

PRACTICALMANUALOF

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Agribusiness Management

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Exercise no. 1

Study of Input Markets; Seed, fertilizers, Pesticides

Seed

Seed production and its marketing involve a high level of technology and a high standard of proficiency. The seed business is a business of trust. Seed marketing is more complicated and specialized process as compared to other inputs and other agricultural products. Although the Indian seed market is one of the largest, it is almost exclusively supplied by locally produced seeds. Farmers retain seed of major food crops (wheat, rice, sorghum, millet, corn, and pulses) and commercial crops for many years, and the largest volume of seed trade involves local exchanges of established self pollinating varieties. The use of hybrid seeds is mostly confined to cotton, and to some extent to corn, millet, sunflower, and few vegetables. However, awareness about the high yield and quality of produce from hybrid seeds, attracting farmers to switch over to hybrids is growing. The Indian seed industry is to be dominated by public sector seed companies. However, following the easing of government regulations and the implementation of a new seed policy in 1988, the private sector seed companies have started playing a major role in seed development and marketing. More recently, the government's decision to embrace biotechnology as a means of achieving food security has attracted several leading biotechnology-focused multinational seed companies to India. The composition of the seed industry, by volume of turnover, has reportedly reached a ratio of 60:40 between the private and public sectors. There are number of institutions involved in supply and marketing of quality seeds.

Public Sector Seeds Companies

Public sector involvement in the seed industry on a national scale began at the beginning of the "green revolution" with the establishment of the National Seed Corporation (NSC) in 1963, which was charged with the responsibility of promoting seed industry development from production through processing, storage and marketing, and establishing a system of quality control. Before that, the Indian seed industry was little developed apart from a small number of private companies dealing with high value vegetable and flower seeds. In the initial years of operation, the NSC concerned itself mainly with foundation seed production and with seed certification after the enactment of Seed Act in 1966. The State Seed Corporations (SSC) were established later with support from the World Bank, initially in nine states, and later expanded to cover 13 states, for production and handling of seed in their respective states.

The role of public sector seed companies is now mostly confined to certified seeds of high volume, low value segment of high yielding varieties of cereals, pulses, and cotton with a limited presence in the high value hybrid sectors of cotton, cereals, and vegetables. Wheat and paddy seed constitutes a major share of the seeds handled by them. The NSC and SSCs work closely together to coordinate procurement and sales prices as well as variety demand and supply. Their presence is considered necessary by the government to ensure the availability of reasonably priced seeds of major crops throughout the country and to make sure that private sector seed companies do not enjoy and exploit unreasonable market power. The public sector seed companies, however, lag behind in research; they are mostly dependent on public research institutions, under the aegis of Indian Council of Agricultural Research (ICAR) and State Agricultural Universities (SAUs) for their breeder seed requirements. Based on feed back from dealers and end-users, the public sector seed companies/state governments forecast seed demand for various crops three years in advance and a requirement for breeder seeds is placed with the GOI's Ministry of Agriculture.

Using the breeder seeds supplied by government research institutes, the public sector seed companies produce foundation seeds on government farms or reliable, well-trained contract farms. These are further multiplied in contract farmers' fields next year as certified seeds for commercial distribution. If for some reasons (drought or other weather calamities) the supply of certified seeds falls short of requirements, the public sector seed companies source commercial grain from the market, upgrade the quality, and after proper testing distribute it as quality seeds. All seed grown by contract growers for seed corporations meeting the specified standards attract a premium price over and above the commercial grain price for that crop. The premium can vary between 25 per cent for cereals to over 100 per cent for hybrids. In the public sector, NSC is usually the retail price setter with the SSCs following NSC prices in determining their own for similar or substitute varieties. For self-pollinated field crops, an accepted basis is to add a margin of 15 to 25 percent on production costs. For hybrid seeds of cereals and vegetables, prices to some degree reflect market trends. However, there is government intervention in the pricing of seeds produced by public sector corporations with the degree of intervention varying from state to state. Some states are now thinking of giving greater autonomy to their seed corporations to make them financially viable by allowing them to market private branded seeds, domestically produced or imported. An advantage to the government seed companies is that they have a vast distribution network and trusted brand image. The reason why they are losing market share is because seeds by

private companies often out perform the publicly available varieties. Some SSCs have started their own research to evolve superior propriety hybrids.

Private Sector Seed Companies

Easing of government regulations in the late 1980s spurred enormous development within the seed industry by attracting several foreign seed companies to India. While some of them (like Cargill) entered through joint venture partnerships with Indian seed companies, some others already had a presence in India through affiliate companies (like Hindustan Lever).

Currently, some 500 hybrids of field crops and vegetables are being marketed, as truthfully labeled seeds, mostly by private seed companies. The private seed sector now comprises some twenty or so large players (with sales turnover exceeding Rs. 200million), several medium companies (sales turn over between Rs. 200 million and 20 million), and a large number of small, unorganized players (sales turnover less than Rs.20 million) with local presence. The private seed industry is now undergoing a transition following the Indian government's focus on biotechnology research, as a means of increasing agricultural production and also driven by trends in the domestic and world seed market. Intensifying international competition, increasing R&D costs, and the complexity of biotechnology have lead to increased consolidation of the Indian seed industry with several of the large and medium companies merging or being taken over by multinational seed companies. Most large multinational seed companies now have their presence in India (either as a joint venture or with 100 percent equity) with their main focus on biotechnology. These include Monsanto, Bayer Crop Science, Syngenta, Advanta, Hicks-Muse-Tate, Emergent Genetics, Dow Agro, Bioseed Genetics

International Inc., Tokita Seed Co, and Nunhems Zaden BV.

Private seed production is largely centered around Bangalore for vegetable crops and Hyderabad for field crops, particularly cottonseeds. The emergence of these two seed production centers is due to ideal climatic conditions, better infrastructure, the technology and research leadership, and the expertise of the two regions' seed farmers in manipulating crops for perfectly synchronized flowering. The initial focus of many of these companies has been cottonseed, for which genetically modified (Bt) hybrids have already been approved by the Indian government for commercial cultivation, with other bio-engineered crops in the pipeline. Most of these companies have licensing agreement with Monsanto for the Bt gene; some are trying to develop their own Bt technology, legally or illegally. The seed industry is represented at the national level by two associations " The Seed Association of India" based

in New Delhi and the “Association of Seed Industries” based in Mumbai. Recently, a third association called All India Crop Biotechnology Association (AICBA), was formed with members from mostly hybrid seed producers and multinationals like Monsanto and Dow Chemicals.

Public-Private Sector Cooperation

Cooperation between private sector seed companies and public research institutes under ICAR, SAUs, and the International Crop Research Institute for Semi-Arid Tropics (ICRISAT), supported by the Consultative Group on International Agricultural Research (CGIAR), is growing. Public sector breeder seeds are available free of charge to private seed companies with no strings attached. The AICT annual workshops provide venues to private sector seed companies to assess what is available with public research institutes. Under the “consortium” model with ICRISAT, private companies can jointly fund research that results in publicly available parental lines, which they often cross with in-house genetics to produce proprietary hybrids. ICRISAT recently introduced a live-in campus for private sector researchers to use the institutions’ facilities and expertise. ICRISAT is focusing more on private sector partnerships for funding reasons and also because of private companies’ effectiveness in getting the research result out to farmers. ICRISAT is currently reviewing its policy of keeping all research in the public domain and is considering licensing/royalties/exclusive rights. Private companies can also fully fund research at SAUs for exclusive rights on the results and/or hire professors as consultants, although the degree of cooperation varies from state to state.

Pricing of seeds:

The prices of ordinary quality seeds transacted between farmers are derived from the prevailing grain prices. The prices of certified seed marketed by the public agencies are announced by the government at the commencement of every growing season. The National Seed Corporation is the leading agency in marketing of seed. The State agencies and private traders set their prices in relation to prices fixed by NSC. The prices of seed marketed by NSC are determined by the government on a cost plus basis.

Fertilizers:

The **Indian Fertilizer Industry** is one of the allied sectors of the agricultural sphere. India has emerged as the third largest producer of nitrogenous fertilizers. The Indian government has devised policies conducive to the manufacture and consumption of

fertilizers. Numerous committees have been formed by the Indian government to formulate and determine fertilizer policies. The dramatic development of the fertilizer industry and the rise in its production capacity has largely been attributed to the favorable policies. This has resulted in large scale investments in all three sectors viz. public, private and co-operative.

At present there are 57 large scale fertilizer units. These manufacture an extensive range of phosphatic, nitrogenous and complex fertilizers. 29 of these 57 units are engaged in the manufacturing of urea, while 13 of them produce Calcium Ammonium Nitrate and Ammonium Sulphate. The remaining 20 fertilizer plants manufacture complex fertilizers and DAP. There are also a number of medium and small scale industries in operation, about 72 of them. The following table elucidates the installed capacity of each sector for the year 2006-07.

Sr. No	Sector	Capacity (LMT)	
		N	P
1	Private Sector	53.94 (44.73)	35.13 (62.08)
2	Public Sector	34.98 (29.0)	4.33 (7.65)
3	Cooperative Sector	31.69 (26.27)	17.13 (30.27)
Total	Total	120.61 (100.00)	56.59 (100.00)

Figures in parentheses indicate percentages to the total.

The Department of Fertilizers is responsible for the planning, promotion and development of the Fertilizer industry. It also takes into account the import and distribution of fertilizers and also the financial aspect. There are four main divisions of the department. These include Fertilizer Imports, Movement and Distribution, Finance and Accounts, Fertilizers Projects and Planning and Administration and Vigilance. It makes an assessment of the individual requirements of the states and union territories and then lays out an elaborate supply plan.. Under the administrative control of the Department of Fertilizers, there are 9 public sector undertakings. The cooperative societies count two in number.

The private sector has also contributed to the Indian fertilizer industry. Some of the notable Private companies to contribute to the production are Chambal Fertilizers and Chemicals Limited and Tata Chemicals Limited. The private sector produced 44.73 % of nitrogenous fertilizers and 62.08 % of phosphatic fertilizers in 2006-07.

The Indian large size fertilizer units manufacture wide varieties of nitrogenous and phosphatic / complex fertilizers. As in 2005-06, these large-scale fertilizer units count 56. In addition to the nitrogenous and phosphatic / complex fertilizers, the large-scale units produce

urea and ammonium sulphate as a by-product. The single super phosphate is produced in India by 9 units. Besides, there are 72 small and medium scale fertilizer units. These units operate mainly to produce SSP. With the formulation and implementation of investor friendly policies, large investments poured into the private, public and co-operative sectors and this propelled the growth of the Indian fertilizer industry.

Some of the major fertilizer companies in India (in the public sector) are as follows:

- 1..Fertilizer Corporation of India Limited (FCIL)
2. Hindustan Fertilizer Corporation Limited (HFC)
- 3.Pyrites, Phosphates and Chemicals Limited
- 4.Rashtriya Chemicals and Fertilizers Limited (RCF)
- 5.National Fertilizers Limited (NFL)
- 6.Projects and Development India Limited (PDIL)
- 7.The Fertilizers and Chemicals Travancore Limited (FACT)
- 8.Madras Fertilizers Limited (MFL).
- 9.FCI Aravali Gypsum and Minerals India Limited, Jodhpur

Some of the other companies engaged in the production of fertilizers are listed below:

1. Paradeep Phosphates Limited (PPL)
2. Neyveli Lignite Corporation Ltd. (NLC)
3. Hindustan Copper Limited (HCL)
4. Steel Authority of India Limited (SAIL)

Private Companies Producing Fertilizer in India :

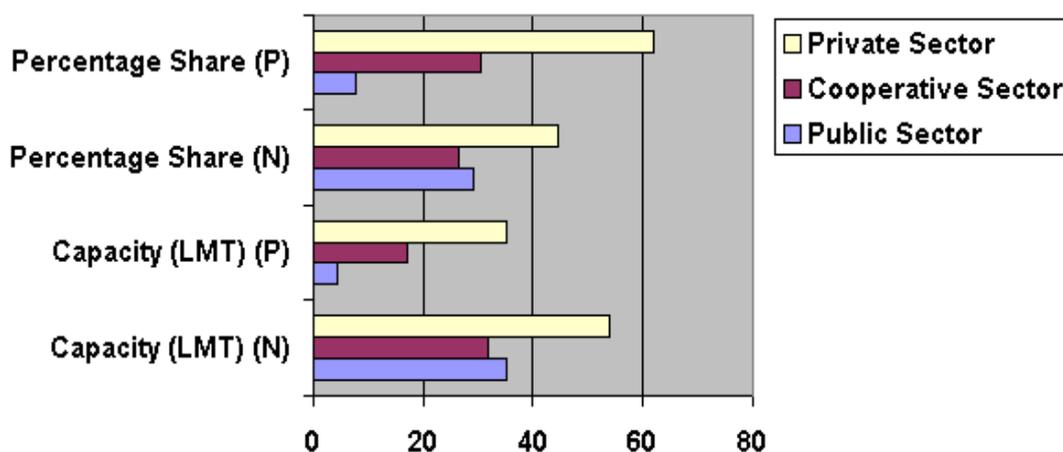
1. Khaitan Chemicals and Fertilizers Limited
2. Mangalore Chemicals
3. Nagarjuna Fertilizers
4. Zauri Chambal.
5. BEC Fertilizers
6. Gujarat State Fertilizers and Chemicals Limited.
7. DSCL

Some of the other private companies engaged in the production of fertilizers in India are listed below:

1. The Scientific Fertilizer Co Pvt Ltd
2. Coromandel Fertilizers

3. Deepak Fertilizers and Petrochemicals Corporation Limited
4. Apratim International
5. Aries AgroVet
6. Devidayal Agro Chemicals

The Indian fertilizer industry has a capacity of 56 lakh MT of phosphatic nutrient and 121 lakh MT of nitrogen. While the private sector has a huge installed capacity for phosphatic fertilizers, capacity utilization of nitrogenous fertilizers is higher in the public sector.



Sector-wise, Nutrient-wise Installed Fertilizer Manufacturing Capacity as on 31.01.2007

The Fertilizer Association of India (FAI) has been set up a model which is based on several factors that include fertilizer prices, high yielding areas, irrigated areas, fertilizer nutrient prices and previous years' fertilizer consumption. **Sector-wise, Nutrient-wise Installed Fertilizer Manufacturing Capacity as on 31.01.2007**

Year	Supply N+P	Demand N+P+K	Demand Supply Gap N+P+K	Demand of K
2007-08	16950	23125	8835	2660
2008-09	17585	24085	9305	2805
2009-10	18595	25035	9405	2965
2010-11	19912	25960	9178	3130
2011-12	19965	26900	10235	3300

Global demand for Indian fertilizer has been on steady rise and so has been its demand for fertilizer imports. India at present holds the fourth position as an exporter of fertilizer in the

global market. Amongst the major fertilizers exported from India is urea. The following table shows the major importers of fertilizers from India (all figures are in 000 tons):

Product	Country	96-97	97-98	98-99	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007
Urea	Nepal	10.00	14.69	-	-	56.83	15.72	18.75	63.37	4.66	-	14.77
AS	Bangladesh	-	-	-	-	-	-	-	-	6.76	-	-
NPK	UAE	0.60	-	-	0.04	0.04	-	-	0.06	0.06	0.06	0.06
MOP	Bangladesh	-	-	-	-	12.84	-	-	4.67	5.90	-	-

Apart from the inorganic fertilizers, the demand for organic fertilizers produced in India has increased in recent years. One of the major players in the field of organic manures and bio-products is M.J. Exports. U.K is a major importer of organic fertilizer from India. Many countries prefer organic fertilizers because of the lower risks of environmental hazards.

The global fertilizer demand as a whole shows a sharp rise in recent years. 2005-2006 registered a 1.5% growth which increased sharply to 5% in 2006-2007. A number of private companies in the Indian fertilizer market are engaged in production of the agro-input. Most of the companies also engage in exporting fertilizers in the global market, earning foreign capital from the business. The country stands at the third position among the largest producers of the product in the world. India is also ranks among the highest consumers of fertilizers.

There are a number of public sector companies in Indian fertilizer market producing complex fertilizers, ammonium sulphate, DAP, calcium ammonium nitrate and urea. At present, there are nine public sector undertakings in the Indian fertilizer market and one cooperative society. These function under the supervision of the Department of Fertilizers of India. Of the 63 large units producing fertilizers in India, 9 units are dedicated to the production of ammonium sulphate and 38 units produce urea. There are 79 small and medium scale units dedicated to the production of single super phosphate. The Indian industries producing fertilizers have to total capacity of 56 lakh MT of phosphatic nutrient and 121 lakh MT of nitrogen

The development trajectory of the agricultural industry derives its main stimulus from the growth in production of fertilizers in India. The fertilizer industry earlier witnessed the preponderance of the public sector units who still retain their status as the major players in Indian fertilizer market. Coupled with the private enterprisers manufacturing fertilizers, India has emerged as the third largest producer of the agro-input. The country has also emerged as one of the largest consumers of fertilizers along with China and the United States of America.

Defects in Fertilizer Marketing

- i) The number of sale points are still inadequate.
- ii) At many sale points, the fertilizers are not stocked at a time when farmers want to purchase.
- iii) Fertilizers are prone to adulteration and several cases of adulteration have been reported.
- iv) When the supply is less than the demand for fertilizers in an area, during a specified season, the dealers charge a price higher than the statutory or normal price.
- v) Farmers in many areas do not have cash to pay for the fertilizers. Short term loan or crop loan from the banks is meant to meet this requirement. But if credit proposals are not processed in time to enable the farmers to buy the fertilizers on credit, the sale of fertilizers gets a set-back in such areas.
- vi) During the last few years, there has been a considerable adhocism in fertilizer
- vii) Pricing policy which came in the way of adequate availability of fertilizers to the farmers in time.

Cost and Margins in Fertilizer Marketing

The gross marketing margin is the difference between the import or ex-factory price and the retail price of the fertilizer. It includes the commission of wholesalers, agents and retailers, transportation cost, storage cost, interest and other overhead costs. In general, the dealer's commission accounts 30 to 35 per cent, transportation cost 20 per cent, handling cost 10 per cent, storage cost 10 per cent and miscellaneous items accounts for remaining 25 to 30 per cent of the gross marketing margin. Marketing margin for fertilizers vary across countries. According to one study, they vary between 5.2 per cent in Taiwan and 62.5 per cent in Thailand. In India, the marketing cost for fertilizers has been estimated at 10 per cent of the retail price

Pesticides :

- Broadly termed Agrochemicals, these (pesticides) are used in the agriculture sector
- Pesticides first used in India in 1948 - DDT used for malaria control. Agriculture usage of pesticide commenced in 1949 - BHC for locust control
- This industry has a vital role to play in the Indian economy - nearly 30% of potential crop is lost due to insects, weed and rodent attack
- Pesticides consists of

- Technical compound/ grade - the basic concentrated chemical compound
- Formulation - the usable form of pesticides
- Industry estimated at Rs. 2,500 crores (US \$ 580 mn)

**Pesticides
(technical)**

Insecticides	Fungicides	Herbicides	Weedicides	Rodenticides	Fumigants
DDT	Captan	Butachlor	Isoprotanan	Zinc phosphate	Aluminium phosphide
Malathion	Captfol	2,4 - D	Basalin		Methyl bromide
Methyl Parathion	Thiren		Glyphosaic		
Fenthion	Zirem		Paraquat		
DDVP	Carbendazim		Alachor Diuren		
Dimethoate Quinalphos	Cabxim				
Anilophos; Monocrotophos	Manlozeb				
Phosphamidon					
Ethion endosulphan					
Fenvalerate, Phonate					

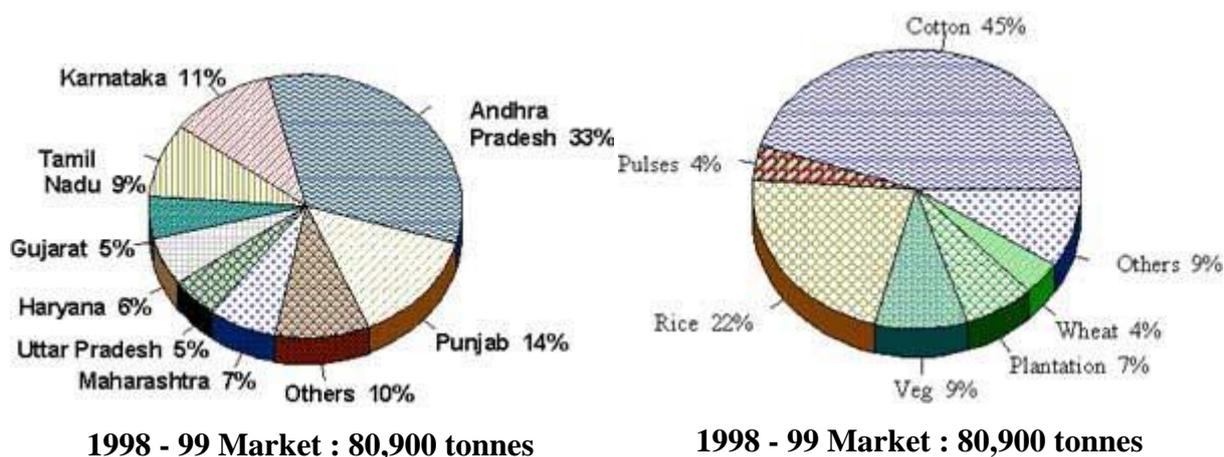
Production of pesticides:

Production ('000 tonnes)

Product	Installed Capacity	92 - 93	93 - 94	94 - 95	95 - 96	96 - 97	97 - 98	98 - 99
Insecticides	81.9	73.4	71.8	75.6	77.7	84.1	60.4	66.0
Fungicides	10.7	5.3	5.5	6.0	6.6	7.3	9.2	8.0
Herbicides	4.8	2.0	1.3	1.5	1.4	1.6	1.9	1.7
Weedicides	10.3	2.2	2.7	5.1	8.5	7.3	7.33	6.7
Rodenticides	0.9	0.27	0.51	0.46	0.40	0.40	0.5	0.5
Fumigants	1.6	1.0	1.5	1.8	1.8	1.9	1.6	1.8
Total	110.2	84.17	83.31	90.46	96.40	102.6	80.9	80.9

- Technical grade pesticides have been growing at the rate of 10% in the last few years.
- Decline in sales in the last two years was primarily due to lower 'pest build up' (decrease in pest attacks). production was also affected due to erratic rainfall in some states
- Demand expected to pick up in the next few years

User Segments



- Major disparity in crop wise and region wise consumption.
- Consumption tilted towards cash crops, which consume over 60% of the pesticides.
- Of the cash crops, cotton alone accounts for over 45% of its pesticide consumption
- Amongst the non cash crops, rice accounts for 22 % of its pesticide consumption
- Since Andhra Pradesh, Karnataka Gujarat, Punjab and Maharashtra are the major growers of cotton and rice, they account for over 70% of the consumption

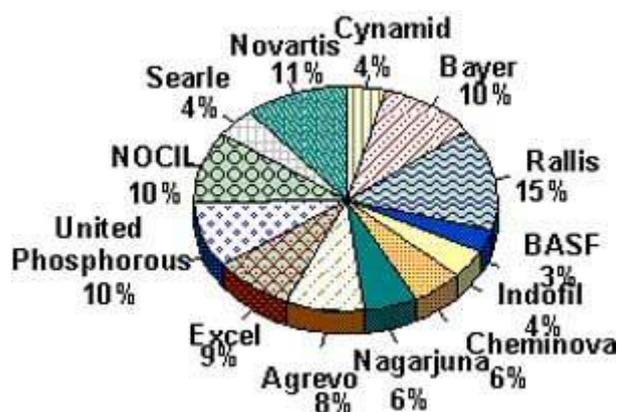
Industry

Industry Structure

- Characterised by technical grade manufacturers and formulators
- Over 40 technical compounds manufactured in India by 60 companies
- Top 5 companies account for over 50% of the market, top 13 cater to over 95%.
- The formulation market consists of over 500 formulators
- R&D efforts in India directed towards fine tuning manufacturing process resulting in volume growth and operating margins being healthy
- Sales primarily through a distribution network - distributors and dealers

Major Players

- Rallis India - Plants at Derabassi, Belapur, Marore, Palghat, Mulund, Ambattur and Ankaleshwar
- United Phosphorous - Vapi, Ankleshwar
- Excel India - Roha, Jogeshwari, Amboli, Bhavnagar
- Novartis - Santa Monica, Kandla
- Bayer - Mumbai, Bangalore
- NOCIL - Mumbai
- Monsanto Chemicals - Lonavala
- Nagarjuna Fertilisers - Kakinada



Rs.2,500 crores (US \$ 580 mn)

Prices

- Competitive pressures resulting in decline in prices
- Prices of major formulations have shown a steep decline in the last two years
 - Acephate formulation has come down from Rs. 450/ ltr. to Rs. 330/350/ltr
 - Chlorophyriphos from Rs. 140/ltr to Rs. 115/130 per ltr
 - Fenvalerates from Rs. 190/ltr to 160 to 175/ltr
 - Endosulphan from Rs. 185/ltr to 165/ltr.
- Duty structure : Basic duty - 35%; Surcharge - 10%; CVD - 8%; Special additional duty

Exercise No. 2

STUDY OF OUTPUT MARKET(Grain, Fruits, Vegetable, Flower)

Food Grain (Wheat)

Marketing channels are routes through which agricultural products moves from producers to consumers. The length of the channel varies from commodity to commodity, depending on the quantity to be moved, the form of consumer demand and degree of regional specialization in production.

1. Marketing channels for wheat

There are different marketing channels for different agricultural commodities in India.

- 1) Producer - Consumer (Direct channel)
- 2) Producer - Village shopkeeper - Wholesaler - Retailer - Consumer
- 3) Producer - Primary wholesaler - Secondary wholesaler - Retailer – Consumer (Most common channel)
- 4) Producer - Itinerant Merchant - Wholesaler - Retailer - Consumer
- 5) Producer - Primary wholesalers - Flour or Dal mills (as the case may be) – Retailers - Consumers.
- 6) Producer - Government Agency (FCI etc) - Fair price shop Owner – Retailer – Consumer
- 7) Producer - Co-operative marketing society - Retailer - Consumer
- 8) Producer - Wholesaler - Retailer - Consumer

2. Marketing Costs , Margins and Price spread.

a. Marketing Costs :- Marketing costs are the actual expenses incurred in marketing process.

b. Marketing Margins : Marketing margins are the actual amounts received by the marketing agencies in the marketing process.

Marketing costs include outlays for transportation and storage from point to point as producer moves to market, they include the margins taken out by various wholesale middlemen, and the marketing expenses producers who market their own products, they include the cost of retailing and also the expenses involved in inspection, standardization, assorting and packaging, in financing and in risk taking and in gathering, dissemination and interpreting market news.

c. Price Spread :- The difference between the consumer's and the producer's price is known as price spread.

3. Total cost of marketing :- The total cost, incurred on marketing either in cash or in kind by the producer - seller and of the various intermediaries involved in the sale and

purchase of the commodity till the commodity reaches the ultimate consumer, which may be computed as follows –

Table 1 : Per Quintal Marketing cost of wheat

Particulars	Quantity in Qt.	Rate/Qt. Rs.	Total cost(Rs.)
(I) Cost incurred by the cultivator			
(1) Transportation charges	100	0.50	50.00
(2) Octroi	100	0.25	25.00
(3) Labour charges for unloading	100	0.25	25.00
	Sub-total	(a)	100.00
(II) Cost incurred by Wholesaler			
(1) Cost of gunny bag (Rs. 5 - Rs.4) purchase price minus sale price	100.00	1.00	100.00
(2) Labour charges for filling and stitching	100	0.20/bag	20.00
(3) Weighing charges (Purchase price Rs. 460/qt.)	Rs. 46000 worth of produce	0.25 of the value	115.00
(4) Commission	Rs. 46000	1 % of the value	460.00
(5) Market Fee	Rs. 46000	1.00 % of the value	460.00
(6) Labour charges for loading on trucks	100 bags	0.25/bag	25.00
(7) Truck transportation	100 bags	1.50/bag	150.00
(8) Octroi	100 bags	0.25/bag	25.00
(9) Labour charges for unloading from truck	100 bags	0.20/bag	20.00
	Subtotal Rs.		1375.00

Particulars	Quantity in Qt.	Rate/Qt. Rs.	Total cost(Rs.)
(III) Cost incurred by the retailer			
(1) Cost of gunny bags (Rs.400-Rs.300)	100 bags	1.00/bag	100.00
(2) Commission on value of the produce (Purchase price Rs. 485/qt)	Rs. 48500	1% of the value	485.00
(3) Market Fee	Rs. 48500	1 %	485.00
(4) Weighing charges	Rs. 48500	0.4%	194.00
(5) Transport charges	100 bags	0.50/bag	50.00
	Sub total Rs.		1314.00
Total Marketing cost (a+b+c) Rs. 2789.00 per quintal cost of marketing = Rs. 27.89			

Table : 2 Price spread of Wheat

Particulars	Quantity in 100 Qt.	Per Qt. Cost in Rs.	Percentage of Share
(i) Net price received by the cultivator	45900	459.00	89.12
(ii) Marketing cost	2789	27.89	5.42
(iii) Marketing Margins (Total for both the traders net profit earned by them after meeting their costs)	2811	28.11	5.45
(iv) Price paid by the consumer	51,500	515.00	100.00

Conclusions :

- (1) The total per quintal cost of Marketing of wheat was estimated to Rs. 27.89.
- (2) Producer's share in consumers rupee was 89.12 per unit.

Problem :

A cultivator brought 15 quintals of Paddy in 15 bags to the primary wholesale market and incurred following expenses.

- (i) Transportation charges @ Rs.2.50/bag
- (ii) Octroi @ Rs.0.70/bag
- (iii) Unloading charges @ Rs. 1.25/bag
- (iv) Commission charges of the agent @ 2 percent

The produce is auctioned and the wholesaler purchased the produce @ Rs. 500/qt.

The commission agent made the payment to the farmer.

The wholesaler incurred the following expenses.

- (1) Cost of gunny bag Rs. 5/bag.
- (2) Sale tax @4 percent of the value of produce
- (3) Labour charges for filling and stitching the bags@ Rs.2/bag.
- (4) Commission @3 percent of the value of the produce.
- (5) Market fee @Rs. 1 percent of the value of the produce.
- (6) Weighing charges @ Rs.0.60/bag

The wholesaler has taken the produce to secondary market and incurred the following expenses.

- (i) Transport charges Rs. 7/bag.
- (ii) Octroi @Rs.0.80/bag
- (iii) Loading and unloading @Rs.1/bag.

The wholesaler sold the produce to the retailer @Rs. 610/qt. The retailer sold the paddy to the consumer @Rs.750/- qt.

The retailer has made following expenses.

- (i) Commission charges @Rs. 2 percent of the value of the produce.
- (ii) Labour charges @Rs.0.70/bag
- (iii) Weighing charges @Rs.0.80/bag
- (iv) Market fee 1 per cent of the value of produce
- (v) Cost of packing @Rs.10/bag

From the above data calculate the total marketing cost and producer's share in the consumer's rupee.

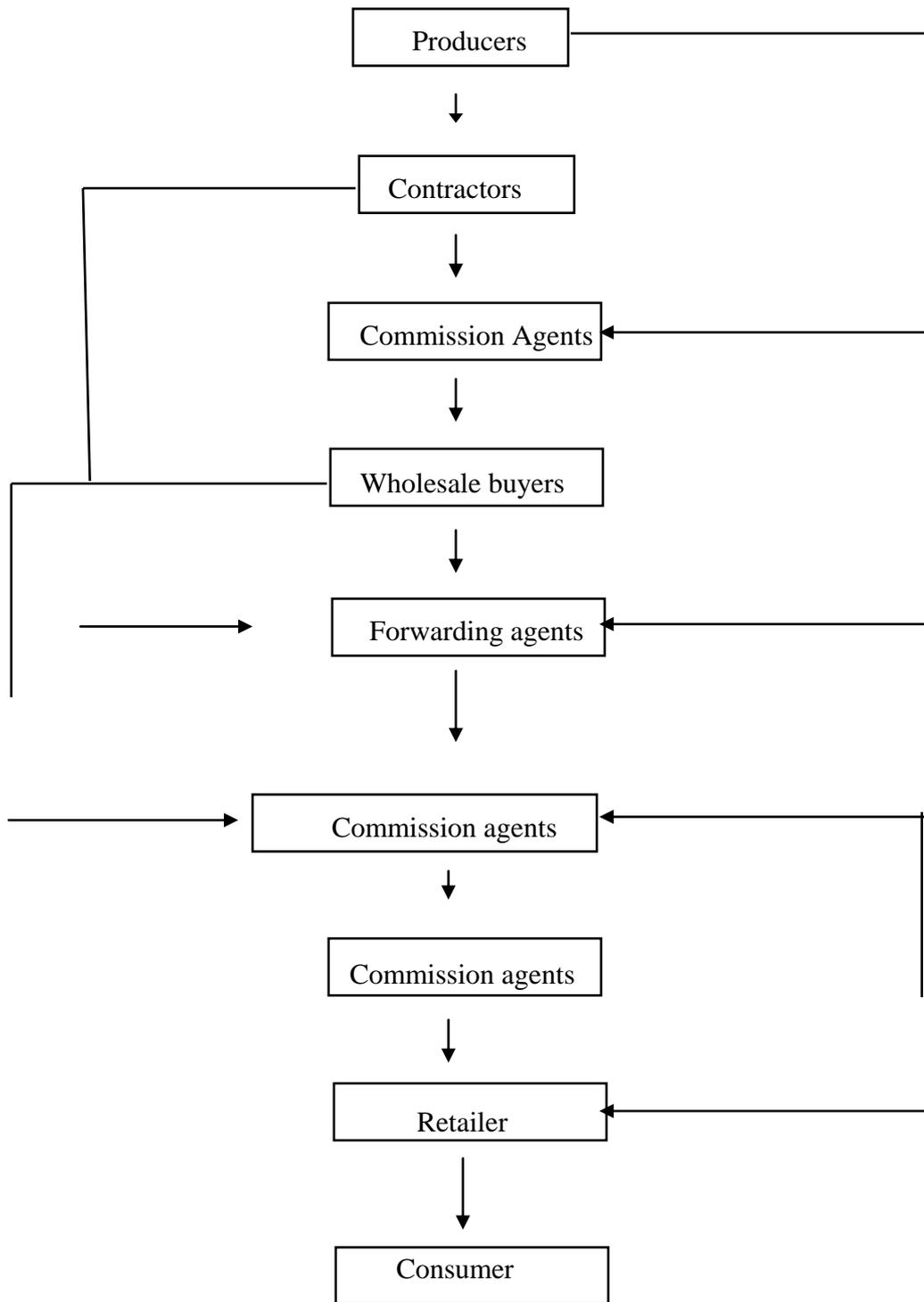
STUDY OF OUTPUT MARKET (Fruits- Grape)

A large number of agencies operate in the assembling of grape.

- a) Grower
- b) Contractor
- c) Itinerant merchants
- d) Forwarding agents
- e) Fruit growing agents/associations

(I) Distribution

The commission agent is the pivot of the whole system of fruit distribution. After leaving the vineyard and before reaching the consumer the fruit has to pass through several agencies such as contractors, commission agents wholesalers and retailers.



(II) Price Spread from consumer to producer - Nasik grapes sold in Mumbai market

Sr. No.	Particulars	Amount (Rs.)	% Share
1.	Net amount received by the grower	21.87	48.6
2.	Transport charges incurred by the grower		
	a) Farm to Nasik and Nasik to Nasik road railway station	0.31	4.2
	b) Railway freight from Nasik road to Mumbai	1.56	
3.	Packing charges incurred by the grower	1.25	2.8
4.	Commission etc. deducted at Mumbai	5.00	11.1
5.	Wholesale price	30.00	33.3
6.	Retailer's profit	15.00	
7.	Price realized by the retailer / paid by the consumer	45.60	100.00

It can be revealed from the Table 1 that the producer's share in consumer rupee in the marketing of grapes in Mumbai market was 48.6 per cent while the retailer's share was observed to the extent of 33.3 per cent of the retail price. The total share of both market agencies accounted to 44.4 percent of the retail price. This show that in marketing of grapes the producers get a less share of consumer rupee.

(III) **Market charges**

- 1) Commission : It is the remuneration of the commission agent for his services in arranging the sell of the produce.
- 2) Market fee 3) Transport cost 4) Charity 5) Octroi
- 6) Miscellaneous expenses

Table :- Percentage share of marketing margins and net price received by the producer in the price paid by consumer's of grapes in different markets.

No.	Market	Consumer's price	Total marketing cost	Traders commission and profit	Net price received by producer
1.	Delhi	100	32.22	22.54	45.24
2.	Bangalore	100	30.46	21.94	47.60
3.	Calcutta	100	33.80	23.18	48.02
4.	Madras	100	33.27	22.75	43.98
5.	Ahmedabad	100	33.67	22.14	44.19
6.	Mumbai	100	32.30	22.60	45.10

It can be revealed from the table that the total marketing cost at different markets range from 30.46 to 33.8 % and commission and profit of traders formed 21.94 to 23.61% of the consumer price. The net price received by producer at different markets ranged from 43 - 48 % of the consumer's price.

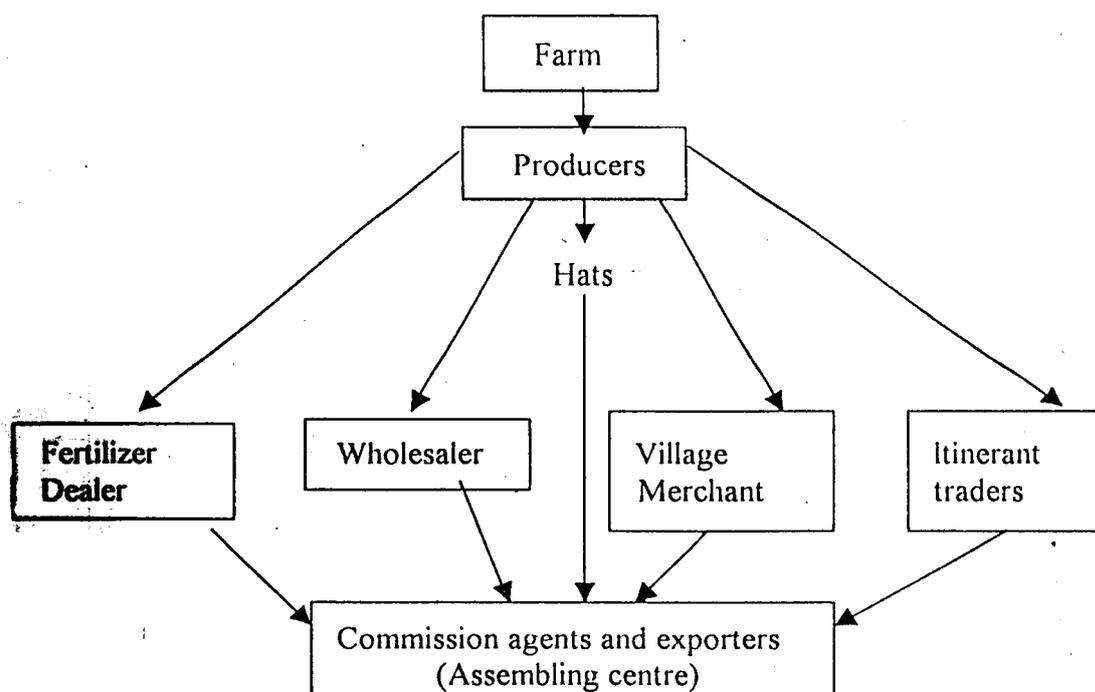
STUDY OF OUTPUT MARKET (Vegetable)

ESTIMATION OF MARKETING COST AND PRICE SPREAD FOR VEGETABLES IN DIFFERENT CHANNELS OF MARKETING

1) **Assembling of the Potatoes** - The large producing centres lie at considerable distance from the consuming markets. It is, therefore, not convenient for the growers and consumers to meet and arrange direct sales. The potatoes are assembled by the following agencies.

1) Producers 2) Village merchants 3) Itinerant traders 4) Fertilizer dealers 5) Wholesale merchants and commission agents 6) Producer's co-operative societies

Channels of distribution of potatoes :-



Market charges :- The produce of potato exchanges hands at a large number of places before it finally reaches the consumers. Various expenses are incurred from the time the potatoes pass into the municipal limits of a city till they reach the buyers godwon in the market. The market charges fall under the following heads.

- 1) Commission 2) Market fees 3) Handling charges 4) Charity
 5) Railway expenses 6) Octroi and terminal tax 7) Miscellaneous expenses

Haulage : Amount for the cartage of the produce from the market to the railway station is charged by the commission agent is known as haulage.

III) **Price spread from consumers to producers :-**

Potatoes, after leaving the producer's holding, pass through several agencies before they are finally consumed. Everyone through whom the goods pass makes a charge for the services rendered by him. The cost of distribution increases according to the number of times the commodity changes before it reaches the final consumer.

It is important to know as to what share of price paid by the consumer is going to the producer and to the various agencies engaged in the distribution of potatoes.

Table 1 : Spread over of consumer's price

Sr. No.	Shares	Charges/qtl. (Rs.)	Percentage
1.	Producer's price in the village	290.00	77.39
2.	Cartage and octroi	21.90	5.33
3.	Assembling charges paid by the sellers	14.40	3.18
4.	Seller's margin	8.90	2.03
5.	Price received by sellers	335.20	87.93
6.	Assembling charges by the buyers	1.60	0.53
7.	Wholesaler's margin	10.40	2.82
8.	Retailer's purchase price	347.20	91.28
9.	Retailer's cost of assembling	12.50	3.12
10.	Retailer's margin	21.50	5.60
11.	Retailer's sale price or consumer's price	381.20	100.00

It is evident from the above table that the producer's share in consumer's rupee for the sale of potato is 77.39 % at his village level and 79.42 % in the wholesale market, while that of wholesaler 2.82 % and retailer 5.60 %

Example :- PER QUINTAL COST OF MARKETING AND PRICE SPREAD OF TOMATO

Table 2 : Per quintal cost of marketing of Tomato in Mumbai market.

Sr. No.	Item	Cost (in Rs.)	Percentage
1.	Packing	52.00	31.74
2.	Transport	90.00	54.95
3.	Commission	12.00	7.32
4.	Market fee	3.40	2.08
5.	Hamali	5.60	3.42
6.	Weighing	0.80	0.49
	Total	163.80	100.00

The per quintal cost of marketing of tomato worked out to Rs. 163.80, the transport cost was the major item constituting 54.95 % of the total cost followed by packaging (31.74 %). The commission charges were 7.32 % to the total marketing cost.

Table 3. Price spread in case of vegetables sold in Pune and Mumbai Market

Vegetable	Market	Consumers Price	Marketing Cost	Wholesale Price	Cost & Margin of intermediaries	Net price realized by producers
1) Tomato	Pune	307.00 (100)	36.17 (11.78)	162.84 (52.88)	144.67 (47.12)	126.17 (41.10)
	Mumbai	420.00 (100.00)	66.92 (15.93)	163.81 (39.00)	256.19 (61.00)	96.89 (23.07)
2)	Pune	358.00 (100)	16.31 (4.55)	162.08 (45.27)	195.92 (54.73)	145.77 (40.72)
	Mumbai	360.00 (100.00)	21.89 (6.08)	128.09 (35.58)	231.91 (64.42)	106.20 (29.50)
3) Brinjal	Pune	239.00 (100.00)	13.87 (5.80)	154.38 (64.59)	84.62 (35.40)	140.51 (58.79)
	Mumbai	325.00 (100.00)	29.02 (8.93)	168.06 (51.71)	156.94 (48.29)	139.04 (42.78)
4) Bhendi	Pune	386.00 (100.00)	17.40 (4.51)	204.49 (52.98)	185.51 (47.02)	187.09 (48.47)
	Mumbai	470.00 (100.00)	36.58 (7.78)	225.46 (47.97)	244.54 (52.03)	188.88 (40.19)

It is revealed from the table that producer's share in consumer's rupee was more in case of all vegetables marketed at Pune than Mumbai Market while the cost and margin of intermediaries was more in Bombay market as compared to that of Pune Market. The wholesale and retail prices of different vegetables sold in Mumbai market were higher to that

of Pune market. Marketing cost was also more in Mumbai market as compared to Pune market. This may be due to transportation cost.

STUDY OF OUTPUT MARKET (Flower)

Flowers are very intimately associated with the social and religious activities in India. In social life, flowers are offered to welcome, to felicitations and to greet friends or relatives and guests in functions. Flowers are needed in all the religious ceremonies functions including marriages. Garlands and wreaths are offered on dead bodies of martyrs and very important persons (VIPs) and national heroes as a gratitude for the work done and sacrifice made by them. Flower is a token of love and tenderness. They are wanted due to various attractive colours and fragrance. Flowers are also used for extracting essential oils, which are used in perfumes. Many flowers have medicinal values and hence are used in Ayurveda. In India, large number of flowers are grown in different parts according to soils and climate and also likings and preferences of the people for specific type of flowers. Important flowers are rose, marigold, chrysanthemum, jasmine, lily, tuberose, aster, zinia, carnation, gladiolus, galardia etc. Flowers are tender and hence highly perishable. They are generally used in fresh form but they have very short shelf life. This poses great problems in their marketing, particularly long distance marketing. Therefore, flower cultivation is concentrated in the hinterland of big cities like Mumbai, Pune, Bangalore, Mysore, Chennai, Calcutta, Delhi etc. But with the development of quick transport vehicles and refrigerated or insulated vans, flowers are transported to distant markets including foreign markets. For successful marketing of flowers, well-developed markets and well-organised marketing system is necessary. In the marketing of flowers the aspects involved are –

1. Channels of marketing,
2. Costs and margins and price spread and
3. Producer's share in consumer's rupee.

Roses

In Haryana, in the marketing of roses three channels were observed.

Channel I - Producer – Commission agent - Retailer – Consumer (in Delhi market)

Channel II - Producer - Retailer – Consumer

Channel III - Producer - Consumer (Local market)

Since Delhi is a big market, 65% flowers were sold through Channel I and remaining 32% and 3% were sold through Channels II and Channels III. Thus the local market sale was only

3%. Marketing costs, margins and producer's share in consumer's rupee is given below for roses sold after making garlands

Sr. No.	Particulars	Channel I		Channel II	
		Rs/Q.	%	Rs/Q.	%
1.	Producer's share	1465	51.72	1504	53.09
2.	Marketing costs	657	22.91	-	-
3.	Commission charges	99	3.74	622	21.95
4.	Retailer's margin	612	21.61	707	24.94
5.	Consumer's price	2833	100.00	2833	100.00

Price spread of marketing roses in loose form

Sr. No.	Particulars	Channel I		Channel II	
		Rs/Q.	%	Rs/Q.	%
1.	Producer's share	1465	73.08	1504	77.17
2.	Marketing costs	245	12.24	208	18.66
3.	Commission agent's margin	99	4.91	-	-
4.	Retailer's margin	196	9.77	238	12.21
5.	Consumer's price	2005	100.00	1950	100.00

There was increase in value of roses when sold in the form of garlands as shown below: -

A. Price of roses sold in the form of garlands (Rs/Kg.) 2832.50

B. Price of roses sold in loose form (Rs/Kg.) 2005.00

Addition – Rs/Kg. 827.50

Percentage (%) 41.27

Thus, there was increase in the value of roses by 41.27% when sold in the form of garlands.

But the producer's share was reduced from 73% to 52% indicating that the producer was not benefited by increase in value.

Orchids :

In Kerala, cultivation of orchids has now assumed commercial status. In the marketing of orchids, there existed two main agencies. (1) Local buyers and (2) Distant market florists, indicating two Channels.

Channel I - Producer – Local buyer – Consumer

Channel II - Producer - Wholesaler - Retailer – Consumer

The cost of marketing worked out to Rs. 3.00 per spike. In this transport cost was the major (73%) followed by packing (27%), Marketing orchids in the distant markets was more remunerative with B.C. ratio of 2 than local (field) sale.

Gladiolus: In the marketing of gladiolus as cut flowers in Karnataka, two channels were observed.

Channel I - Producer – Wholesaler – Retailer – Consumer

Channel II - Producer – Contractor – Retailer – Consumer

Channel I was more important with 84 per cent produce passing through this channel than channel II with 16 per cent produce passing through it. The comparison of returns from market sale and contract sale are shown below (Rs. Per 100 dozen)

Sr. No.	Particulars	Channel I (Market sale)	Channel II (Contract sale)
1.	Gross returns	4000	3000
2.	Additional costs		
	i) Transport	13.02	-
	ii) Personnel	19.08	-
	iii) Packing	8.91	-
	iv) Market fee	0.78	-
	Sub Total	42.39	-
3.	Net returns (1-2)	3957.61	3000

This showed that it is more remunerative to sell flowers in the market where the forces of demand and supply are more clear and price determination is competitive and open or transparent.

Jasmine : In the marketing of Jasmine in Karnataka, following channel was observed.

Channel – Producer – Trader-cum-commission agent – Retailer – Consumer

The marketing cost was Rs. 6.61 per kg. Which was over 15% of the value of flowers sold by the farmers (Rs.44 per kg). Producers share was as low as 41%. The trader-cum-commission agent and retailers margins were 6.02% and 45.78% respectively. About 85% farmers opined that the commission charges were very high.

Consumer quality present survey for gladioli flowers showed that

- i. among the four floral attributes such as colour, variety, floral arrangement and price, the consumer's in general placed priority for variety (i.e. hybrid) followed by colour (i.e.pink),
- ii. Women also showed greater inclination to variety (hybrid). Even youngsters preferred variety as the most important attribute,
- iii. Highly educated consumer's had also strong preference for hybrid varieties.
- iv. Among the three market segments the major segment exhibited strong favour towards variety. This segment was highly conspicuous as it was dominated by women who

were mostly youngsters, highly educated and relatively well off. However, the relative importance attached to different attributes varied across the market segments.

Marigold

In the marketing of marigold following three channels were identified.

Channel I - Producer – Commission agent – Retailer – Consumer

Channel II - Producer – Retailer – Consumer

Channel III - Producer – Consumer

Nearly 99 per cent flowers were sold through channels I and II. The flowers were sold in two ways (1) in loose form and (2) in the form of garlands. The garlands were prepared at the retailer's level. When flowers were sold after making garlands, the producer's share in the consumer's rupee was 22.63% and 23.70% respectively in Channels I and II. These shares were quite high at 72% and 75% respectively in Channels I and II when flowers were sold in loose form. This was due to the fact that in the process of making garlands, the retailer incurred substantial cost in the form of skilled labour, which resulted into increase in the value of flowers, and hence he shared greater margin.

In general, marketing of flowers is not well developed and well organized. There is no improved packing. Flowers like marigold are packed in gunny bags. Transport and commission charges (10-15%) are the main items of costs. Cold chain system of transport is not yet followed for flowers, which are sold in domestic markets. Therefore, long distant marketing (beyond 500 km) is not possible. However, floriculture is emerging as a commercial proposition in recent years due to export of some selected flower types and varieties. Production of export oriented flowers in green houses/poly houses is a recent technological adoption in India, which has given impetus to exports. But there is urgent need to improve packing system, quality of flowers (grading), quick and refrigerated transport and organization with minimum intermediaries. Floriculture crops require intensive cultivation and have high income potential. Therefore, they generate good employment in rural area. An acre of land under flower cultivation can support a family of 5-6 members. It can fetch annual income of Rs. 30,000/- if much valued flowers like roses, carnations, gladiolus and orchids are grown.

Exercise No. 3

Study of Product market: Retail trading, Commodity Trading, value added product

Retail trading:

In recent years, the extent of the **retail market** (both organized and unorganized) has evolved in leaps and bounds. In fact, the success stories of the **commodity market** of India in recent years has mainly centered around the growth generated by the **Retail Sector**. Almost every commodity under the sun both agricultural and industrial are now being provided at well distributed retail outlets throughout the country. Moreover, the retail outlets belong to both the organized as well as the unorganized sector. The **unorganized retail outlets** of the yester years consist of small shop owners who are price takers where consumers face a highly competitive price structure. The **organized sector** on the other hand are owned by various business houses like Pantaloons, Reliance, Tata and others. Such markets are usually sell a wide range of articles both agricultural and manufactured, edible and inedible, perishable and durable. Modern marketing strategies and other techniques of sales promotion enable such markets to draw customers from every section of the society. However the growth of such markets has still centered around the urban areas primarily due to infrastructural limitations. Considering the present growth rate, the total valuation of the **Indian Retail Market** is estimated to cross Rs. 10,000 billion by the year 2010. Demand for commodities is likely to become four times by 2010 than what it presently is.

Currently retail trading in India is estimated to be a \$ 200 billion or Rs. 900,000 crore activity. Of this organized retailing is nearly 3% in the form of various kinds of Shopping malls(22 million Sq. Ft. space), Super markets(47), hyper markets(36), Discount stores(27), Speciality stores(45), Departmental stores(18), Convenience stores(9) and E- Trading(9). Retail trade and service provide employment to large number of persons. For many hawkers and street vendors retailing is the source of livelihood. While bulk of retailing will continued to be in the small scale and informal sector, it must be reorganized that modern organized retaining brings many advantages to producer as well as to consumers.

Benefits of retail trading:

1. Organized retailing in Agriculture produce can set up supply chains, give better prices to farmers for their produce and facilitate agro-processing industries.

2. Modern retailing can bring new technology and reduce consumers prices, thus, stimulating demand and thereby providing more employment in production.

Problems in retail Trading:

1. Retail marketing in India has not been attended adequately.
2. The retailers, especially in fruits and vegetable trade, are not representatives of buyers in wholesale markets but are agents of wholesalers.
3. Hardly 30 % of the retail trade in fruits and vegetable market is in cash and the balance is on credit.
4. The retailers are not organized and constitute a weak link in agril. Marketing.
5. Retail markets in the country are by and large left to civic authorities. Marketing authorities do not look their performance in terms of marketing practices or facilitating infrastructure. They are devoid of minimum facilities and services and are quite inhospitable to consumers.

Remedies to overcome the problems in retail trading:

1. Promotion of organized retail chains in urban areas through promotion of entrepreneurship amongst the educated unemployed youth in urban areas to cater to urban consumers.
2. The organized retail chains must be equipped with cool chambers and other facilities to maintain freshness of product as well as to minimize the deterioration.
3. All concerned govt. departments and organizations should be sensitized to facilitate and promote retail outlets.

COMMODITY TRADING :

Commodity Trading: Commodity trading in India is regulated by the **Forward Markets Commission (FMC)** headquartered at Mumbai, it is a regulatory authority which is overseen by the Ministry of Consumer Affairs and Public Distribution, Govt. of India. It is a statutory body set up in 1953 under the Forward Contracts (Regulation) Act, 1952.

After equity trading, commodity trading is going to be the next big thing for investors. In India people have a love for Gold and Silver, trading is also going to pick up in Gold and Silver. Globally, the commodity trade market is about three times the size of equities trade market. In India, presently, the commodities market is still in a nascent stage and is gradually picking up taking a cue from global markets

Commodity: Any goods that are unbranded and are commonly traded in the market come under commodities.

Commodity trading:

Commodity markets are quite like equity markets. The commodity market also has two constituents i.e. spot market and derivative market. In case of a spot market, the commodities are bought and sold for immediate delivery. In case of a commodities derivative market, various financial instruments having commodities as underlying are traded on the exchanges. It has been seen that traditionally in India people have hedged their risks with Gold and Silver.

Commodities future:

Commodity future is a derivative instrument for the future delivery of a commodity on a fixed date at a particular price. The underlying in this case is a particular commodity. If an investor purchases an oil future, he is entering into a contract to buy a fixed quantity of oil at a future date. The future date is called the contract expiry date. The fixed quantity is called the contract size. These futures can be bought and sold on the exchanges.

The commodities include agricultural commodities like wheat, rice, tea, jute, spices soya, groundnut, coffee, rubber, cotton, etc, precious metals - gold and silver, base metals - iron ore, lead, aluminium, nickel, zinc etc, and energy commodities - crude oil and coal. The number of retail investors participating in the market is increasing gradually after the introduction of commodities futures. The expected growth rate of commodity market is 40 percent annually over the next five years.

Benefits of Commodities Futures:

1. **To producer:** A producer of a commodity can sell the futures of the commodity, thereby ensuring that he can sell a particular quantity of his commodity at a particular price at a particular date.
2. **To investors:** An investor has alternative investment instruments where he can take a position as to future price and the spot price at a particular date in future and buys and sells options. He is not interested in taking deliveries of the commodities.
3. **To commodity trader:** A commodity trader can use these to ensure that he is protected against any adverse changes in the prices. He can enter into a futures contract for purchase of a certain quantity of the underlying at a particular price on a particular date, or he can enter into a futures contract for sale of a particular quantity on a particular date at a particular price and be assured of the margins because both his purchase price as well as the sale price are fixed. Traders do a good arbitrage in Gold and Silver. Whenever they find Gold moving up, they short silver and similarly whenever they find silver moving up and gold likely to move down, they hedge.

4. **To exporters:** Future trading is very useful to the exporters as it provides an advance indication of the price likely to prevail and thereby help the exporter in quoting a realistic price and thereby secure export contract in a competitive market. Having entered into an export contract, it enables him to hedge his risk by operating in futures market.

Option trading in commodity is, however presently prohibited

List of exchanges and their respective traded commodities is given below:

1.	Bhatinda Om & Oil Exchange Ltd., Batinda.	Gur
2.	The Bombay Commodity Exchange Ltd.Mumbai	RBD Pamolein, Groundnut Oil, Sunflower Oil, Cotton Seed, Safflower, Groundnut, Castor oil-Int'l, Castor seed, etc.
3.	The Rajkot Seeds oil & Bullion Merchants` Association Ltd	Groundnut Oil, Castor seed
4.	The Meerut Agro Commodities Exchange Co. Ltd., Meerut	Gur
5.	The Spices and Oilseeds Exchange Ltd.	Turmeric
6.	Ahmedabad Commodity Exchange Ltd.	Cotton Seed, Castor seed
7.	Vijay Beopar Chamber Ltd.,Muzaffarnagar	Gur Mustard Seed
8.	India Pepper & Spice Trade Association.Kochi	Pepper Domestic-MG1, Pepper Domestic-500g/l
9.	Rajdhani Oils and Oilseeds Exchange Ltd. Delhi	Gur Rapeseed/Mustard seed
10.	National Board of Trade. Indore.	Rapeseed/Mustard seed, Rapeseed/Mustard seed Oil Rapeseed/Mustard seed oil-Cake
11.	The Chamber Of Commerce.,Hapur	Gur Rapeseed/Mustard seed
12.	The East India Cotton Association Mumbai.	Indian Cotton
13.	The Central India Commercial Exchange Ltd, Gwalior	Gur Rapeseed/Mustard seed
14.	The East India Jute & Hessian Exchange Ltd,	Hessian, Sacking
15.	First Commodity Exchange of India Ltd, Kochi	Copra, Coconut oil, Copra cake
16.	Bikaner Commodity Exchange Ltd.,Bikaner	Rapeseed/Mustard seed, Rapeseed/Mustard seed Oil Rapeseed/Mustard seed oil-Cake, Guar seed, Gram Guar Gum
17.	Esugarindia Limited.	SugarGrade-M, Sugar Grade - S
18.	National Multi Commodity Exchange of India Limited.	Gur,RBD Pamolein, Groundnut Oil, Sunflower Oil Rapeseed/Mustard seed, Masoor, Urad, Tur / Arhar,Moong Rapeseed – 42,Raw Jute,Coffee-Arabica Plantation A
19.	Surendranagar Cotton oil & Oilseeds Association Ltd,	Kapas CottonSeed Cottonbales
20.	Multi Commodity Exchange of India Ltd.	Gur, RBD Pamolein, Groundnut Oil, Rapeseed/Mustardseed Oil, Pepper Domestic-MG1,Soy bean, Kapas, Soy Meal Cotton Seed, Turmeric, Castor seed, Rice, Wheat Ref Soya oil – Indore, Urad, Tur / Arhar, CASHEW KERNEL W320, Basmati Rice etc

Marketing of Value added products in India:

India is today the second largest producer of food in the world and has all the potential of becoming number one if the emerging problems after the green, white and blue revolution are properly addressed. Agriculture production has shown a growth of about three per cent per annum, and today, India is the number one producer of milk, and second largest producer of fruits and vegetables in the world, with a buffer stock of over 60 million tonnes of wheat and rice. Due to poor handling of the produce, post-harvest losses have been high, resulting in a significant gap between gross production and the net availability to the consumer. The profits on agricultural commodities have greatly diminished. Since nineties, the cost of agricultural inputs has increased faster than the market price of the outputs. As a result, farmers are about 15-20 per cent worse off, even after taking into account the gains in productivity. The problem of improvement in agriculture needs to be tackled from two different angles, First, to increase productivity of agriculture and delivery system and Second, to increase the farmer's earning through efficient and effective value addition.

Value addition to raw food material in India is only 7 per cent while it is 23, 45 and 188 per cent in China, Philippines and UK, respectively (as per National Food Processing Policy, Draft Document, 2000). In India, the difference between price paid by consumers for value added products and farmer's realisation has been increasing rapidly. Further, the food processing industry is plagued by high-risk profile, poor infrastructure and outdated technologies and taxation laws. There is also a lack of backward linkage between farmers and processors. This leads to non-uniformity and inconsistent supply of raw material, longer chain of intermediaries and lack of adequate economic benefits to farmers. Value addition is often understood in the context of adding value to the product. A new dimension from the consumer point of view is added to the existing understanding of value i.e. how a consumer perceives the value delivered to him through a bundle of product services. This new approach of value addition through the consumer's mind needs special attention. All the activities now must be seen from the consumer point of view. In other words, consumer orientation is required in all spheres of agricultural sector. Keeping this approach in mind, there are three ways in which value addition to farm produce is possible:

Level 1 - *Post-harvest level/primary processing*: proper cleaning, grading and packaging e.g. vegetables, potatoes, fruits, etc.

Level 2 - *Secondary processing*: basic processing, packaging and branding e.g. packed *atta*, *suji*, rice, etc.

Level 3 - *High end processing*: supply chain management, modern processing technology, packaging of processed foods, branding, marketing e.g.

potato chips, breakfast food, noodles, macaroni, etc.

Processed Food markets:

Product	Volume (Metric tonnes)	Value(US\$ Million)	Major player
Basic foods			
Packaged wheat flour	1 million	8	Hindustan Lever limited, Pillsbury, Best Food Indian Ltd
Spices	2.4 million	3780	Regional
Edible oil	8 million	8820	ITC Agrotech, Marico Industries, HLL, NDDB
Salt	500,000	60	Gujarat Salt Federation, Hindustan Salt Workers, TATA chemicals
Sugar	15 million	7150	Govt. Co-op
Milk total	73.5 million	n.a	NDDB
Bakery products (including unorganized sector)			
Biscuits and cakes	1 million (biscuits) 500,000 cakes	775	Britannia, Parle, Bakeman's
Bread	1.5 million	350	Britannia, modern, Spencer's
Indian Dairy Products			
Ghee(Butter)(Organised Sector)	85,000	n.a	Aray and small players, co-op dairies
Indian milk sweets (including unorganized sector)	300,000	350	Small players
Western dairy products(Organized sector)			
Ice cream	50 million lts	120	HLL, Gujrat Co-op milk marketing Fed., Hutsun Agro
Cheese	12,000	200	Gujarat co-op Marketing Fed, Britannia
Processed fruit and veg. product			
Pickels	120,000	28	Nestle, Ruchi, Bedekar, Mothers
Fruit beverages	130,000	80	HLL, Parle, Texo Foods
Sauces, fruit spread, Ketch up	50,000	43	HLL, Marico Industries

Convenience food (Org. sector)			
Chocolate	20,000	95	Cadbury, Nestle
Sugar-boiled confectionery	80,000	280	Parry's, Nestle
Chewing, Bubble gum	25,000	55	Warner Lambert, Wrigley's Perfetti
Snacks			
Traditional Indian snacks	310,000	295	Haldirams, Chitale
Western Snacks(including potato chips)	40,000	30	Frito-Lay, Uncle Chips, Procter & Gamble

Food distribution In India: The food distribution system today in India shows that there are several middlemen/ intermediaries who come between the farmer and consumer or food manufacturing company. Distribution of value added products is also fragmented given the fact that food retailing in India is highly unorganized by small neighborhood retailers and vendors. They are estimated to be over five million such small retail outlets in rural and urban India. These small retail outlets accounts for nearly 95% of the retail turn over in the country and their number continue to grow despite a worldwide trend towards retail consolidation.

Large food markets or super markets are an emerging retail format, but only in metropolitan cities. These stores only account 1-2% of food retail sales in urban areas of India.

Exercise No. 4

Study of Financing Institutions Cooperative Commercial Banks

D) Primary Agricultural Cooperative Credit Society (PACCS)

Organization, objectives, Functions and Procedure for Advancing Loans.

Cooperative credit societies are playing an important role in the Indian Financial System, especially in the sphere of rural finance, both for agriculture and small scale and cottage industries. The cooperative banking is the most satisfactory institution for providing finance to borrowers in the rural areas of India.

The cooperative credit societies in India consist of mainly agricultural credit societies, long term agricultural credit institutions and non agricultural credit societies.

As regards the short term and medium term agricultural credit societies, they consist broadly of three categories viz. (a) Primary Agricultural Cooperative credit Societies at village level, (b) Central Cooperative Credit Banks at the district level and (c) State Cooperative Banks or Apex Banks at the State level.

Primary Agricultural Cooperative Credit Societies

Primary Agricultural Credit Societies are the very foundation stones of the cooperative credit structure.

Object

The main object of the credit societies is to provide short and medium-term credit, supply of agricultural and other requisites and the marketing of agricultural produce. The society is also expected to develop habit of thrift and saving of the members of the Co-operative Society.

Functions

In the context of the national drive for increasing agricultural production and consequent need for making available the farmers adequate credit in cash and kind, the primary credit societies have a crucial role to play. It is expected to provide not only loan, but also the necessary input supplies, and that the farmer is not handicapped in his efforts to switch over to the modern methods of cultivation. A Cooperative credit society is now expected to help, formulate and implement a plan for agricultural production for the village and undertake such type, advisory and welfare work as the members might be thinking to take up. Among the most important of these functions are the following:

1. To associate itself with the programme of production

2. To lend adequate amount to producers, especially agricultural producers.
3. To cater to the consumption needs of small producers as well as agricultural labourers to a limited extent, provided the borrower can and will repay and there are adequate means for ensuring payment
4. To borrow adequately and equip itself financially for the above purpose
5. To attract local savings to the maximum possible extent, not only as share capital, but also as fixed deposits, etc.
6. To supervise the use of loans
7. To recover loans and to see that loans are repaid punctually.
8. To distribute fertilizers, seeds, agricultural implements, etc.,
9. To supply the certain consumer goods in common demand such as sugar, kerosene, etc.
10. To collect or purchase produce, where necessary on behalf of a consumer society, marketing society or Government
11. To store produce and
12. To associate itself with programmes of the welfare, economic and other, for the village.

Area of operation

Till recently, the area of operation of primary credit societies was limited and the well known rule of one village one society, was followed.

The Mehta Committee on Cooperative Credit (1960) recommended that the membership should not be too large and the area too extensive. No village, included in the society should be at a distance of more than 3 or 4 miles from the head-quarters village. The population covered should not be more than 3000 or 600 families or 500 cultivating families.

Membership

Membership of the primary societies is open to all persons, agriculturists, artisans and small traders of good character who reside within the area of operation of the society. The minimum initial membership for a primary cooperative society is ten.

Management

The management of a cooperative society is democratic being based on the principle of 'one-man-one-vote'. The management is vested in a general body consisting of all the members and the managing committee consisting of 5 to 9 members.

General Body is the supreme authority in cooperative society which meets at least once in a year. Managing committee is elected and entrusted with certain well defined powers.

The officer-bearers of a cooperative society consists of a President, some times a Vice-President also, a Secretary and a Treasurer. The President is normally the Chairman of all the meetings of the society and its Committees. The Secretary is the Executive Officer of the Managing Committee for all its functions.

Source of Working Capital

1. Share Capital:

The share capital held by a person in the society is the measure of his interest in its financial stability and soundness. The members feel strong attachment to and take interest in a society in which they have invested. The collection of share capital from members is a good way of promoting thrift among them. And as such an individual is required to contribute to the share capital in certain proportion to his borrowings.

The State Government participate in the share capital of these societies, which form the backbone of the cooperative credit movement. Government's contribution helps in the society in getting larger borrowing power. State participation is always indirect i.e. through Apex and Central Bank.

2. Reserve Funds:

The reserve fund is meant to meet unforeseen losses and also to serve as an important asset and security in borrowings, and hence, forms an important element in the working capital of society. The growth of the reserves will ultimately depend upon sizeable profits (25 per cent of net profit) which in turn depend upon the volume of business.

3. Deposits

Deposits raised locally have always been considered as an ideal method of raising the capital. Generally, it is 10 per cent of the borrowings, however, it is recommended that after a member's share holding in the society reached the limit of 20 per cent of borrowing, the society may collect thrift deposit at 5 per cent of his borrowings each year.

4. Borrowings:

Borrowed capital as distinguished from owned capital has always been a chief characteristic feature of agricultural credit societies in India. Borrowings of primary societies come from Central Bank, State Governments and Commercial Banks, etc.

Loan Operations

Primary credit societies advance loans to their members who are the tillers of the soil, owning their own land or cultivating it as tenant and to credit worthy agriculturist members. A member who defaults in repayment is not ordinarily eligible for grant of further loans. In case of late payment, his demand for loans is liable to be curtailed. At present the PACCS advance two types of loans:

1. Short-term loans for a period upto twelve months to meet the seasonal cultivation requirements of the farmers and
2. Medium-term loans for a period from 1 to 5 years for purchase of bullocks, milch cattle, pumping-sets and other improved implements, sinking or repairs of wells, minor land improvements, etc.

An important condition of reorganization of credit societies, as that they should reorient their operational policies so as to ensure that (i) credit was production-oriented, (ii) its use was supervised and (iii) its recovery was made on the dates which would coincide with harvest time.

The agricultural credit societies are expected to advance loans on the basis of what is called the "Crop Loan System". Seasonality in disbursement and recovery of loans, linking of credit with marketing and advancing loans in kind to the maximum extent are the main characteristics of the Crop Loan System.

Rate of Interest

One of the essential requisites of agricultural credit is that it should not be too costly, but provided at a reasonable rate of interest. The rate of interest charged by the agricultural credit societies varies from state to state, but it usually ranges between Rs. 13.5 to 14 per cent per annum which has reduced to 6-9 per cent per annum now a days.

Security:

The basic principle of cooperation is that loans should be advanced on personal security, that is it should primarily depend on the man and his sureties and not on his property. However, presently only the short-term loans are advanced on the basis of sureties and repaying capacity. As regards medium term loans, the loans upto Rs. 500/- are given on the basis of sureties, from Rs. 501/- to Rs. 1,000/- by creating a charge on the landed property and for loans above Rs. 1,000/- mortgage of the land has been recommended as a desirable security.

Repayment of Loans:

The repayment of loans given by the PACSs to its members is of considerable importance for the success of the credit movement. While recovering the loans, the due dates have been so fixed that it coincides with the harvesting season and at the same time, reasonable time is allowed for enabling the cultivator borrower to dispose of his produce. The loans are gradually be paid in two or three installments.

Assignment: Prepare a crop loan proposal to submit to the PACS.

II) Study of District Central Cooperative Bank

Organization, Objectives, Functions and Procedure for Advancing Credit.

Organization

Primary Cooperative credit societies in a particular area, generally, a district, federate and form a District Central Cooperative Bank. They form an important link between the apex cooperative bank and the primary agril. cooperative credit societies working at village level.

The DCC Banks are of two types: In one type, generally known as “Banking Union” the membership (i.e. the federating members) is confined to primary societies only. In second type of the DCC Banks, both individuals and societies are allowed to become members of the bank. In such a bank, the management vests in a board of Directors elected from both the societies as well as individuals. Large majority of the central cooperative banks in India are of this type.

Objectives and Function:

The chief object of DCC Banks is to meet the credit needs of member societies. They finance agricultural credit societies for production purposes, marketing societies for marketing activities. They serve as a ‘**balancing centre**’ for adjusting the surplus and deficiency of working capital of the primary credit societies. They also work as an intermediary to link the primary societies with the money market. Besides providing capital loans, the DCC banks also provide certain normal banking facilities such as acceptance of deposits, remittance of funds, collection of cheques, etc. In some states, they are responsible for supervision and inspection of primary societies. In brief, following are the main objectives of DCC Banks:

1. To act as a balancing center of finance for primary societies in the district by providing them with funds, when they have a shortage and by serving as a clearing house for their funds, which are surplus;

2. To encourage thrift and collect savings from members and others;
3. To provide a safe place for investing reserves of primary societies;
4. To provide other banking facilities for the members;
5. To develop the cooperative movement in the district on sound lines and to act as friend, philosopher and guide,
6. To develop and extent banking facilities in rural areas, and
7. To supervise, guide and control the working of member societies.

Area of Operation

For the efficient functioning of a District Central Cooperative Bank, it is imperative that its area of operation should be such that it may have sufficient business turnover, so as to employ the necessary staff, meet the overheads and build up a strong reserve funds. At the same time, it is also necessary that its area of operation should not be so unwieldy that, it may not be able to supervise and coordinate the work of primary societies. The standing Advisory Committee on Agricultural Credit of the Reserve Bank opined that, ordinarily, there should be only one Central Bank for each district. If, however, in a particular area, financial and other conditions justify the formation of a bank for a region, smaller than a district, there should be no objection to this.

Membership

The membership of the DCC Bank generally consists of primary societies functioning in the area of operation of the bank and the individuals.

Branch Banking

For the effective linking of the Central Cooperative Institution with the societies at the primary level, the Rural Credit Survey Committee suggested that it should have branches at some intermediate level between the villages and districts. Branch banking on the part of DCC Banks has assured added significance in view of the increase in the number of primary agricultural credit societies and their loan operations. The branches are expected to help in expediting the processing of the loan applications and attracting rural deposits.

Sources of working Capital:

The sources of working capital of a DCC Bank consists of:

1. Share capital
2. Reserve and other funds,
3. Deposits
4. Borrowings from
 - a) State Cooperative Bank
 - b) Reserve Bank of India, and
 - c) Government
5. Grants from Government.

Share Capital:

The share capital of a DCC Bank is subscribed by the affiliated societies and individual members. The face value of the share varies from Rs. 50 to 100. Under the by-laws of the Central Bank, the affiliated societies are found to subscribe in proportion to their borrowings. The RBI suggested the proportion to 10 per cent of the borrowings. In order to strengthen the financial structure of these banks and to enforce confidence of the public, the State Government has also been participating in this share capital.

Reserves and Other Funds

At present, the DCC Banks maintain three types of reserves.

- a) **Statutory Reserve Fund:** It is built out of profits, part of which is set aside for reserve fund, instead of distributing the entire profit as dividend among the shareholders.
- b) **Bad and doubtful debt reserves:** Besides maintaining the statutory reserve fund, most of the central banks now maintain bad and doubtful debt reserves, at the disposal of the bank authorities the funds from which bad debts can be written off.
- c) **Agricultural Credit Stabilization Fund:** The agricultural credit stabilization fund has been constituted in the RBI at the national level and in the cooperative credit institutions at the different levels, in order to convert the short term loans for agricultural purposes into medium-term loans when repayment becomes difficult on account of famine, drought, natural calamities etc.

Every year, 15 per cent of the net profit of central banks are contributed to their stabilization funds. State Government passes on the entire excess dividend over three per cent on the shares held by them, to the stabilization funds of central banks. The State Government also makes a lumpsum contribution to the stabilization funds to the extent of 5 to 10 per cent of the outstanding of agricultural loans, and while doing so, 50 per cent of this contribution is given as grant and 50 per cent as interest-free loans.

3. **Deposits**

The third important source of working capital of DCC Bank is deposits. The Central Banks tap deposits from urban and rural areas so as to provide funds in large quantities to primary societies for agricultural development under priority sector.

The State Governments have passed orders authorizing institutions like Panchayats, Municipalities, Educational Institutions, etc. to deposit their savings in cooperative banks

Borrowing:

The apex banks have always been the main source for the borrowings of the central banks. The borrowing limit of these banks is generally linked with their own funds, which is presently 10 to 15 times of the owned funds.

Formerly, the RBI did not provide loans directly to the DCC banks, but through the State Cooperative Banks. However, recently the RBI has formulated a scheme under which “A”, “B” and “C” class central banks are getting loans directly, on the recommendations of the Registrar and against Government guarantee.

The DCC Banks also borrow from the Government, but such loans form a very negligible proportion of their total working capital.

Some of the DCC Banks also obtains advances; overdraft and cash credit accommodation from commercial banks.

Management

The management of a DCC Bank vests in a board of Directors consisting of 12 to 15 members. In order to shape the policies of the central bank for the benefit of the affiliated primary societies, the representatives of the societies generally dominate the board, restricting the number of individual members to 2 to 3 only.

In most of the DCC Banks, Government officials are found to be the Chairman of the boards. In many states, non-officials have been nominated on the board of some of the central banks. The Action Programme has laid down that a DCC Bank should have four key personnel viz:

- i) The Manager, to exercise overall supervision
- ii) The Executive Officer to direct the field staff
- iii) The Chief Accountant, to ensure maintenance of proper accounts,
- iv) A Special Officer, to deal with the coordination of marketing societies

Loan Operations

The central banks advance loans to the affiliated societies for financing agriculture. Short-term loans are given upto 12 months, for performing seasonal agricultural operations, purchase of agricultural implements, marketing, processing and consumption purposes while medium-loans are given for a period ranging from 1 to 5 years for purchase of bullocks, milch cattle, pumping sets, digging or repairs of well and small improvements of land.

Procedure for advancing loans

A society which wants to borrow loans from the DCC bank has to forward an application in the prescribed form to the bank together with the following documents.

1. A certified copy of resolution passed in the general body or by the managing committee, stating the amount of loan.
2. Assets statement in respect of each member of the society
3. A statement showing the latest financial position of the society
4. A certified copy of the by-laws and certificate of registration of the society in case of the first application.
5. In case of crop finance, a statement in respect of each member showing allocation of lands to various crops.

Application for medium term loan is to be accompanied by the documents mentioned under 1, 2, 3 and 4 above.

The application of the society is generally prepared by its Secretary and forwarded to the Central Bank through the intermediary agency e.g. local supervising unions in Maharashtra. Applications which are complete in all respects, are placed by the bank before the Board of Directors for consideration and sanction of loan. In most of the central banks, the sanctioning authority is the executive or loan committee. After the loans have been sanctioned, the managing committee executes the documents, draws the loan amount and disburses the loans. The loans are disbursed to the members of the society, usually in the presence of a Cooperative Supervisor or Inspector.

Overdues

One of the most disgusting trends in the working of DCC Banks is the loans in the hands of defaulters. If not repaid, leads to the virtual collapse of the cooperative movement in some parts of the country.

Rate of Interest:

The rate of interest on loans charged by the Central banks varies according to the purpose of the advance. In some states, the rate of interest for medium-term loans was the same as that for short-term loans.

The margin retained by the Central Banks on the loans or advances, in respect of funds obtained by borrowings from the apex bank, varied between 1 to 3 per cent. The rate of interest ranges from 13 to 14 per cent/annum. It may vary as per the directives of the Central Bank. Recently these rates have been reduced to some extent by the Govt. of India

Security

The Central Banks advance loans to the affiliated societies on the security of promotes executed by them. At the society level, the loans are secured by personal security of members and mortgage of lands.

Assignment: Visit to the nearest Central Bank and study the procedure of advancing the loans by filling-up the loan application form.

Exercise No. 5

Study of Regional Rural Banks

In the multiagency approach to provide credit to agriculture, Regional Rural Banks (RRB's) have special place. They are state sponsored, regionally based and rural oriented commercial banks.

The Govt. of India, in July 1975, appointed a Working Group to study in depth the problem of devising alternative agencies to provide institutional credit to the rural people in the context of steps then initiated under the 20 Point Economic Programme. The Working Group identified various weaknesses of the co-operative credit agencies and the commercial banks and felt that these institutions would not be able to fill the regional and functional gaps in the rural credit system within a reasonable period of time. The Group therefore recommended a new type of institution which combines:

1. Local feel and familiarity with rural possess problems which co-operative banks have.
2. Degree of business organization ability to mobilize deposit, access to money market, modernized outlook which commercial banks have.

Thus, it was envisaged to combine desirable qualities of co-operative banks and commercial banks in RRB's at the same time, it was emphasized that the role of RRB's would be to supplement and not supplant the other institutional agencies already existing in the field.

Formation and Objective:

The Government of India promulgated the Regional Rural Banks Ordinance on 26th September 1975, which was later replaced by the Regional Rural Bank Act 1976. The preamble to the Act states the objective to develop rural economy by providing credit and facilities for the development of agriculture, trade, commerce, industry and other productive activities in the rural areas, particularly to small and marginal farmers, agricultural labourers, artisans and small entrepreneurs.

Capital Structure:

The RRB Act empowers the Central Govt. to open the banks from time to time at places where it may consider it necessary. A Regional Rural Bank is jointly owned by the Govt. of India, the Government of concerned state and public sector bank, which sponsored it. The authorized capital of each bank is Rs. 1 crore and the issued capital is Rs. 25 lakhs; which is held by them in the proportion of 50, 15 and 35 per cent respectively. Each bank carries the banking business within the local limits specified by the Govt. notification.

Organizational structure:

The management of a RRB is vested in a nine-member Board of Directors headed by

1. Chairman who is an officer deputed by a sponsor bank but appointed by the Govt. of India.
2. Three directors to be nominated by the Central Govt.
3. Two directors to be nominated by the concerned State Govt.
4. Three directors to be nominated by the sponsor bank.

The sponsor bank, besides subscribing to the capital and deputing one of its officials as chairman, provides assistance to RRB in several ways such as financial, accommodation, deputing managerial and other staff and arranging the recruitment of staff and their training.

Functions:

Every RRB may undertake the following types of functions:

1. The granting of loans and advances particularly to small and marginal farmers and agricultural labourers individually or to a group, co-operative societies, agricultural processing societies, co-operative farming societies, etc.
2. The Granting of loans and advances to artisans, small entrepreneurs and small traders, businessmen, etc.

Exercise No. 6.

Study of Agribusiness finance limited

ICICI Bank:

By adopting innovative approach to Agri Business financing and by offering complete supply chain solutions. ICICI Bank has changed the face/dynamics of Agri Business Finance in the country. It provide finance to Dairy, Sugar, Plantations, Seed sector, Fertilizer sector, Infrastructure, Markfeds or Food Processing, sectors.

Dairy Sector:

ICICI Bank has been working with various co-operatives as well as private players in this sector.

Product suite:

Working Capital : Working Capital is designed to take care of the day to day business requirements of the organization. Looking at players, your domestic and international businesses, we can provide export packing credit, cash credit and bill purchasing/discounting facility customized to the requirements of the clients. The peak seasonal requirement due to distinctive seasonal production cycle of flush and lean months with a relatively stable consumption cycle can also be addressed.

Long term fund requirement for expansion/ new project: We provide medium term and long term funds for new project, expansion and upgradation of existing plants. In all cases we strive to customize the product offering based on the client's specific cash flow pattern.

Cattle Financing : ICICI Bank can finance the dairy farmers for purchase of Milch animals and other related dairy equipment for farmers supplying milk to the dairy.

Sugar Industry : ICICI Bank serves both the sugar industries as well as the cane growers associated with the sugar industries. The strong linkage between the cane grower and the processor provides ICICI Bank the opportunity to offer structured products to both the parties at very competitive rates.

Products on Offer:

- 1) Regular commercial banking services for Sugar Industries like Working capital finance, Term loans, Forex etc.
- 2) Corporate-linked Agricultural Loan is a product in which ICICI Bank ties up with a sugar company to provide financial assistance to farmers linked to the sugar company. The

corporate would generally be having an arrangement with the farmers to supply agricultural inputs and/or to procure/assist in marketing farm produce.

Features

- The duration of the loan will be between 12-18 months depending on the duration of the crop
- Loan will be disbursed either in form of agri inputs or a combination of agri inputs and cash
- Value of loan sanctioned to a farmer will be a function of area grown under sugar cane cultivation.
- Bullet repayment of principal and interest. Repayment of principal and interest will be deducted by the sugar company when it makes cane payments to the farmers.

Eligibility criteria for farmer selection

- Land ownership
- Consistent supply of cane for the last three years
- Registered member of the sugar mill
- The farmer should have an assured irrigation facility

Plantations

Plantation sector is a significant foreign exchange earner for the Indian economy. In the international trade arena plantation products from India are unmatched in terms of the superior quality they offer. ICICI Bank enjoys long years of relationship with a number of business houses in the plantation sector, which has enabled us to design a whole suite of products for the sector. We stand committed to the efforts for unleashing the competitive advantage of the Indian tropics in plantation products. We offer the following products from our stable, meant for the different stakeholders in the value chain, in the plantation sector.

- Long term loans for Capital expenditure on plantations and processing facilities.
- Short term loans for working capital requirements of the plantations and the processing factories.
- Bill Discounting, Bank Guarantee and Packing credit facilities for Exporters.
- Cash management service for domestic marketers.
- Real time remittance services for Auction Houses, Brokers and Exporters.
- Dealer financing through Bill Discounting, for domestic marketers.

Seed sector:

ICICI Bank offers following products in the seeds sector:

- **Organizer financing:** Seed organizers undertake seed production on behalf of the seed company. ICICI Bank provides financial assistance to the seed organizers on recommendation and letter of comfort given by the seed companies. Short-term loans are extended for seed cultivation or against the stocks held by the seed organizers pending seed certification process. The credit limit depends on the value of seeds to be procured by the seed company from the seed organizer. The seed organizer gives instruction to the seed company to make payments directly to the bank on due date from the payments due to the organizer and this arrangement is to be confirmed by the seed company.
- Seed organizers undertake seed production on behalf of the seed company. ICICI Bank provides financial assistance to the seed organizers on recommendation and letter of comfort given by the seed companies. Short-term loans are extended for seed cultivation or against the stocks held by the seed organizers pending seed certification process. The credit limit depends on the value of seeds to be procured by the seed company from the seed organizer. The seed organizer gives instruction to the seed company to make payments directly to the bank on due date from the payments due to the organizer and this arrangement is to be confirmed by the seed company.
- **Regular working capital financing**
The working capital requirement for seed companies is seasonal and varies depending upon the crop portfolio and seasonality. Working capital assessment

Fertilizer sector :

Fertilizer Companies:

The Fertilizer companies require high working capital due to their seasonal nature of sales and long credit period given to farmers. The industry is characterized by an established distributor and dealer network, which forms the backbone of the dispersed sales network. Certain products are designed for meeting the short-term credit requirements of the channel participants recommended by the corporate on basis of the selection parameters stipulated: -

- **Dealer financing:**

This product provides short term financing to the dealers of fertilizer companies for making purchases of products from the companies. The financing shall be typically for the inventory-holding period of the dealer i.e. typically for a period up to 90 days. The financing to the dealers will be made either on one of the following basis: -

- Financial recourse in the nature of Corporate Guarantee for the overall arrangement
- Non-Financial Recourse in the nature of Letter of Comfort for the overall arrangement (Stop supply etc)

- **Securitisation of receivables for companies:**

Many fertilizer companies have outstanding loans in their books towards the credit provided to the dealers for a period of 90 days. These book debts can be securitized to provide liquidity to the company, the pricing and the structure of the transaction can be worked on a case to case basis

Infrastructure:

Agri Infrastructure Financing is one of the major areas of the Agri Business Group at ICICI Bank. The areas include financing of various agricultural projects in the agri-infrastructure sector like:

- Warehouses / Godowns
- Silos
- Cold Chains
- Refrigerated transport infrastructure
- Development of Market yards
- Agri Business clinics
- Value Addition farm centers
- Food Parks
- Agri Export Zones etc.

The group is actively involved in conceptualizing and structuring innovative and customized financial products for these kinds of projects, based on the projects arrangement with private and public enterprises. The group is jointly working with various warehousing corporations, private infrastructure participants, government bodies and corporates across the country.

IDBI :

IDBI Bank is counted amongst the leading public sector banks of India, apart from claiming the distinction of being the 4th largest bank, in overall ratings. It is presently regarded as the tenth largest development bank in the world, mainly in terms of reach. This is because of its wide network of 509 branches, 900 ATMs and 319 centers. Apart from being involved in banking services, IDBI has set up institutions like The National Stock Exchange of India (NSE), The National Securities Depository Services Ltd. (NSDL) and the Stock Holding Corporation of India (SHCIL).

Agriculture continues to be the largest and the most dominant sector in India, contributing 22 % to the country's GDP. It provides a source of employment and livelihood to over 60 % of the population. Its linkages with industry are growing with increasing stress on food and agri processing industry on account of changing demand patterns for processed food by consumers. With this background Corporate India has started finding new opportunities in Agriculture.

The emergence of modern economic system has institutionalized agriculture sector on business models. Agribusiness is a broad term that encompasses a number of businesses in agriculture including food production, farming, agrochemicals, farm machinery, warehousing, wholesale and distribution, and processing, marketing and sale of food products. The bank has launched several products catering to the rural and agri community.

I. Agriculture Finance (SHORT TERM LOANS):

1. Crop Loan with Kisan Credit Card: Credit to Farmers/ Group of farmers for Crop Loan, working capital or investment credit for viable agriculture purpose. All Farmers/ Owner cultivators, tenant cultivators and Share croppers / Individual farmer having agreement with institution can get crop loan with Kisan Credit card. The card would be valid for 5 years, of which crop loan and working capital components has to be renewed annually.

2. PSL Gold Loan Scheme: Assistance to farmers against pledge of gold for meeting the temporary cultivation needs, social obligations and medical emergencies and Small business/ Traders/ Distributors and Self employed professionals for provision of finance for Business needs. Minimum Rs.10,000 and Maximum Rs.5 lacs are given. Minimum tenor is 1 month and maximum 24 months.

3. Warehouse Receipt Finance: The bank extends financial assistance to farmers, partnership firms and limited companies against pledge of agricultural commodities. Farmers who want to store their produce in warehouses to avoid distress sale immediately after harvest, Processors/ Traders who want to procure large quantities of produce during the season and process / sell over a period of time and Large processors who wish to store required quantity of commodity for future processing by contracting with sellers can be benefited. Individual farmers, Partnerships, Limited Companies.

Eligible commodity

Soya bean, Cotton (including bales), Mustard, Maize, Wheat, Sugar, Paddy, Cashew, Castor, Chilli and Turmeric only

Loan amount

Farmer:	Min Rs. 25,000 and Max Rs. 10 lacs
Traders:	Min Rs. 25,000 and Max Rs. 5 Crores
Processor:	Min Rs. 10 lacs, and Max Rs. 100 Crores

Maximum of 12 months from the date lodging commodities or shelf life of the product

4. Loan Against Crop Receivables: The Bank grants financial assistance to farmers against the produce hypothecated for providing timely credit with minimum documentation to individuals supplying non-processed crop produce to private and public limited companies.

Individual farmers, Group of farmers, Co-operative Societies, Agents acting on behalf of a group of individual farmers can get the loan Indicative list of crops covered under the scheme are Cereals, cash crops, fruits, flowers, medicinal/ aromatic plants, vegetables and oilseeds.

Loan amount:

Corporate	Min. Rs.1 crore; Max. Rs.100 crore
Farmer	<input type="checkbox"/> Min. Rs.10,000. <input type="checkbox"/> Max. 5% of the cumulative limit set for all supplies to the corporate for individual/group of farmers. <input type="checkbox"/> Max. 100% of cumulative limit for co-operative societies

II. Agribusiness Finance (Term loan):

1. Farm Mechanization: The product aims to give credit for purchase of Farm machinery / Irrigation equipments for agricultural operations. The scheme covers activities ranging from purchase of tractors and accessories, power tillers, combine harvesters, power sprayers, dusters, threshers etc.

For pump set/ Irrigation equipments Farmer should own a minimum of 2 acres of irrigable land. For Farm machinery, following is the Minimum irrigated land

1. For power tillers – 2 acres
2. For tractors with power upto 35 HP – 4 acres
3. For tractors with power above 35 HP – 6 acres
4. For combine harvesters – 8 acres

Loan Amount

Minimum: Rs.30, 000 /- and maximum: Rs. 30 lakh

Repayment schedule:

Type of Investment	Min. and Max. Repayment period in years (incl. Gestation period)	Loan installment period	Gestation/ grace period (months)
Pump set	9	Yearly	11
Sprinkler/Drip Irrigation	10-15	Yearly	11
Tractor/power tiller /Harvester	5-9	Half yearly/yearly	Nil

2. Financing Wells: Dug well is one of the major sources for irrigation in India. Bank provides loan for various purposes, which include:-

- Sinking of new wells
- Deepening / renovation of existing well
- Bore well / tube well

All categories of farmers including small, marginal and other farmers are eligible for finance.

Unit cost recommended by NABARD will form the basis, for deciding loan amount

3. Financing Minor Irrigation Schemes: Bank provides financial assistance for exploitation of ground water (sinking of well), water lifting devices and distribution arrangement also. The target group is all types of farmers (small / marginal / other farmer) either individually or alongwith co-owner of the land.

4. Lift Irrigation Schemes: A group of farmers, lift irrigation societies, SHG, companies etc., can avail loan from bank under this product. Minimum 5 persons can form a lift irrigation society and approach bank for financial assistance

5. Loan For Purchase of Land: Govt. is encouraging consolidation of land. As part of this, term loan is available to the tune of Rs. 50000/- to Rs. 10 lakhs to individual Small Farmers/Marginal Farmers/Share cropper/ Tenant farmers for purchase of land. Loans given to individual farmer to make the small and marginal holding economically viable and to bring fallow and waste land under cultivation and to step up agricultural production and productivity. Loan will be in the form long term in nature with maximum period of 9 years including 2 years moratorium.

6. Loan For Land Development: Land Development aims to convert fallow/ barren or uncultivable land into cultivable. This includes land leveling, land reclamation etc. Individual farmer with good repayment record is the eligibility criteria. Loan quantum will be considered on the basis of engineers estimate engineers certificate as per government-scheduled rate.

7. Horticulture & Forestry Development Loans: The bank extends financial assistance to individual farmer or group of farmer for the Activities relating to the establishment/maintenance of the Nurseries of ornamental plants and trees, orchards and quick growing trees and shrubs. Indicative list of activities are Grafting, Layering, Budding, construction of fence, Purchase of planting materials, Preparation of land, seeds and seedlings, fertilizers, pesticides etc. Individuals and group of farmers are eligible for this loan.

Extent of Exposure

Min. Rs. 20,000.

Max. Rs. 50 lacs.

Tenure: Fixed based on the gestation period of different crops.

8. Loans For Bullock Pair & Bullock Cart: IDBI Bank grants term loan to farmer Small, Marginal and Other Farmers /Agricultural and landless labourers for purchases of Bullock pair with Bullock cart. Bullock pair with cart is beneficial for various farm operations, transportation and marketing of farm produce etc. Loan amount is sanctioned on the basis of NABARD Unit cost. Repayment period is 4 to 5 year including 3 months gestation period. Repayment will be half yearly / yearly installments. Rate of interest is below BPLR for loan upto 2 lacs.

9. Two Wheeler Loan To Farmers: IDBI Bank grants term loan upto Rs. 50000/- for purchase of two-wheeler to the farmers with an objective to supervise agricultural operation in time to increase mobility of farmer and timely access to the market.

10. Bio Gas: In view of the growing energy crisis, there is need for developing new as well as renewable sources of energy. National Programme for Bio-gas Development was implemented for this purpose by government. Expenses on construction of biogas chambers of steel gasholder and even construction of latrine, if attached are recommended for financing. Many agencies, such as Z.P. / State Govt./ Central Govt. are providing subsidy, which is treated as margin for the loan.

III. Agri-business finance (Allied activities)

1. Dairy Loans: Credit for Individuals and group of farmers for Purchase of high yielding milch animals (Cattle: Indigenous breed like Gir, Tharparker, etc. and exotic breeds like Jersey, Holstein fresian, etc. and in case of Buffalows: Mehsana, Jafarbadi, etc.), Construction of cattle shed, Purchase of dairy equipments, chaff cutters, etc and expenditure incurred for transportation of animals where the animals are not purchased locally.

Individuals and group of farmers experienced in Dairy farming and are actively engaged in such activity are eligible for loan.

Extent of Exposure

Min. Rs. 20,000.

Max. Rs. 10 lakh.

Repayment Period/ Schedule

Type of investment	Minimum - Maximum repayment period in years (including gestation period)	Loan installment period
Cross bred cow (s)	5	Monthly/ Quarterly
Buffaloes	5 – 6	Monthly/ Quarterly

2. Poultry Farming: Poultry activity in India is graduated from backyard farming to Hi-tech, environmentally controlled poultry. The Bank is providing loans to all activities of poultry farming i.e. Layer farming, Broiler farming and Hatcheries. The entrepreneur should have thorough knowledge of poultry farming substantiated by training certificate/ experience certificate etc. The backward linkages like suitability of climates, availability of day old chicks, water and veterinary services will be the pre-requisite. Loan amount is decided by unit cost recommended by NABARD

3. Loans For Sheep & Goats Rearing: Sheep and goat rearing is supplementary activity to agriculture. However, independent activity is also commercially viable. IDBI Bank grants term loans of Rs. 50,000/- to Rs. 50 lakhs to individual / Group/ Shepard co-op society / Federation / Limited companies that are experienced and actively engaged in such activity.

4. Fisheries Loan: Blue Revolution has created good potential for fisheries development in the country. Bank provides finance to fisheries related activities such as Inland fisheries (construction of fish ponds, purchase of seeds, feeds etc.), Marine fisheries (in-shore, off-shore, deep sea fishing) and brackish water scheme. Individual, fishermen, co-op societies, companies can avail loan.

5. Financing Piggery Unit: Rapid urbanization has created good scope for sale of meat. The supply of canteen waste and vegetable market waste has also helped in development of Piggery units. Bank provides finance to individual, farmer or group of farmers. Applicant should have adequate land, water and other backward linkages available knowledge of pig rearing will be pre-requisite. The loan is available for purchase of pigs, construction of shed, utensils, labour quarter etc, project loan is also available for farmer propose to start a unit with exotic breeds.

ITC:

ITC's pre-eminent position as one of India's leading corporates in the agricultural sector is based on strong and enduring farmer partnerships that has revolutionized and transformed the rural agricultural sector. A unique rural digital infrastructure network, coupled with deep understanding of agricultural practices and intensive research, has built a competitive and efficient supply chain that creates and delivers immense value across the agricultural value chain. One of the largest exporters of agri products from the country, ITC sources the finest of Indian Feed Ingredients, Food Grains, Edible Nuts, Marine Products, Processed Fruits, Coffee & Spices.

ITC's **Agri Business Division** is the country's second largest exporter of **agri-products** with exports of over **Rs. 1000 Crores (Rs. 10 billion)**. Its domestic sales of agri-products are in excess of **Rs. 1500 Crores (Rs. 15 billion)**. It currently focuses on exports and domestic trading of: 1. **Feed Ingredients** – Soyameal, 2. **Food Grains** - Rice (Basmati & Non Basmati), Wheat, Pulses, 3. **Edible Nuts** - Sesame Seeds, HPS Groundnuts, Castor oil, **Marine Products** - Shrimps and Prawns, **Processed Fruits** - Fruit Purees/Concentrates, IQF/Frozen Fruits, Organic Fruit Products, Fresh Fruits, **Coffee & Spices** - Coffee, Black Pepper, Chilly, Turmeric, Ginger, Celery and other Seed Spices

1. Farmer empowerment through e-Choupals:

ITC's unique strength in this business is the extensive backward linkages it has established with the farmers. This networking with the farming community has enabled ITC to build a highly cost effective procurement system. ITC has made significant investments in web-enabling the Indian farmer. Christened '**e-Choupal**', ITC's empowerment plan for the farmer centres around providing Internet kiosks in villages. Farmers use this technology infrastructure to access on-line information from ITC's farmer-friendly website **www.echoupal.com**. Data accessed by the farmers relate to the weather, crop conditions, best practices in farming, ruling international prices and a host of other relevant information. **e-Choupal** today is the world's largest rural digital infrastructure.

The unique **e-Choupal** model creates a significant two-way multi-dimensional channel which can efficiently carry products and services into and out of rural India, while recovering the associated costs through agri-sourcing led efficiencies. This initiative now comprises about **6500 installations covering nearly 40,000 villages and serving over 4 million farmers**. Currently, the '**e-Choupal**' website provides information to farmers across the 10 States of Madhya Pradesh, Haryana, Uttarakhand, Uttar Pradesh, Rajasthan, Karnataka, Maharashtra,

Andhra Pradesh, Kerala and Tamil Nadu. Over the next 5 years it is ITC's Vision to create a network of 20,000 e-Choupals, thereby extending coverage to 100,000 villages representing one sixth of rural India.

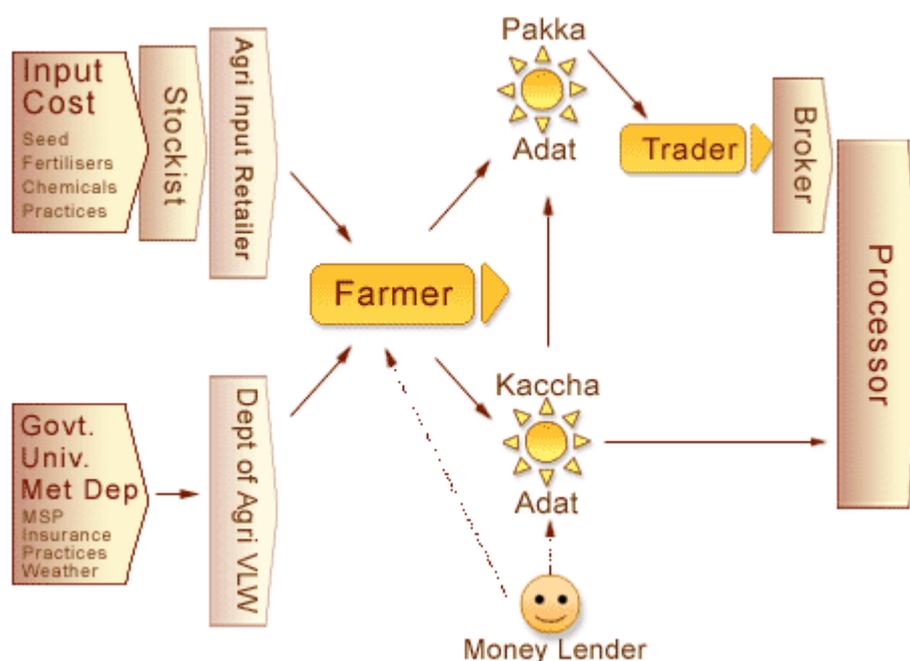
Supporting the e-Choupal network are ITC's procurement teams, handling agents and contemporary warehousing facilities across India, enabling its Agri Business to source identity-preserved merchandise even at short notice. ITC's processors are handpicked, reliable high quality outfits who ensure hygienic processing and modern packaging. Strict quality control is exercised at each stage to preserve the natural flavour, taste and aroma of the various agri products.

The Big Picture:

ITC's Agri Business Division, one of India's largest exporters of agricultural commodities, has conceived e-Choupal as a more efficient supply chain aimed at delivering value to its customers around the world on a sustainable basis.

The e-Choupal model has been specifically designed to tackle the challenges posed by the unique features of Indian agriculture, characterised by fragmented farms, weak infrastructure and the involvement of numerous intermediaries, among others.

The Value Chain - Farm to Factory Gate:



'e-Choupal' also unshackles the potential of Indian farmer who has been trapped in a vicious cycle of low risk taking ability > low investment > low productivity > weak market orientation > low value addition > low margin > low risk taking ability. This made him and Indian agribusiness sector globally uncompetitive, despite rich & abundant natural resources.

Such a market-led business model can enhance the competitiveness of Indian agriculture and trigger a virtuous cycle of higher productivity, higher incomes, enlarged capacity for farmer risk management, larger investments and higher quality and productivity.

Further, a growth in rural incomes will also unleash the latent demand for industrial goods so necessary for the continued growth of the Indian economy. This will create another virtuous cycle propelling the economy into a higher growth trajectory.

The Model in Action:

Appreciating the imperative of intermediaries in the Indian context, 'e-Choupal' leverages Information Technology to virtually cluster all the value chain participants, delivering the same benefits as vertical integration does in mature agricultural economies like the USA.

'e-Choupal' makes use of the physical transmission capabilities of current intermediaries – aggregation, logistics, counter-party risk and bridge financing –while disintermediating them from the chain of information flow and market signals.

With a judicious blend of click & mortar capabilities, village internet kiosks managed by farmers – called *sanchalaks* – themselves, enable the agricultural community access ready information in their local language on the weather & market prices, disseminate knowledge on scientific farm practices & risk management, facilitate the sale of farm inputs (now with embedded knowledge) and purchase farm produce from the farmers' doorsteps (decision making is now information-based).

Real-time information and customised knowledge provided by 'e-Choupal' enhance the ability of farmers to take decisions and align their farm output with market demand and secure quality & productivity. The aggregation of the demand for farm inputs from individual farmers gives them access to high quality inputs from established and reputed manufacturers at fair prices. As a direct marketing channel, virtually linked to the 'mandi' system for price discovery, 'e-Choupal' eliminates wasteful intermediation and multiple handling. Thereby it significantly reduces transaction costs.

'e-Choupal' ensures world-class quality in delivering all these goods & services through several product / service specific partnerships with the leaders in the respective fields, in addition to ITC's own expertise.

While the farmers benefit through enhanced farm productivity and higher farm gate prices, ITC benefits from the lower net cost of procurement (despite offering better prices to the farmer) having eliminated costs in the supply chain that do not add value.

The Status of Execution:

Launched in June 2000, 'e-Choupal', has already become the largest initiative among all Internet-based interventions in rural India. 'e-Choupal' services today reach out to over 4 million farmers growing a range of crops - soyabean, coffee, wheat, rice, pulses, shrimp - in over 40,000 villages through 6500 kiosks across ten states (Madhya Pradesh, Haryana, Uttarakhand, Karnataka, Andhra Pradesh, Uttar Pradesh, Rajasthan, Maharashtra, Kerala and Tamil Nadu).

The problems encountered while setting up and managing these 'e-Choupals' are primarily of infrastructural inadequacies, including power supply, telecom connectivity and bandwidth, apart from the challenge of imparting skills to the first time internet users in remote and inaccessible areas of rural India.

Several alternative and innovative solutions – some of them expensive – are being deployed to overcome these challenges e.g. Power back-up through batteries charged by Solar panels, upgrading BSNL exchanges with RNS kits, installation of VSAT equipment, Mobile Choupals, local caching of static content on website to stream in the dynamic content more efficiently, 24x7 helpdesk etc.

Going forward, the roadmap includes plans to integrate bulk storage, handling & transportation facilities to improve logistics efficiencies.

As India's 'kissan' Company, ITC has taken care to involve farmers in the designing and management of the entire 'e-Choupal' initiative. The active participation of farmers in this rural initiative has created a sense of ownership in the project among the farmers. They see the 'e-Choupal' as the new age cooperative for all practical purposes.

This enthusiastic response from farmers has encouraged ITC to plan for the extension of the 'e-Choupal' initiative to altogether 15 states across India over the next few years. On the anvil are plans to channelise other services related to micro-credit, health and education through the same 'e-Choupal' infrastructure.

2. Choupal Saagar

Following the success of the e-Choupal, the Company launched Choupal Saagar, a physical infrastructure hub that comprises collection and facilities and a unique rural hypermarket that offers multiple services under one roof. This landmark infrastructure, which has set new benchmarks for rural consumers also incorporates farmer facilitation centers with services such as sourcing, training, soil testing, health clinic, cafeteria, banking, investment services, fuel station etc. 24 'Choupal Saagars' have commenced operations in the states of

Madhya Pradesh, Maharashtra and Uttar Pradesh. ITC is engaged in scaling up the rural retailing initiative to establish a chain of 100 Choupal Saagars in the near future.

3. Choupal Fresh:

Choupal Fresh, ITC's fresh food wholesale and retail initiative, leverages its extensive backward linkages with farmers and supply chain efficiencies. It focuses on stocking fresh horticulture produce like fresh fruits and vegetables. Six Choupal Fresh retail stores are currently operational at Hyderabad. The company has also set up a complete cold chain for ensuring the availability of fresh products in the market, besides directly sourcing farm fresh produce from the farmers

4. 'Choupal Pradarshan Khet' :

In line with its mission of improving the quality of life in rural India, ITC's Agri Business has launched a flagship extension programme called 'Choupal Pradarshan Khet' (CPK) or demonstration plots to help farmers enhance farm productivity by adopting agricultural best practices. Started in 2005-06, the crop portfolio includes soya, paddy, cotton, maize, bajra, wheat, gram, mustard, sunflower and potato. This initiative, has covered over 70,000 hectares and has a multiplier impact and reaches out to 1.6 million farmers.

5. Processed Fruits:

In line with its strategy of achieving a higher order of value capture, the business also focuses on the value added segment, steadily enhancing its basket of offerings with several new products. These include frozen foods, IQF (individually quick frozen) fruits, niche products like baby-food quality purees and high brix pulp and organic purees. ITC seeks to focus on this segment and exploit the market opportunity for tropical fruits and fruit products, where India has a natural advantage of growing the complete range, including exotic varieties. In Processed Fruits category, ITC exports from HACCP certified plants to Western Europe, North Africa, West Asia, Japan and North America, a wide range of Processed Fruit products made from Mango (Alphonso, Kesar & Totapuri), Guava, Papaya and Pomegranate. ITC is the leading Indian exporter of Organic Fruit Products certified to European (EC 2092/91) and US (NOP) Standards.

Fresh Table Grapes & Pomegranates are sourced from ITC's EUREPGAP certified farmer groups & retailed through prominent supermarkets like Sainsbury's and Albert Heijn in Europe and Daiei in Japan.

6. Marine products:

ITC has been a significant exporter of seafood from India since 1971. It exports frozen as well as cooked shrimps and other seafood products to Japan, USA and Europe. Its well-known brands include Gold Ribbon, Blue Ribbon, Aqua Kings, Aqua Bay, Aqua Feast and Peninsular.

7. A customer centric approach

ITC's Agri Business Division continues to use innovation as its core strategy to retain its position as the one-stop shop for sourcing agri-commodities from India. Besides setting benchmarks in quality, reliability and value-added services, ITC is a trendsetter in customer care particularly in commodity trading. Major customers include Cargill, Marubeni, Toepfer, among others, who source agriculture commodities and food products from India. Customers can log onto www.itcabd.com, and readily access information on crop production and forecast, market updates, the latest shipment status and the prevailing foreign exchange rates.

8. Sourcing for ITC:

ITC's Agri business is progressively aligning its commodity portfolio with the sourcing needs of the Company's Foods business to generate higher order value from its agri procurement infrastructure. The business has commenced procurement of chipstock potatoes, one of the critical raw materials in the manufacture of the Company's 'Bingo!' brand of potato chips. The acquisition of **Technico**, an Australian company with technology leadership in the production of early generation seed potatoes, helped the business access a ready pipeline of new high-yielding varieties of chipstock potato seeds.

Exercise No. 7

Study of NABARD

NABARD is set up as an apex Development Bank with a mandate for facilitating credit flow for promotion and development of agriculture, small-scale industries, cottage and village industries, handicrafts and other rural crafts. It also has the mandate to support all other allied economic activities in rural areas, promote integrated and sustainable rural development and secure prosperity of rural areas. In discharging its role as a facilitator for rural prosperity NABARD is entrusted with

1. Providing refinance to lending institutions in rural areas
2. Bringing about or promoting institutional development and
3. Evaluating, monitoring and inspecting the client banks
4. Besides this pivotal role,

NABARD also:

1. Acts as a coordinator in the operations of rural credit institutions
2. Extends assistance to the government, the **Reserve Bank of India** and other organizations in matters relating to rural development
3. Offers training and research facilities for banks, cooperatives and organizations working in the field of rural development
4. Helps the state governments in reaching their targets of providing assistance to eligible institutions in agriculture and rural development
5. Acts as regulator for cooperative banks and RRBs

Genesis and Historical Background:

The Committee to Review Arrangements for Institutional Credit for Agriculture and Rural Development (**CRAFICARD**) set up by the RBI under the Chairmanship of Shri B Sivaraman in its report submitted to Governor, Reserve Bank of India on November 28, 1979 recommended the establishment of NABARD. The Parliament through the Act 61 of 81, approved its setting up and it was established on July 12, 1982 .

The Committee after reviewing the arrangements came to the conclusion that a new arrangement would be necessary at the national level for achieving the desired focus and thrust towards integration of credit activities in the context of the strategy for Integrated Rural Development. Against the backdrop of the massive credit needs of rural development and the need to uplift the weaker sections in the rural areas within a given time horizon the arrangement called for a separate institutional set-up.

Similarly, The Reserve Bank had onerous responsibilities to discharge in respect of its many basic functions of central banking in monetary and credit regulations and was not therefore in a position to devote undivided attention to the operational details of the emerging complex credit problems. This paved the way for the establishment of NABARD. CRAFTICARD also found it prudent to integrate short term, medium term and long-term credit structure for the agriculture sector by establishing a new bank. NABARD is the result of this recommendation. It was set up with an initial issued and paid up capital of Rs 100 crore, which was enhanced to Rs 2,000 crore, fully subscribed by the Government of India and the RBI.

Objectives:

NABARD was established in terms of the **Preamble to the Act**, "for providing credit for the promotion of agriculture, small scale industries, cottage and village industries, handicrafts and other rural crafts and other allied economic activities in rural areas with a view to promoting IRDP and securing prosperity of rural areas and for matters connected therewith in incidental thereto".

The main objectives of the NABARD as stated in the statement of objectives while placing the bill before the Lok Sabha were categorized as under :

1. The National Bank will be an apex organization in respect of all matters relating to policy, planning operational aspects in the field of credit for promotion of Agriculture, Small Scale Industries, Cottage and Village Industries, Handicrafts and other rural crafts and other allied economic activities in rural areas.
2. The Bank will serve as a refinancing institution for institutional credit such as long-term, short-term for the promotion of activities in the rural areas.
3. The Bank will also provide direct lending to any institution as may approved by the Central Government
4. .The Bank will have organic links with the Reserve Bank and maintain a close link with in.

Major Activities:

1. Preparing of Potential Linked Credit Plans for identification of exploitable potentials under agriculture and other activities available for development through bank credit.
2. Refinancing banks for extending loans for investment and production purpose in rural areas.
3. Providing loans to State Government/Non Government Organizations (NGOs)/Panchayati Raj Institutions (PRIs) for developing rural infrastructure.

4. Supporting credit innovations of Non Government Organizations (NGOs) and other non-formal agencies
5. Extending formal banking services to the unreached rural poor by evolving a supplementary credit delivery strategy in a cost effective manner by promoting Self Help Groups (SHGs)
6. Promoting participatory watershed development for enhancing productivity and profitability of rainfed agriculture in a sustainable manner.
7. On-site inspection of cooperative banks and Regional Rural Banks (RRBs) and off-site surveillance over health of cooperatives and RRBs

Organization Structure:



Role and Functions:

1. NABARD is an apex institution accredited with all matters concerning policy, planning and operations in the field of credit for agriculture and other economic activities in rural areas.
2. It is an apex refinancing agency for the institutions providing investment and production credit for promoting the various developmental activities in rural areas
3. It takes measures towards institution building for improving absorptive capacity of the credit delivery system, including monitoring, formulation of rehabilitation schemes, restructuring of credit institutions, training of personnel, etc.
4. It co-ordinates the rural financing activities of all the institutions engaged in developmental work at the field level and maintains liaison with Government of India, State Governments, **Reserve Bank of India** and other national level institutions concerned with policy formulation.

5. It prepares, on annual basis, rural credit plans for all districts in the country; these plans form the base for annual credit plans of all rural financial institutions
6. It undertakes monitoring and evaluation of projects refinanced by it.
7. It promotes research in the fields of rural banking, agriculture and rural development
8. For maintaining 'Expert Staff', the bank provide continuous exposure to its officers and staff for up scaling their knowledge and skills in core areas.
9. In pursuance of the Bank's mandate as stated in the Act, the Bank provides training facilities for the RFIs and agencies involved in rural development through BIRD and the two RTCs.
10. As NABARD primarily functions through other agencies, the needs of the client institutions largely determine the knowledge and skill requirements of NABARD officers.
11. NABARD endeavours to blend the experiences of client bank training with the training for NABARD officers so as to make training meaningful and relevant to their roles. Efforts are also made to blend the study findings with the outcome from training to periodically measure the overall impact of the investments made in the training efforts.

Exercise No. 8

Study of Financial Criteria for appraisal of the project

Financial criteria used for appraisal of the project are as follows:

1. NPV(Net Present Value)/worth: Net present value or worth of an investment is the discounted value of all cash inflows net of all cash outflows of the project during life period.

$$\text{NPV} = \sum_{t=1}^I \frac{R_t - C_t}{(1+r)^t} = \sum V_i (1+r)^{-n} - I$$

Where,

$R_t - C_t = V_i =$ net cash flow

$C_t =$ Cost in "t" period

$r =$ Discounting rate

$t =$ Project plan

Decision criteria = $\text{NPV} \geq 1$

If $\text{NPV} = 0$ or +ve, The project can be considered to be feasible

1. The +ve NPV implies that investors may be able to repay the loan.
2. Some benefits will be equal to NPV.

2. BCR(Benefit cost ratio): To analyze the feasibility, the net present worth of cost is compared with benefits. BC ratio of an investment is the ratio of the discounted value of all cash inflows to the discounted values of all cash outflows during the life of the project.

$$\text{BCR} = \frac{\sum_{t=1}^T \frac{R}{(1+i)^t} = \text{Discounted sum of benefits}}{\sum_{t=1}^T \frac{C}{(1+i)^t} = \text{Discounted sum of cost}}$$

$T =$ Total life period

Decision criteria = $\text{BCR} \geq 1$

$\text{BCR} = 1; \text{NPV} = 0$

$\text{BCR} < 1; \text{NPV} = -\text{ve}$

$\text{BCR} > 1; \text{NPV} = +\text{ve}$

3. Pay back period: Pay back period is the time taken by the project to recover its initial investments. It is estimated by adding the net cash flows in the project until the cumulative net cash flows equal to initial investment.

$$\sum_{t=0}^T C_t < \sum_{t=0}^T R_t = \text{Initial investment/Investment for repayment}$$

Select the project which has the least PBP. PBP depends upon the capacity utilization of the project. On the basis of the categorization of PBP of a project is worth considering if and only if its Pay back period is not greater than investors desired maximum PBP.

Decision Criteria= Least PBP.

4. IRR (Internal rate of return): IRR is that discounted rate at which NPV is zero.

$$\text{IRR} = \sum (R_t - C_t) / (1+i)^t = 0$$

It is that rate of returns where the net benefits exactly comes with the present value of the net cost. i.e. PWB = PWC(Present worth benefits = Present worth cost). IRR should be greater than market rate of interest for investment. IRR indicates the marginal rate of capital investment. Independently choose the discounted rate between benefits and costs. Set the NPV at zero and discounted rate is identified. An arbitrary discount rate is used to find NPV.

If result is + ve, a higher rate is used.

If result is – ve , a lower rate is used.

$$\text{IRR} = \frac{\text{lower discount rate} + \text{Difference between NPV at lower discount rate}}{\text{Absolute difference between the NPV at two discount rate}}$$

Decision Criteria = IRR > Ruling interest rate

5. Profitability Index(PI): NPV of the net cash flows of the project are related to the initial capital required for the project through PI

It is the ratio of the present value of the cash flows to the initial capital expenditure.(Co)

$$\text{PI} = \frac{\text{NPV}}{\text{Co}} = \frac{\sum V_i(1+r)^{-n} - I}{I}$$

Where,

V_i = Net cash flow in i^{th} period

r = Discount rate

n = Time period

I = Initial time period

Exercise No. 9

APPRAISAL OF IRRIGATION PROJECT

Need for Project analysis:

The project analysis is needed to estimate, compare and rank the project net benefits among different alternatives with budget constraints. The economic and financial appraisals (ex-anti evaluation) are considered to be the most important tools for helping decision maker to choose or select the project.

Project:

"A project is a group of activities which can be planned, financed (funded), implemented, and analyzed as a unit".

The project in general includes the following factors

1. **Out flows:** Also known as; inputs, resources, costs or investments
2. **Inflows:** Also known as: output, production, benefits or revenues.
3. **Life span of the project:** The time or the life of the project. It is a specific activity (ies) with a specific starting point and specific ending point intended to accomplish a specific objective(s).
4. **A space:** A geographical location or a place with a boundary forming the project space
5. **The management:** The administrative structure, the individuals (coop.,corp., entities) and the participants.

It is better to keep the project close to the minimum size that is economically, technically, and administratively feasible

Example of the agricultural project:

I- Building a multiple objectives DAM :

- 1- Saving water
- 2- Generating electricity
- 3- Flood control
- 4- Navigation Control
- 5- Recreation
- 6- Fish production

Here, each case need to be handled separately

i.e., 2- Generating electricity:

- A. Generating St. ,
- B. Transporting St, .
- C. Distribution St.

Handle each stage as a separate project

The Project Cycle:

1. Project identification (pre-feasibility study):

Any project starts with an idea, then we begin to identify what is the relationship between this idea and the sector plan, then with the national plan as a whole. We also identify the opportunity cost of the alternative investments

2. Project Preparation or Formulation (feasibility studies):

This stage includes the different feasibility studies such as:

- 1- Technical feasibility
- 2- Commercial feasibility (marketing study)
- 3- Financial feasibility
- 4- Economic feasibility, and etc.

This stage ends with a project report.

3. Project appraisal (Ex-ante evaluation)

It includes economic, financial, and social evaluation for the project before its implementation to have enough understanding whether the project is feasible or not.

4. Project Implementation:

This stage includes observing the project scheduling, supervising, and control the different stages. Also to record what has happened in each stage of the project implementation (project reporting, or sometime known as follow up reports).

5. Project Evaluation (Ex-post evaluation):

It includes the financial, economic, and social evaluation after the project is implemented. The difference between Stages 3 and 5 (even the used measures are the same) is that: in stage 3 (the Appraisal stage) is estimated but stage 4 is what actually happened (The Evaluation Stage)

A project or set of projects can be accessed and appraised by following techniques:

- A. Non Discounted Technique:
- B. Discounted Techniques:

Common Steps in accessing and appraising the project or set of projects are as follows:

- Identify the project costs and benefits
- Quantify the project costs and benefits
- Conduct a cost-benefit analysis

- Assess the economic and financial feasibility of the project by estimating the various profitability indicators of the project
- Conduct sensitivity analysis scenarios, whenever needed.
- Accept or reject a project or a set of project according to a set of choice criteria

Use of non discounted and discounted techniques:

A. Non Discounted Technique: Non discounted techniques are used when the use of discount or interest rate is not appropriate. i.e., Soviet Union: Under Marxist doctrine, all value of production is created by labour and it would be improper to pay a return to capital with interest rate.

The technique includes the following concepts:

1. Cutoff period
2. Pay back period
3. Simple rate of return
4. Net average rate of return (NARR)

Each has its advantages and disadvantages, however they are all share one common thing, they did not consider “**The TIME VALUE OF MONEY**”

B. Discounted Techniques: The Discount Rate is the rate of interest society should charge itself for the opportunity cost of time. An appropriate discount rate is that rate which represents the rate of return an alternative investment of equal degrees of risk.

The technique includes the following concepts:

1. Net Present Value or Worth (NPV\NPW)
2. Benefit-Cost Ratio (BCR)
3. Internal Rate of Return (IRR)

Components of the discounted techniques of Cost- Benefit Analysis:

1. Costs
2. Benefits
3. Interest Rate (discount rate)
4. Life span of the project (time)

1. Net Present Value (NPV): It reduces a steam of costs and benefits to a single number in which costs or benefits projected to occur in the future are discounted.

The principle problem associated with using the NPV method is the determination of the appropriate discount rate. The decision criterion: the higher the NPV the better is the project. NPV is so far considered as superior to all other methods

It is calculated using the following equation

$$NPV = \sum_{t=0}^I \frac{R_t - C_t}{(1+r)^t} = \sum V_i (1+r)^{-n} - I$$

Where, $R_t - C_t = V_i$ = net cash flow

C_t = Cost in “t” period

r = Discounting rate

t = Project plan period

Or

$NPV = \Sigma$ discounted benefits – Σ discounted costs

Project with highest NPV is best. $NPV \geq 0$ is accepted

2. Benefit-Cost Ratio (BCR): BCR is normally defined in terms of discounted values.

The BCR however has a major flaw when being used to compare two or more projects.

the BCR gives the discounted benefit per dollar of the discounted cost.

$$\sum_{t=0}^T \frac{R}{(1+i)^t} = \text{Discounted sum of benefits}$$

BCR = -----

$$\sum_{t=0}^T \frac{C}{(1+i)^t} = \text{Discounted sum of cost}$$

T = Total life period

Or

$$BCR = \frac{\sum \text{Discounted benefits}}{\sum \text{Discounted cost}}$$

Project with highest BCR is best. $BCR \geq 1$ is accepted

3. Internal Rate of Return (IRR):

The IRR of a project is defined as that rate of discounting the future that equates the initial cost and the sum of the future discounted net benefits. It is the discounted rate that makes the NPV of a project equal to zero OR its BCR = one

The decision criterion: A project with an IRR exceeding some predetermined level (Social discount rate) is deemed acceptable.

It is calculated by using the following equation

$$IRR = \sum (R_t - C_t) / (1+i)^t = 0$$

Or

$$IRR = \sum \text{discounted benefits} - \sum \text{discounted costs} = 0$$

For increasing the dimensions of projects' feasibility and appraisal, the following issues are becoming increasingly crucial factors in assessing and determining the feasibility of a project or a set of projects:

1. The environmental impact of the project
2. The interdependencies among projects
3. Fund limitations (Capital Constraint)

The environmental impacts of the project need to be assessed economically because it can change the whole situation "up side down"

Environmental Valuation of The Project:

Techniques for valuing environmental goods are as follows:

Environmental Valuation:

$$TEV = UV + NUV$$

Where; TEV: Total Economic Value

UV : Use Value

NUV: Non-Use Value

VALUATION TECHNIQUES: Some of the most applied techniques are:

1. Travel Cost Method (TCM)
2. Contingent Valuation Method (CVM)

To appraise and accept the project decision problem and project selection is very important.

In the project selection problems the decision maker has to face one of the three following situations:

- One project is to be accepted or rejected
- One of several candidate projects is to be accepted
- Several of many candidate projects are to be accepted (??!!)

The third situation brings in two important issues of whether the projects are: Independent or dependent And Whether there is an effective capital constraint.

Project Interdependence:

Meaning of project interdependence

One Definition asserts that: “A project is independent of other projects if the net present value (NPV) of that project is invariant with respect to whether or not any of the other projects are implemented and with respect to the scale of those projects”

The decision maker has to concentrate on three questions.

1. Does the implementation of one project AFFECT the outcome of another or its scale ? ?

If “**No**”: then the projects are independent

One single NPV, for each, regardless of the situation

If “**Yes**”: then the projects are dependence

Various NPV, depending on the presence and location of the other projects

2. Why to analyze the project interdependence?

If there is duplication of the project then less revenues will generated and will cause project failure

3. How to analyze the project Interdependence?

The project interdependence is analyzed on the basis of the financial\economic acceptance criteria:

1- Net Present Value (NPV):

One project, accept if $NPV \geq 0$

Many project (set of projects), Most to least NPV values to rank project, choose until budget is exhausted.

2- Benefit to Cost Ratio (BCR):

One project, accept if $BCR \geq 1$

Many project (set of projects), Most to least BCR values to rank project, choose until budget is exhausted.

To appraise the project decision tree is needed keeping in view the scarcity of funds or fund limitations, project Interdependence and feasibility, and insurance of the best use of our limited capital.

Formal Decision Tree for Accepting Projects (Independent Vs. Dependent)

Decision	State of dependence	Constraint	Criterion
Accept One Project			NPV > 0
Accept One of Several Project			Maximize NPV
Accept few of many project	Independent	Capital Constraint	Rank by BCR
		No Capital Constraint	Rank by NPV > 0
	Dependent	Capital Constraint	Find feasible sets maximize NPV given your budget constraint
		No Capital Constraint	Find possible sets maximize NPV (all projects with NPV > = zero)

Example

Assume the following hypothetical Water Reservoir Project. A water reservoir project to irrigate agricultural land that used to be in rain fed was designed. The estimated costs and benefits of the project in millions of US \$ are displayed in Table 1.

Your task is to calculate the project NPV, BCR at 10% Discounted rate. In addition, you need to determine the project IRR. What will be your advise to the decision makers? Should they build the dam? Why or why not?

(Please note that the number and the project Activities and components are simplified since the purpose of this example is to practice the mechanics of project analysis)

Table 1: The annual estimated costs and benefits for the project

YEARS	INVEST. (\$)	O&M (\$)	TOT.COST (\$)	BENEFITS(\$)
1	15.00	2.00	17.00	5.00
2	10.00	2.50	12.50	8.00
3	10.00	3.00	13.00	11.00
4	0.00	5.00	5.00	15.00
5	0.00	5.00	5.00	15.00
6	12.00	5.00	17.00	10.00
7	0.00	5.00	5.00	15.00
8	0.00	5.00	5.00	15.00
9	0.00	5.00	5.00	15.00
10	0.00	5.00	5.00	15.00
Total	47.00	42.50	89.50	124.00

All number are in millions of US \$

Table 2: The project NPV and BCR at 10% discount rate

YEARS (\$)	INVEST (\$)	O&M (\$)	TOT.COST(\$)	BENEFITS (\$)	DF (10%)	D COST (\$)	D BENFT(\$)	NPV(\$)
1	15.00	2.00	17.00	5.00	0.90909	15.45	4.55	-10.91
2	10.00	2.50	12.50	8.00	0.82645	10.33	6.61	-3.72
3	10.00	3.00	13.00	11.00	0.75131	9.77	8.26	-1.50
4	0.00	5.00	5.00	15.00	0.68301	3.42	10.25	6.83
5	0.00	5.00	5.00	15.00	0.62092	3.10	9.31	6.21
6	12.00	5.00	17.00	10.00	0.56447	9.60	5.64	-3.95
7	0.00	5.00	5.00	15.00	0.51316	2.57	7.70	5.13
8	0.00	5.00	5.00	15.00	0.46651	2.33	7.00	4.67
9	0.00	5.00	5.00	15.00	0.4241	2.12	6.36	4.24
10	0.00	5.00	5.00	15.00	0.38554	1.93	5.78	3.86
Total	47.00	42.50	89.50	124.00		60.61	71.46	10.85

BCR= 1.1790

NPV= 10.8504

2) NPV AND BCR AT 20% DISCOUNT RATE

YEARS (\$)	INVEST (\$)	O&M (\$)	TOT.COST (\$)	BENEFITS (\$)	DF (20%)	D COST (\$)	D BENFT (\$)	NPV(\$)
1	15.00	2.00	17.00	5.00	0.83333	14.17	4.17	-10.00
2	10.00	2.50	12.50	8.00	0.69444	8.68	5.56	-3.13
3	10.00	3.00	13.00	11.00	0.5787	7.52	6.37	-1.16
4	0.00	5.00	5.00	15.00	0.48222	2.41	7.23	4.82
5	0.00	5.00	5.00	15.00	0.40188	2.10	6.03	4.02
6	12.00	5.00	17.00	10.00	0.3349	5.69	3.35	-2.34
7	0.00	5.00	5.00	15.00	0.27908	1.40	4.19	2.79
8	0.00	5.00	5.00	15.00	0.23257	1.16	3.49	2.33
9	0.00	5.00	5.00	15.00	0.19381	0.97	2.91	1.94
10	0.00	5.00	5.00	15.00	0.16151	0.81	2.42	1.62
Total	47.00	42.50	89.50	124.00		44.82	45.70	0.88

BCR= 1.0197

NPV= 0.8842

Searching for the project IRR

Note: As we increase the discount rate, what happened to the Project's NPV and BCR?

3) NPV AND BCR AT 30% DISCOUNT RATE

YEARS (\$)	INVEST (\$)	O&M (\$)	TOT.COST (\$)	BENEFITS (\$)	DF (30%)	D COST (\$)	D BENFT (\$)	NPV (\$)
1	15.00	2.00	17.00	5.00	0.76923	13.08	3.85	-9.23
2	10.00	2.50	12.50	8.00	0.59172	7.40	4.73	-2.66
3	10.00	3.00	13.00	11.00	0.45517	5.92	5.01	-0.91
4	0.00	5.00	5.00	15.00	0.35013	1.75	5.25	3.50
5	0.00	5.00	5.00	15.00	0.26933	1.35	4.04	2.69
6	12.00	5.00	17.00	10.00	0.20718	3.52	2.07	-1.45
7	0.00	5.00	5.00	15.00	0.15973	0.80	2.39	1.59
8	0.00	5.00	5.00	15.00	0.12259	0.61	1.84	1.23
9	0.00	5.00	5.00	15.00	0.0943	0.47	1.41	0.94
10	0.00	5.00	5.00	15.00	0.07254	0.36	1.09	0.73
Total	47.00	42.50	89.50	124.00		35.25	31.68	-3.57

BCR= 0.8987

NPV= -3.5716

Searching for the project IRR

Note: As we increase the discount rate, what happened to the Project's NPV and BCR?

INTERNAL RATE OF RETURN (IRR)

YEARS (\$)	INVEST (\$)	O&M (\$)	TOT.COST (\$)	BENEFITS (\$)	DF (21.4%)	D COST (\$)	D BENFT (\$)	NPV (\$)
1	15.00	2.00	17.00	5.00	0.822372	14.00	4.12	-9.88
2	10.00	2.50	12.50	8.00	0.67852	8.48	5.43	-3.05
3	10.00	3.00	13.00	11.00	0.55891	7.27	6.15	-1.12
4	0.00	5.00	5.00	15.00	0.46039	2.30	6.91	4.60
5	0.00	5.00	5.00	15.00	0.37923	1.90	5.69	3.79
6	12.00	5.00	17.00	10.00	0.31238	5.31	3.12	-2.19
7	0.00	5.00	5.00	15.00	0.2573	1.29	3.86	2.57
8	0.00	5.00	5.00	15.00	0.21196	1.06	3.18	2.12
9	0.00	5.00	5.00	15.00	0.1746	0.87	2.62	1.75
10	0.00	5.00	5.00	15.00	0.14382	0.72	2.16	1.44
Total	47.00	42.50	89.50	124.00		43.20	43.23	0.03

BCR= 1.0007

NPV= 0.0306

IRR= Σ discounted benefits – Σ discounted costs

$$= 43.23 - 43.20$$

$$= 0.03 \approx 0$$

Conclusion: The above project can be accepted because at Discounting rate of 10 per cent, the NPV is ≥ 0 i.e. 10.8504 and BCR ≥ 1 i.e. 1.1790, Even the calculation of Internal rate of Returns shows that at 21.4% discount rate , IRR=0, BCR is 1.0007 i.e. BCR ≥ 1 and NPV= 0.0306 i.e NPV ≥ 0 . We can suggest to the decision maker to accept the project and they should build the dam.

Exercise No. 10

STUDY OF FINANCIAL TEST RATIO FOR EVALUATION OF AGRO-INDUSTRIES.

Financial ratio analysis – The financial ratio analysis is considered as most useful technique in evaluating the performance of the different categories of industrial units. In this study the ratio analysis technique will cover the test of solvency, liquidity, profitability and turnover for the units.

Test of solvency – The solvency ratios of the units would indicate the ability of the unit to meet its medium term and short term obligations. Two solvency ratios will be worked out. They are –

- A) Ratio of total liability to owned funds** – This ratio would reflect the total commitments, the unit owes to creditors as compared to its owned funds. Higher ratio would indicate higher dependence of the unit on the external funds. Ratio value over unity for a non-banking institution would indicate poor financial structure.

$$\text{Total liability to owned fund ratio} = \frac{\text{Total liability}}{\text{Owned funds}}$$

- B) Fixed assets to owned funds ratio** – This ratio would indicate the extent of owned funds invested in fixed assets. Here the ratio of 1:1 is considered to be in the acceptable limits. The steep increase in this ratio is no doubt a sign of progress, which results in rapid increase in production and sales.

$$\text{Fixed assets to owned fund ratio} = \frac{\text{Fixed assets}}{\text{Owned funds}}$$

Test of Liquidity – The liquidity ratios will be used to measure the ability of the unit to meet immediate maturing obligations. Three types of ratios will be calculated in the study. They are –

- a) Ratio of liquid assets to total assets** – This ratio shows the liquidity preference of the unit. The minimum norm for this ratio is 0.5. Higher the ratio, higher will be the liquidity preference of the unit.

$$\text{Ratio of liquid assets to total assets} = \frac{\text{Liquid assets}}{\text{Total assets}}$$

- b) Ratio of current assets to current liabilities** – This ratio is a barometer of the short term solvency of the working capital of the unit. If this ratio happened to be greater than one, it

should be presumed that the unit had sufficient current assets to meet its current obligations. A current ratio of around two is considered to be at satisfactory level.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

- c) **Acid test ratio** – This ratio indicates the dependency of the unit on the inventory. The ratio of 1:1 could be considered as optimum and that less than 0.5 as most unsatisfactory situation

$$\text{Acid test ratio} = \frac{\text{Current assets} - \text{Inventories}}{\text{Current liabilities}}$$

Test of Profitability – The profitability ratio is a meaningful measurement used to diagnose the financial status of units and overall efficiency. Following ratios will be adopted to study profitability.

Net profit to total assets ratio – This ratio indicates the rate of profit earned on the total assets employed. An increase in this ratio over years shows improvement in the overall efficiency of the unit. It was computed as under;

$$\text{Net profit to total assets} = \frac{\text{Net profits}}{\text{Total assets}}$$

- a) **Net profit to owned funds ratio** – This ratio indicates the profits earned by unit on the owned funds invested in the business. Higher ratio indicates higher percentage of income generation on the equity.

$$\text{Net profit to owned funds ratio} = \frac{\text{Net profit}}{\text{Owned funds}}$$

- b) **Net profit to fixed assets ratio** – This ratio will be computed by dividing net profit by fixed assets of the firm. A higher ratio indicates a better utilization of fixed assets by the units and that they are in a better position to meet the long term obligation.

$$\text{Net profit to fixed assets ratio} = \frac{\text{Net profit}}{\text{Fixed assets}}$$

Test of Turnover – Turnover ratio is also known as activity ratio. It reflects the efficiency of a processing unit in managing its resources. These ratios express the relationship between the level of sales and investment in various assets.

- a) **Rate of turnover ratio** – Rate of turnover ratio measures the effectiveness of the unit in its sales efforts. Higher the turnover ratio, better would be the performance of the unit. This ratio is computed as below –

$$\text{Rate of turnover ratio} = \frac{\text{Annual Sales}}{\text{Average Inventory}}$$

Where

$$\text{Average inventory} = \frac{\text{Opening Stock} + \text{Closing stock}}{2}$$

- b) Working capital turnover ratio** – The working capital turnover ratio will be computed by dividing total sales by current assets. It helps in measuring the efficiency of the employment of working capital. The higher the turnover, greater would be the efficiency and larger the rate of profit.

$$\text{Working capital turnover ratio} = \frac{\text{Total sales}}{\text{Current assets}}$$

- c) Fixed assets turnover ratio** – Fixed assets turnover ratio will be used to test the efficiency in utilizing the fixed assets. Higher the fixed assets turnover ratio, higher would be the efficiency of the unit in utilization of fixed assets to generate sales.

$$\text{Fixed assets turnover ratio} = \frac{\text{Annual sales}}{\text{Fixed assets}}$$

- d) Total assets turnover ratio** – This ratio indicates the efficiency in utilizing the total assets of a business firm. A higher ratio would indicate increased efficiency of the processing units utilisation of assets to improve the sales. This ratio will be computed as;

$$\text{Total assets turnover ratio} = \frac{\text{Annual sales}}{\text{Total assets}}$$

Exercise No. 11

STUDY OF METHODS OF PROJECT EVALUATION.

The Programme Evaluation Organisation of the Planning Commission has prescribed four fundamental and pertinent questions in order to arrive at the aims of evaluation of any programme, project or an activity viz., 1. What to evaluate; 2. When to evaluate; 3. How to evaluate; and 4. Who is to take up the work of evaluation.

Thus, if somebody intends to judge the progress of any programme/project and its impact on the development process, it is inevitably necessary that evaluation must cover answers to all the above four questions in minutest details. **Suchman** – a leading propagationist in the field of evaluation has described the aims and objectives of evaluation in terms of : (a) programme effort, (b) performance, (c) adequacy, (d) efficiency.

Types of Evaluation

Evaluation can be categorised under two broad headings –

- i) In terms of the programme/project effects on the recipients, and
- ii) The objectives/goals of a programme/project.

The former group can be divided in the following sub-headings –

1. **Early Evaluation (Formative)** – Detecting problems and suggesting modifications during the period of programme/project prior to its actual implementation, i.e., state of preparedness.
2. **On-going Evaluation (Interim)** – Detecting effects after it has stabilized over a given period with the twin objectives of –
 - (a) Mid-course corrections of programme/project on a large-scale; and
 - (b) Interim analysis of programme/project effects, but not necessarily resulting in any changes-concurrent, for example Programme Evaluation Organisation's Reports on the Accessibility of the Poor to the Rural Water Supply, and Food for Work Programme.
3. **Summary Evaluation (Summative)** – Late stage evaluation (post mortem) of overall effectiveness of interrelation and of social and economic feasibility of replication for the purposes of future programme/project planning e.g. Programme Evaluation Organisation's report on the High Yielding Varieties Programme.

Similarly, keeping in view the purpose and type of evaluation, the objectives/goals of a programme/project can be categorised as : 1. The Immediate Objectives; 2. The Intermediate Objectives, and 3. The Ultimate objectives, Normally, the three types of

evaluation studies confine themselves mainly to the measurement of the 'Immediate' and the 'Intermediate' objectives of a programme/ project. The ultimate objective is generally not taken up for evaluation in the true sense of the term because it calls for qualitative information on the behavioural aspects through indepth probing which is time-consuming, costly, and restricts generalizations. The quicker and timely 'feedback' requirement of an evaluation system (to the formulation and implementation processes of plans, programmes and projects) generally comes in the way to go in for such study.

Advantages

- It would aid in Project Management and control throughout the duration of the Project.
- It would help to ensure compliance with user community objectives before implementation.
- Process of systems design would be evaluated at all stages to aid in improving effectiveness of the Design Terms.
- Cost savings would be realized by modifying systems through evaluation before, rather than after implementation.
- Evaluation would help to ensure that proper design procedures and policies were being carried out.

Methods

Over the years, a variety of methodologies have been evolved by academicians, practitioners and professionals for evaluating any programme/ project. Some of the commonly used practices are discussed below :

- 1. First Hand Information** – One of the simplest and easiest methods of evaluation by the Project Manager or the Chief Executive is on the basis of getting first hand information about the progress, performance, problem areas, etc., of a programme/ project from a host of staff and line officers, field personnel, other specialist, etc., who directly come into contact with him for one purpose or the other. Direct observation about the performance and pitfalls by the Project Manager further facilitates the chances of an effective evaluation. This method, however, cannot be applied as a means of evaluation especially when the programme/ project is a complex one, is of huge size, and is not localised geographically.
- 2. Formal/informal Periodic Reports** – Evaluation is also carried out by medium of formal and informal reports. While the informal reports sometimes give an ample opportunity about the facts of the case as such, and is considered as a valuable instrument for evaluation, it is not based on any authenticity. It also evades responsibility and accountability for supplying a fictitious, distorted, biased, or maligned information. As

such, written reports at periodical intervals are highly relied upon for the purposes of evaluation. The reports are solicited with a great deal of help through designed sets of schedules and questionnaires. The written reports are also subject to a number of inherent limitations, e.g., the reports neither reflect anything on the qualitative aspects nor indicate any trends about the future or current problem areas. Sometimes, the reports are so huge, complex and are submitted at such frequent intervals that it becomes horrible to understand and thus, lose its real purposes.

3. **Graphic Presentations** – Graphic presentations through display of charts, graphs, pictures, illustrations, etc., in the rooms of Chief Executive and Project Manager, is yet another instrument for a close evaluation. Well designed presentations which take lesser space, are more visible, understandable and facilitate comparisons, have to be frequently changed depicting the performance and deviations, if any, about the expected results. The only flaw with this system is that it is a costly and a time-consuming process.
4. **Standing Evaluation Review Committees** – Some of the organizations have set-up Standing Committees, consisting of a host of experts and specialists who meet regularly at frequent intervals. During the course of the meeting, the problems which require urgent attention are identified, alternative opportunities are explored, and remedial measures suggested to the Project Manager to ensure that there is no laxity in achieving the desired results.
5. **Project Profiles** – Preparation of the Project Profiles by the investigating teams on the basis of standardized guidelines and models developed for the purpose, is also another method of evaluation. In this case, intensive studies are made right from the inception of an individual programme/project to its completion. The Plan Evaluation Organization of the Planning Commission has made an ample use of this technique in the finalization of the Report on Integrated Child Development Services.
6. **Control Centre** – Another effort towards effective and close evaluation has been made by setting-up control centers. Such centers are set-up for a single large project(s), or in some cases the total organizational operations with the following objectives in view :
 1. Provides a single location for concentrated display of relevant information about the project (or projects).
 2. Serves as a physical representation of the project, reminding all concerned of its existence, status, state of health, and importance.

Exercise No. 12

CASE STUDY OF AGROBASED INDUSTRIES

Introduction

The case-study method may be new to you. Experience has shown that case studies bring interesting, real-world situations into the classroom study of agribusiness marketing, finance and management. As you discuss cases with your fellow students, you will learn that decision marketing is often a confrontational activity involving people with different points of view. Most important, you will learn how to work toward consensus while tolerating legitimate differences of opinion. Decision marketing is what managers directly influence revenues, costs and profits of an agribusiness firm. If you are to be successful in an agribusiness career, you must learn to be a good decision maker. You must develop the ability to apply classroom training in business and economics to agribusiness problem solving so that you can learn how to (1) make decision making easier, (2) improve the analytical quality of decisions, (3) reduce the time required to make decision and (4) increase the frequency of correct decision. After completing a few case studies, you should find them an interesting and rewarding way to learn. You will soon discover, however, that case studies require an approach that is different from normal homework assignment. Each case can have more than one right answer depending on how the problem is defined and which assumptions are made. Students commonly spend several hours preparing the solution for a case assigned for classroom discussion. The time you spend working on case studies will be well spent because it will prepare you to confidently take on a position in a agribusiness in which decision making challenges face you each day. Success in your career will be real reward for the work you do in preparing case studies.

Attacking the Case

Your first reaction upon reading a case will probably be to feel overwhelmed by all the information. Upon closer reading, you may feel that the case is missing some information that is vital to your decision. Don't despair. Case writers do this on purpose to make the cases represent as closely as possible the typical situations faced by agribusiness managers. In this age of computers, managers often have to sift through an excessive amount of information to glean the facts needed to make a decision. In other situations, there is too little information and too little time or money to collect all the information desired. One definition of management is "the art of using scanty information to make terribly important,

semi-permanent decision under time pressure.” One reason for using the case-study method is for you to learn how to function effectively in that type of decision making environment.

When assigned a case that does not contain all the information you need, you can do two things: First, seek additional information. Library research or a few telephone calls may provide the necessary facts. Second, you can make assumption when key facts or data are not available. Your assumption should be reasonable and consistent with the situation because the “correctness” of your solution may depend upon the assumptions you make. This is one reason that a case can have more than one right solution. In fact, your teacher may be more interested in the analysis and process you used to arrive at the decision than in its absolute correctness.

In some cases, the case writer(s) have provided questions to guide your analysis in other cases it is up to you the case analyst to decide which questions are relevant in defining the problem. This is too by design. In an actual agribusiness situation you will have to decide which question to ask, and certainly no one will give you a list of multiple choice answers. This is why it is suggested that you should not limit your analysis to the question at the end of a case.

The seven step of problem analysis

Using an organized seven stem approach in analyzing a case will make the entire process easier and can increase your learning benefits.

1. **Read the case thoroughly.** To understand fully what is happening in a case, it is necessary to read the case carefully and thoroughly. You may want to read the case rather quickly the first time to get an overview of the industry, the company, the people, and the situation. Read the case again more slowly, making notes as you go.
2. **Define the central issue.** Many cases will involve several issues of problems. Identify the most important problems and separate them from the more trivial issues. After identifying what appears to be a major underlying issue, examine related problems in the functional area (for example, marketing, finance, personnel, and so on). Functional area problems may help you identify deep-rooted problems that are the responsibility of top management.
3. **Define the firm’s goals.** Inconsistencies between a firm’s goals and its performance may further highlight the problems discovered in step 2. At the very least, identifying the firm’s goals will provide a guide for the remaining analysis.
4. **Identify the constraints to the problems.** The constraints may limit the solutions available to the firm. Typical constraints may include limited finances, lack of

additional production capacity, personnel limitations, strong competitors, relationship with suppliers and customers, and so on. Constraints have to be considered when suggesting a solution.

5. **Identify all the relevant alternatives.** The list should have all the relevant alternatives that could solve the problems that were identified in step 2. Use your creativity in coming up with alternative solutions. Even when solutions are suggested in the case, you may be able to suggest better solutions.
6. **Select the best alternative.** Evaluate each alternative in light of the available information. If you have carefully taken the preceding five steps, a good solution to the case should be apparent. Resist the temptation to jump to this step early in the case analysis. You will probably miss important facts, misunderstand the problem, or skip what may be the best alternative solution. You will also need to explain the logic you used to choose one alternative and reject the others.
7. **Develop an implementation plan.** The final step in the analysis is to develop a plan for effective implementation of your decision. Lack of implementation plan even for a very good decision can lead to disaster for a firm and for you. Don't overlook this step. Your teacher will surely ask you or someone in the class to explain how to implement the decision.

The Report

The course instructor may require a written or an oral report describing your solution to the case. The high quality of your analysis or the brilliance of your insights will do you little good if your solution is not expressed clearly. The teacher is more likely to accept your solution even if he or she does not agree with it, if you are able to identify the issues, explain the analysis and logic that led you to choose a particular alternative, and lay out a good plan for implementing the decision.

Written Reports

You probably will be asked to write reports for at least some cases. The following guidelines will help you write an effective case analysis. First, in business communications a short report is usually considered better than a long report. This does not mean that in your report you can skip key points, but rather that state relevant points clearly and concisely. Do not include trivial matters.

Second the report should be well written. It should be typed and not contain spelling or grammatical errors. The reports you hand in for class should be equivalent in quality to a report you would write for your boss, a senior manager of an agribusiness company. In the

early years of your career, particularly in a large firm, you are likely to become known for the quality of your written reports.

A well written report would contain the following elements:

1. *Executive summary.* This is a concisely written statement, less than one page, placed at the front of the report. It briefly summarizes the major points of the case and your solution. It should describe the major issue, the proposed solution, and the logic supporting the solution.
2. *Problem statement.* Present the central issue or major problems in the case here. Do not rehash the facts of the case assume that anyone reading the reports is familiar with the case.
3. *Alternatives.* Discuss all relevant alternatives. Briefly present the major argument for the against each alternative. Be sure to state your assumption and the impact of constraints on each alternative.
4. *Conclusion.* Present the analysis and the logic that led you to select a particular solution. Also discuss the reasons you rejected the other alternatives.
5. *Implementation.* Outline a plan of action that will lead to effective implementation of the decision so that the reader can see not only why you choose a particular alternative but how it will work.

Oral Reports

In some instances the instructor may specifically require an oral report on a case. One student or a team of students will be assigned an oral report in advance. In many classroom situations each students must be prepared to discuss any aspect of a case if called upon or to comment on ideas presented by other students. It is not uncommon for a large portion of the course grade to be based on the frequency and quality of a student's oral participation in classroom discussion. Preparation of an oral case report should include the following.

1. *Description of the case situation.* Present brief overview of the situation in the case. Sometimes a teacher will ask a student to start off the classroom discussion with the overview.
2. *Problem statement.* Describe the major issues or problems in the case.
3. *Analysis of the key alternatives.* Present the result of your analysis of relevant alternatives in a concise manner. Depending on the type of analysis, this is sometimes called "running the numbers."

4. *Conclusion.* Briefly describe the logic that led you to choose the alternative. Summarize why the other alternatives were not chosen.

5. *Implementation.* Present your implementation plan

Sometimes the teacher will assign a full case presentation. In that situation you go through the presentation point. In a class discussion setting, however, even though you must be prepared, you will almost never make a full case presentation. You will be asked to present pieces of your presentation. For example, you may be called upon or volunteer to present your conclusion. You are likely to be interrupted and count on being asked to defend your statements.

Conclusions

The analysis of the case studies may be among the most challenging assignments given to a student. Cases are not just “busy work” given to fill up a student's time. Approached properly, case analysis can be extremely beneficial in preparing you for a career in agribusiness management by given you a chance to develop decision making skills in the classroom so that you will be better prepared to meet the challenges of your after graduation job.

By preparing solutions to class studies, you will be exposed to a variety of agribusiness management roles and business situations. Your decision making skills will be enhanced as sift through large volumes of information to identify problems, determine corporate goals, define relevant alternatives and develop plans to implement decisions. You will prove your ability to apply analytical tools in true to life agribusiness situations. By preparing reports, you will learn how to express yourself succinctly, both orally and in writing. You will also develop the ability to defend the logic of your analysis and conclusions. These are all valuable skills for a future agribusiness manager and will help you go a long way in a rewarding career.

Exercise No. 13

VISIT TO FINANCIAL INSTITUTIONS

Collect the information with following points at the time of visit of financial institution.

1. Name of Financial Institution:
2. Year of Establishment:
3. Organizational structure
4. Financial
5. No. of Branches
6. Type of Loan provided
7. No of Borrowers
8. Give the year -wise and item wise budget provisions.
9. Give the cropwise credit requirement of the financial institutors
10. Explain the role of financial institution.
11. Explain the objectivities and function of the financial institutions
12. Financial turnover of the institution.
13. Balance Sheet of the institution

Exercise No. 14**STUDY OF E-COMMERCE/ E-BUSINESS MARKETING SYSTEMS**

A new alternative system of marketing, trade, commerce or business has emerged in recent years. With the advent of computers and internet, the trading networks have become the common words in business. These are revolutionizing the business world by opening a new horizon of trade, commerce or business on a global scale. There is no universally accepted definition of e-commerce. The World Trade Organization (WTO) has defined e-business as production, distribution, marketing, sales and delivery of goods & services by electronic means. E-commerce starts with setting up of virtual shop in virtual location exhibiting the products and services one wants to sell.

The commercial transaction is divided in three stages: (a) Advertising & searching stage, (b) Ordering & payment stage, and (c) Delivery stage. Any one of or all of these stages of business may be carried out electronically.

Benefits of E-Business

The benefits of e-business are:

- (i) More affordable than traditional one.
- (ii) More business partners can be reached.
- (iii) Caters to more geographically dispersed customer base.
- (iv) Procurement cost is lower.
- (v) Purchase costs, sales and marketing costs are lower.
- (vi) Reduction in inventories.
- (vii) Better customer service.
- (viii) Lower cycle times.

Benefits of Consumers

- (i) Increased choice of vendors and products.
- (ii) Convenience of shopping at home or office.
- (iii) Greater information access on demand.
- (iv) More competitive prices and increased price comparison capabilities.
- (v) Greater customization in the delivery of services.

Benefits to Business Community

- (i) Exchange of a larger quantity of information.
- (ii) Global visibility.
- (iii) Rapid planning cycles and strategies.
- (iv) increased market share.
- (v) Avoids communication gaps
- (vi) Access to new consumer groups.
- (vii) Zero inventories.
- (viii) Better return on investment.
- (ix) Reach to more persons at a lower cost.

- (x) Relationship building is easy
- (xi) Continuous process improvement possible.
- (xii) Better decision making.
- (xiii) Human and intelligent service.

Broad Activities under E-Business

1. Business to Business (B2B)
2. Business to Consumer (B2C)
3. Business to Government (B2G)
4. Intra-organizational business activities.

Of these, business to business segment is currently the biggest one but B2C and B2G are also catching up. The growth of e-commerce is mostly due to the rapid popularity of the World Wide Web system, and rapid growth in internet users even in remote rural areas.

Challenges of E-Business

E-Business is the catalyst for fast growing economies but it faces a number of challenges. These are as follows:

1. Limited Consumer Exposure and Buying: Web users are doing more surfing than buying. Hardly 20 percent of surfers actually use web for shopping or to obtain commercial services. The main customers in E-business are businessmen rather than consumers.
2. Skewed User Demographics: The general population is not able to operate the internet. They are used mostly by technically oriented and upscale persons.
3. Chaos and Clutter: As the internet offers millions of websites and a staggering volume of information, navigating the web can be frustrating. Many sites go unnoticed and very visited site needs to be upgraded depending upon the growing population needs and ever increasing demand for internet.
4. Security : Consumers worry that unscrupulous interlopers may intercept their credit card numbers. The internet is becoming more aware of security. At present there is a continuous race between the pace of new security measures and new code breaking measures.
5. Ethical Concerns: Consumers worry about privacy and fear that the companies might make unauthorized use of their information. There are also chance of unfairness, deception and frauds.

However, the day is not far off when general population will be more knowledgeable about internet and the security measures will be tightened. It is likely that very soon e-marketing would become a significant feature of business world.

E-business or E-commerce is catching up in India. (a) The e-business communication has been going on for many decades. (b) In the last one and half decades, Electronic Spot Exchanges have extended their activities (we discuss more on this in the subsequent paragraphs). (c) In many of the regulated markets, e-auction has started in agricultural commodities. (d) State- wide online trading (e-auction included) has commenced in Karnataka. € Government of India has launched a common National Agricultural Market, which intends to e-link all agricultural produce markets on a national electronic platform for trading. (f) These apart, E-tailing (electronic retailing) has also commenced, which includes grocery & food retailing and fast-food retailing. According to some estimates (CII), the

present (2014) business size of E-tail in India is about \$ 2.3 billion, which is projected to go up to \$ 32 billion by 2020, registering a growth rate of 55 percent per annum. As regards the share of food and grocery in total E-tail, it is about 1 percent which is projected to grow to 4 percent by 2020.

NATIONAL ELECTRONIC SPOT MARKETS (ESMs)

While establishment of agricultural produce markets in 1960s was first agricultural marketing revolution, introduction of ESMs has been a part of the second revolution in agricultural marketing in India, which is bound to change the rural economic scenario in the country. The objectives of APMC markets and ESNs are parallel. In effect, ESMs are modern face of APMC markets: these are complementary to each other. While APMCs operate generally at district or regional levels EPMS operate at the national (or even international) level. There are several advantages of ESMs, which include the following:

1. Traders have common national level platform for sale and purchase.
2. Possibility to trade in large quantities.
3. No counter party risk in trade.
4. Farmers likely to get better prices.
5. Guarantee of trade & payment.
6. Reduction in cost of handling.
7. A national level transparent market in place.
8. Holding capacity to go up due to availability of loan on warehouse receipt.
9. Availability of alternative channel of marketing increases the bargaining power of sellers.
10. Professional services available for grading & standardization.

The licenses to national spot markets have been issued under APMC Acts in several states like Gujarat, Maharashtra, Karnataka, Madhya Pradesh & Rajasthan.

Under National Spot Exchange (NSE) Forum, there are thousands of computer terminals in the country, with several members and places designated as delivery spots. The membership of NSEs can be taken by individuals, partnership firms, corporate houses, hindu-undivided families, cooperatives and other format organizations. The members can trade in their account or their customers' accounts. Members can appoint sub-brokers or agents. they can also sell their sale-rights.

The Government of Forward Markets Commission have allowed national commodity exchanges to set up the spot exchanges. These spot exchanges have created n avenue for direct market linkages among farmers, processors, exporters and end users with a view to reducing the cost of intermediation and enhancing price realization of farmers. The spot exchanges encompass the entire spectrum of commodities across the country to bring home the advantages to all market participants in the agricultural and non-agricultural segments. the agricultural commodities traded on the spot exchange platform are cotton, castor seed, desi chana, guar seed, rape & mustard seed, wheat, barley, maize, yellow peas, urad, tur, soyabean, jeera, groundnut, sugar, moong, pepper and arecanut. The farmer's realization has gone up by 4 to 5 percent. Total turn over of these exchanges was 2810 crore in 2009. The spot exchanges also provide a platform for trading of warehouse receipts.

The advantages of trading in these exchanges to the farmers are (a) farmer himself can bid for sale of his produce; (b) easy loan from banks; (c) immediate payment to farmers; and (d) better prices to farmers than that from the local markets.

These are also advantageous to traders in terms of (a) national level transparent platform for buying & selling of agricultural commodities, (b) freedom from trade guarantee & counter party risk, (c) possibility of large scale purchase & sale, and (d) easy loan from banks.

An important aspect that will determine the benefits accruing to small farmers of electronic spot markets (and for that matter the new initiative of Common National market) is whether farmers are able to organize themselves in to marketing groups. As we have seen earlier, considerable headway has been in formation of farmers' cooperatives, farmer-producer organizations, commodity or area- based self- help-groups, and contract- farming groups in different parts of country. However, the efforts need to be considerably stepped-up. The Small Farmers Agribusiness Consortium (SFAC) is targeting 5 lakh farmers. The corporate sector has also become conscious of the need for a proactive action at their level. In 2013, 60 agribusiness companies formed an alliance to reach out to around 20 million farmers by creating farmers cooperatives, refurbishing warehouse facilities and revamping dealers' network for inputs and equipment's.

In this connection, a Working Group (WG) of the National Advisory Council (NAC) in January, 2013 had recommended for organizing Farmers Organizations (FOs) on a scale of 1000 to 1200 farmers in a cluster of 15 to 20 villages. Further, it was recommended that each FO should be provided with Rs 35 lakhs over a period of three years to meet the cost of capacity building, institutional development and administrative overheads. As Acharya has been suggesting for long, India needs at least 30,000 marketing FOs and that too at double the scale of financial support proposed above. If this is accepted, the total cost, spread over a three year period, would be Rs 21,500 stores. The FOs, which are already existing may also be taken in this fold. Such an initiative will be in line with the recent decision of the Government of India to rename the Union Ministry of Agriculture as Ministry of Agriculture and farmers Welfare.

Exercise No. 15**VISIT TO EXPORT MARKET OF GRAINS, FRUITS,
FLOWERS AND VEGETABLES**

Collect the information with following points at the time of visit of Export Market

Name of Export market

Area of the market:

Name of market Committee

Give the management Body of the Market

No. of Agents (License Holder and Non - licensee holders)

Name of Export Commodities

Commodity wise Arrivals and Prices

Commodity wise and yearwise export quantity of different fruits vegetable and flowers

Information regarding existing Market facilities:

Market fees/ Cost

Commission charges

Loading and Unlading Charges

Exercise No- 16

VISIT TO PROCESSING INDUSTRY, MALLS AND PRODUCERS COMPANIES

Collect the information with following points at the time of visit of Processed Industries and Malls

1. Name of the Firm/ Industry
2. Establishment date
3. Nature of organization: individual/ partnership etc.
4. Type of business: Primary/ processing
5. organization pattern and labor management:
 - give flow chart on organizational pattern
 - linkages of activities/departments
 - Pattern of organization of labour
 - Scheduling of work
 - Problems encountered in labour management
 - Mode of payment to labour
 - Wage rate
 - Needed equipments and office staff

Recruitment and training to workers
6. Procedure for registration , licensing, legal aspects
 - Registration
 - Obtaining license
 - Location peculiarity
 - Tax concession/ subsidy
 - Procedure for lay-out, electrical connection
 - Export procedures
 - Clearance from pollution board
 - Insurance and risk coverage
 - Discharge of waste
 - Excise duty and other taxes
 - Other details
7. Financial management
 - working capital
 - Balance sheet
 - Cash flow statement
 - Income statement

(Draft manual)

Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth



PRACTICAL MANUAL

AGRIBUSINESS MANAGEMENT

Course No. : ELE/ECON – 354

Credit : 3(2 + 1)

Class : T.Y.B.Sc. (Hons.) Agriculture.

Semester : V

**Department of Agricultural Economics and Statistics
College of Agriculture,
Dapoli, Dist. Ratnagiri**

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