

Table S1. Summary of empirical studies on adoption of sustainable farming practices in the EU.

Author(s) & Year Published	Area	Technology/ Measure	Sample Size	Model	Farm Type
<i>Organic farming</i>					
Läpple & Van Rensburg (2011)	Ireland	Organic farming	546	Multinom logit	Various types (drystock)
Genius et al (2006)	Greece	Organic farming	237	Ordered probit	Multi-crop
Mzoughi (2011)	France	Organic farming	243	Multinom logit	Fruit & vegetables
Kallas et al.(2010)	Spain	Organic farming	120	Duration analysis	Vineyard
Burton et al. (2003)	UK	Organic horticulture	237	Duration analysis	Horticulture
Chatzimichael et al. (2014)	Greece & Germany	Organic farming	282	Probit	Horticulture, crops
Läpple & Kelley (2015)	Ireland	Organic farming	597	Bayesian probit	Various types (drystock)
Koesling et al. (2008)	Norway	Organic farming	1018	Multinomial logit	Dairy and crop
Tiffin and Balcombe (2011)	UK	Organic farming	237	Bayesian probit	Horticulture
Läpple & Kelley (2013)	Ireland	Organic farming	193	Probit	Drystock
Kaufmann et al. (2009)	Estonia & Latvia	Organic farming	4917	Agent-based modelling	Various
<i>Manure treatment and manure-based fertilizers</i>					
Gebrezgabher et al. (2015)	Netherlands	Manure separation	111	SUR/Ordered probit	Dairy
Zemo and Termansen (2018)	Denmark	Collective biogas investment	461	Mixed logit	Cattle and pigs
Pampuro et al. (2018)	Italy	Pelletized compost	82	No model	Various non-livestock
Hou et al. (2016)	EU ¹	Manure treatment	96	No model	Pigs, poultry, cattle
Rentala et al. (2017)	Finland	Technological, service & business model	139	Linear regression	Horse farms

Case et al. (2017)	Denmark	Organic fertilizers	452	Probit	Arable, horticulture, & livestock
Tur-Cardona et al. (2018)	EU ²	Bio-based fertilizers	555	Random parameter logit / Latent class	Crop, livestock, horticulture
<i>Soil & water conservation</i>					
Buckley et al. (2012)	Ireland	Riparian buffer zone	247	Gen tobit/Probit	Dairy, arable, livestock
Giovanopoulou et al. (2011)	Greece	Nitrogen reduction	125	Probit/OLS	Not specified
Gachango et al. (2015)	Denmark	Water conservation	267	Ordered probit	Crop, cattle & pigs
Rodriguez-Entrena & Arriaza (2013)	Spain	Soil conservation	232	Multivar probit	Olive growers
Carmona et al. (2015)	Spain	Soil conservation	30	No model	Wheat and sunflower

Notes: This study covered Denmark, Italy, Netherlands, and Spain; This study covered Belgium, Denmark, France, Netherlands, Germany, and Hungary

Table S2. Impact of adoption factors across various technologies.

Factors	Organic Farming		Manure Treatment/Fertilization		Conservation Farming	
Farmer and household characteristics	Läpple & van Rensburg (2011): Genius et al. (2006): Mzoughi (2011): Kallas et al. (2010): Burton et al. (2003): Chatzimichael et al. (2014): Läpple & Kelley (2015): Koesling et al. (2008): Tiffin & Balcombe (2011):	age (-) , edu, hsize age (-) , edu (+) age, sex, edu (+) age (-) age, female (+) , edu (-) , hsize age (+to a level) , female (-) , edu (+to a level) age (-) , edu, hsize edu (+) , agedu (+) , mstatus age, female (+) , edu, hsize(+)	Gebrezgabher et al. (2015): Case et al. (2017):	age (-) , edu, successor age (+)	Giovanopoulou et al. (2011): Gachango et al. (2015): Rodriguez-Entrena (2013):	age (-) , edu (+) age male, agedu (+) , age, descendants(+) , edu
Farm structure and financial state	Läpple & van Rensburg (2011): Genious et al. (2006):	fsize (-) , off inc, ldensity (-) fsize, off inc, aridity (-) , specialty (-) , dist to urban area	Gebrezgabher et al. (2015): Case et al. (2017):	fsize, fewer animals (-) factivity (livestock +), fsize, farming system (organic +)	Buckley et al. (2012): Gachango et al. (2015): Rodriguez-Entrena (2013):	gross margin (-) farm size (+) , mid-steep slope (+) , production type

	belief CF will sustain				
	Tiffin & Balcombe (2011): Läpple and Kelley (2013):	productivity (-), belief OF can satisfy society alone (+) “econ beliefs” (+)			
Sources of information	Läpple & van Rensburg (2011): Genious et al. (2006): Kallas et al. (2010): Burton et al. (2003): Chatzimichael et al. (2014): Läpple and Kelley (2015): Tiffin & Balcombe (2011): Kaufmann et al. (2019):	info media (-)/advisory, knows other farmers (+) info gathering (+) ag authority as info source (+) buyers (-)/press/farmers (+)/advisory service (-) as info source, env membership, prof membership info variables: homophilic (+) & successful (+) adopters info media(-)/advisory, knows other farmers (+) buyers (-), press(-), farmers (+), advisory service (-) as info source, env membership, prof membership (-) advisory service (+)	Gebrezgabher et al. (2015): Zemo & Termansen (2018):	knows technology startup consultancy (+)	Giovanopoulou et al. (2011): Gachango et al. (2015): farmer reception of info on ecological status, farmers’ reception of info on N and P reduction.
Attributes of technology	Kallas et al. (2010):	price of grape (+)	Hou et al. (2018): Tur-Cardona (2018): Gebrezgabher et al. (2015): Zemo & Termansen (2018):	fertilizer price price reduction (+), N uncertainty (-), solid form (+), fast nutrient release (+) attributes of manure separation (+) number of partners (+ to a level), partnership cancellation (+)	Rodriguez-Entrena (2013): Carmona et al. (2015) number of varieties, plantation age, plantation density, fertilization method (+). weed presence, pest incidence, lack of zero-till drill technology.

Institutional environment (laws, regulations, incentives)	Chatzimichael et al. (2014): Kaufmann et al. (2009): Genious et al. (2006): Kallas et al. (2010):	conversion subsidies (+) subsidy (+) subsidies received (+) difficulty to get loans (+)	Zemo & Termansen (2018): Hou et al. (2018):	subsidy (+) pressure from policies/regulations	Giovanopoulou et al. (2011): Subsidies.
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Note: all adoption factors in bold are significant, with the direction of their effects reported in parentheses. Some common abbreviations read as follows: edu = education, agedu = agricultural education, hsize = household size, mstatus = marital status, ldensity = livestock density, off inc = off-farm income, fsize = farm size, OF = organic farming, CF = conventional farming, env att = environmental attitude, risk att = risk attitude, profit orient = profit orientation.