

# IIT Madras

## BSc Degree

### Copyright and terms of use

**IIT Madras is the sole owner of the content available in this portal - [onlinedegree.iitm.ac.in](http://onlinedegree.iitm.ac.in) and the content is copyrighted to IIT Madras.**

- Learners may download copyrighted material for their use for the purpose of the online program only.
- Except as otherwise expressly permitted under copyright law, no use other than for the purpose of the online program is permitted.
- No copying, redistribution, retransmission, publication or exploitation, commercial or otherwise of material will be permitted without the express permission of IIT Madras.
- Learner acknowledges that he/she does not acquire any ownership rights by downloading copyrighted material.
- Learners may not modify, publish, transmit, participate in the transfer or sale, create derivative works, or in any way exploit, any of the content, in whole or in part.

**English – I (Basic English)**  
**Professor Shreesh Chaudhary**  
**Humanities and Social Sciences**  
**Indian Institute of Technology Madras, Chennai**  
**Data Interpretation Sample- A Household Survey**

Welcome once again to another session in the module on writing. Just as we said at the beginning of this module, most business communication, science and technology communication and serious formal communication of many different kinds use a variety of media to communicate information and to elicit information.

Similarly, you know statistical data are communicated in many ways in more ways than one, you can have tables, you can have graphs, you can histogram, you have pie charts, you have a lot of other things, I am not even aware of. We can write reports about all of them because no chart no graph is complete by itself without report without comments on the numbers that charts present, why these numbers are the way they are and why these numbers are not different from the way they are. So, therefore each kind of transmission of information will have to be looked at carefully, but while writing about them we follow the same basic principles, that is not so difficult to learn and to write to learn well just as for example, please see.

(Refer Slide Time: 02:06)

A HOUSEHOLD SURVEY



- Writing a report on data from Pie Charts, Histograms, or graphs is not very different from doing so for data in a table.



We are now before us a writing task which says writer you know a reporter pie chart, but whether pie chart or histograms or graphs or other kinds of charts and as you know the basic principles are the same, as far as language is concerned next.

(Refer Slide Time: 02:33)

- The report should focus on:
  - a. What these data are about
  - b. How they are presented
  - c. Important Highlights
  - d. Significant Details/ Noteworthy Inter-nodal differences
  - e. Concluding Remarks



All of these reports should have at least number one, overarching statement about the data, what these data are about? Do they describe buffaloes or cows? Do the described lions or tigers? Are they about climate or something else? So, what these data are about? Then the next point will maybe, how they are presented? Do these data come to us as pie charts as bar diagrams or what? And indeed, charts or diagrams how many tables how many sections there are?

In a graph how many things are you saying, a graph can say a variety of things together, you know annual rainfall, annual heat and cold temperature, decay through buildings a whole lot of things can be presented through a graph. So, another important point to write about maybe, how they are presented? And then the third, what are the most important points that arise from this chart this table? Say, for instance when we look at a railway timetable.

(Refer Slide Time: 04:01)

UP TRAIN				RAILWAY TIME TABLE				DOWN TRAIN				
TRAIN NO.	DAY	ARRIVAL JAMMU/KASHMIR	DEPARTURE JAMMU/KASHMIR	TRAIN NO.	DAY	ARRIVAL JAMMU/KASHMIR	DEPARTURE JAMMU/KASHMIR	TRAIN NO.	DAY	ARRIVAL JAMMU/KASHMIR	DEPARTURE JAMMU/KASHMIR	
15045	Mon	00:03	00:05	OKHA - GOKARHPUR - OKHA	15045	Sat	00:22	00:27				
59548	Daily	02:10	02:09	OKHA - AHMEDABAD - OKHA	59547	Daily	03:04	03:09				
19568	Fri	02:26	02:40	OKHA - TUTICORIN - OKHA	19567	Tue	22:29	22:30				
19202	Tue	03:12	03:17	PORBANDAR - SECUNDERABAD - PORBANDAR	19201	Thu	20:54	20:56				
22960	W.E. Sat. & Su.	-	04:45	JAMNAGAR - SURAT - JAMNAGAR	22959	W.E. Sat. & Su.	23:40	-				
14247	Tue	-	05:15	JAMNAGAR - KATHI - JAMNAGAR	14248	Mon	21:00	-				
16337	M. Sat	06:23	06:25	OKHA - ERNAKULAM - OKHA	16338	Fri, Su	13:51	13:52				
59564	Daily	06:57	06:55	OKHA - VARKALA - OKHA	59563	Daily	20:29	20:34				
22965	W.E. Su.	09:43	09:45	OKHA - HOWRAH - OKHA	22966	Sun, M, Th	16:02	16:37				
16734	Tue	10:12	10:17	OKHA - RAMESWARAM - OKHA	16733	Mon	09:49	09:28				
19575	Sat	10:15	10:17	OKHA - NATHdwARA - OKHA	19576	Mon	17:40	17:13				
12965	W.E. Su.	10:53	10:58	PORBANDAR - HOWRAH - PORBANDAR	12966	Su, M, Th	15:42	15:48				
59512	Daily	11:07	11:08	PORBANDAR - RAJNAND - PORBANDAR	59511	Daily	16:17	16:22				
18402	Wed	11:38	11:40	OKHA - PURI - OKHA	18401	Tue	09:46	09:51				
19665	Fri	11:39	11:40	OKHA - Dibrugarh - OKHA	19666	Mon	12:28	12:33				
19218	Daily	-	13:55	JAMNAGAR - BARODA TERMINUS - JAMNAGAR	19217	Daily	08:50	-				
15635	Fri	14:24	14:26	OKHA - GAUNHATI - OKHA	15636	Thu	09:22	09:27				
22946	Daily	15:40	15:45	OKHA - MEWAR CENTRAL - OKHA	22945	Daily	11:41	11:43				
22969	Thu	16:10	16:20	OKHA - VARANASI - OKHA	22970	Mon	05:12	05:17				
19263	Tu, Sa	17:58	18:01	PORBANDAR - DELHI SARAI R - PORBANDAR	19264	Tu, F	09:28	09:33				
19269	Thu, Fr	17:58	18:01	PORBANDAR - MUZAFFARPUR - PORBANDAR	19270	Tu, W	13:32	13:57				
59508	Daily	18:26	18:31	OKHA - BHANUAGAR - OKHA	59507	Daily	09:05	09:08				
19578	Fri, Sa	-	21:00	JAMNAGAR - TIRUNELVELI - JAMNAGAR	19577	Wed, Th	05:15	-				
19573	Mon	22:01	22:03	OKHA - JAIPUR - OKHA	19574	Wed	09:46	09:51				
19252	Daily	22:35	22:37	OKHA - SOMNATH - OKHA	19251	Daily	04:41	04:43				
19216	Daily	23:49	23:51	PORBANDAR - MUMBAI - PORBANDAR	19215	Daily	02:17	02:22				
12475	Wed	-	05:30	HARSH - JAIPUR 1968I - HARSH	12476	Tue	20:50	-				
22968	Thu	-	05:15	HARSH - MAGOGON - HARSH	22967	Sat	10:00	-				
22969	Tue	-	02:25	HARSH - BILAPUR - HARSH	22940	Fri	14:50	-				



There are four columns on my left, there is a broad central column, and then there are four columns to the right, even the timetable gives you particular slide the name of the train, frequency, arrival and departure at different stations, which days of the week there run or they do not run, all this information is there, but you are not looking at it for all the trains, maybe you are looking at it for one particular train, so you know where in that chart you can look up your train.

So, for instance, you look up you want to look at train number 19263, now 19263 is the Porbandar Delhi Sarai express, when does it leave, where does it leave from all that is given there, so you know while writing a report on this timetable you might say, as overall highlight that this chart gives us the names of train, frequency or the days on which they run and there arrival and departure time, you have said that. So, you know people may decide whether this is the draft for them or they are looking at some wrong chart, wrong draft, so go back.

(Refer Slide Time: 05:34)



- The report should focus on:
  - a. What these data are about
  - b. How they are presented
  - c. Important Highlights
  - d. Significant Details/ Noteworthy Inter-nodal differences
  - e. Concluding Remarks



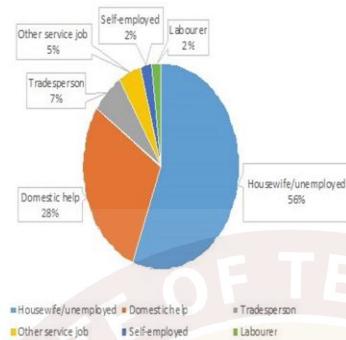
The point I am making is that regardless of how much chart contains it may be a lot, it may be little you know the one who is writing a report on the basis of these charts can always say can always talk about important highlights, then what are the other significant details? Imagine you take the example of a timetable again it is possible that there are only two direct trains, but there are trains which passed through your town or city, so in that case, you can say, the timetable will tell you, that in all there are ten trains to your city, though only 2 of them begin here and in your city.

So, all these things can be highlighted can be mentioned and then concluding remarks. Do all these things lead to one particular conclusion? If they do wonderful mention it if they do not say that, nothing much can be nothing can be formally concluded from this letter that will still be very effective, it will help the reader understand the chart better. Now, look at them in some detail.

(Refer Slide Time: 06:59)



In about 150 words, write a report on the basis of data presented in the following pie chart for a household survey conducted recently.



Write a report on the basis of data presented in this in the following pie chart for a household survey conducted recently; it does not give you definite time; it does not give you place maybe it has its own reasons, but all the information that is there in the digital form in verbally can be taken out of the chart and can you present it in a place piece of good prose written by us. Another sections look at the data look at the figures and also look at their interrelationships, what one speaks about the other, go next.

(Refer Slide Time: 07:48)



### FIRST DRAFT A HOUSEHOLD SURVEY

The pie chart here presents data of some women respondents of a household survey. Of the total number of respondents 56 % respondents are housewives and unemployed. 28% ladies work as domestic help, 7% have their own shops and business. 5 % ladies are in other kinds of jobs. 2 % ladies work as labour, and about 2 % are self-employed, means they work in their own homes or companies.

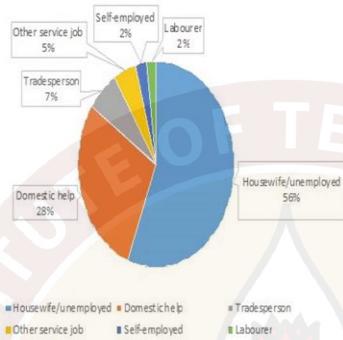


In this chart as you noticed earlier you know there is just a mechanical reproduction of data, what you see in numbers you see in words here, 56 per cent of respondents are housewives and unemployed, go back to the data.

(Refer Slide Time: 08:08)



In about 150 words, write a report on the basis of data presented in the following pie chart for a household survey conducted recently.



That is what it says. Do we need pros report to say that 28 per cent respondents work as domestic help do we need a report on that, it is here the pie chart does that function based on one page you know that is the beauty of presenting statistical information in accepted forms like graphs charts in highly little you show all the trains all the numbers that are there, what you do not show in you know in those media, you know using any of this particular medium is the difference in the relationship between two nodes which may be important, why did the business grow so rapidly between 2010 and 2020 or 2010 and 2015, but why is it not growing between 2015 in 20?

So, once you ask this question, the answer becomes obvious the answer is, the local government had some policies which are not conducive to the growth of the business and here is the evidence. So, unless you look at internodal differences, the difference between 2010-15 one section and the other section will be 2015-20, how does why did in one section business grew rapidly, but not in the other? This can be shown best by the report. Of course, the report can also site actual numbers, but it will have to go beyond actual numbers, it is expected to see a little more which is not otherwise very clearly obvious in this form. So, come back to the report.

(Refer Slide Time: 10:13)

## FIRST DRAFT A HOUSEHOLD SURVEY

The pie chart here presents data of some women respondents of a household survey. Of the total number of respondents 56 % respondents are housewives and unemployed. 28% ladies work as domestic help, 7% have their own shops and business. 5 % ladies are in other kinds of jobs. 2 % ladies work as labour, and about 2 % are self-employed, means they work in their own homes or companies.



Twenty-eight per cent ladies work as domestic help, 7 per cent have their own shops and businesses and 5 per cent ladies are employed otherwise 2 per cent only work as daily wage labour, and two per cent are self-employed by means of you know which means they work in their own homes or in their companies, that is all. Just mechanically you get no wiser, you know you look at the report, you look at the chart, you have the same information, no more no less, but it can be written differently, look at it.

(Refer Slide Time: 10:57)

The chart shows great unemployment among women. Whereas all men are employed and get jobs these days, women still do not get jobs. Government should bring reservation for women in all departments. Women can also become police officers and bus drivers. They need not always be asked to sit at home and cook. They are also full citizens of this country. So this survey shows that they are not in a happy situation. (146 Words)



The chart shows great unemployment, the chart shows great unemployment among women, whereas all men are employed and get jobs, these days women still do not get jobs, the government should bring reservation for women in all departments, women can also become police officers and bus drivers, they need not always be asked to sit at home and cook, no one

says no one will say the sentiments are all, there must be justice for all, there must be equality for all, but is this the place to see all this? And what does this kind of writing, what does this kind of report should contain?

This is what many people called gas, anger, waiting to come out, but not information that can make you wiser, that can help you decide better, that is not there. And that is why in spite of the fact that it observes word limit, you know 146 words 150 words that about the same thing, 4 or 5 words more or less would not attract any penalty.

But what will attract penalty here is the absence of information, the absence of insight into the table which only a human being or which only an intelligent human being can have, after all every test item has a purpose, when you are asked to write or a given you know chart or diagram or bar giving you a statistics, then you are expected to demonstrate your ability in language and your ability to analyze statistical data.

In this kind of writing your ability of language is you know it can be seen partly can be shown partly, but your ability to analyze, evaluate and make predictions on the basis of data, hardly find a chance of expression, it remains unsaid and therefore even if it is within limit it is not a good piece of writing, because it lacks fundamentals go next.

(Refer Slide Time: 13:40)



- The draft given above meets the requirement of word limit almost correctly. It goes on a tangent talking about denial of employment to women. But other details are left unmentioned.
- Data are just mechanically reproduced.



As I have said the draft given above meets the requirements of word count word limit, but nothing is little it goes on a tangent about women's rights human rights democracy, these details do not make you wiser here, and data are just the mechanically reproduced, x is x, y is y, not that you would choose between x and y, there is a gap which can be or which should not be filled in. Next.

(Refer Slide Time: 14:20)



FINAL DRAFT  
WOMEN'S EMPLOYMENT :  
A HOUSEHOLD SURVEY

The given pie-chart shows how respondents are engaged by way of work. The chart has six sections, one each for a kind of work. Chart does not mention absolute number of respondents, all women, or time of survey.

Section 1 shows that over half the women are housewives or unemployed. It is unclear if they are all unemployed even when they have tried for a job.



Look at another draft a better draft a subsequent draft. I am not saying this is perfect, maybe it can be made better, but perhaps it seeks to answer all the relevant questions, it first says what the data what the chart or the data are about, so it says it is about how people work, what kind of work they are engaged in, you know and that the data here have been presented in the form of a chart, not in the form of the graph, not in the form of bar diagram, not as a photograph, the information here is presented as a pie chart.

Then the chart has sections, you know if it is a pie then pie has sections, what are those sections? So, one each for a kind of work, or absence of work and then other things, other categories you know, what kind of work and how much how many people. And it also shows that all respondents that are talked about that are mentioned here are women.

But the time of survey et cetera are not indicated, we do not know when this survey was done, there is nothing like that on the chart. Now, a section one of the chart shows that over half to women you could as well say 6 per cent, but more telling you to know the greater impact will come from saying more than half the women are housewives or unemployed, for some reason and perhaps likely so becoming a housewife is not seen as a mark of respect.

So, that is why unemployed, and housewives have been put together, otherwise strictly speaking it is not that housewives are unemployed, you know I mean it is another matter that their job is not recognized but you as a sensitive human being all of us have university people should learn to respect the kind of 24 into seven jobs that those who stay home and allow themselves to be called housewives do, you know so you know it is not good therefore to bracket them with unemployed. But for some reason, this pie chart has done so, and that is why you know it is unclear if they are all unemployed or only some, it is not clear how many of them try to find a job and could not get a job outside their homes to that extent that section of the data is misleading.

Go

next.

(Refer Slide Time: 17:50)



Most women work as domestic help in other houses. One fourth of all respondents are employed this way. Another nine per cent are self-employed, at least two percent of them being in trade in some manner. Of the total only two percent respondents have said they work as labour, but five percent have claimed they are employed in services other than domestic help or manual labour.

The chart shows that new sectors of employment are yet to open for women. (152 words)



What is one huge area where lot more women than men are employed or where a lot more of the total number of women most women are unemployed, and it seems even today that is work as domestic help, that is a huge sector, it takes all kinds and employs all kinds, one-fourth of all respondents actually a little more than one-fourth of all respondent, not 25 per cent, it is 28 per cent of all respondents who happen to be women employed as domestic help?

Others are very few, you know 5 per cent, 2 per cent, 7 per cent, self-employed, employed in other services or working as daily wage labour, that is this also shows that not many new unconventional avenues of employment have come up for women who are not otherwise very educated or highly skilled.

But perhaps, you know that is changing, and this is not the place we talked about that, the chart definitely shows that new sectors of unemployment are yet to open for women. You know saying all this has taken maybe two words more than the minimum 152 words, but then the report says things which are faithful to the statistical information and yet go beyond the information that statistical table might by itself give. Next.

(Refer Slide Time: 19:48)

- One needs to look at the chart carefully.
- One can write “over” in place of “more than”, or “under” in place of “less than” etc.



Why does it happen? We saw that both the drafts had been done in good English, so the English is not a problem. Actually, I would go to the extent of saying that a good piece of writing requires more than language, it requires a sharp eye, a sharp mind, for details, for examining and concluding what is relevant and what must be said and how much that be said, language is important, but the language is only one of the important parts of the good piece of writing, there are others, and this one of the others is before you begin writing look at the chart, look at the data, look at the graph, look at the bar diagram carefully until you feel you have got all the information your mind-brain.

And then use expressions which do not require too many words, where one word can replace many words, so for example what is the point saying that you know more than so many people are in are employed there, you can see over so many people, why you need to say? You know, under so many people you could just say less them fewer them.

(Refer Slide Time: 21:29)

# FIRST DRAFT

## A HOUSEHOLD SURVEY



The pie chart here presents data of some women respondents of a household survey. Of the total number of respondents 56 % respondents are housewives and unemployed. 28% ladies work as domestic help, 7% have their own shops and business. 5 % ladies are in other kinds of jobs. 2 % ladies work as labour, and about 2 % are self-employed, means they work in their own homes or companies.



The pie chart you know the pie chart as the results of a household survey. And then you do not have to say of the total number of respondents; you can simply say all respondents are women 56 per cent respondents are housewives and unemployed. So, we save a whole lot of these words of the total number of respondents, ladies on a are in other kinds of jobs, ladies are in other jobs, or ladies do other things, as good you know as employed means they work in there home are self-employed and then you have to define.

You do not have a define self-employed does not necessarily work all the time in their homes, they may also go out, imagine somebody runs a school, she is a teacher, and she claims I am self-employed, would you, therefore, say that she is all the time in her home, you know these are prejudices biases they make for bad writing, and they take a lot of words. So, you know, come back to the screen which we were. Please.

(Refer Slide Time: 22:53)

- One needs to look at the chart carefully.
- One can write “over” in place of “more than”, or “under” in place of “less than” etc.



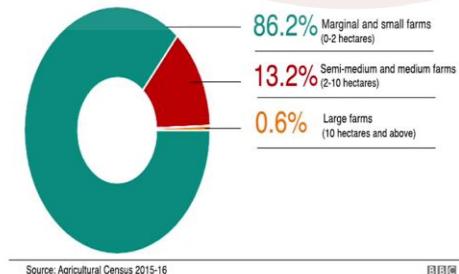
So, look at the chart carefully and use devices ask yourself how much of what I am saying is necessary, how much of it need not be said, how much of it can be left unsaid, how much of it can be said in fewer words if there are other expressions and the moment you ask yourself these questions after the first draft, of course, the first draft should be without a thought for language, write anything that comes to your head, write everything that comes to a head and then start editing and once you get rid of these superfluities, redundancies, inaccuracies, your writing will become perfect, as good as they ought to be. Next.

(Refer Slide Time: 23:47)

## ACTIVITY

See the following charts, and write about data in the manner shown here and in earlier units.

### Who are India's farmers?



As I have been saying, please allow me, please bear with me allow me to say that once again, perfection and real learning, you know what is real learning you know doubts will still come to

you doubts will still arise in your mind, you might still make mistakes, but when you really learned something well, then you will notice your mistakes as soon as you make them.

You will be able to answer, your doubts, your queries, your confusions, your questions yourself, you may not have to seek external help to correct a mistake if you make one by chance, you know it is possible, we tend to be absent-minded, and we make mistakes, that is in the nature of human beings, but it is also in the nature of human beings that if they are alert and if they know their subject well, they automatically they immediately know as soon as they make a mistake they know, that I made a mistake and this is the mistake I have made, and this is how it can be rectified.

So, have some maybe not every day but once in a week once in three days once in four days you can write you can take some of these numerical you know data you get them frequently in newspapers on in social media on websites, and you can look at them and write your own short reports and if you find they are not good, revise them, rewrite, check and recheck and you will find in this manner in no time in about a few weeks you become as good a writer as good an editor as anybody else. Go next. You do not have to do all that every day, but as I have been saying once in a while, do maybe once this week, another next week, so that you also have variety in your work and then real learning happens, good luck and thank you.

