Budget and Budgetary Control
Semester IV- CMA II

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Introduction:

A budget is an accounting plan. It is a formal plan of action expressed in monetary terms. It could be seen as a statement of expected income and expenses under certain anticipated operating conditions. It is a quantified plan for future activities – quantitative blue print for action.

Every organization achieves its purposes by coordinating different activities. For the execution of goals efficient planning of these activities is very important and that is why the management has a crucial role to play in drawing out the plans for its business. Various activities within a company should be synchronized by the preparation of plans of actions for future periods. These comprehensive plans are usually referred to as budgets. Budgeting is a management device used for short-term planning and control. It is not just accounting exercise.

Meaning and Definition:

Budget:

According to CIMA (Chartered Institute of Management Accountants) UK, a budget is "A plan quantified in monetary terms prepared and approved prior to a defined period of time, usually showing planned income to be generated and, expenditure to be incurred during the period and the capital to be employed to attain a given objective."

In a view of Keller & Ferrara, "a budget is a plan of action to achieve stated objectives based on predetermined series of related assumptions."

G.A.Welsh states, "A budget is a written plan covering projected activities of a firm for a definite time period."

One can elicit the explicit characteristics of budget after observing the above definitions. They are…

- It is mainly a forecasting and controlling device.
- It is prepared in advance before the actual operation of the company or project.
- It is in connection with definite future period.
- Before implementation, it is to be approved by the management.
- It also shows capital to be employed during the period.

Budgetary Control:

Budgetary Control is a method of managing costs through preparation of budgets. Budgeting is thus only a part of the budgetary control. According to CIMA, "Budgetary control is the establishment of budgets relating to the responsibilities of executives of a policy and the continuous comparison of the actual with the budgeted results, either to secure by individual action, the objective of the policy or to provide a basis for its revision."

The main features of budgetary control are:

1. Establishment of budgets for each purpose of the business.
2. Revision of budget in view of changes in conditions.
3. Comparison of actual performances with the budget on a continuous basis.
4. Taking suitable remedial action, wherever necessary.
5. Analysis of variations of actual performance from that of the budgeted performance to know the reasons thereof.

Objectives of Budgetary Control:

Budgeting is a forward planning. It serves basically as a tool for management control; it is rather a pivot of any effective scheme of control.
The objectives of budgeting may be summarized as follows:

1. **Planning:** Planning has been defined as the design of a desired future position for an entity and it rests on the belief that the future position can be attained by uninterrupted management action. Detailed plans relating to production, sales, raw-material requirements, labour needs, capital additions, etc. are drawn out. By planning many problems estimated long before they arise and solution can be thought of through careful study. In short, budgeting forces the management to think ahead, to foresee and prepare for the anticipated conditions. Planning is a constant process since it requires constant revision with changing conditions.

2. **Co-ordination:** Budgeting plays a significant role in establishing and maintaining coordination. Budgeting assists managers in coordinating their efforts so that problems of the business are solved in harmony with the objectives of its divisions. Efficient planning and business contribute a lot in achieving the targets. Lack of co-ordination in an organization is observed when a department head is permitted to enlarge the department on the specific needs of that department only, although such development may negatively affect other departments and alter their performances. Thus, co-ordination is required at all vertical as well as horizontal levels.

3. **Measurement of Success:** Budgets present a useful means of informing managers how well they are performing in meeting targets they have previously helped to set. In many companies, there is a practice of rewarding employees on the basis of their accomplished low budget targets or promotion of a manager is linked to his budget success record. Success is determined by comparing the past performance with previous period's performance.

4. **Motivation:** Budget is always considered a useful tool for encouraging managers to complete things in line with the business objectives. If individuals have intensely participated in the preparation of budgets, it acts as a strong motivating force to achieve the goals.

5. **Communication:** A budget serves as a means of communicating information within a

firm. The standard budget copies are distributed to all management people provide not only sufficient understanding and knowledge of the programmes and guidelines to be followed but also give knowledge about the restrictions to be adhered to.

6. **Control:** Control is essential to make sure that plans and objectives laid down in the budget are being achieved. Control, when applied to budgeting, as a systematized effort is to keep the management informed of whether planned performance is being achieved or not.

Advantages of Budgetary control:

In the light of above discussion one can see that, coordination and control help the planning. These are the advantages of budgetary control. But this tool offer many other advantages as follows:

1. This system provides basic policies for initiatives.
2. It enables the management to perform business in the most professional manner because budgets are prepared to get the optimum use of resources and the objectives framed.
3. It ensures team work and thus encourages the spirit of support and mutual understanding among the staff.
4. It increases production efficiency, eliminates waste and controls the costs.
5. It shows to the management where action is needed to remedy a position.
6. Budgeting also aids in obtaining bank credit.
7. It reviews the present situation and pinpoints the changes which are necessary.
8. With its help, tasks such as like planning, coordination and control happen effectively and efficiently.
9. It involves an advance planning which is looked upon with support by many credit agencies as a marker of sound management.

Limitations of Budgetary control:

1. It tends to bring about rigidity in operation, which is harmful. As budget estimates are quantitative expression of all relevant data, there is a tendency to attach some sort of rigidity or finality to them.
2. It being expensive is beyond the capacity of small undertakings. The mechanism of budgeting system is a detailed process involving too much time and costs.
3. Budgeting cannot take the position of management but it is only an instrument of management. ‘The budget should be considered not as a master, but as a servant.’ It is totally misconception to think that the introduction of budgeting alone is enough to ensure success and to security of future profits.
4. It sometimes leads to produce conflicts among the managers as each of them tries to take credit to achieve the budget targets.
5. Simple preparation of budget will not ensure its proper implementation. If it is not implemented properly, it may lower morale.
6. The installation and function of a budgetary control system is a costly affair as it requires employing the specialized staff and involves other expenditure which small companies may find difficult to incur.

Essentials of Effective Budgeting:

1) **Support of top management:** If the budget structure is to be made successful, the consideration by every member of the management not only is fully supported but also the impulsion and direction should also come from the top management. No control system can be effective unless the organization is convinced that the management considers the system to be important.
2) **Team Work:** This is an essential requirement, if the budgets are ready from "the bottom up" in a grass root manner. The top management must understand and give enthusiastic support to the system. In fact, it requires education and participation at all levels. The benefits of budgeting need to be sold to all.
3) **Realistic Objectives:** The budget figures should be realistic and represent logically attainable goals. The responsible executives should agree that the budget goals are reasonable and attainable.
4) **Excellent Reporting System:** Reports comparing budget and actual results should be promptly prepared and special attention focused on significant exceptions i.e. figures that are significantly different from expected. An effective budgeting system also requires the presence of a proper feed-back system.
5) **Structure of Budget team:** This team receives the forecasts and targets of each department as well as periodic reports and confirms the final acceptable targets in form of Master Budget. The team also approves the departmental budgets.
6) **Well defined Business Policies:** All budgets reveal that the business policies formulated by the higher level management. In other words, budgets should always be after taking into account the policies set for particular department or function. But for this purpose, policies should be precise and clearly defined as well as free from any ambiguity.
7) **Integration with Standard Costing System:** Where standard costing system is also used, it should be completely integrated with the budget programme, in respect of both budget preparation and variance analysis.
8) **Inspirational Approach:** All the employees or staff other than executives should be strongly and properly inspired towards budgeting system. Human beings by nature do not like any pressure and they dislike or even rebel against anything forced upon them.

Classification of Budget:

The extent of budgeting activity varies from firm to firm. In a smaller firm there may be a sales forecast, a production budget, or a cash budget. Larger firms generally prepare a master budget. Budgets can be classified into different ways from different points of view. The following are the important basis for classification:

Functional Classification:

SALES BUDGET:

Classification of Budget

Function
- Sales Budget
- Production Budget
- Raw Materials Budget
- Purchase Budget
- Labour Budget
- Production Overhead Budget
- Selling & Distribution Budget
- Administration Cost Budget
- Capital Expenditure Budget
- Cash Budget

Flexibility
- Fixed
- Flexible

Time
- Long-Term
- Short-Term
- Current
- Rolling

The sales budget is an estimate of total sales which may be articulated in financial or quantitative terms. It is normally forms the fundamental basis on which all other budgets are constructed. In practice, quantitative budget is prepared first then it is translated into economic terms. While preparing the Sales Budget, the Quantitative Budget is generally the starting point in the operation of budgetary control because sales become, more often than not, the principal budget factor. The factor to be consider in forecasting sales are as follows:

- Study of past sales to determine trends in the market.
- Estimates made by salesman various markets of company products.
- Changes of business policy and method.
- Government policy, controls, rules and Guidelines etc.
- Potential market and availability of material and supply.

PRODUCTION BUDGET:

The production budget is prepared on the basis of estimated production for budget period. Usually, the production budget is based on the sales budget. At the time of preparing the budget, the production manager will consider the physical facilities like plant, power, factory space, materials and labour, available for the period. Production budget envisages the production program for achieving the sales target. The budget may be expressed in terms of quantities or money or both. Production may be computed as follows: Units to be produced = Desired closing stock of finished goods + Budgeted sales – Beginning stock of finished goods.

PRODUCTION COST BUDGET:

This budget shows the estimated cost of production. The production budget demonstrates the capacity of production. These capacities of production are expressed in terms of cost in production cost budget. The cost of production is shown in detail in respect of material cost, labour cost and factory overhead. Thus production cost budget is based upon Production Budget, Material Cost Budget, Labour Cost Budget and Factory overhead.

RAW-MATERIAL BUDGET:

Direct Materials budget is prepared with an intention to determine standard material cost per unit and consequently it involves quantities to be used and the rate per unit. This budget shows the estimated quantity of all the raw materials and components needed for production demanded by the production budget. Raw material serves the following purposes:

- It supports the purchasing department in scheduling the purchases.
- Requirement of raw-materials is decided on the basis of production budget.
- It provides data for raw material control.
- Helps in deciding terms and conditions of purchase like credit purchase, cash purchase, payment period etc.

It should be noted that raw material budget generally deals with only the direct materials whereas indirect materials and supplies are included in the overhead cost budget.

PURCHASE BUDGET:

Strategic planning of purchases offers one of the most important areas of reduction cost in many concerns. This will consist of direct and indirect material and services. The purchasing budget may be expressed in terms of quantity or money.
The main purposes of this budget are:

- It designates cash requirement in respect of purchase to be made during budget period; and
- It is facilitates the purchasing department to plan its operations in time in respect of purchases so that long term forward contract may be organized.

LABOUR BUDGET:

Human resources are highly expensive item in the operation of an enterprise. Hence, like other factors of production, the management should find out in advance personnel requirements for various jobs in the enterprise. This budget may be classified into labour requirement budget and labour recruitment budget. The labour necessities in the various job categories such as unskilled, semi-skilled and supervisory are determined with the help of all the head of the departments. The labour employment is made keeping in view the requirement of the job and its qualifications, the degree of skill and experience required and the rate of pay.

PRODUCTION OVERHEAD BUDGET:

The manufacturing overhead budget includes direct material, direct labour and indirect expenses. The production overhead budget represents the estimate of all the production overhead i.e. fixed, variable, semi-variable to be incurred during the budget period. The reality that overheads include many different types of expenses creates considerable problems in:

1) Fixed overheads i.e., that which is to remain stable irrespective of vary in the volume of output,
2) Apportion of manufacturing overheads to products manufactured, semi variable cost i.e., those which are partly variable and partly fixed.
3) Control of production overheads.
4) Variable overheads i.e., that which is likely to vary with the output.

The production overhead budget engages the preparation of overheads budget for each division of the factory as it is desirable to have estimates of manufacturing overheads prepared by those overheads to have the responsibility for incurring them. Service departments cost are projected and allocated to the production departments in the proportion of the services received by each department.

SELLING AND DISTRIBUTION COST BUDGET:

The Selling and Distribution Cost budget is estimating of the cost of selling, advertising, delivery of goods to customers etc. throughout the budget period. This budget is closely associated to sales budget in the logic that sales forecasts significantly influence the forecasts of these expenses. Nevertheless, all other linked information should also be taken into consideration in the preparation of selling and distribution budget. The sales manager is responsible for selling and distribution cost budget. Naturally, he prepares this budget with the help of managers of sub-divisions of the sales department. The preparation of this budget would be based on the analysis of the market condition by the management, advertising policies, research programs and many other factors. Some companies prepare a separate advertising budget, particularly when spending on advertisements are quite high.

ADMINISTRATION COST BUDGET:

This budget includes the administrative costs for non-manufacturing business activities like director’s fees, managing directors’ salaries, office lightings, heating and air condition etc. Most of these expenses are fixed so they should not be too difficult to forecast. There are semi-variable expenses which get affected by the expected rise or fall in cost which should be taken into account. Generally, this budget is prepared in the form of fixed budget.

CAPITAL- EXPENDITURE BUDGET:

This budget stands for the expenditure on all fixed assets for the duration of the budget period. This budget is normally prepared for a longer period than the other functional budgets. It includes such items as new buildings, land, machinery and intangible items like patents, etc. This budget is designed under the observation of the accountant which is supported by the plant engineer and other functional managers. At the time of preparation of the budget some important information should be observed:

- Overfilling on the production facilities of certain departments as revealed by the plant utilization budget.
- Long-term business policy with regard to technical developments.
- Potential demand for certain products.

CASH BUDGET:

The cash budget is a sketch of the business estimated cash inflows and outflows over a specific period of time. Cash budget is one of the most important and one of the last to be prepared. It is a detailed projection of cash receipts from all sources and cash payments for all purposes and the resultants cash balance during the budget. It is a mechanism for controlling and coordinating the fiscal side of business to ensure solvency and provides the basis for forecasting and financing required to cover up any deficiency in cash. Cash budget thus plays a vital role in the financing management of a business undertaken.

Cash budget assists the management in determining the future liquidity requirements of the firm, forecasting for business of those needs, exercising control over cash. So, cash budget thus plays a vital role in the financial management of a business enterprise.

Function of Cash Budget:

- It makes sure that enough cash is available when it is required.
- It designates cash excesses and shortages so that steps may be taken in time to invest any excess cash or to borrow funds to meet any shortages.
- It shows whether capital expenditure could be financed internally.
- It provides funds for standard growth.
- It provides a sound basis to manage cash position.

Advantages of Cash Budget:

1. **Usage of Cash:** Management can plan out the use of cash in accord with the changes of receipt and payment. Payments can be planned when sufficient cash is available and continue the business activity with the minimum amount of working capital.
2. **Allocation for Capital Investment:** It is dual benefits such as capital expenditure projects can be financed internally and can get an idea for cash availability of capital investment.
3. **Provision of Excess Funds:** It reveals the availability of excess cash. In this regard management can decide to invest excess funds for short term or long term according to the requirements in the business.
4. **Pay-out Policy:** This budgetary system may help the management for future pay-out policy in the form of dividend. In case the cash budget liquid position is not favourable, the management may reduce the rate of dividend or maintain dividend amount or skip dividend for the year.
5. **Provision for acquiring Funds:** It gives the top level management ideas for acquiring funds for particular time duration and sources to be explored.
6. **Profitable Use of Cash:** Business person can take decision for the best use of liquidity to make more profitable transaction. It can be used at the time of bulk purchase payments and one get the benefit of discount.

Limitation of Cash Budget:

1. **Complex Assumption:** Business is full of uncertainties, so it is very difficult to have near perfect estimates of cash receipts and payments, especially for a longer duration. It can be predicted for short duration such as of three to four months.
2. **Inflexibility:** If the finance manager fails to show flexibility in implementing the cash budget, it will incur adverse effects. If the manager follows strictly adheres to the estimates of cash inflow it may negatively result in losing customers. Likewise, loyalty in payments may lead to deterioration of liquid position.
3. **Costly:** Application of this technique necessitates collecting of statistical information from various sources and expert personnel in operation research would be the costliest deal. It becomes expensive which may not be affordable to small business houses. In addition, finding out experts is not always possible. In this situation the long term predictions do not prove correct.

Methods:

1. **Receipt and payment:** It is most popular and is universally used for preparing cash budget. The assumption of statistical data is arrived at calculated on the basis of requirements like monthly, weekly or fortnightly. On account of elasticity, this method is used in forecasting cash at different time periods and thus it helps in controlling cash distributions.
   (a) Cash receipts from customers are based on sales forecast. The term of sale, lag in payment etc., are generally taken into consideration.
   (b) Cash receipts from other sources, such as dividends and interest on trade investment, rent received, issue of capital, sale of investment and fixed assets.
   (c) Cash requirements for purchase of materials, labour and salary cost and overhead expenses based on purchasing, personnel and overhead budgets.
   (d) Cash requirements for capital expenditure as per the capital expenditure budget.
   (e) Cash requirements for other purposes such as payment of dividends, income-tax liability, fines and penalties.
   (i) Estimating Cash Receipts: Generally main sources of cash receipts are sales, interest and dividend, sales of assets and investments, capital borrowings etc. The Company estimates time-lag on the basis of past experience of cash receipts on credit sales while cash sales can be easily determined.
   (ii) Estimating Cash Payments: It can be decided on the basis of various operating budgets prepared for the payment of credit purchase, payment of labour cost, interest and dividend, overhead charges, capital investment etc.
2. **Adjusted Profit and Loss Account:** This method is based on cash and non-cash transactions. This method estimates closing cash balance by converting profit into cash. The hypothesis of this method is that the earning of profit brings equal amount of cash into the business. The net profit shown by profit and loss account does not signify the actual cash flow into the business. This also leads to another assumption, that is the business will remain static, i.e. there will be no wearing out or increase of assets and changes of working capital so that the total cash on hand for the business would be equal to the profit earned.
3. **Budgeted Balance Sheet Method:** This method looks like the Adjusted Profit and Loss Account method only, except that in this method a Balance Sheet is projected and in that method Profit and Loss Account is adjusted. In this method Balance Sheet is prepared with the projected amount of all assets and liabilities except cash at the end of budget period. The cash balance will find out balancing amount. If assets side is higher than liability side it would be the bank overdraft while liability side is higher than assets side it gives bank balance. This method is used by the stable business houses.

4. **Working Capital Differential Method:** It is based on the estimate of working capital. It begins with the opening working capital and is added to or deducted from any changes made in the current assets except cash and current liabilities. At the end of the budget period balance shows the real cash balance. This method is quite similar to the Balance Sheet method.

Model of Cash Budget

Particular	January	February	March
Opening Balance	-	-	-
Add: Receipts:			
Cash Sales	-	-	-
Receipts from Debtors	-	-	-
Interest and Dividend	-	-	-
Sale of fixed assets	-	-	-
Sale of Investments	-	-	-
Bank Loan	-	-	-
Issue Shares & Debenture	-	-	-
Others	-	-	-
Total Receipts (A)	-	-	-
Less: Payments			
Cash Purchases	-	-	-
Payment to creditors	-	-	-
Salaries & wages	-	-	-
Administrative expenses	-	-	-
Selling expenses	-	-	-
Dividend payable	-	-	-
Purchase of Fixed Assets	-	-	-
Repayment of Loan	-	-	-
Payment of taxes	-	-	-
Total Payments (B)	-	-	-
Closing Balance (A - B)	-	-	-

FIXED AND FLEXIBLE BUDGET:

1. FIXED BUDGET:

A fixed budget is prepared for one level of output and one set of condition. This is a budget in which targets are tightly fixed. It is known as a static budget. It is firm and prepared with the assumption that there will be no change in the budgeted level of motion. Thus, it does not provide room for any modification in expenditure due to the change in the projected conditions and activity. Fixed budgets are prepared well in advance.

This budget is not useful because:

- The conditions go on the changing and cannot be expected to be firm.
- The management will not be in a position to assess, the performance of different heads on the basis of budgets prepared by them because to the budgeted level of activity.
- It is hardly of any use as a mechanism of budgetary control because it does not make any difference between fixed, semi-variable and variable costs
- It does not provide any space for alteration in the budgeted figures as a result of change in cost due to change in the level of activity.

2. FLEXIBLE BUDGET:

This is a dynamic budget. In comparison with a fixed budget, a flexible budget is one "which is designed to change in relation to the level of activity attained." An equally accurate use of the flexible budgets is for the purposes of control.

Flexible budgeting has been developed with the objective of changing the budget figures so that they may correspond with the actual output achieved. It is more sensible and practical, because changes expected at different levels of activity are given due consideration. Thus a budget might be prepared for various levels of activity in accord with capacity utilization.

Flexible budget may prove more useful in the following conditions:

- Where the level of activity varies from period to period.
- Where the business is new and as such it is difficult to forecast the demand.
- Where the organization is suffering from the shortage of any factor of production. For example, material, labour, etc. as the level of activity depends upon the availability of such a factor.
- Where the nature of business is such that sales go on changing.
- Where the changes in fashion or trend affects the production and sales.
- Where the organization introduces the new products or changes the patterns and designs of its products frequently.
- Where a large part of output is intended for the export.

Uses of Flexible Budget:

In flexible budgets numbers are adjustable to any given set of operating conditions. It is, therefore, more sensible than a fixed budget which is true only in one set of operating environment.

Flexible budgets are also useful from the view point of control. Actual performance of an executive should be compared with what he should have achieved in the actual circumstances and not with what he should have achieved under quite different circumstances. At last, flexible budgets are more realistic, practical and useful. Fixed budgets, on the other hand, have a limited application and are suited only for items like fixed costs.

Preparation of a Flexible Budget

The preparation of a flexible budget requires the analysis of total costs into fixed and variable components. This analysis of course is, not unusual to the flexible budgeting, is more important in flexible budgeting then in fixed budgeting. This is so because in flexible budgeting, varying levels of output are considered and each class of overhead will be different for each level. Thus the flexible budget has the following main distinguishing features:

- ✓ It is prepared for a range of activity instead of a single level.
- ✓ It provides a dynamic basis for comparison because it is automatically related to changes in volume.

The formulation of a flexible budget begins with analyzing the overhead into fixed and variable cost and determining the extent to which the variable cost will vary within the normal range of activity. In a simple equation form it could be put as:

Y=a+bx and it is illustrated as below:

Cost	Flexible budget		Y = a + b x
Fixed Variable Semi-Variable	Rs.5000 Rs.0 Rs.500	+ + +	Rs. 0(x) Rs.2.5(x) Rs.1.0(x)
	Rs.5500	+	Rs.3.5(x)

There are two methods of preparing such a budget:

(i) Formula Method / Ratio Method: This is also known as the Budget Cost Allowance Method. In this method the budget should be prepared as follows:

(a) Before the period begins:

- ✓ Budget for a normal level of activity,
- ✓ Segregate into fixed and variable costs,
- ✓ Compute the variable cost per unit of activity

(b) At the end of the period:

- ✓ Ascertain the actual activity
- ✓ Compute the variable cost allowed for this level, add the fixed cost to give the budget cost allowance.

The whole process is expressed in the formula:

Allowed cost = Fixed cost + (Actual units of activity for the period) (Variable cost per unit of activity)

(ii) Multi-Activity Method: This method involves computing a budget for every major level of activity. When the actual level of activity is known, the allowed cost is found "interpolating" between the budgets of activity levels on either side.

- ✓ Different levels of activity are expressed in terms of either production units or sales values. The levels of activity are generally expressed in production units or in terms of sales values.
- ✓ The fixation of the budget cost gives allowance for the budget centres. According to CIMA London, the budget cost allowance means, "the cost which a budget centre is expected to incur during a given period of time in relation to the level of activity attained by the budget centre."
- ✓ The determination of the different levels of activity for which the flexible budget is to be prepared.

(3) Graphic Method: In this method, estimates of budget are presented graphically. In this costs are divided into three classes, viz., fixed, variable and semi-variable cost. Values of costs are obtained for different levels of production. These values are signified in the form of a graph.

Model of Flexible Budget

Particulars	**Capacity Utilization**		
	60%	**80%**	**100%**
1. Prime Cost:			
- Direct Material	-	-	-
- Direct Labour	-	-	-
- Direct expenses (if any)	-	-	-
Total (A)	-	-	-
2. Variable overheads:			
- Maintenance & repairs	-	-	-
- Indirect Labour	-	-	-
- Indirect Material	-	-	-
- Factory overheads	-	-	-
- Administrative Overheads	-	-	-
- Selling & distribution O/H	-	-	-
Total (B)	-	-	-
3. Marginal Cost (A + B)	-	-	-
4. Sales	-	-	-
5. Contribution (Sales - MC)	-	-	-
6. Fixed cost			
- Factory overheads	-	-	-
- Administrative Overheads	-	-	-
- Selling & distribution O/H	-	-	-
Total (C)	-	-	-
7. Profit or Loss (C- FC)	-	-	-

Zero Base Budgeting:

The ‘Zero-Base’ refers to a ‘nil-budget’ as the starting point. It starts with a presumption that the budget for the next period is ‘zero’ until the demand for a function, process, or project is not justified for single penny. The assumption is that without such justification, no expenditure will be allowed. In effect, each manager or functional head is required to carry out cost-benefit analysis of each of the activities, etc. under his control and for which he is responsible.

The method of ZBB suggests that the business should not only make decision about the proposed new programmes but it should also, regularly, review the suitability of the existing programmes. This approach of preparing a budget is called incremental budgeting since the budget process is concerned mainly with the increases or changes in operations that are likely to occur during the budget period.

This method for the first time was used by the Department of Agriculture, U.S.A. in the 19th century. Other State Governments of the U.S.A. found this method helpful and so almost all the states took deep interest in the ZBB method. A number of states of America use this technique even today. The ICAI has brought out a research in the form of a monograph showing the application of the ZBB method that worries in tandem with the concerns for national environment and its requirements. In India, however, the ZBB approach has not been fully accepted and actualized.

"ZBB is a management tool, which provides a systematic method for evaluating all operations and programmes, current or new, allows for budget reductions and expansions in a rational manner and allows re-allocation of sources from low to high priority programmes."

- David Lieninger

ZBB is a planning, resource allocation and control tool. It, however, presupposes that

(a) There is an efficient budgeting system within the enterprise.
(b) Managers can develop quantitative measures for use in performance evaluation.
(c) Among the new suggestions and programmes, along with old ones are put to a strict scrutiny.
(d) Funds are diverted from low-priority suggestions to high priority suggestions.

Procedure of Zero-base Budgeting:

(1) Determination of the objective: This is an initial step for determining the objective to introduce ZBB. It may result into the decreased cost in personnel overheads or debunk the projects which do not fit in the business structure or which are not likely to help accomplish the business objectives.

(2) **Degree at the ZBB is to be introduced:** It is not possible every time to evaluate every activity of the whole business. After studying the business structure, the management can decide whether ZBB is to be introduced in all areas of business activities or only in a few selected areas on the trial basis.

(3) Growth of Decision units: Decision units submit their data as to which cost benefit analysis should be done in order to arrive at a decision that helps them decide to continue or abandon. It could be a functional department, a programme, a product-line or a sub-line. Here the decision unit sexist independent of all the other units so that when the cost analysis turns unfavourable that particular unit could be closed down.

(4) Growth of Decision packages: Decision units are to be identified for preparing data relating to the proposals to be included in the budget, concerned manager analyzes the activities of his or her own decision units. His job is to consider possible different ways to fulfill objectives. The size of the business unit and the volume of goods it deals with determine the number of decision units and packages. The decision package has to contain all the information which helps the management in deciding whether the information is necessary for the business, what would be the estimated costs and benefits expected from it.

(5) **Assessment and Grading of decision packages:** These packages invented and formulated are submitted to the next level of responsibility within the organization for ranking purposes. Ranking basically decides as to whether or not to include the proposals in the budget. The management ranks the different decision packages in the order from decreasing benefit or importance to the organization. Preliminary ranking is done by the unit manager himself and for the further review it is sent to the superior officers who consider overall objectives of the organization.

(6) **Allotment of money through Budgets:** It is the last step engaged in the ZBB process. According to the cost benefit analysis and availability of the funds management has ranks and thereby a cut-off point is established. Keeping in view reasonable standards, the approved designed packages are accepted and others are rejected. The funds are then allotted to different decision units and budgets relating to each unit are prepared.

Advantages:

- ✓ ZBB rejects the attitude of accepting the current position in support of an attitude of inquiring and testing each item of budget.
- ✓ It helps improve financial planning and management information system through various techniques.
- ✓ It is an educational process and can promote a management team of talented and skillful people who tend to promptly respond to changes in the business environment.
- ✓ It facilities recognition of inefficient and unnecessary activities and avoid wasteful expenditure.
- ✓ Cost behavior patterns are more closely examined.
- ✓ Management has better elasticity in reallocating funds for optimum utilization of the funds.

Disadvantages:

- ✓ It is an expensive method as ZBB incurs a huge cost every in its preparation.
- ✓ It also requires high volume of paper work; hence sometimes it becomes a tedious job.
- ✓ In ZBB there is a danger of emphasizing short-term benefits at the expenses of long term ones.
- ✓ This is not a new method for evaluating various alternatives, and cost-benefit analysis.
- ✓ The psychological effects can also not be ignored. It holds out high hopes as a modern technique, claiming to raise the profitability and efficiency of the business.

Budgets & Budgetary Control
Practical Problems (with solutions)

Flexible Budget

(1) Prepare a Flexible budget for overheads on the basis of the following data. Ascertain the overhead rates at 50% and 60% capacity.

Variable overheads:	At 60% capacity (Rs)
Indirect Material	6,000
Labour	18,000
Semi-variable overheads:	
Electricity: (40% Fixed & 60% variable)	30,000
Repairs: (80% fixed & 20% Variable)	3,000
Fixed overheads:	
Depreciation	16,500
Insurance	4,500
Salaries	15,000
Total overheads	93,000
Estimated direct labour hours	1,86,000

Solution:

Flexible Budget

Items	**Capacity**	
	50%	**60%**
Variable overheads:	**Rs.**	**Rs.**
Material	5,000	6,000

Labour	15,000	18,000
Semi-variable		
Electricity	27,000	30,000

Repairs	2,900	3,000
Fixed overheads:		
Deprecation	16,500	16,500
Insurance	4500	4500
Salaries	15,000	15,000
Total Overheads	85,900	93,000
Estimated direct labour hours	1,55,000	1,86,000
Overhead Rate	0.55	0.50

Working Note:

Electricity

At 50% capacity = $\frac{18,000 * 50}{60}$

= Rs. 15,000

Rs. 12,000 + Rs. 15,000 = Rs. 27,000

60% capacity = Rs 18,000 + Rs. 12,000 = Rs. 30,000

Repairs

For 60% capacity = Rs.600

=Rs. 2400 + Rs.600 =Rs.3,000

At 50% capacity : = 600/60 * 50

= Rs. 500

=Rs.2400 + 500

=Rs.2,900

(2) Prepare a flexible budget for overheads on the basis of the following data. Ascertain the overhead rates at 60% and 70% capacity.

	At 60% capacity(Rs)
Variable overheads:	
Material	6,000
Labour	18,000
Semi-variable overheads:	
Electricity:	30,000
40% Fixed	
60% variable	
Repairs:	
80% fixed	3,000
20% Variable	3,000
Fixed overheads:	
Depreciation	16,500
Insurance	4,500
Salaries	15,000
Total overheads	93,000
Estimated direct labour hours	1,86,000

Solution:

Working:

Repairs

For 60% capacity Fixed 80/100 * 3,000 = Rs.2400

Variable = 20/100 * 3,000 = Rs. 600

=Rs. 2400 + Rs.600 =Rs.3,000

Electricity Exp.:

At 60% capacity Fixed= 40/100 *30,000 = 12,000

Variable = 60/100 * 30,000=
18,000 At 70% capacity: Fixed = 40/100 * 30,000
= Rs. 12,000

Variable = 18,000/60 *70 = Rs. 21,000
Total Rs. =33,000

Flexible Budget

Items	**Capacity**	
	60%	**70%**
Variable overheads:	**Rs.**	**Rs.**
Material	6,000	7,000
Labour	18,000	21,000
Semi-variable		
Electricity	30,000	33,000
Repairs	3,000	3,100
Fixed overheads:		
Deprecation	16,500	16,500
Insurance	4,500	4,500
Salaries	15,000	15,000
Total Overheads	93,000	1,00,100
Estimated direct labour hours	1,86,000	2,17,000
Overhead Rate	0.50	0.46

(3) The expenses budgeted for production of 1,000 units in a factory are furnished below:

Particulars	Per Unit Rs.
Material Cost	700
Labour Cost	250
Variable overheads	200
Selling expenses (20% fixed)	130
Administrative expenses (Rs. 2,00,000)	200
Total Cost	1,480

Prepare a budget for production of 600 units and 800 units assuming administrative expenses are rigid for all level of production.

Solution: **Flexible Budget**

Particulars	**For 600 units**		**For 800 units**	
	Per unit Rs.	**Total Rs.**	**Per unit Rs.**	**Total Rs.**
Variable Cost:				
Materials	700	4,20,000	700	5,60,000
Labour	250	1,50,000	250	2,00,000
Variable overheads	200	1,20,000	200	1,60,000
(A)	**1,150**	**6,90,000**	**1,150**	**9,20,000**
Semi variable cost:				
Variable selling expenses	104	62,400	104	83,200
Fixed selling expenses	43.33	26,000	32.50	26,000
(B)	**147.33**	**88,400**	**136.50**	**1,09,200**
Fixed cost:				
Administrative expenses	333.33	2,00,000	250.00	2,00,000
Total Cost(A+B+C)	**1,630.66**	**9,78,400**	**1,536.50**	**12,29,200**

(4) The budgeted output of a industry specializing in the production of a one product at the optimum capacity of 6,400 units per annum amounts to Rs. 1,76,048 as detailed below:

Particulars	Rs.	Rs.
Fixed costs		20,688
Variable costs:		
Power	1,440	
Repairs etc.	1,700	
Miscellaneous	540	
Direct material	49,280	
Direct Labour	1,02,400	1,55,360
Total cost		1,76,048

The company decides to have a flexible budget with a production target of 3,200 and 4,800 units (the actual quantity proposed to be produced being left to a later date before commencement of the budget period)

Prepare a flexible budget for production levels of 50% and 75%. Assuming, selling price per unit is maintained at Rs. 40 as at present, indicate the effect on net profit.

Administrative , selling and distribution expenses continue at Rs.3,600.

Solution:

The production at 100% capacity is 6400 units, so it will be 3,200 units at 50% and 4,800 units at 75% capacity. The variable expenses will change in that proportion.

Flexible Budget

Particulars	100 %	75%	50 %
(i)Sales (per unit Rs.40)	2,56,000	1,92,000	1,28,000
Cost of Sales:			

(a)variable costs:			
Direct material	49,280	36,960	24,640
Direct Labour	1,02,400	76,800	51,200
Power	1,440	1,080	720
Repairs	1,700	1,275	850
Miscellaneous	540	405	270
Total variable costs	**1,55,360**	**1,16,520**	**77,680**
(b)Fixed Costs:	20,688	20,688	20,688
(ii) Total Costs	**1,76,048**	**1,37,208**	**98,368**
Gross Profit(i)- (ii)	**79,952**	**54,792**	**29,632**
Less: Adm., selling and Dist. Costs	3,600	3,600	3,600
Net Profit	**76,352**	**51,192**	**26,032**

(5) A factory engaged in manufacturing plastic buckets is working at 40% capacity and produces 10,000 buckets per month.

The present cost break up for one bucket is as under:

Materials
Rs.10 Labour
Rs.3
Overheads Rs.5 (60% fixed)

The selling price is Rs.20 per bucket. If it is desired to work the factory at 50% capacity the selling price falls by 3%. At 90% capacity the selling price falls by 5% accompanied by a similar fall in the price of material.

You are required to prepare a statement the profit at 50% and 90% capacities and also calculate the break- even points at this capacity production.

Solution

Flexible Budget

Particulars	**Capacity**		
	40%	**50%**	**90%**
Production and sales Units	10,000	12,500	22,500
Sales price per unit	20	19.40	19.00
Sales Amount	2,00,000	2,42,500	4,27,500
Marginal Cost:			
Material: Rs.10 per unit(at 90% - Rs.9.50 per unit)	1,00,000	1,25,000	2,13,750
Labour	30,000	37,500	67,500
Variable overhead	20,000	25,000	45,000
Total	**1,50,000**	**1,87,500**	**3,26,250**
Contribution	50,000	55,000	1,01,250
Less: Fixed Cost	30,000	30,000	30,000
Profit	20,000	25,000	71,250
Contribution per unit	5	4.40	4.50
BEP (units) (F /C)	**6,000**	**6,818**	**6,667**

CASH BUDGET

(1) Saurashtra Co. Ltd. wishes to arrange overdraft facilities with its bankers from the period August to October 2019 when it will be manufacturing mostly for stock. Prepare a cash budget for the above period from the following data given below:

Month	Sales (Rs.)	Purchases (Rs.)	Wages (Rs.)	Mfg. Exp. (Rs.)	Office Exp. (Rs.)	Selling Exp. (Rs.)
June	1,80,000	1,24,800	12,000	3,000	2,000	2,000
July	1,92,000	1,44,000	14,000	4,000	1,000	4,000
August	1,08,000	2,43,000	11,000	3,000	1,500	2,000
September	1,74,000	2,46,000	12,000	4,500	2,000	5,000
October	1,26,000	2,68,000	15,000	5,000	2,500	4,000
November	1,40,000	2,80,000	17,000	5,500	3,000	4,500
December	1,60,000	3,00,000	18,000	6,000	3,000	5,000

Additional Information:

(a) Cash on hand 1-08-2010 Rs.25,000.

(b) 50% of credit sales are realized in the month following the sale and the remaining 50% in the second month following. Creditors are paid in the month following the month of purchase.

(c) Lag in payment of manufacturing expenses half month.

(d) Lag in payment of other expenses one month.

Solution:

CASH BUDGET

For 3 months from August to October 2019

Particulars	**August (Rs.)**	**September (Rs.)**	**October (Rs.)**
Receipts:			
Opening balance	25,000	44,500	(66,750)
Sales	1,86,000	1,50,000	1,41,000
Total Receipts(A)	2,11,000	1,94,500	74,250
Payments:			
Purchases	1,44,000	2,43,000	2,46,000
Wages	14,000	11,000	12,000
Mfg. Exp.	3,500	3,750	4,750
Office Exp.	1,000	1,500	2,000
Selling Exp.	4,000	2,000	5,000
Total payments(B)	1,66,500	2,61,250	2,69,750
Closing Balance(A-B)	**44,500**	**(66,750)**	**(1,95,500)**

Working Note:

1. Manufacturing Expense:

Particular	August	September	October
July (4000/2)	2000	---	---
August (3000/2)	1500	1500	---
September (4500/2)	---	2250	2250
October (5000/2)	---	----	2500
Total	3500	3750	4750

2. Sales

Particular	August	September	October
June (180000/2)	90000	---	---
July (192000/2)	96000	96000	---
August (108000/2)	---	54000	54000
September (174000/2)	---	----	87000
Total	186000	150000	141000

(2) S. K. Brothers wish to approach the bankers for temporary overdraft facility for the period from October 2019 to December 2019. During the period of this period of these three months, the firm will be manufacturing mostly for stock. You are required to prepare a cash budget for the above period.

Month	**Sales (Rs.)**	**Purchases (Rs.)**	**Wages (Rs.)**
August	3,60,000	2,49,600	24,000
September	3,84,000	2,88,000	28,000
October	2,16,000	4,86,000	22,000
November	3,48,000	4,92,000	20,000
December	2,52,000	5,36,000	30,000

(a) 50% of credit sales are realized in the month following the sales and remaining 50% in the second following.

(b) Creditors are paid in the month following the month of purchase

(c) Estimated cash as on 1-10-2019 is Rs.50,000.

CASH BUDGET

For 3 months from October to December 2019

Particulars	**October (Rs.)**	**November(Rs.)**	**December(Rs.)**
Receipts:			
Opening balance	50,000	1,12,000	(94,000)
Collection from Debtors	3,72,000	3,00,000	2,82,000
Total Receipts(A)	4,22,000	4,12,000	1,88,000
Payments:			
Payments to Creditors	2,88,000	4,86,000	4,92,000
Wages	22,000	20,000	30,000
Total payments(B)	3,10,000	5,06000	5,22,000
Closing Balance(A-B)	**1,12,000**	**(94,000)**	**-3,34,000**

Working Note: Collection from debtors

Particulars	**October (Rs.)**	**November(Rs.)**	**December(Rs.)**
Sales			
August	1,80,000		-
September	1,92,000	1,92,000	-
October	-	1,08,000	1,08,000
November	-		1,74,000
	3,72,000	3,00,000	2,82,000

(3) TATA Co. Ltd. is to start production on 1st January 2019. The prime cost of a unit is expected to be Rs. 40 (Rs. 16 per materials and Rs. 24 for labour). In addition, variable expenses per unit are expected to be Rs. 8 and fixed expenses per month Rs. 30,000. Payment for materials is to be made in the month following the purchase. One-third of sales will be for cash and the rest on credit for settlement in the following month. Expenses are payable in the month in which they are incurred. The selling price is fixed at Rs. 80 per unit. The number of units to be produced and sold is expected to be: January 900; February 1200; March 1800; April 2000; May 2,100; June 2400

Draw a Cash Budget indicating cash requirements from month to month.

CASH BUDGET of TATA LTD.

For 6 months from January to June 2011

Month	Jan.	Feb.	March	April	May	June
Receipts						
Opening Balance		(34,800)	(37,600)	(32,400)	(5,867)	(27,600)
Cash sales	24,000	32,000	48,000	53,333	56,000	64,000
Collection from Debtors		48,000	64,000	96,000	1,06,667	1,12,000
Total receipts(A)	24,000	45,200	74,400	1,16,933	1,56,800	1,48,400
Payments						
Creditors		14,400	19,200	288,00	32,000	33,600
Wages	21,600	28,800	43,200	48,000	50,400	57,600
Variable Exp.	7,200	9,600	14,400	16,000	16,800	19,200
Fixed Exp.	30,000	30,000	30,000	30,000	30,000	30,000
Total Payment(B)	58,800	82,800	1,06,800	1,22,800	1,29,200	1,40,400
Closing Balance	**-34,800**	**-37600**	**-32400**	**-5867**	**-27,600**	**8,000**

(4) Prepare a Cash Budget from the data given below for a period of six months (July to December)

(1) Month	Sales	Raw Materials
May	75,000	37,500
June	75,000	37,500
July	1,50,000	52,500
August	2,25,000	3,67,500
September	3,00,000	1,27,500
October	1,50,000	97,500
November	1,50,000	67,500
December	1,37,500	____

(2) Collection estimates:

- Within the month of sale: 5%
- During the month following the sale: 80%
- During the second month following the sale: 15%

(3) Payment for raw materials is made in the next month.
(4)Salary Rs. 11,250, Lease payment Rs. 3750, Misc. Exp. Rs. 1150, are paid each month
(5) Monthly Depreciation Rs. 15,000
(6) Income tax Rs. 26,250 each in September and December.
(7) Payment for research in October Rs.75,000
(8) Opening Balance on 1st July Rs.55,000.

CASH BUDGET

For the six months from July to December

Particulars	July	Aug.	Sep.	October	Nov.	December
Receipts						
Opening Balance	55,000	80,100	1,53,950	-38450	24150	83000
Collection from Debtors	78,750	1,42,500	2,17,500	2,81,250	1,725,00	1,49,375
Total receipts(A)	1,33,750	2,22,600	3,71,450	2,42,800	1,96,650	2,32,375
Payments						
Payment to suppliers	37,500	52,500	3,67,500	1,27,500	97,500	67,500
Salary	11,250	11,250	11,250	11,250	11,250	11,250
Lease payment	3750	3750	3750	3750	3750	3750
Misc. expense	1,150	1,150	1,150	1,150	1,150	1,150
Income tax			26,250			26,250
Payment for Research				75,000		
Total Payment(B)	53,650	68,650	4,09,900	2,18,650	1,13,650	1,09,900
Closing Balance	**80,100**	**1,53,950**	**-38,450**	**24,150**	**83,000**	**1,22,475**

Note: Depreciation is a non-cash item. It does not involve cash flow. Hence, depreciation will not be considered as payment through cash.

(5) Prepare a cash Budget of R.M.C. LTD. for April, May and June 2019:

Months	Sales(Rs.)	Purchases(Rs.)	Wages(Rs.)	Expenses(Rs.)
Jan.(Actual)	80,000	45,000	20,000	5,000
Feb.(Actual)	80,000	40,000	18,000	6,000
March (Actual)	75,000	42,000	22,000	6,000
April (Budget)	90,000	50,000	24,000	7,000
May(Budget)	85,000	45,000	20,000	6,000
June(Budget)	80,000	35,000	18,000	5,000

Additional Information:

(i) 10% of the purchases and 20% of sales are for cash.

(ii) The average collection period of the company is ½ month and the credit purchases are paid regularly after one month.

(iii) Wages are paid half monthly and the rent of Rs. 500 included in expenses is paid monthly and other expenses are paid after one month lag.

(iv) Cash balance on April 1,2019 may be assumed to be Rs.15,000

CASH BUDGET

(For the months ending April, May & June 2019)

Particulars	**April (Rs.)**	**May (Rs.)**	**June (Rs.)**
Receipts Opening Balance Cash Sales Collection from Debtors	15,000 18,000 66,000	27,200 17,000 70,000	35,700 16,000 66,000
Total Receipts(A)	99,000	1,14,200	1,17,700
Payments			
Cash Purchases	5,000	4,500	3,500
Payment to creditors	37,800	45,000	40,500
Wages	23,000	22,000	19,000
Rent	500	500	500
Other Exp.	5,500	6,500	5,500
Total Payments(B)	71,800	78,500	69,000
Closing balance	**27,200**	**35,700**	**48,700**

ANALYSIS OF FUND FLOW AND CASH FLOW

ANALYSIS OF FUND FLOW

6.1 INTRODUCTION:

One of the most fundamental objectives of business is to make a profit. Long run survival requires that the business must be able to deal with any liquidity problems which arise in the short term. Basically any business must be concerned with making a profit and marinating a solvent financial position. The financial statement of the business indicates assets, liabilities and capital on a particular date and also the profit or loss during a period. But it is possible that there is enough profit in the business and the financial position is also good and still there may be deficiency of cash or of working capital in business. If the management wants to find out as to where the cash is being utilized, financial statement cannot help.

In the other words, the profit and loss account and balance sheet statements are the common important accounting statements of a business organization. The profit and loss account provides the financial information relating to only a limited range of financial transactions entered into during an accounting period and which have impact on the profits to be reported. The balance sheet contains information relating to capital debt raised or assets purchased. Along with the information about the assets and liabilities as well as the profit and loss, it is equally important to know what funds became available during the accounting year and how such funds were applied. This information may be obtained by preparing a statement of source and application of funds. This statement demonstrates the movement of funds into and out of the business during the course during the accounting period.

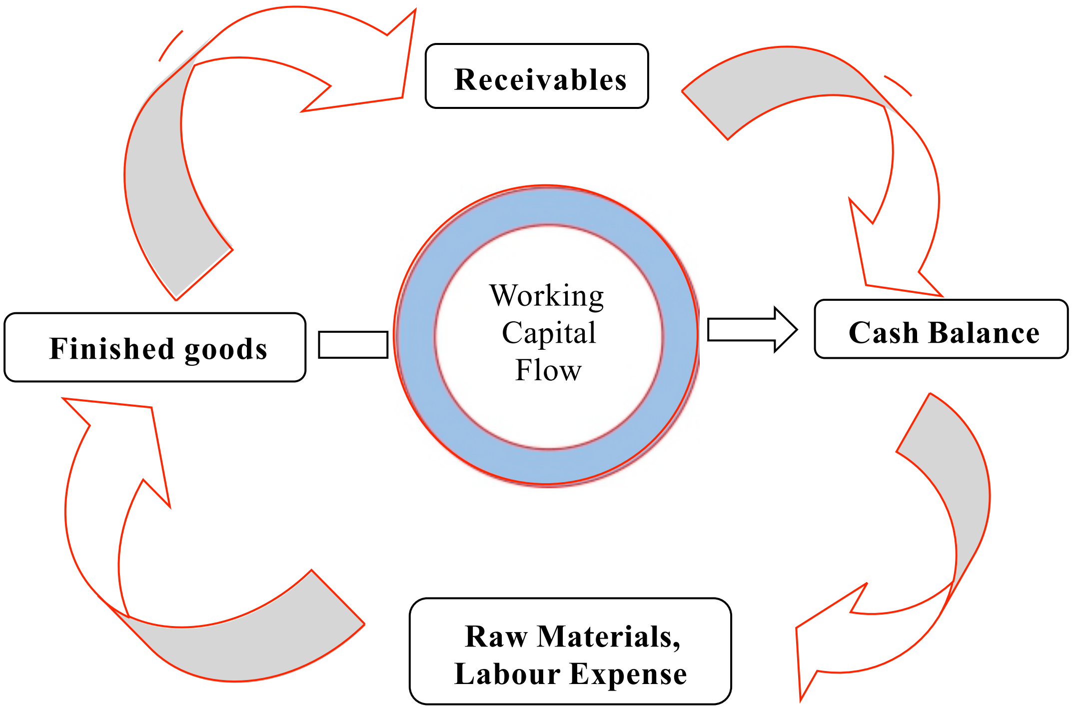
6.2 CONCEPT OF "FUND":

The term '*fund*' has been defined and interpreted differently by different experts. Broadly the term '*fund*' refers to all the financial resources of the company. On the other extreme, fund has been understood as 'cash' only. According to the ***International Accounting Standard No.*** *7*, the term generally refers to cash, to working capital and to cash and cash equivalents (long term financial sources).

A) **Fund means cash:** Under this concept, the term "funds" is used only in the sense of cash and bank balance. Here, only the changes in cash and bank are considered. Hence, the statement is called "Cash Flow statement. This statement aims at listing the various items which bring about changes in the cash balance between two balance sheet dates. Cash planning becomes useful for control purposes. Since cash is considered as short term assets, they are subjected to short term fluctuations. A delay in making payment to suppliers and a provision of one month's credit for making a payment of land purchases may show sufficient cash flow. They may reflect a satisfactory position, but it is not a reality. Therefore, cash equivalent concept of fund is useful only for short term financial planning and not for long term. Thus cash and bank is one part of fund.

B) **Fund means Working Capital:** Working capital is the excess of current assets over current liabilities. It means working capital = Current asserts - current liabilities. It is an alternative measure of the changes in the financial position. All those transactions which increase or decrease working capital are included in this statement. It excludes all such items which do not affect the working capital. The working capital concept of funds is in conformity with normal accounting procedures. Hence, a funds flow statement based on this concept fits well with the other statements. Moreover, working capital is also a measure of short term liquidity of the firm. Therefore, an analysis of factors bringing about a change in the amount of net working capital is useful for decision making by shareholders, creditors and management. Due to these reasons, the working capital approach to funds is more useful than the cash approach.

The operating cycle of working capital (working capital flow) is as follow:



C) Fund means total financial resources: The term “funds” is very often used in the sense of useful financial resources also. Cash approach and working capital approach both are incomplete and inadequate to the extent that they omit a few major financial and investment transactions. Such items do not affect net working capital. But, if they are included, they would certainly provide qualitative information for the decision making, For example issuing equity shares and debentures for purchase of buildings or assets shall not have any effect on the working capital. But it is a significant financial transaction that should be disclosed. Therefore, this concept seems to be the best approach to disclose the changes in the financial position as compared to other concepts. It is in conformity with the statutory regulations and legal requirements.

6.3 CONCEPT OF FUND FLOW:

The term "Flow of Funds" refers to changes or movement of funds or changes in working capital in the normal course of business transactions. The changes in working capital may be in the form of inflow of working capital or outflow of working capital. In other words, any increase or decrease in working capital when the transactions take place is called as "Flow of Funds." If the components of working capital results in increase of the fund, it is known as Inflow of Fund or Sources of Fund. Similarly, if the components of working capital effects in decreasing the financial position it is treated as Outflow of Fund. For example, if the fund raised by way of issue of shares will be taken as a source of fund or inflow of fund. This transaction results in increase of the financial position. Like this, the fund used for the purchase of machinery will be taken as application or use of fund or outflow of fund, because it stands to reduce the fund position.

Increase the funds while others decrease the funds. Some may not make any change in the funds position. In case a transaction results in increase of funds, it will be termed as a "sources of funds". In case a transaction results in decrease of funds it will be taken as an application or use of funds. In case a transaction does not make any change in the funds position, it is said that it is a non-fund transaction.

According to R.N. Anthony, "Fund Flow is a statement prepared to indicate the increase in cash resources and the utilization of such resources of a business during the accounting period."

According to Smith Brown, "Fund Flow is prepared in summary form to indicate changes occurring in items of financial condition between two different balance sheet dates."

No Flow of Funds:

Some transactions may not make any movement or changes in the fund position. Such transactions are involved within the business concern. Like the transaction which involves both between current assets and current liabilities and between non-current assets and non-current liabilities and hence do not result in the flow of funds. For example, conversion of shares in to debenture. Such transaction involves between non-current accounts only and this activity does not effect in increase or decrease of the working capital position.

6.4 CONCEPT OF FUND FLOW STATEMENT:

It is a statement showing the movement of funds into and out of business. In other words it is a statement showing sources and application of fund. A fund flow statement deals with the financial resources required for running the business activities. It explains how were the funds obtained and how were they used.

A fund flow statement matches the funds raised and funds applied during a particular period. The sources and applications of fund may be of capital as well as of revenue nature. A fund flow statements provide a meaningful link between the balance sheets at the beginning and at the end of the period and profit and loss account of the period. In view of recognized importance of capital inflows and outflows which often involve large amount of money should be reported to stake holders, the fund flow statement is devised.

In the words of **Dr. Shailesh Ransariya,** *"Funds flow statement is a modern technique of analyzing financial statement. Fund flow statement shows as to where have the funds come from and where have they been used during the accounting period. It helps in analyzing the movement of funds of a firm between the two balance sheet dates."*

As per ***Foulk*** point of view "A statement of sources and applications of fund is a technical device deigned to analyze the changes in the financial condition of a business enterprise between two dates."

In the words of ***Anthony***, "The fund flow statement describes the sources from which additional funds were derived and the uses to which these sources were put."

The ***I.C.W.A***. in glossary of management accounting terms defines fund flow statement as "a statement prospective or retrospective, setting out the sources and applications of the funds of an enterprise. The purpose of this statement is to indicate clearly the requirement of funds and how they are proposed to be raised and the efficient utilization and application of the same."

6.5 OBJECTIVES OF FUNDS FLOW STATEMENT:

The main objectives of the fund flow statement are:

(1) **Helpful in finding the answer to some important financial question**:-
A fund flow statement is prepared to give satisfactory answer to the following question:-

- (a) What have been the main source and application of funds during the period?
- (b) How much funds have been generated from business operations?
- (c) Where did the profits go?
- (d) Why where dividends not larger?
- (e) How was it possible to distribute dividends in excess of current earning or in the presence of net loss for the period?
- (f) Why the net current assets are up even though there is a net loss for the period?
- (g) How was the expansion in plant and equipment financed?
- (h) How was the repayment of long term debt accomplished?
- (i) How was the increase in working capital financed?

(2) **Helpful in financial analysis:-** A fund flow statement provides a complete analysis of the financial position of a firm.

(3) **It provides more reliable figures of profit and loss of the business:-** It gives much more reliable figure of the profits of the business than the figures shown by P/L account because the figure of profit shown by P/L account is affected by the personal decision of management in deciding the amount of depreciation and other adjustments regarding the writing off preliminary expanses etc.

(4) **It enables to know whether the funds have been properly used:-** The funds flow statement enables the management to know whether the funds have been properly used in purchasing various assets or repaying loans etc.

(5) **Helpful in proper management of working capital:-** While managing working capital in a business, it becomes essential to ensure that it should neither be excessive nor inadequate. A fund flow statement indicates the excessiveness or inadequacy in working capital.

(6) **Helps in preparation of budget for the next period:-** A fund flow statement is prepared for next year, it will enable the management to plan its financial resources properly. The firm will know how much funds it requires, how much the firm can manage internally and how much it should arrange from outside source. This is helpful in preparing the budgets for the future period.

(7) **It helps a firm in borrowing operations:-** A fund flow statement prepared for the future period indicates whether the company will have sufficient funds to repay the interest & loans in time.

(8) **Helpful in determining dividend policy: -** Sometimes, there may be sufficient profit but the distribution of dividend may not be possible due to its adverse effect on the liquidity and working capital of the business. in such cases a funds flow statement help in leading whether to distribute the dividend or not because a funds flow statement will reveal from where and how much funds can be managed for distributing the dividends.

(9) **Useful to shareholders:-** Shareholders also get information about the financial policies of the enterprise with the help of fund flow statement.

6.6 SOURCES AND USES (APPLICATIONS) OF FUNDS:

Since a fund flow statement describes the varies sources and uses of funds, it is imperative that one should know the varies sources and uses of funds:

Sources of funds:

Generally funds are derived from:

1. Operating of business i.e. operating income
2. Income from investment

3. Sale of assets
4. Sale of long term investments
5. Contribution of share holders
6. Increase in long term liabilities, e.g., issue of debentures
7. Gifts, damages awarded in legal action etc.

Uses (Applications) of funds:

Generally funds are utilized to:

8. Operating loses
9. Repayment of long term loan and debentures
10. Redemption of preference share capital
11. Payment of cash dividends
12. Purchase of fixed assets
13. Purchase of long term investments

Loss of cash by embezzlement costs in legal action etc.

6.7 IMPORTANCE/SIGNIFICANCE OF FUND FLOW STATEMENT:

Fund flow statement is a useful tool in the financial managers' analytical kit. The basic propose of this statement is to indicate where funds came from and where it was used during certain period. Following are the uses of this which show its importance:

[1] Fund flow statement determines the financial consequences of business operations. It shows how the funds were obtained and used in the past. Financial manager can take corrective actions.

[2] The management can formulate its financial policies – dividend, reserve etc. on the basis of the statement.

[3] It serves as a control device, when comparing with budgeted figures. The financial manager can take remedial steps, if there is any deviation.

[4]Other points:

1. It points out the sound and weak financial position of the enterprise.
2. It points out the causes for changes in working capital.

3. It enables the Bankers, creditors or financial institutions in assessing the degree of risk involved in granting credit to the business.
4. The management can rearrange the firm's financing more effectively on the basis of the statement.
5. Various uses of funds can be known and after comparing them with the uses of previous years, improvement or downfall in the firm can be assessed.
6. It provides a basis for preparation budgets for the future.
7. The statement compared with the budget concerned will show to what extent the resources of the firm were used according to plan and what extent the utilization was unplanned.
8. It tells whether sources of funds are increasing or decreasing or constant.
9. It points out the financial strengths and weaknesses of the business.
10. It helps in working capital management of the company.
11. It appraises the shareholders regarding the uses of funds in the business.

6.8 LIMITATION OF FUND FLOW STATEMENT:

The main limitations of fund flow statement are as under:

(1) The statement lacks originality because it is only rearrangement of data appearing in account books

(2) It indicates only the past position and not future.

(3) It indicates Fund flow a summary form and it does not show various changes which take place continuously.

(4) When both the aspects of a transaction are current, they are not considered.

(6) When both the aspects of a transaction are non- current, even then they are not included in this statement.

(6) It is not an ideal tool for financial analysis.

(7) It is not an original statement but simply a rearrangement of two statements or financial data.

(8) It is not a substitute of income statement or a balance sheet. It is only a supplement to them.

6.9 COMPONENTS OF FLOW OF FUNDS:

In order to analyze the sources and application of funds, it is essential to know the meaning and components of flow of funds given below:

(l) Current Assets

(2) Non-Current Assets (Fixed or Permanent Assets)

(3) Current Liabilities

(4) Non-Current Liabilities (Capital & Long-Term Liabilities)

(5) Provision for Tax

(6) Proposed Dividend

1. **Current Assets:** The term "Current Assets" refer to the assets of a business of a transitory nature which are intended for resale or conversion into different form during the course of business operations. For example, raw materials are purchased and the amount unused at the end of the trading period forms part of the current as stock on hand. Materials· in process at the end of the trading period and the labour incurred in processing them also form part of current assets.

2. **Non-Current Assets (Permanent Assets):** Non-Current Assets also refer to as Permanent Assets or Fixed Assets. These classes of asset include those of tangible and intangible nature having a specific value and which are not consumed during the course of business and trade but provide the means for producing saleable goods or providing services. Land and Building, Plant and Machinery, Goodwill and Patents etc. are the few examples of Non-Current assets.

3. **Current Liabilities:** The term Current Liabilities refer to amount owing by the business which are currently due for payment. They consist of

amount owing to creditors, bank loans due for repayment, proposed dividend and proposed tax for payment and expenses accrued due.

4. **Non-Current Liabilities:** The term Non-Current Liabilities refer to Capital and Long-Term Debts. It is also called as Permanent Liabilities. Any amount owing by the business which are payable over a longer period time, i.e., after a year are referred as Non-Current Liabilities. Debenture, long-term loans and loans on mortgage etc., are the few examples of non-current liabilities.

5. **Provision for Taxation:** Provision for taxation may be treated as a current liability or an appropriation of profit. When it is made during the year it is not used for adjusting the net profit, it is advisable to treat the same as current liability. Any amount of tax paid during the year is to be treated as application of funds or non-current liability. Because it is used for adjusting the net profit made during the year.

6. **Proposed Dividend:** Like provision for taxation, it is also treated as a current liability and noncurrent liability, when dividend may be considered as being declared. And thus, it will not be used for adjusting the net profit made during the year. If it is treated as an appropriation, i.e., an non-current liability when the dividend paid during the year.

7. **Provisions Against Current Assets and Current Liabilities:** Provision for bad and doubtful debts, provision for loss on inventories, provision for discount on creditors and provision made against investment etc. are made during the year, they may be treated separately as current assets or current liabilities or reduce the same from the respective gross value of the assets or liabilities.

6.10 ANALYSIS OF FUND FLOW:

FUND FLOW STATEMENTS OF DGVCL

DESCRIPTION	2013-14	2012-13	2011-12	2010-11
Sources of Funds:				
Cash Profit from operations	195.87	146.05	179.10	154.72
Decrease in Investments	1.89	61.11	0.00	0.00
Increase in Share Capital	1.66	0.00	0.00	0.00
Increase in Share warrants/outstanding	0.00	10.94	0.00	0.00
Increase in Sec. Loans	0.00	52.86	0.00	0.00
Increase In Unsecured Loans	165.13	51.15	824.97	0.00
Decrease in Working Capital	186.50	45.68	0.00	115.56
Others	211.92	164.75	233.11	149.80
Total	**762.97**	**532.55**	**1237.17**	**420.08**
Application of Funds:				
Increase in Gross Block	625.42	532.55	285.61	204.48
Decrease in Share Capital	0.00	0.00	0.00	0.00
Decrease in Sec. Loans	126.61	0.00	97.76	124.41
Decrease in Un. Sec Loans	0.00	0.00	0.00	91.19
Decrease in Share warrants/outstanding	10.94	0.00	0.00	0.00
Increase in Investments	0.00	0.00	85.78	0.00
Interim Dividend Paid	0.00	0.00	0.00	0.00
Equity Dividend Paid	0.00	0.00	0.00	0.00
Corporate dividend tax paid	0.00	0.00	0.00	0.00
Increase in Working Capital	0.00	0.00	768.02	0.00
Others	0.00	0.00	0.00	0.00
Total	**762.97**	**532.55**	**1237.17**	**420.08**

Analysis:

The above table no.6.1 presents the fund flow statement of DGVCL during the study period of 2010-11 to 2013-14. It would provide the valuable information about the changes in the long-term sources of funds and in the quantum of working capital. First part of the statement shows the sources of funds. Profit from operations shows the mixed trend during the study period. It is ranged between 146.05 in 2012-13 and 195.87 in 2013-14. The company has sold the investments during last two years of the study period. Company has issued additional share capital 1.66 crore in 2013-14. Again it shows that company has taken a secured loan of 52.86 in the year 2012-13. Company has borrowed huge amount in form unsecured loan in the year 2011-12, 2012-13 and 2013-14. 824.97% increase in unsecured loan in 2011-12 as compare to 2010-11. Amount in working capital was also decreased in the year 2010-11, 2012-13 and 2013-14.

Second part of the statement shows the application of funds. Company has purchased the fixed assets of Rs.204.48 crore, Rs.285.61 crore, Rs.532.55 crore and Rs.625.42 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows the progressive trends during the study period. 86.46% increase in fixed assets in 2012-13 as compare to the year 2011-12. Company has repaid the secured loans in the year 2010-11, 2011-12 and 2013-14. Company's working capital was increased of Rs.768.02 crore in the year 2011-12. Company has invested Rs.85.78 crore in investments in the year 2011-12.

FUND FLOW STATEMENTS OF MGVCL

DESCRIPTION	2013-14	2012-13	2011-12	2010-11
Sources of Funds:				
Cash Profit from operations	151.46	135.27	142.92	125.92
Decrease in Investments	0.00	0.00	0.00	0.00
Increase in Share Capital	7.07	0.00	0.00	0.00
Increase in Share warrants/outstanding	0.00	42.42	0.00	0.00
Increase in Sec. Loans	0.00	1.61	0.00	0.00
Increase In Unsecured Loans	30.47	58.33	36.42	467.88
Decrease in Working Capital	199.54	19.51	0.00	0.00
Others	138.66	86.03	200.16	57.82
Total	**527.20**	**343.17**	**379.50**	**651.62**

Application of Funds:				
Increase in Gross Block	426.30	327.12	287.69	205.48
Decrease in Share Capital	0.00	0.00	0.00	0.00
Decrease in Sec. Loans	40.37	0.00	57.02	39.45
Decrease in Un. Sec Loans	0.00	0.00	0.00	0.00
Decrease in Share warrants/outstanding	42.42	0.00	0.00	0.00
Increase in Investments	18.11	16.05	4.13	43.30
Interim Dividend Paid	0.00	0.00	0.00	0.00
Equity Dividend Paid	0.00	0.00	0.00	0.00
Corporate dividend tax paid	0.00	0.00	0.00	0.00
Increase in Working Capital	0.00	0.00	30.66	363.39
Others	0.00	0.00	0.00	0.00
Total	**527.20**	**343.17**	**379.50**	**651.62**

Analysis:

The above table no.6.2 shows the fund flow statement of MGVCL during the study period of 2010-11 to 2013-14. It would provide the valuable information about the changes in the long-term sources of funds and in the quantum of working capital of the MGVCL. First part of the statement shows the sources of funds. Profit from operations shows the mixed trend during the study period. It is ranged between 125.92 in 2010-11 and 151.46 in 2013-14. The Company has issued additional share capital 7.07 crore in 2013-14 and increased in Share warrants/outstanding of 42.42 crore in the year 2012-13. Again it shows that company has taken a secured loan of 1.61 crore in the year 2012-13. Company has borrowed huge amount in form unsecured loan of Rs. 467.88 crore, Rs. 36.42 crore, Rs. 58.33 crore and Rs. 30.47 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. Amount in working capital was also decreased in the last two years of study period by Rs. 19.51 crore and Rs. 199.54 respectively. Moreover company has received funds in form of other sources by Rs. 57.82 crore, Rs. 200.16 crore, Rs. 86.03 crore and Rs. 138.66 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It is increased by 246.18 % in the year 2011-12 as compared to year 2010-11.

Second part of the statement shows the application of funds. Company has purchased the fixed assets of Rs.20548 crore, Rs.287.69 crore, Rs. 327.12 crore and Rs. 426.30 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows the continuously progressive trends during the study period of 2010-11 to 2013-14. 30.32% increase in fixed assets in 2013-14 as compare to the year 2012-13. Company has repaid the secured loans in the year 2010-11, 2011-12 and 2013-14. Company's working capital was increased of Rs. 363.39 crore and Rs. 30.66 in the year 2010-11 and 2011-12 respectively. Company has purchased investment of Rs. 43.30, Rs.4.13, Rs.16.05 and Rs.18.11 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively.

FUND FLOW STATEMENTS OF PGVCL

DESCRIPTION	2013-14	2012-13	2011-12	2010-11
Sources of Funds:				
Cash Profit from operations	385.40	321.22	259.17	216.84
Decrease in Investments	0.00	26.31	0.00	0.00
Increase in Share Capital	440.12	324.00	0.00	0.00
Increase in Share warrants/outstanding	0.00	0.00	2.38	0.00
Increase in Sec. Loans	20.09	164.32	0.00	36.61
Increase In Unsecured Loans	0.00	319.52	10.78	41.75
Decrease in Working Capital	352.80	93.74	495.72	265.43
Others	169.65	231.64	372.52	394.25
Total	**1368.06**	**1480.74**	**1140.57**	**954.88**
Application of Funds:				
Increase in Gross Block	1196.22	1381.90	1115.67	911.25
Decrease in Share Capital	0.00	0.00	0.00	0.00
Decrease in Sec. Loans	0.00	0.00	18.68	0.00
Decrease in Un. Sec Loans	164.88	0.00	0.00	0.00
Decrease in Share warrants/outstanding	3.54	98.84	0.00	6.84
Increase in Investments	3.42	0.00	6.21	36.84

Interim Dividend Paid	0.00	0.00	0.00	0.00
Equity Dividend Paid	0.00	0.00	0.00	0.00
Corporate dividend tax paid	0.00	0.00	0.00	0.00
Increase in Working Capital	0.00	0.00	0.00	0.00
Others	0.00	0.00	0.00	0.00
Total	**1368.06**	**1480.74**	**1140.57**	**954.88**

Analysis:

The above table no.6.3 indicates the fund flow statement of PGVCL during the study period of 2010-11 to 2013-14. It would provide the valuable information about the changes in the long-term sources of funds and in the quantum of working capital of the PGVCL. First part of the statement shows the sources of funds. Profit from operations shows the mixed trend during the study period. It is ranged between 216.84 in 2010-11 and 385.40 in 2013-14. The Company has issued additional share capital of Rs. 324.00 crore and Rs.440.12 crore in 2012-13 and 2013-14 respectively and increased in Share warrants/outstanding of Rs.2.38 crore in the year 2011-12. Again it shows that company has taken a secured loan of Rs. 36.61 crore, Rs. 164.32 crore and Rs. 20.09 crore in the year 2010-11, 2011-12 and 2013-14 respectively. Company has borrowed huge amount in form unsecured loan of Rs. 41.75 crore, Rs. 10.78 crore and Rs. 319.52 crore in the year 2010-11, 2011-12 and 2012-13 respectively. It is increased by 2864% in the year 2012-13 as compared to 2011-12. Amount in working capital was also decreased by Rs. 265.43 crore, Rs. 495.72 crore, Rs. 93.74 crore and Rs. 352.80 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. Moreover company has received funds in form of other sources by Rs. 394.25 crore, Rs. 372.52 crore, Rs. 231.64 crore and Rs. 169.65 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively.

Second part of the statement shows the application of funds. Company has purchased the fixed assets of Rs. 911.25 crore, Rs. 1115.67 crore, Rs. 1381.90 crore and Rs. 1196.22 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows the mixed trends during the study period of 2010-11 to 2013-14. Company has repaid the secured loans in the year 2011-12 by Rs. 18.68

crore. Company has purchased investment of Rs. 36.84, Rs. 6.21 and Rs. 3.42 crore in the year 2010-11, 2011-12 and 2013-14 respectively.

FUND FLOW STATEMENTS OF UGVCL

DESCRIPTION	2013-14	2012-13	2011-12	2010-11
Sources of Funds:				
Cash Profit from operations	187.39	155.91	144.43	132.16
Decrease in Investments	3.44	0.00	74.41	68.32
Increase in Share Capital	29.56	0.00	0.00	0.00
Increase in Share warrants/outstanding	0.00	168.50	0.00	0.00
Increase in Sec. Loans	29.38	0.00	0.00	0.00
Increase In Unsecured Loans	0.00	282.21	0.00	0.00
Decrease in Working Capital	296.08	0.00	113.52	126.37
Others	261.12	120.27	59.43	43.62
Total	**806.98**	**726.89**	**391.80**	**370.47**
Application of Funds:				
Increase in Gross Block	541.55	544.95	293.70	272.31
Decrease in Share Capital	0.00	0.00	0.00	0.00
Decrease in Sec. Loans	0.00	8.28	29.04	34.98
Decrease in Un. Sec Loans	96.93	0.00	69.05	63.18
Decrease in Share warrants/outstanding	168.50	0.00	0.00	0.00
Increase in Investments	0.00	0.99	0.00	0.00
Interim Dividend Paid	0.00	0.00	0.00	0.00
Equity Dividend Paid	0.00	0.00	0.00	0.00
Corporate dividend tax paid	0.00	0.00	0.00	0.00
Increase in Working Capital	0.00	172.68	0.00	0.00
Others	0.00	0.00	0.00	0.00
Total	**806.98**	**726.89**	**391.80**	**370.47**

Analysis:

The above table no.6.4 indicates the fund flow statement of UGVCL during the study period of 2010-11 to 2013-14. It would provide the valuable information about the changes in the long-term sources of funds and in the quantum of working capital of the UGVCL. First part of the statement shows the sources of funds. Profit from operations shows the progressive trend during the study period. It is ranged between 132.16 crore in 2010-11 and 187.39 crore in 2013-14. The Company has issued additional share capital of Rs. 29.56 crore in the year 2013-14. It shows that the amount increased in Share warrants/outstanding of Rs. 168.50 crore in the year 2012-13. Again it shows that company has taken a secured loan of Rs. 29.38 crore in the year 2013-14. Company has borrowed huge amount in form unsecured loan of Rs. 282.21 crore in the year 2012-13. Amount in working capital was also decreased by Rs. 126.37 crore, Rs. 113.52 crore and Rs. 296.08 crore in the year 2010-11, 2011-12 and 2013-14 respectively. Moreover company has received funds in form of other sources by Rs. 43.62 crore, Rs. 59.43 crore, Rs. 120.27 crore and Rs. 261.12 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively.

Second part of the statement shows the application of funds. Company has purchased the fixed assets of Rs. 272.31 crore, Rs. 293.70 crore, Rs. 544.95 crore and Rs. 541.55 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows the fluctuated progressive trends during the study period of 2010-11 to 2013-14. Company has repaid the secured loans of Rs. 34.98 crore, 29.04 crore and Rs. 8.28 in the year 2010-11, 2011-12 and 2012-13. Company has purchased investment of Rs. 0.99 crore in the year 2012-13.

ANALYSIS OF CASH FLOW

6.11 INTRODUCTION:

The separation of management from ownership in modern business calls for the use of some form of connection between the managers and the owners and other interested parties. Financial reporting is the most efficient and extensively used medium of communicating the operating results as well as latest financial position of a concern for the management. Constancy and achievement of any business largely depend on its capacity to generate enough cash. As part of conveying an end result of companies operation managements use financial statement as an important vehicles through which financial information is furnished to the stakeholders. But the three basic financial statements present only fragmentary information about a company's cash flows (cash receipt and cash payments).

The balance sheet is a snapshot of a firm's financial resources and obligations at a single point in time, and the income statement summarizes a firm's financial transactions over an interval of time. These two financial statements reflect the accrual basis accounting used by firms to match revenues with the expenses associated with generating those revenues.

6.12 CONCEPT OF CASH FLOW:

A cash flow statement is a financial report that describes the sources of a company's cash and how that cash was spent over a specified time period. It does not include non-cash items. The cash flow statement is a cash basis report on three types of financial activities: operating activities, investing activities, and financing activities. Non-cash activities are usually reported in footnotes. This makes it useful for determining the short-term viability of a company, particularly its ability to pay bills. Because the management of cash flow is so crucial for businesses and small businesses in particular, most analysts recommend that an entrepreneur should study a cash flow statement at least every quarter. The cash flow statement is similar to the income statement in that it records a company's performance over a specified period of time. The difference between the two is that the income statement also takes into account some non-cash accounting items such as depreciation. The cash flow statement strips away all of this and shows exactly how much actual money the company has generated. Cash flow statements show how companies have performed in managing inflows and outflows of cash. It provides a sharper picture of a company's ability to pay creditors, and finance growth.

The Cash Flow Statement (CFS) provides relevant financial information about the cash receipts and cash disbursements of a firm during a fiscal year. This information is especially important to shareholders and creditors. As part of their investment return, shareholders often expect to receive dividends, and the ability to pay cash dividends depends on the availability of cash flows. Creditors are concerned about a firm's ability to make interest and principal payments on loans they have made to the firm. Other stakeholders such as employees and suppliers are also concerned about a firm's ability to meet its financial obligations.

It is perfectly possible for a company that is shown to be profitable according to accounting standards to go under if there isn't enough cash on hand to pay bills. Comparing amount of cash generated to outstanding debt, known as the "operating cash flow ratio," illustrates the company's ability to service its loans and interest payments. If a slight drop in a company's quarterly cash flow would jeopardize its ability to make loan payments that company is in a riskier position than one with less net income but a stronger cash flow level.

Unlike the many ways in which reported earnings can be presented, there is little a company can do to manipulate its cash situation. Barring any outright fraud, the cash flow statement tells the whole story. The company either has cash or it does not. Analysts will look closely at the cash flow statement of any company in order to understand its overall health. Statement of cash flows provides the answer to the following simple but important question about an enterprise. (Keiso and Weygand, 1998: 1275-76)

i. Where did cash come from during the period?
ii. What was the cash used for during the period?
iii. What was the change in the cash balance during the period?

The use of cash flow information is gaining value in the analysis of financial statements. Cash flow information is measured less open to manipulation than information on earnings, because it is based on the actual receipt and payment of cash only and not on the accrual and other accounting principles. However, the literature on the cash flow statement indicates that there are grey areas in cash flow reporting that are open to various interpretations. The perceived simplicity of the cash flow statement may therefore create synthetic confidence in the reliability of companies‟ cash flow reporting and the comparability of various companies' cash flow information. The acceptance of AS-3: The Cash Flow Statement has added a new dimension to the preparation and presentation of financial statements in Bangladesh. This paper is an effort to investigate into the state of cash flow reporting by the listed Bangladeshi non-banking financial companies in general. The focal point is not on the quality of the reporting of the companies but rather on what the reporting levels are in general.

6.13 IMPORTANCE OF CASH FLOWS

Investors, creditors, and managers use cash flow information to make decisions about a company's ability to meet obligations, or to take advantage of business opportunities. Information about a current period's cash flows provides a basis for predicting the amount, timing, and certainty of future cash flows. Cash flow information is also useful in evaluating the liquidity, solvency, and financial flexibility of a company. **Liquidity** refers to the ability of a company to pay its current liabilities with existing liquid assets. **Solvency** is the ability to pay all debts as they come due. A company may wish to raise money by issuing shares, for instance. **Financial flexibility** relates to the ability of a company to use its resources to adapt to change and take advantage of business opportunities as they arise.

A cash flow statement (formerly known as a statement of changes in financial position) is designed to help a user make these evaluations and to answer specific questions such as

- What accounts for the difference between cash and cash equivalents at the beginning of the year and at the end of the year?
- What was done with the cash raised from the sale of bonds or shares?
- How did the business finance its purchases of machinery or other capital assets?

- How was it possible to pay dividends when the business reported a net loss on its income statement?
- Does the firm have the ability to pay off the mortgage on its office building?

6.14 CASH FLOW STATEMENT:

In 1998, the CICA revised section 1540 of the *CICA Handbook*, changing the "statement of changes in financial position" to "cash flow statement." This does not affect the preparation of the cash flow statement, which is still based on cash and cash equivalents. This applies to all businesses unless a business has relatively simple operations, with few or no significant financing and investing activities, and their effects on cash flows are apparent from the other financial statements or are adequately disclosed in the notes to the financial statements
. For example, the cash flow statement does not apply to pension plans or not-for-profit organizations.

The CFS is similar to an income statement in that it summarizes the activities of a company during a given period. An income statement, however, only reports on operating activities. The CFS not only reports on operating activities, but also on investing and financing activities. Another key difference between the income statement and the CFS is that the income statement is prepared using the accrual basis of accounting, but the CFS includes inflows and outflows of cash or cash equivalents, thus it is prepared on a cash basis.

6.15 CLASSIFICATION OF CASH FLOW TRANSACTIONS:

Cash flows result from operating, financing, and investing activities. You must be able to distinguish among these types of cash flows. These activities are explained as follows.

1. **Operating activities:** Cash flows from operating activities include all cash flow transactions that are *not* classified as investing or financing activities. **Operating activities** are related to the primary operations of the company in generating revenues and incurring related expenses. Companies expect to generate more cash inflows from selling goods and

services than they spend in doing so. As you know, revenues are recorded when they are earned and expenses are recorded when incurred. Revenues and expenses therefore seldom match perfectly with their corresponding cash flows. For example, of $20,000 sales during the current fiscal period, perhaps only $10,000 are collected in the same period as the sales. The income statement also includes noncash expenses such as amortization. Amortization expense reduces income without a corresponding reduction in cash. You should think of operating cash flow activities as those that affect net income as well as current assets and current liabilities (the working capital accounts or operating accounts). Changes in working capital accounts are very much affected by a company's rate of growth. Expanding businesses will usually report significant increases in accounts receivable and inventories. If a business uses suppliers to finance these increases, you will see an upward change in accounts payable. Some changes in current liabilities, however, are not usually classified as operating activities. For instance, changes in dividends payable and interest charged to retained earnings are classified as financing activities. In the previous example, a business may finance increases in accounts receivable and inventory with borrowing or equity financing. However, borrowing and equity financing are not considered to be operating activities.

2. **Investing activities:** In general, **investing activities** are transactions for purchasing and selling capital assets and other productive assets. Capital assets are acquired in order to increase productive capacity. Cash needed for this expansion may come from the sale of existing assets that are less productive. Usually this section of the CFS shows a net cash outflow because companies typically spend more cash than they receive from the sale of non-current assets. Additional cash, therefore, has to come from operations or other sources to finance capital expansion. Investing activities also include purchasing and selling of long-term investment securities such as bonds or shares of other companies.

3. **Financing activities:** Financing activities affect a business' capital structure, its debt and equity. This includes a company's transactions with its owners and creditors but does not include cash payments to settle credit purchases of merchandise, which are operating activities. Financing activities include the use of cash to pay dividends to shareholders, the borrowing or payment of debt, and the issue or repurchase of shares. Do not confuse dividends declared and paid with dividends received from investments. Dividends paid are a cash outflow that is a financing activity, but dividends received are a cash inflow reported on the income statement. Dividends received are therefore classified as an operating activity.

6.15 COMPARISION OF FUND FLOW STATEMENT & CASH FLOW STATEMENT

FUND FLOW STATEMENT	CASH FLOW STATEMENT
1. This analysis shows the changes in working capital fixed assets etc. between two periods	1. This analysis shows the changes in cash position between two periods.
2. Increase in funds does not always means increase in cash.	2. Increase in cash does always mean increase in fund.
3. Fund flow analysis notes the overall changes in funds of the company and we can decide overall stability of business unit.	3. Cash flow analysis notes the changes in cash position only and one can't know the stability of Co. by this analysis
4. It reveals the long term stability of business.	4. It reveals the short term cash position of the business.
5. Management can take long term major decisions with the help of this statement.	5. Management can take short term decisions regarding cash only.

6. This analysis includes cash flow analysis because cash is a part of working capital.	6. This analysis does not include fund flow analysis because this covers only cash transactions.
7. While preparing statement of changes in working capital if current assets increase or current debts decrease, working capital increases.	7. In cash flow analysis increase in current assets or decrease In current debts means reduction in cash.

6.17 ANALYSIS OF CASH FLOW:

Cash flow analysis is primarily used as a tool to evaluate the sources and uses of funds. Cash flow analysis provides insights into how a company is obtaining its financing and deploying its resources. It also is used in cash flow forecasting and as part of liquidity analysis. The cash flow statement was previously known as the flow of Cash statement. The cash flow statement reflects a firm's liquidity. The balance sheet is a snapshot of a firm's financial resources and obligations at a single point in time, and the income statement summarizes a firm's financial transactions over an interval of time. These two financial statements reflect the accrual basis accounting used by firms to match revenues with the expenses associated with generating those revenues. The cash flow statement includes only inflows and outflows of cash and cash equivalents; it excludes transactions that do not directly affect cash receipts and payments. These non-cash transactions include depreciation or write-offs on bad debts or credit losses to name a few. The cash flow statement is a cash basis report on three types of financial activities: operating activities, investing activities, and financing activities. Noncash activities are usually reported in footnotes. The cash flow statement is intended to

1. Provide information on a firm's liquidity and solvency and its ability to change cash flows in future circumstances
2. Provide additional information for evaluating changes in assets, liabilities and equity
3. Improve the comparability of different firms' operating performance by eliminating the effects of different accounting methods

4. Indicate the amount, timing and probability of future cash flows.

The cash flow statement has been adopted as a standard financial statement because it eliminates allocations, which might be derived from different accounting methods, such as various timeframes for depreciating fixed assets.

CASH FLOW STATEMENTS OF DGVCL

DESCRIPTION	2013-14	2012-13	2011-12	2010-11
Profit Before Tax	67.26	31.85	95.26	88.09
Adjustment	255.20	258.34	205.25	223.05
Changes In working Capital	289.44	93.44	-47.42	122.03
Cash Flow after changes in Working Capital	611.91	383.63	253.10	433.16
Interest Paid	-	-	-	-
Tax Paid	8.75	-6.45	-13.80	-56.32
Other Direct Expenses paid	-	-	-	-
Extra & Other Item	-1.21	3.42	-17.77	-0.60
Cash From Operating Activities	619.44	380.59	221.54	376.24
Cash Flow from Investing Activities	-628.54	-532.61	-286.11	-205.52
Cash from Financing Activities	47.95	169.56	115.56	-146.40
Net Cash Inflow / Outflow	38.86	17.54	50.98	24.32
Opening Cash & Cash Equivalents	152.03	134.49	83.50	59.18
Cash & Cash Equivalent on Amalgamation / Take over / Merger	-	-	-	-
Cash & Cash Equivalent of Subsidiaries under liquidations	-	-	-	-
Translation adj. on reserves / op cash balances frgn subsidiaries	-	-	-	-
Effect of Foreign Exchange Fluctuations	-	-	-	-
Closing Cash & Cash Equivalent	**190.88**	**152.03**	**134.49**	**83.50**

Analysis:

The above table no.6.5 shows the cash flow statement of DGVCL during the study period 2010-11 to 2013-14. Cash flow after changes in working capital was Rs. 433.16 crore, Rs.253.10 crore, Rs.383.63 crore and Rs.611.91 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows progressive trend during the year 2011-12 to 2013-14. It was increased by 85.57 % in 2013-14 as compare to 2012-13. Cash flow from operating activities was Rs. 376.24 crore, Rs.221.54 crore, Rs.380.59 crore and Rs.619.44 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows fluctuated and progressive trend during the study period. It was increased by 62.76 % in 2013-14 as compare to 2012-13. Cash flow from investing activities was Rs. -205.52 crore, Rs.-286.11 crore, Rs.-532.61 crore and Rs.-628.54 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows progressive trend during the study period. It was increased by 86.16 % in 2012-13 as compare to 2011-12. Cash flow from financing activities was Rs. -146.40 crore, Rs.115.56 crore, Rs.169.56 crore and Rs.47.95 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows fluctuated trend during the study period. Closing balance of cash and equivalent was Rs.83.50 crore, Rs.134.59 crore, Rs.152.03 crore and Rs.190.88 crore during the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows the progressive trend during the study period.

CASH FLOW STATEMENTS OF MGVCL

DESCRIPTION	2013-14	2012-13	2011-12	2010-11
Profit Before Tax	24.84	22.92	46.08	32.27
Adjustment	124.62	117.97	120.64	110.78
Changes In working Capital	229.70	98.10	59.03	86.93
Cash Flow after changes in Working Capital	379.16	238.99	225.75	229.98
Interest Paid	-	-	-	-
Tax Paid	-2.87	-0.22	-6.53	-16.55
Other Direct Expenses paid	-	-	-	-
Extra & Other Item		0.13	-0.49	16.58
Cash From Operating Activities	376.29	238.91	218.73	230.01

Cash Flow from Investing Activities	-433.43	-345.57	-289.35	-227.36
Cash from Financing Activities	55.14	117.63	84.41	4.43
Net Cash Inflow / Outflow	-2.00	10.96	13.78	7.08
Opening Cash & Cash Equivalents	60.61	49.65	35.87	28.79
Cash & Cash Equivalent on Amalgamation / Take over / Merger	-	-	-	-
Cash & Cash Equivalent of Subsidiaries under liquidations	-	-	-	-
Translation adj. on reserves / op cash balances frgn subsidiaries	-	-	-	-
Effect of Foreign Exchange Fluctuations	-	-	-	-
Closing Cash & Cash Equivalent	**58.62**	**60.61**	**49.65**	**35.87**

Analysis:

The above table no.6.6 shows the cash flow statement of MGVCL during the study period 2010-11 to 2013-14. Cash flow after changes in working capital was Rs. 229.98 crore, Rs.225.75 crore, Rs.238.99 crore and Rs.379.16 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows fluctuated and progressive trend during the study period. It was increased by 58.65 % in 2013-14 as compare to 2012-13. Cash flow from operating activities was Rs. 230.01 crore, Rs.218.73 crore, Rs.238.91 crore and Rs.376.29 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows fluctuated and progressive trend during the study period. It was increased by 57.50 % in 2013-14 as compare to 2012-13. Cash flow from investing activities was Rs. -227.36 crore, Rs.-289.35 crore, Rs.-345.57 crore and Rs.-433.43 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows progressive trend during the study period. It was increased by 25.43 % in 2013-14 as compare to 2012-13. Cash flow from financing activities was Rs. 4.43 crore, Rs.84.41 crore, Rs.117.63 crore and Rs.55.14 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows fluctuated trend during the study period. Closing balance of cash and equivalent was Rs.35.87 crore, Rs.49.65 crore, Rs.60.61 crore and Rs.58.62 crore during the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows the mixed trend during the study period.

CASH FLOW STATEMENTS OF PGVCL

DESCRIPTION	2013-14	2012-13	2011-12	2010-11
Profit Before Tax	19.37	10.56	11.48	24.65
Adjustment	608.30	478.83	359.63	378.64
Changes In working Capital	791.78	-447.97	351.93	313.03
Cash Flow after changes in Working Capital	1419.44	41.42	723.04	716.32
Interest Paid	-	-	-	-
Tax Paid	-0.03	-3.10	-24.02	-15.12
Other Direct Expenses paid	-	-	-	-
Extra & Other Item	-	-	-	-
Cash From Operating Activities	1419.42	38.32	699.02	701.20
Cash Flow from Investing Activities	-1194.15	-1384.24	-1127.65	-666.48
Cash from Financing Activities	-265.70	1403.89	415.74	-25.53
Net Cash Inflow / Outflow	-40.43	57.97	-12.90	9.19
Opening Cash & Cash Equivalents	124.34	66.37	79.27	70.08
Cash & Cash Equivalent on Amalgamation / Take over / Merger	-	-	-	-
Cash & Cash Equivalent of Subsidiaries under liquidations	-	-	-	-
Translation adj. on reserves / op cash balances frgn subsidiaries	-	-	-	-
Effect of Foreign Exchange Fluctuations	-	-	-	-
Closing Cash & Cash Equivalent	**83.91**	**124.34**	**66.37**	**79.27**

Analysis:

The above table no.6.7 presents the cash flow statement of PGVCL during the study period 2010-11 to 2013-14. Cash flow after changes in working capital was Rs. 716.32 crore, Rs.723.04 crore, Rs.41.42 crore and Rs.1494.44 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows fluctuated and progressive trend during the study period. There was sharp decline in the year 2012-13 in cash flow after changes in working capital by 681.62 crore. It was increased by 3508 % in 2013-14 as compare to 2012-13. Cash flow from operating activities was Rs. 701.20 crore, Rs.699.02 crore, Rs.38.32 crore and Rs.1419.42 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows fluctuated trend during the study period. It was increased by 3604 % in 2013-14 as compare to 2012-13. Cash flow from investing activities was Rs. -666.48 crore, Rs.-1127.65 crore, Rs.-1384.24 crore and Rs.-1194.15 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows progressive trend during the year 2010-11 to 2012-13. Cash flow from financing activities was Rs. -25.53 crore, Rs.415.14 crore, Rs.1403.89 crore and Rs.-265.70 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows fluctuated trend during the study period. Closing balance of cash and equivalent was Rs.79.27 crore, Rs.66.37 crore, Rs.124.34 crore and Rs.83.91 crore during the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows the fluctuated trend during the study period.

CASH FLOW STATEMENTS OF UGVCL

DESCRIPTION	2013-14	2012-13	2011-12	2010-11
Profit Before Tax	13.33	-1.72	46.51	19.71
Adjustment	278.34	316.82	187.87	218.03
Changes In working Capital	246.29	-143.37	269.83	320.63
Cash Flow after changes in Working Capital	537.95	171.73	504.21	558.37
Interest Paid	-	-	-	-
Tax Paid	-1.50		-2.55	-27.25
Other Direct Expenses paid	-	-	-	-
Extra & Other Item	-0.08	-0.57	-0.38	-0.31
Cash From Operating Activities	536.37	171.16	501.28	530.81
Cash Flow from Investing Activities	-545.57	-549.74	-293.09	-222.05
Cash from Financing Activities	-44.68	374.74	-148.95	-301.05
Net Cash Inflow / Outflow	-53.88	-3.84	59.23	7.71
Opening Cash & Cash Equivalents	128.04	131.87	72.64	64.93
Cash & Cash Equivalent on	-	-	-	-

Amalgamation / Take over / Merger				
Cash & Cash Equivalent of Subsidiaries under liquidations	-	-	-	-
Translation adj. on reserves / op cash balances frgn subsidiaries	-	-	-	-
Effect of Foreign Exchange Fluctuations	-	-	-	-
Closing Cash & Cash Equivalent	**74.16**	**128.04**	**131.87**	**72.64**

Analysis:

The above table no.6.8 presents the cash flow statement of UGVCL during the study period 2010-11 to 2013-14. Cash flow after changes in working capital was Rs. 558.37 crore, Rs.504.21 crore, Rs.171.73 crore and Rs.537.95 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows fluctuated trend during the study period. There was sharp decline in the year 2012-13 in cash flow after changes in working capital by 332.48 crore as compare to year 2011-12. It was increased by 213.25 % in 2013-14 as compare to 2012-13. Cash flow from operating activities was Rs. 530.81 crore, Rs.501.28 crore, Rs.171.16 crore and Rs.536.37 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows fluctuated trend during the study period. It was increased by 213.37 % in 2013-14 as compare to 2012-13. Cash flow from investing activities was Rs. -222.05 crore, Rs.-293.09 crore, Rs.-549.74 crore and Rs.-545.57 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows progressive trend during the year 2010-11 to 2012-13. Cash flow from financing activities was Rs. -301.05 crore, Rs.-148.95 crore, Rs.374.74 crore and Rs.-44.68 crore in the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows sharp fluctuated trend during the study period. Closing balance of cash and equivalent was Rs.72.64 crore, Rs.131.87 crore, Rs.128.04 crore and Rs.74.16 crore during the year 2010-11, 2011-12, 2012-13 and 2013-14 respectively. It shows the fluctuated trend during the study period.