Appendix 3

Examples of the Data Used for Analyzing the Supply and Demand of Characteristics

Tables A3.1 and A3.2 (for men and women in the same household, respectively) show the data that can be obtained by using the method to elicit the importance of characteristics of a variety or other technology. Each row is a household and each column is a characteristic. This table came from a spreadsheet. To perform a statistical analysis like the one presented in the example, the data can be imported into a statistical package such as SPSS (release 7.5.3), which was used for this example. With SPSS, researchers used two nonparametric tests: the Kruskal-Wallis test for "K–independent samples" and the Wilcoxon matched-pairs signed ranks test for the "two related samples." This second test was used for comparing the ratings of the importance of characteristics between men and women from the same household. Note that to do this test, the two tables should be put side by side with slightly different names for the characteristic, i.e. "withstands drought-men," "withstands drought-women."

Table A3.3 presents an example of the data that would be obtained by using the method to elicit the performance for each characteristic by each variety or technological option from men (a similar table should be generated for women, but unlike the previous case the analysis is independent). Each row is a combination of a household and a variety grown by a male farmer, while each column is a characteristic. This table came from a spreadsheet. Note that each farmer may have more then one row, since he may plant more then one variety. The names of the maize types are presented, but they have also been coded into numbers (1 to 4) in an adjacent column. For the statistical analysis, the data were imported into SPSS (release 7.5.3). Researchers used the routine statistics, nonparametric tests, and (for the Kruskal Wallis analysis of variance by ranks) the "K Independent Samples" option. This latter test is used for comparing the ratings of the performance for each characteristic across the four maize types.

Table A3.1. Ratings of importance for each characteristic for men (demand of characteristics), Santa Ana Zegache, Oaxaca, Mexico

Household ID, men	Yield-weight, men	Yield-volume, men	Nixtamal quality, men	Taste of tortilla, men	Yield stability, men	Ease of shelling, men	Withstands drought, men	Withstands wind, men	Withstands weeds, men	Cash investment, men [a]	Labor investment, men [a]
1	1	1	2	1	1	2	1	3	2	1	3
2	2	1	3	3	1	2	1	3	2	1	1
3	1	2	2	1	1	2	1	3	2	1	2
4	2	1	2	1	1	2	1	3	1	1	1
5	2	1	2	2	1	2	1	3	3	1	1
6	1	2	2	2	1	2	1	3	2	1	1
7	1	1	1	1	1	2	1	3	2	1	2
8	1	2	3	3	1	2	1	3	2	1	1
9	2	1	1	3	1	2	1	3	2	1	1
10	2	1	2	1	1	2	1	3	3	1	2
11	1	1	3	2	1	2	1	3	3	1	2
12	1	1	2	3	1	3	1	2	2	1	2
13	1	1	1	2	1	2	1	2	2	1	2
14	1	1	2	2	1	2	1	3	3	1	2
15	1	1	1	2	1	2	2	3	3	3	2

Note: 1 = very important, 2 =somewhat important, 3 = not important.

[a] For cash and labor investment, 1= little, 2= regular, 3= a lot.

Table A3.2. Ratings of importance for each characteristic (demand of characteristics) for women, Santa Ana Zegache, Oaxaca, Mexico

Household ID, women	Yield-weight, women	Yield-volume, women	Nixtamal quality, women	Taste of tortilla, women	Yeld stability, women	Ease of shelling, women	Withstands drought, women	Withstands wind, women	Withstands weeds, women	Cash investment, women [a]	Labor investment, women [a]
1	1	2	1	1	1	3	1	1	3	2	1
2	1	3	1	2	1	1	1	2	2	1	1
3	1	2	1	1	1	3	1	2	2	2	1
4	1	2	1	1	2	3	1	3	2	1	3
5	1	1	1	1	1	3	1	2	3	1	1
6	1	2	3	1	1	3	1	2	1	1	1
7	1	3	1	1	1	2	1	2	3	1	1
8	1	1	1	2	1	3	1	3	1	1	2
9	1	3	1	1	1	3	1	1	3	1	2
10	1	1	2	1	1	3	1	3	2	1	3
11	1	1	1	1	1	3	1	1	2	1	2
12	1	2	2	1	1	2	1	2	2	1	2
13	1	3	1	1	1	3	1	1	2	1	2
14	1	1	1	1	1	2	2	2	2	1	1
15	1	1	1	1	1	3	1	2	2	1	1

Note: 1 = very important, 2 =somewhat important, 3 = not important.

[a] For cash and labor investment, 1= little, 2= regular, 3= a lot.

Table A3.3. Ratings of performance of each maize type for each farmer with respect to each characteristic (supply of characteristics), Santa Ana Zegache, Oaxaca, Mexico

Household ID	Number of maize types	Maize type	Type code	Nixtamal quality	Taste of tortilla	Yield stability	Ease of shelling	Withstands drought	Withstands wind	Withstands weeds	Cash investment	Labor investment
1	1	Blanco	1	1	1	1	2	1	1	2	2	2
2	1	Blanco	1	1	1	2	2	2	2	1	2	2
3	1	Blanco	1	1	1	1	1	2	1	1	2	2
3	2	Amarillo	2	1	1	1	1	1	1	1	2	2
4	1	Blanco	1	1	1	2	2	2	2	2	2	2
4	2	Amarillo	2	1	1	2	1	2	2	2	2	2
4	3	Negro	3	1	1	2	1	1	2	3	2	2
4	4	Belatove	4	1	1	2	1	1	2	3	2	2
5	1	Blanco	1	1	1	1	2		1	2	2	2
5	2	Amarillo	2	1	1	1	1	1	1	2	2	2
6	1	Blanco	1	1	1	2	1	1	2	2	2	2
7	1	Blanco	1	1	1	2	1	1	1	2	2	2
7	2	Amarillo	2	1	1	2	1	1	1	2	2	2
8	1	Blanco	1	1	1	2	2	2	2	2	2	2
8	2	Negro	3	1	1	1	1	1	1	1	2	2
9	1	Blanco	1	1	1	2	1	1	1	1	2	2
10	1	Blanco	1	1	1	1	1	1	1	2	2	2
10	2	Amarillo	2	1	1	1	1	1	2	2	2	2
10	3	Negro	3	1	1	1	1	2	2	1	2	2
10	4	Belatove	4	1	1	1	1	2	2	1	2	2
11	1	Blanco	1	1	1	2	2	2	2	2	3	3
12	1	Blanco	1	1	1	1	2	1	1	2	2	2
12	2	Amarillo	2	1	1	1	1	1	1	2	2	2
13	1	Blanco	1	1	1	2	2	1	2	1	2	2
13	2	Negro	3	1	1	2	1	2	2	2	2	2
14	1	Blanco	1	1	1	2	2	1	1	1	3	3
14	2	Negro	3	1	1	1	1	1	1	1	3	3
15	1	Blanco	1	1	1	2	2	2	1	2	3	3

Note: 1= very good, 2 = intermediate, 3= poor. Each farmer has a different number of maize types, e.g., Farmer 1 only has one type, while Farmer 4 has 4 types.