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## Going global to local: achieving agri-food sustainability from a spatially explicit input-output analysis perspective

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### Citation

Sun, Z. (2021, June 1). *Going global to local: achieving agri-food sustainability from a spatially explicit input-output analysis perspective*. Retrieved from <https://hdl.handle.net/1887/3180744>

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Cover Page



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**Author:** Sun, Z.

**Title:** Going global to local: achieving agri-food sustainability from a spatially explicit input-output analysis perspective

**Issue Date:** 2021-06-01

# **Going global to local: achieving agri-food sustainability from a spatially explicit input-output analysis perspective**

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PhD Thesis Leiden University, The Netherlands

Cover design:

Cai Huang

Cover icons:

[www.nounproject.com](http://www.nounproject.com)

Printing:

[www.proefschriften.nl](http://www.proefschriften.nl)

ISBN:

978-90-5191-999-8

# **Going global to local: achieving agri-food sustainability from a spatially explicit input-output analysis perspective**

Proefschrift

ter verkrijging van

de graad van doctor aan de Universiteit Leiden,

op gezag van rector magnificus prof.dr.ir. H. Bijl,

volgens besluit van het college voor promoties

te verdedigen op dinsdag 1 juni 2021

klokke 10.00 uur

door

Zhongxiao Sun

geboren te Zaozhuang city, Shandong province, China

in 1991

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## Abbreviations

AGBC	Above Ground Biomass Carbon
AIDA	Italian company information and business intelligence
AIM/CGE	Asia-Pacific Integrated Model/Computable General Equilibrium
AMNE	Analytical Activity of Multinational Enterprises
BGBC	Below Ground Biomass Carbon
CDR	Carbon Dioxide Removal
CES	Consumer Expenditure Surveys
CFs	Characterization Factors
CO <sub>2</sub> e	Carbon Dioxide equivalent
COICOP	Classification of Individual Consumption by Purpose
cSAR	countryside Species–Area Relationship
DEHM	Danish Eulerian Hemispheric Model
EDGAR	European Commission's in-house Emissions Database for Global Atmospheric Research
EEIO	Environmentally Extended Input-Output
ESA CCI-LC	European Space Agency Climate Change Initiative-Land Cover
FABIO	Food and Agriculture Biomass Input-Output
FAO	Food and Agriculture Organization
FAOSTAT	Food and Agriculture Organization Corporate Statistical Database
GCAD	Global Cropland Area Database
GCAM	Global Change Analysis Model
GEOS	Goddard Earth Observing System
GGCMI	Global Gridded Crop Model Intercomparison
GHG	Greenhouse Gas
GISMO	Global Integrated Sustainability MOdel
GLOBIO	GLObal BIOdiversity model for policy support
GLOFRIS	Global Flood Risk with IMAGE Scenarios
GMRIO	Global Multi-Regional Input-Output
GRIP	Global Roads Inventory Project
GTAP	Global Trade Analysis Project
HYDE	History Database of the Global Environment
IAMs	Integrated Assessment Models
ICIO	Inter-Country Input-Output
IELab	Industrial Ecology virtual Laboratory
IFA	International Fertilizer Association
IMAGE	Integrated Model to Assess the Global Environment
IoT	Internet of Things
IPBES	Intergovernmental Science–Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change

ISA	Integrated Sustainability Analysis
KBAs	Key Biodiversity Areas
LPJmL	Lund-Potsdam-Jena managed Land
LQs	Location Quotients
LULCC	Land Use Land Cover Change
MESSAGE	Model for Energy Supply System Alternatives and their General Environmental Impacts
Mha	Million Hectares
MODIS	Moderate Resolution Imaging Spectroradiometer
MRIO	Multi-Regional Input-Output
NRMSD	Normalized Root Mean Square Deviation
OECD	Organisation for Economic Co-operation and Development
PNV	Potential Natural Vegetation
POPs	Persistent Organic Pollutants
PREDICTS	Projecting Responses of Ecological Diversity In Changing Terrestrial Systems
REIM	Regional Econometric Input–output Model
REMIND	REgional Model of Investment and Development
SABI	Survey data from enterprises
SAR	Species–Area Relationship
SCA	Smeared Concentration Approximation
SDGs	Sustainable Development Goals
SIO	Spatially explicit Input-Output
SMRIO	Spatially explicit Multi-Regional Input-Output
SOC	Soil Organic Carbon
SPAM	Spatial Production Allocation Model
TEC	Trade by Enterprise Characteristics
UNEP	United Nations Environmental Program
WIOD	World Input-Output Database
ZCTAs	Zip Code Tabulation Areas