**Entrepreneurship Essentials**
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**Lecture - 37**
**Introduction to Financial Statements (contd.)**

Hello and welcome. So, we have seen preparation of profit loss account and balance sheet from given data.

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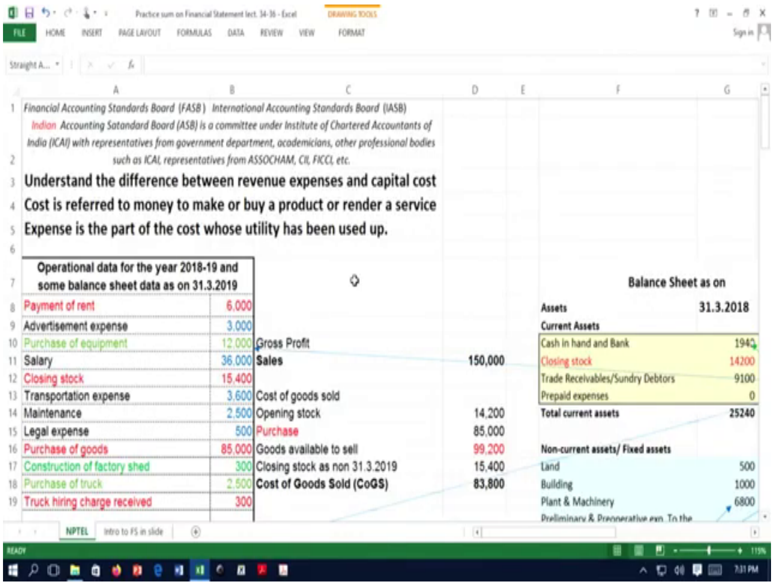


So, we can have a look at the data that is given and the that operational data and some balance sheet data for the year 2018-19 and balance sheet data as on 31.03.2019 are given. So, our job is to prepare the profit loss account and balance sheet and cash flow statements.

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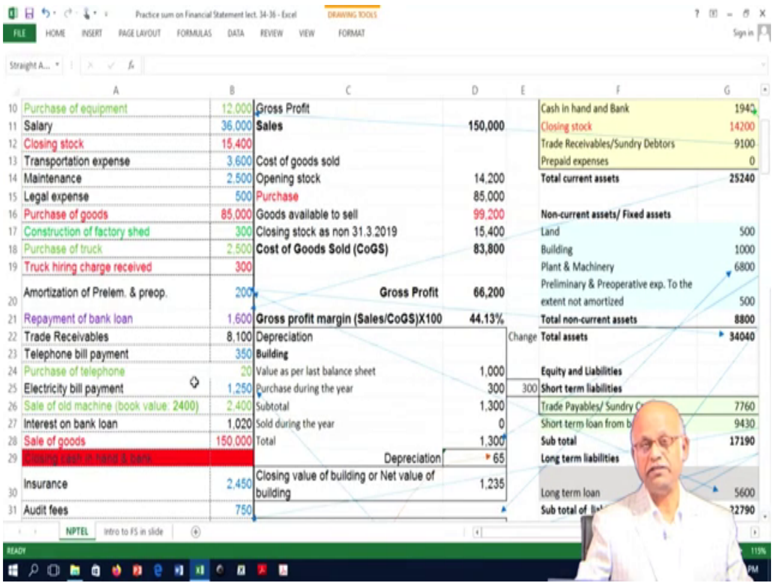


So, we started by identifying revenue expenses first thing. We know the revenue meaning the sales; sales is regarded as revenue. There may be other income also, but sales is sales. So, we know that sales is 1,50,000 and out of sale sales is sales and revenue are the only cash inflow. Majority are cash outflow; if you think of a company of your own, you will see that cash comes from very few sources whereas, cash goes from various stream. There are various streams of cash outflow whereas, cash inflow are very few.

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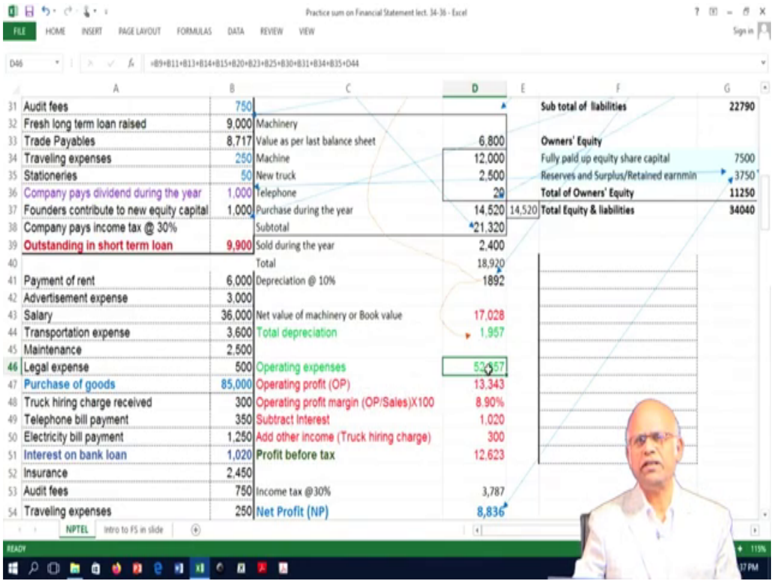


So, out of this data, we have identified what are the revenue expenses; expenses that are revenue in nature. Out of that purchase of goods is used to estimate, the revenue expenses related to consumption of goods which is nothing, but cost of goods consumed in the context of a trading business. So, cost of goods is a revenue expense; purchase is not. You may purchase a lot of things, but you may not consume all of that.

So, similarly interest on bank loan is a revenue expense, but we want to separate them from other operating expenses because operating expense does not include interest. So, we find operating profit, then we deduct interest on bank loan to receive profit before tax on which we pay tax. So, this whole thing is about estimating first thing gross profit by estimating cost of goods sold, then we get we deduct this from sales. So, 153000 minus 83800, we get 66200 as gross profit.

And as I mentioned profit margin is always with respect to sales. So, gross profit margin is nothing, but 66200 divided by 150000 which is the sales, then we identify all other revenue expenses incidentally depreciation and amortization are part of operational expenses. So, we estimate depreciation. Though I have mentioned about depreciation and we have defined it a little bit maybe, I will take another mini session to explain depreciation and to take a holistic view about financial statements in the next session.

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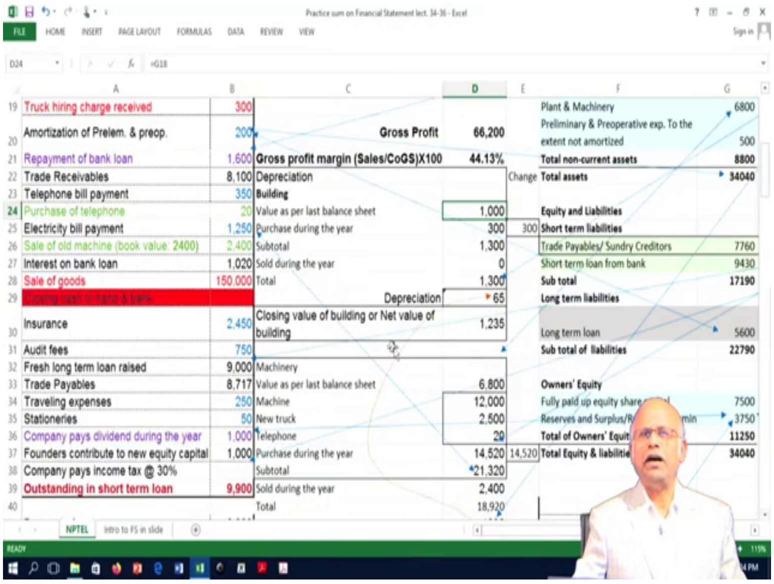


Now, after estimating depreciation, we get we have to add all the depreciations; depreciation on building which is normally at 5 percent depreciation on machinery. Machinery depreciation rates vary across assets like pollution controlised satellite. Computer normally is depreciated at 33 percent; 33.33 percent meaning computers are depreciated in 3 years time. Whereas, machines normally on a ballpark, we use 10 percent depreciation. Because we are taking a very simplistic example, we will not go into complexity about depreciation.

Post depreciation, we get net value of a particular asset. Suppose you have building asset, now you allow depreciation during the year; whatever you get that is the net asset that goes to the balance sheet.

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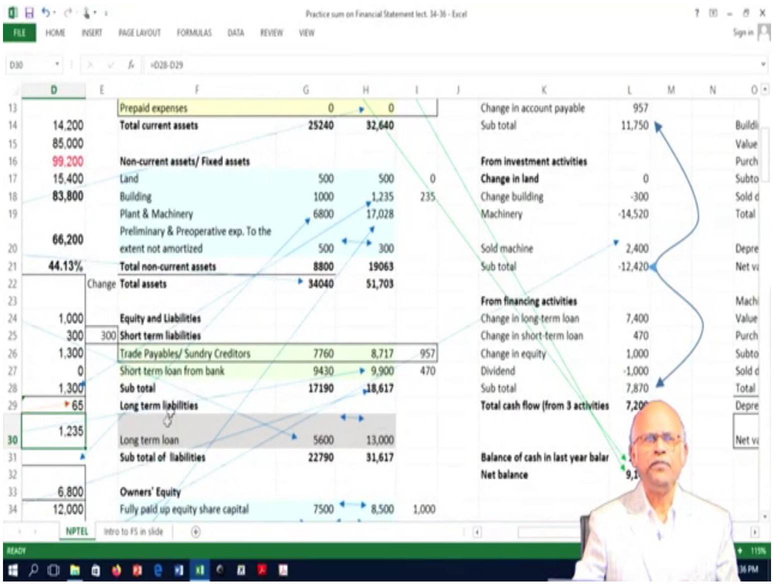


So, while you prepare depreciation and net amount of the asset, you keep on populating the balance sheet in the respective sales of the balance sheet like for building or depreciation was 65. So, we deducted 65 out of 1300. So, we received 1235.

So, we populated that in the balance sheet here building asset is here; building earlier was 1000. Now post depreciation, the value is this and this is the value as on 31.03.2019 and because this is the value that is showing in our books of accounts. This is also referred to as the book value. So, book value is nothing, but procurement value of any asset minus all the accumulated depreciation during the used life of the asset.

Suppose the asset was there for 5, years accumulated depreciation during this 5 years is deducted from the procurement cost to get book value of the asset or the net asset value. Then we estimate the operating operational expenses. Here it is and we take pick up the sales from here whatever we have identified and you can see the formula and all items have been covered including depreciation and amortization. So, we get operating profit. We deduct operating expenses from gross profit, we get operating profit and in the same manner operating profit divided by sales is operating profit margin.

Then we add other income; in this case there is no other income or there is truck hiring charge is 300. So, we add that so, that or we subtract interest because interest is not operating expense. Operational expense, they deduct that and then eventually we get profit before tax.

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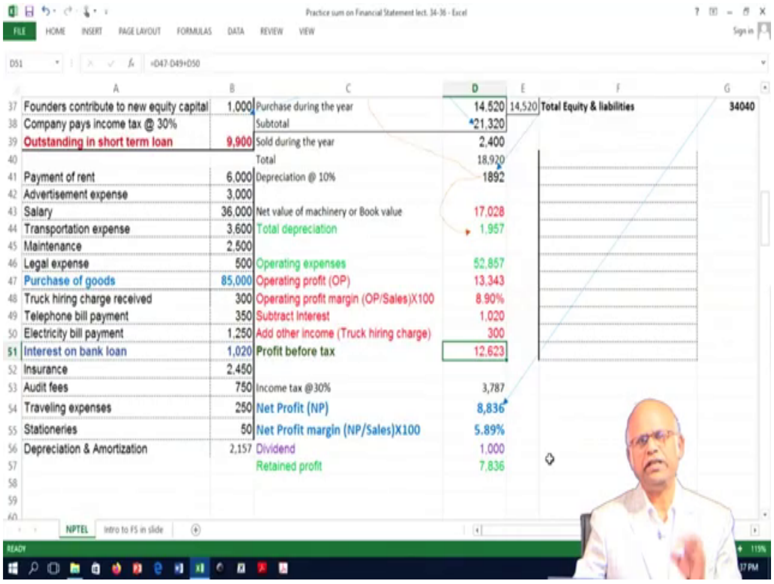


And we charge or we pay income tax on this amount. So, income tax rate if it is 30 percent, then we add 30 deduct 30 percent of that as income tax; we get 8836. This money belongs to the founders, owners of the business.

So, owners 8836 is the money that belongs to the owner. Now it is the prerogative of the owner to take away all the money or to decide to put back all the money back to the business for the growth of the business either way or they may take partially and keep the other part. So, that business for business growth, they can may meet the expenses necessary or capital investment necessary.

And then net profit margin also is estimated in the same manner, net profit divided by sales and after payment of dividend, dividend is the money that owners are taking away from out of the net profit. So, they are taking away only 1000 rupees. So, 8836 minus 1000, this is the money that remains at the business. This is termed as retained profit or retained earning.

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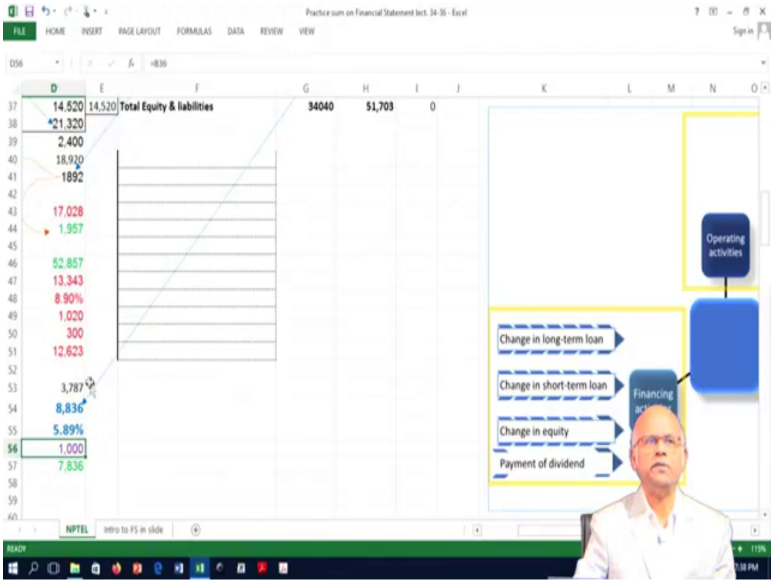


Then this retained earning; this arrow should be should actually come down.

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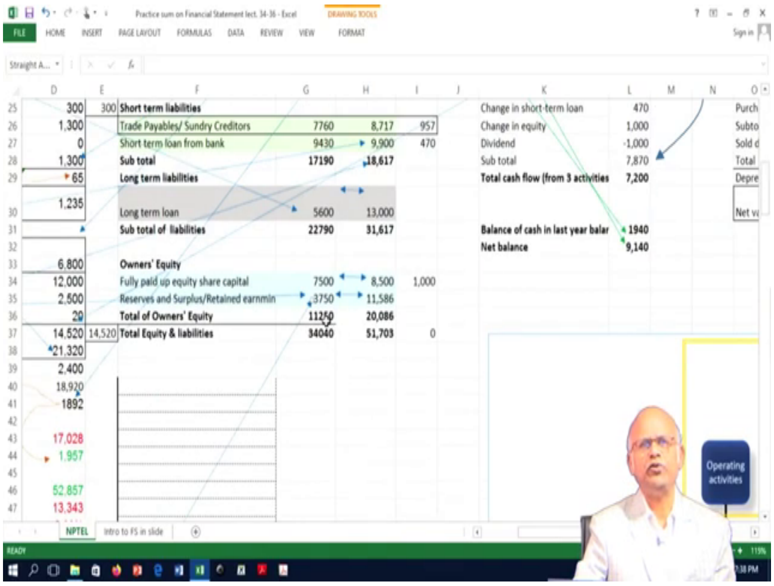

This retained earning is transferred to balance sheet and added to reserves and surplus of the previous year to receive or to obtain the reserves and surplus position of the current year that is as on 31.03.2019.

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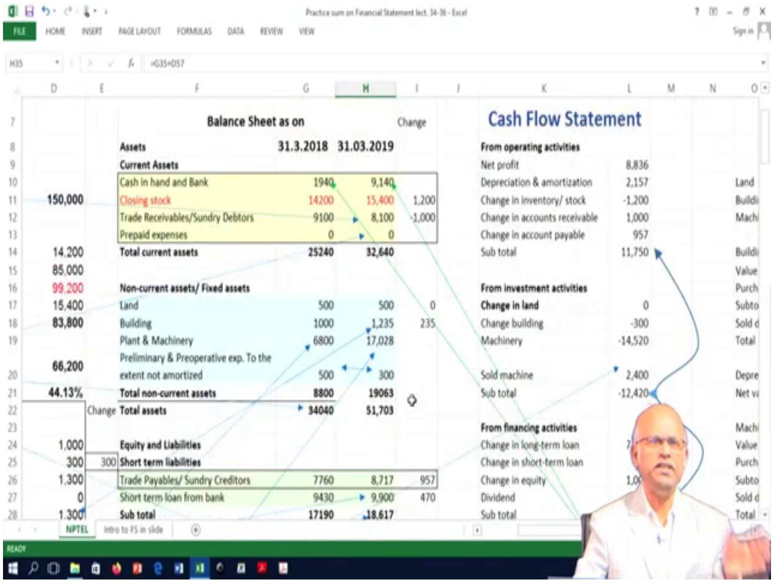


And majority of the other items in balance sheets are already given meaning that in a real situation, you will receive that from your general ledger heads; the balance as in the end of the year.

Cash balance will not be given; this should come from cash flow statements. I am just populating for example, purpose. Total current asset will be estimated based on closing a stock which is already given, you get it from the general ledger; total receivable you get it from general ledger. So, all the data are already available.

And if you estimate cash flow statement whatever is the closing cash balance, add them and you get the total current asset. Total non current asset also is given everything is given. Land is never depreciated. So, land comes just like that and we have not procured any new land either we sold any old land. So, land remains as it is.

Building value comes from calculation of des depreciation, post depreciation or welding value was 1235. Similarly plant valuation, post depreciation of 1728 so, that remains as it is. Then preliminary preoperative experiences, we have allowed or written off 200 out of the 500. So, what remains is only 300; 500 minus 200. So, we get the total non current asset, this becomes the total of the asset site. Similarly for liability side, majority of the items are already there like payable amount is already there; accounts payable or trade payable.

But short term loan bank loan is to be obtained from the bank. So, bank will tell you that this is the outstanding balance in your short term, loan account that is your subtotal. Long term loan, you have to see your earlier loan was 5600, then you have repaid 1600 so, deduct 1600 from 5600. So, you receive only 4000 that is the outstanding, but then you have raised another 9000 new loan. So, 9000 plus 4000 becomes 13000 that is how you get this amount.

Paid off capital was 7500. Now you added 1000 more during the year, new capital was inducted by the founders that becomes 8500. Reserves and surplus you know that retained earning is added to the previous year's reserves and plus and you get 20000. So, you get the entire balance sheet populated and that is all that about balance sheet.

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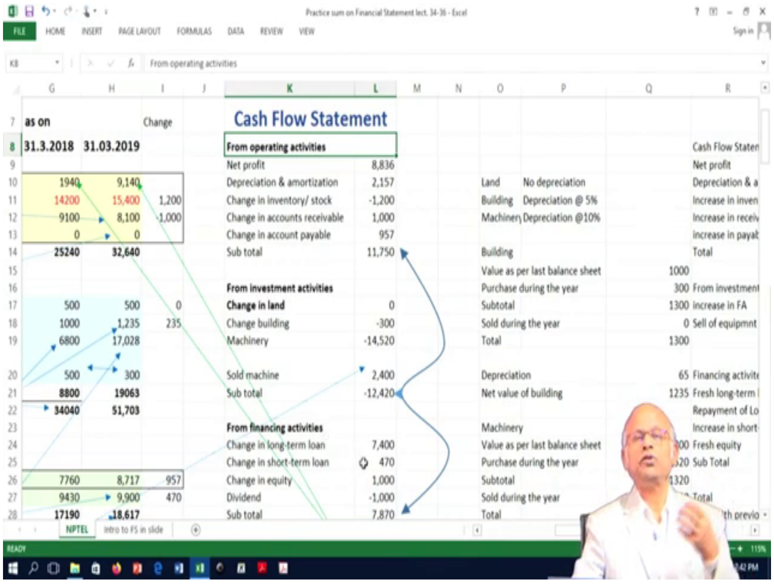


Let us see how cash flow statement is prepared. We will take a short format of the cash flow statement. There is a direct method and an indirect method of estimating cash flow statement. The direct method uses all the transactions meaning whatever transaction that a company does in a year, it takes into account all the transaction.

So, all the sales, all the purchases are taken into account to estimate profit and then gradually we move forward. Whereas, indirect method actually starts from net profit, they do not do they do away with the sale purchase etcetera etcetera, but they start only with net profit. Just follow the format; it is normally an accepted format across the world.

So, I am not going into the format ah, we will just I will just show you how this what is the format and how we use that. As I said there are three activities from which cash flow happens. One is the cash flow from operating activities is just a classification, there is no hard and fast. But then it makes it simple and it makes the information more meaningful.

If you submit your financial statements to a banker, they would like to see what is the cash flow from operating activities, what is the cash flow from investment activities, what is the cash flow from financing activities.

If you show that you are cash positive, they would like to see whether you were you have borrowed money from sister concern or some external agencies, without the knowledge of the bank, with the knowledge of the bank and if that is positive that does not really indicate a healthy situation. Whereas, if you make a huge positive cash flow like this one is a 11750 positive cash flow from operating activities.

This actually shows that you are better off compared to had it been a negative net cash flow from your operating activity. So, that gives comfort to the bankers in the sense that they think your business is doing good. Otherwise suppose you have a positive cash flow in the form of suppose you borrow huge money or maybe your creditors go up and etcetera. That may not indicate that not creditors eliminate creditor from the statement.

Suppose you borrow money from bank, borrow money from friends, relatives or induct money unsecured loan into the business and you show huge positive cash flow that does not indicate a good health. So, bankers would like to see where from cash has come and how you have used the cash.

Suppose you receive lot of good cash meaning positive cash flow was there, but then you will use the cash to give loans to founders. That is again is a bad omen; bankers hate that part. They are suspicious that founders or owners are taking away cash from the company. That shows that they are trying to run away from the business show. They will have a deeper look into your operating statement whether you are really making profit or you are cooking of the books to just show a profit so that bankers will not call back the money ok.

Let us move forward. For operating activities, there are items like net profit is the first item. Whatever net profit that you have estimated in the profit loss account, it just comes from here. I have just picked it picked up the data from the formula using the formula.

So, this is 8836 you may remember, but it is before paying dividend. This is not retained profit, this is net profit. Then one thing is depreciation and amortization. Depreciation is a non cash expense; you bought machinery, you have invested money in that.

Now, we are not making any payment to an outsider, you are just allowing part of the investment that you have made to procure fixed asset and allowing that as expense meaning that you are recovering the cost of buying the fixed asset over the life of the fixed asset. Because your this is an investment and you all the sources from where you can recover any expenses is through sales.

So, you have to deduct these expenses from sales to estimate profit and any government allows depreciation to be deducted as an expense. So, eventually you pay, you end up making less tax payment. So, your income tax goes down because you are deducting depreciation from total income and then depreciation is you are showing as an income. So, it is going away from the profit.

Now it is going away from the profit in the books, but your money remains with you. That is why it is a positive cash flow from cash flow point of view because you have deducted that from profit. If you would not have deducted from that, your net profit would have gone up. So, from that point of view, depreciation is a positive cash flow.

Now look at the next three items carefully. These are very important; the convention is very important. Change in inventory and stock inventory or a stock, these are not really cash, but if they are like cash equivalent.

So, suppose your inventory goes up; say last year your inventory suppose hypothetically speaking was 10000. As the close of business this year; suppose the inventory is 15000. So, during the year your inventory has gone up by 5000 where from you procure that inventory, you have procured that inventory by making payment to suppliers.

So, some of the money has gone in the form of inventory that is 5000 rupees worth of cash has been gone has gone in inventory. So, this is a cash utilization. You may argue that this may be a stock purchase on credit. So, that will come again on change in accounts payable.

So, these are explicitly taken care off. So, do not mix this credit purchase or cash purses or anything. If inventory goes up, you presume that money has been utilized for this purpose. So, this cash flow is a negative cash flow. If inventory goes down; suppose last year inventory was 1000, this year inventory is 8000 that means inventory has gone down.

So, when inventory goes down, some money is released because now total money blocked in inventory is only 8000. Whereas, total money blocked in inventory as at the close of business in the last year was 10000. So, there is a decrease.

So, this 2000, the difference between the inventory will be regarded as positive cash flow that is the convention and you should understand it; that way I do not try to remember formulas, it is very logical and just remember that.

Change in accounts receivable accounts receivable as I said arises when you sell some goods and the party is yet to make payment. So, because you made some sales and parties yet to make the payment so, whatever goods that you sent to the customer who bought this definitely you spend some money for procuring goods to manufacture them, to pay salary to people etcetera etcetera. There are many many expenses involved in making finished goods from raw material.

So, whatever is the value that you have supplied value of the goods that you have supplied to somebody, money has been utilized to make them. Now do not worry about individual transaction, but think of the position as at the end of the business in the last year and position as at the end of the business this year. If there is a difference between receivable; last year suppose receivable was 10000, this year suppose receivable is 12000; that means, receivable has gone up by 2000.

So, definitely you spend 2000 rupees to build. This receivable it may not be exactly 2000 because there is an element of profit in that. Forget about all those smallest small things, just presume that whatever by whatever value the receivable has gone up; this is a utilization of cash. So, that should be regarded as cash outflow.

On the contrary if receivable goes down; that means, suppose last year receivable was 10000, this year suppose receivable is 7000. So, your money that was due with this buyers, dealers, distributor or customer that was 10000. Whereas as at the close of business this year the receivable has gone down to 7000; that means, you have recovered some additional 3000 rupees over the year over the period of the year. So, money has come in. So; that means, if there is a reduction in receivable, there is a positive cash flow by that amount.

Similarly payable convention is just the opposite meaning that if your receivable goes if your payable goes up; that means, somebody has supplied you more goods. Payable going up means somebody has supplied you more goods compared to what was the position in the last year. That means you have received some goods, but goods requires money.

So, even if you receive some additional goods, it is regarded as if you have received money. Therefore, if payable goes up during the this two point in time, one is the close of business last year; another is the close of business this year, then we regard that as a positive cash flow. If receivable goes down I am sorry; if payable goes down if payable goes down; that means, you have made some payment against the supplies that they made earlier that is how the position has gone down.

So, there is a negative cash flow to that extent. The extent by which payable has gone down. Therefore, we have to understand the change in inventory change in accounts receivable change in, accounts payable and that is why we have made this column here change. You can write it here, you can do it in do it separately. So, we will not talk about cash because forget about cash as this point of time because we have not yet done the cash flow. So, eliminate that part from here.

Now, as I said closing stock which is nothing, but inventory. Closing a stock of raw material finished goods in process everything together constitute inventory. So, inventory was 14200 last year, this year it is 15400; that means, this minus this there is an increase of 1200. If there is an increase of 12000; that means, you have used some money to buy these additional goods. So; that means, 1200 is the negative cash flow that is why we have done this here meaning that is equal to minus this.

So, if this is an increase automatically, it will take minus; if there is a decrease automatically, there will be a plus sign. Change in accounts receivable, let us see. Receivable is here trade receivable was 9100, here it is 8100; that means, there is a reduction. This minus this, there is a reduction of receivable. Convention is same as a stock inventory. So, because there is a reduction so, there is a positive cash flow.

Normally we say we write it here is equal to plus is equal to minus this item. Here also there also it is equal to minus, there also is equal to minus. So, if there is a negative sign here, automatically it becomes positive. Change of accounts payable convention is opposite, in this it will be just equal to rather than minus sign. So, that if there is an increase, there will be a plus; if there is a decrease, there will be automatically a minus.

So, here let us see what is the receivable here. See the receivable here is 957. Receivable has gone up; that means, you have received some money equivalent of a stock. Stock equivalent of money 957 so, that becomes positive. So, subtotal is you have to total with sign.

So, this is negative, this is positive, this is positive, this is positive; total becomes 11750 rupees of net cash flow out of operating activities. Now let us do this for investment activities. Remember that investment activity means wherever you are investing money wherever you are investing money, do not confuse this with financing activity. Financing is wherever you are raising money from; investment activity is wherever you are putting money in. Maybe you can sell something also that also is contra investment meaning that you are getting back the invested money.

So, if you some of your fixed deposit or some investment matures and you receive back the money that also is investment that is negative investment. So, that becomes positive cash flow.

Now, look at change in land. Are you, have you made any investment in land during the year? Look at the land position, it was 500 last year, 500 this year; there is no change. So, change in land is 0. So, there is no cash flow out of land. Change in building, you have to see whether you have created any new building or you have sold some new building. Do not look at this data, do not look at this data because this data is post depreciation. It does not indicate the right value of the asset that you have procured.

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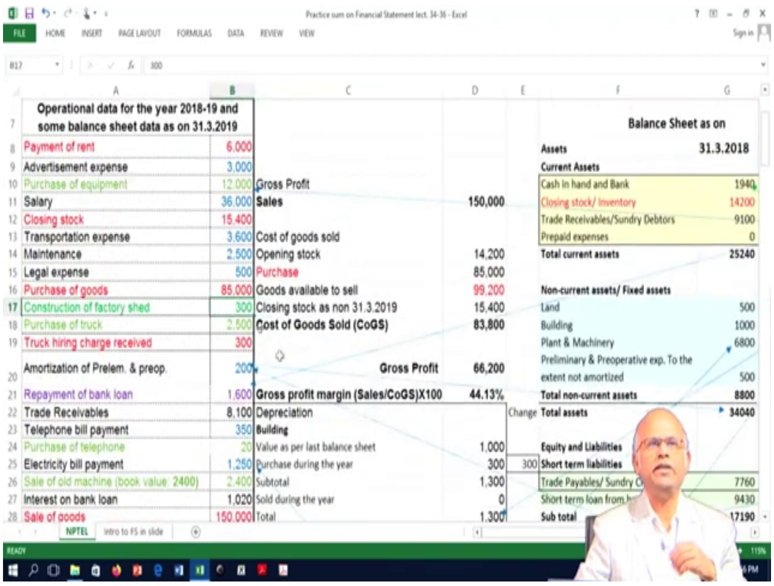


So, you have to really go back to this position like purchases of truck like construction of factory shed is the new building that you have constructed. So, if I talk about building then you have to see whether you have constructed a new building during this year or not. We have actually invested 300 rupees to make a new factory shed and because we have invested money that is a negative cash flow. If we have sold this shed for 300 would have been a positive cash flow meaning cash will come when you sell some land some asset.

Now, for machinery the position was something say 6800 that was the position in the last year. We have to see whether we have invested; do not even look at this data. We have to see whether we have made any fresh investment in new asset or whether we have sold any new asset.

If we have not done anything then it will be simply 0 just as we have done in the case of land. Now see machinery, we have to go back to this place and see machinery position purchase of say purchase of equipment is another machinery that is 12000 rupees, then construction of factory shed has been already considered in building. So, it does not come. Purchase of truck is 2500. So, 1200 plus 2500 is 14500. Then purchase of telephone is 20 rupees so, another 20; 14520.

So, we have to see that way whether we have bought any other we have to write all the purchase of the asset here. So, this is 14520 is the value of the machinery that we bought during the year. Money has gone out whether we bought it on credit or cash; do not worry about it, you have to consider that money has gone out. So, machinery is minus although we have to see whether we have sold any machine. Incidentally we have sold some machine for 2400. Sale of machine with book value of 2400 because we sold it for 2400, there is no capital gains.

We will take another mini session on this, but for the time being look at this that the data was 2400 and we have sold book value was 2400. We sold it for 2400. So, there is no profit gain, but then when we sell the machine at whatever price, cash comes in. So, this is a positive cash flow. Now we make a make an aggregate of the cash flow from investment activities. So, minus 300 minus 4000 plus 2400 makes minus 12420.

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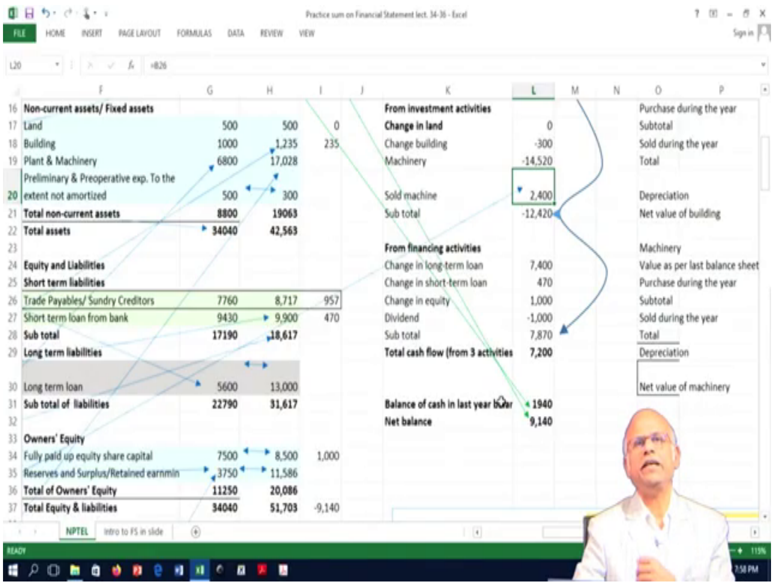


Let us see cash flow from financing activities. These are the activities from where cash comes in or cash you use to repay some of the; some of the similar kind of sources of cash. See change of long term loan long term loan position was something. Here the convention is slightly different.

You have to see now see in case of building and all we did not go to the balance sheet to know previous balance. But in case of loan, you have to go to the balance sheet to know the previous balance. See long term loan long term; in long term liability, first thing is long term or short term? Long term loan.

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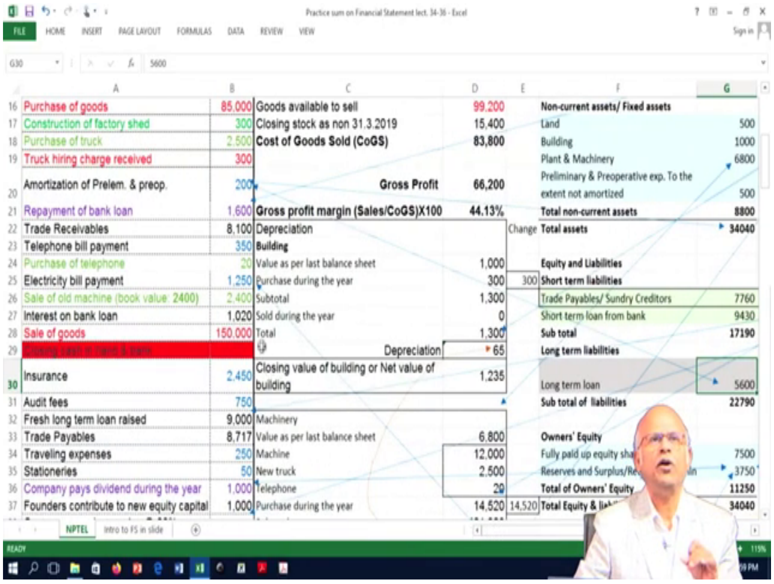

So, we have to see long term loan. Long term loan earlier year it was 5600. You have to see whether you have repaid any alone. If you remember we have repaid 1600 rupees of loan in the current year so, you have to deduct that because that lone outstanding has gone down by 1600 rupees.

So, 5600 minus 1600 becomes 4000, then if you remember we made fresh long term loan of 9000 rupees and therefore, this is to be added to that 4000 so, that raising fresh loan of 9000 rupees here. We raised fresh long term loan of 9000 rupees.

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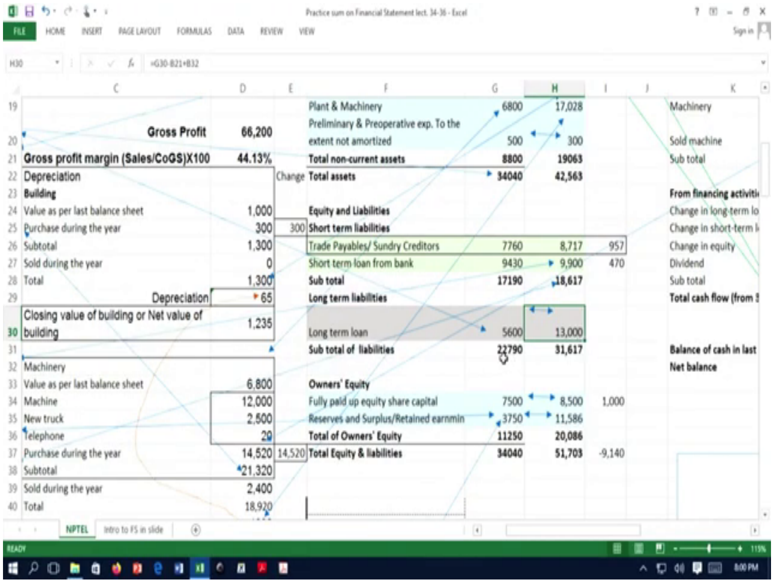

So, add that 9000 rupees with the 4000 rupees, the balance becomes 13000 rupees. So, that is very important whereas, see the convention for long term loan is different from the convention of short term loan. Short term loan you have to make just a subtraction from this year's balance minus previous years balance.

You have to remember this convention because there is no concept of repayment of short term loan. So, whatever is the balance as of closing business of this year minus the balance of previous year will become the cash flow. So, because the balance has gone up; that means, we have received some money from the bank in terms of short term loan.

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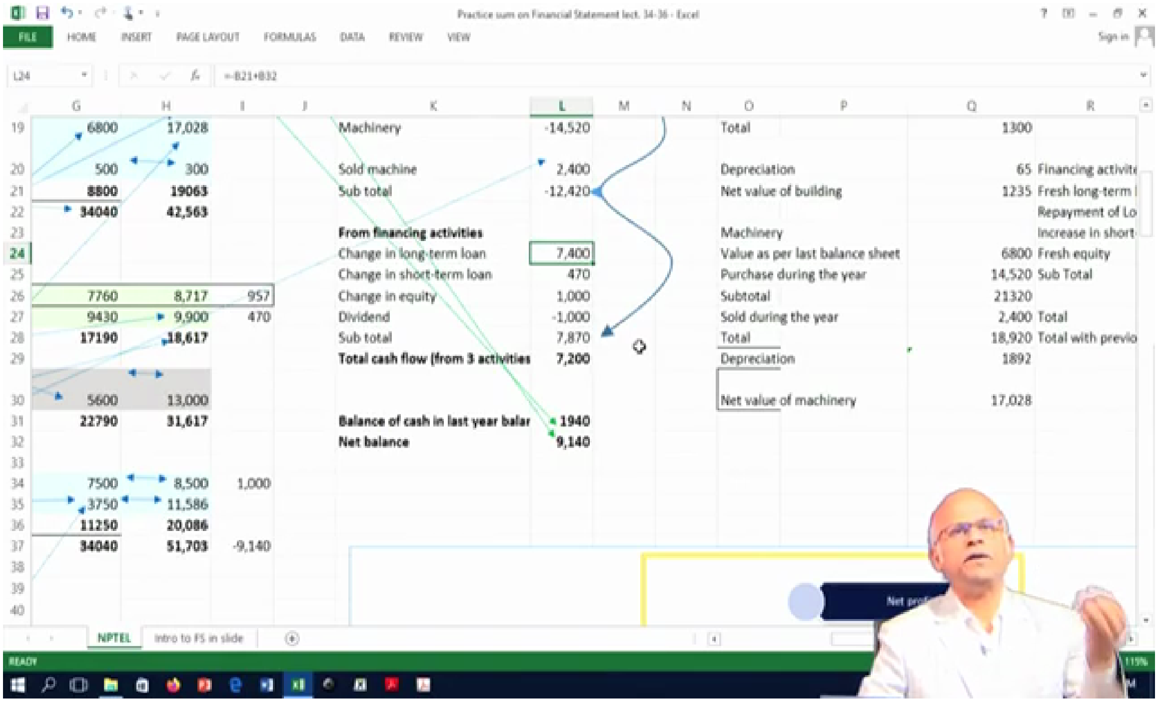


So, whether if the loan goes up, we receive the money. Change in long term loan, loan has gone up. So, it is a positive cash flow short term loan has gone up by 4470. So, this is a positive cash flow. Change in equity we told at the when we provided the data, we said that founders bring a new equity of 10000; that means, founder has brought in 1000 rupees.

So, we add that here. This is a positive cash flow because money even the founders are part of the company, they are externalizing. Company is a separate entity; company is called a juridical individual person juridical person; that means, company is from the point of view of the law on companies different from the founders. So, founders brings in money that is a positive cash flow.

Now, we paid dividend to founders. So, founders take away another 1000 rupees. So, money goes out; that means, cash goes out that becomes a negative cash flow. So, we make a subtotal of this and net cash flow from financing activity is plus 7870. Now we add this to the net cash flow from investment activity and net cash flow from operating activity to receive a total of 19 sorry total of 7200 that is the net cash flow during the year. So, our company had a net cash flow during the year is equal to 7200.

Now we have to see what was the cash position in the previous year; that cash was always there with us. So, previous year the cash position was 1940. So, here we have to add that with this net cash flow from the year, add that with the previous year's cash flow to get the balance of cash position as at the close of business this year. So, here we populate this one by picking up data from this position and then we get the cash position of the present year that was 9140.

So, we make a total of the assets side which becomes 51730 73 and we see that liability side also is equal to 51703. That means asset side and liability side match together means match exactly same; that means, the balance sheet has been balanced; that means, we have not committed any mistake in preparing the balance sheet. So, that is what is cash flow balance sheet and profit loss account.

This is a we are drawing a conclusion here and in the next session a mini session, I will be talking about depreciation slightly at length. And if you sale an asset say fixed asset at a higher value or lower value compared to the book value, then how you treat that in cash flow statement in profit loss account; we will show that.

So, thank you very much for the time being.