



# **Land Reform and Welfare in Vietnam: Why Gender of the Land-Rights Holder Matters**

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# Motivation

- Improving control over assets is important for women's autonomy and household well-being
  - Greater control over land in developing world has mainly come through land titling programs
- Vietnam's 1993 Land Law granted households land-use rights which could be exchanged, leased, bequeathed or mortgaged
- One of the largest land-titling programs to date in the developing world in scope and pace of implementation
  - In seven years, rural households issued about 11 million LUCs (Do and Iyer 2008)

# Motivation

- By creating a market for land, the 1993 law brought about an enormous change in the security of land tenure with potentially large impacts on decisions regarding
  - agricultural investments
  - labor inputs
  - women's relative well-being given the feminization of farm production that started in the 1980s
- In two separate papers, we examine whether Vietnam's land titling led to improvements in measures of:
  - household economic security
  - children's human capital (health and education)

# Motivation

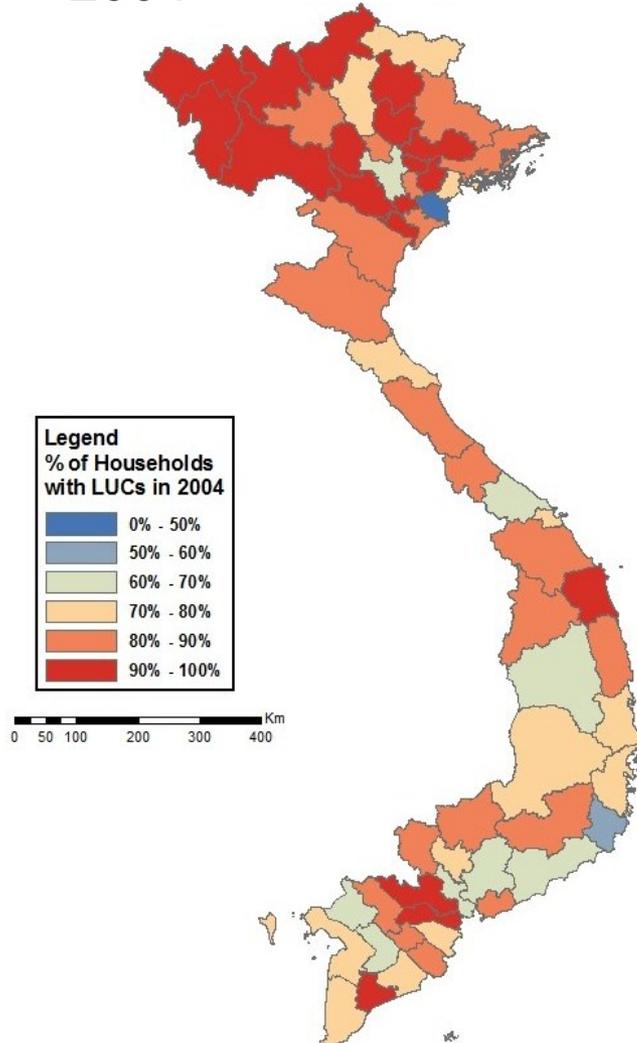
- Used data on matched households from Vietnam's 2004 and 2008 Household Living Standards Surveys (VHLSS) which asked detailed questions on land-use rights
- Supplemented with qualitative data from 25 interviews conducted in Thot Not, a district of the city of Can Tho.
  - located in the Mekong Delta, the "rice basket of Vietnam"
  - Can Tho: Vietnam's fifth largest city
  - respondents live in a rural section of Thot Not.
- To the best of our knowledge, among the first studies to analyze the effects of gender-segregated land rights on measures of women's economic security and child well-being in Vietnam

# Background

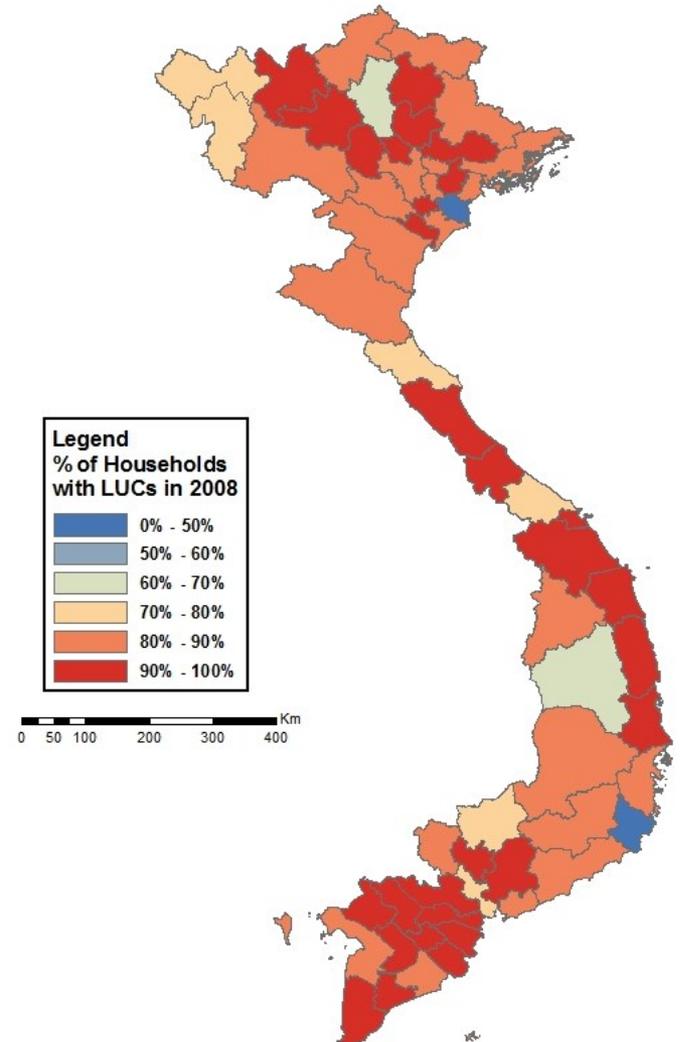
- In 1988, Vietnamese government moved away from collective system based on agricultural cooperatives to a new system that allowed farm households to lease plots of land for 10-15 years
- 1993's Land Law extended lease period and allowed farmers to trade, transfer, rent, bequeath or mortgage their land-use rights.
- Change in Law was implemented through issuance of Land-Use Certificates (LUCs).
  - Implementation across provinces remained uneven (see next figure)
  - Also uneven across gender

# Incidence of LUCs among landholders

2004

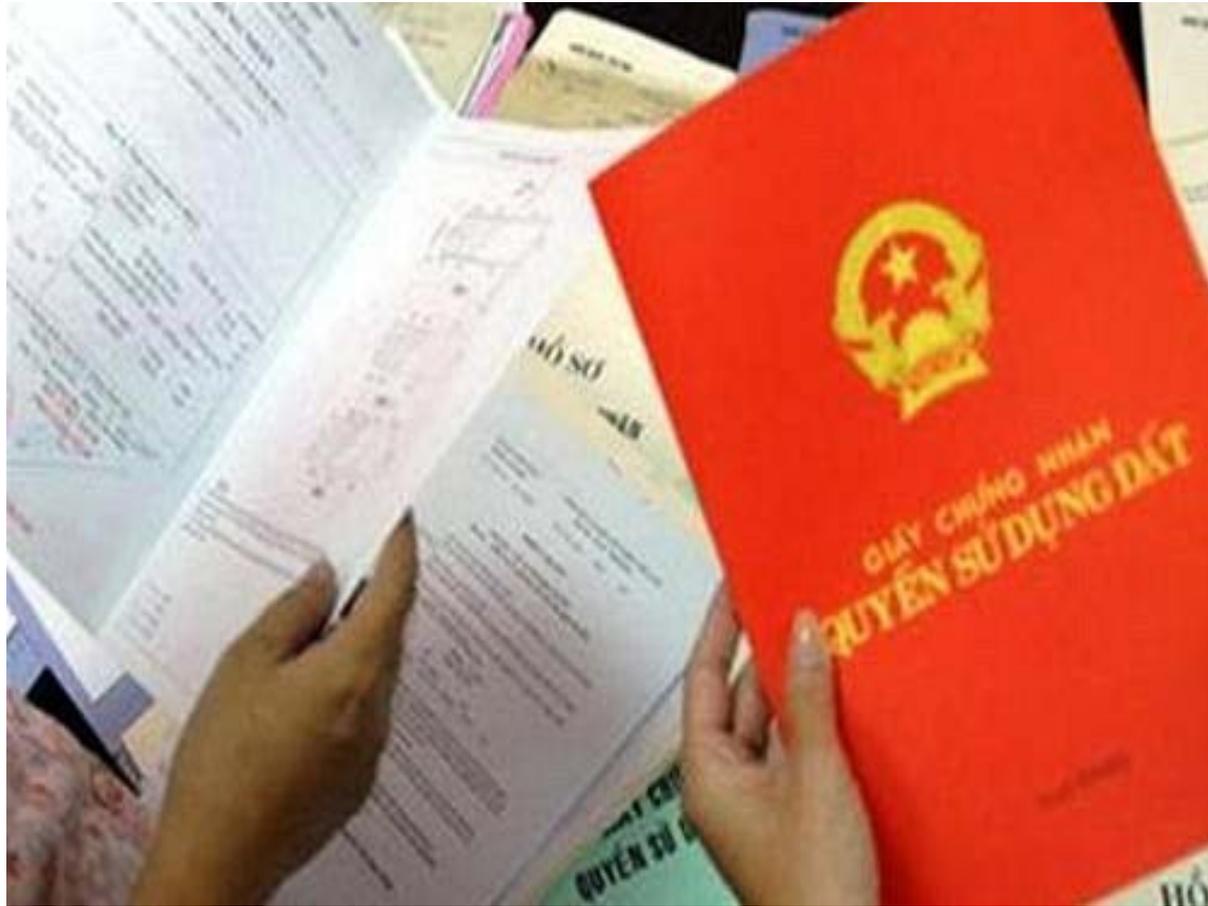


2008



# Background

- Language gender-neutral, but LUCs had space for only one name (to be filled by the household head), so in practice, relatively few LUCs were inscribed with women's names
- 2001 decree specified that both husband and wife have names on LUC if land was jointly owned; however, not well enforced in some provinces
- Other sources of gender discrepancies: allocation of land to working age adults; social norms and cultural traditions





# Conceptual framework

- Land rights linked to control over resources through:
  - Increased security of land tenure and reduced risk of expropriation
  - Greater access to credit from being able to use land as collateral
  - Reduced vulnerability to food price shocks
  - Gains from trade in rental and sales markets for land
- Each channel has important implications for women's autonomy and household economic security
  - Increased security of land tenure implies
    - ❖ Encourages long-term investments like allowing the land to remain fallow to increase soil fertility, investments in improved drainage and irrigation, planting perennial crops rather than annual crops
  - Access to credit
    - ❖ Land is the most common form of collateral

## Conceptual framework

- These channels have feedback effects on women's role in HH decision-making and bargaining power
  - Provide capital to finance economic activities
  - Long-term investments in land may be labor-saving after the initial planting stage, which encourages non-agricultural activities
  - Opportunities for entrepreneurial work is beneficial where women have limited paid-employment opportunities
- Income generation and access to credit is found to increase say in household decision making, encourage mobility and improve relative bargaining power in the home (Pitt *et al.* 2006), reduce domestic violence, lower fertility and improve health (Agarwal 1994)

## Previous literature

- Other examples of studies of women's land rights and measures of their autonomy and bargaining power within the household:
  - In Karnataka, India, home ownership and land ownership have positive effects on women's mobility outside the home, and on their ability to make decisions about their own work, health, and expenditures (Swaminathan *et al.* 2012)
  - In Kerala, India, women's land and home ownership are associated with lower likelihood of being subject to physical and psychological abuse by their husbands (Panda and Agarwal 2005). Similar results in Bhattacharyya *et al.* (2011)
  - Peru's national land titling program led to a substantial increase in the incidence of women's names on property documents and in women's decision-making power within the home (Field 2003)

## Previous literature

- Numerous studies have shown that additional resources controlled by women leads to greater household inputs
  - Child well-being including food, education, and health services:
    - ❖ Quisumbing and Maluccio (2003): In Bangladesh and South Africa, assets that women brought into marriage had positive effect on household budget share for education
    - ❖ Doss (2006) found that women's land ownership is a positive predictor of budget shares spent on food and education, and a negative predictor of budget shares on alcohol and tobacco
  - Impact of women's land ownership on child human capital
    - ❖ Allendorf (2007): estimated an inverse relationship between women's land rights and child malnutrition in Nepal; relationship attributed primarily to additional income and resources from land ownership rather than women's autonomy

## Previous literature

- Relevant studies for Vietnam
  - Do and Iyer (2008): using province-level variation found that with land rights, households allocated a larger proportion of cultivated areas toward perennial crops and increased labor supply in non-farm activities
    - ❖ Results attributed to security of land tenure rather than improved credit access
    - ❖ No focus on gender
  - Van den Broeck *et al.* (2007): land-use rights positively impacted rice yields in male-headed household but not in female-headed households, possibly because men had better access to credit markets

## Previous literature

- Ravallion and van de Walle (2008): reallocation process favored male household heads largely due to space for only one name on LUCs
  - ❖ Women lost control of the main productive asset owned by the household even though they might have carried primary responsibility for working it
  - ❖ Land allocations disproportionately biased toward male-headed households in excess of what the efficient allocation should have been
  
- Deininger and Jin (2008): Vietnamese women who head households face bias in the market for land sales
  
- Linde-Rahr (2008): Households with higher proportion of female members appear to have lower willingness to pay for secure property rights, suggesting that land market imperfections may induce women to behave as if they are risk-averse

# Data

- Vietnam Household Living Standards Surveys, begun in 2002 and conducted every two years by Vietnam's GSO
  - Data on income, ethnicity, region, household structure, wages, education
  - Panel component: subset of households are re-surveyed in following waves
- Use the 2004 and 2008 waves of VHLSS; modules on land use with data on LUC registration and identity of 1<sup>st</sup> and 2<sup>nd</sup> stakeholders
  - Also use commune-level data on terrain, poverty rates, access to roads and electrical power
- Other sources: General Statistical Office (GSO) data for province characteristics (population, number of farms, gross agricultural output, and land area); and poverty lines

# Data

- Constructed panel dataset at the household level that matches individuals within households across 2004 and 2008
  - Used the 2004-2006 household identifier cross-walks to match households across these years
  - Matching gender and year of birth of household members between 2006 and 2008, a similar cross-walk was created for households between 2006 and 2008 (McCaig 2009)
  - Matched households between 2004 and 2008 were identified by combining information from the 2004-2006 and 2006-2008 household cross-walks

# Data

- Final panel dataset has 1728 matched households in 2004 and 2008
  - 7623 individuals in 2004
  - 7203 individuals in 2008
  - 6381 (75 percent) individuals matched perfectly
  - New people in 2008 absent in 2004: births, new spouse, older child returning home after being away
  - 2004 people missing in 2008: deaths, older child leaving home
- Of the 1728 matched households
  - 1296 have male heads and 432 have female heads in 2004
  - 1274 have male heads and 454 have female heads in 2008
- Since dependent variables are at the household level, estimations are run on sample of 1728 matched households in each year for a total of 3456 observations

## Patterns in LUC ownership

- Conditioning on land ownership, the share of households with LUC increased from 81 percent in 2004 to 86 percent in 2008
- Closer examination reveals that the proportion switching away from male-only LUCs to joint-held or female-only held LUCs is higher than the share of newly-registered LUCs
  - Rural households with any type of land are more likely to hold LUCs relative to urban households
  - Ethnic minorities have higher rates of LUC ownership as compared to Kinh/Chinese majority

# Methodology

- Main challenge to identification: selection bias from household unobservables
  - Progressive/egalitarian households may register LUCs in women's names and also have better household outcomes
- Standard remedy: instrumental variables
  - Finding an IV that satisfies the exclusion restriction, is uncorrelated with omitted variables and has adequate strength is not straightforward
  - Do and Iyer (2008) use province-level characteristics that affected the speed of implementation as IVs
    - ❖ Will not work since these may be correlated with other province level measures that may also determine household expenditures and labor market choices

# Methodology

- Preferred method: household-fixed effects model with region and time controls and their interactions

$$y_{ijrt} = \alpha_0 + \alpha_1 H_{ijr} + \alpha_2 C_{jr} + \alpha_3 T_t + \alpha_4 (R_r \times T_t) + \beta X_{ijrt} + \delta LUC_{ijrt} + \varepsilon_{ijrt}$$

- Coefficient of interest,  $\delta$ , represents the impact of different categories of land-use certificates on measures of household economic security and measures of children's human capital. The coefficient is identified from variations in  $LUC_{ijrt}$  over time.
- Standard errors clustered at the commune level
- Technique controls for household-level unobservable characteristics related to preferences, ability, and tastes that may determine LUC registration patterns and outcomes simultaneously

# Measures of Household Economic Security

- Estimate models for 5 alternative indicators of household economic security:
  - Per capita household expenditures, women's self-employment in agriculture, men's self-employment in agriculture, incidence of poverty, and incidence of food poverty

# Measures of Children's Human Capital

- Estimate models for 9 alternative indicators of children's human capital at the household level:
  - Percent of household children:
    - ❖ Sick in past 4 weeks
    - ❖ Sick in past 12 months
    - ❖ Sick in past 12 months and absent from school
    - ❖ Sick in past 12 months and bedridden
    - ❖ Covered by health insurance
    - ❖ Enrolled in school
  - Percent of household expenditures allocated to
    - ❖ All food and beverages
    - ❖ Alcohol, beer, tobacco and betel-nut
    - ❖ Education

# Results for Household Economic Security

- LUCs registered in women's names only are found to:
  - Increase per capita household expenditures by 10.4 percent
    - most likely channel: marginal improvement in a household's access to credit and the ability to undertake agricultural investments
    - Most of the effect occurs in rural sector
    - Compared to no statistically significant effect for male-only held LUCs
  - Increase the share of household women who are self-employed in agriculture by 5.5 percentage points
    - Most of the effect occurs in the rural sector
    - Similar result found for men in case of LUCs registered in men's names only
  - Reduce the incidence of poverty by 6 percent
    - Compared to no statistically significant effect for male-only held LUCs

# Results for Household Economic Security

- LUCs held jointly (husbands and wives) are found to:
  - Increase the share of household women who are self-employed in agriculture by 5 percentage points
  - Reduce the incidence of poverty by 5 percent
    - Compared to no statistically significant effect for male-only held LUCs
- LUCs held by men only are found to reduce incidence of food poverty by 2.5 percent.

# Results for Children's Human Capital

- LUCs registered in women's names only are found to decrease the incidence of illness among children measured in four ways:
  - 18 percentage point drop in the share of HH children who were sick in the recent past
    - ❖ Effect is almost three times that of LUCs held by men only
  - 9 percentage point drop in share of HH children sick in past year
    - ❖ Compared to no statistically significant impact of LUCs held by men only
  - 10 percentage point drop in share of HH children sick in past year and absent from school
    - ❖ Compared to no statistically significant impact of LUCs held by men only
  - 5 percentage point drop in share of HH children sick in past year and bedridden
    - ❖ LUCs held by men only had larger beneficial impact (7 percentage points)

# Results for Children's Human Capital

- LUCs registered in women's names only are found to have additional beneficial effects:
  - 5 percentage point increase in health insurance coverage of household children
    - ❖ Indicates a mechanism to explain impacts on the measures of child health
  - 4 percentage point increase in share of HH children enrolled in school
  - 1 percentage point increase in share of household expenditures allocated to food and beverages
  - 1 percentage point decrease in share of household expenditures allocated to adult substances

# Results for Children's Human Capital

- LUCs held jointly (husbands and wives) are found to have fewer impacts as compared to LUCs held exclusively by women, but the statistically significant ones include:
  - 8 percentage point increase in share of HH children enrolled in school
  - 1/3 percentage point decrease in share of household expenditures allocated to alcohol, beer, tobacco and betel-nut

# Qualitative Evidence

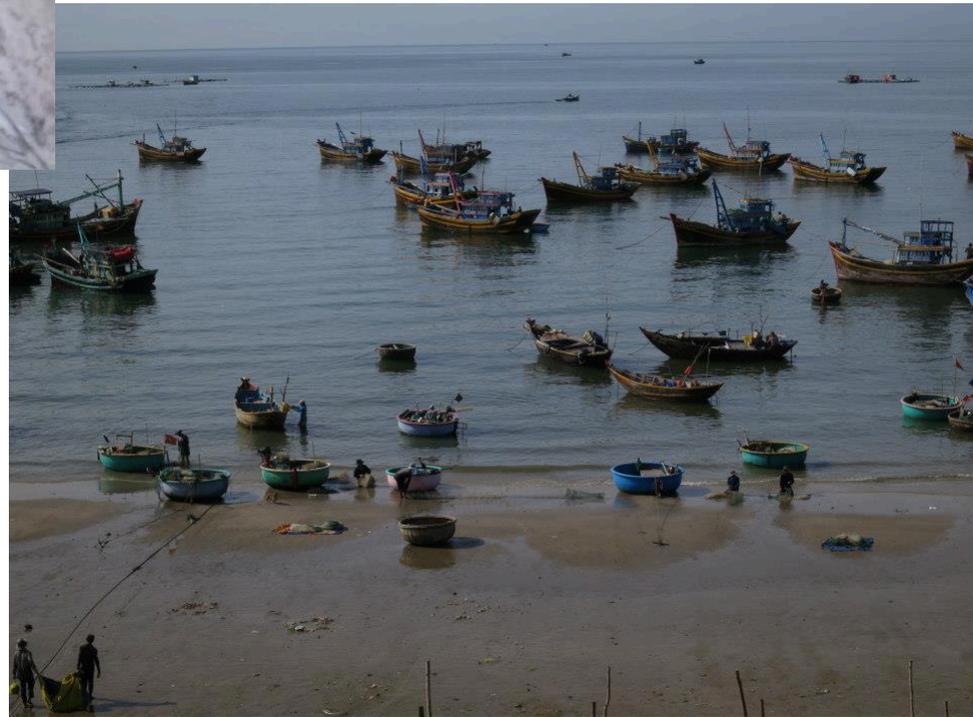
- Interviews conducted by Alexis in November 2012 with 25 women in rural part of Thot Not District of Can Tho City



AUI-VIE107 - (c) - Mickael David







# Qualitative Evidence: Sample Characteristics

	All Women n=25	Women w/ LUC n=12	Women w/ no LUC n=13
Age in years	43	47	39
Number of children	2	2	2
Years of education	7	6	8
Completed high school (%)	28	25	31
Religion (%)			
No religion	32	42	23
Buddhism	64	58	69
Caodaism	4	0	8
Marital Status (%)			
Single	12	17	8
Married	76	67	85
Divorced or Widowed	12	16	8

# Qualitative Evidence: Decision-Making Power

	All women n=25	Women w/ LUC n=12	Women w/ no LUC n=13
% of respondents answering yes			
Decides borrowing money	72	75	69
Decides purchase/sale livestock	24	25	23
Implements purchase/sale livestock	24	33	15
Decides purchase/sale ag products	36	67	8
Implements purchase/sale ag products	52	75	31
Decides purchase/sale/mortgage land	56	75	38
Implements purchase/sale/mortgage land	56	75	38
Decides purchase/sale/mortgage farm eq	20	33	8
Implements purchase/sale/mortgage farm eq	12	25	0
Decides home construction/maintenance	52	58	46
Implements home construction/ maintenance	20	33	8
Vote in the last election	72	83	62
Own decision for who to vote	72	83	62

## Qualitative Evidence: Opinions about Status and Autonomy

	All women n=25	Women w/ LUC n=12	Women w/ no LUC n=13
% of respondents answering yes			
Women's opinions equal to men's in household	76	83	69
I attend community meetings and/or participate in community decision making	44	42	46
Women participate enough in community	60	58	62
Women's opinions equal to men's in community	72	83	62
Owning land enhances status in home	60	83	39
I feel empowered by my current or future possession of land	60	67	54
I have more responsibilities owning land	84	75	92
My community standing increases with land	44	33	54
I understand the LUC program	80	83	77

# Qualitative Evidence: Quotations

- “I think it is important for both names to be on the property to protect the rights of the woman if a divorce happens. It ensures the property will be divided equally between husband and wife.”
- “It makes a person able to live life easier because it’s a law that you have the right to decide what to do with your land. I do not have to defend my decisions. I think it’s good for that reason.”
- “Before, when I didn’t own the land, I had to work for others which was very hard. Now, I feel better and am happy to own land.”
- “Everybody thinks I am poor but everybody loves me. When I inherit land, maybe it will be different. People will not look down on me.”

# Conclusion and policy implications

- On balance, female-only held LUCs and jointly-held LUC's have beneficial effects for measures of household economic security: higher household expenditures, greater women's self-employment in agriculture, and lower incidence of poverty
- These impacts occur mostly in the rural sector

# Conclusion and policy implications

- Female-only held LUCs also have beneficial effects on measures of child well-being: lower incidence of illness among children, increases in their health insurance coverage, higher school enrollment, and reallocation of household expenditures toward food and away from alcohol and tobacco
- Jointly-held LUCs have beneficial effects for children's school enrollment and reallocation of expenditures away from adult substances
- Almost all of these impacts are stronger than those of male-only held LUCs

# Conclusion and policy implications

- In general, results provide support for strengthening and promoting procedures to encourage women's titling to land.
- Results also suggest that institutional changes in credit markets, a better social safety net, and policies to change and improve cultural attitudes may increase the effectiveness of land titling programs in Vietnam

