

Supplementary material

This file provides an example of how the W^{inv-s} matrix (shown on p.6 in the main manuscript) is constructed for five hypothetical farms (observed in a particular year) shown on Table S1. This table shows the inverse hyperbolic sine transformation of profit per cow and the distance of each farm from farm 1. As seen in Table S1, farm 4 is the most profitable farm in the sample. The same farm is the most distant from farm 1.

Table S1. Data on 5 hypothetical farms

Farm number	$\tilde{\pi}_i$	Distance from farm 1 in km
1	-1	0
2	5	2
3	7	4
4	8	45
5	-2	20

Note: $\tilde{\pi}_i$ is the inverse hyperbolic sine transformation of profit per cow.

For simplicity, we only focus on farm 1 and its geographic/economic relationship with the rest of the farms. Table S.2 shows the inverse distance matrix W^{inv} using the data in Table S1, eq. (2) in the main manuscript, and a 25 km cut-off. As shown in Table S2, the highest weight is assigned to farm 2 because this farm is the nearest farm to farm 1 (only 2 km far, as shown in Table S1). Note that farm 4 gets the lowest weight (i.e. 0) because it operates beyond the chosen cut-off point. The diagonal elements of the matrix are set to zero since no farm can be viewed as its own neighbor.

Table S2. Depiction of the W^{inv} matrix (i.e. the matrix based on geographic distance) for farm 1 and its neighbors.

	1	2	3	4	5
1	0	0.50	0.25	0	0.05
2	0.50	0	-	-	-
3	0.25	-	0	-	-
4	0	-	-	0	-
5	0.05	-	-	-	0

Table S3 presents the economic distance matrix W^s calculated using eq. (3) in the main manuscript. Farm 4 gets the highest weight in this matrix because it is the most profitable farm in the sample as shown in Table S1. Note that farm 5 gets a zero weight because it is less profitable than the farm under investigation (i.e. farm 1). This is because we assume that farmers follow other farmers with higher profit levels, in line with findings in the literature (Chatzimichael et al. 2014; Conley and Udry, 2010).

Table S3. Depiction of W^S matrix (i.e. economic distance matrix) for farm 1 and its neighbors

	1	2	3	4	5
1	0	0.67	0.89	1	0
2	0.67	0	-	-	-
3	0.89	-	0	-	-
4	1	-	-	0	-
5	0	-	-	-	0

Our final matrix W^{inv_s} (for our hypothetical example), which is the Hadamard product of W^{inv} and W^S , is depicted on Table S4. In this matrix, the highest weight is assigned to farm 2. This is the closest (in distance terms) most profitable neighbor to farm 1. As it is shown in table S1, farm 3 is more profitable than farm 2 but it gets a lower weight because it is further away from farm 1 (compared to farm 2). Note that farm 4, although the most profitable farm in the sample, it gets a zero weight because it operates beyond the chosen distance cut-off.

Table S4. Depiction of W^{inv_s} for farm 1 and its neighbors

	1	2	3	4	5
1	0	0.33	0.22	0	0
2	0.33	0	-	-	-
3	0.22	-	0	-	-
4	0	-	-	0	-
5	0	-	-	-	0

References

- Chatzimichael, K., Genius, M., and Tzouvelekas, V. (2014). Informational cascades and technology adoption: Evidence from Greek and German organic growers. *Food policy* 49: 186-195.
- Conley, T. G. and Udry, C. R. (2010). Learning about a new technology: Pineapple in Ghana. *American Economic Review* 100 (1): 35-69.