# Land ownership, its distribution, market access : the case of Turkey… and gender

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# outline

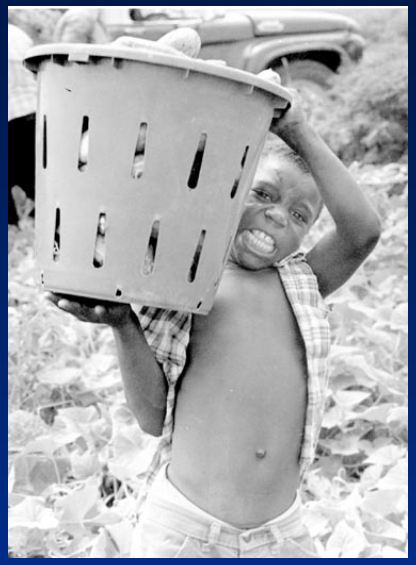
- Motivation
- Why Agriculture?
- Overall Framework  of the research and the central question
- Turkey- Agriculture brief overview
- Is land ownership inequality bad for your mama, and your papa…and your country?
  - Turkey as a case study
- What is gender got to do with it?
  - Efficiency
  - **Empowerment**
  - Environment

# Women, children and agriculture

**But in the developing world it is…**

- **Women constitute 80 % of economically active population in agriculture** in developing countries.
- There are **450 million women and men** working as agricultural laborers worldwide **who do not own or rent the land** on which they work, or the tools and equipment they use. These workers comprise over 40 percent of the world's agricultural labor force and, along with their families, are part of the core rural poor in many countries

- **Nearly 70% of child labor occurs in agriculture, fishing, hunting, and forestry. Children are harvesting:**
- Bananas in Ecuador
- Cotton in Egypt & India
- Flowers in Colombia
- Oranges in Brazil
- Cocoa in the Ivory Coast
- Tea in Argentina & Bangladesh
- Fruits & Vegetables in the U.S.
- 16% of all migrant workers are women, and 66% migrate with their children)



# Motivation

- Personal: 1000 cousins was not a lie…
- Neoliberal policies and
  - ARIP

# MOTIVATION

- Implementation of ARIP ( Agricultural Reform Implementation Program)
- Markets as decision makers of production and distribution within the agricultural sector

# Main Question

- To question the ability of markets in distributing economic opportunities within the sector
- Land ownership, its distribution and how it is impacting land, labor and credit markets

# Broader Framework: why land ownership, and its distribution

- Orthodox
  - Pure neoclassical ( Schultz 1964)
  - Transaction cost theories of development

- Heterodox
  - **Structuralists- structures matter**

# Structuralist approach….land ownership and its distribution

- land ownership and its distribution is a major structure that the rest of the economy sits on….given this..let me start my song about Turkey….
- Agarwal: Analytical Descriptive Method (1997)

# IMPORTANCE OF AGRICULTURE FOR TURKEY

- Share of agriculture in GDP is 11.5 % (2007)
- 30 % of the labor force in agriculture in (2006)
- 40% of Turks live in rural areas, most of them agrarian households.
- Fastest growth in poverty in agricultural sector with 41 % living under the poverty line ( 2005).


BLACK SEA
Bulgaria
Ankara
Greece
TURKEY
Iran
Syria
Iraq
MEDITERRANEAN SEA
0 mi
500
0 km
1000

# Agrarian context- Turkey

- **27% of all arable land, and majority of water resources are in Turkey in the MENA region**
- **Turkey's surface area is 77.9 million hectares with 97% in Asia.**
- **26.4 million is agricultural land excluding pastures (FAO 2004).**
- **Ranks in the top five for: chickpeas, chilies and peppers, cotton, cucumber, eggplants, green beans, lentils, nuts (pistachios, chestnuts, and walnuts), onion, sugarbeet, tomatoes, watermelons and melons, stone fruit, olives, and sheep's milk.**
- **Is the world's largest producer of apricots, hazelnuts and figs [Longworth (2005)].**

# Land Ownership Inequality

- What does the picture look like in Turkey
- Based on a 2002 WB Survey covering 5003 rural households:
  - Clustered sampling to ensure the selection of agrarian households, but not only agrarian hhs
  - Agrarian household: a hh that earns more than 50% of their hh income from agricultural activities….

# How does land ownership inequality hurt your mama

- Thru which mechanisms…
- Choice of agrarian production
  - Different forms of tenure
  - Effect on credit
- Efficiency
  - Agricultural output outcomes based on farm size
- Environment
  - sustainability
- Empowerment
  - Voices of the poorest of the poor- women in agriculture
-

## MARKETPARTICIPATION AND LAND INEQUALITY

| Regions | All Agr. markets (comb.) | Land own. Gini | Land holding Gini | Per capita land owned ( in decares) | Per capita land hold( in decares) |
|---|---|---|---|---|---|
| **Mediterr.** | **41%** | **0.68** | **0.64** | **11** | **16** |
| **Aegean** | **49%** | **0.71** | **0.61** | **14** | **18** |
| **SE Anatolia** | **41%** | **0.64** | **0.58** | **13** | **16** |
| **Marmara** | 39% | 0.55 | 0.54 | 16 | 21 |
| **Central An.** | 42% | 0.58 | 0.51 | 23 | 34 |
| **E. Anatolia** | 28% | 0.59 | 0.55 | 16 | 19 |
| **Black Sea** | 22% | 0.64 | 0.59 | **9** | **11** |
| **Turkey** | 37% | 0.65 | 0.6 | 14 | 19 |

# CREDIT ACCESS and LAND ACCESS PATTERNS

| | land ownership ( in decares) | | land holding ( in decares) | |
|---|---|---|---|---|
| | no credit | yes credit | no credit | yes credit |
| **Mediterr.** | 11 | 13 | 16 | 23 |
| **Aegean** | 13 | 19 | 16 | 23 |
| **SE Anatolia** | 13 | 10 | 16 | 14 |
| **Marmara** | 15 | 19 | 20 | 27 |
| **Central An.** | 22 | 34 | 32 | 60 |
| **E. Anatolia** | 16 | 36 | 18 | 69 |
| **Black Sea** | 9 | 5 | 12 | 8 |
| **Turkey** | 14 | 17 | 19 | 24 |

# Forms of Agrarian Production

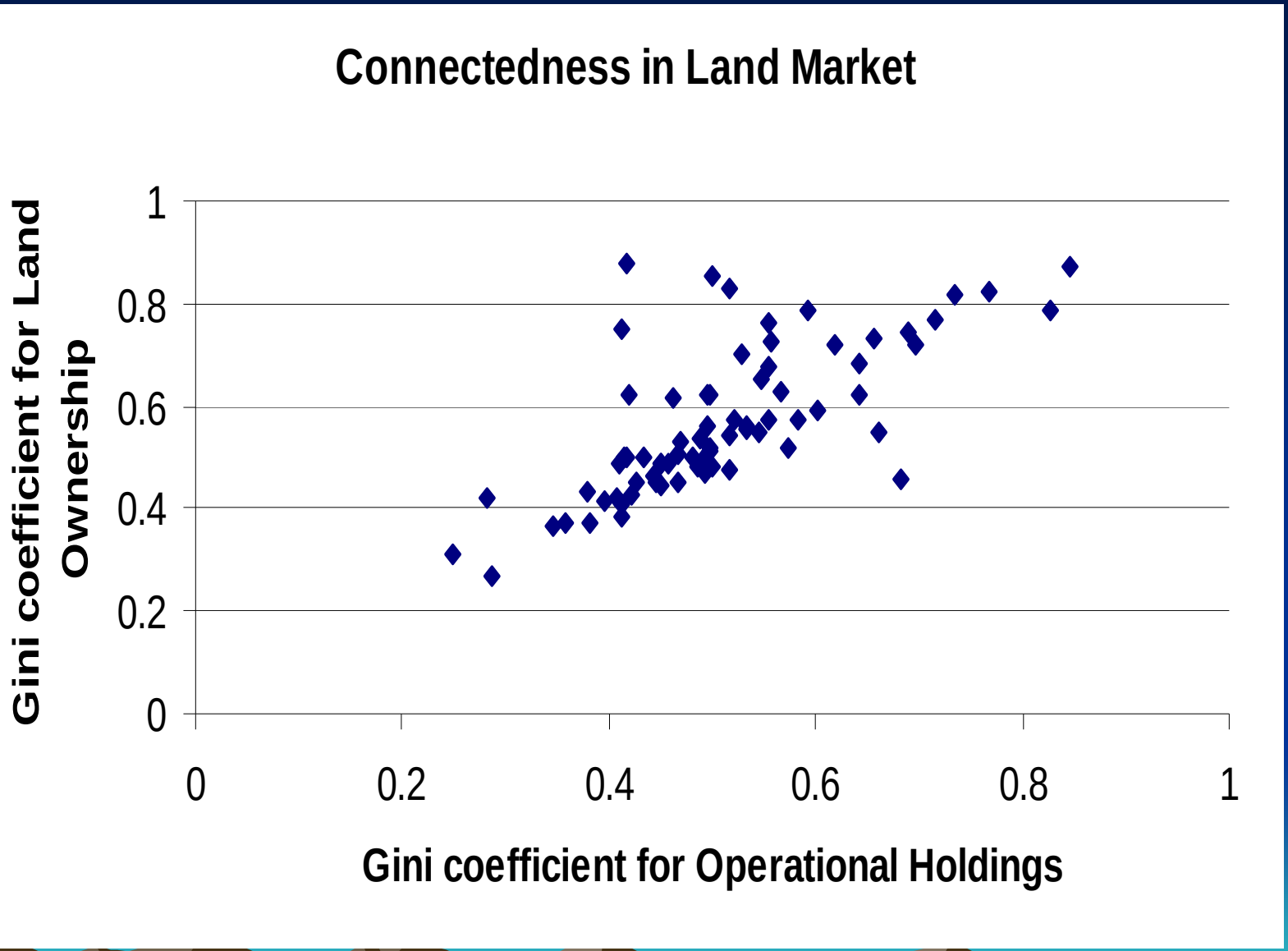
- Sharecropping
  - Marshallian disincentive
- Fixed Rent Tenancy
  - Land over utilization
- Wage Labor
  - supervision
- Owner cultivation
  - Primitive accumulation

## CREDIT per CAPITA, 2002 ( in YTL)

| | Labor Market | | Share Scropping | | Fixed Rent | | |
|---|---|---|---|---|---|---|---|
| **Regions** | **No** | **Yes** | **No** | **Yes** | **No** | **Yes** | **Trky** |
| **Mediter.** | 62 | 57 | 63 | 60 | 41 | 120 | **60** |
| **Aegean** | 121 | 64 | 179 | 97 | 89 | 135 | **104** |
| **SE Anatolia** | 12 | 9 | 7 | 12 | 12 | 7 | **11** |
| **Marmara** | 101 | 84 | 58 | 100 | 81 | 136 | **97** |
| **Central An.** | 77 | 77 | 120 | 69 | 72 | 93 | **77** |
| **E. Anatolia** | 29 | 21 | 81 | 21 | 20 | 56 | **27** |
| **Black Sea** | 41 | 38 | 22 | 41 | 35 | 87 | **40** |
| **TURKEY** | **70** | **52** | **84** | **63** | **53** | **107** | **65** |

# LAND OWNERSHIP/ HOLDING DISTRIBUTION

| | Land Ownership Gini | Land Holding Gini |
|---|---|---|
| **Mediterr.** | **0.68** | **0.64** |
| **Aegean** | **0.71** | **0.61** |
| **SE Anatolia** | **0.64** | **0.58** |
| **Marmara** | 0.55 | 0.54 |
| **Central An.** | 0.58 | 0.51 |
| **E. Anatolia** | 0.59 | 0.55 |
| **Black Sea** | 0.64 | 0.59 |
| **Turkey** | **0.65** | **0.60** |


Connectedness in Land Market
Gini coefficient for Land Ownership
1
0.8
0.6
0.4
0.2
0
0
0.2
0.4
0.6
0.8
1
Gini coefficient for Operational Holdings

# FARM PRODUCTIVITY per DECARE in 2002 ( in YTL)

| | FARM TYPE | | | | | |
|---|---|---|---|---|---|---|
| Region | Small 1-19.99 | Medium 20-199.99 | Large 200-499.99 | Very Large 500+ | AVG | N |
| Mediterr. | 805 | 225 | 168 | 108 | 357 | 633 |
| Aegean | 467 | 237 | 113 | 35 | 294 | 852 |
| SE Anatolia | 1,223 | 148 | 62 | 55 | 259 | 459 |
| Marmara | 410 | 294 | 376 | 178 | 319 | 758 |
| Central An. | 558 | 120 | 60 | 45 | 121 | 836 |
| E. Anatolia | 215 | 62 | 23 | 26 | 76 | 308 |
| Black Sea | 512 | 155 | 98 | 2 | 278 | 1,157 |
| **Turkey** | **556** | **190** | **110** | **59** | **257** | **5,003** |

# LABOR INPUT per DECARE in 2002 ( in Man-days)

| | FARM TYPE | | | | | |
|---|---|---|---|---|---|---|
| Region | Small 1-19.99 | Medium 20-199.99 | Large 200-499.99 | Very Large 500+ | AVG | N |
| Meditterr. | 23.5 | 3.2 | 1.1 | 0.8 | 7.8 | 633 |
| Aegean | 22.8 | 6.3 | 1.3 | 0.3 | 10.5 | 852 |
| SE Anatolia | 8.6 | 2.2 | 0.6 | 0.4 | 2.7 | 459 |
| Marmara | 14 | 3.1 | 0.8 | 0.9 | 4.8 | 758 |
| Central An. | 12.3 | 1.7 | 0.5 | 0.3 | 1.8 | 836 |
| E. Anatolia | 8.4 | 2 | 0.4 | 0.3 | 2.6 | 308 |
| Black Sea | 17 | 3.8 | 0.6 | 0.1 | 8.4 | 1,157 |
| Turkey | 17.8 | 3.5 | 0.7 | 0.4 | 6.2 | 5,003 |

# Summary…

- Smallest farmer is **9 times more** productive than the largest one (Trky avg.)
  - In SE Anatolia it is 22 times more,
  - The difference is more pronounced in areas with higher land ownership inequality
- Smallest farmers work 45 days more per decare than the largest ones (Trky avg)
  - In Black Sea it is 170 days more

# Agrarian Labor markets: looking at the agricultural household

- Labor is the most common factor rural poor have
- Hypothesis of Separability:
- Given the household is a utility maximizer: In perfect markets, a farmer household should be indifferent between buying labor from the market or from itself

# Labor markets and land ownership inequality…

- Given transaction costs, gender norms, unemployment
- Labor allocation  between on and off-farm employment is to be determined by the shadow wages and not the market wages

# Methodology: Calculation of shadow wage

- elasticity of family labor input from a production function regression, take the coefficient and come up with the shadow wage rate
- $MPLi = \beta \times Yi/Li$
- Yi is the estimated output for ith household Li is the total amount of family labor input per household.

# Two main categories in the literature

- Neoclassical ( Roseinzweig, 1980)
- Structural models (AHMs)
  - Micro-structuralists ( de Janvry et al. 1991, Sadoulet et al. 1996, Bedi and Tunali 2004)
  - Macro-structuralists ( Mduma and Wobst, 2005;  Deere, 1982; Bardhan 1979; Griffin et al. 2002)

# Wage diversion: The band

- Band= W*-W
- W*= MPL
- W= market wage rate
- Upper limit: effective wages paid ( inflated by supervision costs)
- Lower limit: effective wages earned (deflated by transportation, unemployment)
- Buy L: if wage paid is less than the shadow wage ( MPL)
- Sell L: if wage earned is more than the MPL

# Micro structuralist- transaction costs development theories…

- The main point in the work of micro-structuralists is the importance of household specifics in how they integrate to market, in other words, in overcoming market imperfections
  - Logic: if some households can do it given the same market, it must be a household specific phenomena.
  - Flaw: never question the mechanism thru which inequalities are enhanced and retained

# Policy implication

- Despite recognizing market imperfection, specific focus on the household specific characters have important policy implications:
- Policies geared targeting households, and not the macro environment.
- It is the household to be fixed, education, etc, and not the market.

# Macro-structuralist

- Mduma and Wobst (2005)- in developing countries focusing on specific households policy would be fruitless due to limited government capacities

# Macro-structuralist

- Studies
  - Mduma and Wobst (2005) land ownership inequality, locality, safe water availability positively associated. Credit access negatively associated.
  - Mishra and Goodwin (1997) government subsidies help diversify risk – lower participation
  - Swinnen et al. (2005) privatization- increase participation by shedding unproductive labor from agriculture, and by removing barriers to market entry and exit

# Macro structuralist

- Griffin et al. (2002) monopsony in land markets results limited employment opportunities
  - Institutional labor control mechanisms

# Macro-structuralists

- Policy implication is to fix the markets, their underlying structure, and not the households.
  - Looking at the wage diversion

# Results: MPL is not equal to W

**Table 3: MPL and Market Wage Rate Averages**

| Region | mpl | market wage | difference | N |
|---|---|---|---|---|
| **Mediterranean** | 30.41 | 16.13 | 14.28 | 568 |
| **Aegean** | 17.76 | 11.36 | 6.40 | 839 |
| **Southeast Anatolia** | 25.62 | 10.86 | 14.76 | 410 |
| **Marmara** | 17.63 | 20.06 | -2.43 | 720 |
| **Central Anatolia** | 38.26 | 17.42 | 20.84 | 790 |
| **East Anatolia** | 7.28 | 12.5 | -5.22 | 252 |
| **Black Sea** | 10.66 | 19.88 | -9.22 | 1,106 |
| **TURKEY** | 21.18 | 16.33 | 4.85 | 4,685 |

# MPL and W are different in all regions

- Monopsony?
  - South East
  - Mediterranean
  - Aegean
- Labor surplus?
  - Marmara
  - East Anatolia
  - Black Sea

- How to come up with a macro relationship in looking at the association between labor markets and land ownership inequality?

# Testing for the impact of land ownership inequality on labor markets

- *The band= shadow wage – market wage = $c + \beta$ village land ownership gini + $\varepsilon$*

# Land ownership inequality

**Regression Results for the Price Band**

| | Dependent variable ln ( W*-W) | | |
|---|---|---|---|
| | **I** | **II** | **III** |
| **lncity_land_gini** | 2.674 | | |
| | (0.399)*** | | |
| **lntown_land_gini** | | 0.719 | |
| | | (0.276)*** | |
| **lnvilg_land_gini** | | | 0.596 |
| | | | (0.270)** |
| **Constant** | 14.709 | 15.717 | 15.79 |
| | (0.223)*** | (0.156)*** | (0.147)*** |
| **Observations** | 1365 | 1365 | 1365 |
| **R-squared** | 0.09 | 0.07 | 0.06 |

Robust standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

# Land ownership inequality

- Is positively and significantly correlated with the degree of diversion between shadow and market wage rates… i.e,market failure.

# First round of conclusions….

- When it comes agrarian organization for production, land ownership inequality is a determining factor….
- Those who do not have land do not have credit access, neither do have land access, they work in labor markets but labor markets are connected to power structures in rural markets
- For rural factor markets to function better, asset redistribution is needed before implementing market friendly policies;
- Total agrarian output would have been much higher if land were to be redistributed from large farmer to the smaller

# Gender- land ownership, land distribution?

- 450 million people working as agricultural laborers have no land ownership, neither they have land access
- **Poorest of the poor are women who work in agriculture and have no land access.**

# WHY DO WOMEN HAVE LESS LAND THEN MEN, IN OTHER WORDS WHY IS THE DISTRIBUTION OF LAND OWNERSHIP BETWEEN MEN AND WOMEN SO UNEQUAL?

- **Family**
  - Male preference in inheritance.
- **State**
  - Male bias in state's land redistribution programs.
- **Market**
  - Gender inequality in land markets; women are less likely to be buyers of land.

# GENDER AND LAND RIGHTS

- **“effective and independent rights” in land, can be defined as including legal rights as well as the social recognition of these rights and effective control over land that are formally untied to male ownership and enforceable by an external legitimized authority such as the community or the state”.** ( Bina Agarwal, 1994).

# WHY DO WOMEN NEED INDEPENDENT RIGHTS IN LAND?

- Welfare argument
- Efficiency argument
- **Equality and empowerment argument**

# WHY DO WOMEN NEED INDEPENDENT RIGHTS IN LAND?

- Empowerment argument:
  - There is a specific aspect of equality in land rights:
    - 1st as an indicator of women's economic empowerment and;
    - 2nd as a facilitator in challenging gender inequities in arenas, such as political and social.

      Land rights would increase empowerment so that women can challenge the structure that creates existing inequalities

# HOW CAN WOMEN CHALLENGE EXISTING STRUCTURES WHEN THEY HAVE RIGHTS TO LAND?

- Land ownership and/or control of land can significantly affect ideological constructions, including those of gender.
  - **Within the family**: increased bargaining power, more power over decisions that are influential in lives of children and self. Improved evaluation of worth by self and others. More voice in household decision making.
  - **Within state:** land ownership is highly linked to rural political power: women's participation in decision-making within social and political institutions is likely to be linked to class, other things such as cast, education, etc are held constant. More voice in state policies.

# HOW CAN WOMEN CHALLENGE EXISTING STRUCTURES WHEN THEY HAVE RIGHTS TO LAND?

- **Within markets:** increased bargaining power for higher wages and better work conditions from a stronger fall back position. Easier access to cheaper credit.
- **Within society:** Women with property are treated with much more respect than those who are without. Those who control and own wealth generating property (i.e land) can shape the institutions that influence culture, education, religion, and media.

# SO IT IS A PRETTY GOOD SOLUTION…

- Economic Change: eases poverty, increase efficiency and production.
- Social Change: challenge structures that retain and enhance gender inequality.

# FINAL WORD

- IF YOU EDUCATE A BOY YOU EDUCATE A HUMAN BEING. IF YOU EDUCATE A GIRL, YOU EDUCATE GENERATIONS…..
- IF YOU GIVE RIGHTS TO LAND TO A MAN YOU FEED A FAMILY, IF YOU GIVE LAND TO A WOMAN YOU START TO CHANGE THE WORLD….for the better ☺

- I know in some countries this is the situation about land ownership, gender, land rights…
- May be I could stop now and we can start our knowledge sharing ( or a chorus of songs), about your own countries

And the very last final word: come visit Turkey: agriculture is in ruins, we need some tourist business!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Thank you!