

Agricultural project planning and analysis

Chapter One

1. The project concept

Project planning and analysis has a long history in financial and business analysis. Project analysis has always been used as a means of checking the profitability of a particular investment by private firms. Recent experiences show that project analysis has attracted the attention of development economists. Projects are now assessed from the economy's viewpoint instead of only from the firm's perspective. The selection criteria have also included economic criteria on top of financial criteria.

Perhaps the most difficult problem confronting administrators in developing countries is implementing development programs. Much of the failures can be traced to poor project preparation. Especially from development viewpoint, for most development activities careful preparation in advance of expenditure is, if not absolutely essential, at least the best available means to ensure efficient, economic use of capital funds and to increase the chances of implementation on schedule. Unless projects are carefully prepared in substantial details, inefficient or even wasteful expenditure is almost sure to result – a tragic loss in nations short of capital.

Absence of effective and well defined project preparation is one major problem in LDCs. Economic development planners often give little time to the preparation of suitable development projects. However, project preparation is not the only aspect of agricultural development planning. The latter includes identifying national agriculture development objective; selecting priority areas for investment; designing effective price policies, and mobilizing resources.

Public projects, which are not profit oriented, are the main targets of aid-flows coming to LDCs which have their origin in government plans, make demands on government resources and institutions, even though the private sector may be involved in the implementation phase. Example: Road construction projects and electric power generating projects.

The main differentiating feature between agricultural projects and projects in other economic sectors is the biological nature of agricultural pursuits, making it harder to predict input - output relationships. The following are typical features of agriculture which are mainly the outcomes of its dependency: risk and uncertainty, perish ability of products, nature dependence, fixity of gestation period or growth period, sequential order of the growth pattern, unique role of land in production, and time sensitivity.

From all the discussions above one can derive the following more dynamic and comprehensive definition of a project:

*A **project*** is an instrument of change. It is coordinated series of actions resulting from a policy decision to change resource combinations and levels so as to contribute to the realization of the country's development objectives. Projects should, according to this definition, be formulated within the framework of the country's development priority objectives which may include agricultural production growth, improving income definition, eradicating poverty and malnutrition, promoting larger public involvement in producing goods and services.

*A **project*** is people - oriented which responds to people's actions. Example: seeds project is oriented by farmer's response to the improved seed. Hence, projects should forecast the response of their ultimate beneficiaries. A project within the framework of a national development changes plan into action at a micro-level. Hence, a project is undertaken, among other things, for development reasons which may include:

- executing national objectives at the micro level,
- national increases in agricultural production,
- promoting exports,
- employment creation,
- utilizing non-utilized and under-utilized resources - full employment, and
- Pursuing agricultural diversification policies (minimizing risk).

1.1 Definition of project

The Webster's New World Dictionary defined a Project as follows:

- ❖ **Project** (praj'ekt, ikt) n. a proposal of something to be done; plan; scheme. an organized undertaking; specifically, a special unit of work, research, etc., as in school, etc., an extensive public undertaking, as in conservation, construction, etc.
- ❖ It originated from a Greek term-**Projectum** which means 'what comes before anything else'.
- ❖ A **project** can be defined as: *"A temporary endeavor undertaken to create a unique products, service, or results."* Here, 'Temporary' means that every project has a definite end. 'Unique' means that the product or service is differentiated in some distinguished way from all similar products or services. **Operations**, on the other hand, is work done in organizations to sustain the business. **Projects** are different from operations in that they end when their objectives have been reached or when the project has been terminated.
- ❖ *Project is generally referred to as a proposed undertaking, a complex set of economic activities in which scarce resources are committed in expectation of benefits that exceed the resources in order that investment decisions are wisely carried out in the area of development plan, formulation and implementation.*
- ❖ *Project* is an investment activity in which specific resources are committed within a given time frame, to create capital assets over an extended period of time in expectation of benefits that exceed the committed resource.
- ❖ *A project* is a unique set of coordinated and controlled activities, with definite starting and finishing points, undertaken by an individual or organization to meet specific objectives within defined schedule, cost and performance parameters.'
- ❖ *A project* is a task of considerable magnitude that must be completed within a budget and by a specific time; usually but not always carried out at once.
- ❖ *A project* is a non-repetitive/ non-routine activity that is goal oriented, that has a particular set of constraints, the output of which is measurable, and that changes something when carried out.
- ❖ *A project* is a set of proposal for investment of resources in to a clearly identified set of actions that are expected to produce future benefits of a fairly specific kind, the whole series of actions being the subject of individual planning and

examination before being adapted and implemented within a single overall financial and managerial framework.

1.2. Classification of a Project

- Based on ownership
 - ✓ Privet sector:
 - ✓ Public sector
 - ✓ NGO's
- Based on the Sources of Finance
 - ✓ Project with domestic financing
 - ✓ Project with foreign financing
 - ✓ Project with mixed financing
 - ✓ Project with financial institutions
- Based on the force behind
 - ✓ Demand driven/need driven
 - ✓ Donor Driven
 - ✓ Political Driven
- Based on the purpose
 - ✓ New projects
 - ✓ Expansion projects
 - ✓ Updating projects
- Based on sector
 - ✓ Industrial project
 - ✓ Agricultural project
 - ✓ Educational and
 - ✓ Health project
- Based on risk involved in the project
 - ✓ High risks projects
 - ✓ Normal risks projects
 - ✓ Low risk projects
- Based on resource requirements of projects
 - ✓ Project with domestic resources

- ✓ Project with foreign resources
- Based on speed required for execution of the project
 - ✓ Normal project
 - ✓ Crash project
 - ✓ Disaster project
- Based on time horizon
 - ✓ Long term projects
 - ✓ Medium term projects
 - ✓ Short term projects
- Based on locality
 - ✓ Regional
 - ✓ National
 - ✓ International
- Based on resource use
 - ✓ Capital intensive projects
 - ✓ Labor intensive projects
 - ✓ Energy intensive projects

1.3. Characteristics/features of a Project

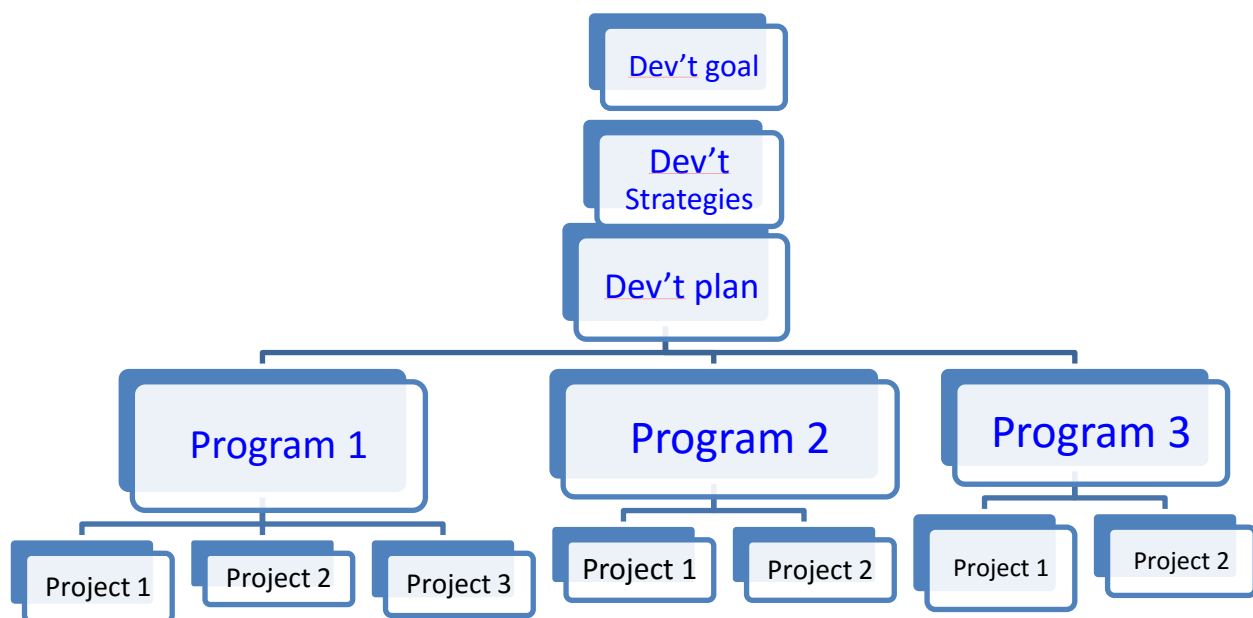
- Project involves the investment of scarce resources in expectation of future benefits.
- Involves a single definable purpose or end-item.
- Every project is unique and non- routine.
- Has a defined life span with a beginning and an end.
- A project is a temporary activity.
- A project utilises skills and talents from multiple organisations and professions.
- Completed by a team of people – Team spirit.
- Dynamic in nature.
- A project has a risk and uncertainty
- Projects are bounded by time, cost and quality constraints.
- A project has a life cycle.
- A project should have a primary customer or sponsor.

1.4. Project Levels

Project work in its broadest sense takes place at three levels:

- ❖ At the ***national level***, where national investment plans are formulated, priorities among sectors are established, and the macroeconomic framework of policies for economic growth is put in place.
- ❖ At the ***sector level***, where priorities for investment within each sector are determined and the issues and problems affecting the development of the sector are addressed.
- ❖ At the ***project level***, where individual projects are identified, prepared, and implemented and attention is given to their technical, economic, financial, social, institutional, and other dimensions.

1.5. National Development Planning and Project Analysis



❖ Development Goal/ objectives

- ☞ statement of intention or aspiration of a government to improve the living conditions of its people

- ☞ It is a comprehensive statement which guides development.
- ☞ For example, growth, equity in income distribution, reduction of unemployment.

❖ **Development Strategies**

- ☞ The general methods of achieving specific objectives at national or organizational levels.
- ☞ describes the essential resources which will be committed to achieve objectives & how these resources will be organized
- ☞ Example, it may ask how to organize the labor force of the organization or the project. It can take different forms such as import substitute, export promotion, ALI etc,

❖ **Plan**

- ☞ a statement of anticipatory decisions, their interrelations and the criteria employed in making them
- ☞ designed as a means to accomplish strategies
- ☞ A national plan covers an entire region, e.g a district or entire economy and it is made up of proposed programs and projects to be implemented over a period of time

❖ **Program**

- ✓ A program is open ended in nature and could be on going investment activities which are not time bound.
- ✓ A series of coordinated, related, multiple projects that continue over an extended time and are intended to achieve a goal.

❖ **Project**

- ☞ a discrete activity aimed at specific objective with a defined budget and limited timeframe
- ☞ Projects often constitute a clear and distinct element of a larger program.

1.6. The linkage between projects and programs

It is necessary to distinguish between projects and programs because there is sometimes a tendency to use them interchangeably.

A **project** refers to an investment activity where resources are used to create capital assets, which produce benefits over time and has a beginning and an end with specific objectives,

A **program** is an ongoing development effort or plan which may not necessarily be time bounded.

- Examples could be a road development program,
- A health improvement program,
- A nutritional improvement program,
- A rural electrification program, etc. A development plan or program is a general statement of economic policy. National development plans are further disaggregated in to a set of sectoral plans.

A development **plan or a program** is therefore a wider concept than a project. It may include one or several projects at various times whose specific objectives are linked to the achievement of higher level of common objectives.

➤ **For instance, a health program** may include:

- A water project as well as
 - A construction of health centers **both aimed at improving the health of a given community**, which previously lacked easy access to these essential facilities. Projects, which are not linked with others to form a program, are sometimes referred to as “**stand alone**” projects.
- ❖ Projects in such context are the concrete manifestations of the development plans in a specific place and time.
 - ❖ One can think of projects as subunits and bricks of programs, which constitute the national plan (usually the direction is from plans to projects).
 - ❖ We have to note that projects could be either **public or private**.
 - ❖ It is the smallest operational element prepared and implemented as a separate entity in a national plan or program.
- A **project** is designed with a high degree of precision and details as regards its objectives, features, calculation of returns and implementation plan.

- **A program** by contrast is general, lacks details and precision and aims at a broader goal often related to a sectoral policy of a country or departmental policy of an organization.

Perhaps the distinction between projects and programs would be clear if we see the basic characteristics of projects. Projects in general need to be **SMART**.

S – Specific

A project needs to be specific in its objective. A project is designed to meet a specific objective as opposed to a program, which is broad. A project has also specific activities. Projects have well defined sequence of investment and production activities and a specific group of benefits. A project is also designed to benefit a specific group of people.

M - Measurable

Projects are designed in such a way that investment and production activities and benefits expected should be identified and if possible be valued (expressed in monetary terms) in financial, economic and if possible social terms. Though it is sometimes difficult to value especially secondary costs and benefits of a project, attempt should be made to measure them. Measure costs and benefits must lend themselves for valuation and general projects are thought to be measurable.

A – Area bounded

As projects have specific and identifiable group of beneficiaries, so also have to have boundaries. In designing a project, its area of operation must clearly be identified and delineated. Though some secondary costs and benefits may go beyond the boundary, its major area of operation must be identified. Hence projects are said to be area bounded.

R – Real

Planning of a project and its analysis must be made based on real information. Planner must make sure whether the project fits with real social, economic, political, technical, etc situations. This requires detail analysis of different aspects of a project.

T – Time bounded

A project has a clear starting and ending point. The overall life of the project must be determined. Moreover, investment and production activities have their own time sequence. Every cost and benefit streams must be identified, quantified and valued and be presented year-by-year.

1.7. Project Environment and Stakeholders

- All projects are planned and implemented in a *social, economic, technological, political and international context*.
1. **Cultural and Social Environment:** is that how a project affects the people and how they affect the project.
 - This requires understanding of economic, demographic, ethical, ethnic, religious and cultural sensitivity issues.
 2. **International and Political Environment:** refers to the knowledge of international, national, regional or local laws and customs, time zone differences, teleconferencing facilities, level of use of technology, national holidays, travel means and logistic requirements.
 3. **Physical Environment:** is the knowledge about local ecology and physical geography that could affect the project, or be affected by the project.

