November 2026

Pamela Torola

Address: Department of Economics
Yale University
New Haven, CT 06520-8268

Telephone: (906) 369-5522

E-mail: pamela.torola@yale.edu

Web page: https://pamtorola.github.io

Citizenship: United States

Fields of Concentration:
Primary Field: Development Economics
Secondary Field: International Trade

Qualifying Examinations Completed:
2023, Development; International Trade

Dissertation Title: *From Subsistence to Specialization: The Transformation of Indian Agriculture*

Committee:
Professor Kevin Donovan (Co-Chair)
Professor Michael Peters (Co-Chair)
Professor Costas Arkolakis
Professor Mark Rosenzweig

Education:
Ph.D., Economics, Yale University, 2027 (expected)
M.Phil., Economics, Yale University, 2024
M.A., Economics, Yale University, 2024
B.S., Ecology and Evolutionary Biology, Yale University, 2018. *Summa cum laude*

Fellowships, Honors and Awards:
National Science Foundation Graduate Research Fellowship, 2021–2026
Sylff Fellowship (Ryoichi Sasakawa Young Leaders Fellowship Fund), Economic Growth Center, Yale University, 2024–2025
Phi Beta Kappa, Yale University, 2018
Belknap Prize (Senior Thesis), Yale University, 2018
Prix Montaigne (French), Yale University, 2018

Research Grants:
Cowles Foundation Labor and Public Economics Program, Yale University, data-acquisition funding for "For-Profit Colleges and the Sources of Undermatching" (with Serena Goldberg and Ryan Haygood), $43,500, 2023–2028

Teaching Experience:

Spring 2025, Teaching Assistant to Prof. John Eric Humphries, ECON 117: Introduction to Data Analysis and Econometrics (U), Yale College
Fall 2023, Teaching Assistant to Prof. John Eric Humphries, ECON 117: Introduction to Data Analysis and Econometrics (U), Yale College

Research Experience:

Research Assistant to Profs. Gaurav Chiplunkar, Pinelopi Goldberg, Michael Peters, and Fabrizio Zilibotti, Yale University, 2023
Field Research Assistant (survey piloting and enumerator training), *Kizazi Kijacho* early-childhood development RCT (Stockholm University, NHH, University of Chile, and Yale), Tanzania, 2022
Pre-Doctoral Fellow to Prof. William Nordhaus, Department of Economics, Yale University, 2019–2021
Research Assistant, Medical Practice Evaluation Center, Massachusetts General Hospital / Harvard Medical School, 2018–2019

Publications:

"Estimating the Effect of Maternal Viral Load on Perinatal and Postnatal HIV Transmission: A Systematic Review and Meta-Analysis" (2025), with C.M. Dugdale, O. Ufio, J. Giardina, F. Shebl, E. Coskun, E. Pletner, D. Cosar, R. Shapiro, M. Kim, L. Mofenson, and A.L. Ciaranello, *The Lancet*, 406(10501), 349–357.

"Measuring the US Employment Situation Using Online Panels: The Yale Labor Survey" (2021), with Christopher L. Foote, Tyler Hounshell, William D. Nordhaus, and Douglas Rivers, *Journal of Economic and Social Measurement*, 46(1–2), 1–22.

"Novel Microsimulation Model of Tobacco Use Behaviours and Outcomes: Calibration and Validation in a US Population" (2020), with K.P. Reddy, A.J. Bulteel, D.E. Levy, E.P. Hyle, T. Hou, B. Osher, L. Yu, F.M. Shebl, A.D. Paltiel, and K.A. Freedberg, *BMJ Open*, 10(5), e032579.

Working Papers:

"From Subsistence to Specialization: The Transformation of Indian Agriculture" (November 2026), *Job Market Paper*

"From Rural Fields to Urban Kitchens: Structural Change and the Decline of Women's Work in India", with Michael Peters, Lindsey Uniat, and Fabrizio Zilibotti (December 2024), EGC Discussion Paper No. 1111, Yale University

"The Gendered Employment Impacts of Smartphones: Evidence from Mexico", with Gaurav Chiplunkar and Pinelopi Goldberg (December 2025)

Work In Progress:

"Inheritance, Farm Size, and Agricultural Productivity", with Meet Mehta

"For-Profit Colleges and the Sources of Undermatching", with Serena Goldberg and Ryan Haygood

Seminar and Conference Presentations:

Development Economics PhD Retreat (joint Yale–Harvard), Harvard Kennedy School, January 2026

Departmental Service:

Co-organizer, Development Breakfast, 2023-2024
Co-organizer, Development Lunch Student Presentations, 2023-2024
Co-organizer, Economics Graduate Student Social Events, 2023-2024
Co-coordinator, Yale Economics Admitted Student Outreach, 2024

Languages:

English (native), French (professional proficiency), Spanish (professional proficiency), Swahili (basic)

References:

Prof. Kevin Donovan
Yale University
School of Management
New Haven, CT 06511
165 Whitney Avenue
kevin.donovan@yale.edu

Prof. Michael Peters
Yale University
Department of Economics
New Haven, CT 06520
PO Box 208268
m.peters@yale.edu

Prof. Costas Arkolakis
Yale University
Department of Economics
New Haven, CT 06520
PO Box 208268
costas.arkolakis@yale.edu

Prof. Mark Rosenzweig
Yale University
Department of Economics
New Haven, CT 06520
PO Box 208268
mark.rosenzweig@yale.edu

Dissertation Abstract

I am a development economist studying how rural market frictions and household-level constraints shape structural transformation and aggregate productivity.

From Subsistence to Specialization: The Transformation of Indian Agriculture [Job Market Paper]

Structural change involves a transformation of production within agriculture, as farms transition from subsistence — producing for the household's own consumption — to market-oriented production. I argue that two forces can lead farmers to grow subsistence staples rather than the crops their land is best suited to: caloric needs and fixed costs of selling. By relaxing these constraints, economic growth

causes farms to enter output markets and produce according to comparative advantage, raising agricultural productivity. I provide evidence for this link between subsistence, specialization, and productivity and quantify how farms' transition into output markets has contributed to agricultural productivity growth in India between 1971 and 2006.

I establish three empirical facts, leveraging a panel I construct by harmonizing data on households in about 240 Indian villages from 1971 to 2006. First, in 1971, only about a third of small farms sell any output, despite universal participation in food buying among farms of all sizes. Second, I find that smaller farms are less likely to sell, allocate more land to staples, and choose lower-revenue crops. Third, when a regulated wholesale market (mandi) arrives nearby, small farms increase selling and shift farmland toward locally higher-return crops relative to large farms in the same village.

I quantify how the transition from subsistence to specialization shapes agricultural productivity growth using an agricultural trade model with caloric needs and fixed costs of selling. The fixed cost of selling rises with distance; I discipline this relationship using the empirical relationship between mandi arrival and selling. I calibrate the model to India in 1971 and 2006. I find that the expansion of mandi locations accounts for two fifths of the increase in the share of farms selling. Agricultural TFP growth and falling interstate trade costs drove most of the remaining increase in farms' output market participation, while shrinking farm sizes and rising wages worked in the opposite direction. Together, economic development and the expansion of wholesale markets induced farms to enter output markets, accounting for 4% of agricultural output-per-hectare growth between 1971 and 2006, and over 10% of growth among farms cultivating less than two hectares. These findings highlight how economic development and improved market access raise agricultural productivity by enabling farms to move from subsistence production toward specialization according to comparative advantage.

From Rural Fields to Urban Kitchens: Structural Change and the Decline of Women's Work in India, with Michael Peters, Lindsey Uniat, and Fabrizio Zilibotti

India's GDP per capita grew threefold between 1987 and 2019, coinciding with rapid urbanization. During this period, female labor force participation (FLFP) declined substantially. Consistent with this observation, we document a pronounced urban-rural participation gap, where FLFP is higher in poorer, rural labor markets. Using time-use data, we show that this gap is primarily driven by the extensive margin of part-time work: in rural districts, women often work part-time in agriculture and informal family businesses, while urban women more often exit the labor market entirely to focus on home production. We propose and estimate a model of household labor supply that aligns with these trends. The main drivers of the urban-rural participation gap are higher spousal incomes in cities, which reduce the marginal utility of female labor, and labor market distortions that depress women's urban wages below their marginal product. Counterfactual simulations show that economic growth is unlikely to provide a sharp reversal of this trend in future decades unless it is accompanied by changes in gender norms and labor market institutions.

The Gendered Employment Impacts of Smartphones: Evidence from Mexico, with Gaurav Chiplunkar and Pinelopi Goldberg

We examine the gendered employment effects of 3G mobile internet expansion in Mexico. Combining nationally representative labor force surveys with high-resolution measures of 3G rollout over a decade, we show that improved mobile connectivity reshapes labor market outcomes in

different ways for men and women. For men, 3G availability increases full-time formal employment, shifts workers out of agriculture and into manufacturing, and raises hourly wages—patterns consistent with upward occupational mobility. For women, 3G access substantially increases labor force participation, with growth in unpaid and self-employed agricultural work, part-time service employment, and transitions into full-time formal wage jobs. Women's total hours and earnings rise, but conditional on paid work, their hourly wages do not. Evidence on mechanisms indicates that mobile internet reduces information and communication frictions and enables more frequent—particularly home-based—internet use, especially among women. Taken together, the results suggest that while mobile internet expands access to work, it also reinforces disparities in job quality, underscoring the need for complementary policies to ensure that digital infrastructure yields more inclusive labor market gains.