Agribusiness Management(Elective course)
Practical Manual
Course Code: EC-AGP 501, Credits 3(2+1)
B.Sc. (Hons.) Agriculture


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ABOUT THE MANUAL

Manual of guidelines for practical classes of the subject Agribusiness Management has been prepared aiming at imparting knowledge to the students regarding the prevailing conditions and parameters of the market of agribusiness in the country. These parameters and the excising market conditions will give required guidelines and directions of how to study the scope of agribusiness. In course of preparing the manual care has been taken so that the students can grasp the areas of applying their minds to practically study the specific issues.

In course of preparing the guidelines for study of financing institutions like banks, RRBs and NABARD the areas of finance being provided by the institutions have been highlighted in order to enable the students to practically see for themselves. Again, in course of preparing the manual on preparation of project and its appraisal and the case study as well guidelines on methodology has been practically exhibited. Because of the fact that the subject relates to study in practice emphasis has been given on the "concept" of the issues and how they work based on which the students can develop ideas of methodology to search for and to document in practical book/ khata as per the format provided in the manual unlike stereotype system of experiment, observation, inference which do not usually apply to study of agribusiness.

Suggestions are always invited for improvement.

30th May, 2021.

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PRACTICAL 1
STUDY OF AGRIINPUTS MARKETS- SEEDS, FERTILIZERS, PESTICIDES

Concept:

Input markets are the markets in which resources –labour, capital, land and organisation are used to produce products that is finished goods and also services. Agricultural input markets have various implications on agriculture as a whole and on the welfare of the farmers. Quality of inputs increase the productivity of the farm and the farmers; lower prices of inputs can reduce the cost of production and thus increase the income of the farmers. There are many policies in three major input sectors; seeds, fertilizers and pesticides. New policies have also emerged. The current challenges in the agri-input markets are lack of quality seeds and technology policies in seed sectors.

Agri-inputs markets are not static, these are undergoing numerous changes in terms of scale of operation, diversification and participation. Agri-inputs markets of seeds, fertilizers and pesticides are facing many challenges in respect of quality production, government policies to support the markets and producers' participation.

1. Seeds: During last 30 years government policy intervention has shaped up the seed sector through national seed project, - phases i and ii and seed development policies from time to time, protection of plant varieties and farmers' rights act, 2001 (ppv&fr act). Two most recent policies in seed sector are – cotton seed price control order, 2015 and seed bill 2011. The seed act, 1966 and seed bills 2011 have accounted to ensure regulation in line with present scenario. It has included major changes on registration, transgenic varieties, compensation to farmers, export import rules and penalties on spurious seeds.

Seed sector could be understood in two segments; high volume low value and high value and low volume. Public institutions are mostly in high volume low value seed segments and private companies are at high value low volume seed sector. As a result of it, in value terms, private sector accounts high for the market.

Various states like Gujarat, Maharashtra and Andhra Pradesh have enacted state legislations to control cotton price under cotton price control order, 2015.Indian seed industry accounts 4 % Global's production which is 5th position in the world.In public sector after merging of State Financial Corporation of India limited (SFCI) with national seed corporation (NSC), there is only one organization – national seed corporation (NSC), while in case of private sector, more than 500 seed companies (multi-national companies and domestic private seed companies) are in business.India being a member of WTO (world trade organization) opts for sui generis system of protection for plant varieties.

Challenges:

Major challenges in seed sector are non-availability of good quality seeds, spurious seeds in the markets, especially cotton seeds, policy dilemma over gm technology, investment in R&D, government regulatory intervention, investment in R&D. Ensuring good quality seeds and preventing spurious seeds is key priority in the sector. The seed bills, 2011 takes care of the issue of spurious seeds to some extent / compensation for farmers.

To ensure availability of good quality seeds both public and private enterprises should be promoted.

Public enterprises can also venture into high value low volume seed varieties developed by ICAR.

2. <u>Pesticides</u>: India accounts for 1.7% of the gobal pesticides use - (67000) ton of the 3.2 million tons of pesticides (active ingredients) used in the world. The highest pesticides consuming country is China followed by USA, EU, Brazil and Argentina. Among the total pesticides, the share of insecticides is 39%, fungicides are 38.7%, herbicides 18.8%, rodenticides are 3.6% (Subash *et al*, 2017). Indian market expected to grow at approximately 12% with fungicides and herbicides growth expected to be higher than insecticides (FICCI, 2015). There are two categories of producers, manufacturers and formulators. Manufacturers produce technical grades materials and about 10 manufacturers account for 80 percent of production of technical grade (FICCI, 2015). Formulators buy technical grade and use different concentration for different crops. The current pesticides industry constitutes multinational companies which are strong on R&D, while traditional Indian companies are mostly formulators. There are a total of 125 basis manufacturers which produce or sell them as brand to more than 800 formulators with around 145000 distributors catering about 130 million of farmers (FICCI 15, 2015). Only 25 percent of the total market products are patented products, 25 to 30 percent is generic and 45-50 percent is off patent products (Utley, 2014). There are large number of patents coming off patents which brings opportunity for generic pesticides products (FICCI, 2015).

The insecticide act, 1968 is the key legislation to regulate production, registration, import, sale distribution of pesticides (Subash *et al*, 2017). Pesticide's manufacturing and formulation need to be registered central institute and board and the registration committee (CIB&RC) under insecticides act, 1968. There are two recent proposed legislations-insecticides (second amendment to 2017 and pesticidesregulation bills, 2008).

Challenges and Way Forward:

There are regulatory hurdles in pesticides industry. Major concern is existence of counterfeit and spurious insecticides in the market. It is about 25% of total market by value and 30% by volume. Another important issue is poor awareness among the farmers and lack of adequate technical expertise. Apart from legislative efforts government can arrange training in collaboration with private companies for spreading proper effective awareness. Though it has been part of the act, it has been diluted. Stringent action is also required against such recalcitrant dealers.

<u>3. Fertilizers</u>: fertilizer industry is highly dependent on capital. It is subsidized by government which is equal to about 0.5% to 0.8% of GDP.There are three types of fertilizers –Urea, Phosphate, Potash Govt. has fixed the price (MRP). The difference between the production cost and MRP of urea is generally given as subsidy by govt. In case of P&K it differs depending on policy.

Marketing of fertilizers is regulated under commodities act, 1955 and fertilizers control / order ordinance. Under this act and order the territory and quantities to be marketed by different manufacturers are regulated control order and provisions authorize state governments regarding quantity of fertilizers.

Govt. is trying to prevent leakage of heavily subsidized urea to chemical industry and other uses like making of adulterated milk. About 41% of urea is getting diverted to non-agricultural purposes (ECONOMIC SURVEY, 2016).

Urea accounts about 75% of the total fertilizer's subsidy; 35 % of urea subsidy goes to the small and marginal farmers. Studies have shown that there has been significant reduction in respect of leakage of urea into non crop purposes. Govt. Has given permission to import urea to three companies –state trading corporation ltd.(STC), metals and minerals trading corporation ltd. (MMTC) and Indian potash ltd. (IPL). India is also importing approx. 20 lakh tones from Oman India Fertilizer Company through a long-term agreement.

Concept of Direct Benefits Transfer (DBT) in fertilizer's was implemented by GOI in 7 states in 2017; since march 2018 it has been implemented in another 18 states. DBT in fertilizer's provides subsidy to the companies after the farmer based biometric identification is conducted by input dealer (retailer). It is designed to provide subsidy to the farmer on urea based on physical offtake by the farmers.it would reduce diversion of urea for non-agricultural purposes.

In the present regime 100% payment is done once sale of fertilizer is biometrically authenticated by the retailer.

Challenges:

Most challenging job is to transfer the benefits to the farmers- small and marginal farmers in respect of purchase of fertilizers, handling of variation of subsidies of different grades of fertilizers and variation of components from company to company.

Challenges are also there in respect of infrastructure such as network connectivity, retail outlets, transport for farmers, transaction time, especially in peak season etc. Which need to be addressed on priority basis. NITI AYOG is evolving ways to solve the issues.Price of P& K could be rationalized to mitigate the distortion in NPK ratio.

Conclusion:

Each input (Seed, Fertilizers, Pesticides) has a characterized market structure which is unique to each one. In case of seed and fertilizers both private and public firms are handling the markets. Pesticide sector is completely handled by private sector.Existing policies are protective in seed sector, subsidy based in fertilizer and regulatory in case of pesticides. Quality and availability of the inputs is a core issue in respect of all the sectors. Recent policy reforms of GOI have considered these issues to some extent. Considering the dynamic nature of the sector the policies need to be realigned and reformed in a faster pace. There is need to strengthen policies to build partnership; public private partnership for R&D in case of seed, for quality control in case of pesticides and joint venture including foreign joint venture in case of fertilizers.

PRACTICAL: 2

STUDY OF OUTPUT MARKETS: GRAINS, FRUITS, VEGETABLES, FLOWERS

CONCEPT:

Product or output markets are the markets in which goods and services are exchanged. The utilized amount of the various inputs determines the quantity of output according to the relationship called production function—land, labour and capital.

India is considered as the fruit and vegetable basket of the world. It is the home of wide varieties of fruits and vegetables; it holds unique position among all countries. It is the second largest producer of fruits in the world after China and in respect of vegetables the same position holds good.This is because of Agro climatic condition and biodiversity, fertile soil and large cultivable areas. It is the largest producer of mangoes, bananas,papaya, sapota, chillies, ginger.

Horticultural sector covering all types of crops witnessed tremendous growth as a result of investment through national horticultural mission (NHM). Vegetables and fruits account for nearly 90% of the horticulture production in the country.Consumption of grains, fruits, vegetables, flowers is also very high in our country. Foreign currency is also garnered due to export of the products.Horticulture contributes 28% of agricultural GDP.

Except grains the products like fruits, vegetables, flowers are perishable; grains if not properly preserved are damaged due to invasion by insects and fungus etc. Proper technological interventions for production and postharvest activities and forward linkages (markets) and value additions to marketing have made the success in horticultural output. Increasing purchasing power of more working power of women have positive effect on life style and fruit consumption.

Challenges:

Marketing of horticultural crops is quite complex and risky due to their perishable nature and storage. While the market infrastructure is developed for food grains, fruit and vegetables markets are not that developed and markets are congested and unhygienic. Markets in many of the cities in some states are not covered under market legislation and continue to function under civic body as well as private owner.Studies have shown that producer share in consumers' rupees comparably lower for perishable crops.

This could be due to variety of factors as number of intermediaries, cost of market functions rendered by intermediaries, spread of locations of produce consumers. Degree of perishability, variety and quality and market imperfections, market infrastructure also influence the marketing cost-price levels.Producers' share is relatively high in the areas where infrastructure facilities for marketing are made available.

Scope and Achievement:

So far as output market is concerned vast production base offers India tremendous opportunities for export. During 2015-2016 India exported fruits and vegetables worth Rs. 8391.41 crores which comprised of fruits worth Rs. 3524.50 crores and vegetables worth Rs. 4866.91 crores. Mangoes,walnuts,grapes, bananas, pomegranates account for larger portion of fruits exported from the country, while onions, okra, bitter gourd, green chilies and potatoes contribute to the vegetables market.

The major destination for Indian fruits is Bangladesh. UAE, Malaysia, U.K., Netherland, Sri Lanka, Nepal, Saudi Arabia, Pakistan and Qatar. Though India's share in world market is 1% only there is increasing acceptance of horticulture produce from our country. This has been possible due to concurrent development in the areas of the state-of-the art cold chain infrastructure and quality assurance measures (APEDA, 2017) —agricultural and processed food products export development authority established by GOI.

Conclusion:

Studies have identified the prevailing value chain from farmer -to - pre harvest contractor -to- commission agent -to- output market. Thus, in the process narrowing the margin of the producers and manipulating the cost for the consumers. Indian farmers are typically and heavily depend on middleman particularly flower and vegetables marketing. Marketing of grain does not suffer the same fate because of being not so perishable and can be preserved properly without compromising with sale value. The efficiency of marketing of fruits and vegetables has been of significant concern.

Producers' share also often vary during peak and lean season. Damage cost, intermediaries, perishability of produces, transportation cost and high storage cost have been found to be major constraints of marketing of fruits and vegetables.Output markets are directly related to and influenced by input markets.

Character of each output market of fruit, vegetables, flower and grain is unique because of various factors of production and their variability, seasonality, demand and consumer behaviour towards the outputs. Markets of each output has to be separately identified and taken care of.

PRACTICAL 3

STUDY OF PRODUCT MARKETS, RETAIL TRADES AND VALUE-ADDED PRODUCTS

STUDY OF PRODUCT MARKETS:

CONCEPT: PRODUCT:

"Product" refers to anything offered by a firm to provide customer satisfaction, tangible or intangible. A product is a bundle of attributes (features, function, benefits and uses). Broadly speaking products fall into two categories: consumer products and business products (also called industrial products and b2b products). B2b means business to business. Consumer products are purchased by the final consumer. Consumer products are classified into four groups based on buying decision, convenience, shopping, special ity and unsought products. Agro products are basically the consumer products.

Marketing channel:

Product markets is directly linked with marketing channel. Marketing channel, simply speaking, is chain of intermediaries through whom various food/ Agro products /foodgrains / pass from producers to consumers. According to Kohls and Uhl marketing channel is an alternative route of product flows from producers to consumers.

Factors affecting marketing channels:

Marketing channels for agricultural products vary from products to products, lot to lot and time to time. Say marketing channels for fruits are different from those of foodgrain; packaging plays a crucial role in marketing of fruits. Wheats are supplied in the form of wheat and bread. Most eatables are to be cooked and packed properly before they reach the consumers. In India, however, most foodgrains are purchased by the consumers in their form and processed at consumer level.

Lots of products originating at small farms follow different routes or channels from the one originating in large farms. Small farmers generally sell their products to village traders; it may not enter the main market. But large farmers usually sell their products in the main market where it goes to the hands of wholesalers. The produce sold immediately after the harvest usually follows longer channel than the one sold in later months.

With the expansion in transport and communication network, changes in the structure of demand and the development of markets, marketing channels for farm products in India have undergone considerable changes, both in terms of length and quality. Another point is the level of development of a society or a country determines the final form in which consumers demand the product. Processors play a dominating role in such societies.

Some prevailing practical examples of some day to day used products markets as observed in the fields will clarify the situation:

Marketing of the product cereals: paddy, wheat, cereals.

Marketing channel for various cerealsare almost same in India except paddy where the rice millers come into the picture. For pulse crops dal mills come in to the picture. The following diagram gives general marketing channel for general food grains in India.

1. FARMER > CONSUMER
2. FARMER > RETAILER/ VILLAGE TRADER >CONSUMER

3. FARMER> WHOLESALER >RETAILER>CONSUMER
4. FARMER>VILLAGE TRADER >WHOLE SALER>RETAILER > CONSUMER
5. FARMER > COOPERATIVE MARKETING SOCIETY >RETAILER > CONSUMER
6.FARMER > GOVT. AGENCY (FCI ETC. >FAIR PRICE SHOP>CONSUMER
7. FARMER > WHOLESALER > MILLER > RETAILER> CONSUMER.

Marketing of oilseeds:

Marketing of oilseeds are different from those of foodgrains because of extraction of oil from oilseeds is an important function of oilseeds.

1. PRODUCER > CONSUMER WHO DIRECTLY CONSUMES OIL SEEDS / > GETS IT PROCESSED ON CUSTOM BASIS.
2. PRODUCER >VILLAGE TRADER > PROCESSOR> RETAILER > CONSUMER
3. PRODUCER>WHOLE SALER>PROCESSOR>OIL WHOLE SALER> OIL RETAILER > OIL CONSUMER
4. PRODUCER >VILLAGE TRADER >PROCESSOR>OIL CONSUMER
5. PRODUCER >GOVT. AGENCY> PROCESSOR>OIL WHOLE SALER> RETAILER > OIL CONSUMER

Marketing of fruits & vegetables:

Marketing of products like fruits and vegetables vary from commodity to commodity and from producer to producer. In rural and small towns many producers perform the function of retail sellers. Large producers directly sell their products to the whole salers or processing firms. Some of common marketing channels for vegetables and fruits are;

1. PRODUCER > CONSUMER
2. PRODUCER >PRIMARY WHOLE SALER >RETAILERS OR HAWKERS>CONSUMER
3. PRODUCER >PROCESSORS (FOR CONVERSION INTO JUICES, PRESERVES ETC.)
4. PRODUCERS > PRIMARY WHOLE SALERS >PROCESSORS
5. PRODUCERS >PRIMARY WHOLESALERS > SECONDARY WHOLE SALERS >RETAILERS OR HAWKERS > CONSUMERS.
6. PRODUCERS >LOCAL ASSEMBLERS > PRIMARY WHOLE SALERS> RETAILERS OR HAWKERS >CONSUMERS

Conclusion:

Studies on the product markets for agricultural commodities are practically based on concept of marketing channels which defines the flow of the produce from the producer (farmer) to the consumer. But as the orientation/ commercialization is increasing and the farmers and consumers are located in different parts of different states, different countries the marketing channels that are emerging go across state or even national boundaries. Study of product markets is not static it goes on changing with the change of production, demand, transportation facilities and value additions of the products with the changing pattern of liking of the consumers.

PRACTICAL 4
STUDY OF FINANCING INSTITUTIONS - COOPERATIVE BANKS

Concept:

Financing institutionsare the institutions which render supports to the lawfully established bodies / firms/ agencies by way of lending money for carrying out legally accepted viable activities for the welfare of the society. In our country among various types of financing institutions three types are generally well known such as cooperative banks, commercial banks and regional rural banks. These banks accept deposits from public under various deposit schemes against which interest is paid to the depositors and also render financial supports by way of loan, among other activities, to agribusiness activities based on viable schemes and projects within the laws of the land and overall guidance and supervision of RBI. However, each bank has its own financing / lending policy within the ambit of policy guidelines of RBI. Each bank has its own board of directors to run and supervise its own bank.

Cooperative banks are established and empowered to function by the state within the purview of state cooperative act and rules within the overall administrative guidelines and control of reserve bank of India. Each state has its own cooperative bank in the name and style, say west Bengal state cooperative bank. Functions and activities of state cooperative banks are supervised by a board constituted as per provisions of the act and guidelines of reserve bank of India. The acceptance of deposit and lending to the eligible person(s), bodies are guided by the rbi guidelines issued from time to time. Cooperative bank is authorized to accept deposits from the public under different schemes of deposits say, savings bank account, current account, fixed deposit. Bank has different types of lending schemes to cooperative credit societies, individuals for productive purposes. Cooperative banks play important role of financing farmers and the cooperative societies under various schemes and procedures. The bank plays very important role to help the small and marginal farmers in case of fund for agricultural purposes.

Important feature of lending by cooperative bank:

Important feature of lending by cooperative bankis that it primarily deals with indirect lending. Indirect lending means the bank lends to the cooperative credit societies formed and registered under state cooperative act for specific purpose. In turn the societies relend to the members of the societies formed for specific purposes mentioned in the bye laws. Important feature of cooperative societies is that the societies are to borrow from the cooperative bank and relend to the members of societies. To become a member a person is to pay membership fee and is to purchase share of the society; the share determines the borrowing limit of the member which maybe 10 times of the share purchased by the member. Say if one purchase share of Rs. 100, he can borrow Rs. 1000 from the society. The amount of lending is calculated by the bank on the basis of the share purchased by the member supported by the scheme of utilization of farmers. The limit fixed by the bank on the basis of share, scheme of utilization of fund and the repayment schedule is called credit limit for that farmer. Societies are to maintain three important registers - membership register, share register and land register. Membership register maintains names of members, share register maintains share held by each member and the land register maintains land owned by each member.

Cooperative banks also lend for business purposes but within the overall control and supervision of cooperative credit societies of which the borrower must be a member. The society takes the responsibility of determining the limit of such loan on the basis of scheme and borrowing power based on share purchased by the borrower. Cooperative bank largely relies on the society in respect of sanctioning of loan, its utilization and repayment in time. It deserves mention that such cooperative society is also administered and managed by managing committee/ board of directors who approves the credit limit for each member / society desirous of availing of loan/ credit from cooperative bank. While the bank sanctions loans and also supervises the loan sanctioned. The supervision, utilization and repayment are also the joint responsibility of the society and the bank.

For availing of loan from cooperative bank each society is to submit to the cooperative bank a statement called credit limit statement (CLS) stating therein the names of applicants, their area of cultivation based on land register, share held by each member and the amount of recommended loan approved by the board / managing committee of each society. Such CLS is signed by the applicant *i.e*., member and approved by the committee in a meeting of the committee / board. Such CLS is prepared for each season / for a year based on cropping pattern. A credit limit for the whole year is also sanctioned on the basis of schemes and such a pattern of sanction of credit limit for the whole year for different purposes to a particular farmer is called kisan credit card (KCC). Apart from availing of credit for cultivation of crops farmers can also have loan for say, pump set, sprayer, power tiller and for other agricultural implements/ activities etc. based on viable schemes and projects. Such loans are sanctioned to farmers /Agri business purposes individually under direct lending pattern with the approval of the managing committee / board of directors of the concerned cooperative credit society.

Conclusion:

Cooperative banks lend to other legally formed cooperative societies say, marketing societies, consumers' societies, Agro Service Centers, producers' societies etc. For the purpose of carrying out approved technically feasible and economically viable agricultural business activities within the norms of bank and bye laws of that particular society. In case of such individual loan for economic activities the borrower is to prepare viable scheme stating there in the source of fund, owner's capital, scheme for deployment of fund, business projection, risks, return on investment, marketability, surplus, profitability, repayment of loan in time. For all such loans the borrower is to submit projected accounts of business prepared by auditors and audited accounts for previous minimum three years on the basis of which bank sanctions the credit limit. Such limit/ loan may be for short term or medium term / long-term depending on viability, lending and repayment norm of bank and accounting procedure for which sanction letter is issued by bank stating detail of sanction. The borrowers have to follow and comply with the terms of sanction and execute documents with the bank for availing of the loan as per sanction terms.

PRACTICAL 5
STUDY OF FINANCING INSTITUTIONS - COMMERCIAL BANKS

Concept:

Commercial banks are generally of two types: public sector banks and private sector banks. All the types of banks are established under the provisions of relevant acts. The banks are supervised by reserve bank of India within the provisions of banking regulations act,1949 amended from time to time. Public sector banks are also called nationalized banks. The biggest bank in India is state bank of India in terms of both business and number of branches.

Functions of all types of public sector and private sector banks are almost of same nature – acceptance of deposits from public on different types of deposit schemes against payment of interest on deposits at varying rates under the main schemes of savings bank scheme, fixed deposit schemes , recurring deposits schemes which are selected by the customers and also current account which bears no interest because of nature of its transactions / handling (deposit and withdrawal) by the customer– for frequent transactions - such current account is generally used by the businessmen for convenience of frequent transactions.

For agribusiness purposes the commercial banks are very useful. As discussed earlier the business establishments / firms/ farms can be of any type – proprietorship/ partnership/ companies/ societies as registered with the concerned authorities. The agribusiness units can open deposit account with the bank on submission of required documents and complying with required formalities of which submission of KYC (know your customer) documents is a must and vital. Business units can also avail credit facilities (loan) from banks on submission of viable project/ proposal for any type of Agri-business. For availing of credit facilities, the business unit has to submit the following documents:

1. Application form duly filled in with KYC documents: if it is under KCC (Kisan Credit Card), scheme is to be submitted.
2. Enclosing registration certificate: proprietorship/ partnership/ society – any acceptable society / cooperative society/ company/ NGO/ SHG:
3. Project/ proposal for loan:
4. Past performance if already functioning with 3/ 4 years' financial performance (audited balance sheet)
5. If new unit, only the projected performance with economic viability report for 3 years.
6.projected financial performance for 3 years.
7. In case of security GOI guidelines have to be followed.

Commercial banks sanction loans in the form of short-term loan for cultivation of crops – under normal lending policy and also based on KCC (Kisan Credit Card) scheme where in production plan for the year based on cropping pattern project/ scheme has to be submitted. Repayment is scheduled synchronizing with harvesting of crops.

For other loans for Agri machineries / long term / project / mid / Agro-Service Center / long term loan is sanctioned stipulating repayment in years in keeping with generation of surplus out of the project. The accounting of loan by bank is maintained in the form of term loan / cash credit wherein the interest is charged as per RBI guidelines for priority sector advances (as defined by RBI such loans for agricultural purposes are categorized as priority sector advance).The rate of interest on priority sector advances is lower than that of other purposes.Viability of such project is an essential credential for quality of credit assessment and disbursal.

PRACTICAL: 6
STUDY OF FINANCING INSTITUTIONS - REGIONAL RURAL BANKS (RRBs)

Concept:

Regional rural banks (RRBs)are categorized as public sector banks /commercial banks. The banks were established under the provisions of regional rural banks act, 1975. The banks are supervised by reserve bank of India within the provisions of banking regulations act,1949 amended from time to time. RRBs are also called govt. Sponsored banks. The banks are sponsored by the lead banks of the districts of the country. Under lead bank scheme of GOI/ RBI the commercial banks having a greater number of branches and business as well in a particular district have to sponsor and supervise such banks. Share capital of the bank is contributed by GOI 50%, state govt. 15% and lead bank 35%. Sponsor banks have to render support in respect of supervision, monitoring, inspection, manpower planning, business plan and training facilities and also in respect of disciplinary procedure.

RRBs with the amendments of RRBs act can participate in almost all types of activities including clearing / remittance of fund to certain limits.

Initially RRBs were set up district-wise, subsequently RRBs have been merged state-wise or merging covering some districts together as per people convenience.

FUNCTIONS:

RRBs have been set up with the prime objective of serving the rural areas/ rural economy. RRBs are primarily to serve the rural areas both in respect of deposits and advances functions are almost of same nature – acceptance of deposits from public on different types of deposit schemes against payment of interest on deposits at varying rates under the main schemes of savings bank scheme, fixed deposit schemes , recurring deposits schemes which are selected by the customers and also current account which bears no interest because of nature of its transactions / handling (deposit and withdrawal) by the customer– for frequent transactions-such current account is generally used by the businessmen for convenience of frequent transactions. sponsor banks have been assigned the responsibilities of supervising the functioning of each bank sponsored by them. initially 4/5 officers including chairman of the bank were deputed by the sponsor banks to each RRB. now with the passage of time only chairman and general manager are deputed by the sponsor bank.

For agribusiness purposes the regional rural banks are very useful. As discussed earlier the business establishments / firms/ farms can be of any type –proprietorship/ partnership/ companies/ societies as registered with the concerned authorities. The agribusiness units can open deposit account with the bank on submission of required documents and complying with required formalities of which submission of KYC (know your customer) documents is a must and vital. Business units can also avail credit facilities (loan) from banks on submission of viable project/ proposal for any type of Agri business. For availing of creditfacilities,the business unit has to submit the following documents:

1. APPLICATION FORM DULY FILLED IN WITH KYC DOCUMENTS:

2. ENCLOSING REGISTRATION CERTIFICATE: PROPRIETORSHIP/ PARTNERSHIP/ SOCIETY – ANY ACCEPTABLE SOCIETY / COOPERATIVE SOCIETY/ COMPANY/ NGO/ SHG:

3. PROJECT/ PROPOSAL FOR LOAN:

4. PAST PERFORMANCE IF ALREADY FUNCTIONING WITH 3/ 4 YEARS' FINANCIAL PERFORMANCE (AUDITED BALANCE SHEET)

5. IF NEW UNIT, ONLY THE PROJECTED PERFORMANCE WITH ECONOMIC VIABLITY REPORT FOR 3 YEARS.

6.PROJECTED FINANCIAL PERFORMANCE FOR 3 YEARS.

7. IN CASE OF SECURITY GOI GUIDELINES HAVETO BE FOLLOWED.

RRBs like commercial banks sanction loans in the form of short-term loan for cultivation of crops and other agricultural activities – repayment synchronizing with harvesting of crops and under KCC.Limits for sanction of loans by RRBs under different schemes including small scale industries and purposes are restricted to certain limits.For other loans for Agri machineries / long term / project / mid / Agro service center / long term loan is sanctioned stipulating repayment in years in keeping with generation of surplus out of the project.

The accounting of loan by bank is maintained in the form of term loan / cash credit wherein the interest is charged as per RBI guidelines for priority sector advances (as defined by RBI such loans for agricultural purposes are categorized as priority sector advance).The rate of interest on priority sector advances is lower than that of other purposes. It is lower than commercial banks as per RBI guidelines.Viability of such projects is the criterion for quality of credit.RRBs lend credit supports to small borrowers of the sectors like agriculture, small / village industries animal husbandry, fisheries and small business etc.

PRACTICAL: 7
STUDY OF FINANCING INSTITUTIONS - AGRIBUSINESS FINANCE LTD.

CONCEPT:

Agribusiness Finance Ltd. Is a private limited company registered under companies act, 1956 (amended in 2013). It is a Non-Govt. Company and it provides fund for sustainable agricultural activities, Agri MSME (Micro, Small and Medium Enterprises) and retail loans. Such company is addendum to other companies / Govt. Institutions / banks. It supports for Sustainable Agribusiness Financing Programme (SAFP).

Apart from this there is agricultural finance corporation also registered and authorized by government of India to extend financial support for Agri business and production agriculture.

FUNCTION:

The company provides credit for agribusiness projects engaged in the production, harvest, processing and marketing of crops, poultry, livestock and fishery as well as other agricultural plantation projects. eligible borrowers are business entities duly registered with government. eligible loan purposes are for Agri related project development, expansion, acquisition of fixed assets, capital expenditure and working capital, agricultural production on loan, permanent working capital, fruits and vegetables, and high value commercial crop production. other purposes are farm integration and diversification, plantation projects, agricultural trading, manufacturing and distribution of farm machinery. equipment and suppliers, acquisition and development of land as Agri project site and other Agri related businesses.

FINANCE:

Finance is provided to agribusiness units based of techno economic feasibility and roi of the proposal / project in order to pay back the borrowed fund in time.it is very important that prior to extending credit support to the agribusiness units the financier has to study the viability of the project in keeping with prevailing market study and various economic , social and also political factors that influence the implementation at every stage of the project, marketability of the product in relation to socio economic factors , other relevant factors, existing government policy and probable policy that may come into force in near future. Procedural details like application, viability of schemes, project appraisal, disbursement, supervision and recovery remain as are practiced by banking system.

PRACTICAL 8
STUDY OF FINANCING INSTITUTION –NABARD

CONCEPT:

NABARD – established on 12 July, 1982 by act of parliament for financing agriculture and rural sector. its full form is national bank for agriculture and rural development. it was formed by government of India to provide basically financial support for leading to rural development. because it is a bank its regulatory authority was reserve bank of India. it is now fully govt of in Agri cultural activities, industrial activities and infrastructural development India owned. though it is a bank it does not deal with other banking activities of accepting deposits and other activities as RRBs, cooperative banks and commercial banks are doing. it renders support through RRBs, cooperative banks and commercial banks of the country based on various schemes and projects of agriculture, industrial and infrastructural development activities. it also supports for some scheme based urban development. it deals with indirect lending through other eligible banks like RRBs, cooperative banks and commercial banks. it does not lend directly to the entrepreneurs.

As a development bank it enjoys the skills to provide and regulate the credit and other facilities like the formulation, supervision of schemes, projects for agriculture, industrial and socio-economic development activities.NABARD does not lend directly to any individual, it sanctions loan to bank like RRBs, cooperative banks, other commercial banks against application sanctioned by banks. To avail of loan person/ society/ firm/ agribusiness entrepreneurs / SHG is to approach bank with viable schemes. Bank is to sanction loan against which bank will approach NABARD for refinance against sanction.

NABARD provides refinance to the financing institutions like cooperative banks, RRBs and other commercial banks. Let us understand the concept of the word "refinance". Simply speaking refinance means to finance again. It means to finance the banks up to certain percentage of the amount of finance (loan) disbursed by the bank to the beneficiaries.

Mechanism (example of refinance):

Say an amount of loan Rs. 1 crore has been disbursed by a bank to the beneficiary (beneficiaries) based on viable schemes. The concerned bank in order to replenish / make good of the fund *i.e.,* Rs. 1 crore lent may approach NABARD as per procedure to refinance (sanction loan to the bank) up to certain percentage around 75%, 90% of the lent amount as per NABARD guideline against very low rate of interest. Such refinanced amount availed by the bank is to be repaid by the bank in time to NABARD irrespective of whether the borrower has paid back to the financing bank. To avail refinance facility is the decision / option of the financing bank. Financing bank considering its fund base may or may not avail of the refinance facility. Reason is, if the borrower does not repay in time the bank will suffer for shortage of fund lent andinterest paid to the NABARD for the refinance availed from NABARD. This is an important area where the refinance facility works.

Schemes under NABARD:

Refinance, long term loan, RIDF (Rural Infrastructure Development Fund), LTIF (Long term Irrigation Fund), PMAY-G (Pradhan Mantri AwasYojona—Green), area development schemes -AtyodayaYojona, NRLM (National Rural Livelihood Mission), Dairy Entrepreneurship Development Schemes.

agriculture, Agri clinic and Agri business development centers schemes, new agriculture marketing infrastructure, assistance for infrastructure development,NIDA (NationalIrrigation Development Authority), warehouse infrastructure, Antodaya, National Rural Livelihood Mission,National Livestock Mission,Dairy Entrepreneurship DevelopmentScheme, RuralGodownSchemes. New schemes are developed fromtime-to-time rate of interest very low 4.5—8.35 (itvaries) for Antodaya national rural livelihood mission it is very low.

PRACTICAL: 9
PREPARATION OF PROJECT OF AGRIBUSINESS ENTREPRENEURS

CONCEPT:

Project, generally speaking, is the combination of many activities aiming at a goal to be achieved after completion of the related activities. A project is any concept and understanding carried out individually or in collaboration involving various types of activities like planning, design, productive activities, research, coordinating and relevant jobs; and review to achieve certain meaningful contribution to achieve the objective and goal. A project can be defined as an effort to create or modify a specific spell of activities. It is an effort that involves a series of activities and resources aimed at achieving a certain output considering constraints like time, quality and cost which often introduces a change. Lake (1997) says project is a temporary endeavour that is needed to produce a unique outcome / result as prespecified. Project para meters are scope, quality time, cost resources. Project may be of short life of long life. This concept is also applicable to agribusiness entrepreneurs.

STEPS FOR PROJECT PREPARATION FOR AGRIBUSINESS:

1. CONCEPTUALISATION OF PROJECT FOR AGRIBUSINESS
2. ESTABLISH GOALS AND OBJECTIVES
3. ISSUES OR PROJECT CHARTER
4. OUTLINE IMPLEMENTATION STRATEGY
5. DEVELOP PRELIMINAEY COST ESTIMATES
6. IDENTIFY POSSIBLE RISKS KEEPING IN MIND THE SEASONALITY OF AGRI OPERATION
7. DEFINE ROLES AND RESPONSIBILITES OF PERSONS INVOLVED
8. SELECT AND APPOINT THE PROJECT TEAM COMPRISING OF THE PERSONS HAVING TECHNICAL KOWLEDGE OF SPECIFIC AGRIBUSINESS AND SUPPORT STAFF.

Agribusiness project preparation consists of all works necessary to ensure that a proposed project is feasible and also appropriate and that it can be successfully implemented considering time, place, season and climate and market demand for the Agro inputs/ outputs.

Five phases of project management have to be kept in mind from practical point of view; - conception, initiation, planning, execution, performance / monitoring and project closure / continuance.

Agro project preparation process also includes

1. SCREENING FOR ACCEPTING THE BEST ONE
2. INITIAL ASSESSMENT FOR BOTH PHYSICAL AND FINANCIAL NEED AND AVAILABILITY OF FUND
3. FIELD ASSESSMENT IN RESPECT OF PHYSICAL REQUIRMENT AND AVAILABILITY, ITS TIMING AND SEASONALITY
4. REDUCTION PLAN, IF REQUIRED DEPENDING ON POSSIBILITY OF RESOURCE MOBILISATION.

5. CONTRACT DESIGN AND PROCUREMENT --PLANNING FOR DESIGNING OF THE PROJECT SYNCHRONISING WITH TIME OF AVAILMENT OF THE NECESSITIES FOR THE SPECIFIC AGRI BUSINESS.
6. CONRACT IMPLEMENTATION - TO BE EXECUTED CONFORMING TO THE TIME BECAUSE AGRI BUSINESS IN PARTICULAR IS VERY MUCH TIME BOUND.

Implementation of agri project:
The entrepreneur is to be very particular and serious to

- 1.IDENTIFY ALL STAKEHOLDERS
- 2. DEFINE ROLES AND RESPONSIBILITIES
- 3.HOLD A MEETING
- 4.DEFINE PROJECT SCOPE, BUDGET AND TIMELINE
- 5. SET AND PRIORITISE GOALS
- 6. DEFINE DELIVERABLES.
- 7. CREATE A PROJECT SCHEDULE
- 8. IDENTIFY ISSUES AND COMPLETE RISK ASSESSMENT
- 9. RESET PROJECT PLAN IF SO WARRANTS.

PRACTICAL : 10
FEASIBILITY REPORT OF AGRIBUSINESS

Typical feasibility report of agribusiness is prepared comprising of the following

1. Introduction of the agribusiness stating the name, location, place, ownership --type of business, proprietorship, partnership, company registration

2. description of the business covering objective and type of business stating the products / services and source of procurement of the products, availability and seasonality demand

3. market consideration -a preliminary evaluation of the market potentials of the product, marketing channel, market demand, sale potentials, dealer's appointment

4. Management team stating there in the staff, line, leadership and managerial authority and ability.

5. Technical specification and production plan –it is based on seasonal demand of the consumers and availability of raw materials for value added Agro products**.**

6. Marketing plan; Programme for marketing of products and services depending on the types of products and value-added products and the specific season.

7. Examination of critical risks and problems; critical risks include mostly marketing and procurement of products in time based on seasonality of agribusiness. The critical one which may hamper the business has to be specifically and carefully studied and mentioned to take guard against such risk.

8. Financial and economic plans

PRACTICAL -11
APPRAISAL/ EVALUATION TECHNIQUES OF IDENTIFYING VIABLE PROJECTS – NON-DISCOUNTING TECHNIQUES

CONCEPT:

The traditional methods or non-discounting methods include payback period and accounting rate of return. The discounted cash flow method includes the NPVmethod, profitability index method and IRR. A non-discounting method of capital budgeting does not explicitly consider the time value of money, in other words each rupee earned in the future is assumed to have the same value as each rupee that was invested many years earlier. The pay back method is one of the techniques used in capital budgeting thatdoes not consider the time value of money. Two types of budgeting will be considered operational budgeting and capital budgeting. We will consider capital budgeting.

Capital budgeting is a process used by companies for evaluating ranking potential. Capital budgeting or investments that are significant in amount.

Payback period method:

This method refers to the period in which the proposal will generate cash to recover the initial investment made, it purely emphasizes on the cash inflow, economic, life of the project and the investment made the project, with no consideration of time value of money. Through this method selection of a proposal is based on the earning capacity of the project. With simple calculation, selection or reaction of the project can be done, with results that will help gage the risk involved. However, as the method so based on thumb rule, it does not consider the importance of time value of money and so the elegant dimensions of profitability. Payback period simply computes the number of years it will take to for an investment to return CAS equal to the amount invested.

If an investment of amount of Rs. 100,000 is made and it generates cash of Rs. 50,000 for two years followed by 10,000 per year for four additional years its payback is two years (Rs.50,000 + Rs. 50000). If another investment of Rs. 100,000 generates cash of Rs. 20,000 per year for two years and then provides cash of rs.40,000 per year for six additional years its pay back is approximately 3.5 years (20000+20000+40000 + 0.5 times 40,000).

As we see in the examples payback only answers one question, how long before the cash invested is returned.

The accounting rate of return or return on investment are two more examples of methods used in capital budgeting that does not involve discounting future cash amounts.

In capital budgeting the internal rate of return is also the interest rate that results in an investment.

EXAMPLE:

	PROJECT A	PROJECT B	(Rs.)
• Cost	1,00,000	1,00,000	
• **Expected cash flow**			
• Year 1	50,000	1,00,000	
• Year 2	50,000	5,000	
• Year 3	1,10,000	5,000	
• Year 4	none	none	
• Total	2,10,000	1, 10,000	
• Payback	2 years	1 year	

- Payback period of project B is shorter than a, but project a provides higher returns. Hence project A is superior to project b.
- Payback period = Cash outlay (investment)/ Annual Cash Inflow.

PRACTICAL 12
CASE STUDY OF AGROBASED INDUSTRIES-I

Case study, as the name suggests, is a field study practically to see how an industry / unit functions be it an Agro-based industry or other units functioning with some purposes and objectives.

Case study is a practical study covering the relevant areas of activities of any type of business enterprises. Case study is undertaken to uphold, to bring to the people the success of the industry in order to attract for encouraging the spirit with which such industry / business is carried on and to attract investor to invest for betterment. The lapses and lacunae are also brought to light for rectification and remedies.

In course of undertaking case study, the following areas are taken into consideration:

1. Introduction: identification of the Agro-based industry in a particular area clearly stating its name, location, registration the details of the activities –its industrial activities if it is an industry / it is a business, purpose for which it is established and the function it is carrying out, contribution to the economy of the locality where it is established, may be rural area, urban area. All these preliminary issues have to be studied.
2. Objective: Study in relation to objective say, why this industry has been set up;
   A) to become an agri-business entrepreneur
   B) to manufacture value added products from Agro products.
   C) to earn livelihood.
   D) to cater to the need of the locality and to sell the products to urban areas and also to export.
   E) to provide employment to the local skilled and unskilled persons / labour.

3.Methodology: Two types of data in respect of the functioning of Agro-based industry are to be collected in two ways;

A) Primary data: Data are to be collected through interaction directly with the relevant authority of the unit in respect of functioning of the industry through a structured questionnaire covering different aspects like production, marketing, sale, availability of raw materials, sources of fund, sale, demand potentials, income, expenses, barriers in functioning and operation, management.

B) Secondary data: secondary data are generally the published data; such data are to be collected from published documents say from balance sheet of the industry, annual report, journal, articles, in respect of that particular industry.

4. Vision of the industry / enterprise: say some inspirational statement of idealistic emotional future and goal of the industry.

5. Mission: important assignment for the overall success to be achieved by the industry.

6. Data analysis and interpretation: Data so collected are to be analyzed systematically. Both types of data – primary and secondary are to analyzed separately. Data are to be analyzed for each area of functioning say, area of production, raw materials, demand, marketing, sale, earning, barriers, management etc.Whatever data have been collected from primary and secondary sources. These data are to be interpreted item wise. So far as financial analysis is concerned the important areas like cost of production and other relevantcosts and total ROI have to be calculated to understand thefinancial health of the industrial unit.

7.Conclusion: on the basis of results of interpretation of the performance data overall summary is written stating there in the achievement, success, failure of the unit identifying the causes of success, failure and remedial measures of failure , if any.

PRACTICAL – 13

CASE STUDY OF AGROBASED INDUSTRIES-II – VERMICOMPOST

Concept:

A marginal farmer in a village near diamond harbor having no source of income from agricultural practices thought of producing vermicompost at his own uncultivable land. He thought of utilizing the uncultivated lands near his dwelling house.

He got practical training on techniques of preparation of vermicompost at government training center.

The marginal farmer being motivated visited vermicompost pits/ sites and saw for himself the stages of preparation. Also thought of the requirement of fund.

Fund requirement: the farmer was at a loss as to how to arrange fund. He approached branch of regional rural bank for financial assistance. He prepared a modest scheme for preparation of ten pits comprising of materials like brick, small sheds, FYM, earth worms etc.

Technical issues: each pit was of 6x3x3 cft.,10 separate pits were constructed. As per his verbal declaration during first year there were 2-3 cycles of production and subsequently 5-6 cycles were produced. According to him cost of production of compost is around RS. 2. 00 per kg. And it sells at RS. 6-10 per kg. Worm sales at aboutRS 300-400 per kg. Which is very profitable.

No specific written record of investment and return / sale could be maintained by him. As per his verbal discussion it could be learnt that he has made arrangement to seal it to some farms / firms.

Observation:

The farmer, as told by him an amount of Rs. 50, 000 was availed of as loan. Out of the loan he spent towards the construction of 10 pits. He spent aroundRs. 15,000 from his own source. Initially he and his wife could work, very little amount spent towards hired labour. Now with the increase of works and business he deployed two labours.

For sale of products, he need not go outside, the products are sold in situ.

His innocently and happily disclosedthat out of the income he maintains a five-member family and cost towards education of two children.

Repayment of bank loan is also up to date. He was thinking to increase the loan with the bank for expansion of business in the left-outareas of land.

Inference:

Because no document was available with him no further study of appraisal of the project could be done. But however, it was convinced that the project was running profitably (with convincing surplus.)

PRACTICAL - 14
TREND AND GROWTH RATE OF PRICES OF AGRICULTURAL COMMODITIES

Concept:

Food and agricultural commodity prices in India are primarily determined by domestic demand and growth. To keep the price rise in check, factors like production, changes in input price, trend in market price are to be controlled. As the supply and demand for commodities change, the price of the commodity will also change. Production depends largely on nature, the price, therefore, largely depends on nature although efforts are made to keep the production at higher level. Trend of prices Agri commodities becau8se of relevant factors are not in general predictable although Govt. Efforts are there to provide minimum support prices to the farmers. It deserves mention that there is significant improvement of trend of prices of commodities, say, industrial commodities, other than agricultural commodities.

The key factors include the supply and demand of the commodity, currency movements, geopolitical situations, government policies and economic growth, mother nature, favorable weather, transportation and storage costs, the bottom line –change in govt. Policy.

The elasticity of demand for most of the agricultural products is so low that a small change in supply with demand remaining constant influences the price of that commodity.

Trend of price and growth rate of prices of Agri commodities can be said to be fluctuating because of various factors discussed.

Instead of study of individual prices of different Agrocommodities, a significant study based on wholesale price index (WPI) (2011-12, =100), WPI for foodgrains,cereals, wheat and paddy show that prices have increased by 1.40 percent, 5.05 percent, 8.39 percent and 4.78 percent in 2018 over 2017. But these ratios are variable depending on the factors stated above.

India is having largest area under rice crop for which separate data have been presented.

For cereals, meat, fish, and vegetables oil growth rates are around half the rates in previous decade as studied by FAO.

As examples, trends of growth rates of prices of main cereal crops are studied as follows:

Wheat: In Rs. / Qntl.

• Year	Cost of production	MSP
2012-13	1066	1350
2013-14	1109	1400
2014-15	1147	1450
2015-16	1163	1525
2016-17	1203	1625

Paddy : In Rs./ qntl.

Year	Cost of production	MSP
2012-13	1152	1250
2013-14	1234	1310
2014-15	1267	1360
2015-16	1324	1410
2016-17	1378	1470

It is evident from the study of two main cereal crops that the growth rate of MSP in times of cost of production of both wheat and paddy are very low;

	WHEAT	PADDY
2012-13	1.26	1.08
2013-14	1.26	1.06
2014-15	1.26	1.07
2015-16	1.31	1.06
2016-17	1.35	1.06

PRACTICAL -15
NPW TECHNIQUE AND IRR FOR SELECTION OF VIABLE PROJECT

Concept:

Basic concept is that NPW (net present worth also can be said NPV (Net Present Value) method results in a money value that a project will produce, while (IRR-- internal rate of return) generates the percentage return that the project is expected to create. Purposes -the NPW method focusses on project surplus while IRR is focused on the break-even cash flow of a project.

NPW discounts the stream of expected cash flow associated with a proposed project to their present value which presents a cash surplus or loss for the project it is used toevaluate a proposed capital expenditure.

IRR (Internal Rate of Return): IRR calculates the percentage rate of return at which the cash flows associated with a project will result in a net present value of zero. It is used to evaluate a proposed capital expenditure. IRR focusses on break even cash flow means no profit no loss where from / based on which the project surplus will be calculated.

NPV proposals are usually accepted if they have a net positive value,while IRR is often accepted if the resulting IRR has a higher value compared to the existing cut off rate. Projects with a positive net present value also shows a higher IRR greater than the base value.

Two concepts are based on the concepts of time value of money which means value of rupee today goes down the value of money tomorrow. These two techniques are known as discounted cash flow techniques where in say, value of return from project in future date is calculated considering time value of money *i.e.*, value is discounted at certain accepted rate which is known as DCF (discounting factor) available from DCF table. NPW method is a time value of money approach to evaluate return from an investment.

Accept the project when NPV >0 *i.e.*,NPV is positive and reject when NPV < o i.e.NPV isnegative.

Example of NPV method: A company whose cost of capital is 12% is considering two projects Aand B. Original investment is Rs. 1,40,000 in both the projects. Cash flow is (Rs);

Year	Project A	Project B
1	20,000	1,00,000
2	40,000	80,000
3	60,000	40,000
4	1,00,000	20,000
5	1,10,000	20,000

To find out NPVs and to comment which project is better.

COMPUTATION OF NPV VALUES:

Project A

Year	net cash flow	at 12% PV factor	In Rs. present value
1	20,000	.8929	17,858
2	40,000	.7972	31,888
3	60,000	.7118	42, 708
4.	1,00,000	.6355	63,550
5.	1,10,000	.5674	62,414
Total			2,18, 418
Less initial investment			1,40,000
NPV/NPW			78, 418

Project B:

Year	Net cash flow	at 12% PV factor	In Rs. present value
1	1,00,000	.8929	89,290
2.	80,000	.7972	63,776
3.	40,000	.7118	28,472
4.	20,000	.6355	12,710
5.	20,000	.5674	11,348
Total			2,05,596
less initial investment			1,40,000
NPV/ NPW			65, 596

Comment: Since the NPV/ NPW of the Project A is greater than the NPV of Project B , hence project A is better

Documentation of Agribusiness Practical Class

(PRACTICAL BOOK/ KHATA)

1. Topic:
2. Date of study:
3. Place of study:
4. Objective of study:
5. Methodology:Data collection
    i) Primary
    ii) Secondary
    iii) Field study of the business
6. Appraisal technique applied:
7. Observation:
8. Interpretation / Analysis of observations:
9. Recommendation (may not apply to allcases):
10. Conclusion:

Relevant photos/ pictures/ drawings are to be inserted in the left-hand white pages of the practical khatas.