

SALGST

Version 5.20

Step-By-Step Guide

- (1) Make sure you have a set of ADM1 population estimates and projections and a set of estimates for the smaller areas (ADM2) making up each ADM1 for two years (e.g., 1990 and 2000). This may be a challenge if there were administrative boundary changes between the two censuses.¹

- (2) In the SALGST workbook sheet SETUP, column B, rows 7-9, enter the first date to which the smaller area estimates pertain (see Figure 1).

Figure 1. SETUP Sheet

	A	B	C	D	E
3	Table		22		
4	Country	Republic of Demographica Region 1			
5	A. Projection specifications				
6	First date				
7	Year		1990		
8	Month		7		
9	Day		1		
10					
11	Second date				
12	Year		2000		
13	Month		7		
14	Day		1		
15					
16	Number of subareas		3		
17					
18	Subarea label	District			
19					
20	Projection dates				
21	Starting date		2000.50		
22	Ending date		2015.50		
23	Interval		5		
24					
25	<div style="border: 1px solid black; padding: 5px; display: inline-block;">Set up workbook</div>				
26					
27					
28					
29					
30	Sources: 1990 and 2000 censuses of				

¹ ADM1 refers to the first subnational administrative level, as shown in Figure 1 above. ADM2, ADM3, etc., refer to lower geographic levels, such as regions and districts. This Guide is written using the example of levels ADM1 with ADM2; however, SALGST can be also be used for combinations of higher levels (e.g., national and ADM1) or lower levels (e.g., ADM2 with ADM3).

- (3) In sheet SETUP, column B, rows 12-14, enter the second date to which the smaller area estimates pertain.
- (4) In sheet SETUP, column B, row 16, enter the number of subnational areas for projection.
- (5) In sheet SETUP, column B, row 18, enter the subarea label (e.g., “district” or “county”).
- (6) In sheet SETUP, column B, row 21, enter the projection starting date. This may be earlier, later, or in the period between the first and second estimate dates.
- (7) In sheet SETUP, column B, row 22, enter the projection ending date. This should be later than the second estimate date.
- (8) In sheet SETUP, column B, row 23, enter the desired projection date interval in the projection period. Make sure that the interval and starting and ending dates are consistent.
- (9) Add source information on the lines beginning with row 30.
- (10) After entering the data on the SETUP sheet, click on the button “Set up workbook” (see Figure 1).
- (11) In sheet INPUT, enter the ADM1 estimates and projections in row 7 (Figure 2).

Figure 2. INPUT Sheet

	A	B	C	D	E	F	G	H
3	Table 22				Project			
4	Republic of Demographica Region 1							
5	B. Total Projected Population							
6	Area	2000.5	2005.5	2010.5	2015.5			
7	Total	17,493,729	19,520,094	21,355,078	23,166,043			
8								
9	C. Population by District							
10		Population		Proportion		Asymptotes		Logistic
11	District	1990.50	2000.50	1990.50	2000.50	Lower	Upper	growth rate
12								
13	Total	13,569,729	17,493,730	1.0000	1.0000	0	1	
14								
15	District 1	3,392,432	3,498,746	0.2500	0.2000	0	1	-0.0288
16	District 2	7,463,351	9,971,426	0.5500	0.5700	0	1	0.0081
17	District 3	2,713,946	4,023,558	0.2000	0.2300	0	1	0.0178
18								
19								

- (12) Enter the names for the smaller areas (districts in Figure 2) in column A beginning with row 15.

- (13) Enter the smaller area estimates for the first date in column B of sheet INPUT starting in row 15, and the estimates for the second date in column C.

The lower and upper asymptotes can be modified to be all the same (and different from 0 or 1) by changing row 13. The limits for each subarea can also be changed as desired.

- (14) Press the “Project” button.

- (15) Given the population totals by district supplied by the user, the workbook computes the proportional distribution of the population by district for the two dates (columns D and E starting in row 15). It then fits a logistic curve to each pair of proportions and projects for the desired projection horizon (sheet LOGISTIC). It then adjusts the projected proportions to sum to one (sheet PROPORTION), and uses the higher-level projected population to convert proportions to population (sheet POP). These projections for smaller areas begin in column B and row 11 of sheet POP (Figure 3).

Figure 3. POP Sheet: Output Projected Populations

	A	B	C	D	E
3	Table 22				
4					
5	F. Projected Population by District				
6					
7	Republic of Demographica Region 1	2000.5	2005.5	2010.5	2015.5
8					
9	Sum	17,493,729	19,520,094	21,355,078	23,166,043
10					
11	District 1	3,498,859	3,460,355	3,336,547	3,173,575
12	District 2	9,971,385	11,274,561	12,461,376	13,618,494
13	District 3	4,023,485	4,785,178	5,557,155	6,373,974
14					
15					

Navigation: HELP SETUP INPUT LOGISTIC PROPORTION POP