

Management Accountancy

Unit 9

Master Budget

Structure

- Master Budget

After the completion of this unit, you should be able to:

- Enumerate the various stages in the budget process
- Prepare functional budgets (schedules for Master Budget)

9.1 Introduction

A master budget is basically a summary budget of all the budgets. It represents the overall plan of action and goals for the future period of the enterprise. A master budget sometimes called a comprehensive budget is the summary of total budget package for a business firm. It is a formal statement of management's expectation regarding sales, production, cost and other financial transactions of the firm for coming period.

It can be defined as “the summary budget, incorporating its component functional budgets which is finally approved, adopted and employed.”

The master budget is a tool for coordinating all individual budgets of a concern into an acceptable effective plan. It is the comprehensive financial plan for the organisation as a whole as well as it is the end product of the budget preparation process. The exact composition of the master budget preparation process. The exact composition of the master budget depends somewhat on the type and size of business. However, a master budget contains consolidated summary of all the budgets prepared by the organisation.

A master budget can be divided into operating and financial budget. Operating budget reflect the results of operating decision. It describes the income generating activities of a firm. A plan of the expected revenues and expenses is included in operating budget. The best examples of operating budgets are sales, production, purchase, overhead budgets etc. The ultimate outcome of the operating budget is a budgeted income statement. Financial budget details the inflows and outflows of cash and overall financial position. It reflects the financial decision of the firm as well. The financial budget consists of cash budget and budgeted balance sheet.

9.2 Components of Master Budget

The master budget consists the following:

- Cash budget (cash receipts and disbursements)
- Budgeted income statement
- Budgeted balance sheet.

9.3 Basic Steps in Preparing Master Budget

The budget consists of many separate budgets that are interdependent. Such separate budgets are known as schedules or components of master budget. There are no specific guidelines for the steps and timing of budget preparation. The steps depend upon the budget system of an organization. However, many of the financial activities are not known until the operating budgets are known. So the operating budget is prepared first.

The following budgets are prepared for manufacturing enterprises and the given steps make easier for preparation of master budgeting:

Step first: To prepare Operational or Functional Budgets:

- Sales Budget.
- Production Budget.
- Raw material Consumption Budget.
- Raw material Purchase Budget.
- Direct Labour Cost Budget.
- Overhead Budget
- Manufacturing Overhead Budget.
- Office and Administration Overhead Budget.
- Selling and Distribution Overhead Budget
- Cost of goods production and sold budget
- Account receivable budget
- Account payable budget.

Step second: To prepare Financial Budgets:

- Cash Budget (Cash Receipts and Disbursements)
- Budgeted Income Statement and Balance Sheet
 - Budgeted Balance Sheet

In case of non-manufacturing enterprise, the merchandise is frequently used and the following budgets are prepared and the given steps make easier for preparation of master budgeting:

Step first: To prepare Operational or Functional Budgets:

- Sales Budget.
- Merchandise Purchase Budget.
- Operating cost Budget
- Cost of goods sold budget
- Account receivable budget
- Account payable budget.

Step second: To prepare Financial Budgets:

- Cash Budget (Cash Receipts and Disbursements)
- Budgeted Income Statement and Balance Sheet
 - Budgeted Balance Sheet

9.4 Sales Budget

A sales budget is a forecast of what the company can expect to sell during a budget period. It is forecast of total sales expressed and incorporated in quantities and money. A sales budget is the starting point in which other budgets are also based. All other budgets such as Production budget,

Purchase budget, Labour budget, Overhead budgets etc. are affected by sales budget. Therefore, sales budget can be referred as a nerve centre or backbone of the enterprise.

9.5 Production Budget

The production budget is prepared after preparing the sales budget. A production budget incorporates the estimates of total volume of production with the scheduling of operation by days, weeks and months. It specifies the number of units of product of each product that must be produced to satisfy the sales forecast and to achieve the desired level of closing finished goods. The specimen of production budget and production cost budget are given below :

Production Budget
For Months.....

Particulars/Months	Janua ry	Februa ry	Marc h	Total
Budgeted Sales Units	x x x	x x x	x x x	x x x
Add : Desired Ending Inventory	x x x	x x x	x x x	x x x
Total Needs	x x x	x x x	x x x	x x x
Less : Beginning Inventory	x x x	x x x	x x x	x x x
Budgeted Production Units	x x x	x x x	x x x	x x x

9.6 Direct Material Consumption Budget

The direct material budget deals with the quantities of raw materials and components required to produce the budgeted production units which are determined by production budget. The estimation of material requirements is the responsibility of the production engineering department. The material budget is prepared indicating the standard quantities of each material required for each unit of product. Then the total requirement of material is ascertained by multiplying budgeted output units with standard quantity required per unit of output. While determining material required units, wastage of raw materials should be considered.

The format of direct material budget which is also known as material consumption budget is presented below :

Direct Material Consumption Budget
For Months.....

Particulars/Months	January	February	March	Total
Budgeted Production Units	x x x	x x x	x x x	x x x
Budgeted Total Direct Material Consumption (Production Units × Consumption Rate per Unit)	x x x	x x x	x x x	x x x

9.7 Direct Material Purchase Budget

This budget is prepared for the determination of purchase of raw materials and components parts. The purchase units and price of materials are determined by the purchasing departments. While

preparing this budget, inventory policy of the concern should also be considered. The purchase unit is determined by adjusting closing and opening stock with required units as following:

$$\text{Purchase Units} = \text{Required Units} + \text{Ending Stock} - \text{Beginning Stock}$$

The format of material purchase budget is given below :

**Direct Material Purchase Budget
For Months.....**

Particulars/Months	January	February	March	Total
Budgeted Direct Material Consumption	x x x	x x x	x x x	x x x
Add: Desired Ending Inventory	x x x	x x x	x x x	x x x
Total Needs	x x x	x x x	x x x	x x x
Less: Beginning Inventory	x x x	x x x	x x x	x x x
Budgeted Direct Material Purchase (Units)	x x x	x x x	x x x	x x x
Budgeted Direct Material Purchase (Rs.) (Purchase Units × Purchase Price per Unit)	x x x	x x x	x x x	x x x

9.8. Direct Labour Cost Budget

The labour required to meet production needs is estimated by direct labour budget. It is developed directly from the production budget. The labour budget which shows the labour hours required to meet the production demand of the factory during the budgeted period is known as direct labour hour budget. To compute total direct labour hours requirement, expected production volume for each product is multiplied by the number of direct labour hours required to produce a single unit. In the same way, if the labour budget is prepared for an estimation of labour cost, that is known as labour cost budget, for obtaining labour cost, the direct labour hours required to meet production requirement is multiplied by labour cost per hour.

9.9 Overhead Budget

Three types of budgets come under overhead budget. They are :

- (a) Manufacturing Overhead Budget.
- (b) Office and Administrative Overhead Budget.
- (c) Selling and Distribution Overhead Budget.

Illustration 1

Months	January	February	March	April	May
Sales units	1,000	2,000	3,000	2,000	1,000

Required: Sales Budget for 3 months ending March

Solution:

Sales Budget

For 3 months from 1st Jan 2019 to end of March

Months	Sales Units	Price	Sales Revenue
January	1,000	100	1,00,000
February	2,000	100	2,00,000
March	3,000	100	3,00,000
Total	6,000		6,00,000

Illustration 2

Continuation of Illustration 1

Additional information

- Inventory should meet 50% of next month's sales
- Expected inventory balance as on 1st January is 500 units

Required: Production Budget for 3 months ending March

Solution:

Production Budget

For 3 months from 1st Jan. to end of March

Months	Jan	Feb	March	April	May
Budgeted Sales Units	1,000	2,000	3,000	2,000	1,000
Add: Ending inventory	1,000	1,500	1,000	500	
Total need	2,000	3,500	4,000	2,500	
Less: Beginning Inventory	500	1,000	1,500	1,000	
Budgeted Production units	1,500	2,500	2,500	1,500	

Illustration 3

Continuation of Illustration 1

Additional information

- Production units (from production budget)
- Raw material consumption rate
- Raw material “X” required 2 kg for 1 unit of finished goods
- **Required:** Raw Material Consumption Budget for 3 months ending March
- Solution:

Raw Material Consumption Budget

For 3 months from 1st Jan to end of March

Months	Jan	Feb	March	April
Budgeted Production units	1,500	2,500	2,500	1,500
Raw material consumption (kg) (@ 2 kg per unit)	3,000	5,000	5,000	3,000

Illustration 4

Continuation of Illustration 1

Additional information

- Inventory should meet sufficient of following month’s consumption
- Raw material purchase price = Rs 5 per kg
- **Required:** Raw Material Purchase Budget for 3 months ending March 2019
- Solution:

Raw Material Purchase Budget

For 3 months from 1st Jan to end of March

Months	Jan	Feb	March	April
Raw material consumption (kg)	3,000	5,000	5,000	3,000
Add: Ending inventory	5,000	5,000	3,000	
Total need	8,000	10,000	8,000	
Less: Beginning Inventory	3,000	5,000	5,000	
Raw material purchase in Kg	5,000	5,000	3,000	
Raw material purchase in Rs. (@ Rs. 5 per kg)	25,000	25,000	15,000	

Illustration 5

- Direct labour hours required
 - Skilled Labour hours = 2 hours per unit
 - Unskilled labour hours = 3 hours per unit
- Labour hour rate
 - Skilled Labour hours rate = Rs 100 per hour
 - Unskilled labour hours = Rs. 70 per hour

Required: Direct Labour Cost Budget for 3 months ending March

Solution:

Direct Labour Cost Budget, For 3 months from 1st Jan to end of March

Months	Budgeted Production units	Skilled		Unskilled		Total	
		Hours (@2 hrs. per unit)	Amount (Rs. 100 per hr.)	Hours (@3 hrs. per unit)	Amount (@Rs. 70 per hr.)	Hours	Amount
January	1,500	3,000	300,000	4,500	315,000	7,500	615,000
February	2,500	5,000	500,000	7,500	525,000	12,500	1,025,000
March	2,500	5,000	500,000	7,500	525,000	12,500	1,025,000
Total	6,500	13,000	1,300,000	19,500	1,365,000	32,500	2,665,000

Illustration 6

From the information given below, prepare a manufacturing overhead budget for the quarter ending December 31st, 19xx :

Budgeted Output during the Quarter	:	4,000 units
Fixed Overheads	:	Rs. 40,000
Variable Overhead (Varying at the Rate of Rs. 10 per unit)	:	Rs. 40,000
Semi-variable Overhead (40% Fixed and 60% Variable)	:	Rs. 5 per unit

SOLUTION:

Manufacturing Overhead Budget For the Quarter Ending Dec. 31, 19xx

	Rs.
Fixed Overheads	40,000
Variable Overheads	40,000
Semi-variable Overheads :	
Fixed (40% of 5 x 4,000)	8,000
Variable (60% of 5 x 4,000)	12,000
Total Overheads Cost	100,000

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