# Association between socio demographic profile and design parameters

# 1. Age groups

### Age group Vs. Preferred Signage

Count

|        |        |               | Preferred Signage |                   |              |         |        |     |  |  |
|--------|--------|---------------|-------------------|-------------------|--------------|---------|--------|-----|--|--|
|        |        | Biowaste      | Biowaste          | Biowaste          | Biowaste     | Without | Others |     |  |  |
|        |        | Diversion Bin | Recycling Bin     | Environmental Bin | Recovery Bin | signage |        |     |  |  |
|        | Youth  | 24            | 38                | 94                | 15           | 3       | 0      | 174 |  |  |
| Age    | Adult  | 15            | 41                | 73                | 23           | 2       | 1      | 155 |  |  |
| Groups | Senior | 5             | 29                | 16                | 3            | 2       | 0      | 55  |  |  |
| Total  |        | 44            | 108               | 183               | 41           | 7       | 1      | 384 |  |  |

**Chi-Square Tests** 

| Oni-oquare resis   |                     |    |             |  |  |  |  |
|--------------------|---------------------|----|-------------|--|--|--|--|
|                    | Value               | df | Asymp. Sig. |  |  |  |  |
|                    |                     |    | (2-sided)   |  |  |  |  |
| Pearson Chi-Square | 28.758 <sup>a</sup> | 10 | .001        |  |  |  |  |
| Likelihood Ratio   | 27.324              | 10 | .002        |  |  |  |  |
| Linear-by-Linear   | .609                | 1  | .435        |  |  |  |  |
| Association        |                     |    |             |  |  |  |  |
| N of Valid Cases   | 384                 |    |             |  |  |  |  |

a. 6 cells (33.3%) have expected count less than 5. The minimum expected count is .14.

### Age group vs. Preferred Capacity

Count

|            |        | ſ           | Total       |             |     |
|------------|--------|-------------|-------------|-------------|-----|
|            |        | Small       | Medium      | Large       |     |
|            |        | Drum(30-35  | Drum(80-100 | Drum(200    |     |
|            |        | kgs,10 inch | kgs,15 inch | kgs,23 inch |     |
|            |        | diameter)   | diameter)   | diameter)   |     |
|            | Youth  | 57          | 78          | 39          | 174 |
| Age Groups | Adult  | 38          | 87          | 30          | 155 |
|            | Senior | 14          | 20          | 21          | 55  |
| Total      |        | 109         | 185         | 90          | 384 |

|                    | Value               | df | Asymp. Sig. (2-sided) |  |  |  |
|--------------------|---------------------|----|-----------------------|--|--|--|
|                    |                     |    | (= 0.000)             |  |  |  |
| Pearson Chi-Square | 12.471 <sup>a</sup> | 4  | .014                  |  |  |  |
| Likelihood Ratio   | 11.764              | 4  | .019                  |  |  |  |
| Linear-by-Linear   | 3.677               | 1  | .055                  |  |  |  |
| Association        | 3.077               | Į. | .033                  |  |  |  |

N of Valid Cases 384

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.89.

#### Age group vs. Composting Engagement

Count

|               |        | Comp<br>Engag | Total |     |
|---------------|--------|---------------|-------|-----|
|               |        | Yes           | No    |     |
|               | Senior | 30            | 25    | 55  |
| Age<br>Groups | Adult  | 60            | 95    | 155 |
| Groups        | Youth  | 53            | 121   | 174 |
| Total         |        | 143           | 241   | 384 |

**Chi-Square Tests** 

|                                 | Value               | df | Asymp. Sig. (2-sided) |
|---------------------------------|---------------------|----|-----------------------|
| Pearson Chi-Square              | 10.613 <sup>a</sup> | 2  | .005                  |
| Likelihood Ratio                | 10.434              | 2  | .005                  |
| Linear-by-Linear<br>Association | 10.092              | 1  | .001                  |
| N of Valid Cases                | 384                 |    |                       |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 20.48.

### 2. Sex

Sex vs. Preferred Aeration

Count

|       |        | Preferred      | Total          |     |
|-------|--------|----------------|----------------|-----|
|       |        | Natural        | Mechanical     |     |
|       |        | Aeration (with | Aeration       |     |
|       |        | holes)         | (without holes |     |
|       |        |                | but with fan)  |     |
| 0     | Female | 126            | 87             | 213 |
| Sex   | Male   | 79             | 92             | 171 |
| Total |        | 205            | 179            | 384 |

**Chi-Square Tests** 

|                                    | Value              | df | Asymp. Sig. (2- | Exact Sig. (2- | Exact Sig. (1- |
|------------------------------------|--------------------|----|-----------------|----------------|----------------|
|                                    |                    |    | sided)          | sided)         | sided)         |
| Pearson Chi-Square                 | 6.398 <sup>a</sup> | 1  | .011            |                |                |
| Continuity Correction <sup>b</sup> | 5.888              | 1  | .015            |                |                |
| Likelihood Ratio                   | 6.409              | 1  | .011            |                |                |
| Fisher's Exact Test                |                    |    |                 | .013           | .008           |
| Linear-by-Linear                   | 6 204              | 1  | 010             |                |                |
| Association                        | 6.381              | '  | .012            |                |                |
| N of Valid Cases                   | 384                |    |                 |                |                |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 79.71.

b. Computed only for a 2x2 table

Sex vs. Preferred Odor Filter

Count

|       |        | Preferred | Total      |     |
|-------|--------|-----------|------------|-----|
|       |        | Natural   | Synthetic  |     |
|       |        | (Compost) | (Activated |     |
|       |        |           | Carbon)    |     |
| Cav   | Female | 110       | 103        | 213 |
| Sex   | Male   | 71        | 100        | 171 |
| Total |        | 181       | 203        | 384 |

**Chi-Square Tests** 

| Cili-5quale lesis                  |                    |    |                 |                |                |  |
|------------------------------------|--------------------|----|-----------------|----------------|----------------|--|
|                                    | Value              | df | Asymp. Sig. (2- | Exact Sig. (2- | Exact Sig. (1- |  |
|                                    |                    |    | sided)          | sided)         | sided)         |  |
| Pearson Chi-Square                 | 3.901 <sup>a</sup> | 1  | .048            |                |                |  |
| Continuity Correction <sup>b</sup> | 3.505              | 1  | .061            |                |                |  |
| Likelihood Ratio                   | 3.911              | 1  | .048            |                |                |  |
| Fisher's Exact Test                |                    |    |                 | .051           | .030           |  |
| Linear-by-Linear                   | 2.000              | 4  | 0.40            |                |                |  |
| Association                        | 3.890              | 1  | .049            |                |                |  |
| N of Valid Cases                   | 384                |    |                 |                |                |  |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 80.60.

b. Computed only for a 2x2 table

### 3. Marital Status

### Marital Status vs Preferred Signage

Count

|         |                         |               |           | Preferred Signage |              |         |        | Total |
|---------|-------------------------|---------------|-----------|-------------------|--------------|---------|--------|-------|
|         |                         | Biowaste      | Biowaste  | Biowaste          | Biowaste     | Without | Others |       |
|         |                         | Diversion Bin | Recycling | Environmental     | Recovery Bin | signage |        |       |
|         |                         |               | Bin       | Bin               |              |         |        |       |
|         | Widowed/separated       | 0             | 12        | 7                 | 3            | 1       | 0      | 23    |
| Marital | Married                 | 19            | 61        | 78                | 18           | 4       | 1      | 181   |
| Status  | Single/Never<br>Married | 25            | 35        | 98                | 20           | 2       | 0      | 180   |
| Total   |                         | 44            | 108       | 183               | 41           | 7       | 1      | 384   |

**Chi-Square Tests** 

| On oquare resis    |                     |    |             |  |  |  |  |
|--------------------|---------------------|----|-------------|--|--|--|--|
|                    | Value               | df | Asymp. Sig. |  |  |  |  |
|                    |                     |    | (2-sided)   |  |  |  |  |
| Pearson Chi-Square | 22.044 <sup>a</sup> | 10 | .015        |  |  |  |  |
| Likelihood Ratio   | 24.515              | 10 | .006        |  |  |  |  |
| Linear-by-Linear   | .052                | 1  | .820        |  |  |  |  |
| Association        | .002                | 1  | .020        |  |  |  |  |
| N of Valid Cases   | 384                 |    |             |  |  |  |  |

a. 8 cells (44.4%) have expected count less than 5. The minimum expected count is .06.

#### **Marital Status vs Composting Engagement**

Count

| Count          |                      |            |                      |     |  |  |
|----------------|----------------------|------------|----------------------|-----|--|--|
|                |                      | Composting | omposting Engagement |     |  |  |
|                |                      | Yes        | No                   |     |  |  |
|                | Widowed/separated    | 11         | 12                   | 23  |  |  |
| Marital Status | Married              | 77         | 104                  | 181 |  |  |
|                | Single/Never Married | 55         | 125                  | 180 |  |  |
|                | Total                | 143        | 241                  | 384 |  |  |

|                                 | Value              | df | Asymp. Sig. (2-sided) |
|---------------------------------|--------------------|----|-----------------------|
| Pearson Chi-Square              | 6.721 <sup>a</sup> | 2  | .035                  |
| Likelihood Ratio                | 6.751              | 2  | .034                  |
| Linear-by-Linear<br>Association | 6.434              | 1  | .011                  |
| N of Valid Cases                | 384                |    |                       |

### 4. Educational Attainment

### Educational Attainment vs Preferred Biodegradable waste scheme

Count

|                      |             | Preferred E     | eferred Biodegradable Waste Scheme |                |     |  |  |
|----------------------|-------------|-----------------|------------------------------------|----------------|-----|--|--|
|                      |             | Household level | Barangay level                     | Both household |     |  |  |
|                      |             | only            | only                               | and barangay   |     |  |  |
|                      | Doctorate   | 0               | 0                                  | 3              | 3   |  |  |
|                      | Masteral    | 2               | 2                                  | 12             | 16  |  |  |
| Education Attainment | College     | 29              | 43                                 | 189            | 261 |  |  |
|                      | High School | 16              | 20                                 | 47             | 83  |  |  |
|                      | Elementary  | 8               | 5                                  | 8              | 21  |  |  |
| Total                |             | 55              | 70                                 | 259            | 384 |  |  |

**Chi-Square Tests** 

| Cili-3quare rests               |                     |    |             |  |  |  |  |
|---------------------------------|---------------------|----|-------------|--|--|--|--|
|                                 | Value               | df | Asymp. Sig. |  |  |  |  |
|                                 |                     |    | (2-sided)   |  |  |  |  |
| Pearson Chi-Square              | 20.941 <sup>a</sup> | 8  | .007        |  |  |  |  |
| Likelihood Ratio                | 19.693              | 8  | .012        |  |  |  |  |
| Linear-by-Linear<br>Association | 17.556              | 1  | .000        |  |  |  |  |
| N of Valid Cases                | 384                 |    |             |  |  |  |  |

a. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .43.

#### **Educational Attainment vs Preferred Color**

Count

| Count      |                |       |                   |      |        |     |       |       |     |      |       |       |       |        |     |
|------------|----------------|-------|-------------------|------|--------|-----|-------|-------|-----|------|-------|-------|-------|--------|-----|
|            |                |       | Preferred Color T |      |        |     |       |       |     |      | Total |       |       |        |     |
|            |                | Cream | Brown             | Gray | Orange | Any | Green | Black | Red | Blue | Pink  | Peach | White | Yellow |     |
|            | Doctorate      | 0     | 0                 | 0    | 1      | 1   | 0     | 0     | 0   | 0    | 1     | 0     | 0     | 0      | 3   |
|            | Masteral       | 2     | 3                 | 5    | 2      | 0   | 2     | 1     | 0   | 0    | 1     | 0     | 0     | 0      | 16  |
| Education  | College        | 22    | 66                | 81   | 42     | 6   | 19    | 16    | 1   | 2    | 0     | 2     | 1     | 3      | 261 |
| Attainment | High<br>School | 11    | 22                | 22   | 11     | 6   | 5     | 2     | 1   | 2    | 0     | 0     | 1     | 0      | 83  |
|            | Elementary     | 3     | 7                 | 3    | 5      | 0   | 3     | 0     | 0   | 0    | 0     | 0     | 0     | 0      | 21  |
| To         | tal            | 38    | 98                | 111  | 61     | 13  | 29    | 19    | 2   | 4    | 2     | 2     | 2     | 3      | 384 |

**Chi-Square Tests** 

|                                 | Value                | df | Asymp. Sig. (2-sided) |
|---------------------------------|----------------------|----|-----------------------|
| Pearson Chi-Square              | 108.468 <sup>a</sup> | 48 | .000                  |
| Likelihood Ratio                | 47.827               | 48 | .480                  |
| Linear-by-Linear<br>Association | 3.661                | 1  | .056                  |
| N of Valid Cases                | 384                  |    |                       |

a. 51 cells (78.5%) have expected count less than 5. The minimum expected count is .02.

- 5. No association of Religion
- 6. House ownership

### House ownership vs Composting Enggagement

Count

|                 | Court              |            |            |       |
|-----------------|--------------------|------------|------------|-------|
|                 |                    | Composting | Engagement | Total |
|                 |                    | Yes        | No         |       |
| Hauga Ownarahin | Complete ownership | 97         | 126        | 223   |
| House Ownership | Rent               | 46         | 115        | 161   |
| Т               | otal               | 143        | 241        | 384   |

|                                    | Value              | df | Asymp. Sig. (2- | Exact Sig. (2- | Exact Sig. (1- |
|------------------------------------|--------------------|----|-----------------|----------------|----------------|
|                                    |                    |    | sided)          | sided)         | sided)         |
| Pearson Chi-Square                 | 8.913 <sup>a</sup> | 1  | .003            |                |                |
| Continuity Correction <sup>b</sup> | 8.286              | 1  | .004            |                |                |
| Likelihood Ratio                   | 9.043              | 1  | .003            |                |                |
| Fisher's Exact Test                |                    |    |                 | .004           | .002           |
| Linear-by-Linear                   | 8.890              | 1  | 003             |                |                |
| Association                        | 0.090              | ı  | .003            |                |                |
| N of Valid Cases                   | 384                |    |                 |                |                |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 59.96.

b. Computed only for a 2x2 table

# 7. Type of Housing

## Type of Housing vs Preferred Color

Count

|                    |                             |       | Preferred Color |      |        |     |       |       |     |      |      | Total |       |        |     |
|--------------------|-----------------------------|-------|-----------------|------|--------|-----|-------|-------|-----|------|------|-------|-------|--------|-----|
|                    |                             | Cream | Brown           | Gray | Orange | Any | Green | Black | Red | Blue | Pink | Peach | White | Yellow |     |
|                    | Others                      | 1     | 1               | 1    | 2      | 0   | 2     | 0     | 0   | 0    | 0    | 0     | 1     | 0      | 8   |
|                    | Private Single family house | 22    | 67              | 57   | 33     | 7   | 19    | 13    | 2   | 2    | 2    | 2     | 1     | 2      | 229 |
| Type of<br>Housing | Low Rise<br>Apartment       | 10    | 22              | 43   | 18     | 6   | 8     | 6     | 0   | 2    | 0    | 0     | 0     | 0      | 115 |
|                    | High Rise<br>Apartment      | 5     | 8               | 10   | 8      | 0   | 0     | 0     | 0   | 0    | 0    | 0     | 0     | 1      | 32  |
|                    | Total                       | 38    | 98              | 111  | 61     | 13  | 29    | 19    | 2   | 4    | 2    | 2     | 2     | 3      | 384 |

**Chi-Square Tests** 

|                                 | oqua.o re           |    |                       |
|---------------------------------|---------------------|----|-----------------------|
|                                 | Value               | df | Asymp. Sig. (2-sided) |
| Pearson Chi-Square              | 54.112 <sup>a</sup> | 36 | .027                  |
| Likelihood Ratio                | 43.879              | 36 | .172                  |
| Linear-by-Linear<br>Association | 3.152               | 1  | .076                  |
| N of Valid Cases                | 384                 |    |                       |

a. 36 cells (69.2%) have expected count less than 5. The minimum expected count is .04.

### Type of Housing vs Composting Engagement

Count

|                       |                             | Composting | Engagement | Total |
|-----------------------|-----------------------------|------------|------------|-------|
|                       |                             | Yes        | No         |       |
|                       | Others                      | 3          | 5          | 8     |
| Town a of Hannaira or | Private Single family house | 100        | 129        | 229   |
| Type of Housing       | Low Rise Apartment          | 32         | 83         | 115   |
|                       | High Rise Apartment         | 8          | 24         | 32    |
|                       | Total                       | 143        | 241        | 384   |

|                    | Value               | df | Asymp. Sig. |
|--------------------|---------------------|----|-------------|
|                    |                     |    | (2-sided)   |
| Pearson Chi-Square | 10.461 <sup>a</sup> | 3  | .015        |
| Likelihood Ratio   | 10.695              | 3  | .013        |

| Linear-by-Linear | 0.516 | 4 | 004  |
|------------------|-------|---|------|
| Association      | 8.516 | I | .004 |
| N of Valid Cases | 384   |   |      |

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 2.98.

# 8. Respondents Code

#### Respondents Code vs Preferred Odor filter

Count

|                   |   | Preferred            | Odor Filter                        | Total |
|-------------------|---|----------------------|------------------------------------|-------|
|                   |   | Natural<br>(Compost) | Synthetic<br>(Activated<br>Carbon) |       |
|                   | Son/Daughter/Grandmother<br>/Grandfather/Siblings | 73                   | 78                                 | 151   |
| Respondent's Code | Mother  | 58                   | 45                                 | 103   |
|                   | Head of the Family                                | 50                   | 80                                 | 130   |
|                   | Total   | 181                  | 203                                | 384   |

**Chi-Square Tests** 

|                                 | Value              | df | Asymp. Sig. (2-sided) |
|---------------------------------|--------------------|----|-----------------------|
| Pearson Chi-Square              | 7.494 <sup>a</sup> | 2  | .024                  |
| Likelihood Ratio                | 7.536              | 2  | .023                  |
| Linear-by-Linear<br>Association | 2.455              | 1  | .117                  |
| N of Valid Cases                | 384                |    |                       |

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 48.55.

### Respondents Code vs Preferred Signage

Count

|             |  |          | Preferred Signage |             |         |        |       | Tota |
|-------------|--|----------|-------------------|-------------|---------|--------|-------|------|
|             |  | Biowast  | Biowaste          | Biowaste    | Biowast | Withou | Other | 1    |
|             |  | е        | Recyclin          | Environment | е       | t      | s     |      |
|             |  | Diversio | g Bin             | al Bin      | Recover | signag |       |      |
|             |  | n Bin    |                   |             | y Bin   | е      |       |      |
| Respondent' | Son/Daughter/Grandmother/Grandfather/Siblin gs | 16       | 30                | 87          | 15      | 3      | 0     | 151  |
| s Code      | Mother   | 8        | 37                | 40          | 16      | 1      | 1     | 103  |
|             | Head of the Family                             | 20       | 41                | 56          | 10      | 3      | 0     | 130  |

| Total | 44 | 108 | 183 | 41 | 7 | 1 1 | 384 |
|-------|----|-----|-----|----|---|-----|-----|

**Chi-Square Tests** 

|                                 | Value               | df | Asymp. Sig. (2-sided) |  |  |  |  |  |
|---------------------------------|---------------------|----|-----------------------|--|--|--|--|--|
| Pearson Chi-Square              | 21.661 <sup>a</sup> | 10 | .017                  |  |  |  |  |  |
| Likelihood Ratio                | 21.618              | 10 | .017                  |  |  |  |  |  |
| Linear-by-Linear<br>Association | 4.360               | 1  | .037                  |  |  |  |  |  |
| N of Valid Cases                | 384                 |    |                       |  |  |  |  |  |

a. 6 cells (33.3%) have expected count less than 5. The minimum expected count is .27.

### 9. Income

#### **Income vs Preferred Color**

Count

| T.      |             |       |                 |      |          |     | ount  |       |     |      |      |       |       |        | r . |
|---------|-------------|-------|-----------------|------|----------|-----|-------|-------|-----|------|------|-------|-------|--------|-----|
|         |             |       | Preferred Color |      |          |     |       |       |     |      |      |       | Total |        |     |
|         |             | Cream | Brown           | Gray | Orange   | Any | Green | Black | Red | Blue | Pink | Peach | White | Yellow |     |
|         | Above       | 0     | 1               | 0    | 0        | 0   | 1     | 0     | 0   | 0    | 1    | 0     | 0     | 0      | 3   |
|         | P157,800    | ı     |                 |      | <br>     |     |       |       |     |      |      |       |       |        | į.  |
|         | P118,350-   | 1     | 1               | 0    | 0        | 0   | 1     | 0     | 0   | 0    | 0    | 0     | 0     | 0      | 3   |
|         | P157,800    | '     | '               | Ü    | Ŭ        | O   | '     |       | Ü   |      |      |       |       |        | J   |
|         | P78,900-    | 0     | 3               | 4    | 2        | 1   | 1     | 0     | 0   | 0    | 0    | 0     | 0     | 0      | 11  |
|         | P118,350    |       | Ŭ               | , i  | _        | ·   |       | Ŭ     |     |      |      |       |       |        |     |
| Monthly | P31,560-    | 4     | 11              | 7    | 5        | 1   | 4     | 1     | 0   | 0    | 0    | 0     | 0     | 0      | 33  |
| Income  | P78,900     |       | • • •           | ,    | Ĭ        | ·   |       | •     | Ü   |      |      |       |       |        |     |
|         | P15,780-    | 7     | 20              | 23   | 11       | 3   | 9     | 5     | 1   | 1    | 0    | 0     | 0     | 1      | 81  |
|         | P31,560     | ,     | 20              | 23   |          | 3   |       | J     | '   | '    | U    |       |       | '      | 01  |
|         | P7,890-     | 18    | 30              | 30   | 27       | 5   | 10    | 9     | 0   | 3    | 1    | 1     | 2     | 1      | 137 |
|         | P15,789     | 10    | 30              | 30   | <u> </u> | 3   |       | 9     | J   | 3    | '    | '     |       | '      | 137 |
|         | Less than P | 8     | 32              | 47   | 16       | 3   | 3     | 4     | 1   | 0    | 0    | 1     | 0     | 1      | 116 |
|         | 7,890       | J     | 52              | , T  |          | 3   |       |       | ·   |      |      | '     |       | '      | 110 |
| -       | Total       | 38    | 98              | 111  | 61       | 13  | 29    | 19    | 2   | 4    | 2    | 2     | 2     | 3      | 384 |

|                    | Value                | df | Asymp. Sig. |
|--------------------|----------------------|----|-------------|
|                    |                      |    | (2-sided)   |
| Pearson Chi-Square | 110.656 <sup>a</sup> | 72 | .002        |
| Likelihood Ratio   | 62.015               | 72 | .793        |

| Linear-by-Linear<br>Association | 1.030 | 1 | .310 |
|---------------------------------|-------|---|------|
| N of Valid Cases                | 384   |   |      |

a. 71 cells (78.0%) have expected count less than 5. The minimum expected count is .02.