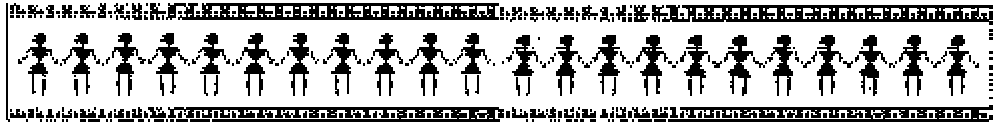


Unit 17

Managing Working Capital



General Objective

After studying this Unit, you should be able to help participants in your training session to provide an overview of the importance and assessment of the concept of “working capital”.

Specific Objectives

This Training Unit will help you to enable trainees to:

- Differentiate working capital from total capital;
- Assess working capital for an enterprise; and
- Learn to manage working capital.

Planning

Time	:	Two hours thirty minutes
Training Methodology:		Case study, discussion and exercise.
Training Materials	:	Case on ‘Chilli and Turmeric Powder’, Small problems for exercise, Posters, Charts and Markers
Trainer’s Preparation :		Selecting some short and simple exercises for assessing and calculating working capital. Gathering illustrations suited to participants and situations. In case of GMT preparing the pictorial presentation of the case.

Background Material

Introduction

Money is needed both for acquiring fixed assets as well as for operating enterprise functions. For operating day-to-day functions money is used for purchasing raw materials, processing these into finished products and finally delivering them to customers. The fund for meeting such operating costs is often referred to as ‘working capital’. Realistic assessment and effective management of working capital is crucial to ensure *profit* as well as the *continuity* of work.

Money as capital is needed in an enterprise for:

1. *Establishing an enterprise.* It includes long-term investment on items like land, shed, tools, machinery and equipment. These are one time expenses and are accordingly referred to as **“Fixed Capital”**.
2. *Running an enterprise.* It includes capital used to buy raw materials, to pay labour for turning these into finished goods, and to meet the cost for selling to customers. It also includes payment received as price of the goods. These are short-term assets and keep on rotating as per the operating cycle. The fund for meeting such operating costs is often referred to as **‘Working Capital’**.

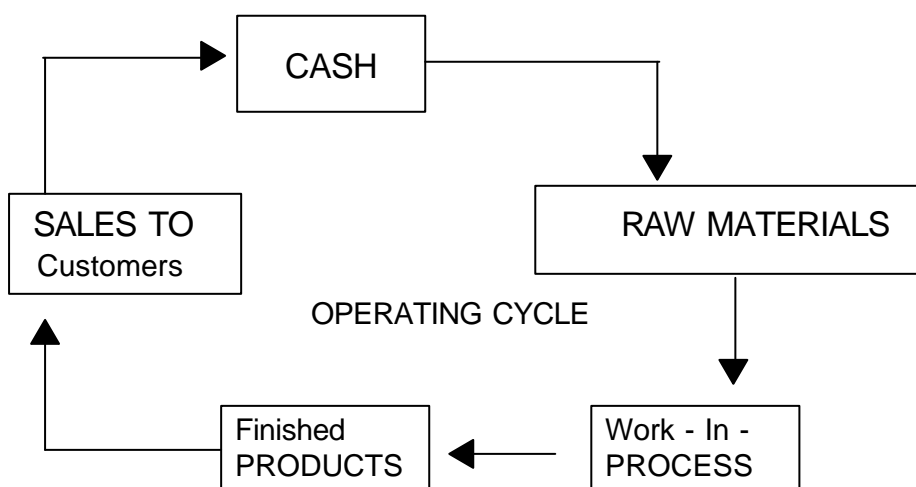
Realistic assessment and effective management of working capital is crucial to ensure *profit* as well as the *continuity* of work.

Assessment of Working Capital

Net working capital is the excess of current assets over current liabilities. Current assets are those which are converted into cash in a short period of time, whereas current liabilities are those liabilities which are to be paid in a short period of time.

Many microenterprises underestimate or even ignore the need of working capital. Many business failures are due to insufficient working capital. It is, therefore, necessary to make proper assessment and accordingly raise funds for working capital.

Working capital is assessed after considering the operating cycle. The operating cycle explains the **time lag** between money spent for acquiring raw materials, meeting operational expenses (related to production and sale of finished products) and recovering money in the form of sale proceeds. The operating cycles show different periods for different products. For example, it is very short in case of hotels and restaurants as compared to products like dresses and shoes. The operating cycles may be completed within a day, weeks, months, or year. Net working capital, accordingly is estimated for the period in which one operating cycle is completed.



For assessment of working capital, all expenses in terms of production and sale of finished products during a given period are listed. The total of such expenses are divided by the number of operating cycles completed during the given period to obtain net working capital as illustrated in the ‘Working Capital Assessment Tables given in Group Exercises.

Management of Working Capital

Working capital is perpetually locked up in the form of current assets (such as raw materials), work in process, finished products, credit given, and overall cash required to sustain operational activities in terms of production and sales. The investment in working capital, however, is not fixed and it may vary as per variation in the following conditions:

- Level of production and sales;
- Changes in raw material prices;
- Period of availability/procurement of raw materials;
- Processing time;
- Delivery schedule;
- Credit to customers or received from suppliers;
- Variation in wage rate, and
- Changes in tariff – Utility, Transport and Communications.

In view of the above, effective management of working capital requires the following considerations:

Consideration 1

Only if money is available one can order the raw materials. Raw material is available against advance or credit and hence it is necessary to estimate the stocks needed for a given period considering the time lag between ordering and delivery.

Consideration 2

Every enterprise has a particular manufacturing cycle that may or may not involve semi-finished products. In case such products are involved, there is a need to estimate the period and value of goods including raw materials and all other expenses locked as the semi-finished goods. This forms a part of the working capital.

Consideration 3

All goods produced may or may not be sold immediately. Certain finished goods may have to be stored for some time till these are sold or dispatched. Money is thus blocked in finished goods. This again forms part of the working capital.

Consideration 4

In business every entrepreneur wants to sell goods against cash payment. But in actual practice, payment is received after some time gap or some portion of sale is given on credit. So long as the credit is not realized, the working capital is blocked and hence the amount of working capital will increase accordingly.

Consideration 5

Besides at all stages of manufacturing, the expenses are incurred at every stage of selling the finished products. Such costs also form part of the working capital.

Consideration 6

The availability and price of raw materials may or may not be the same all the year round. In case the availability is restricted to a particular period or season, the raw materials have to be stocked for longer periods and accordingly the working capital will increase.

Consideration 7

Generally, raw material prices and operating expenses tend to rise, at times faster particularly, under inflationary environment. Often sales prices cannot be raised so rapidly. Besides, a successful business keeps growing. The demand for working capital increases. This must be anticipated and a part of profit should regularly be added to the fund for working capital.

All these considerations help participants in managing availability of working capital as per need. Working capital should ideally neither be in excess nor less to maintain an uninterrupted and smooth running of the enterprise.

Procedure*Step 1*

Present the role and importance of money in starting and managing an enterprise. Encourage participants to think and list all purposes for which they need money.

Elicit responses and put these on a flip chart. Through discussion explain that start-up cash is needed for two types of capital:

- a) for establishing enterprise (long-term fixed capital)
- b) for running an enterprise (short-term working capital)

Working capital is used to buy raw materials, to pay labour for turning these into finished goods, and to meet the cost for selling to customers and receiving payment as price. The working capital keeps on revolving and accordingly it is a 'circulating capital'. Explain 'operating cycle'.

Step II

For assessment of 'Working Capital', distribute the case on 'Chilli and Turmeric Powder'.

Assist participants in estimating the following:

- a) Total cash required for purchasing raw materials.
Labour, operating and selling cost.
- b) Cost of finished goods in stock.
- c) Total receivables prior to end of operating cycle, and
- d) Period of operating cycle.

Divide total operating cost in a given period of time (say a year or month) by the number of operating cycles completed during the period, to obtain the required working capital.

Step III

For understanding management of working capital, divide participants into small groups and on the basis of the distributed case ask them to discuss the following stages:

Stage 1

Only if money is available one can order the raw materials. Raw materials are available against advance or credit and hence it is necessary to estimate the stocks needed for a given period and money required acquiring these.

Stage 2

Every enterprise has a particular manufacturing cycle, which may or may not involve the semi-finished product. In case they are involved, there is a need to estimate the period and value of goods including raw materials and all other expenses locked as the semi-finished goods. This forms a part of the working capital.

Stage 3

All goods produced may or may not be sold immediately. Certain finished goods may have to be stored for some time till these are sold or dispatched. Money is blocked as finished goods. This again forms part of the working capital.

Stage 4

In business every entrepreneur wants to sell goods against cash payment. But in actual practice, payment is received after some gap in time or some portion of sale is given on credit. So long as the credit is not realized, the working capital is blocked and hence the amount of working capital will increase accordingly.

Stage 5

Besides at all stages of manufacturing, the expenses are incurred at every stage of selling the finished products. Such costs also form a part of the working capital.

Stage 6

The availability and price of raw materials may or may not be the same all the year round. In case the availability is restricted to a particular period or season, the raw material has to be stocked for a longer period and accordingly the working capital will increase.

Stage 7

Working capital also depends on the adoption of new technology and the consistency in sales pattern.

Small groups make presentations and as the trainer, you can assist in integrating all these. All these considerations help participants in managing availability of working capital as per need – neither excess nor shortage to maintain uninterrupted smooth running of the enterprise.

Processing

While processing, you may check if the participants could differentiate between fixed and working capital.

The assessment of working capital should be practiced by giving some simple short exercise.

The participants may be assisted to assume one case of her own and assess as well as develop the strategy for managing the working capital.

The conclusion must establish the need to assess and manage working capital since the excess working capital increases the overheads whereas the underestimated working capital often causes interruption in production and results in loss.

Group Activity 1

Working Capital Assessment Exercise

Chilli and turmeric powder project

Project Details

A. Chilli Grinding and selling:

Average selling price of Chilli Powder	Rs. 45 per kg.
Average cost of Raw Material	Rs. 25 per kg.
Total Production of Chilli Powder per month	300 Kgs.
Total Production of Chilli Powder per day	12 Kgs.

B. Turmeric Grinding and selling:

Average selling price of Turmeric Powder	Rs. 30 per kg.
Average cost of Raw Material	Rs.12.50 per kg.
Total Production of Turmeric Powder per month	300 kgs.
Total Production of Turmeric Powder per day	12 kgs.

C. *Operative Cycle of 10 days:* Product does not involve semi-finished stage. At the end of the week production goods are taken to the market and sold on cash payment and hence there is no credit sale. In such a case the working capital will be assessed as follows:

Items	Amount	Total
Working Capital		Required Working Capital
I. Raw Material Cost		
1. Raw Chilli 300 kg @ 25/kg	Rs. 7,500	
2. Raw Turmeric 300 kg. @ Rs.12.5 /kg	Rs. 3,750	
3. Plastic Bags for packaging	Rs. 375	
II. Production Cost		
4. Wages	Rs. 4,050	
5. Electricity	Rs. 250	
III Administrative Cost	Nil	
IV Selling Cost		
6. Transport expenses	Rs. 300	
V Semi-finished, finished goods and receivable	Nil	
Total for Month (A)	Rs. 16,225	
Total Working Capital (considering 3 operating cycles in a month A/3),	Rs. 16,225/3	Rs. 5,245

Working Capital Management Table (Initial Working Capital of Rs. 6000)

Day	Raw Material Turmeric	Raw Material Chilli	Value of Turmeric	Value of Chilli	Total
	T (150 x Rs. 12.5)	C(150 x Rs. 25)	_T	_C	
1.	150	150	Rs. 1875	Rs. 3750	Rs. 5625 Rs. 375 cash in hand
2.	138	136			
3.	126	122			
4.	114	108			
5.	102	94			
6.	90	80			
7.	78	66			
8.	66	52			
9.	54	38			
10.	42	24			
11.	30	10	Rs.4500 Sale	+Rs.375 cash	Rs. 4875
12.	18+100	0+100	Rs.1250	+Rs.2500	Rs.3750 spent, and Rs.1125 cash in hand Rs. 1125 Cash in hand
13.	6+ 100	96			
14.	94	82			
15.	82	68			
16.	70	54			
17.	58	40			
18.	46	26			
19.	34	12	Rs.3000 sale	+Rs.1125 Sale	Rs. 4125
20.	22 + 80	80	Rs.1000	+ Rs.2000	Rs.3000 spent, and Rs. 1125 cash in hand
21.	10 + 80	80			
22.	78	66			
23.	66	52	Rs.1500 sale	+Rs.1125 sale	Rs. 2625 cash in hand
24.	54	38			
25.	42	26			
26.	30	12			
27.	18	-			
28.	6				Raw material worth Rs.75 in stock **

**Working Capital Management Table – (For Stages 3 and 4)
Finished goods in stock or sold but Waiting payments)**

Managing Working Capital

Day	Finished Stock		Quantity Sold		Sales Value		Money Received		Money Yet to be Received	
	T	C	T	C	T	C	T	C	T	C
1	12	12								
2	24	24								
3	36	36								
4	48	48								
5	60	60								
6	12	12	60	60	1800	2700				
7	24	24								
8	36	36								
9	48	48								
10	60	60								
11	12	-	60	60	1800	2700				
12	24	12								
13	36	24								
14	48	36								
15	60	48								
16	22	20	50	40	1500	1800				
17	34	32								
18	46	44								
19	58	56					1000	2000	800	700
21	12	15	70	65	2100	2925				
22	24	27								
23	36	39					800	700		
24	48	51								
25	60	63	60	60	1000	2700				
26	12	15								
27	24	15								
2	36*	15*								

* a stock value $(36 \times 30) / (15 \times 45) = \text{Rs.}1755$

Managing Money**Position at the end of the month**

Raw material in stock worth	Rs. 75
Cash in hand	Rs. 2625
Stock value	Rs. 1755
Sales value	Rs. 4000
Yet to receive	
Net receivable in	
The next month	<u>Rs. 4500</u>
Total	Rs.13, 980.

The availability and price of raw materials may or may not be the same all the year round. In case the availability is restricted to a particular period or season, the raw material has to be stocked for a longer period and accordingly the working capital will increase.