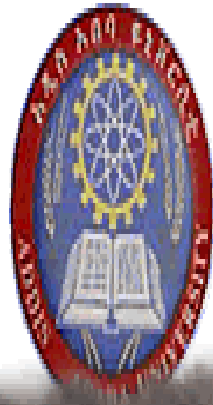


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**ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE**

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**ASSESSMENT OF APPRAISAL PRACTICE OF DASHEN BANK FOR FINANCING  
PROJECTS**

**BY**

**SELAMAWIT KUMA**

**PROJECT WORK SUBMITTED TO ADDISABABA UNIVERSITY SCHOOL OF  
COMMERCE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE  
AWARD OF MASTER OF ARTS DEGREE IN PROJECT MANAGEMENT**

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**Date**

## **STATEMENT OF DECLARATION**

I declare that this study “Assessment of Appraisal Practice of Dashen Bank for Financing Projects” is my own work. It has not been submitted for any award in this or any other institution. And that all sources of material used for the thesis have been duly acknowledged.

Selamawit Kuma

Signature.....

## **STATEMENT OF CERTIFICATION**

This is to certify that Selamawit Kuma has carried out this research work on the topic entitled "Assessment of Appraisal Practice of Dashen Bank for Financing Projects" under my supervision. This work is original in nature and it is sufficient for submission for the partial fulfillment for the award of Degree of Masters of Art in Project Management.

Dr. Solomon Markos

Signature.....

Date.....

## *Abstract*

*This study intends to assess the project finance appraisal practice of financial institutions; specifically focusing on Dashen Bank S.C. The challenges exist throughout the appraisal process are also assessed and identified. The project appraisal practice was evaluated; whether or not it encompasses measurement parameters concerning Technical, Financial, Market, Managerial, and risk aspects of a proposed project. Primary data was used throughout the research. Quantitative and qualitative data were employed. The quantitative data was collected through a structured questionnaire and the qualitative using an in-depth interview. Since the appraisal process is undertaken on two departments at Head office, the 48 credit related staffs of these departments were taken as a population and census method was employed. About 77% or 37 questionnaires were filled and returned. Frequency, percentage, mean and standard deviation were used to analyze the data. The findings of the research revealed that from the technical dimension the appraisal practice is good enough in addressing aptness of the project schedule, choice of appropriate technology and scale of operation. However plant layout and selection of scale of operation were not well considered. The Bank uses cash flow estimation to forecast the cost-benefit of the proposed project. Payback period, accounting rate of return and net present value (NPV) are the widely used methods of estimation while other alternative methods are not popular in the Bank. In the process, the management aspect got little attention despite the significant contribution it has on project success/failure. Regarding the marketing aspect, Demand-supply gap analysis is the only used to identify the demand for the product of the proposed project defining distribution channels and pricing of the product got little consideration. Project related risk is assessed solely using sensitivity analysis leaving apart qualitative risk analysis and probabilistic risk analysis. The Bank has no defined risk prevention and mitigation strategy specifically for project risks. The restraining factors of the project appraisal process are identified as; low level of quality and completeness of project feasibility study, unavailability of reliable, quality and up to date information, low level of knowledge and skill of project appraiser, lack of well trained and experienced consultants on the specific project, external pressure, management intervention.*

**Key Words;** *Project, Appraisal, Finance*

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# Chapter One

## INTRODUCTION

### 1.1 Background of the study

Developing economies, like that of our country, are striving to transform their economy from agriculture to industrialization. According to the second GTP of Ethiopia, a breakthrough in the economic transformation and industrialization is the overarching goal of the industrial sector. This largely calls for undertaking large-scale projects and the most economic use of scarce resources. The same source depicts that financing of ETB 1.9 trillion, is projected to be mobilized through banks and microfinance institutions. According to Wendy and Colin (2003) the role of commercial banks lies in accelerating investment and growth in a developing economy. Banks are considered as the nerve centers of economies and finance of a nation and the barometer of its economic perspective. Banks take the responsibility for the resources mobilized from the society and ensure that these resources are utilized in a way that brings the maximum possible return for its stakeholders.

Project financing is among the long run investment options financial institutions have to consider in generating optimum value from the deposit mobilized at a cost of interest. Reaching optimal investment decision requires placing a mechanism that can safeguard the money from inefficient or wasteful use. Investment decisions involve a weighing of profits and risks attending or believed to attend, in various alternatives of investment in the future. Assumptions and estimations play a critical role in an attempt to identify and weight the future profits and risks. In the uncertain future activities involving estimation and assumption are risky.

Banks as an investment decision maker are susceptible to different types of risks. According to Perez (2014), bank risks can roughly be classified as major risks, other significant risks, and unrelated risks. The author classified Credit risk along with Market risk and Operational risks as Major risk. Of all the risks banks encounter in their intermediation processes, credit risk poses greater threat to their vulnerability & sustainability (Kanpur, 2010). Credit risk arises from the likelihood of borrowers' inability to meet payment obligations.

MacDonald and Koch (2006) also described in another way as, loans are the dominant asset and represent 50-75 percent of the total amount at most banks, which also generate the largest share of operating income

and represent the bank's greater risk exposure. Thus Credit risk management constitutes a sizeable part of overall risk management of banking.

Project financing is a special financing method which is seen as a well-established tool that helps project sponsors initiate a project when they lack money at the outset of the project (Wang, 2012).

In the course of project financing the loan is granted, hoping to get repaid from the project's output or asset. Banks provide financing because they are able to evaluate complex project financing transactions and to assess and assume the construction and performance risk usually involved in such financing. Selecting and considering potential projects that can generate a better outcome and embed lesser risk helps the bank in managing credit risk.

Sound credit risk management system decreases the loan default which in turn decreases the level of nonperforming loans. Nonperforming loans affect the credit capacity of banks impeding the asset that can otherwise be available for potential creditors. The profitability of the bank also compromised by the provision held for NPL and from the unpaid interest income.

To avoid or minimize the loan default that can arise due to failed or delayed projects, banks have to use a robust project finance appraisal process before granting a loan. This study intends to review the project appraisal process employed by commercial banks and how parallel it is with theoretical methodologies.

## **1.2 Statement of the problem**

The annual reports of the National bank for the last three consecutive years depict that the investment on projects is significantly increased from 4.1 billion in 2014/15 to 6.7 billion in 2015/16 and reached 8.9 billion in 2016/17. The restrictive credit directive by national bank (NBE Directives No 047-2017 dated 03/10/17), limited credit facilities of banks on Export and Manufacturing sectors with an intent to bring additional investment on export-oriented projects. This forces commercial banks to reallocate their lending plan on financing those types of projects. In addition to these, following the GTP, industry Parks are built as an endeavor towards industrialization which also insists a number of projects to be undertaken. As per the policy direction, these projects are intended to be financed by financial institutions mainly by Development Bank of Ethiopia. The policy tools also pushed Commercial banks to consider this as an opportunity to widen their investment in manufacturing sectors. But how do commercial banks choose potential projects?

As an investment decision, financing projects involve risks that if not properly managed might lead to loan default or NPL. The risk in relation to project appraisal is an uncertainty or probability of realizing the future

returns or values of a project (Richard and Stewart , 1996). Development Bank of Ethiopia, financed most of the development projects, in its annual report as at June 30, 2013, showed that 69% of the projects financed by the bank are categorized under failed projects.

A research conducted by Yilkal (2015) to identify the possible causes of failure of projects financed by the Development Bank of Ethiopia found that technical support given by the Bank, implementation delay, project's manpower quality and overestimation of project's return as a major cause.

Fikirte (2015), Conducted a case study on Commercial Bank of Ethiopia to determine the possible causes of default in project finance. The researcher has tried to come up with different reasons. Appraisal-related factors such as weak credit assessment of the market, technical, economic and environmental feasibility of the project and inadequate skill of the credit performers to appraise project loan are among the Bank specific factors indicated.

Failure or delay of financed projects leads to credit risk which can be manifested by loan default and then affects the NPL position of banks. The NPL position of Dashen Bank during the last five consecutive years falls within the range of 5.46 % to 2.13% which signifies a need for intervention.

A research was made on credit monitoring activity and asset quality of Dashen Bank in 2015 by Yihenalem . Based on the findings from the analysis the researcher recommended an implementation of enhanced credit appraisal process to ensure improved asset quality.

A preliminary interview made with the manager of credit analysis and appraisal department of the Bank also revealed that lack of proper appraisal and monitoring of projects is among the major detaining factors of Asset quality.

The aforementioned studies and the preliminary interview, pinpoint the need to employ robust project appraisal process to maintain a better investment portfolio. This research aims to review the project finance appraisal process employed by Dashen bank with respect to what theoretical literatures state.

### **1.3 Research Questions**

- How the technical viability of proposed projects appraised in Dashen Bank?
- How the financial viability of proposed projects appraised in Dashen Bank?
- How the commercial/market viability of propoed projects appraised in Dashen Bank?
- How the management capability of proposed projects appraised in Dashen Bank?

- How the risk attached to projects analyzed and managed in Dashen Bank?
- What are the challenges encountered throughout the appraisal process?

#### **1.4 General Objective**

The general objective of the research is to assess the practice and problems of project appraisal process at Dashen Bank.

#### **1.5 Specific Objective of the study**

- To assess the technical appraisal practice of projects in the bank.
- To assess the financial appraisal practice of projects in the bank.
- To assess the commercial/market appraisal practice of projects in the bank.
- To assess the management appraisal practice of projects in the bank.
- To assess the risk analysis and management practice of projects in the bank.
- To identify the challenges encountered in undertaking the project appraisal process.

#### **1.6 Significance of the study**

The prevailing policy directives of NBE and the national policy direction towards industrialization push the competitive edge of banks on financing manufacturing and Export based projects. NPL is also a firing issue for NBE as a directive Body and as a financial institution, for Banks.

- NBE can use the finding of this paper as an input for policy formulation regarding loan defaults arising from project loans.
- This study will signify decision makers in the banking industry to consider robust project appraisal process as a tool for managing credit risk and NPL level.
- Researchers can use this as a platform to assess the practice of project appraisal in a generalizable format to all commercial banks.

#### **1.7 Scope of the Study**

The project appraisal process of Dashen Bank is conducted centrally on credit analysis and appraisal department after preliminary review made at Branches. Thus the study is conducted at Head Office through credit analysis & Appraisal Department and Portfolio Management Department.

The study is focused on projects financed by Dashen Bank, privately owned company, which almost all projects are commercial projects.

In this study, the practice of project appraisal process is taken partly as a separate portion of the credit appraisal process which includes credit rating of customers and other factors internal to the bank.

The practice of the project appraisal is on an ongoing improvement following feedbacks from implementation. The research is conducted on the prevailing practice.

The challenges on the appraisal practice are addressed from the practical challenges identified by different empirical studies made on project appraisal practice of local Banks.

### **1.8 Limitation of the study**

Most of the time credit-related information is kept confidential. The researcher faces the same challenge to see the depth of the problem in the company considered for the case study.

# Chapter Two

## LITERATURE REVIEW

### 2.1 Introduction

This chapter presents the definition, concept and empirical studies related with project financing, project appraisal and challenges faced by banks while undertaking project appraisal.

### 2.2 Project financing

Project financing techniques date back to at least 1299 A.D. when the English Crown financed the exploration and the development of the Devon silver mines by repaying the Florentine merchant bank, Frescobaldi, with output from the mines. The Italian bankers held a one-year lease and mining concession, i.e., they were entitled to as much silver as they could mine during the year. Here the chief characteristic of project financing is that the use of the project's output or assets to secure financing (Bruce, 1996). As a more discernible financing technique, project finance have thought to begun in the 1930s when a Dallas Bank made a non- recourse loan to develop an oil and gas property. It "came of age" in the 1970s and 1980s with the successful financing of North Sea oil and gas projects, Australia's Northwest Shelf gas project, independent non-utility power generation in the United States, and similar substantial projects (Paul 1995).

Project financing has evolved through the centuries into primarily a vehicle for assembling a consortium of investors, lenders and other participants to undertake infrastructure projects that would be too large for individual investors to underwrite (Balagi 2016).

#### *What is Project Financing?*

The term "project finance" is used by academics, bankers and journalists to describe a range of financing arrangements. Project finance is a financing of a major independent capital investment that the sponsoring company has segregated from its assets and general purpose obligations" (Wynant 1980)

According to the Basel Committee on Banking Supervision, International Convergence of Capital Measurement and Capital Standards (Basel II), project financing is a method of funding in which the lender looks mainly to the revenues generated by a single project, both as the source of repayment and as security for the exposure.

A major player in sponsoring infrastructure projects and providing financing in developing countries, the World Bank defines project finance as the "use of nonrecourse or limited-recourse financing." Further defining these two terms, "the financing of a project is said to be *nonrecourse* when lenders are repaid only

from the cash flow generated by the project or, in the event of complete failure, from the value of the project's assets. Lenders may also have *limited recourse* to the assets of apparent company sponsoring a project.

It seems that there is no one universally accepted definition for project finance. Gardner and Wright's (2016) explanation tries to encompass the above two definitions "*The raising of finance on a Limited Recourse basis, for the purposes of developing a large capital intensive infrastructure project, where the borrower is a special purpose vehicle and repayment of the financing by the borrower will be dependent on the internally generated cash flows of the project*"

The essential difference between a recourse and non-recourse loan has to do with which assets a lender can go after if a borrower fails to repay a loan.

In both types of loans, the lender is allowed to take possession of any assets that were used as collateral to secure the loan. In most cases, the collateral is the asset that was purchased by the loan. For example, in both recourse and non-recourse mortgages, the lender would be able to seize and sell the house to pay off the loan if the borrower defaults. The distinction comes into play if money is still owed on the debt after the collateral is sold. In a recourse mortgage, the lender can go after the borrower's other assets or sue to have his or her wages garnished – anything to be made whole, basically. In a non-recourse mortgage, however, the lender is out of luck. If the asset does not sell for at least what the borrower owes, the lender must absorb the difference and walk away; he has no claim on the lender's other funds or funding sources.

### **2.3 Characteristics of Project Financing**

What are the distinctive features of project financing? Not every project financing transaction will bring out every characteristic, but the following are a preliminary list of common features of project finance transactions as listed by (Bruce, 1996).

- **Capital-intensive** Project financings tend to be large-scale projects that require a great deal of debt and equity capital, from hundreds of millions to billions of dollars.
- **Highly leveraged** these transactions tend to be highly leveraged with debt accounting for usually 65% to 80% of capital in relatively normal cases.
- **Long term** the tenor for project financings can easily reach 15 to 20 years.

- **Independent entity with a finite life** Project financings frequently rely on a newly established legal entity, known as the project company, which has the sole purpose of executing the project and which has a finite life so it cannot outlive its original purpose.
  - **Non-recourse or limited recourse financing** the financing in this case is not primarily dependent on the credit support of the sponsors or the value of the physical assets involved rather it is focused on the return from the project. Thus, it takes an entirely different credit evaluation or investment decision process to determine the potential risks and rewards of a project financing as opposed to a corporate financing.
  - **Controlled dividend policy** In more modern major corporate finance parlance, the project has a strictly controlled dividend policy, though there are exceptions because the dividends are subordinated to the loan payments. The project's income goes to servicing the debt, covering operating expenses and generating a return on the investors' equity.
  - **Many participants** these transactions frequently demand the participation of numerous international participants. It is not rare to find over ten parties playing major roles in implementing the project. Project sponsors or owners ,Project Company, Contractor ,Government, Operator, Supplier, Customer ,Commercial banks ,Capital markets ,Direct equity investment funds ,Multilateral agencies, Export credit agency, Insurers, Legal advisers and financial adviser are among the parties.
  - **Allocated risk** Because many risks are present in such transactions, often the crucial element required to make the project go forward is the proper allocation of risk. This allocation is achieved and codified in the contractual arrangements between the project company and the other participants.
- Costly** Raising capital through project finance is generally more costly than through typical corporate finance avenues. The greater need for information, monitoring and contractual agreements increases the transaction costs. Furthermore, the highly-specific nature of the financial structures also entails higher costs and can reduce the liquidity of the project's debt.

## 2.4 Project financing Vs corporate financing?

According to Kensinger and Martin, (1988) corporate financing is when a corporation chooses to undertake an investment project, cash flows from existing activities fund the newcomer; and management has the option to roll over the project's capital into still newer ventures within the company later on -- without submitting them to the discipline of the capital market. With project financing, by contrast, the assets and

cash flows associated with each project are accounted for separately. Funding for the new project is negotiated from outside sources, and creditors have recourse only to the assets and cash flows of a specific project. As the project runs its course, furthermore, the capital is returned to the investors, and they decide how to reinvest it.

## **2.5 Risks involved in project financing**

Financing projects entails a formidable set of risks. Failing to identify a major risk or requiring the wrong party to assume or control a particular risk can result with the following outcomes (Phillip & Andrew, 2014)

- Delays in the project's construction and operation schedule.
- The need to revise transaction documents at additional cost to the parties.
- The project company being unable to repay the lenders.
- Ultimately, loss or abandonment of the project

It is the role of the project finance advisor, the project sponsor and other participants to structure the financing in such a manner that mitigates these risks. A project financing can face one or more of the following risks (Adebisi, 2017). However this cannot be taken as an exhaustive list of risk in project financing.

- Country risks cover the political economy. Examples of country risk include civil unrest, guerrilla sabotage of projects, work stoppages, any other form of *force majeure*, exchange controls, monetary policy, inflationary conditions, etc
- Political risks cover changes within the country's political landscape, i.e., change of administration, as well as changes in national policies, laws regulatory frameworks.
- Industry risk; Competitive forces within the industry represent significant risks to the project. It is necessary for project sponsors to analyze the potential risks that their particular project faces vis-à-vis global and local industries.
- Project risk is generally associated with the adequacy and track-record of the concerned technology and the experience of the project's management.
- The risk with customers; is that demand for the product or throughput declines or widely fluctuates.
- Supplier; the general issue here is with securing supplies for the project - electricity, water, inputs etc.

- Sponsor; The primary risks with sponsors revolve around the sponsor's experience, management ability, its connections both international and with the local agencies, and the sponsor's ability to contribute equity.
- Contractor; The principal construction risks are schedule delays and budget overruns
- The operator is the company or entity charged with the responsibility of maintaining the quality of the assets that generate the project's cash flow.
- Product risk might include product liability, design problems, etc. The underlying risk here is unperceived risks with the product.
- Competitor risk is related to industry risk; however it focused more directly on resources with which the competitor might be able to circumvent competitive barriers.
- The funding risk is that the capital necessary for the project is not available. For example, equity participants might fail to contribute their determined amount. Or, the underwriters might not be able to raise the target amount in the market.
- Currency; The first risk is exchange rate fluctuation, i.e., devaluation erodes the value of a contract or payment in the project company's home currency, or the currency in which it must service its debt. The second risk is currency controls, i.e., the sovereign government limits the project company's access to foreign exchange or curtails its ability to make foreign currency payments outside of the country. Another possible means of mitigating currency risk is to engage in a currency swap.
- Interest rate; Interest rate fluctuations represent a significant risk for highly-leveraged project financings. Arranging for long-term financing at fixed rates mitigates the risk inherent in floating rates. Furthermore, projects can enter into interest rate swaps to hedge against interest rate fluctuations.

## 2.6 Project Appraisal

As it has been discussed above project financing is subject to a variety of risks. Project appraisal is a means to foresee the possible benefit and risk attached to several projects and reach at the optimum investment decision.

### *What is Project Appraisal?*

**Project Appraisal** is a consistent process of reviewing a given project and evaluating its content to approve or reject this project, through analyzing the problem or need to be addressed by the project, generating

solution options (alternatives) for solving the problem, selecting the most feasible option, conducting a feasibility analysis of that option, creating the solution statement, and identifying all people and organizations concerned with or affected by the project and its expected outcomes. It is an attempt to justify the project through analysis, which is a way to determine project feasibility and cost-effectiveness (McConnell, 2011).

For a financial institution project appraisal “is a process whereby a leading financial institution makes an independent and objective assessment of the various aspects of an investment proposition for arriving at a financial decision and is aimed at determining the viability of the project” (Sharma, 2016)

## **2.7 How to appraise Investment Projects**

According to literatures banks use various types of project appraisal methods in the process of evaluating investment options.

A bank appraising a project which is a candidate for project finance will wish to be satisfied that the project is viable from technical, financial, economic, legal, social and political points of view, all the way from the project site to the final market place, and from the first ink on the first memorandum in the project sponsor’s office to the final repayment of the last loan. It will also wish to be assured that the project is reasonably insensitive to a changed environment, particularly in relation to profit and cash flow forecasts, and that the assumptions made as to financing terms can be supported in the lending market. (Findlay, 2012 ).

Reviewing approved proposals of World Bank, it can be understood that the proposed projects are evaluated from Economic, Financial, Technical, Institutional/Managerial, Social, Environmental and safeguard dimensions.

African Development Bank Group disclosed the appraisal process on its official website. ADB examines project feasibility through an appraisal mission. The appraisal mission - in consultation with the government and other stakeholders - examines the project's technical, financial, economic, technical, institutional, environmental, marketing, and management aspects as well as potential social impact. Detailed project risks and sensitivity analyses are carried out to assess viability of the proposed project.

The European commission on its update on the “Guide to cost benefit analysis of investment projects” (2014) discussed seven steps that have to be followed as a standard cost benefit analysis of investment projects.

Description of the context is the first step of the project appraisal aims to describe the social, economic, political and institutional context in which the project will be implemented. Secondly the project objectives should be defined in explicit relation to needs. In other words, the needs assessment builds upon the description of the context and provides the basis for the objective’s definition. As far as possible, objectives should be quantified through indicators and targets (quantified aspect of the objective).

After the objectives are defined the project must be identified. A project is clearly identified when the physical elements and the activities that will be implemented to provide a given good or service, and to achieve a well-defined set of objectives, consist of a self-sufficient unit of analysis; the body responsible for implementation (often referred to as ‘Project promoter’ or ‘beneficiary’) is identified and its technical, financial and institutional capacities analyzed; and the impact area, the final beneficiaries and all relevant stakeholders are duly identified (‘who has standing?’)

Following the identification Technical feasibility and environmental sustainability should be confirmed. Technical feasibility and environmental sustainability are among the elements of information to be provided in the funding request for major projects. Detailed information should be provided on: demand analysis; options analysis; environment and climate change considerations; technical design, cost estimates and implementation schedule. On the other hand Nagarajan, (2001) on its project management book also presented detailed technical factors to test the technical viability of projects.

***Selection of process/technology-*** the selection of the technology should answer questions like Does the technology make use of locally available raw material? Can the technology be implemented and maintained by locally available man power? Is the technology in tune with the local social and cultural conditions? Does the technology protect ecological balance?

***Scale of Operations*** Capital and operating costs as a function of the plant size should be considered to arrive at the appropriate scale of operation. Other factors like special problems of fabrication of equipment, transportation and erection of equipment, problem associated with availability of production inputs on a sustained basis etc., also impose restriction on the plant size.

**Raw material** cost of different raw materials available, the transportation cost involved, the continuous availability of raw material, the cost of capital investments required on plant and machinery should also be studied before arriving at a decision on the choice of raw material.

**Technical know-how** it must be ascertained whether the consultant has the requisite knowledge and experience and whether he has already executed similar projects successfully. Necessary agreement should also be executed between the project promoter and the know-how supplier incorporating all essential features of the know-how transfer.

**Collaboration Agreement** If the project promoters have entered into agreement with foreign collaborators; The competence and reputation of the collaborators through possible sources including embassies needs to be ascertained abroad and the collaborator's bankers. It must be ensured that the collaboration agreement does not infringe upon any patent rights. It is better to have a buy-back arrangement with technical collaborator. The collaboration agreement should have the necessary approval of government. If there is financial participation in the projects by the collaborator, its effect in the management of the unit and transfer of payment/payment of interest to the collaborator may be studied.

**Product Mix** the production facilities should be planned with an element of flexibility to satisfy the varying needs and preferences of customers

**Selection and Procurement of Plant and Machinery** Capacity of each machinery has to be decided by considering the output planned, machine hour required for each types of operation, and the real capacity of the machine.

**Plant layout** Plant layout should be so arranged that it ensures steady flow of production and minimizes the overall cost.

**Location of Projects** First region/territory is chosen that is the best suited for the project and then within the chosen region, the particular site is selected. The regional factors are raw materials, proximity to market, availability of labor, availability of supporting industries, availability of infrastructural facilities (Water, Power Transport facilities), location and climate. For choosing a particular site in the chosen region, considerations like cost of land, suitability of land, availability and suitability of groundwater, facilities for effluent disposal should be considered.

**Project scheduling** detailed project implementation schedule should be placed indicating there in the various steps to be taken up in the project implementation in chronological order and time required for completion of each stage.

**Environmental** Will the project have any adverse effects on the environment? Have remedial measures been included in the project design?

After the assessment on the technical and environmental sustainability financial, economic and risk aspects have to be addressed. Financial analysis is carried out in order to: assess the consolidated project profitability; verify the project financial sustainability, and outline the cash flows which underpin the calculation of the socio economic costs and benefits. (European commission 2014)

The three basic steps in determining whether a project is financially worthwhile or not as summarized from the AAU Module for project identification, analysis and appraisal (MBAP 606)are:-

- (a) Estimate project cash flows; Project cash flow is the stream of financial costs and benefits, or expenditures and receipts that will be generated by the project over its economic life, and will not be produced in its absence
- (b) Establish the cost of capital; and The cost of capital is the discount rate to be used in determining present value of cash flows
- (c) Apply a suitable decision or appraisal rule or criterion. These are Nondiscounted cash flow methods and discounted cash flow methods.

**Non discount cash flow** methods include ranking by inspection, the payback period, Proceeds per unit of outlay, the average annual proceeds per unit of outlay ,accounting rate of return (IRR) ,output - capital ratio

**Discounted cash flow methods** constitute the net present value (NPV), the internal rate of return of a project (IRR), and the net benefit investment ratio (NBIR)

The key concept in economic analysis is the use of shadow prices to reflect the social opportunity cost of goods and services, instead of prices observed in the market, which may be distorted. (European commission 2014).Social cost benefit analysis is a methodology developed for evaluating investment projects from the point of view of the society (or economy) as a whole. The main objective of an individual, a firm or a company in investing on a project is to earn the maximum possible returns for the investment. Accordingly, the project promoters are solely interested in wealth maximization. Hence the project promoters, including financing institutions, tend to evaluate only the commercial profitability of the project. Nagarajan, (2001)

According to the guideline the last aspect is risk assessment. Risk assessment is required to deal with the uncertainty that always permeates investment projects, including the risk that the adverse impacts of climate change may have on the project. Qualitative risk analysis, sensitivity analysis, probabilistic risk analysis and, defining risk prevention and mitigation strategy are methods to manage risk. (European commission 2014)

Nagarajan, (2001) presented detailed variables to measure the commercial aspect of a given project. Commercial (market) appraisal of a project is done studying the commercial successfulness of the product/service offered by the project. Determining demand for the product can be identified using Survey method, Statistical approach and Identify demand-supply gap. The Supply position for the product, distribution channels, pricing of the product and government policies should be addressed.

The management aspect of the given project has also to be considered. The Project Management Body of Knowledge (PMBOK) identifies the hard skill competencies of effective project managers, supporting each of the nine knowledge areas, including project scope management, time management, cost management, risk management, procurement management, communications management, quality management, and integration management.

Soft skills are also important attributes of an effective project manager. Numerous soft skills have been found to positively impact the effectiveness of a project manager. Soft skills, as stated on different project management literatures include:-

- Leadership, communications, verbal and written skills, attitude, and the ability to deal with ambiguity and change (Stevenson and Starkweather, 2010).
- Optimism was found to have a positive effect on project outcomes by facilitating better collaboration and problem-solving (Smith, Bruyns, Evans, 2011).
- Behavioral competencies, including motivation, self-control, openness, negotiation, and results orientation (Alam,et.al. 2010)
- Conflict management, trust building and decision making (Thuerbach.C, 2013).

## **2.8 Empirical Literatures**

The researcher did not find a research made on the same topic but got those somehow related ones.

Ayodele Thomas (2012), in his article on Risk Management and Project Appraisal of Banks, tried to assess the practice of project appraisal from the risk analysis angle. He saw how they use the scientific analytical tools to capture variability under risk and uncertainty. This research is solely concentrated on one aspect of

project appraisal i.e. risk analysis. The finding of the research showed that not all the various risk analytical methods are popular among the bankers as opposed to all being taught in theory.

Another research was conducted on the Role of project financing appraisal on the credit risk management in the banking sector by Kabeja Faustin (2016). In the study financial appraisal, technical appraisal and management appraisal were taken as an independent variable to determine the dependent variable (credit risk). The researcher confirmed the significant effect of the independent variable (Appraisal process) on the dependent variable.

Elsie Khakasa (2015) assessed the IT project appraisal process of commercial banks in Kenya. The researcher measures the process from five different aspects using detailed variables under them. The fundamental conclusion of this research is that in the banking industry, the level of usage of sophisticated techniques that integrate financial and strategic analysis to appraise IT investment is low compared to the usage of “traditional” appraisal techniques that focus on the financial return of an investment. The conclusion underlines the importance of further developing and spreading knowledge on how to analyze potential IT investments using formal techniques.

The Role of Projects’ Appraisal on the Performance of Financial Institutions was evaluated by Jonnes Nzivo (2016). The researcher examined the effect of project appraisal on the performance of banks. The project appraisal process was measured from technical, managerial, financial, and market aspects. At the meantime, the performance of the bank was measured in terms of profit, revenue and loan performance. The finding of the research is that, Project financial appraisal significantly influences financial performance among financial institutions most notably by considerably addressing all possible bottlenecks in a project’s finances, key among which include initial working capital, project profitability project’s operating expenditures and financial statements including income statement, cash flow statement and balance sheets as well as a project’s internal cash generations (account receivables) capabilities and capital goods.

The researcher is able to find three local researches made on a related topic. The objective of the first research was to assess the appraisal process of government priority projects in the case of the Development Bank of Ethiopia. The researcher Senay Getu (2016) was more focused on the constraints of the appraisal process and concluded that;

- Low level of quality and completeness of project feasibility study provided by project promoters,
- Unavailability of reliable and quality data and up to date information related to manufacturing projects.

- Poor credit culture or history of project promoter
- Lack of well trained and experienced consultants for complex manufacturing projects study
- Level of knowledge and skill of project appraiser; are the challenges faced in the process of project appraisal process.

The second research was undertaken by Fitawok Abebe (2016) examined the agricultural financing of the commercial bank of Ethiopia and indentified that;

- The bank has no sufficient agricultural expertise. Due to this most agricultural loan request handled by others who don't have expertise know how on agriculture.
- The capacity of loan performers is also weak to analyze and appraise agricultural loan requests
- The management information system does not provide timely and useful information to evaluate risk levels and trends in the agricultural portfolio.
- lack of properly trained consultant to prepare agricultural project feasibility study,
- less availability of data and up to date information,
- less capability of credit performers of the bank to evaluate the technical and financial projections of agricultural projects,

As causes of default of projects financed by Commercial Bank of Ethiopia, Fikerete Gashaw (2015) identified challenges faced while undertaking project appraisal.

- Lack of well-organized Research and Development Center to supply quality, accurate and timely information to Credit department.
- Due to lack of appropriate and accurate information, the analysis result will not show the true picture.
- Lack of proper knowledge and experiences to appraise novel project loan.
- Sometimes there are external pressures to process the loan within only short period of time and without the customer fulfill the required documents.
- There is management intervention in some cases on the loan approval process.

The empirical researches tried to measure the effect of project appraisal on the performance of financial institutions. All of the studies were concerned on measuring the project finance appraisal process of financial institutions. However, some of them are solely concentrated on a single aspect while the others took some but not all aspect of project appraisal. In this case study, the researcher tried to include the five aspects

of the project appraisal i.e. financial, managerial, technical, market and risk appraisal. Because the case study is conducted on a private commercial bank, utterly interested in wealth maximization, economic and social cost benefit aspects of appraisal are not considered. This case study examines the appraisal of proposed projects, examine how well they are practiced in the banking industry specifically in Dashen Bank S.C and what constrained the process.

# Chapter Three

## METHODOLOGY

### 3.1 Introduction

The chapter constitutes the research design, research approach, the type of data, source of data, methods of data collection, target population and data analysis.

### 3.2 Research Design

According to Saunders et.al (2009), most common used research designs are exploratory, descriptive and explanatory which are classified based on the purpose of the research. The primary characteristic of the descriptive research is that it represents an attempt to provide an accurate description or picture of a particular situation or phenomena. This approach does not ferret out cause and effect relationships. Instead, it attempts to identify variables that exist in a given situation and, at times, to describe the relationship that exists between these variables. It is restricted to factual registration and that there is no quest for an explanation why reality is showing itself this way. Descriptive research is about describing how reality is. (Voordt 2002)

This research is intended to review the current practice of project appraisal. Thus, descriptive research approach better fits the research objective.

### 3.3 Research approach

Both qualitative and quantitative approaches are used throughout the research. Quantitative method is used to capture the attitude and opinion of the credit related staffs of two departments involved in the project appraisal practice. These staffs are senior customer relationship manager, customer relationship manager, credit appraisal expert and loan analyst.

Qualitative data is gathered by undertaking an in-depth interview with experienced personnel within the departments engage in the process. In-depth interviewing is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation. In-depth interviews are useful when you want detailed information about a person's thoughts and behaviors or want to explore new issues in-depth. (Carolyn & Palena , 2006)

### **3.4 Data type, Source of Data and Methods of Data Collection**

Primary data is used throughout the paper. The data is obtained from staffs of Credit Analysis and Appraisal Department and Portfolio Management Department who have a direct involvement with project appraisal.

A structured questionnaire and In-depth interview are used as a tool to collect data. The questionnaire is designed in Likert type scale and has four sections. The first section is all about the characteristics and attributes of the employee who filled the questionnaire including their current position in the bank, their educational qualification, the experience in the bank and in credit appraisal process. The second section incorporates the four aspects of project appraisal i.e., technical, commercial, financial and managerial. Challenges faced during project appraisal are presented in the third section. Open-ended questions about; financial aspect, risk analysis and challenges in appraisal process are presented in the last section of the questioner. To avoid biases by the respondents, the academic purpose of the study has been explained. The confidentiality of the response also well explained at the beginning of the questionnaire.

Since employees in the banking industry especially those working on managerial positions have a tight schedule, in-depth interview is made with only two Senior Customer Service Managers. These Managers have 15 & 13 years relevant experience with project appraisal.

### **3.5 Target Population**

The credit analysis & Appraisal Department and Portfolio Management Department are responsible for evaluating projects. The total number of staffs who have a relevant relationship with project appraisal i.e. senior customer relationship manager, customer relationship manager, credit appraisal expert and loan analyst, within these departments are 48. These staffs are considered as a target population. There are two kinds of surveys: sample surveys and census surveys. In a sample survey, data are collected for only a fraction (typically a very small fraction) of units of the population while in a census survey; data are collected for all units in the population (survey methods and practices 2003). For the case of this research, census survey is more appropriate. Questioners were distributed for the 48 staffs identified as target population and able to collect 37 of them. Since 77% of the population has responded to the questioner and the population is homogenous, it can be taken as a representative of the opinions of the population.

### **3.6 Data Analysis**

In analyzing Likert scale data there are two long-standing controversial issues. One argument is that, in a Likert-type data, the interval between numeric values cannot be measured. A number

assigned to Likert-type items has a logical or ordered relationship to each other. The scale permits the measurement of a degree of difference but not the specific amount of difference. Due to these characteristics, Likert-type items fall into the ordinal measurement scale. Procedures to analyze ordinal measurement scale items include median for central tendency and frequencies for variability. (Imran Khan, 2013)

The other argument is that parametric tests not only can be used with ordinal data, such as data from Likert scales, but also parametric tests are generally more robust than nonparametric tests. That is, parametric tests tend to give “the right answer” even when statistical assumptions such as a normal distribution of data are violated, even to an extreme degree. Thus, parametric tests are sufficiently robust to yield largely unbiased answers that are acceptably close to “the truth” when analyzing Likert scale responses. (Norman, 2010)

In the case of this research, the data is analyzed using both parametric and nonparametric analysis. Tables, frequencies and percentages from descriptive statistics and mean and standard deviation from parametric statistics are used. For the ease of computation the value 5 is assigned for Strongly Agree, 4 for Agree, 3 for Neutral, 2 for Disagree and 1 for Strongly Disagree. The data obtained from the responses of the interviewed candidates is also summarized qualitatively.

SPSS is used to work out frequency, percentage, mean and standard deviation.

### **3.7 Organization of the research report**

The final paper has five chapters. Chapter one consists the introduction/Background, Statement of the problem, research question, research objective and scope of the study. A detailed review of related literature is presented in chapter two. Chapter three describes the methodology of the research. The data collection tool, the sampling technique, how the data is analyzed and presented are included in this chapter. Chapter four contains the Data analysis and presentation part of the research. The last chapter presents the conclusion and recommendation of the research paper.

### **Company Profile**

Dashen bank, as posted on its official websites, is a private commercial bank established on September 20, 1995, according to the commercial code of Ethiopia, 1960, and the licensing and supervision of banking business proclamation No 84/1994. The business propose of the bank is to render commercial banking activities both at the domestic and international spheres.

Dashen grants loans and advance to various sectors of the economy on the strength of viability and assessment of concentration risk

Major types of credit facilities offered by the bank are

- Overdraft (for working capital)
- Term loans (Short and project finance)
- Letter of credit facility
- Advance on import bills
- Revolving overdraft (for export bills)
- Merchandise loan
- Trade bills discounted
- Export credit guarantee scheme
- Letter of guarantee (Advance, Performance and Bid Bonds)

Typical Loan Categories

- Agriculture
- Manufacturing
- Import/Export Loans
- Trade and Services
- Building & Construction
- Transport

At the end of September 30, 2017, the outstanding loans and advances of the bank reached Birr 19,645 million which is about 14 % of the total outstanding loan granted by private banks. (the total outstanding balance is obtained from NBE's First quarter report of 2017/18). From the total outstanding balance of loans and advances Birr 14, 259 million or 73% is granted in the form of term loans (short and project finance).

The credit policy and procedure manual of the bank put the steps to be followed in the process of loan appraisal and approval. All loan processes start at area bank level based on documents required to support and justify the credit line requested. Review and screening works would be handled by the credit analysis & Appraisal Department and Portfolio Management department before presentation to committee approval.

# Chapter Four

## RESULTS AND DISCUSSION

This chapter is composed of three parts. The first section contained information on the response rate of the respondents. General information about the respondents is presented in the following section. In the third section the data obtained on the project finance appraisal practice is presented and analyzed.

### 4.1 Response

Questioners were distributed for the 48 staffs identified as target population and able to collect 37 of them. Since 77% of the population has responded to the questioner and the population is homogenous, it can be taken as a representative of the opinions of the population. In-depth interview was conducted with two senior level managers.

### 4.2 General Information

This subsection constitutes the respondent’s current carrier position; experience in the banking industry, experience in credit related department, and their educational background.

*Table 4.1 Demographic Data*

<b>Variables</b>		<b>frequency</b>	<b>percentage</b>
<b>Current position</b>	Senior Customer Relationship Manager	12	32
	Customer Relationship Manager	10	27
	Credit Appraisal Expert	11	30
	Loan analyst	4	11
<b>Work experience in the Bank</b>	0-5 years	9	24
	6-10 years	7	19
	11-15 years	8	22
	Above 15 years	13	35
<b>Work experience in Project Appraisal</b>	0-5 years	10	27
	6-10 years	6	16
	11-15 years	9	24
	Above 15 years	12	33
<b>Educational Level</b>	Master’s Degree	26	70
	Bachelor Degree	11	30

*(Source: Survey Result and own computation)*

#### ***4.2.1 Respondents position (current)***

The number of senior customer relationship managers constitutes the highest percentage of the total respondents. Since senior customer relationship managers have the closest involvement in the process of loan appraisal, 32 % is good representation. Credit appraisal experts, Customer relationship managers and loan analysts represent 30%, 27% and 11% of respondents respectively.

#### ***4.2.2 Respondents Experience in the Bank***

More than one-third of the respondents found to have 15 or more years of experience in the banking industry. From the total respondents, 76 % have more than 6 years of banking experience. Thus, we can say that the respondents have enough experience in the banking industry.

#### ***4.2.3 Respondents Experience in project Appraisal (Credit Appraisal)***

Respondents with more than 15 years project appraisal experience are 12 or 33% while those worked from 6 to 15 years constitute 40 % of the total respondent. Since 73 % of the respondents have more than 6 years of project related experience we can rely on the responses concerning practical accomplishments.

#### ***4.2.4 Respondents educational background***

Regarding the educational qualification of respondents, 70% of the respondents hold Master Degree and the remaining are Bachelor Degree holders. Thus, we can say that the respondents are well qualified.

In general the respondents are in a better position, experience and educational qualification to observe and provide rational opinions about the practical project appraisal process.

### **4.3 Project Finance Appraisal Practice**

Under this subsection the data obtained from the questionnaire and interview pertaining to the technical, financial, managerial, commercial and risk aspects presented and analyzed. The challenges identified on the project finance appraisal process are also addressed.

#### ***4.3.1 Technical Aspect***

The technical aspect of project appraisal includes choice of technology, scale of operation, raw material, technical know how available, evaluation of collaboration agreements, selection of product mix, selection and procurement of plant and machinery, evaluation of the plant layout and examination of the project scheduling. Each is assessed in the following section using the specific criteria under them.

##### ***a) Choice of technology***

If the proposed project requires installing new technology, how the Bank is capable of measuring its appropriateness from different dimensions? According to literature while choosing the technology to be used

throughout the project the financing institution has to make sure that the technology makes use of locally available raw material, is in tune with the local social and cultural conditions, protects ecological balance and whether the technology be implemented and maintained by locally available man power. (Nagarajan,2001)

**Table 4.2 Choice of technology**

Particulars	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Mean	S.D
	No	%	No	%	No	%	No	%	No	%		
The bank make sure that the technology make use of locally available raw material	18	49	9	24	10	27					4.22	.85
The Bank makes sure that the technology is in tune with the local social and cultural conditions	18	49	10	27	9	24					4.24	.83
The bank makes sure that the technology protects ecological balance	14	38	14	38	9	24					4.14	.79
The bank makes sure that the technology be implemented and maintained by locally available man power	5	14	23	62	4	11	5	14			3.75	.86
<b>Grand Mean</b>	<b>4.09</b>											

*(Source: Survey Result and own computation)*

According to the survey result 49% of the respondents strongly agreed and 24% agreed that the bank makes sure that the technology use locally available raw material. Since 73% of the respondents agreed and no one disagrees, we can conclude that there is a better consideration on this point.

76 % of the respondents agreed that; the bank considers the social, cultural and ecological effect the technology may bring with. The remaining 24% of the respondents are neutral and no one disagrees.

Regarding the consideration of the implementation and maintenance of the technology with locally available man power, 76% of the respondents agreed while 14% disagreed.

The survey result above reviled that all the points under the choice of technology are well considered in the bank. This conclusion also supported by the grand mean figure 4.09.

***b) Scale of operation***

While deciding on the scale of operation, the financing institution has to identify and consider special problems of fabrication of equipments and erection of equipments, problems associated with transportation, problems associated with availability of production inputs on sustained bases. Capital and operating costs analysis as a function of the plant size has also to be considered. (Nagarajan, 2001).

The survey result on these points showed that, more than 70 % of the respondents agreed that the bank considers each point indicated above in the literature. The remaining are neutral and no one disagrees on the issue. The values of the mean and standard deviation of all the four points also support the argument. Thus, we can conclude that the scale of operation of the proposed project is decided according to what the literature state. The grand mean 4.30 is also in favor of the conclusion.

**Table 4.3 Scale of operation**

Particulars	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Mean	S.D
	No	%	No	%	No	%	No	%	No	%		
Uses capital and operating costs analysis as a function of the plant size	20	54	7	19	10	27					4.27	.87
Considers factors like special problems of fabrication of equipments and erection of equipments	18	49	14	38	5	13					4.35	.72
Considers problems associated with transportation	18	49	10	27	9	24					4.24	.83
Considers problems associated with availability of production inputs on sustained bases.	20	54	9	24	8	22					4.32	.82
<b>Grand Mean</b>	<b>4.30</b>											

*(Source: Survey Result and own computation)*

**c) Raw material**

Since the manufacture process and the machinery/equipment to be used also to a larger extent depend upon the raw material, the type of raw material to be used should be chosen carefully after analyzing various factors like the cost of different raw materials available, the transportation cost involved and the continuous availability of raw material.(Nagarajan,2001).

The survey result showed that 61% and 65% of the respondents disagree to the points that the bank assesses the cost of different raw materials available and the transportation cost involved while selecting the raw material respectively. The values of the individual mean and standard deviation also inclined towards the disagreement. The continuous availability of raw material is deemed considered by the bank by 76% of the respondents while 24% of them are neutral.

**Table 4.4 Raw material**

Particulars	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Mean	S.D
	No	%	No	%	No	%	No	%	No	%		
Assess cost of different raw materials available	5	14	4	11	5	14	11	30	12	31	2.43	1.41
The transportation cost involved,	5	16	6	16	1	3	14	35	11	30	2.46	1.5
The continuous availability of raw material	14	38	14	38	9	24		0		0	4.14	0.79
<b>Grand Mean</b>	<b>3.01</b>											

*(Source: Survey Result and own computation)*

From this we can say that the continuous availability of raw material is well considered by the Bank. However the cost of different raw materials and the related transportation cost are not properly assessed on the raw material selection process. Since the grand mean 3.01 is more than 2.5 we can say that the overall practice of selecting raw material is better.

**d) Technical now how available**

The European commission (2014) on its update on the “Guide to cost benefit analysis of investment projects” define technical capacity as, the relevant staff resources and staff expertise available within the organization of the project promoter and allocated to the project to manage its implementation and subsequent operation. In the case of the need to recruit additional staff, evidence should be provided that no constraints exist to find the necessary skills on the local labor market.

Insuring the availability of consultants that have the relevant knowledge and experience and making sure of the proper agreement is in place are what the financing institution be concerned about. In this regard 62% and 64% of the respondents did not believe that the availability of relevant knowledge of the consultant and the agreement made with the consultant is well considered respectively while 11% and 8% are neutral. The mean value 2.49 and 2.48 also inclined towards the disagreement.

**Table 4.5 Technical now how available**

Particulars	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Mean	S.D
	No	%	No	%	No	%	No	%	No	%		
Whether the consultant has the requisite knowledge and experience in executing similar projects successfully.	4	11	6	16	4	11	13	35	10	27	2.49	1.32
Whether the necessary agreement has been executed between the project promoter and the know-how supplier.	5	14	5	14	3	8	14	37	10	27	2.48	1.39
<b>Grand Mean</b>	<b>2.48</b>											

*(Source: Survey Result and own computation)*

The consultant’s knowledge, experience and the agreements involved are not well considered in the required depth in the project evaluation process. This is also confirmed by the grand mean figure 2.48.

**e) Evaluation of collaboration agreements**

According to Project management book of Nagarajan,(2001) if the project promoters have entered into an agreement with foreign collaborators; the competence and reputation of the collaborators, patent rights, government approval requirements and its effect on the management and financial matters need to be assessed.68% of the respondents did not agree on; the bank assesses the competence and reputation of the foreign collaborators of proposed projects. On the other hand, 71% and 81% of the respondents agreed that, the Bank assures that the collaboration agreement does not infringe upon any patent rights and the collaboration agreement has the necessary approval of government respectively. If there is financial participation in the projects by the collaborator, 73% of the respondents agree that, its effect in the management of the unit and transfer of payment/payment of interest to the collaborator is studied by the Bank.

**Table 4.6 Evaluation of collaboration agreements**

Particulars	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Mean	S.D
	No	%	No	%	No	%	No	%	No	%		
The competence and reputation of the collaborators	2	5	5	14	5	14	15	41	10	27	2.30	1.18
The collaboration agreement does not infringe upon any patent rights.	21	57	5	14	11	29					4.27	.9
The collaboration agreement have the necessary approval of government	16	43	14	38	7	19					4.24	0.76
If there is financial participation in the projects by the collaborator, its effect in the management of the unit and transfer of payment/payment of interest to the collaborator is studied.	5	14	22	59	5	14	5	14			3.73	.87
<b>Grand Mean</b>	<b>3.64</b>											

(Source: Survey Result and own computation)

From the survey result above we can say that any collaboration agreement involved in the project proposal is investigated well from the legal and financial angles. But the Competence and reputation of the collaborator didn't get proper attention. The grand mean 3.64 show better consideration of the overall evaluation of collaboration agreement.

**f) Selection of product mix**

Project appraisal is a means to assure that the project is reasonably insensitive to a changed environment, particularly in relation to profit and cash flow forecasts (Findlay, 2012). Meeting the changing needs of customers is achieved through product mix. Thus, the technology must allow flexibility in production. In this regard 65% of the respondents believe that the flexibility issue is not considered in the process of project evaluation. The mean value 2.46 also appears on the disagreement side.

**Table 4.7 Selection of product mix**

Particulars	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Mean	S.D
	No	%	No	%	No	%	No	%	No	%		
Whether the production facilities planned with an element of flexibility to satisfy the varying needs and preferences of customers	6	16	5	19			15	35	11	30	2.46	1.46
<b>Grand Mean</b>	<b>2.46</b>											

(Source: Survey Result and own computation)

Since the majority of the respondents disagree with the issue of flexibility, we can conclude that the bank is inconsiderate regarding flexibility of production facilities.

**g) Selection and Procurement of Plant and Machinery**

The machinery and equipment required for a project depend up on the production technology proposed to be adopted and the size of the plant proposed. Capacity of each machinery is to be decided by making a rough estimate. The survey result tells that 19% of the respondents agree and 67% of the respondents disagree that the bank use rough estimate of output planned, machine hour required for each types of operation, and the real capacity of the machine in the process of selecting the machinery or plant.

**Table 4.8 Selection and Procurement of Plant and Machinery**

Particulars	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Mean	S.D
	No	%	No	%	No	%	No	%	No	%		
Use rough estimate of output planned, machine hour required for each types of operation, and the real capacity of the machine.	2	5	5	14	5	14	13	35	12	32	2.24	1.21
<b>Grand Mean</b>	<b>2.24</b>											

*(Source: Survey Result and own computation)*

In addition to the survey result discussed above, looking at the mean value 2.24, it can be deducted that the Bank didn't take in to accounts output planned, machine hour required for each types of operation, and the real capacity of the machine while selecting plant or machinery.

**h) Evaluating the plant layout**

The efficiency of a manufacturing operation depends upon the layout of the plant and machinery. Plant layout should be so arranged that it ensures steady flow of production and minimizes the overall cost. (Nagarajan, 2001)

Regarding the consideration of this point during project appraisal, 70% of the respondents choose disagreement or they didn't believe that this point is evaluated in the appraisal process of the Bank.

**Table 4.9 Evaluating the plant layout**

Particulars	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Mean	S.D
	No	%	No	%	No	%	No	%	No	%		
Plant layout is arranged so as to ensure steady flow of production and minimizes the overall cost.			6	16	5	14	17	46	9	24	2.22	1
<b>Grand Mean</b>	<b>2.22</b>											

*(Source: Survey Result and own computation)*

Since only 16 % of the respondents are agreed and 70 % disagreed, it can be seen that plant layout is not considered in the appraisal process. The mean value 2.22 is also support this argument.

***i) Examination of the project scheduling***

A project schedule is a tool used to help manage resources and tasks, and it will help to guide a project to a successful completion. The schedule lists the tasks to be completed during the project as well as identifying what resources – personnel and materials – are necessary to complete that task. (Eric Stallsworth 2009)

With 14% of the respondents neutral, the remaining 86% of the respondents agreed that detailed project implementation schedule has been placed indicating there in the various steps to be taken up in the project implementation in chronological order and time required for completion of each stage.

Supporting this with the mean value 4.43, we can say that the scheduling aspect of the proposed project got proper examination.

**Table 4.10 Examination of the project scheduling**

Particulars	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Mean	S.D
	No	%	No	%	No	%	No	%	No	%		
Detailed project implementation schedule has been placed indicating there in the various steps to be taken up in the project implementation in chronological order and time required for completion of each stage.	21	57	11	29	5	14					4.43	.73
<b>Grand Mean</b>	<b>4.43</b>											

*(Source: Survey Result and own computation)*

The above analysis evaluated the technical aspect of the project finance appraisal process from nine different dimensions. The grand mean of each is calculated from the specific points under them. Table 4.14 presents the aggregate mean of each of the nine dimensions considered.

**Table 4.11 Aggregate mean values**

<b>Particulars</b>	<b>Aggregate Mean</b>
Choice of technology	<b>4.02</b>
Scale of operation	<b>4.30</b>
Raw material	<b>3.05</b>
Technical now how available	<b>2.48</b>
Evaluation of collaboration agreements	<b>3.64</b>
Selection of product mix	<b>2.46</b>
Selection and Procurement of Plant and Machinery	<b>2.24</b>
Evaluating the plant layout	<b>2.22</b>
Examination of the project scheduling	<b>4.43</b>
<b>Grand Mean</b>	<b>3.20</b>

*(Source: Survey Result and own computation)*

Evaluation of the plant layout, selection and procurement of plant and machinery, selection of product mix and making sure of technical now how available registered grand mean values 2.22, 2.24, 2.46 and 2.48 respectively. Since these mean values are less than 2.5, we can observe the existence of significant gap on the areas. On the other hand examination of the project scheduling, identification of scale of operation and choice of technology are the most considered ones with grand mean values 4.43, 4.30 and 4.02 respectively.

### **4.3.2 Financial aspect**

The financial analysis deals primarily with earning considerations of a project. It is concerned with whether the project will be able to repay and whether the project can be financially viable or profitable. (Gittinger.P 1972)

In this section the financial aspect evaluation of the proposed project is addressed. Three questions are prepared to measure whether the bank used Cash flow estimates or not, if it uses, which methods are used among the popular discounted and nondiscounted cash flow methods.

#### **a) Estimating Cash Flow**

Majority of the respondents or 72% are agreed that cash flow estimates are used for evaluating the financial viability of the proposed project. The remaining 14% are neutral and the other 14% disagreed

**Table 4.12 Financial aspect**

Particulars	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Mean	S.D
	No	%	No	%	No	%	No	%	No	%		
Estimates project cash flows Based on financial costs and benefits, or expenditures and receipts that will be generated by the project over its economic life	14	37	13	35	5	14	5	14			3.97	1.32
<b>Grand Mean</b>	<b>3.97</b>											

*(Source: Survey Result and own computation)*

Taking the survey result it can be observed that the Bank use cash flow estimates to evaluate the financial performance of the project.

**b) Nondiscounted cash flow methods**

As it can be understood from the above survey result, the bank uses cash flow estimating methods to assess the financial viability of a proposed project. Six popular methods of nondiscounted cash flow estimating methods were presented for choice leaving space for additions if methods other than the specified were used.

The payback period of estimating cash flow is deemed being used by the bank, by 92 % of the respondents followed by accounting rate of return which is chosen by 51 % of the respondents. Ranking by inspection, the average annual proceeds per unit of outlay and Output - capital ratio got 5 % of the respondents vote each. Again 5% of the respondents believe that nondiscounted methods are not used in the process of project appraisal. No additional method was suggested.

**Table 4.13 Nondiscounted cash flow methods used**

Particulars	No	%
Ranking by inspection	5	4
The payback period	34	92
Proceeds per unit of outlay	0	0
The average annual proceeds per unit of outlay	5	14
Accounting rate of return (IRR)	19	51
Output - capital ratio	5	14
Nondiscounted methods are not used in the process of project appraisal	5	14

*(Source: Survey Result and own computation)*

The payback period and the Accounting rate of return are the widely used nondiscounted cash flow methods in the Bank. On the opposite Ranking by inspection, the average annual proceeds per unit of outlay and

Output - capital ratio are not well known in the Bank. Because every method has its own strength and weakness, using different methods help to uphold the weakness of one by the strength of the other.

**c) Discounted cash flow methods**

Three discounted cash flow methods were presented for choice with request for additional suggestion if any. The net present value (NPV) is chosen by 89% of the respondents as a discounted cash flow method used to evaluate the financial dimension of the proposed project. The internal rate of return (IRR) and the net benefit investment ratio (NBIR) picked by 11% and 5% of the respondents respectively. Same like on the nondiscounted method, 5% of the respondents believe that none of the above discounted methods are used in the process of project appraisal. No additional discounted method was suggested.

**Table 4.14 Discounted cash flow methods used**

Particulars	No	%
The net present value (NPV)	33	<b>89</b>
The internal rate of return of a project (IRR)	4	<b>11</b>
The net benefit investment ratio (NBIR)	14	<b>5</b>
None of the above discounted methods are used in the process of project appraisal.	14	<b>5</b>

*(Source: Survey Result and own computation)*

From this, it can be seen that the net present value (NPV) is the most accepted method in the Bank’s project evaluation process. The internal rate of r

eturn (IRR) and the net benefit investment ratio (NBIR) are not well experienced in the process.

The overall evaluation of the practice of financial estimating mechanisms i.e. discounted and the nondiscounted cash flow methods indicated that the bank is over-relied on few methods among the several.

**4.3.3 Managerial Aspect**

Banks and financial institutions that lend money for financing projects lay more emphasis on management appraisal. Management appraisal is purely qualitative and subject in nature. (Nagarajan,2001)

According to The Project Management Body of Knowledge (PMBOK), a Project manager needs to have hard skill and soft skill.

70% and 62 % of the respondents disagree that the Bank measures hard and soft skill of the management of the proposed project respectively. The individual mean values 2.41 and 2.49 also confirm the result.

**Table 4.15 Managerial Aspect**

Particulars	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Mean	S.D
	No	%	No	%	No	%	No	%	No	%		
Hard Skills like scope, time, cost, risk, procurement, quality, integration and communication management of a project.	5	14	6	16			14	38	12	32	2.41	1.44
Soft skills like leadership, communication, conflict management, decision making ...etc.	4	11	8	22	2	5	11	30	12	32	2.49	1.43
<b>Grand Mean</b>	<b>2.45</b>											

*(Source: Survey Result and own computation)*

The opinion of the candidates of the survey with a grand mean of 2.45 indicated that the management of the proposed project got little emphasis unlike its significant contribution on the project outcome. The response of the interview candidates also supports this finding. They believe that the management of a proposed project didn't receive proper attention when compared with the other aspects.

#### **4.3.4 Market/Commercial Aspect**

The very survival and success of any project depend on the question as to whether the product/service offered by the project is successful commercially. Commercial (market) appraisal of a project is done studying the commercial successfulness of the product/service offered by the project. ( I. M. & Mirrleas, 1969).

Determining demand for the product, Supply position for the product, distribution channels, pricing of the product and Government policies are evaluated under the commercial aspect.

##### **a) Determining Demand for the product**

A new project can be one that identifies a new product for which there is demand from the customers or it can be a project for the production of a product that is already in the market but the demand for which is in excess of the supply, leaving a gap to be filled in.( I. M. & Mirrleas, 1969).

Three ways of identifying the demand of the product i.e. Survey method, Statistical approach and Identify demand-supply gap were checked whether they are practiced by the Bank or not. Off the survey participants, 71% and 64% didn't agree that Survey method and Statistical approach are used in the process of defining

the demand of the product respectively. While 81% of the respondents agreed that demand-supply gap is used in the process, with zero disagreement.

**Table 4.16 Determining Demand for the product**

Particulars	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Mean	S.D
	No	%	No	%	No	%	No	%	No	%		
Survey method	3	8	6	16	2	5	19	51	7	20	2.43	1.31
Statistical approach	5	14	5	14	3	8	9	24	15	40	2.35	1.47
Identify demand-supply gap	16	43	14	38	7	19					4.24	0.76
<b>Grand Mean</b>	<b>3.00</b>											

*(Source: Survey Result and own computation)*

The bank uses demand-supply gap analysis to reach at the market demand of the product of the proposed project. Statistical approach and Survey method are not well practiced. The grand mean lay above the average 2.5 indicating the better overall application of the methods.

**b) Other commercial aspects**

The consideration of; Supply position for the product, distribution channels, pricing of the product and Government policies ,by the Bank was assessed by the participants of the survey. Identification of Supply position for the product and reviewing of Government policies get 78% and 72% agreement of the respondents respectively. On the other hand, 64% and 67 % of the respondents think that Distribution channels and Pricing of the product is not considered.

**Table 4.17 Other commercial aspects**

Particulars	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Mean	S.D
	No	%	No	%	No	%	No	%	No	%		
Supply position for the product	15	41	14	37	5	14	2	5	1	3	4.08	1.01
Distribution channels	1	3	5	14	7	19	14	37	10	27	2.27	1.1
Pricing of the product	1	3	4	11	7	19	14	37	11	30	2.19	1.08
Government policies	5	14	22	58	5	14	5	14			3.73	0.87
<b>Grand Mean</b>	<b>3.07</b>											

*(Source: Survey Result and own computation)*

Even though the Supply position for the product and Government policies concerning the market are properly addressed in the process of project appraisal, defining Distribution channels and Pricing of the

product got little consideration. However the grand mean 3.07 confirm the better concern given around the area.

The aggregate means of determining demand for the product and determining other commercial aspects are 3.00 and 3.07 respectively. Even though both points under market/demand analysis are said to be well considered, the consideration of demand analysis for the product of the proposed project is less compared to the other commercial aspects

#### 4.3.5 Risk Analysis

Risk analysis is essentially a method of dealing with the problem of uncertainty. Risk emanates from the uncertainty encompassing the projected variables. The evaluation of project risk, therefore, depends on the one hand, on our ability to identify and understand the nature of uncertainty surrounding key project variables and on the other, on having the tools and methodology to process its risk implications on the return of the project. (Sawakis Sawides 2012)

The three well known analytical tools were offered to be chosen by the respondents with a space provided for addition if any. There is also a question whether there is defined risk prevention and mitigation strategy. The Sensitivity analysis is selected by 79% of the respondents. Qualitative risk analysis and Probabilistic risk analysis; chosen by 19% and 9 % of the respondents correspondingly. Only 10 % of the respondents believed that the bank has defined risk prevention and mitigation strategy for projects.

**Table 4.18 Risk Analysis**

Particulars	No	%
Sensitivity analysis	29	<b>79</b>
Qualitative risk analysis	7	<b>19</b>
Probabilistic risk analysis;	3	<b>9</b>
Defined risk prevention and mitigation strategy	4	<b>10</b>
There is no any risk analysis tool used in the process of project appraisal	5	<b>14</b>

*(Source: Survey Result and own computation)*

Sensitivity analysis is the most used method for analyzing risks involved in the proposed project. The others are not well practiced by the bank. The result also revealed that the bank has no defined risk prevention and mitigation strategy for project risks that may encounter.

Responses from the interview are aligned with the above findings. As it can understood from the above analysis some points under each aspects get great concern while others not. The interview candidates as well

indicated that there are some points that have given due consideration and others got little, depending on the time available and the alertness of management.

#### ***4.3.6 Challenges facing the project appraisal practice***

Financial institutions come across various challenges while appraising projects. Six major challenges are identified from different empirical studies made on the same area. These points were arranged on a Likert scale to get the opinion of the survey candidates. Space also provided for writing if any additional challenges other than the six points specified were encountered. The responses of the interview candidates also summarized under the respective points.

Low level of quality and completeness of project feasibility study provided by project promoters is agreed to be a practical challenge in the Bank by 86% of the respondents. The remaining 14 % is neutral but no one disagrees on this point. The interview candidates also mentioned this point as a challenge.

Unavailability of reliable and quality data and up to date information is also believed to be a challenge by 71% of the participants with no disagreement. The interview response is also confirmed this argument. According to the response of the interview candidates, the information obtained need supplementary verification to boost appraisal quality. There is also difficulty in accessing primary sources of appraisal & analysis input variables

Low level of knowledge and skill of project appraiser is deemed as being a challenge by 53% of the respondents, While 33% of them disagreed and 14% are neutral. The mean value 3.32 also confirmed the challenge is common.

According to the response from the interview candidates, even though their understanding level differs with their experience in credit areas and project appraisal areas, all direct participants have some knowledge about scientific project appraisal techniques. But they also point out problems related with updating existing staffs and offering training for the new ones at the appropriate time. There are also problems in recruiting external consultants for short-term training regarding project appraisal process; due to the low demand it has on the market the existing consultants are not well prepared on the area.

Lack of well trained and experienced consultants on the specific project is another point evaluated by the process. Off all the respondents 73% of them agreed, 14% disagreed and 14% are neutral.

Sometimes there are external pressures to process the loan within only short period of time and without the customer fulfill the required documents. No one disagrees with this point rather 81% agreed 19% choose to be neutral. Nevertheless the interview result argues otherwise. According to the response from the interview, this problem probably characterized on state owned banks but in Dashen Bank it can't be taken as a critical problem.

The last question concerning the challenge was whether there is management intervention on the loan approval or not. Here 59% of the survey participants are neutral while 28% agreed and 14% disagreed. But looking at the mean 3.27 it can be said that it is somehow a challenge.

Even though a space was provided for additional challenges encountered throughout the process no any additional challenge is suggested by the respondents of the questionnaire.

**Table 4.19 Challenges affect the project appraisal practice**

Particulars	Strongly Agree (5)		Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)		Mean	S.D
	No	%	No	%	No	%	No	%	No	%		
Low level of quality and completeness of project feasibility study provided by project promoters	21	57	11	29	5	14					4.43	0.73
Unavailability of reliable and quality data and up to date information	21	57	5	14	11	29					4.27	.9
Low level of knowledge and skill of project appraiser	11	30	9	23	5	14	5	14	7	19	3.32	1.51
Lack of well trained and experienced consultants on the specific project.	5	14	22	59	5	14	5	14			3.73	0.87
Sometimes there are external pressures to process the loan within only short period of time and without the customer fulfill the required documents.	16	43	14	38	7	19					4.24	.76
There is management intervention on the loan approval.	5	14	5	14	22	59	5	14			3.27	0.73
<b>Grand Mean</b>	<b>3.88</b>											

*(Source: Survey Result and own computation)*

Looking at the survey result, it can be observed that all the identified challenges are also prevalent in the Bank's appraisal practice. The grand mean 3.88 which is much greater than the average 2.5 also strongly

support the existence of the challenges. The responses from the interview candidates also support the existence of the above mentioned challenges in the appraisal process. In addition to the specified ones, the candidates also point out some;

- The existing unstructured market coupled with uneducated business persons and unfit project proposal writers makes it very difficult to go by the book.
- The information obtained need supplementary verification to boost appraisal quality.
- Difficulty in accessing primary sources of appraisal & analysis input variables

# Chapter Five

## SUMMARY, CONCLUSION AND RECOMMENDATION

### 5.1 Summary of Findings

The project appraisal of the bank is evaluated from the point that the literature on the area states. Accordingly, a project must be evaluated from the technical aspect, financial aspect, managerial aspect, commercial aspect, and risk aspect.

The technical aspect of the project appraisal is seen from nine major points and the findings are;

- Regarding the choice of appropriate technology, selection of scale of operation and project scheduling, the Bank appraisal procedure is robust.
- The continuous availability of raw material is well considered by the Bank.
- While selecting raw material cost of different raw materials and the related transportation cost are not assessed.
- The consultant's knowledge, experience and the related agreements made are not considered in the required depth.
- Collaboration agreement involved in the project proposal is investigated well from the legal and financial angles. But the Competence and reputation of the collaborator didn't get proper attention.
- The bank is inconsiderate regarding flexibility of production facilities.
- The Bank didn't take into account output planned, machine hour required for each types of operation, and the real capacity of the machine while selecting plant or machinery.

The research as well assessed whether the bank uses financial appraisal techniques i.e. cash flow methods and from the well-known discounted and nondiscounted cash flow techniques, which of them are practiced in the bank.

- Estimating cash flow of the project is used in Bank as an appraisal technique to identify the financial viability of the project.
- The payback period and the Accounting rate of return are the widely used nondiscounted cash flow methods in the Bank.

- The net present value (NPV) is the most accepted discounted method in the Bank's project evaluation process.
- Among the nondiscounted cash flow estimation methods; Ranking by inspection, the average annual proceeds per unit of outlay and Output - capital ratio are not well known in the Bank.
- The internal rate of return (IRR) and the net benefit investment ratio (NBIR) are not well experienced in the process of estimating discounted cash flow.

The management of the proposed project is evaluated from the hard skill and soft skill acquired by the managing personnel. The management of the proposed project got little emphasis unlike its significant effect on the project outcome.

How the Bank determines the demand for the product, Supply position for the product, distribution channels, pricing of the product and Government policies are evaluated under the commercial aspect.

- The bank uses demand-supply gap analysis to reach at the market demand of the product of the proposed project.
- The Supply position for the product and Government policies concerning the market are properly addressed in the process of project appraisal.
- Statistical Approach and Survey Method are not practiced in the Bank to identify the demand for the product of the proposed project.
- Defining distribution channels and Pricing of the product got little consideration.

The risk aspect is examined from the point that whether there is a systematic risk identification, and mitigation strategy.

- Sensitivity analysis is the widely used method by the Bank in analyzing risks involved in the proposed project.
- The Qualitative risk analysis and Probabilistic risk analysis are not well practiced by the bank.
- The bank has no defined risk prevention and mitigation strategy specifically for project risks that may encounter.

Based on the finding of the research it has been concluded that the project appraisal practice of the bank face the following major drawbacks;

- Low level of quality and completeness of project feasibility study provided by project promoters
- Unavailability of reliable and quality data and up to date information
- Low level of knowledge and skill of project appraiser
- Lack of well trained and experienced consultants on the specific project
- External pressures to process the loan within only short period of time and without the customer fulfill the required documents and there is also management intervention
- The existing unstructured market coupled with uneducated business persons and unfit project proposal writers makes it very difficult to go by the book.
- Difficulty in accessing primary sources of appraisal & analysis input variables

## **5.2 Conclusion**

The general objective of the research was to assess the practice and problems of project appraisal process at Dashen Bank, specifically focusing on assessing the technical, financial, commercial, management and risk aspects of project appraisal practice of the bank. Identifying the challenges encountered in undertaking the project appraisal process also another focusing issue of the research.

To achieve these objectives the study used quantitative and qualitative approaches. Questionnaire and in-depth interview were employed to collect data. The collected data were analyzed using Descriptive and parametric statistics.

The overall technical appraisal practice of the Bank is good however evaluation of the plant layout, and selection and procurement of plant and machinery are not well considered. Examination of the project scheduling, choice of technology, and scale of operation are well evaluated.

Regarding the financial aspect, cash flow estimation methodologies are used but the process is more relied on the payback period, accounting rate of return and the net present value (NPV) among the various methods. The capability of the management of the proposed project didn't get proper attention by the Bank despite its significant role for the success/ failure of the project.

Concerning the commercial/market aspect, the demand of the product of the proposed project is identified. The bank uses demand-supply gap analysis to reach at the market demand of the product of the proposed

project. The Supply position for the product and Government policies concerning the market are properly addressed in the process however defining distribution channels and Pricing of the product got little consideration.

Sensitivity analysis is the widely used method by the Bank in analyzing risks involved in the proposed project. The Qualitative risk analysis and Probabilistic risk analysis are not well practiced by the bank. The bank has no defined risk prevention and mitigation strategy specifically for project risks that may encounter.

The appraisal process also faces challenges that are internal and external to the bank. Low level of quality and completeness of project feasibility study, lack of well trained and experienced consultant, external pressures, management intervention, unavailability of reliable and quality data and up to date information and low level of knowledge and skill of project appraiser are the major ones.

### **5.3 Recommendation**

The project appraisal process of the Bank lacks concentration on various points under each aspect of evaluation. The Bank has to be vigilant on these gaps.

The overall evaluation of the practice of financial estimating mechanisms i.e. discounted and the nondiscounted cash flow methods indicated that the bank is over-relied on few methods among the several. Because every method has its own strength and weakness, using different methods help to uphold the weakness of one by the strength of the other. Therefore, the Bank has to consider using diversified methodologies.

Even though the management of a project plays a major role in the success or failure of same, the appraisal of the management of the proposed project got little attention. Management appraisal by its nature is more of subjective. Therefore, the Bank has to create awareness on the importance and the methodology of management appraisal, within the appraisal experts.

The bank has no defined risk prevention and mitigation strategy specifically for project risks that may encounter. Most of the time project finance investments add up a large amount on loan outstanding balance of the Bank. Thus developing and keeping risk prevention and mitigation strategy benefits the Bank.

Several challenges on the project finance appraisal process are identified in the study. The Bank has to work towards the challenges that are internal to the Bank by;

- Conducting continuous training to improve knowledge and skill of project appraiser

- Creating consistency and transparency in the process of appraisal.
- Organize the research and development department so as to support the project appraisal department feeding updated information.
- Develop MIS system to create easy access to up-to-date information.

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ANNEX-1

Questionnaire

Addis Ababa University School of Commerce

Questionnaire to be filled by credit related staffs of Dashen Bank

Introduction

This survey is going to be undertaken by a student of Addis Ababa University, School of commerce in the Department of Project management as a partial fulfillment for the award of Master of Art in Project Management. This questionnaire is designed to obtain information on the practice of Project Finance Appraisal. The information collected is purely for academic purpose and will be kept confidential. And your personal information will never be linked with your responses. Hence, you are kindly requested to fill the questionnaire and provide your opinion as truthfully as you can.

Part 1- Personal Information

Please indicate your responses by circling your choice

- 1. Your current position in the Bank
1) Credit Director 2) Credit Approving Team 3) Customer Relationship Manager
4) Credit Appraisal Expert 5) Loan Recovery Officer
6) Others, please specify
2. Your experience in the Banking Industry:-
1) 0-5 years 2) 6-10 years 3) 11-15 years 4) Above 15 years
3. Your experience in the Bank Credit Process:-
1) 0-5 years 2) 6-10 years 3) 11-15 years 4) Above 15 years
4. Your Educational Background
1) Masters Degree 2) Bachelor Degree 3) Diploma 4) Certificate,
5) Others, please specify

NB; 5= strongly agree, 4 = agree, 3 = neutral, 2= disagree, 1=strongly disagree

Table with 6 columns (5, 4, 3, 2, 1) and 5 rows of technical aspects for project appraisal practice.

<b>1.2 while evaluating the scale of operation of the project the bank</b>					
1.2.1	Uses capital and operating costs analysis as a function of the plant size				
1.2.2	Considers factors like special problems of fabrication of equipments, transportation and erection of equipments,				
1.2.3	Considers problems associated with transportation				
1.2.4	Considers problems associated with availability of production inputs on a sustained basis.				
<b>1.3 while evaluating the raw material used by the proposed project the bank analyzes:-</b>					
1.3.1.	Cost of different raw materials available				
1.3.2	The transportation cost involved,				
1.3.3	The continuous availability of raw material				
1.3.4	The cost of capital investments required on plant and machinery				
<b>1.4 while assessing the technician know how available the bank makes sure:-</b>					
1.4.1	Whether the consultant has the requisite knowledge and experience in executing similar projects successfully.				
1.4.2	Whether the necessary agreement has been executed between the project promoter and the know-how supplier.				
<b>1.5 If the project promoters have entered into agreement with foreign collaborators the bank assesses that:-</b>					
1.5.1	The competence and reputation of the collaborators				
1.5.2	The collaboration agreement does not infringe upon any patent rights.				
1.5.3	The collaboration agreement have the necessary approval of government				
1.5.4	If there is financial participation in the projects by the collaborator, its effect in the management of the unit and transfer of payment/payment of interest to the collaborator is studied.				
<b>1.6 while evaluating the product mix of the output of the proposed project the bank makes sure :-</b>					
1.6.1	Whether the production facilities planned with an element of flexibility to satisfy the varying needs and preferences of customers				

<b>1.7 while evaluating the Selection and Procurement of Plant and Machinery of the proposed project the bank considers :-</b>					
1.7.1 Output planned, machine hour required for each types of operation, and the real capacity of the machine.					
<b>1.8 while evaluating the plant layout of the proposed project the bank makes sure that :-</b>					
1.8.1 Plant layout is arranged so as to ensure steady flow of production and minimizes the overall cost.					
<b>1.9 while evaluating the Project scheduling of the proposed project the bank makes sure that :-</b>					
1.9.1 Detailed project implementation schedule has been placed indicating there in the various steps to be taken up in the project implementation in chronological order and time required for completion of each stage.					
<b>2.Commercial Aspect</b>					
<b>2.1 While Determining Demand for the product of the proposed project is identified by the bank using:-</b>					
2.1.1. Survey method					
2.1.2 Statistical approach					
2.1.3 Identify demand-supply gap					
<b>2.2 the bank assess other commercial aspects</b>					
2.2.1 Supply position for the product					
2.2.2 Distribution channels					
2.2.3 Pricing of the product					
2.2.4 Government policies					
<b>3. Financial aspect</b>					
<b>3.1 While evaluating the financial aspect of the proposed project the bank</b>					
3.1.1 Estimates project cash flows Based on financial costs and benefits, or expenditures and receipts that will be generated by the project over its economic life					
3.1.2 Establishes the cost of capital					

<b>4.Management aspect</b>				
<b>4.1 In appraising the management competency of the proposed project the bank measures</b>				
4.1.1 Hard Skills like project scope, time, cost, risk, procurement, communications, quality, and integration management.				
4.1.2 Soft skills like leadership, communication, conflict management, decision making ...etc				
<b>Part III Challenges of project appraisal</b>				
<b>How do you think the following challenges affect the project appraisal practice of the bank</b>				
1. Low level of quality and completeness of project feasibility study provided by project promoters				
2. Unavailability of reliable and quality data and up to date information				
3. Low level of knowledge and skill of project appraiser				
4. Lack of well trained and experienced consultants on the specific project at hand				
5. Sometimes there are external pressures to process the loan within only short period of time and without the customer fulfill the required documents.				
6. There is management intervention on the loan approval.				

## Part IV

### Financial Aspect

1. Which of the following nondiscounted cash flow methods the bank uses to estimate cash flow?  
(Possible to choose more than one option)

- Ranking by inspection
- The payback period
- Proceeds per unit of outlay
- The average annual proceeds per unit of outlay
- Accounting rate of return (IRR)
- Output - capital ratio

- Nondiscounted methods are not used in the process of project appraisal
- Please mention if other methods out of the above are used -----

2. Which of the following discounted cash flow methods the bank uses to estimate cash flow?  
(Possible to choose more than one option)

- The net present value (NPV)
- The internal rate of return of a project (IRR)
- The net benefit investment ratio (NBIR)
- None of the above discounted methods are used in the process of project appraisal.
- Please mention if other methods out of the above are used -----

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***Risk Analysis Aspect***

3. While assessing risk which methods are used in the Bank? (Possible to choose more than one option)

- Sensitivity analysis;
- Qualitative risk analysis
- Probabilistic risk analysis;
- Define risk prevention and mitigation strategy
- There is no any risk analysis tool used in the process of project appraisal.
- Please mention if other methods out of the above are used -----

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4. Please specify challenges faced if any while undertaking project appraisal practice.

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## **ANNEX- 2**

### **Interview Guide**

#### **Addis Ababa University School of Commerce**

#### **Interview Guide**

#### **Research Questions**

1. How is the understanding of the participant staffs about project appraisal? Are they aware of scientific project appraisal techniques?
2. Do you think the bank uses the appropriate methodology for appraisal of projects?
3. Do you think the appraisal practice of the bank is good enough in picking the most viable projects for investment? I.e. can we say that the projects selected so far have passed the proper appraisal methodologies?
4. Is there a trend of assessing technical, managerial, market, financial and risk dimensions of a proposed project?
5. In the project appraisal team, are there members qualified in the specified area of the proposed project? (Manufacturing, agriculture, building ... professionals)
6. Is there any scheduled training and discussion on new updates on project appraisal?
7. Is there an organized information management system that can feed the process of project appraisal?
8. Are you working with the research and development department to access up to date information?
9. As a project appraisal team, what challenges are encountered during the process?

