Supporting Information

Khoury et al. 10.1073/pnas.1313490111

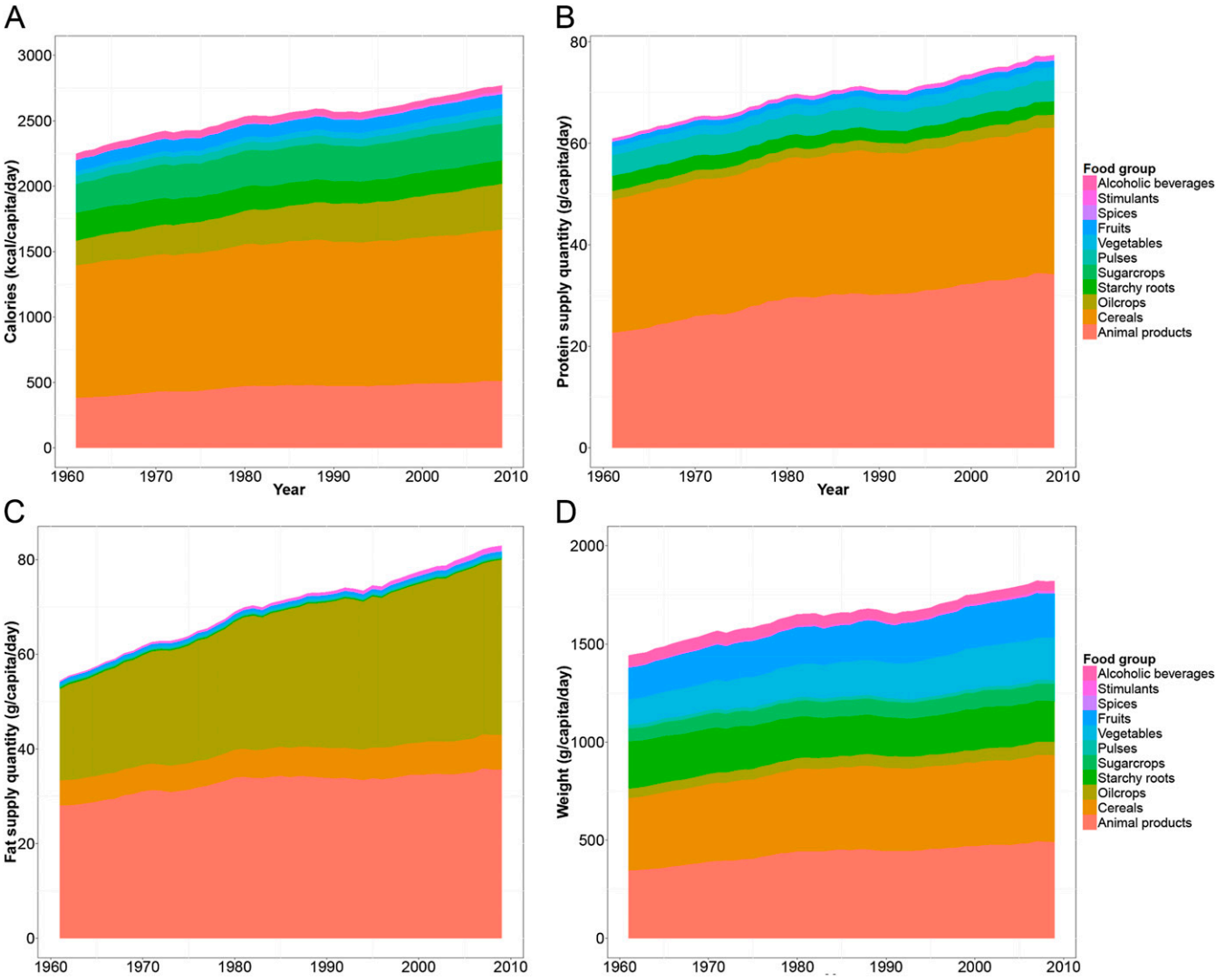

Fig. S1. Global change in national food supplies by food groups from plant and animal sources, for (*A*) calories, (*B*) protein, (*C*) fat, and (*D*) weight, 1961–2009. Data displayed is mean per capita values across all (152) countries.

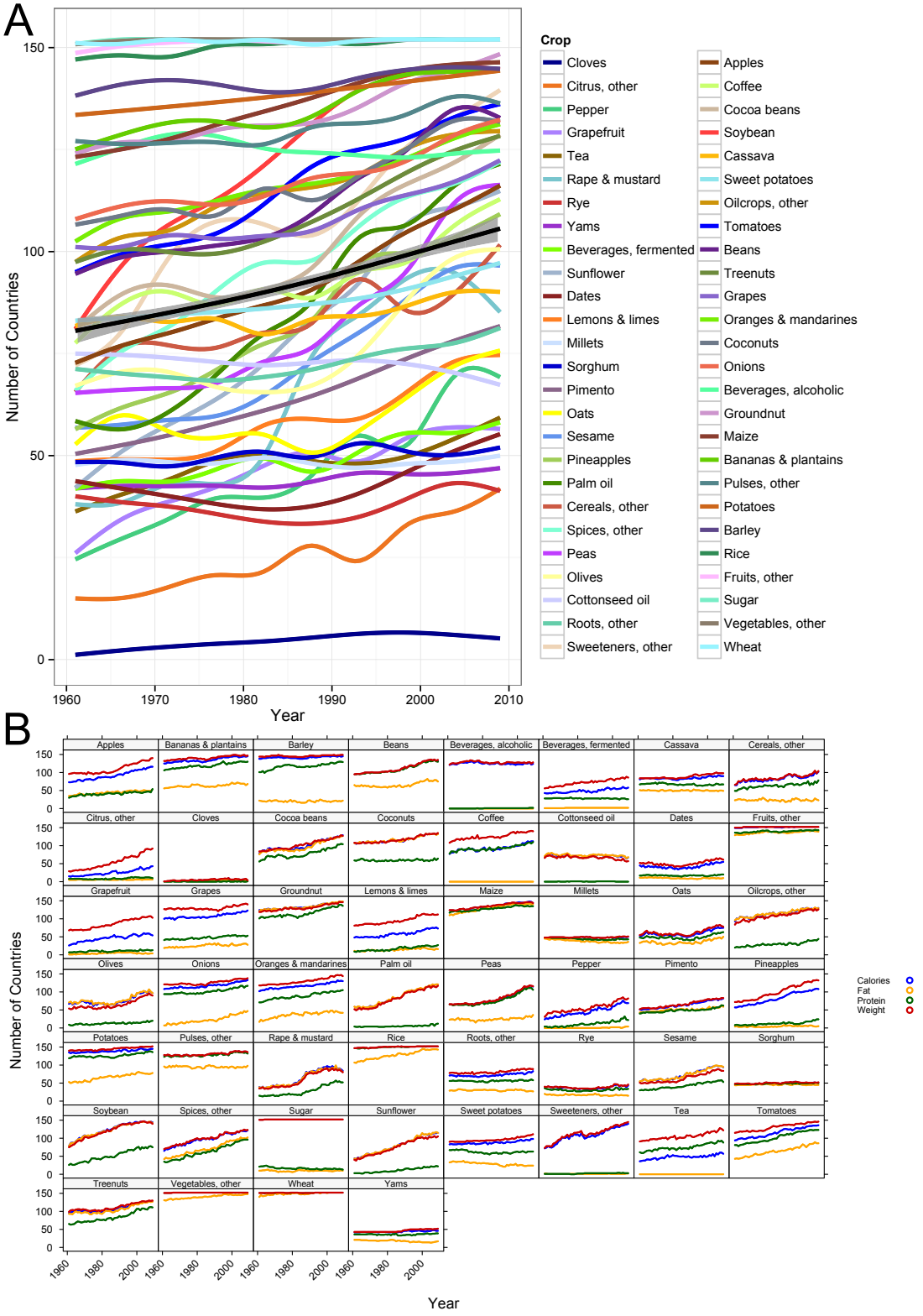

Fig. S2. Change in the total number of countries reporting each crop commodity, per crop, 1961–2009. (*A*) Change in the total number of countries reporting each crop commodity using generalized additive modeling. Crop commodities are counted as present within a given country in a given year when contributing to food supply (>0) for any variable. Crop commodities are listed in ascending order from the value in 1961. The black line displays the mean value across crop commodities. (*B*) Change in the total number of countries reporting each crop commodity, per crop, for calories, protein, fat, and weight.

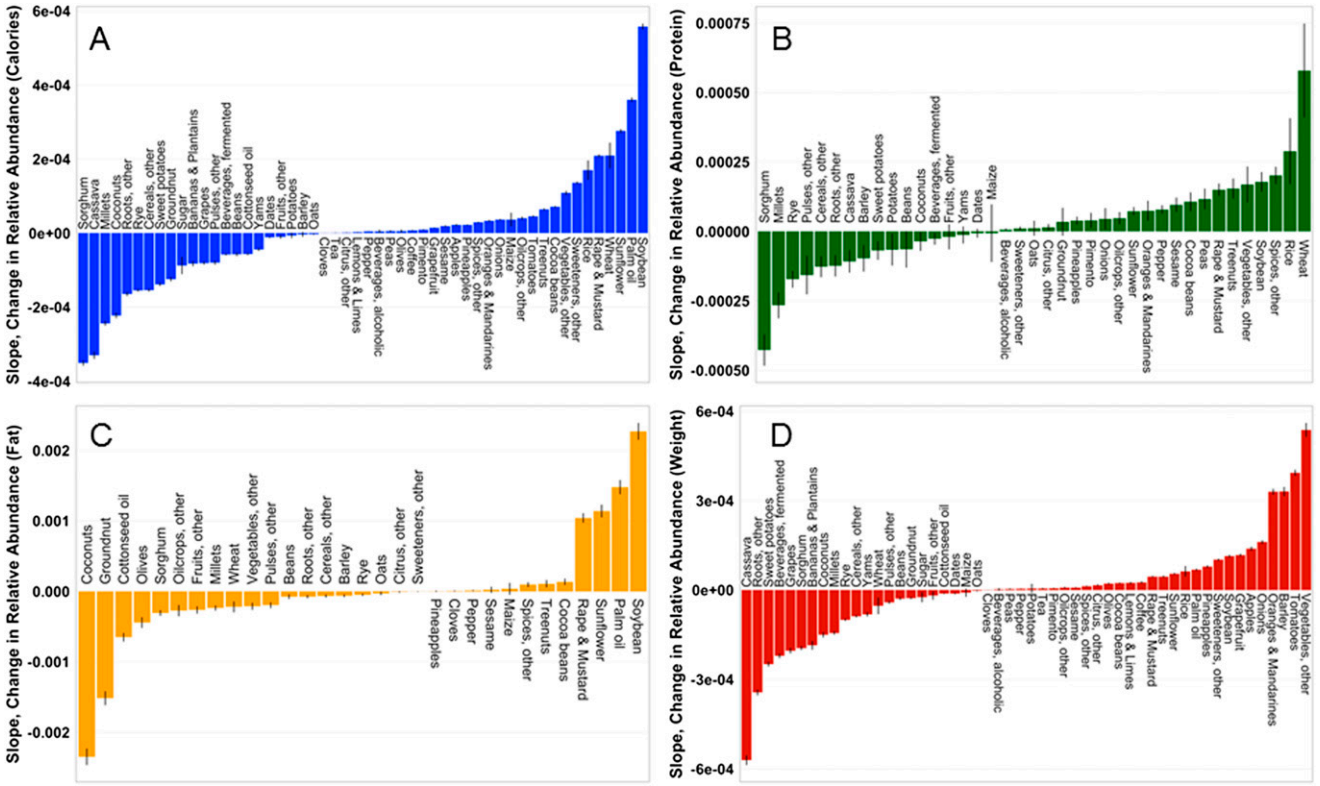

Fig. S3. Slope of the change in relative abundance probability of crop commodities in contribution to (*A*) calories, (*B*) protein, (*C*) fat, and (*D*) weight in national per capita food supplies from 1961 to 2009. Change in relative abundance probability was analyzed using a generalized linear mixed model with a binomial error distribution; year and crop as fixed effects; and country as a random effect. Bars represent the slopes [±95% confidence interval (CI)] of the predicted values derived from the model for each crop species. Commodities contributing minimally to protein/fat (i.e., <1 g protein/fat per 100 g of the item) were not included in *B* and *C* here.

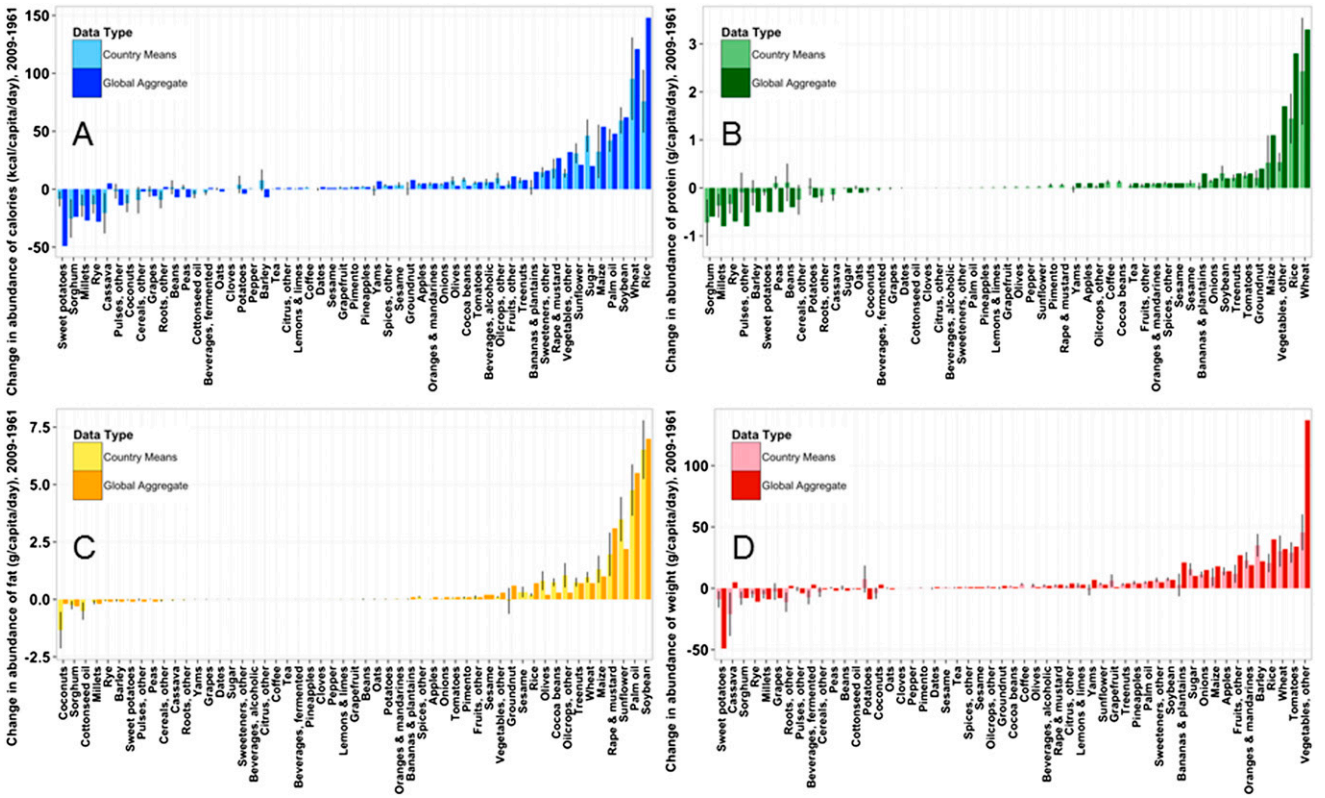

Fig. S4. Comparison of absolute abundance trends for crop commodities reported in contribution to (*A*) calories, (*B*) protein, (*C*) fat, and (*D*) weight in global aggregate food supply data vs. mean national food supply data, 1961–2009. To derive these values, the absolute abundance of the crop in 1961 was subtracted from the 2009 value. For country-level changes, the between-years difference was first calculated for each country and then averaged across all countries (±95% CI). Global aggregate abundance is a single global value and therefore no estimate of error is possible.

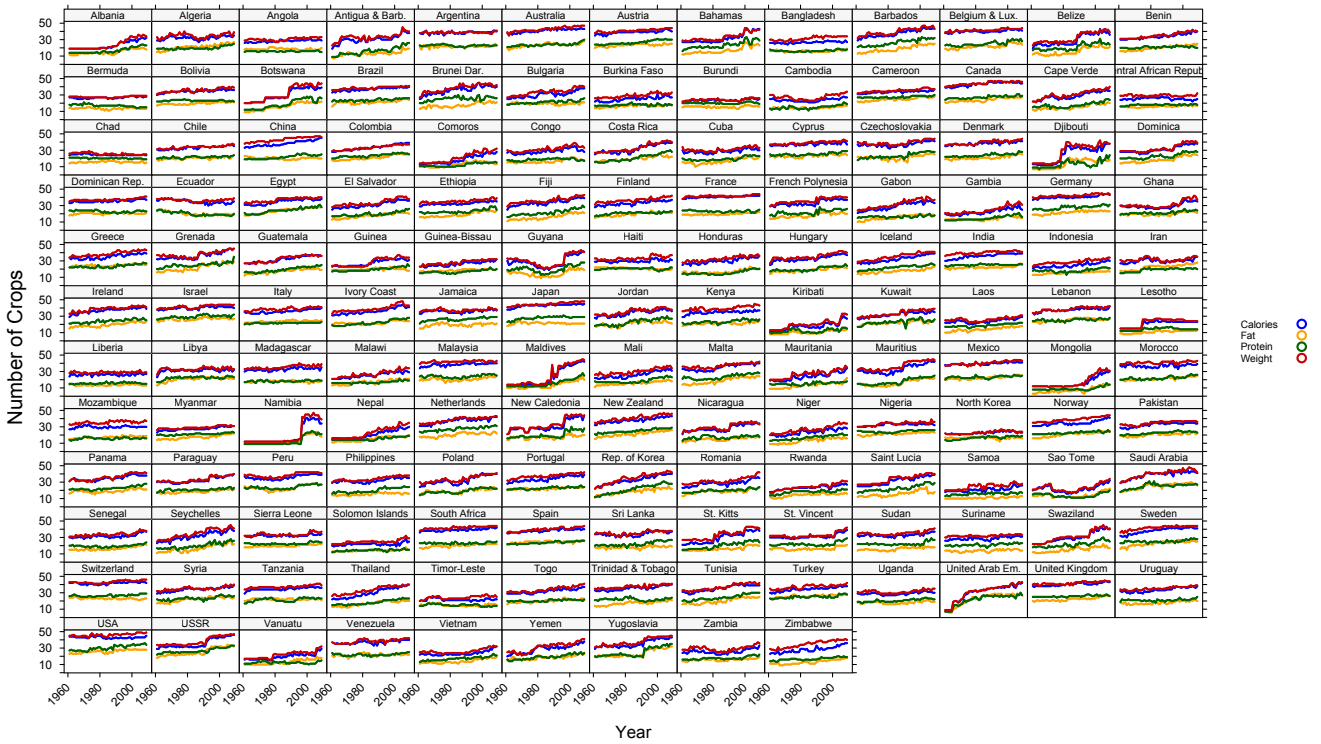

Fig. S5. Change in the total number of crop commodities reported in contribution to national food supplies, per country, for calories, protein, fat, and weight, 1961–2009.

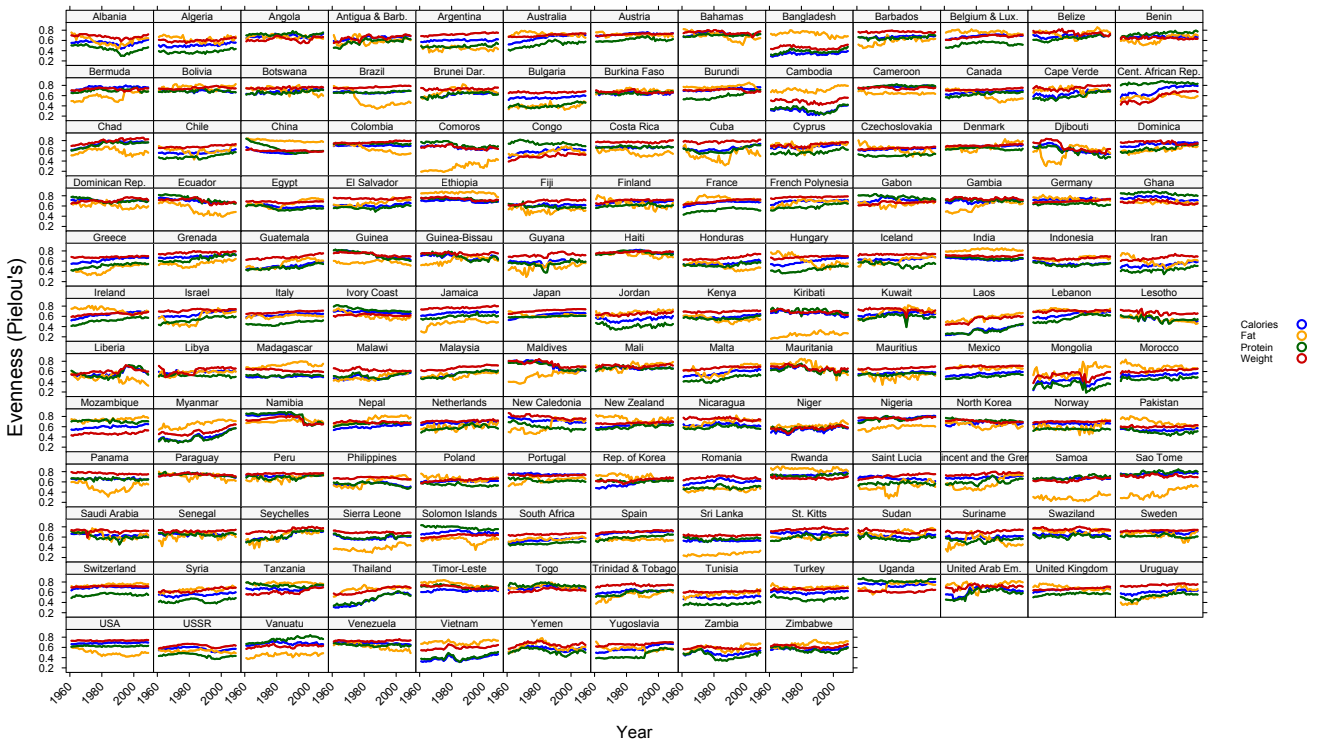

Fig. S6. Change in evenness in contributing crop commodities in national food supplies using Pielou's evenness index, per country, for calories, protein, fat, and weight, 1961–2009.

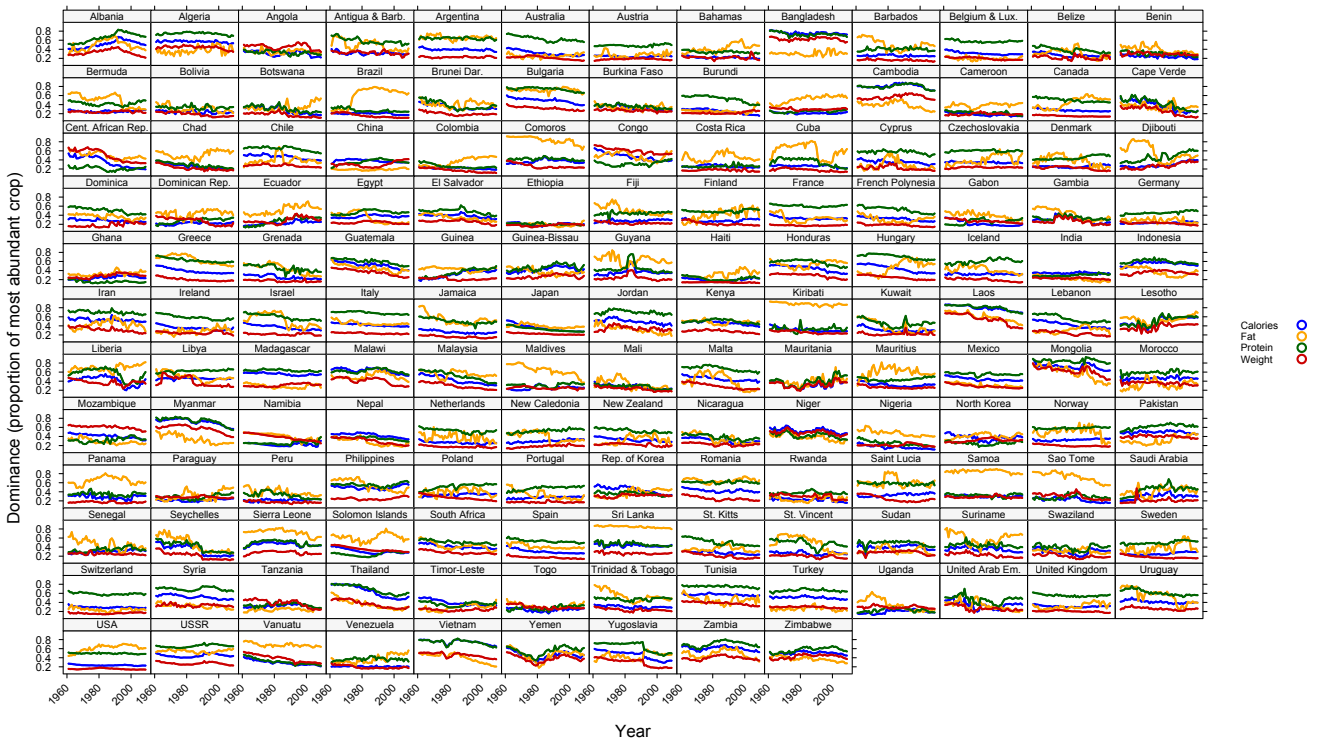

Fig. S7. Change in the proportion of the most abundant crop commodity in national food supplies, per country, for calories, protein, fat, and weight, 1961–2009.

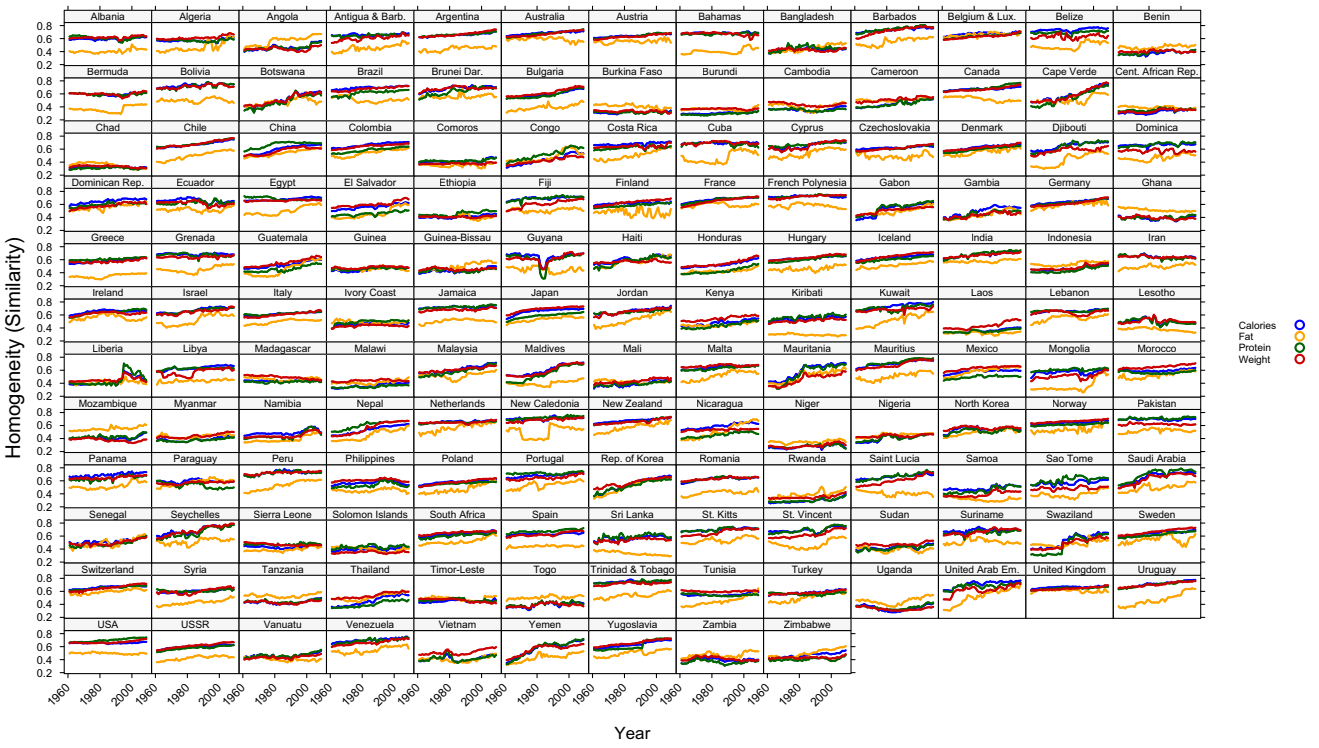

Fig. S8. Per-country contribution to global homogenization, as measured by the change in similarity of the national food supply crop commodity composition in comparison with the global mean composition (centroid), for calories, protein, fat, and weight, 1961–2009.

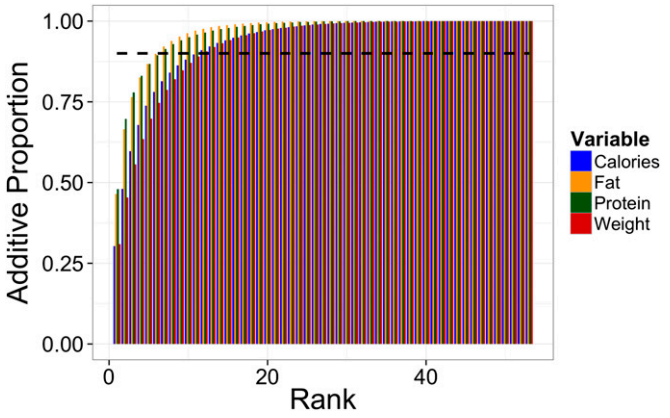

Fig. S9. Global average additive contribution by ranked abundance of crop plant and animal commodities to calories, protein, fat, and weight in food supply, 2009. The dotted line shown at 90% displays the threshold used to determine the number of crops considered important to each national food supply in 2009 (Table S1), which is inclusive of major contributors to supply and exclusive of commodities contributing very small quantities (1).

Table S1. Relative importance of crop commodities worldwide, as measured by the number of countries in which each specific crop commodity counted within the top 90% of national per capita food supply for that variable (total countries = 152) in the most current year (2009)

Table S1

For any particular variable (e.g., calories) for each country, the contributing crop commodities were listed in descending order of importance until 90% of food supply was reached. These commodities were then counted as significant to the food supply of the country, and the total number of countries finding each crop significant was summed to derive a quantitative measure of importance worldwide. Commodities are listed in order of importance defined as sum of country count across the four variables, within cereals; starchy roots; sugar crops; pulses; oil crops and nuts; fruits and vegetables; spices and stimulants; and alcoholic beverages categories. Taxonomy followed The Plant List (13).

1. Prescott-Allen R, Prescott-Allen C (1990) How many plants feed the world? *Conserv Biol* 4(4):365–374.
2. Linares OF (2002) African rice (*Oryza glaberrima*): History and future potential. *Proc Natl Acad Sci USA* 99(25):16360–16365.
3. Rachie KO (1975) *The millets: Importance, utilization and outlook. Research report* (Intl Crops Res Inst Semi-Arid Trop, Hyderabad, India).
4. Zeid M, Echenique V, Diaz M, Pessino S, Sorrells M (2011) Eragrostis. *Wild crop relatives: Genomic and breeding resources, millets and grasses*, ed Kole C (Springer, Berlin), Chap 8.
5. FAO (2013) FAOSTAT, Methods and standards, classification, food supply, crops primary equivalent. Available at http://faostat3.fao.org/faostat-gateway/go/to/mes/classifications/*/E. Accessed June 15, 2013.
6. Dendy DAV, Dobraszczyk BJ (2001) *Cereals and cereal products: Chemistry and technology* (Aspen, Gaithersburg, TN).
7. FAO (2010) FAOSTAT, Production. Available at http://faostat3.fao.org. Accessed June 15, 2013.
8. International Institute for Tropical Agriculture (2009) Yam. Available at www.iita.org/yam.
9. Belay G (2006) *Cereals and Pulses* (PROTA Found, Wageningen, Netherlands).
10. USDA, ARS, National Genetic Resources Program (2011) Germplasm Resources Information Network. Available at www.ars-grin.gov/cgi-bin/npgs/html/index.pl.
11. Winkler AJ, Cook JA, Kliewer WM, Lider LA (1974) *General viticulture* (Univ of California Press, Berkeley).
12. FAO (1884) *Food balance sheets 1979–1981 average* (Food Agric Org United Nations, Rome).
13. The Plant List (2010) Version 1. Available at www.theplantlist.org/.
14. Davis AP, Gole TW, Baena S, Moat J (2012) The impact of climate change on indigenous Arabica coffee (*Coffea arabica*): Predicting future trends and identifying priorities. *PLoS ONE* 7(11):e47981.
15. FAO (2013) FAOSTAT, Methods and standards, classification, food balance sheets. Available at http://faostat3.fao.org/faostat-gateway/go/to/mes/classifications/*/E. Accessed June 15, 2013.