

# Excel tricks for Lookup Tables

## Managing large lookup tables efficiently

Sometimes when creating Lookup Tables, you can receive large source files with values in different fonts, all caps etc. This page describes a few tricks on how to make values easily all lower case, how to replace spaces by underscores etc. Below are a set of Excel formulas, with a description of what it does and how to use it.

*Note: this tutorial assumes that you are using Excel in English. The names of the formulae are different in French.*

## How to turn all your text entries to first-letter capital for each word (ex: First\_name Last\_name)

### =proper

**Use:** Converts words written in any format to words where the first letter is upper case and the rest is lower case. Example: CAPE TOWN > Cape Town

**How:** Add a column next to the column where all the values are, then in the first cell of the new column add =proper(cell number) and click enter (for 'cell number' click on the cell with the all caps value). Drag the corner right little box from the cell down so that all values from the all caps column will be converted.

When clicking on the new value, you'll notice that the value of the cell is still the formula. Select the first cell and then click ctrl+shift+down arrow (this will select all values in this column) and click ctrl+c to copy the selection. Then right click and choose 'paste values' under paste options. This eliminates the formula so that you are only left with the values you want (ie, the text in the desired format).

	A	B
1	City	Edited city
2	CAPE TOWN	Cape Town
3	DAKAR	=PROPER(A3)
4	MAPUTO	Maputo
5	Johannesburg	Johannesburg
6	cape town	Cape Town

**Note:** For words that are already properly formatted (ex: Johannesburg in the example above), no change is applied. Note as well that "cape town" turns to Cape Town.

## How to quickly format all your text entries to all caps:

### =upper

**Use:** Converts words written in any format to all caps. Example: Cape Town > CAPE TOWN

**How:** Add a column next to the original words/text. Use the formula =UPPER(cell number) in the new column and click enter. Drag down the formula to replicate this for all your text.

When clicking on the new value, you'll notice that the value of the cell is still the formula. Select the first cell and then click ctrl+shift+down arrow (this will select all values in this column) and click ctrl+c to copy the selection. Then right click and choose 'paste values' under paste options. This eliminates the formula so that you are only left with the values you want (ie, the text in the desired format).

	A	B
1	Name	Edited Name
2	Cindy jones	CINDY JONES
3	Marie France	MARIE FRANCE
4	janet jackson	=UPPER(A4)
5	Lori spengler	LORI SPENGLER
6	JANE DOE	JANE DOE

## How to quickly format all your text entries to lower case:

### =lower

**Use:** Converts words written in any format to all lower case. Example: Cindy Jones > cindy jones

**How:** Add a column next to the original words/text. Use the formula =LOWER(cell number) in the new column and click enter. Drag down the formula to replicate this for all your text.

When clicking on the new value, you'll notice that the value of the cell is still the formula. Select the first cell and then click ctrl+shift+down arrow (this will select all values in this column) and click ctrl+c to copy the selection. Then right click and choose 'paste values' under paste options. This eliminates the formula so that you are only left with the values you want (ie, the text in the desired format).

	A	B
1	Name	Edited Name
2	Cindy jones	cindy jones
3	Marie France	marie france
4	janet jackson	janet jackson
5	Lori spengler	=LOWER(A5)
6	JANE DOE	jane doe

### How to quickly delete unwanted spaces:

=trim

**Use:** For when you receive a list of names/places where there is a space before the first word or after the final word. Example " cindy jones " (notice the space before 'cindy' and after 'jones'. The TRIM function will yield "cindy jones"

**How:** Add a column next to the original words/text. Use the formula =TRIM(cell number) in the new column and click enter. Drag down the formula to replicate this for all your text.

When clicking on the new value, you'll notice that the value of the cell is still the formula. Select the first cell and then click ctrl+shift+down arrow (this will select all values in this column) and click ctrl+c to copy the selection. Then right click and choose 'paste values' under paste options. This eliminates the formula so that you are only left with the values you want (ie, the text in the desired format).

**Note:** TRIM only deletes spaces before or at the end a full string of text. It will not eliminate common/accurate spaces such as the space between a first and last name.

	A	B	C	D	E	F
1	Country	Edited Country				
2	kenya	kenya				
3	senegal	senegal				
4	Mali	Mali				
5	south africa	south africa				
6	sudan	sudan				
7	nigeria	nigeria				
8	FRANCE	FRANCE				
9						
10						
11						
12						

**Note:** Though you're unable to see it, Kenya has a space after the letter 'a'

**Note:** Notice the spacing before the word.

**Note:** TRIM does -not- modify the format. It only eliminates unnecessary spaces.

### Combining the above formulas: (ex: to eliminate unnecessary spaces AND to format upper/lower case)

=UPPER(TRIM(cell number)) or =LOWER(TRIM(cell number)) or =PROPER(TRIM(cell number))

**Use:** Do the steps above more quickly!

**How:** Add a column next to the original words/text. Use the formula =UPPER(TRIM(cell number)) in the new column and click enter. Drag down the formula to replicate this for all your text.

\*the bolded UPPER can be modified to reflect what you actually want.

When clicking on the new value, you'll notice that the value of the cell is still the formula. Select the first cell and then click ctrl+shift+down arrow (this will select all values in this column) and click ctrl+c to copy the selection. Then right click and choose 'paste values' under paste options. This eliminates the formula so that you are only left with the values you want (ie, the text in the desired format).

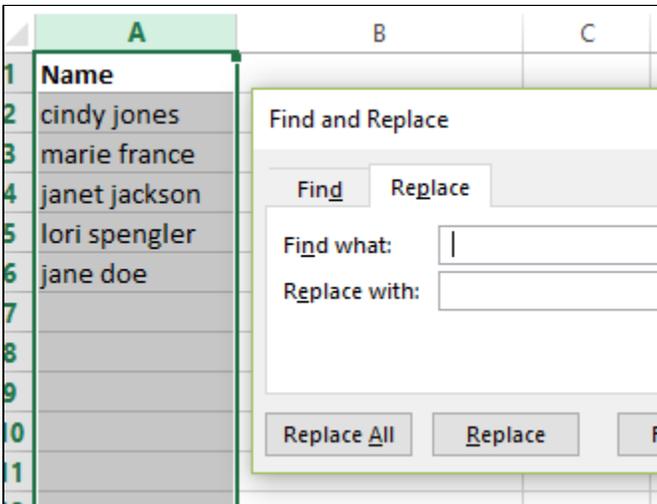
	A	B
1	<b>Country</b>	<b>Edited Country</b>
2	kenya	KENYA
3	senegal	SENEGAL
4	Mali	=UPPER(TRIM(A4))
5	south Africa	SOUTH AFRICA
6	sudan	SUDAN
7	nigeria	NIGERIA
8	FRANCE	FRANCE

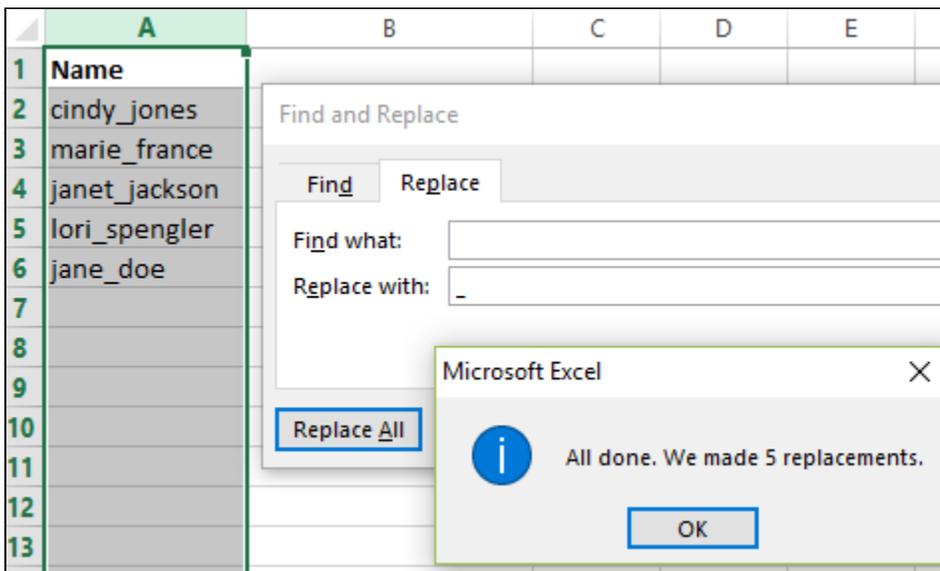
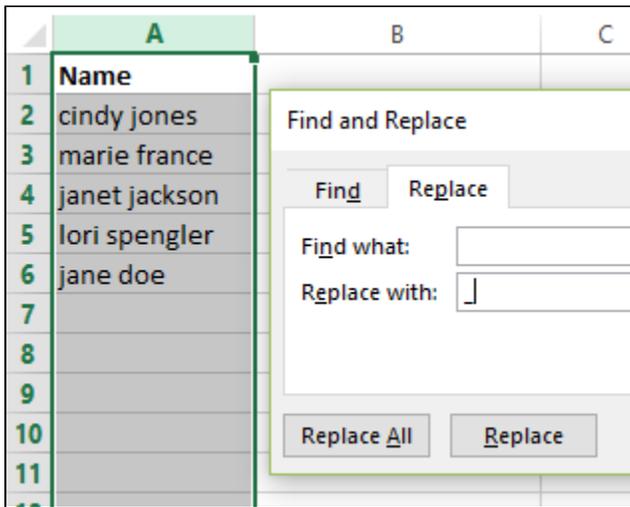
## How to turn spaces into underscore (necessary for uploading your lookup tables into CommCare HQ)

**Use:** It is recommended that before you upload your lookup table into CommCare HQ that you eliminate the spacing between the words. Example: marie france > marie\_france

**How:** (numbered steps correspond to the images below)

- 1) Select the column(s) where the data are located. Then click "**Ctrl + F**" to show the "**Find**" box. Go to the tab "**Replace**" and in the "**Find what:**" entry box, type a space.
- 2) In the "**Replace with:**" entry box, type an underscore "\_"
- 3) Click "**Replace all**"





## How to quickly append text/numbers to the end a text:

**=CONCATENATE**

**Use:** Imagine that you have a list of districts and another list of villages. Some of the districts have the exact same name as the villages (Ex: District: Bambara, which contains a village also called Bambara). CommCare will require you to distinguish which of the "Bambara" is a village and which is a district. For this example, we will append "\_vil" to the end of each village name.

**How:** Create a column next to the one containing the words you want to append. Use =CONCATENATE(cell number, "what you want to append"). In this case, we appended \_vil.

When clicking on the new value in the column "Appended Village", you'll notice that the value of the cell is still the formula. Select the first cell and then click ctrl+shift+down arrow (this will select all values in this column) and click ctrl+c to copy the selection. Then right click and choose 'paste values' under paste options. This eliminates the formula so that you are only left with the values you want (ie, the text in the desired format).

SUM					
: X ✓ fx =CONCATENATE(B5,"_vil")					
	A	B	C	D	E
1	<b>District</b>	<b>Village</b>	<b>Appended village</b>		
2	mafoke	boutouko	boutouko_vil		
3	bambara	bambara	bambara_vil		
4	sofia	lipana	lipana_vil		
5	luanda	nairobi	=CONCATENATE(B5,"_vil")		
6	boma	jeneba	jeneba_vil		
7	sofia	jozi	jozi_vil		
8	luanda	bilinga	bilinga_vil		
9	sofia	daina	daina_vil		
10	boma	loko	loko_vil		
11	bambara	gogogogo	gogogogo_vil		

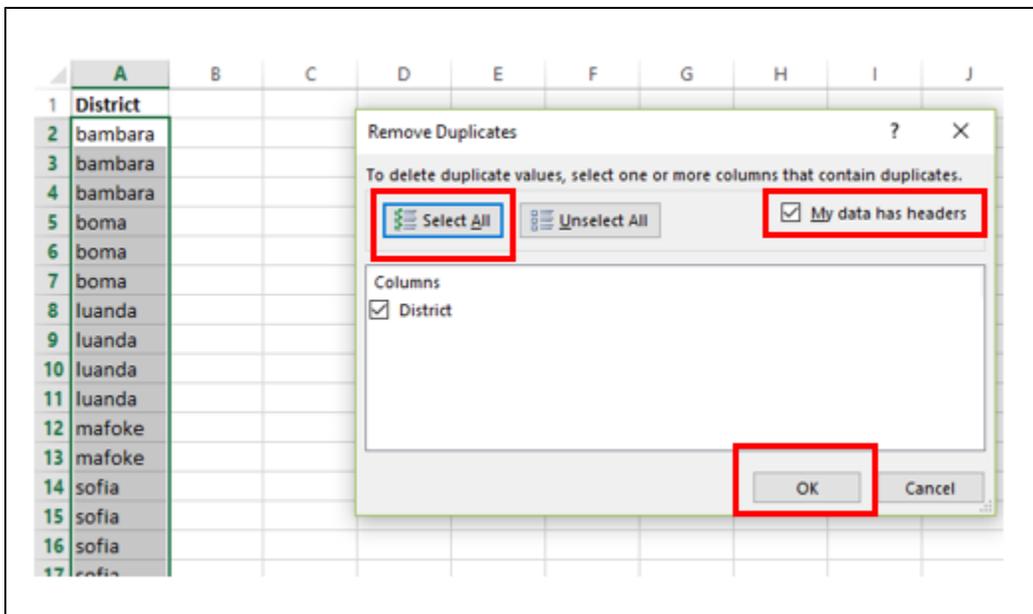
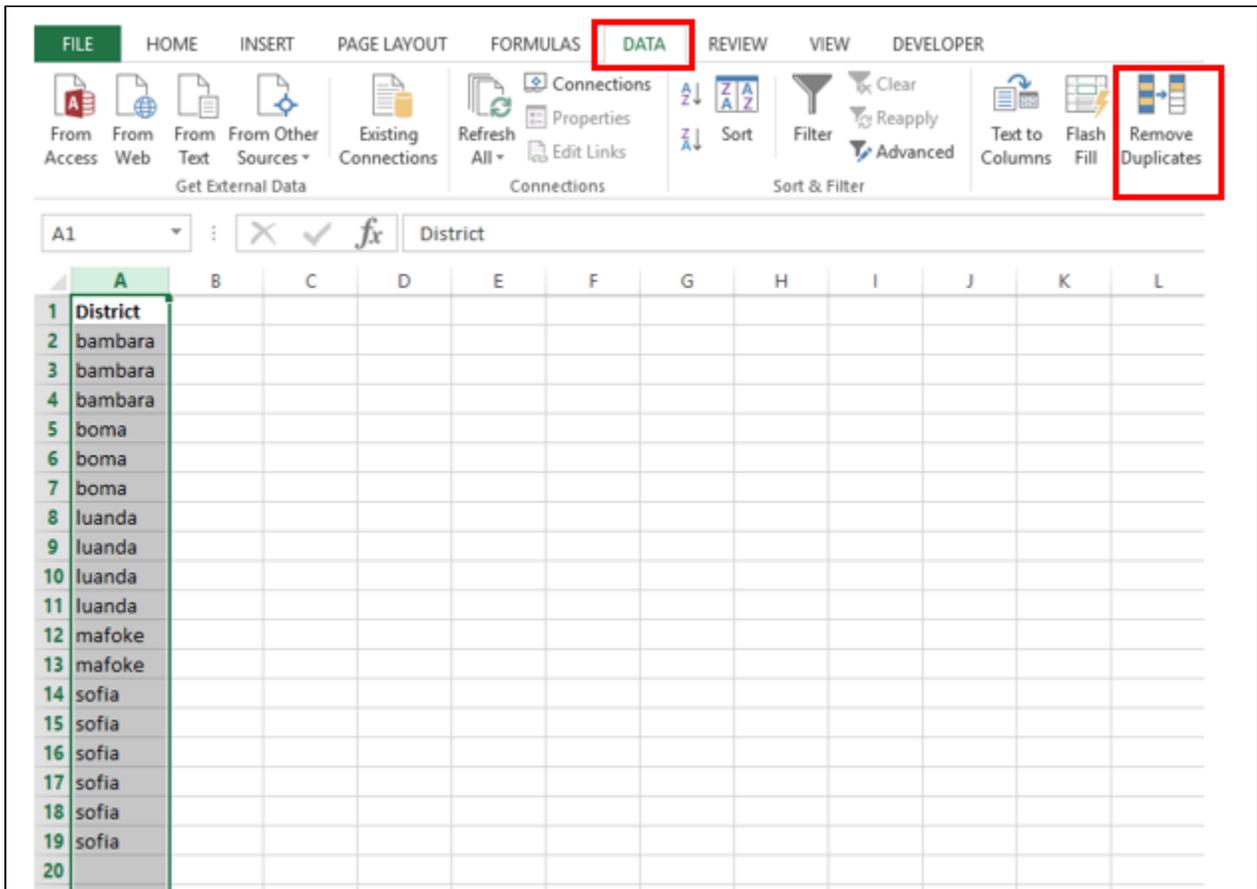
**Note:**  
Note that now, bambara\_vil is distinct from bambara the district.

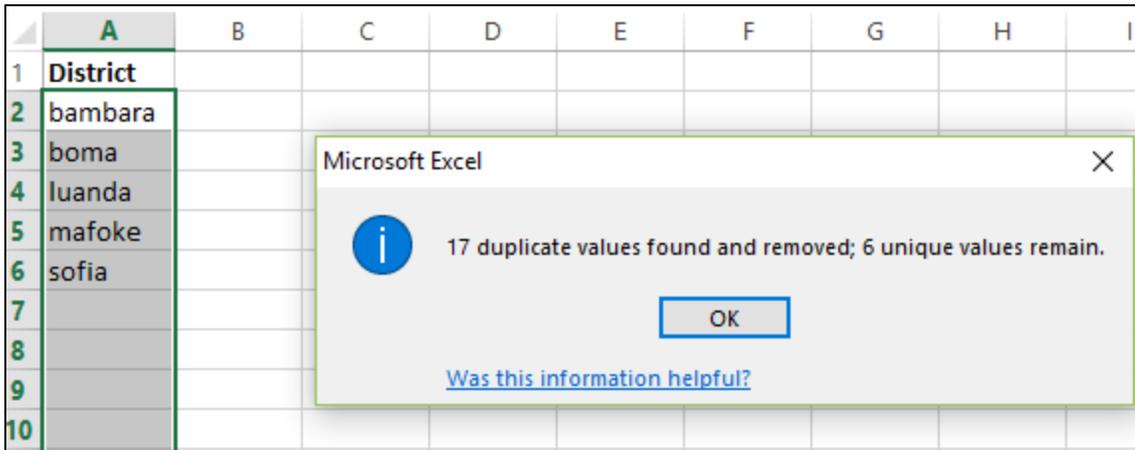
### How to quickly eliminate duplicate entries from your Lookup list:

**Use:** To link villages to districts, you need one row per village. But because multiple villages can belong to a single district, this means as a result that you will have several rows where your district is repeated. CommCare will require a separate list for districts and a separate one for villages. For that reason, you will want to eliminate all the duplicate districts from your Excel spreadsheet.

**How:** (numbered steps correspond to the images below)

- 1) Select the columns containing duplicate data. Click "Data" on the toolbar, then click "Remove Duplicates"
- 2) Make sure that you select that your data has headers (if it does), and that you have selected the entire column. Click OK.
- 3) You will see a message box with the number of duplicate values that have been removed and the number remaining.





### If you want to be able to see which duplicate values were removed

1. In a new tab, copy - paste your original column with duplicates into column A
2. Copy - paste your new cleaned up column into column B
3. In column C, enter the following countif equation: `"=COUNTIF(B1:B800, A1)"`
4. In any row that has the value "2" in column C, the column A value is a duplicate

### How to (very) quickly fill in a column with a value or a formula:

If you want to quickly pull down a single value, you can double click (don't drag) on the bottom right corner and the value will fill in below for all rows where there is information next to it.

The RED X shows you were to double click.

M	N
fokontany_code	village
andrainerivo	
fijoroana	
firariantsoa_miarinarivo	
miarmandroso	
mirarisoa	
vohidroa	
volafotsy	
ambohimandroso	
andrefakidona	
ankarinarivo_andoharano	
ankazofady	
avaradrano_ambalavaokely	
tsaramandroso_felimaha	
vohitrarivo	
ambatomena	
ambohimiadana	
anaody	
angavo	
ankazosoaravina	
iarinomby	
iavomalaza	
ifandana_est	
samimasina	
soamanandray	
tambohobe	
tsikahoe	
alatsinainy	
ambalamahasoa	
ambohidroa	
ambohijafy	
ambohimahasoa	
amnanaha	



M	N
fokontany_code	village
andrainerivo	village
fijoroana	village
firariantsoa_miarinarivo	village
miarmandroso	village
mirarisoa	village
vohidroa	village
volafotsy	village
ambohimandroso	village
andrefakidona	village
ankarinarivo_andoharano	village
ankazofady	village
avaradrano_ambalavaokely	village
tsaramandroso_felimaha	village
vohitrarivo	village
ambatomena	village
ambohimiadana	village
anaody	village
angavo	village
ankazosoaravina	village
iarinomby	village
iavomalaza	village
ifandana_est	village
samimasina	village
soamanandray	village
tambohobe	village
tsikahoe	village
alatsinainy	village
ambalamahasoa	village
ambohidroa	village
ambohijafy	village

AND the same thing can be done with Functions! But don't forget to copy and paste value once you've created a column of functions.

=PROPER(M2)

M	N
<b>fokontany_code</b>	
andrainarivo	=Proper(M2)
fijoroana	
firiantsoa_miarinarivo	
miaramandroso	
mirarisoa	
vohidroa	
volafotsy	
ambohimandroso	
andrefakidona	
ankarinarivo_andoharano	
ankazofady	
avaradrano_ambalavaokely	
tsaramandroso_felimaha	
vohitrarivo	
ambatomena	
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iavomalaza	
ifandana_est	
samimasina	
soamanandray	
tambohobe	
tsikahoe	
alatsinainy	
ambalamahaso	
ambohidroa	
ambohijafy	
ambohimahaso	



M	N
<b>fokontany_code</b>	
andrainarivo	Andrainarivo
fijoroana	Fijoroana
firiantsoa_miarinarivo	Firiantsoa_Miarinarivo
miaramandroso	Miaramandroso
mirarisoa	Mirarisoa
vohidroa	Vohidroa
volafotsy	Volafotsy
ambohimandroso	Ambohimandroso
andrefakidona	Andrefakidona
ankarinarivo_andoharano	Ankarinarivo_Andoharano
ankazofady	Ankazofady
avaradrano_ambalavaokely	Avaradrano_Ambalavaokely
tsaramandroso_felimaha	Tsaramandroso_Felimaha
vohitrarivo	Vohitrarivo
ambatomena	Ambatomena
ambohimadana	Ambohimadana
anaody	Anaody
angavo	Angavo
ankazosoaravina	Ankazosoaravina
iarinomby	Iarinomby
iavomalaza	Iavomalaza
ifandana_est	Ifandana_Est
samimasina	Samimasina
soamanandray	Soamanandray
tambohobe	Tambohobe
tsikahoe	Tsikahoe
alatsinainy	Alatsinainy
ambalamahaso	Ambalamahaso
ambohidroa	Ambohidroa
ambohijafy	Ambohijafy
ambohimahaso	Ambohimahaso