Appendix: Supplementary figures and tables

A1 Geographical location of cherry production areas

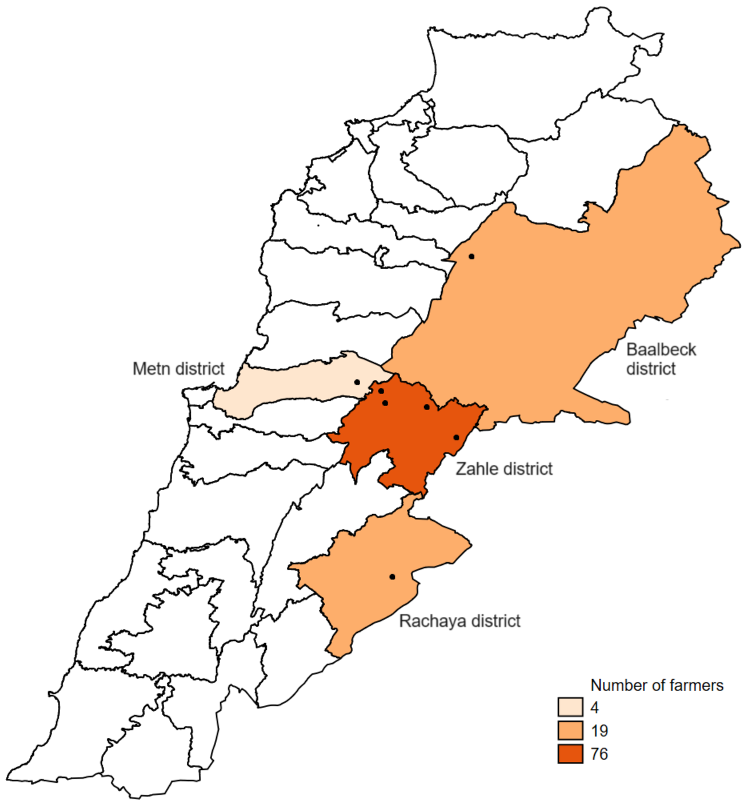

Figure A1: **Administrative districts and production areas, Lebanon**. Darkest shade indicates higher number of small-scale farmers included in the longitudinal sample. Author's elaboration.

Black points illustrate the location of the seven production areas included in the study, divided by administrative units (districts) In each district, multiple productive areas are present, as follows:

- Baalbeck district: Ainata production area (altitude: 1600-2000 masl);
- Metn district: Baskenta production area (altitude: 1200-1700 masl);
- Rachaya district: Rachaya production area (altitude: 1350-1500 masl);
- Zahle district: Ferzol/Niha (altitude: 1200-1400 masl); Kaa el Rim (altitude: 1250-1500

masl); Kousseya (altitude: 1100-1200 masl); and Wadi el Arayech (altitude: 1200-1300 masl) production areas.

The empirical analysis controls for the seven production areas listed above.

A2 Sample size calculation

We took advantage of a previous exploratory survey (2014), administered to 68 smallholder cherry farmers in the production areas of Ainata and Kaa el Rim, to calculate the sample size required for the analysis. The survey contains data about the average market price obtained by cherry farmers. Since the FGPII initiative envisages a 30% price increase as specific objective, we used this target to make the power calculations. Considering intermediate growth rates (from a precautionary 20% up to 30%), we calculated the minimum sample size required to observe the expected objective, net of possible inflationary process. Table A1 summarizes the results and Figure A2 illustrates the calculations.

Table A1: Sample size calculation

Price increase	LBN Lira	alpha	power	N sample	N per group
20%	2480	.05 .05	.8 .9	168 224	84 112
22%	2520	.05 .05	.8 .9	140 188	70 94
24%	2562	.05 .05	.8 .9	118 158	51 79
26%	2603	.05 .05	.8 .9	102 134	67 94
28%	2645	.05 .05	.8 .9	88 116	44 58
30%	2686	.05 .05	.8 .9	76 102	38 51

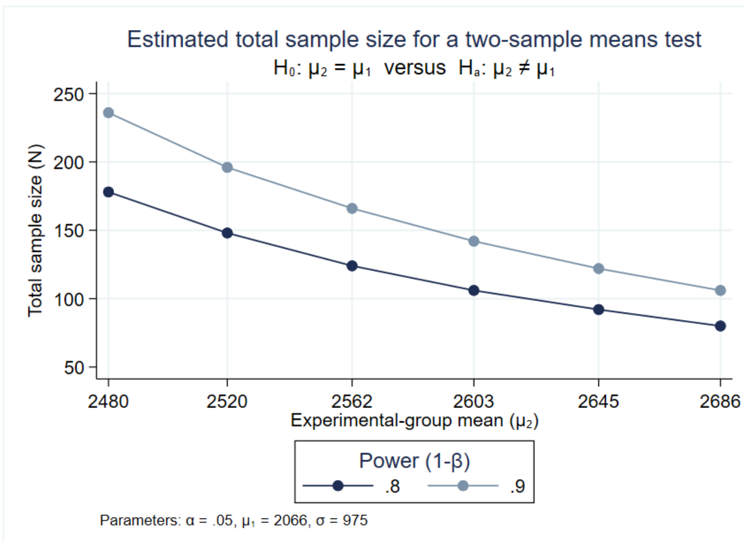

Figure A2: **Estimated sample size for progressive price increases.**