma programs to find flaws.

Hazard analysis critical control point (HACCP) has emerged as a significant, well-recognized food safety program in the food business. As a result of public and legislative demands for more food safety protection, it has quickly acquired favor. A uniform food safety program that is recognized by the international community is also required due to the increased global sourcing of raw materials and distribution of food products. The fundamental tenet of HACCP is that preventing food safety issues is more important than managing them. HACCP is relevant to raw materials suppliers even though it is most useful when processing safe food. The advantages of HACCP include lowering the possibility of producing and selling unsafe goods, raising awareness of workplace dangers, and improving product quality. Seven guiding principles for



establishing, implementing, and maintaining the HACCP system in an operation make up the system. The guidelines are listed below:

1. Perform a risk analysis. Make a list of the process phases that pose significant risks and outline the protective measures.
2. Define the process' Critical Control Points.
3. Define Critical Limits for each identified Critical Control Point's preventative actions.
4. Establish criteria for monitoring Critical Control Points. Create procedures based on monitoring data to tweak the operation and keep control.
5. Specify the corrective steps to be followed when monitoring shows a departure from a critical limit that has been established.
6. Create efficient record-keeping practices to maintain track of the HACCP system.
7. Create processes for confirming that the HACCP System is operating properly.

### CONCLUSION

In order for organizations to effectively satisfy client needs, increase productivity, and optimize their production processes, production planning and management are essential. Businesses may increase productivity, cut costs, and enhance product quality by effectively allocating resources, setting production targets, and putting in place efficient procedures. Businesses may respond to market changes, reduce waste, and produce goods and services that match consumer expectations by using effective production planning and management. It is an essential element of operations management and it is what propels competition and success in the fast-paced corporate climate of today.

### REFERENCES:

- [1] D. A. Rossit, F. Tohmé, and M. Frutos, Production planning and scheduling in Cyber-Physical Production Systems: a review, *Int. J. Comput. Integr. Manuf.*, 2019, doi: 10.1080/0951192X.2019.1605199.
- [2] H. Jodlbauer and S. Strasser, Capacity-driven production planning, *Comput. Ind.*, 2019, doi: 10.1016/j.compind.2019.103126.
- [3] A. Cheraghalikhani, F. Khoshalhan, and H. Mokhtari, Aggregate production planning: A literature review and future research directions, *International Journal of Industrial Engineering Computations*. 2019. doi: 10.5267/j.ijiec.2018.6.002.
- [4] N. Gopan, Rupture of nanoscaled water sheets in the presence of an applied electric field, *Fluid Dyn. Res.*, 2016, doi: 10.1088/0169-5983/48/6/061426.
- [5] K. S. P. Kumar and E. C. N. Peter, Adsorption of chromium (VI) from aqueous solutions by different admixtures - A batch equilibrium test study, *J. Eng. Sci. Technol.*, 2014.
- [6] S. F. Dos Santos and H. S. Brandi, Application of the GUM approach to estimate uncertainty in measurements of sustainability systems, *Clean Technol. Environ. Policy*, 2016, doi: 10.1007/s10098-015-1029-3.
- [7] O. Sawada and R. Takada, On the analyticity and the almost periodicity of the solution to the Euler equations with non-decaying initial velocity, *J. Funct. Anal.*, 2011, doi: 10.1016/j.jfa.2010.12.011.

- [8] A. B. Liu, D. Mather, and R. D. Reitz, Modeling the effects of drop drag and breakup on fuel sprays, in *SAE Technical Papers*, 1993. doi: 10.4271/930072.
- [9] J. Tanaka, Taylor, L.: Reconstructing Macroeconomics. Structuralist Proposals and Critiques of the Mainstream, *J. Econ.*, 2005, doi: 10.1007/s00712-005-0125-y.
- [10] P. Flores, M. Machado, E. Seabra, and M. T. Da Silva, A parametric study on the baumgarte stabilization method for forward dynamics of constrained multibody systems, in *Proceedings of the ASME Design Engineering Technical Conference*, 2009. doi: 10.1115/DETC2009-86362.
- [11] S. K. Genuis, Kuhlthau's Classic Research on the Information Search Process (ISP) Provides Evidence for Information Seeking as a Constructivist Process, *Evid. Based Libr. Inf. Pract.*, 2007, doi: 10.18438/b88d0c.

## CHAPTER 21

### REAL-TIME DATA EXCHANGE AND SUPPLY CHAIN: ENHANCING AGRIBUSINESS EFFICIENCY

---

Dr. A.K. Singh, Asstt. Professor  
SOAS, Jaipur National University, Jaipur, India  
Email [Id-ashoksingh@jnujaipur.ac.in](mailto:Id-ashoksingh@jnujaipur.ac.in)

#### ABSTRACT:

Supply chain management is essential for the agriculture sector, coordinating and integrating various activities, processes, and stakeholders involved in the production, processing, distribution, and sale of agricultural products. Efficient supply chain management ensures a constant flow of goods, minimizes waste, lowers costs, and boosts overall effectiveness. It involves overseeing processes like procurement, transportation, storage, processing, packaging, and distribution while considering sustainability, quality control, and legal compliance. The agribusiness sector faces challenges due to seasonality, perishability, and specialized handling and storage. To address these issues, agribusinesses use various technologies, such as demand forecasting, inventory management, supplier relationship management, traceability systems, and IT for real-time data exchange and supply chain visibility. By effectively managing the supply chain, agribusinesses can respond to market demands, ensure product quality and safety, optimize production and distribution processes, and decrease waste and losses. Additionally, it promotes socially conscious and sustainable principles by encouraging fair trade and reducing environmental impact.

#### KEYWORDS:

Agribusiness, Chain, Goods, Inventory, Management.

#### INTRODUCTION

An overview of the production planning components of operations management in the agribusiness was given in the previous chapter. Determining the location, layout, capacity, and particular procedures that the agribusiness will employ to produce goods and services is one of the production planning functions. Supply chain management, which regulates the flow of goods, information, and materials into and out of the company, is a crucial component of running an agribusiness [1]–[4]. Supply chain management takes into account a variety of processes relating to how agricultural inputs are planned and acquired, as well as how finished goods are stored and distributed to customers. By definition, supply chain management involves the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities, according to the Council of Supply Chain Management Professionals.

Inbound and outgoing transportation management, floor management, warehousing, materials handling, order fulfillment, logistics network design, inventory management, supply demand planning, and management of third-party logistics service providers are all operations that fall under the category of logistics management. Many people mistakenly believe that supply chain management entails collaboration among businesses and logistics management refers to internal company activity. The movement and storage of inputs, finished goods, and data are at the heart of supply chain management [5]–[8].

## Importance of Supply Chain Management

Supply chain management is the cornerstone of several businesses' overall business strategies, including Wal-Mart. Agribusiness companies have reorganized their organizations to create supply chain management divisions, whose manager reports directly to the CEO of the business, in response to its growing relevance. Why, therefore, is supply chain management so crucial? Its significance to a company's overall viability and success is demonstrated by three examples. Let's start with inventory control, a crucial component of supply chain management. Typically, 35 to 50 percent of a company's current assets are made up of inventory. With such a large percentage of assets, judgments about the optimal inventory management are crucial to the agribusiness's overall viability. Inputs for manufacturing are purchased, smooth production of goods and services is coordinated, the right amount of inventory is kept on hand, and perhaps most crucially, the supply chain acts as a conduit between the agribusiness, its suppliers, and its consumers. The distribution of the agricultural firm's goods and services falls under this final set of responsibilities.

Second, more and more business sectors are beginning to see the value of cooperation. Efficient Consumer Response (ECR), a business strategy, is a key supply chain management concept in the food industry, according to the Food Marketing Institute. ECR is a system that connects food producers and distributors with retail supermarkets, and it is quick, precise, and information-based. Among the four components of ECR are: Supplying the proper variety of products, replenishing products as they are used, and introducing new products. Increased sales, fresher products, less damage, shorter cycle times, more accurate invoicing, higher cash flows, and fewer occurrences of out-of-stock items are all advantages of ECR. AgGateway's goals for the production agriculture industry are similar. Cycle-time-to-market is a notion that has gained importance as a third factor in the importance of logistics.

Cycle-time-to-market, often known as quick response, has evolved into a major strategic priority for many agribusinesses. The objective is to speed up the process of turning a product from an idea into a finished one that customers can hold. A team of professionals from sales, logistics, marketing, design, and manufacturing collaborate closely to plan, design, produce, and sell new products in an effort to shorten cycle-time-to-market. By include suppliers in the process of developing new products, supply chain management significantly reduces the amount of time needed to bring a product to market. The infrastructure for equipment and information is provided by supply chain management, starting with suppliers and purchasing and continuing through manufacturing and finally to the physical distribution networks. Many businesses have created integrated information systems to shorten cycle times.

## Supply Chain Management Objectives

In its current definition, supply chain management is a relatively recent field of study that has changed significantly over the previous 40 years. To maximize inventory levels and cut down on transportation expenses, agribusinesses in the past narrowly concentrated their efforts on the physical distribution of their finished products. In order to run and manage the agribusiness, companies have merged their materials and distribution functions during the last 20 years. The end result is a coordinated system for distribution, inventory management, scheduling, and purchasing. Improved information technology, better customer service, risk reduction, and global operations are a few of the more recent, broader supply chain management goals [9], [10].

### **Information Technology**

The advancements in information technology are essential to the increased focus on supply chain management. These developments enable the agribusiness to connect distributors, suppliers, and final consumers. The capabilities of logistics are always changing due to new information technology breakthroughs. For instance, UPC codes have started to be replaced by RFID chips (radio frequency identification) on products. Large retailers' suppliers have access to daily downloads of product sales by retail location. When the inventory at a store falls below a predetermined level, electronic orders are occasionally sent to a supplier through automated ordering systems.

### **Customer Service**

Another crucial goal for supply chain managers in agribusinesses is customer service. One strategic way for an agribusiness to distinguish its products or services is through customer service. One method of differentiating a company's product or service is by providing timely updates on the status of a delivery or having a quick inventory replenishment system for efficient and effective customer service. Retailers are increasingly keeping an eye on the performance of suppliers in terms of things like on-time delivery or damaged goods.

### **Risk Reduction**

Agribusinesses are also working together more with other firms to reduce risk. Contracts that allow for shared information and investments in facilities, new technology, inventories, and product distribution can be made by supply chain managers with suppliers or customers. Agribusinesses can minimize risk by utilizing their own capabilities as well as the assets of their alliance partners. One agricultural company might be good at distribution, whereas a supplier might be good at manufacturing and maintaining a specific part for that agricultural company. Agribusinesses can concentrate on their core capabilities by sharing expertise while also gaining from the strengths of important partners.

### **Globalization**

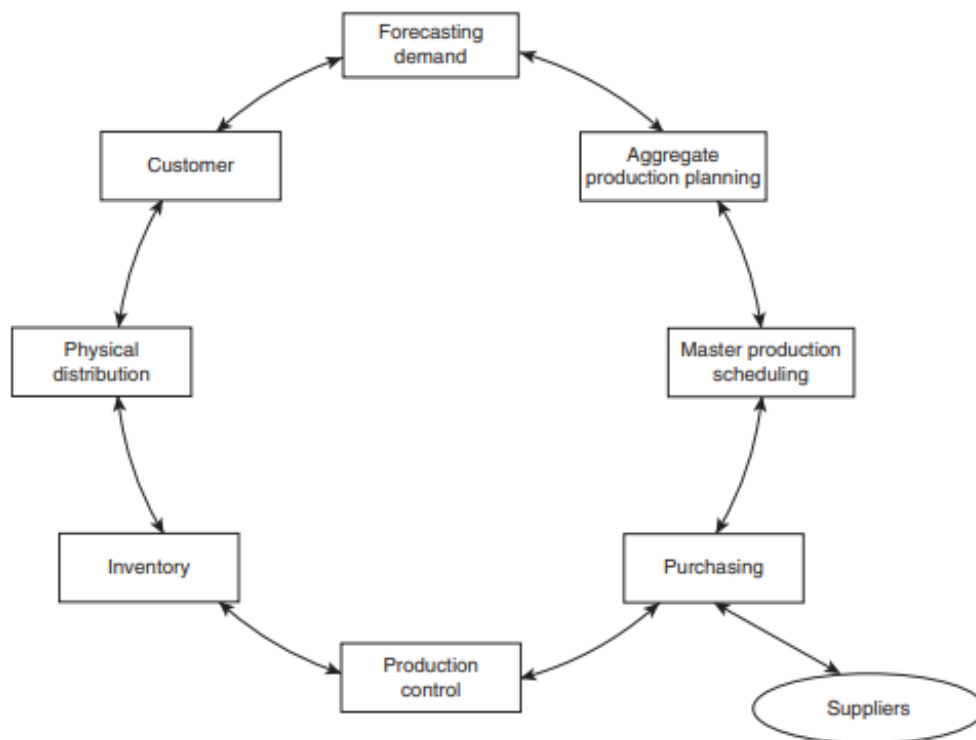
As we saw in earlier chapters, the majority of agriculture firms today are undoubtedly thinking about globalization. While competitors with foreign affiliations penetrate domestic markets, international markets continue to grow. However, managing a worldwide enterprise requires having a strong logistical infrastructure in place. Agribusinesses are increasingly sourcing raw resources outside of the United States on the input side. To ensure the timely arrival of inputs, information and shipping techniques must be devised. Agribusinesses must create their own distribution networks or collaborate with foreign companies to extend their operations internationally or export their products. Agribusinesses must comprehend the unique needs and preferences of the overseas consumer in order to achieve this. New suppliers, distributors, and retailers need to be built up; they frequently operate in distinct regulatory and cultural contexts.

## **DISCUSSION**

### **Supply Chain Management Functions**

This chapter offers a conceptual framework for comprehending the function of supply chain management in an agribusiness and how it interacts with other agribusiness operations. The many steps in the supply chain management process are shown in Figure 1. As you examine this figure,

keep in mind that how these activities are carried out is influenced by the distinctive characteristics of agricultural products including perishability, seasonality, and bulkiness. Where the marketing role of demand forecasting ended, the supply chain management function started. The long-term demand predictions are converted into broad production plans for the upcoming quarter and year through aggregate production planning. A final production schedule outlining the precise timing and precise amounts to be produced comes after master production scheduling. The fundamental task of purchasing is to acquire the required inputs for the manufacturing of the finished items, and it does this by using the master production schedule.



**Figure 1: Representing the Supply Chain Management Process [Research Gate.Net].**

Production control controls internal logistics to create a precise internal schedule for sub-assemblies, machines, and to coordinate the entire production process when the proper amount of inputs are available. Production control is concerned with any last-minute adjustments to the number of products produced and takes into account any production that is lost due to scrap or downtime.

After the goods are created, they are either dispatched for sale or added to an inventory. As can be seen later, a variety of factors influence inventory levels. Regarding how products are delivered to the final consumer, distribution can have many different elements. In order to fulfill the supply chain management functions, this completes the circle. Customers buy the finished products, which in turn fuels anticipated demand for more things. Following this brief summary of supply chain management tasks, further in-depth explanations of the major functions will be provided.



## Forecasting Demand

In order to place the marketing function of demand forecasting in context with the supply chain functions that follow. The agricultural industry is characterized by highly seasonal demand, unpredictability of the weather, erratic market pricing, and a changing market. These market traits necessitate thorough planning on the side of the company management. The overall economic, market, and sales projections, as previously mentioned, serve as the basis for a number of managements planning decisions, including supply chain management decisions. Decisions about distribution facilities, warehouse size, transportation equipment, and long-term supplier agreements are influenced by general economic and market forecasts. Market and sales predictions, often known as short-range projections, are what influence decisions about how quickly to buy raw materials to turn them into finished goods, manage inventories, and schedule overall production.

## Aggregate Production Planning

Aggregate production planning is the process of determining the precise production volumes, rates, and labor sizes, while balancing client demands with equipment and plant capacity constraints. In order to create monthly, quarterly, and annual aggregate production plans, broad economic and market forecasts are used. Aside from enhancing customer service, aggregate production plans aim to reduce inventories, minimize fluctuations in labor force size and output, and enhance plant and equipment use. For instance, a food manufacturer might be projecting future demand for its cereal bars and boxed cereals. The production planner observes a rise in the consumption of high-energy cereal bars when looking at the past quarter's food product consumption in the US. Additionally, planned promotions and retailers' growing interest in carrying cereal bars give us important insights about client demand.

These demand projections are integrated with existing production capacity constraints, inventories, and other data in aggregate production planning to determine the amount of ingredients, labor, and equipment needed for the following three to twelve months. When aggregate planning identifies a scarcity of a particular resource, such as a piece of machinery or a certain labor skill, plans can be made to address the issue either temporarily or permanently. The precise numbers of different cereal bar flavors or varieties that will be needed are not stated in the aggregate production plan. Instead, it makes basic estimations of the overall number of product kinds that will be required in order to calculate the anticipated needs for equipment, personnel, and raw materials. Sales predictions, which are supplied by sales agents, and actual orders are used to estimate the precise numbers of individual stock keeping units (SKUs) that are required. The detailed master production schedule, which is the following step, is built around these two components.

## Master Production Scheduling

Once specific product orders have been obtained and/or short-term sales predictions have been established, the master production schedule (MPS) is developed. The MPS specifies the final SKU production numbers that must be produced during specific time periods. A six- to twelve-month time horizon's worth of product requirements are typically provided weekly by the MPS. The next six weeks of production are often not changed in a manufacturing facility to give purchasing and production control time to finalize their purchases and plans (note that this might vary greatly depending on the product being produced). The quantities of certain products

beyond the estimated six-week time frame have not been established, but will solidify as production time gets closer. The master scheduler must take into account both the supplier's capacity as well as the total demand placed on the agribusiness's resources and capacities. It shows a condensed MPS procedure. There are three fundamental MPS tactics. When a company uses a make-to-stock strategy, it means that it is manufacturing items for stock before making actual sales. Here, the manufacture of agricultural chemicals, seeds, and several food items are examples. When an order is placed, a company that uses the assemble-to-order technique puts together the available components. A good illustration of this tactic would be farm tractors and machinery. When using a make-to-stock technique, the company actually constructs items upon request. Dairy equipment companies who manufacture sophisticated milking systems precisely to a producer's specifications are a good example in this regard. It is obvious that each of these tactics would use the concept of the master production schedule differently.

### Purchasing

Once a practical master production schedule has been created, purchasing can start working on acquiring the inputs required to fulfill the production schedule's criteria. Every firm has a common function called purchasing. Although it differs by industry, the typical firm spends between 40 and 60 percent of its entire revenues on products and services that are purchased. The bottom line of an agriculture firm can therefore be significantly impacted by even a minor percentage reduction in such a significant amount of the overall costs. For instance, if net profits in the agribusiness are 5% of sales, a 1% decrease in purchasing expenses will be passed on to the bottom line, raising profits by 20% above their prior level. This example shows the connection between manufacturing expenses and the firm's profits. In some agricultural industries, materials are bought in bulk, frequently at significant discounts. Other businesses use decentralized purchasing, where each location only makes the specific purchases that are required at the time. Both have significant benefits, and most agricultural enterprises utilize a mix of the two. Four types of items are frequently bought by an agricultural firm.

1. Items utilized for additional processing.
2. Goods that are resold.
3. Goods that are used directly in the company's final goods.
4. Substances used in the production of the product but not in it.

The purchasing department handles a wide range of tasks, including the following:

1. **Receive a Purchase Requisition:** buying reviews these forms to see if a less expensive item may be used in its place or deleted altogether.
2. **Choose a Qualified Supplier:** Purchasing chooses suppliers primarily based on four criteria: cost, quality, responsiveness, and customer service.
3. **Place the Order:** Depending on the type of purchase and the buyer-supplier relationship, ordering methods can range from regular computer-based systems to extremely time-consuming manual systems. Follow-up is particularly crucial when a delay could interrupt production, result in a loss of customer goodwill, and potentially result in the loss of future sales. Purchasing keeps an eye on deliveries and production schedules and expedites orders as needed.

Receive the order and approve the payment: purchasing works with receiving and accounting at this stage to make sure all the goods are satisfactorily received before authorizing

payment. Because input prices have an effect on the bottom line of the agribusiness, choosing suppliers for purchases is essential. Quality, price, timeliness, and customer service are the four main considerations when choosing suppliers, as was already discussed. One of the most crucial factors is quality. When an agricultural company uses a part they've bought only to discover later that it's flawed, they may pay internal expenditures as well as possible loss of goodwill and future sales. Given that the average business spends close to half of its sales on purchased goods, the price of inputs must be a key consideration when choosing a supplier. It is also crucial that suppliers deliver purchased supplies on time. Every minute that a production line is not working, even inexpensive parts can cost the company thousands of dollars. As an agribusiness does not want to miss sales because they lack inventories of finished goods, the potential costs of such an issue might be very high. On the other side, keeping too many items in stock can be highly expensive. Up to 35 percent of the inventory's purchase price might be lost to carrying costs, physical storage space costs, recordkeeping fees, taxes, insurance, and lost interest on capital locked up in inventory. Customer service is also another important but frequently disregarded component. Less inventory is needed by the agribusiness to give higher levels of customer service because to shorter lead times and timely deliveries of ordered goods.

### CONCLUSION

In conclusion, supply chain management is essential to the success of agriculture because it ensures the smooth and efficient transportation of agricultural goods from the farm to the consumer. Agribusinesses may maximize production, eliminate waste, cut expenses, and satisfy consumer demands by managing procurement, transportation, processing, and distribution well. Agribusiness supply chain management is particularly difficult because of things like seasonality, perishability, and the requirement for specialist handling. However, agribusinesses can get over these obstacles and improve productivity, product quality, and sustainability by implementing tactics like demand forecasting, inventory management, and traceability systems. In an industry that is crucial for supplying food and agricultural products to international markets, the efficient management of the supply chain in agribusiness is necessary for preserving competitiveness, fulfilling regulatory requirements, and guaranteeing customer satisfaction.

### REFERENCES:

- [1] J. Rayman, The Politics and Practice of Voice: Representing American Sign Language on the Screen in Two Recent Television Crime Dramas, *M/C J.*, 2010, doi: 10.5204/mcj.273.
- [2] N. Kabir and M. Balnaves, Students 'at Risk': Dilemmas of Collaboration, *M/C J.*, 2006, doi: 10.5204/mcj.2601.
- [3] P. Belluck, End of a Ghetto: Razing the Slums to Rescue the Residents, *New York Times*, 1998.
- [4] S. R. Smith, H. E. Ngodock, and G. A. Jacobs, 4DVAR assimilation of ADCP data with the navy coastal ocean model using the cycling representer method, in *Oceans Conference Record (IEEE)*, 2007. doi: 10.1109/OCEANS.2007.4449389.
- [5] J. Tolsby, Taylorism given a helping hand: How an IT system changed employees' flexibility and personal involvement in their work, *J. Organ. Chang. Manag.*, 2000, doi: 10.1108/09534810010377444.

- [6] J. A. Stein, How to undo the history of sexuality: Editing Edward Taylor's meditations, *American Literature*. 2018. doi: 10.1215/00029831-7208536.
- [7] B. F. Yousif and K. S. Yeh, Badminton training machine with impact mechanism, *J. Eng. Sci. Technol.*, 2011.
- [8] S. H. Derbyshire, Stable boundary-layer relative humidity profiles and the conditions for onset of radiation fog over land, *Q. J. R. Meteorol. Soc.*, 2019, doi: 10.1002/qj.3558.
- [9] T. Skripcak *et al.*, Creating a data exchange strategy for radiotherapy research: Towards federated databases and anonymised public datasets, *Radiotherapy and Oncology*. 2014. doi: 10.1016/j.radonc.2014.10.001.
- [10] M. Staffa *et al.*, An OpenNCP-based Solution for Secure eHealth Data Exchange, *J. Netw. Comput. Appl.*, 2018, doi: 10.1016/j.jnca.2018.05.012.