**CHAPTER TWO**

**MASTER BUDGET**

**2.1. Introduction to Budgeting in General**

There are different types of organizations in today world. Generally, these organizations can be divided as profit making organization and not for profit organizations. The main objective of profit-making organization is making profit. Therefore, in a for profit-oriented company, decisions made by management are intended to increase or at least maintain profit. Success is measured to a significant degree by the amount of profit the organizations earn. A not for profit organization is an organization whose goal is something other than earning a profit for its owners. Usually its goal is to provide service. In not for profit organization, decisions made by management ordinarily are intended to produce the best possible service with the available resources.

Success in a not for profit organization is measured primarily by how much service the organization provided and by how well these services are rendered. Most basically, the success of a not for profit organizations is measured by how much it contributes to the public well-being. Since service is vague and less measurable concept than profit, it is more difficult to measure performance in not for profit organization. Despite these complications, management must do what it can do to assure that resources are used efficiently and effectively.

Despite the difference in the objective of organization, all of them have to plan what they want to achieve. Planning is the process of establishing enterprise objective. There should be agreement among and all levels of management as to the objective of the company and the proposed means of accomplishing them. Developing a budget is a critical step in planning any economic activity. This is true for business, for government agencies and for individuals. We must all budget our money to meet day to day expense and plan for the major expenditure, such as buying a car or paying for college tuition. Similarly, business of all types and government units at every level must make financial plans to carry out routine operation, to plan for major expenditure and to help in making financing decision.

Most people associate the word “budget” with the approving, rejecting or arguing over various budgets. Tax payers demand that governments plan the effective use of their hard-earned tax dollars and budget not only allow government to plan spending, but also allow tax payers to see exactly where and how their many is being spent. Government and government agencies, however, tend to use budget only as a means of limiting spending. In contrast, most business organizations use budget to focus attention on company operation and financial not just to limit spending. Budget highlights potential problem and advantage early, allowing management to take steps to avoid these problems or use the advantages wisely. Thus, a budget is a tool that helps managers in both their planning and control function. A budget is a formal written summery (statement) of management plan for a specific future time period expressed in financial terms. It normally represents primary means of communicating agreed up on objectives throughout the business organization. Once adopted, a budget becomes an important basis of for evaluating performance. Thus, it promotes efficiency and serves as a deterrent to waste and inefficiency

**2.2. Strategic Planning and Its Implementation**

Planning is the first function of management. It is performed continuously because the passages of time demand both re-planning and making new plans. More over current feedback often necessitates newly planned action to, improve current performance deficiency, Cope with unanticipated events that are unfavorable, and Take advantage of new development

Management planning is a process that includes the following five steps

* 1. Establish enterprise objective and goals
  2. Developing premise about the environment of the entity
  3. Making decision about course of action
  4. Initiating actions to activate the plans
  5. Evaluating performance for re planning

The development of organization objectives is the most fundamental level of the planning process. Objective states the desired, broad, long range future state of the organization .For example, the objective for a manufacturing Company should relate to such basic issue as breadth of the product line, quality of a product, growth expectations etc. The next planning level is known as goals, which represent the broad objective brought in to sharper focuses by explicitly specifying; The time dimension for attainment, Quantitative expression and Subdivision of responsibility

For example, goals would explicitly state such items as the following. Three years from now the new product being developed will be introduced. The return on investment goal for the next year will be 15% and the profit goal of product A is 5% of sales for next year. To establish the foundation for the attainment of the enterprise objective and specific goals, management must develop strategies to be pursued by the entity.

Strategy specify the “how’; they detailed the plan of attack to be used in pursuing the goals operationally. For example, the strategy for a company may include expanding the current sales territory, reducing the selling price to attract higher volume, increasing the advertising and financing the expansion with debt rather than equity. Finally, the most detailed level of planning occurs when management operationalize the objective, goals and strategies already established by incorporating them in the budget. A budget is a financial and narrative expression of the expected result from the planning decision.

**2.2.1. Budget and the Budget Cycle**

Most people associate the word “budget” with the approving, rejecting of resource spending. If we associate budget with the government activities, governments usually request their various agencies to prepare their resource requirement so as to examining and approve the reasonableness and importance of the budget. Once the approved, the budget then will be used as a blue print for the agencies activities and means of controlling and limiting their spending.

In contrast, most business organizations use budget to focus attention on their companies’ operation and financial implication of their planned operation; not just to limit spending. Budget highlights potential problem and advantage early, allowing management to take steps to avoid these problems or use the advantages wisely. Thus, a budget is a tool that helps managers in both their planning and control function. A budget is a formal written summery (statement) of management plan for a specific future time period expressed in financial terms. It normally represents primary means of communicating agreed up on objectives throughout the business organization. Once adopted, a budget becomes an important basis for evaluating performance. Thus, it promotes efficiency and serves as a deterrent to waste and inefficiency.

* ***Budget in brief is a future plan of action expressed in quantitative terms which is also an aid to management control and performance evaluation***

Budget can cover both financial and non-financial aspects of the plan that can serve as blue print for the organization to follow in an upcoming period. A budget covers financial aspects and quantities of management expectation regarding income, cash flows, and financial position. Like financial statements present the historical financial condition and operating results of the business, budgeted balance sheet, cash flow and income statement are also prepared to show the future financial condition and operational performance. Budgeted financial statements are usually supported by detail schedule of the various operation of the firm, so budget also include nonfinancial aspects of the plan such as units of output to be produced and sold, number of employee and working hours, etc. Budget is a cyclical and sequential activity. In a well-managed company, budget usually cycles through the following steps:

1. Planning the performance of the company as a whole, as well as planning the performance of its subunits (such as department or divisions). Managers at all level agree on what is expected.
2. Providing a frame of reference, a set of specific expectations against which actual results can be compared
3. Investigating variations from plans. If necessary, corrective action follows investigation
4. Planning again, in light of feedback and changed condition.

**2.2.2. Purposes of Budget**

Budget prepared as a formal business plan is used by all managers at different functional areas and managerial level. Further budget is used by all types of organizations, be it a business organization, government organization or NGO. When administered wisely budget can provide the following benefits:

1. **Efficient Allocation of Resources**

Resource available to meet the objective of any organization is generally limited; therefore, efficient allocation of recourse is one of the prerequisite for successful attainment of organizational goal. For example, an office of a city Administration must allocate its revenue among basic societal service such as security and protection, heath, education, infrastructure etc. In the case of business organizations, the well-designed business strategy hardly become successful without availability and efficient allocation of resource. Therefore, adopting formal budgetary process helps organization to identify the resource requirement of the planed activity and allocate in accordance to the priority of each operation in achieving organizational objective.

1. **Compel strategic planning and implementation of plans**

The budgeting process forces managers to plan ahead. The development of budget triggers managers to plan their operation ahead as well as to prepare on the ways of talking any change during the implementation of the plan. Budget enable the successful implementation of strategy that is why in most business organization budget is considered as an integral part of strategic planning and implementation.

1. **Facilitating coordination and communication**

For any organization to be effective, each manager throughout the organization must be aware of the plan made by other managers. In large and diverse organizations the problem of coordination becomes critical. An important role of budgeting is to improve the coordination among the various units of the organization. Planning or budgeting means establishing objectives in advance and identifying the steps by which the objectives are to be accomplished. The planning process initiates coordination and clarification of sub-goals to achieve major enterprise goals. The coordinated plan or budget provides a blue print for implementation and control.

* ***A good budgeting process facilitates communication in all direction in the organization and help coordinating the various resources, manpower and units of the organization so that goal of the organization is achieved.***

1. **Frame work for judging performance**

Once plans are in Place, Company’s performance can be measured against the budget established for those plans. Budget can overcome two limitations of using past performance as abases of judging actual results. one limitation is that past results incorporate past misuse and substandard performance and the other limitation of using past performance is that the future conditions may be expect to differ from the past.

1. **Motivating Managers and Employees**

Research shows that budgets that are challenging improve performance. An inability to achieve budget numbers is viewed as filer. Most individuals are motivated to work more intensely to avoid failure than to achieve success. As individuals get closer to goal they work harder to achieve it. For this reason, many executives like to set challenging but achieve goal for their subordinates. Creating attitude of anxiety improves performance, but overly ambitious and unachievable budget increase anxiety without motivation that is because individuals see little chance of avoiding.

**2.2.3. Types of budget and budgeting Techniques**

The type of budget used by different organization differs based upon the nature of their business and the purpose of the budget; however, the general frame work is the same. In this section we will try to see the different type of budget their advantage and disadvantage and in what circumstance organizations prefers to adopt a specific type of budget and budgeting techniques.

1. **Strategic Plan:** The most forward-looking budget is the strategic plan, which sets the overall goals and objective of the organization. Some organization won’t classify the strategic plan as an actual budget though because it does not deal with a specific time frame and it does not produce forecasted financial statement. In any case, the strategic plan leads to long range planning which produce forecasted financial statement for five or ten years. The financial statements are estimates of what management would like to see in the company’s future financial statement. Decisions made in long range planning include addition or deletion of department, acquisition of a new equipment or building and other long-term commitment.
2. **Capital Budget:** Capital budget is a budget that details the planned expenditure for facilities, equipment, new product, and other long-term investments.
3. **Master budget:** A master budget is a short-term, comprehensive plan to achieve the financial and operational goals of an organization. Master budget comprises of the organizations overall plan for the given period and the budget for the various functional areas the make up the organization.

* ***Long rang plan and budget gives an organization a direction and goals for the future while short term plan and budget guide the day to day operation.*** ***Both long term and short-term budgets are relevant for archiving the overall goal of an organization, so managers are advised to give a reasonable attention to both short- and long-term budgets.***

Managers who pay attention to only short-term budget will quickly lose sight of long-term goals similarly managers who pay attention to only the long-term budget could wind up mismanaging day to day operation. There has to be a happy medium that allows managers to pay attention to their short-term budget while still keeping an eye on long term plan.

Master budget can be prepared as a standalone for one year or one operating cycle or in a continuous basis. Continuous budget or rolling budget or revolving budget are a very common form of a master budget that simply add a month in the future as the month just ended is dropped. Budgeting thus becomes an ongoing instead of periodic process. Continuous budgets for managers to allow think about the next twelve months not just the remaining month in fixed budgeting cycle. As they added a new twelfth month to continuous budget, managers may update the other month as well. They can compare actual monthly result with both the organization plan and the most recent revised plan. Continuous budgeting approach in preparing master budget is adapted mostly when the business environment is volatile to coup up with the change. Different organizations prepare budget using different techniques that may be grouped as follows:

1. **Incremental budgeting**: is a budget set based on past year’s actual performance. In this technique a budget for the coming year is simply this year budgeted or actual results plus or minus some amount for expected change on planned operation or change in the market price. This budgeting technique is easy and widely used, however it has its own draw back. As the base is the current year performance or budget any anomaly in the current year performance or budget may be incorporated in the budget.
2. **Zero based budgeting**: In a dynamic business it often makes sense to 'start afresh' when developing a budget, rather than basing ideas too much on past performance. In this technique each budget is therefore constructed without much reference to previous budgets. Preparing a budget afresh is usually required in most business organizations, where the business environment is volatile that require continues effort of incorporating changes in budget thinking.
3. **Rolling budgets**: Given the speed of change and general uncertainty in the external environment, shareholders seek quick results. US companies typically report to shareholders every three months, compared with six months in the UK. Rolling budgets involve evaluating the previous twelve months' performance on an ongoing basis, and forecasting the next three months' performance.
4. [**Strategic**](javascript:popUp('glossary.php?gID=207');) **budgeting:** This involves identifying new, emerging opportunities, and then building plans to take full advantage of them. This is closely related to zero based budgeting and helps to concentrate on gaining [competitive advantage](javascript:popUp('glossary.php?gID=39');).
5. **Activity based budgeting**: This examines individual activities and assesses the strength of their contribution to [company](javascript:popUp('glossary.php?gID=269');) success. They can then be ranked and prioritized, and be assigned appropriate budgets.

**2.3. Budgeting in business organization**

**2.3.1. Introduction**

The type of budget and the extent of the budgeting activity vary considerably from organization to organization. In smaller business organization, there may only be a sales forecast, a production budget or a cash budget, larger organization generally prepare a master budget or a comprehensive budget. A master budget involves the development of a complete set of financial statement for the budget period with supporting schedule. The primary responsibility for developing a master budget is given to the controller and her or his staff. In large organization, a special budget committee will be formed. The budget committee is usually composed of several key executive from various segment of the organization. People from finance, sales, purchasing, production, engineering and accounting are usually represented. The procedure followed by this committee in developing the budget is largely determined:

* By the authority it has over the finance budget
* By the amount of participation, it allows from others within the organization.

The authority of the budget committee is determined by top management philosophy; top management may have a predetermined profit objective in mind and will look to the budget as a means to accomplish it. This objective may be stated in variety of ways, such as rate of return on net asset, earning per share, or a specific amount of net income. It may be based on operating results of previous years adjusted for expectations about the coming year or some desired level of profitability. When top management has a predetermined profit objective, the budget committee must recognize it and develop a budget that will achieve it.

If top management has no specific profit level in mind, the budget committee must first develop some nation about what is fair and reasonable expectation for the budget period without this, the budget process often turns in to “game” and much of the benefit is lost. The budget committee may or may not invite other members in the organization to participate in developing the budget. In estimating sales for the coming period, for example, sales people may be asked to project the number of units of each product they expect to sell in their territories. The sales representative on the budget committee would use these as a basis for developing the sales forecast for the entire company participation could be carried to the extreme and every person in the organization could asked to estimate productivity in her or his individual area. On the other extreme, the budget committee may allow no participation. It merely may develop a budget that will achieve the desired profit and pass it on as the standard of performance for the budget period. More will be said about the behavioral considerations associated with employee participation in developing the budget.

**2.3.2. Process of Developing a Budget**

Although each organization is unique in the way it puts together its budget, all budgeting process share some common elements. After organizational goals, strategies, and long-range plans have been developed, work begins on the master budget, a detailed budget for the coming fiscal year with some detail.

The master budget is a comprehensive financial plan for a business. It is made up of the Operating and Financial budgets, which are in turn made up of supporting schedules (budgets).

To envision the master budget process, picture the financial statements most commonly prepared by companies: The income statement, the balance sheet, the cash flow statement. Then imagine the preparation of these statements before the fiscal period operational period.

**2.3.2.1. Parts of A Master Budget:** As shown on figure on the next page master budget consists of two major parts, namely: the operating budget and financial budget.

1. **Operating budget** refers to the budgeted income statement and the supporting budget schedules for various business functions in the value chain. The operating budget basically shows the expected operating result of the organization in the upcoming operational period.
2. **The financial budget** is part of the master budget made up of the capital expenditures budget, the cash budget, the budgeted balance sheet, and the budgeted statement of cash flow.

**An Overview of a Master Budget**

**Ending Inventory Budget**

### Production Budget

**Budgeted Income statement**

**Budgeted Cash Flow statement**

### Manufacturing Overhead Budget

### Budgeted Balance Sheet

### Direct Labor Budget

**Direct Material Budget**

C**apital Expenditure Budget**

### Operating Expense/none manufacturing overhead/ Budget

### Cost of Goods Sold Budget

### Sales Budget

#### Cash Budget

**2.3.2.2. Steps in developing an operating budget**

The Operating Budget refers to the budgeted income statement and all the supporting schedules.

* Dear learners, if you are given a responsibility of preparing an operating budget or coordinating the budgeting process, do you know where and how to start?

One way to think about this question is to understand that the organization has more control over some aspects of the business (for example how much to produce) and less control over other aspects, (the demand for its product and service). For most organizations sales is uncertain. Therefore, beginning with sales forecast, the firm can plan the activities over which it has more control. As better information about sales becomes available, it is reasonably easy to adjust the rest of the budget. If, on the other hand, production is more uncertain than sales, the firm may want to begin with a raw material and production forecast so as to reduce the uncertainty related to production. To clearly understand the steps in development of an operating budget, consider the budget information gathered by the controller of Gibe Furniture Manufacturing company during the process of budgeting for the upcoming fiscal year, 2011.

The summary of required budget information obtained from different operating units, such as sales related information from the marketing department, production related information from production department, direct and indirect labor related information from the human resource department, and other manufacturing and non-manufacturing overhead budgets from other departments as well as assumptions taken for the development of an operating budget are given as follows:

1. The only source of revenues is sales of tables and unit sold is the only revenue driver.
2. Work in Process inventory is negligible and is ignored.
3. Unit costs of direct materials purchased and finished goods sold remain unchanged throughout each budget year.
4. There are two types of Direct materials: Lumber and Metal
5. There are two types of direct labor: Laminating labor and Machine labor.

Direct labor rates remain unchanged throughout each budget year.

1. For computing inventor able costs, Gibe Furniture allocates all manufacturing overhead costs using manufacturing labor hours as the allocation base.
2. Numerical information
   1. Each table has the following product specifications:

**Direct materials:**

Lumber----------------- 9 board feet/table

Metal------------------- 10 board feet/table

**Direct labor:**

Laminating labor------0.25Hrs/table

Machine labor---------3.75 Hrs/table

* 1. Inventory information in physical units for 2011.

**Beginning Inventory** **Target Ending Inventory**

**Direct materials:**

Lumber------------- 20,000 board feet 18,000 board feet

Metal--------------- 25,000 board feet 22,000 board feet

**Finished goods:**

Tables------------- 5,000 tables 3,000 tables

* 1. Revenue expected from sales of tables for 2011 are:

Selling price-----------Br. 392/table

Units’ sales------------- 52,000 tables

* 1. Costs expected for 2011.

**2010** **2011**

Lumber/ board feet ------- Br. 3.90 Br. 4.00

Metal/ board feet---------- 5.80 6.00

Laminating labor/ Hr. ---- 24.00 25.00

Machine labor/ Hr. ------- 29.00 30.00

* 1. Other budgeted costs and amounts for 2006 are:
* Variable non-manufacturing costs------------- 13.5% of sales
* Fixed non-manufacturing costs---------------- Br. 1,400,000
* Variable MOH costs---------------------------- Br. 9.50/DL Hr.
* Fixed MOH costs------------------------------- Br. 1,600,000

(f) The inventor able cost is Br.275/table in 2005.

Now you can see each step in the preparation of the operating budget using the budget information given above.

**Step 1: Preparing Revenue budget**

The starting point for operating budget development for most business organizations is a revenue budget. A revenue/Sales budget outlines the expected sales for each product in units and Birr. This budget will be developed after the firm made a forecast of the demand for the company’s product by considering the following points:

* The sales volume in recent periods
* General industry and economic condition
* Market research studies
* Pricing polices
* Advertising & sales promotion
* Competition & regulatory policies

Based upon the forecasted sales the budgeted sale is prepared by a mere multiplication of forecasted sales volume and selling price.

|  |
| --- |
| **Budgeted Sales = Budgeted sales volume X Budgeted Selling price** |

The Revenue budget for Gibe Furniture, based upon budget information 7(C) is,

**Schedule (1) Sales Budget**

|  |  |
| --- | --- |
| Budgeted Unit | 52,000tables |
| X Budgeted Unit Selling Price | Br 392/table |
| Budgeted Sales | Br. 20,384,000 |

**Step 2: preparing the production budget (in units)**

After the revenues are budgeted, you would then prepare a Production Budget. The production budget is prepared to show how many units must be produced in order to meet your budgeted sales need and the target level of ending inventory balance for finished goods.

The total number of budgeted production requirement, is therefore, the sum of budgeted sales in unit and target ending inventory. However, if the firm is not new in operation, usually some of its production requirement can be satisfied using the inventory kept of the beginning of the period. Therefore, the beginning inventory should be deducted from the total production requirement to determine the exact units in the production budget

Formula wise you can put the production budget in unit as follow:

|  |
| --- |
| **Budgeted Production in unit = Budgeted Target Finished Beginning Finished**  **sales in unit + Goods inventory - goods inventory** |

The production budget for Gibe using the given information is prepared as follows

**Schedule (2) Production budget**

|  |  |
| --- | --- |
| Budgeted unit sales | 52,000 |
| Add: Target Finished Goods Inventory | 3,000 |
| Total requirements | 55,000 |
| Less: Beginning FG Inventory | 5,000 |
| **Units to be produced** | **50,000** |

After the sales and production budgets have been developed and the efforts of the sales and production groups have been coordinated, the next stage is the development of the production costs (direct material, direct labor and manufacturing overheads) at budgeted output level.

**Step 3: Preparing the Direct Material Usage and Direct Material Purchase Budget**

The number of units to be produced calculated in production budget Schedule is the key to computing direct materials in quantity and Birr. The direct materials budget ties the production to the Direct Materials that will need to be purchased in order to produce the estimated units. Direct materials purchases needed for the budget period are determined using this equation:

|  |
| --- |
| **Required Material to be + Estimated Estimated**  **Material = Used in Production ending materials - beginning**  **Purchase inventory materials inventory** |

The direct material usage budget in our case is prepared as follows:

**Schedule 3A: DM Usage Budget**

Lumber Metal Total

**Physical Units Budget:**

Lumber: 50,000 x 9 board feet 450,000b.f

Metal: 50,000 x 10 board feet 500,000b.f

To be used in production 450,000b.f 500,000b.f

**Cost Budget:**

-Available from Beginning Inventory.

Lumber: Br. 3.90 x 20,000 Br. 78,000

Metal: Br. 5.80 x 25,000 Br. 145,000

-To be obtained from purchases

Lumber: Br. 4.00 x 430,000 Br. 1,720,000

Metal: Br. 6.00 x 475,000 Br. 2,850,000

***DM to be used Br. 1,798,000 Br. 2,995,000 Br. 4,793,000***

**Schedule 3B: DM Purchases Budget**

**Lumber Metal Total**

**Physical Units Budget:**

Production Budget 450,000b.f 500,000b.f

Add: Target End. Inv. 18,000b.f 22,000b.f

Total requirements 468,000b.f 522,000b.f

Deduct: Beg. Inv. 20,000b.f 25,000b.f

Units to be purchases 448,000b.f 497,000b.f

**Cost Budget:**

Lumber: Br.4.00 x 448,000 Br. 1,792,000

Metal: Br. 6.00 x 497,000 Br. 2,982,000

Purchases Br. 1,792,000 Br. 2,982,000 Br. 4,774,000

**Step 4: Preparation of direct manufacturing labor cost budget**

This budget will show the number of employee and total hours required in producing the budgeted level of output along with the cost. The costs in this budget usually depend on wage rate, production method and human resource plan.

**Schedule 4: DL Budget**

Laminating Labor Machine Labor Total

Labor-hours Budget:

Laminating: 50,000 tables x 0.25Hrs. 12,500Hrs.

Machine: 50,000 tables X 3.75Hrs. 187,500Hrs.

**Total DL Hrs. required 12,500Hrs. 187,500Hrs. 200,000Hrs**

Cost Budget:

Laminating: Br. 25/Hr. x 12,500Hrs. Br. 312,500

Machine L: Br. 30/Hr. x 187,500Hrs. Br. 5,625,000

Total DL cost Br. 312,500 Br. 5,625,000 Br. 5,937,500

**Step 5: Preparing Manufacturing Overhead (MOH) Budget.**

The Overhead budget shows the expected cost of all indirect manufacturing items. The total of these costs depends on how individual overhead costs vary with respect to the cost driver.

Gibe Furniture treats both variables MOH and fixed MOH as inventorable costs.

**Schedule 5: MOH Budget**

At the budgeted level of 200,000 DL-Hours

Total variables MOH [Br.9.50 x200, 000] Br. 1,900,000

Total fixed MOH Br. 1,600,000

Total MOH Br. 3,500,000

Gibe Furniture inventories MOH at the budgeted rate of Br. 17.50/DL Hr.

[i.e. Br.3, 500,000/200,000Hrs.]. The budgeted MOH cost per table is Br. 70

[Br. 3,500,000/50,000tables].

**Step 6: Preparing the Ending Inventory Budget**

This budget is prepared for target ending raw material and ending finished goods inventory

**Schedule 6A: Computation of Unit Costs of Ending Inventory of FG**

**Cost/unit of**

**Input Input Total**

**DIRECT MATERIAL**:

Lumber: Br. 4 /b.f 9 b.f Br. 36

Metal: Br. 6 /b.f 10b.f Br.60 Br. 96.00

**DIRECT LABOR:**

Laminating Labor Br. 25 /Hr. 0.25Hrs. Br. 6.25

Manufacturing Labor Br.30 /Hr. 3.75Hrs. Br.112.50 Br. 118.75

MOH Br. 17.5/Hr. 4.00Hrs. Br. 70.00

Total Br. 284.75

**Step 7: Preparing Cost of goods sold (CGS) budget**

The following are inputs to prepare cost of goods sold budget

* Direct material usage budget
* Direct labor budget
* Manufacturing overhead budget
* Ending and beginning finished goods inventory
* Ending and beginning working in process inventory

**Schedule 7: CGS Budget**

Beg. FG Inv., Jan1, 2006 (275 x 5000) Br. 1,375,000

DM Used (sch.3A) 4,793,000

DL (Sch. 4) 5,937,500

MOH (Sch. 5) 3,500,000

CGM 14,230,500

Cost of goods available for sale 15,605,500

Less: Ending FG Inv. (sch.6B) 854,250

CGS Br. 14, 751, 250

**Step 8: Preparation of Non-Manufacturing overhead Cost Budget**

The non-manufacturing cost budget include the marketing and administrative departments’ costs required to operate the company at its projected level of sales and production and to achieve long term company goals. Unless there is a change in the organizations production and sales or level of activity, the nonmanufacturing cost budget is easily prepared by taking previous year’s actual or budgeted result after making the necessary adjustment for price change and other similar changes between periods.

**Schedule 8: Operating Expenses Budget**

Variable non-manufacturing costs: 13.5% X 20,384,000 Br. 2,751,840

Fixed non-manufacturing costs 1,400,000

Total Operating Expense 4,151,840

**Step 9: Preparing the Budgeted income Statement**

The last effort in operational budget development is pulling all the budget schedules prepared in all the above steps in to the income statement. The budgeted income statement, which can also be called Performa income statement show the revenue, costs of production, operating cost and the resulting operational profit envisage in the budget period.

**BUDGETED INCOME STATEMENT**

Revenues (Sch. 1) Br. 20,384,000

Less: CGS (Sch. 7) 14,751,250

Gross Profit 5,632,750

Less: Operating Expenses (Sch. 8) 4,151,840

Operating Income **Br. 1,480,910**

**2.3.3. Financial Budgets**

The remaining budgets that appear in the Master Budget make up the Financial Budget. The Financial Budget typically consists of the capital expenditure budget, the Cash Budget, the Budgeted Balance Sheet and the budgeted statement of cash flows. In this section the focus is only on the cash budget and budgeted balance sheet, as the rest are discussed in detail in other course modules in financial accounting and financial managements.

* + 1. **Cash budget**

Cash budget is a schedule of expected cash receipt and disbursement. It predicts the effects on the cash position at the given level of operation. Cash budget helps to avoid unnecessary idle cash and unexpected cash deficiencies. They thus, keep cash balance in line with needs, ordinarily; the cash budget has the following main sections.

The beginning cash balance plus cash receipt equals the total cash available before financing.

**Cash receipts** depend on the collection of accounts receivable, cash sales, and miscellaneous recurring sources such as rental royalty receipts. Information on expected collectable of account receivable is needed for accurate prediction.

**Cash disbursement**: Organizations make cash disbursement for various reasons such as:

* Payment for direct material purchased
* Salary paid for direct labor cost and other wages
* Other disbursements for property, equipment and other long-term investment
* Interest on long term borrowing
* Income tax payment
* Others,

Short time financing requirement depends on how the total cash available for needs compare with the total cash disbursement plus the minimum ending cash balance desired. If there is a deficiency of cash, loan will be taken, if there is excess cash, an outstanding loan will be paid

Suppose **Gibe Furniture Company** had the balance sheet for the year ended December 31, 2010 as follows:

|  |  |
| --- | --- |
| **ASSETS** | **LIABILITIES & STOCKHOLDERS’ EQUITY** |
| Cash Br. 500,000  Accounts Receivable 1,881,600  Direct Materials Inventory 223,000  Finished Goods Inventory 1,375,000  Land 1,200,000  Buildings & Equipment 2,300,000  Accumulated Depreciation (800,000) 1,500,000  **Total Assets Br. 6,679,600** | **Liabilities**  Account payable Br. 384,000  Tax payable 20,460  Total current 404460  Long term debt 2,400,000  Total current & Liability 2,804,460  **Stockholders’ Equity**  Common Stock 3,000  Retained earnings 3,872,140 3,875,140  Total Liabilities & SHE **Br. 6,679,600** |

The quarterly cash flow based on the budgeted cash effects of the operation formulated in operating budget above is given below:

**Quarter 1 Quarter 2 Quarter 3 Quarter 4**

Cash Collection Br. 5,331,200 Br. 4,704,000 Br. 4,704,000 Br. 6,272,000

Disbursements:

Direct Materials 960,000 1,152,000 1,152,000 1,536,000

Payroll 1,626 300 1,626 300 1,888,600 1,626,300

Other costs 1,580,460 1,580,460 1,580,460 1,580,460

Equipment purchase - 0- -0- 1,800,000 -0-

Interest expense 60,000 60,000 60,000 60,000

Income tax 100,000 120,460 100,000 100,000

Total **Br. 4,326,760 Br. 4,539,220 Br. 6,581 060 Br. 4,902,760**

***Additional information***

* Long term debt is Br. 2.4 million at an annual interest rate of 10% with 60,000 interest payable every quarter
* The company wants to maintain a Br. 100,000 minimum cash balance at the end of each quarter
* The company borrows cash in multiple of Br. 1,000 at the beginning of each quarter and repayment is made at the end of each quarter
* The company can borrow or repay money at an interest rate of 12% per year.
* Management doesn’t want to borrow any money more short term cash than is necessary
* Interest is computed and paid when the principal is repaid
* Tax rate is assumed to be 36%.
* During the year the company paid Br. 420,640 income tax. This amount is the remaining due for the year 2010, plus four quarter payment of each Br. 100,000
* Equipment amounting Br. 1,800,000 was bought in the 3rd quarter
* No land is bought or sold.
* Depreciation for the year is Br. 500,000.
* Long term notes payable is not repaid.
* No dividend is paid.

To prepare a cash budget you need to get adequate information about the cash receipt and disbursement made by the organization during the budget period. Most of this information is obtained from the different schedules prepared for the operating budget parts of a master budget. In addition to cash receipts and payments for operational activities, information is required on planned investing and financing activity of the firm on the budget period. Information on the companies desired minimum cash balance is also required.

* + - 1. The ending balance of cash in one quarter is the beginning balance of cash for the next quarter.
      2. In the year for total column the receipt and disbursement are totaled for the four quarters, however the beginning balance in the column are the beginning balance in for quarter 4.
      3. Depreciation is not a cash disbursement,
      4. The cash receipt and disbursement for operational activity appears in all the quarter as the budgeted operation of the company will continue in without interruption. However, when you come to cash receipt and disbursement for investing and financing activities appears only on some of the quarters. For example the firm acquired fixed asset costing Birr 1,800,000, that is why the cash disbursement for investing activity appears only once in Q3.
      5. When you consider cash receipt and payments related to financing activity the firm borrowed Birr 308,000 to finance the expected short term cash shortage at quarter III, as a result cash receipt from financing activity appeared only in this quarter. The principal amount and the interest on borrowed money are paid at quarter IV when the firm has excess cash on hand beyond the required amount of cash for planned payments and minimum cash balance requirement of the quarter, as a result cash payment for financing activity appears only in the fourth quarter. Using all the information given above on illustration to the cash budget for Gibe Furniture can be prepared as follow:

**Cash Budget for Gibe Furniture**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Descriptions** | **Quarters** | | | | **Total for the year** |
| **I** | **II** | **III** | **IV** |
| **Cash balance at the beginning** | Br 500,000 | Br 1,504,440 | Br 1,669,220 | Br 100,160 | 500,000 |
| ***Add Receipts:*** | | | | | |
| Cash collection from customers | 5,331,200 | 4,704,000 | 4,704,000 | 6,272,000 | 21,011,200 |
| **Total Cash available for needs (X)** | **5,831,200** | **6,208,440** | **6,372,220** | **6,372,160** | **21,511,200** |
| ***Deduct Disbursements*:** | | | | | |
| Direct materials | 960,000 | 1,152,000 | 1,152,000 | 1,536,000 | 4,800,000 |
| Payroll | 1,626,300 | 1,626, 300 | 1,888,600 | 1,626,300 | 6,767,500 |
| Other costs | 1,580,460 | 1,580,460 | 1,580,460 | 1,580,460 | 6,321,840 |
| Interest cost(long term debts) | 60,000 | 60,000 | 60,000 | 60,000 | 240,000 |
| Machinery purchase# | 0 | 0 | 1,800,000 | 0 | 1,800,000 |
| Income tax | 100,000 | 120,460 | 100,000 | 100,000 | 420,460 |
| **Total cash Disbursement(Y)** | **4,326,760** | **4,539,220** | **6,581,060** | **4,902,760** | **20,349,800** |
| Minimum Cash Balance desired | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 |
| **Total Cash needed** | **4,426,760** | **4,639,220** | **6,681,060** | **5,002,760** | **20,449,800** |
| **Cash excess (deficiency)** | 1,404,440 | 1,569,220 | (307,840) | 1,369,400 | 1,061,400 |
| ***Financing*** | | | | | |
| Borrowing at the beginning | 0 | 0 | 308,000 | 0 | 308,000 |
| Repayment at the end | 0 | 0 | 0 | (308,000) | (308,000) |
| Interest at 12% per annum | 0 | 0 | 0 | (18,480) | (18,480) |
| Total effect of financing | 0 | 0 | 308,000 | (326,480) | (18,480) |
| **Ending cash balance** | **Br1,504,440** | **Br 1,669,220** | **Br100,160** | **Br1,142,920** | **1,142,920** |

* + 1. **The Budgeted Balance Sheet**

The budgeted balance sheet shows the financial position of the firm during the budget period.Each item in the budgeted balance sheet is projected in the light of the details of the business plan expressed in all the previous budget schedules.

The budgeted balance sheet of Gibe furniture prepared on the bases of previously developed budget is prepared as follows:

**Budgeted Balance Sheet of Gibe furniture**

|  |
| --- |
| **Assets** |
| Cash Br1,142,920 |
| Accounts Receivable 1,254,400 |
| Direct Materials 204,000 |
| Finished Goods 854,250 Br 3,455,570 |
| Property plant and equipment |
| Land 1,200,000 |
| Building & Equipment 4,100,000  Ac.Depreciation (1,300,000) 2,800,000 4,000,000 |
| Total Assets **7,455,570** |
| Liabilities and Stock Holders’ Equity |
| Current liabilities |
| Account Payables 358,000 |
| Income Tax payables 40,075 398,075 |
| Long term Debt(interest 10% per year) 2,400,000 |
| Stock Holders Equity |
| Common Stock 3,000 |
| Retained earnings 4,654,495 4,657,495 |
| Total Liabilities & SHE **Br 7,455,570** |

* + 1. **Budgeted statement of cash flow**: statement of cash flow presents cash flow from operating, investing and financing activity in detail.
    2. **Capital budgeting**: is the process of making long term planning decision for investment capital budgeting also called long term investment. Long term investment involves the commitment of resource for projects which have long term consequence. Such decisions usually involve large investment of money. Capital budgeting decision have uncertain actual outcome that have long-term effect on the organization. Poor long-term investment decision can affect the future stability of an organization because it is often difficult for organization to recover money tied up in bad investment. Mangers need a long term planning tool to analyze and control investment with long-term consequence.