

Practical Manual on Project Management

CECM - 355

B.Sc. (Hons.) Community Science

Semester - V

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CERTIFICATE

It is to certify that this is record of the practical work carried out by

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Case Study: Process Changes for a Manufacturing Company

Company XYZ has been aware that their production of widgets will not continue to satisfy clients' demands. They have seen an increase of 10% year after year for widgets over the last 5 years with no end in sight for the increase in demand. The CEO had asked an internal team to review current manufacturing processes and propose changes to the processes, along with upgrades to equipment to meet the demands for the future. When the team's proposal was submitted to the CEO, it recommended an upgrade to manufacturing equipment and a redesign of the production line with no solid metrics relating to the number of anticipated increases. Also missing (and critical to the outcome) was an analysis of what would happen in procurement, delivery, as well as warehousing, if these changes were made to the manufacturing process, and whether these departments would be able to manage those changes. After seeing such deficiencies in the team's plan, and with past experiences in such projects at another company, the CEO chose to engage a project management consulting company, ABC Projects, to outline a project plan for this initiative. ABC Projects specialised in process improvement initiatives. The CEO knew that these efforts were more likely to be successfully implemented when run as a well-managed project.

The Project Plan -

ABC Projects outlined a project plan with tentative timelines and cost ranges until discovery was completed. The project plan included the discovery and identification of needs for increased production, as well as identification of affected departments and/or processes if the increase in production were carried out.

ABC Projects knew from experience that other areas besides the manufacturing line would be affected. For example, procurement had a set budget for purchases. The expenditure necessary for materials that were not ready to be used in manufacturing would wreck havoc on cash flow and require consideration of how to store materials until they are ready to be used by manufacturing. Further, additional vendors from which to purchase the materials would need to be identified, should the current vendors be unable to meet procurement's increased demands. Alternative vendors needed to be in place before any supply issues

arose. It was evident that the processes for procurement must be very closely integrated with the manufacturing processes to maintain an ongoing flow of materials to production.

The project team developed a detailed plan for identifying the stakeholders and how they would proceed to gather the data necessary to accurately document the manufacturing processes. The plan included a detailed list of questions to ask each stakeholder to ensure that all interviewers asked the same questions and gathered the same data. The project team knew from experience that documenting processes required a thorough understanding of the business, because, when being interviewed, individuals often unintentionally skipped relevant details. Thus, experienced people were required to extract information needed for an accurate and detailed documentation of processes.

The project team also developed a plan for potential risks and strategies for managing them should they come to fruition. They wanted to be sure that once they determined the options for making changes to the manufacturing processes, that they could accommodate potential changes to other processes. They knew that changing one process would likely have a domino effect throughout the company. For example, during one of the scenario planning sessions, the project team found that if procurement was unable to fulfil the material needs of manufacturing from one vendor, without a back up vendor in place, there would potentially be a shortage of materials which would cause a delay in production or costs would increase by at least 30%. This would be unacceptable and would ultimately cause customer dissatisfaction which could lead to a loss of business to competitors.

The team also put together a change management plan; because a major component of the project would be communicating changes company-wide and ensuring the appropriate people were on-board and prepared to work with the new processes. Additionally, the project team needed the individuals involved on the production line to be willing to test new processes as well as new equipment with no interruption in meeting current client demand. Without support from these individuals, this would be an impossible task and one that had a high potential of risk associated with it.

Additionally, the project team sent out a company-wide communication so that employees knew what was happening and why, and they asked for suggestions from employees. By getting the input of the individuals who were

doing the job day in and day out, they increased the likelihood of success on the project.

The Work Breakdown Structure included several milestones to allow the company to move forward with working with new processes and upgrades to equipment without interrupting the current production schedule. At each milestone, there were several tasks for measuring progress and comparing it to expected results and baselines. Assessments were completed regularly to ensure the current plan held true to the objectives. At any point during the project, if the assessments showed deficiencies from the objectives, then an evaluation of the process design and, if necessary, a correction occurred. The Work Breakdown Structure included training time to get individuals up to speed on new equipment.

The Risk Management Plan included contingencies should current employees be incapable of learning the new equipment and performing their role in a timely fashion. Part of the contingency plan was to use employees who adapted quickly to the new equipment on the new production line and maintain the old production line with employees who learned less quickly, until they were able to get up to speed. An integrated team concept, including mentoring, was put in place to assist people in getting up to speed on new equipment.

Regular status meetings were scheduled with manufacturing, procurement, delivery and other departments to maintain lines of communication and general awareness of the project status. These meetings also served to ensure that employees were comfortable with change and were able to participate in decisions that would affect how they perform their job.

Project Results -

Prior to undertaking the project, Company XYZ was producing 250 widgets per day. At the time of the undertaking of the process improvement initiative, client demand had just reached 250, and demand had increased by 10% annually over the last five years and it appeared that the increase would continue for the foreseeable future.

The directive from the executives was to improve manufacturing processes through changes in processes as well as upgrading equipment, toward a goal of producing up to 400 widgets per day. Based on current projections, the company would experience a five year timeline before having to undertake another increase in production to satisfy growing client demand. At that point, if client demand continued to increase, the company would be in a better position to invest in

another manufacturing site in order to meet demands after the five year mark.

Additionally, in the current production line there was, on average, a 3.6% defect rate in widgets produced. One of the directives specific to this project was to attempt to reduce this defect rate by at least half within the next two years.

The following were discovered during the project:

- Capacity for procurement was limited due to cash flow and budgetary issues, as well as storage. Any new process needed to take this into consideration once production increased and would have to allow for a smooth flow between procurement and manufacturing.
- It became apparent that once the number of widgets manufactured increased, demands on warehousing and delivery would increase accordingly. A plan was put in place to change warehousing and delivery processes to reduce the strain on these functions.

The project had run slightly over the projected timeline, but did remain within budget. The increase in the timeline resulted from an underestimate of the space required to store manufactured widgets prior to delivery. This occurred to a great extent because the decrease in the defect rate was .06%, significantly exceeding the goal of 1.8%, thus causing an increase in the number of widget units to be stored. Although this was not anticipated in a contingency plan it did not cause the executives to be unhappy.

Practical exercise

Student will take a case study of any project

Visit to Project - Technology generation/ Transfer of Technology (TOT).

Technology transfer, also called transfer of technology (TOT), is the process of transferring (disseminating) technology from the places and in groups of its origination to wider distribution among more people and places. Horizontal transfer is the movement of technologies from one area to another. It occurs along various axes: among universities, from universities to businesses, from large businesses to smaller ones, from governments to businesses, across borders, both formally and informally, and both openly and surreptitiously. Often it occurs by concerted effort to share skills, knowledge, technologies, methods of manufacturing, samples of manufacturing, and facilities among governments or universities and other institutions to ensure that scientific and technological developments are accessible to a wider range of users who can then further develop and exploit the technology into new products, processes, applications, materials, or services. It is closely related to (and may arguably be considered a subset of) knowledge transfer. Horizontal transfer is the movement of technologies from one area to another. At present transfer of technology (TOT) is primarily horizontal. Vertical transfer occurs when technologies are moved from applied research centers to research and development departments.

Technology has always been important to economic well-being; the current technological context makes it critical to development. It is rapidly transforming all productive systems and facilitating international economic integration.

Practical exercise

Student will visit a technology generation/transfer project and preparereport for presentation

Visit to Project- Women entrepreneurship.

Women entrepreneur may be defined as a woman or group of women who initiate, organize, and run a business enterprise. In terms of Schumpeterian concept of innovative entrepreneurs, women who innovate, imitate or adopt a business activity are called “women entrepreneurs”.

Kamal Singh who is a woman entrepreneur from Rajasthan, has defined woman entrepreneur as “a confident, innovative and creative woman capable of achieving self-economic independence individually or in collaboration, generates employment opportunities for others through initiating, establishing and running the enterprise by keeping pace with her personal, family and social life.”

The Government of India has defined women entrepreneurs based on women participation in equity and employment of a business enterprise. Accordingly, the Government of India (GOI2006) has defined women entrepreneur as “an enterprise owned and controlled by a women having a minimum financial interest of 51 per cent of the capital and giving at least 51 per cent of the employment generated in the enterprise to women.” However, this definition is subject to criticism mainly on the condition of employing more than 50 per cent women workers in the enterprises owned and run by the women.

In nutshell, women entrepreneurs are those women who think of a business enterprise, initiate it, organize and combine the factors of production, operate the enterprise and undertake risks and handle economic uncertainty involved in running a business enterprise.

Functions of Women Entrepreneurs:

As an entrepreneur, a woman entrepreneur has also to perform all the functions involved in establishing an enterprise. These include idea generation and screening, determination of objectives, project preparation, product analysis, and determination of forms of business organization, completion of promotional formalities, raising funds, procuring men, machine and materials, and operation of business.

Frederick Harbison (1956) has enumerated the following five functions of a woman entrepreneur:

1. Exploration of the prospects of starting a new business enterprise.
2. Undertaking of risks and the handling of economic uncertainties

involved in business.

3. Introduction of innovations or imitation of innovations.

4. Coordination, administration and control.

5. Supervision and leadership.

The fact remains that, like the definition of the term 'entrepreneur', different scholars have identified different sets of functions performed by an entrepreneur whether man or women.

All these entrepreneurial functions can be classified broadly into three categories:

(I) Risk-bearing

(ii) Organisation

(iii) Innovations

Practical exercise

Student will visit a Women entrepreneurship project and prepare report for presentation

Visit to state level and international level funding agencies.

Maharashtra State Financial Corporation (MSFC) is the term lending development financial institution in Maharashtra state in India. It provides finance to small and medium scale enterprises. It was set up by Government of Maharashtra in 1 April 1962. Area under- Maharashtra, goa, Div-Daman Maharashtra State Financial Corporation There are today a large number of organizations like North Eastern Industrial and Technical Consultancy Organization (NEITCO), National Institute of Small Industry Extension Training (NISIET) [till it was merged with the Indian Institute of Entrepreneurship (IIE)] and the North Eastern Industrial Consultants Ltd (NECON) who has been actively involved in entrepreneurship development activities in the region. Their efforts have been supported by the North Eastern Council (NEC) in general and financial institutions like Industrial Development Bank of India (IDBI), Small Industries Development Bank of India (SIDBI), North Finance Corporation Limited (NEDFi) and various commercial banks in particular. The present paper in this regard is an attempt to examine the role of financial institutions small scale and tiny industries in terms of growth of entrepreneurs, enterprises and its contribution to State Domestic Products. financial institutions (DFIs) in emerging economies regularly assess platforms to support their investments in new ventures, established firms, and technology institutions (TIs). Their financing decisions are guided by national priorities such as achieving technological self-reliance. By providing attractive financing options and related support, DFIs are well placed to consciously channel finance into designated priority technology areas. To better understand DFI roles, we conducted multiple interviews with participants affiliated with DFIs, firms and TIs in India. From data gathered from these interviews and secondary data on DFIs in emerging economies, we develop a preliminary framework to suggest that DFIs, when proactive in making technology assessments, form an important link between developing a firm's absorptive capacity and building a nation's innovative capacity

International funding agencies

Dena Shakti

Dena Shakti Scheme finances women entrepreneurs by including

following activities / sectors under 1.Agriculture & allied activities 2.Small Enterprises (Direct and Indirect Finance) 3. Micro and small (manufacturing) enterprises 4. Micro and small (service) enterprises which include small road and water transport operators, small business professional and self-employed and all other service enterprises 5. Retail Trade 6. Micro Credit 7. Education 8. Housing

Schemes from Punjab National Bank

Assists women entrepreneurs for setting up of new projects in tiny /small scale sector and rehabilitation of viable sick SSI units. Existing tiny and small scale industrial units and service industries undertaking expansion, modernization technology up gradation & diversification can also be considered

CENT Kalyani

New as well as Existing Women entrepreneurs for her Micro / Small enterprise (as defined under MSME Act- 2006) .i.e engaged in manufacturing and service activity for eg. Handloom weaving Handicraft, Food-Processing, Garment making etc. etc. Professionals & Self employed women – Doctors, Chartered Accountants, and Engineers or trained in Art or Craft etc. Health /Beauty clinics/Dieticians/Fashion Designing Beauty Parlors .Small Business-Small lunch/canteen, mobile restaurant, circulating library/ tailoring /Day Creches for children ,Tailoring, Typing / STD/ Zerox booth etc.Transport Operators- Three wheeler /Four wheeler . (Retail Trade/ Education and training Institute/ Self Help Group not eligible)

Stree Shakti Package

The Stree Shakti Package is a unique scheme run by the SBI, aimed at supporting entrepreneurship among women by providing certain concessions. An enterprise should have more than 50% of its share capital owned by women to qualify for the scheme.

Oriented Mahila Vikas Yojana

Women Entrepreneurs enterprise consisting of all units managed by one or more in proprietary concerns or in which she/they individually or jointly have a share capital of not less than 51% as partners/ shareholders/ directors of a private ltd. company/members of a co-operative society.

MUDRA Loan

Micro Units Development and Refinance Agency Ltd. [MUDRA] is an NBFC supporting development of micro enterprise sector in the country. MUDRA provides refinance support to Banks / MFIs for lending to micro units

having loan requirement upto 10 lakh. MUDRA provides refinance to micro business under the Scheme of Pradhan Mantri MUDRA Yojana.

Udyogini Financial Linkages

Udyogini links entrepreneurs with social investor firms. Entrepreneurs will be evaluated and qualified independently, though the funds are routed through and guaranteed by Udyogini; Provides formal financial linkages; Micro-insurance; Subsidies for critical inputs available from government schemes and other programs

Maan Deshi Foundation Womens Bank

Provide financing to women entrepreneurs to expand their businesses; Create new and customised credit products and services specifically for rural women; Promote digital banking; Represent rural women's concerns at the national and international level for Banking and Financial Inclusion; Provide insurance schemes and products; Provide doorstep banking services

ICICI Bank: Empowering women through economic independence

ICICI Bank launched the Self Help Group – Bank Linkage Programme exclusively for underprivileged women in rural India. The programme provides unsecured loans to these women-led groups and helps them in starting or expanding their own businesses. Through this programme, the Bank aims at promoting entrepreneurship among rural women and in helping them to earn sustainable livelihoods.

Small Industries Development Bank of India (SIDBI)

The purpose is to provide refinance facilities and short term lending to industries. It is an institution for the promotion, and development of the Micro, Small and Medium Enterprise (MSME) sector and for co-ordination of the functions of the institutions engaged in similar activities.

Stand Up India

Prime Minister Narendra Modi launched the 'Stand up India' scheme on 5 April 2016 as part of the government's efforts to support entrepreneurship among women and SC & ST communities. The scheme offers bank loans of between ₹10 lakh (US\$15,000) and ₹1 crore (US\$150,000) for scheduled castes and scheduled tribes and women setting up new enterprises outside of the farm sector.

National Credit Guarantee Trustee Company Ltd (NCGTC)

National Credit Guarantee Trustee Company Ltd (NCGTC) is a private limited company incorporated under the Companies Act 1956 on March 28, 2014,

established by the Department of Financial Services, Ministry of Finance, as a wholly owned company of the Government of India, to act as a common trustee company for multiple credit guarantee funds.

Ernst and Young supporting women entrepreneurs

With help from the EY Foundation in India, programs supporting women entrepreneurs are proving highly successful at raising living standards. It's why supporting women entrepreneurs is at the heart of a holistic approach to village development in India, supported by annual investment of INR85m from the EY Foundation.

Empower: Accelerator for women in tech

Currently 5 accelerators : Zone Startups India (flagship program), Mumbai; empoWer (India's 1st tech accelerator for Women entrepreneurs); Axis Bank AccelerWomen have been among the most disadvantaged and oppressed section of our country with regard to access to and control over resources. Problems faced by them continue to be grave particularly for illiterate & semi literate women of rural and urban areas In order to alleviate their problems, ator & ThoughtFactory Co-Innovation Lab, Bangalore; Gateway 91, Mumbai; Barclays Rise Accelerator Program; Palava Accelerator.

Agri Udaan : Food & Agribusiness Accelerator 2.0

AGRI UDAAN is a Food & Agribusiness Accelerator organised by NAARM, a-IDEA and IIM-A; CIIE in partnership with Caspian Impact Investment and supported by DST. The program focuses on catalyzing scale-up stage Food & Agribusiness startups through rigorous mentoring, industry networking and Investor pitching.

Trade Related Entrepreneurship Assistance and Development (TREAD) Scheme for Women

Govt. of India launched a scheme entitled "Trade Related Entrepreneurship Assistance and Development" (TREAD) during the 9th plan period which has slightly been modified and is now put in operation. The scheme envisages economic empowerment of such women through trade related training, information and counseling extension activities related to trades, products, services etc.

Science For Equity Empowerment and Development (SEED)

Science For Equity Empowerment and Development has the broad objectives of providing opportunities to motivated scientists and field level

workers to take up action oriented and location specific projects aiming towards socio-economic upliftment of poor and disadvantaged sections of the society through appropriate science and technology interventions especially in the rural areas. Under this program efforts have been made to associate concerned National Labs or other specialist S&T institutions with each major program so as to build-in expert input, utilize national S&T infrastructure and link it up with grassroots S&T interventions/initiatives.

Support to Training and Employment Programme for Women (STEP)

The Ministry has been administering 'Support to Training and Employment Programme for Women (STEP) Scheme' since 1986-87 as a 'Central Sector Scheme'. The STEP Scheme aims to provide skills that give employability to women and to provide competencies and skill that enable women to become self-employed/entrepreneurs. The Scheme is intended to benefit women who are in the age group of 16 years and above across the country. The grant under the Scheme is given to an institution/ organizations including NGOs directly and not the States/ UTs. The assistance under STEP Scheme will be available in any sector for imparting skills related to employability and entrepreneurship, including but not limited to the Agriculture, Horticulture, Food Processing, Handlooms, Tailoring, Stitching, Embroidery, Zari etc, Handicrafts, Computer & IT enable services along with soft skills and skills for the work place such as spoken English, Gems & Jewellery, Travel & Tourism, Hospitality.

Practical exercise

Student will visit a to state level and/or international level funding agencies. and prepare report for presentation.

Visit to women and child development project

The Ministry of Women and Child Development is headed by Smt. Maneka Sanjay Gandhi, Minister; Mr. Shankar Aggarwal is the Secretary and Mr. A.B.Joshi and Ms. Preeti Sudan are Additional Secretaries of the Ministry of Women and Child Development. The activities of the Ministry are undertaken through seven bureaux. The Ministry has 6 autonomous organisations working under its aegis.

- National Institute of Public Cooperation and Child Development (NIPCCD)
- National Commission for women (NCW)
- National Commission for Protection of Child Rights (NCPCR)
- Central Adoption Resource Agency (CARA)
- Central Social Welfare Board (CSWB)
- Rashtriya Mahila Kosh (RMK)

NIPCCD and RMK are societies registered under the Societies Registration Act, 1860. CSWB is a charitable company registered under section 25 of the Indian Companies Act, 1956. These organisations are fully funded by the Govt. of India and they assist the Department in its functions including implementation of some programmes/schemes. The National Commission for Women was constituted as a national apex statutory body in 1992 for protecting and safeguarding the rights of women. The National Commission for Protection of Child Rights which is a national level apex statutory body constituted in the March 2007 for protecting and safe guarding the rights of children.

Practical exercise

Student will visit women and child development project and prepare report for presentation

Visit to Agriculture Development project

Schemes for Development of Agriculture and Farmers' Welfare

The Department of Agriculture & Cooperation was earlier implementing 51 schemes for development of agriculture and welfare of farmers in the country. These schemes have recently been restructured into 5 Centrally Sponsored Missions, 5 Central Sector Schemes and 1 State Plan Scheme as given below:

I. Centrally Sponsored Missions

1. National Food Security Mission (NFSM)
2. National Mission on Sustainable Agriculture (NMSA)
3. National Mission on Oilseeds and Oil Palm (NMOOP)
4. National Mission on Agricultural Extension and Technology (NMAET)
5. Mission of Integrated Development of Horticulture (MIDH)

II. Central Sector Schemes

6. National Crop Insurance Programme (NCIP)
7. Integrated Scheme on Agriculture Cooperation (ISAC)
8. Integrated Scheme for Agriculture Marketing (ISAM)
9. Integrated Scheme on Agriculture Census, Economics & Statistics (ISACE&S)
10. Secretariat Economic Service (SES)

III. State Plan Scheme

11. Rashtriya Krishi Vikas Yojna (RKVY)

The schemes are constantly reviewed and evaluated at National, State and Zonal levels and taken up during meetings with States and during Zonal and National Rabi/Kharif season Conferences to identify the deficiencies in the implementation of the schemes. The deficiencies so identified are taken up with the State Governments concerned for remedial measures, viz modification of the schemes and/or its guidelines, for effective implementation.

Brief Details of Missions/Schemes**I. Missions****1. National Food Security Mission (NFSM)**

NFSM aims to increase the production of rice, wheat, pulses and Coarse Cereals through area expansion and productivity enhancement; restoring soil fertility and productivity; creating employment opportunities; and enhancing

farm level economy. The basic strategy of the Mission is to promote and extend improved technologies, i.e., seed, micronutrients, soil amendments, integrated pest management, farm machinery and resource conservation technologies along with capacity building of farmers.

2. National Mission on Sustainable Agriculture (NMSA)

NMSA has been formulated to make agriculture more productive, sustainable, remunerative and climate resilient by promoting location specific integrated/Composite Farming Systems; conserve natural resources through appropriate soil and moisture conservation measures; adopt comprehensive soil health management practices; optimize utilization of water resources through efficient water management to expand coverage for achieving 'more crop per drop; develop capacity of farmers & stakeholders, in conjunction with other on-going Missions and pilot models in select blocks for improving productivity of rainfed farming by mainstreaming rainfed technologies.

3. National Mission on Oil seeds and Oil Palm (NMOOP)

The Mission aims to expand area under oilseeds, harness the potential in the area/ districts of low productivity, strengthening inputs delivery mechanism, strengthening of post harvest services besides a focus on tribal areas for tree bourn oilseeds.

4. National Mission on Agricultural Extension & Technology (NMAET)

The Mission has four components viz : Sub Mission on Agriculture Extension, (SMAE) Sub Mission on Seed and Planting Material (SMSP), (iii) Sub Mission on Agricultural Mechanization (SMAM) and (iv) Sub Mission on Plant Protection and Plant Quarantine (SMPP). The Mission aims to disseminate information and knowledge to the farming community in local language/ dialect in respect of agricultural schemes.

5. Mission of Integrated Development of Horticulture (MIDH)

The Missions aims to promote holistic growth of horticulture sector, including bamboo and coconut through area based regionally differentiated strategies, which includes research, technology promotion, extension, post harvest management, processing and marketing, in consonance with comparative advantage of each State/ region and its diverse agro-climatic features; encourage aggregation of farmers into farmer groups like FIGs/FPOs and FPCs to bring economy of scale and scope; enhance horticulture production, augment farmers, income and strengthen nutritional security and improve

productivity by way of quality germplasm, planting material and water use efficiency through Micro Irrigation.

II. Central Sector Schemes

1. National Crop Insurance Scheme (NCIP)

The Scheme aims to provide insurance coverage and financial support to the farmers in the event of crops failure as a result of natural calamities, pests and diseases as also to encourage farmers to adopt progressive farming practices, high value inputs and higher technology in agriculture.

2. Integrated Scheme on Agriculture Cooperation (ISAC)

The objective of the scheme is to provide financial assistance for the activities of cooperatives like agro-processing, marketing of food grains, input supply, development of weaker section cooperatives, computerization of co-operatives etc. as also to develop cooperative awareness amongst the people and to cater to the education and training requirements of cooperative personnel and State Government officials.

3. Integrated Scheme on Agriculture Marketing (ISAM)

The Scheme aims to to promote creation of agricultural marketing infrastructure by providing backend subsidy support to State, cooperative and private sector investments; to promote creation of scientific storage capacity and to promote pledge financing to increase farmers' income; to promote Integrated Value Chains (confined up to the stage of primary processing only) to provide vertical integration of farmers with primary processors; to use ICT as a vehicle of extension to sensitize and orient farmers to respond to new challenges in agricultural marketing; to establish a nation-wide information network system for speedy collection and dissemination of market information and data on arrivals and prices for its efficient and timely utilization by farmers and other stake holders; to support framing of grade standards and quality certification of agricultural commodities to help farmers get better and remunerative prices for their graded produce; to catalyze private investment in setting up of agribusiness projects and thereby provide assured market to producers and strengthen backward linkages of agri-business projects with producers and their groups; and to undertake and promote training, research, education, extension and consultancy in the agri marketing sector.

4. Integrated Scheme on Agriculture Census, Economics and Statistics (ISACE&S)

The Scheme aims to collect/ compile data of operational holdings in the country to provide aggregates for basic Agricultural Characteristics for use as the benchmark for inter-census estimates.

5. Secretariat Economic Service (SES)

The Scheme aims to provide support and services to the employees/ officers of the Department of Agriculture & Cooperation including provision of office equipments, furniture, office accommodation, renovation of rooms, transport services, newspaper, Magazines, Publicity and Advertisement expenditure, etc.

III. State Plan Scheme

Rashtriya Krishi Vikas Yojana (RKVY)

The Scheme aims to incentivize the States to increase investment in Agriculture and allied sectors to achieved 4% growth in agriculture sector. The scheme is available for any agriculture activity that can increase production growth in the agriculture and allied sectors.

This information was given today by the Minister of State for Ministry of Agriculture and Food Processing Industries, Dr. Sanjeev Kumar Balyan in a written reply to Lok Sabha question.

Some of the recent developments in the agriculture and allied sector are enumerated below:

Launch of Pradhan Mantri Fasal Bima Yojana

Farming has become an unreliable sector. Farmers are always unsure of the yield they'll reap, but strive to draw the maximum benefits out of their investments and effort. Often farmers might be at the receiving end, with natural calamities like droughts and floods affecting their yield adversely. To resolve the problem of unpredictable nature of farming and prevent farmer suicides in the country, the Government launched PM Mantri Fasal Bima Yojana in early 2016. It's a crop insurance policy with relaxed premium rates on the principal sum insured for farmers. Implemented with a budget of Rs 17,600 crore, this scheme will provide financial support to farmers and cover for their losses. This initiative is expected to go on floors from the next Kharif season of farming, that is from June 2016.

After green, white, and golden, it's time for blue

The Cabinet Committee on Economic Affairs (CCEA) has approved Blue

Revolution in India. It's an integrated scheme designed to increase the productivity and profitability from aquaculture and fisheries resources, inclusive of both inland and marine. With a budget of Rs 3,000 crore offered by the government for the next five years, this scheme aims to maintain an annual growth rate of six to eight percent of the agriculture and allied sector.

Government to invest Rs 221 crore to improve milk productivity

India boasts of being the largest producer of milk in the world with an annual output of 130 million tonnes. However, with a milk-producing animal population of more than 118 million, the milk yields per animal is very low. To meet the steadily growing demand for milk, the National Dairy Development Board (NDDB) has announced 42 dairy projects, under a budget of 221 crore. These projects shall focus on improving the milk productivity of major milk-producing states like Uttar Pradesh, Maharashtra, Karnataka, Tamil Nadu and the likes.

Energy-efficient irrigation to be implemented

A report says that in India more than two-thirds of the arable area lacks proper irrigational facilities. Taking note of this, Power Minister Piyush Goyal said that the government is planning on investing Rs 75,000 crore to provide energy-efficient irrigational facilities to farmers, over the next three to four years. Under this scheme, close to 30 million energy-saving pump sets would be given to farmers and this cost would be recovered via savings in the electricity consumed. This would result in about 46 billion kWh of power being saved and creation of 20 lakh jobs.

Launch of Paramparagat Krishi Vikas Yojana

The government has launched Paramparagat Krishi Vikas Yojana in order to address the critical importance of soil and water for improving agricultural production. The government would support and improve the organic farming practices prevalent in India. Following cluster approach mode of farming, at least 50 farmers would form a group having 50 acres of land to implement organic farming. The government aims to cover 10,000 clusters and five lakh hectares of arable land under organic farming within three years.

Recently, the government has been active in investing in agricultural infrastructure such as irrigational facilities, mechanised farming, and warehousing. The growing use of genetically modified crops will also improve the sector's contribution to GDP. While all of these initiatives look promising, in what

way are they going to affect the current scenario is something interesting to watch out for.

Practical exercise

Student will visit any agriculture development project and prepare report for presentation.

Visit to Rural Development project

Rural development is the process of improving the __qualityoflife and economic well-being of people living in rural areas, often relatively isolated and sparsely populated areas.

Rural development has traditionally centered on the exploitation of land-intensive natural resources such as agriculture and forestry. However, changes in global production networks and increased urbanization have changed the character of rural areas. Increasingly tourism, niche manufacturers, and recreation have replaced resource extraction and agriculture as dominant economic drivers. The need for rural communities to approach development from a wider perspective has created more focus on a broad range of development goals rather than merely creating incentive for agricultural or resource based businesses. Education, entrepreneurship, physical infrastructure, and social infrastructure all play an important role in developing rural regions. Rural development is also characterized by its emphasis on locally produced economic development strategies. In contrast to urban regions, which have many similarities, rural areas are highly distinctive from one another. For this reason there are a large variety of rural development approaches used globally.

Rural development is a comprehensive term. It essentially focuses on action for the development of areas outside the mainstream urban economic system. we should think of what type of rural development is needed because modernization of village leads to urbanization and village environment disappears.

Aims and Objectives

Rural development aims at improving rural people's livelihoods in an equitable and sustainable manner, both socially and environmentally, through better access to assets (natural, physical, human, technological and social capital), and services, and control over productive capital (in its financial or economic and political forms) that enable them to improve their livelihoods on a sustainable and equitable basis.

The basic objectives of Rural Development Programmes have been alleviation of poverty and unemployment through creation of basic social and economic infrastructure, provision of training to rural unemployed youth and providing employment to marginal Farmers/Labourers to discourage seasonal and

permanent migration to urban areas.

Strategies and programs for rural development

The rural economy is an integral part of the overall Indian economy. As majority of the poor reside in the rural areas, the prime goal of rural development is to improve the quality of life of the rural people by alleviating poverty through the instrument of self-employment and wage employment programmes, by providing community infrastructure facilities such as drinking water, electricity, road connectivity, health facilities, rural housing and education and promoting decentralization of powers to strengthen the Panchayati raj institutions etc. The various strategies and programs of the Government for rural development are discussed below:

Integrated Rural Development Program (IRDP): First introduced in 1978-79, IRDP has provided assistance to rural poor in the form of subsidy and bank credit for productive employment opportunities through successive plan periods. Subsequently, Training of Rural Youth for Self Employment (TRYSEM), Development of Women and Children in Rural Areas (DWCRA), Supply of Improved Tool Kits to Rural Artisans (SITRA) and Ganga Kalyan Yojana (GKY) were introduced as sub-programs of IRDP to take care of the specific needs of the rural population.

Wage Employment Programs: Anti-poverty strategies, like assistance to the rural poor families to bring them above the poverty line by ensuring appreciable sustained level of income through the process of social mobilization, training and capacity building. Wage Employment Programs have sought to achieve multiple objectives. They not only provide employment opportunities during lean agricultural seasons but also in times of floods, droughts and other natural calamities. They create rural infrastructure which supports further economic activity. It encompasses Swarnjayanti Gram Swarozgar Yojana (SGSY), Sampurna Grameen Rozgar Yojana (SGRY) and National Rural Employment Guarantee Act (NREGA) etc. NREGA is an act of parliament. It is not merely a scheme or policy. It aims at enhancing the livelihood security of the people in rural areas by guaranteeing hundred days of wage employment in a financial year, to a rural household whose members volunteer to do unskilled manual work. The objective of the Act is to create durable assets and strengthen the livelihood resource base of the rural poor.

Employment Assurance Scheme (EAS):

EAS was launched in October 1993 covering 1,778 drought-prone, desert, tribal and hill area blocks. It was later extended to all the blocks in 1997-98. The EAS was designed to provide employment in the form of manual work in the lean agricultural season. The works taken up under the program were expected to lead to the creation of durable economic and social infrastructure and address the felt-needs of the people.

Food for Work Program:

The Food for Work program was started in 2000-01 as a component of the EAS in eight notified drought-affected states of Chattisgarh, Gujarat, Himachal Pradesh, Madhya Pradesh, Orissa, Rajasthan, Maharashtra and Uttaranchal. The program aims at food provision through wage employment. Food grains are supplied to states free of cost. However, lifting of food grains for the scheme from Food Corporation of India (FCI) godowns has been slow.

Rural Housing:

Initiated in 1985-86, the IAY is the core program for providing free housing to families in rural areas. It targets scheduled castes (SCs)/scheduled tribes (STs), households and freed bonded laborers. The rural housing program has certainly enabled many BPL families to acquire pucca houses. The coverage of the beneficiaries is limited given the resource constraints. The Samagra Awas Yojana (SAY) was taken up in 25 blocks to ensure convergence of housing, provision of safe drinking water, sanitation and common drainage facilities. The Housing and Urban Development Corporation (HUDCO) has extended its activities to the rural areas, providing loans at a concessional rate of interest to economically weaker sections and low-income group households for construction of houses.

Social Security Programs:

Democratic decentralization and centrally supported Social Assistance Programs were two major initiatives of the government in the 1990s. The National Social Assistance Program (NSAP), launched in August 1995 marks a significant step towards fulfillment of the Directive Principles of State Policy. The NSAP has three components: a) National Old Age Pension Scheme (NOAPS); b) National Family Benefit Scheme (NFBS); c) National Maternity Benefit Scheme (NMBS). The NSAP is a centrally-sponsored program that aims at ensuring a minimum national standard of social assistance over and above the assistance that states provide from their own resources. The NOAPS provides a monthly pension of Rs.

75 to destitute BPL persons above the age of 65. The NFBS is a scheme for BPL families who are given Rs. 10,000 in the event of the death of the breadwinner. The NMBS provides Rs. 500 to support nutritional intake for pregnant women. In addition to NSAP, the Annapurna scheme was launched from 1st April 2000 to provide food security to senior citizens who were eligible for pension under NOAPS but could not receive it due to budget constraints.

Land Reforms:

In an agro-based economy, the structure of land ownership is central to the wellbeing of the people. The government has strived to change the ownership pattern of cultivable land, the abolition of intermediaries, the abolition of zamindari, ceiling laws, security of tenure to tenants, consolidation of land holdings and banning of tenancy are a few measures undertaken. Furthermore, a land record management system is a pre-condition for an effective land reform program. In 1987-88, a centrally-sponsored scheme for Strengthening of Revenue Administration and Updating of Land Records (SRA & ULR) was introduced in Orissa and Bihar.

Practical exercise

Student will visit a rural development project and prepare report for presentation.

Exercise no. 8

Designing, planning and preparation of a mini project proposal.

1.0 General:

Name of the Firm: _____

Project: _____

Location: _____

Type of the Organization: Proprietary/Partnership _____

Address: _____

Name of the Chief Promoter (s): _____

Birth Date: _____

1.1 Educational Qualifications:

SSC or Below	Degree/ Diploma	Institute	Major Subject	Year of Passing

1.2 Special Training:

Training in	Institute	Duration	Achievement/Remark

1.3 Work Experience (Past and Present):

Organization	Position	Nature of Work	Duration

1.4 i) Promoter's Annual Income (Last year): Rs.

ii) Assets owned by the promoter(s):

Movable Rs. _____

Immovable Rs. _____

2.0 Details of the Proposed Project: Manufacturing:

2.1 Land and Building:

Sr. No.	Particulars	Area Required	Total Value	Remarks
1.	Land Building			
2.				
		Total		

2.2 Machineries/Equipments:

Sr. No.	Description	Nos. Required	Rate (Rs.)	Total Value (Rs.)
			Total	

2.3 Misc. Fixed Assets:

Sr. No.	Particulars	Nos. Required	Rate (Rs.)	Total Value (Rs.)
			Total	

2.4 Preliminary and Pre-Operative Expenses:

Sr. No.	Particulars	Amount (Rs.)	Remarks
L 2, 3, 4.	Interest during implementation Establishment expenses Start-up expenses Misc. expenses		
	Total		

2.5 Working Capital:

Sr. No.	Item	Duration	Total Value (Rs.)		
			Year-I	Year-II	Year-III
1.	Raw-material stock				
2.	Semi-finished goods stock				
3.	Finished goods stock				
4.	Sales on credit				
5.	Production expenses				
	Total				

2.6 Total Cost of the Project:

Sr.	Particulars	Total Value (Rs.)
1, 2, 3,	Fixed capital (Total of item nos. 2. 1, 2.2, 2.3) Working capital (Total of item no. 2.5) Preliminary & pie-operative expenses (Total of item no. 2.4)	
	Total	

2.7 Means of Finance:

Sr.	Particulars	Amount	Remarks I
L 2, 3, 4.	Own investment Term loan Working capital loan Any other source		
	Total		

3.0 Market Potential:

3.1 Present demand and supply of the product

3.2 Competition

3.3 Target clients/selected market area

3.4 Marketing strategy (USP)

4.0 Manufacturing Process:

a) Technical know-how availability

b) Step-by-step description of the manufacturing process (R.M-F.G)

c) Attach process flow chart (if required)

5.0 Production Programme:

i) No. of working days per annum -

ii) No. of working shifts (8hrs) per day -

iii) Installed capacity (annual) -

iv) Utilized Capacity (%): -

Year-I

Year-II

Year-III

Sr. No.	Items(s)	Quantity Produced Per Year	Capacity Utilization (%)

5.1 Sales Revenue:

Year	Items(s)	Quantity Sold Per Year	Rate per Unit (Rs.)	Sales Realization (Rs.)
	Total			

5.2 Raw Material (Annual Requirement):

Sr. No.	Items(s)	Quantity	Rate (Rs.) (Rs.)	Total Value
	Total			

5.3 Utilities:

Sr. No.	Particulars	Annual Expenditure (Rs.)	Remarks
1.	Power/electricity Water Coal/oil/steam		
2. 3. 4.	Any other item		
	Total		

5.4 Man Power (Salaries/Wages):

Sr. No.	Particulars	No.	Wages/Salaries per Month (Rs.)	Annual Expenses (Rs.)
1.	Skilled			
2.	Semi-skilled			
3.	Unskilled			
4.	Office staff			
5.	Any other			
	Total			

5.5 Repairs and Maintenance:

Sr. No.	Particulars	Amount (Rs.)
	Total	

5.6 Selling and Distribution Expenses:

Sr. No.	Particulars	Amount (Rs.)	Remarks
1 2. 3.	Publicity expenses, Traveling Freight, Commission Misc.		
	Total		

5.7 Administrative Expenses:

Sr. No.	Particulars	Amount (Rs.)	Remarks
1.	Stationery & printing,		
2, 3.	Post/telephone/telegrams Entertainment, expenses Misc.		
	Total		

5.8 Interest:

Year	Outstanding Loan Amount (Rs.)	Interest (Rs.)	Installment (Rs.)	Balance (Rs.)

5.9 Depreciation:

Sr. No.	Type of Asset	Cost of Asset	Expected Life	Depreciation

6.0 Profitability Projections

Sr. No.	Particulars	Amount (Rs.)				
		Year-I	Year-II	Year-III	Year-IV	Year-V
A.	Sales realization					
B.	Cost of producing					
i)	Raw materials					
ii)	Utilities					
iii)	Salaries/wages					
iv)	Repairs & maintenance					
v)	Selling & distribution expenses					
vi)	Administrative expenses					
vii)	Interest					
viii)	Rent					
ix)	Misc. expenses					
	Total					
C.	Less: Depreciation					
D.	Gross profit/loss (A-B)					
IK	Income-tax					
I*	Net profit/loss					
Fa	Repayment					
R	Retained surplus					

Debt Service Coverage Ratio* Break-even Level of Activity* Return on Investment* Larger projects require projected financial statements like Projected Profit and Loss Accounts and Balance Sheets. *

Practical exercise

Student will Design, plan and prepare a mini project proposal



Working on project management techniques: PERT, CPM.

Programme Evaluation and Review Technique-PERT was developed and has been used for research types of programmes, especially when there are a number of uncertainties in the development of new technologies. This relationship need for planning and development of a new technology have been well defined, but it allows for uncertainties in activity time.

PERT calculates the expected value of activity duration as a weighted average of three time estimates—optimistic, most probable and pessimistic.

$$t_e = \frac{t_o + 4t_m + t_p}{6}$$

where t_e = expected time to complete a planned activity;
 t_o = optimistic time; t_m = most probable time;
 t_p = pessimistic time

PERT also calculates variability in the completion of an activity on the basis of standard deviation. However, it simplifies the calculation of standard deviation as follows:

$$S1 = \frac{t_p - t_o}{6}$$

In other words, standard deviation is one-sixth of the difference between the two extreme time estimates. Thus the greater the uncertainty in time estimates, the greater the differences in optimum and pessimistic time estimates.

The Critical Path Method (CPM) was originally developed to solve schedule problems in an industrial setting. It is more concerned with costs of project scheduling and how to minimise them. CPM is a technique of project management useful in the basic management function of planning, scheduling and control.

With CPM, the amount of facilities needed to complete various facets of the project is assumed to be known with certainty; moreover, the relation between the amount of resources employed and the time needed to complete the project is also assumed as known. Thus CPM is not concerned with uncertain job times as is PERT (Programme Evaluation and Review Technique). Rather it deals with time-cost trade-offs CPM is used more in projects such as construction where there has been some experience in handling similar endeavors.

Developed in the late 1950s to aid in the planning and scheduling of larger projects, CPM is today widely used in industry and services. CPM is basically concerned with obtaining the tradeoff between cost and completion date for large projects. It emphasizes the relationship between utilizing more men or other resources to shorten the duration of given jobs in a project and the increased cost of those additional resources. Thus it is a deterministic rather than probabilistic model. It does allow for variations in job times, however, as planned and expected outcome of resource assignments. Most jobs can be reduced in duration if extra resources are assigned to them. The cost of getting the job done may increase but if other advantages outweigh this added cost, the job should be expedited otherwise crashed. Thus only the critical job, not all, needs to be expedited.

Practical exercise

Student will Work on project management techniques: PERT, CPM.

Working on project management technique: WBS

Work Breakdown Structure (WBS)

A work breakdown structure (WBS) is a key project deliverable that organizes the team's work into manageable sections. The Project Management Body of Knowledge (PMBOK) defines the work breakdown structure as a "deliverable oriented hierarchical decomposition of the work to be executed by the project team." The work breakdown structure visually defines the scope into manageable chunks that a project team can understand, as each level of the work breakdown structure provides further definition and detail.

Why use a Work Breakdown Structure?

The work breakdown structure has a number of benefits in addition to defining and organizing the project work. A project budget can be allocated to the top levels of the work breakdown structure, and department budgets can be quickly calculated based on the each project's work breakdown structure. By allocating time and cost estimates to specific sections of the work breakdown structure, a project schedule and budget can be quickly developed. As the project executes, specific sections of the work breakdown structure can be tracked to identify project cost performance and identify issues and problem areas in the project organization.

Project work breakdown structures can also be used to identify potential risks in a given project. If a work breakdown structure has a branch that is not well defined then it represents a scope definition risk. These risks should be tracked in a project log and reviewed as the project executes. By integrating the work breakdown structure with an organizational breakdown structure, the project manager can also identify communication points and formulate a communication plan across the project organization.

When a project is falling behind, referring the work breakdown structure will quickly identify the major deliverables impacted by a failing work package or late sub-deliverable. The work breakdown structure can also be color coded to represent sub-deliverable status. Assigning colors of red for late, yellow for at risk, green for on-target, and blue for completed deliverables is an effective way to produce a heat-map of project progress and draw management's attention to key areas of the work breakdown structure.

Practical exercise

Student will work on project management technique: WBS