The Wage Gap between Male and Female Agricultural Workers: Analysis and Implications for Gender and Development Policy of Presentation

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Motivation for the study

Wage gaps

- Well-known feature of labor markets, even controlling for sector of employment and worker education
- Various explanations:
 - Workplace discrimination institutionalised?
 - Differences in time allocation (housework, child care) biological, socio-cultural?



Gender gap in agriculture

FAO (2011):

- Worldwide, women comprise 43% of labor force in agriculture
- Disadvantage in terms of access to resources and compensation
- Closing the gender gap in agriculture could potentially raise yields on their farms by 20 to 30 percent



Philippines and gender

Philippines: progressive country re gender

- Out of 144 countries, the Philippines ranks 10th in the Global Gender Gap score (World Economic Forum [WEF], 2017); high rankings in educational attainment (1st), political empowerment (13th), economic participation and opportunity (25th).
- In agriculture: official statistics show breakdown in male and female wages



Gender policy and agriculture

- Women's suffrage 1937
- Philippines signed CEDAW (Convention on Eradication of All Forms of Discrimination Against Women) in 1981
- Domestic law: Magna Carta of Women (2008)
- •In agriculture:
 - CARL (RA 6657) provides for equal rights for tenure, share in output, representation in decision-making bodies
 - Magna Carta of Small Farmers (1991) state to ensure that women and youth be provided ample opportunity to develop their skills, acquire productive employment, and contribute to their communities to the fullest of their capabilities



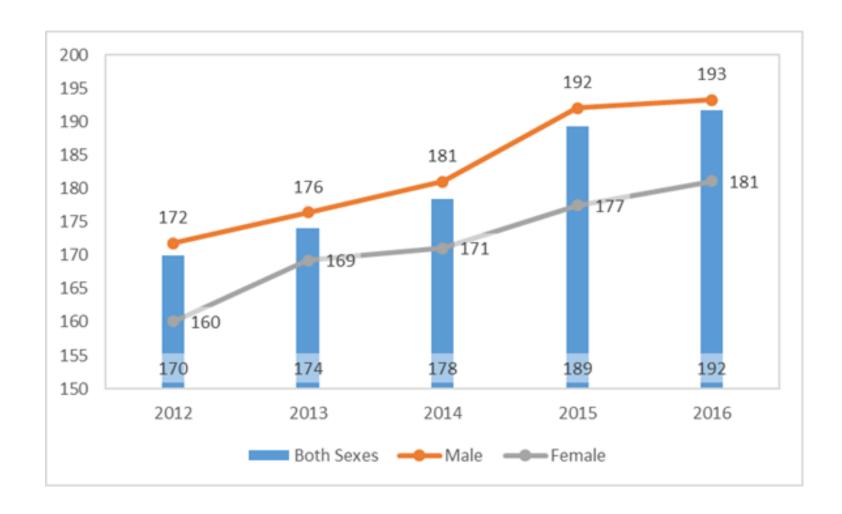
Gender policy and agriculture

• In agriculture:

- AFMA (1997): explicitly provides for a focus on women in terms of access to credit, information and marketing support, and for special training projects
- Magna Carta of Women: providing for equal treatment of women and men, whether married or not, in the titling of land and issuance of stewardship contracts and patents over public land; customary tenure in ancestral domains; and in the sharing of the produce of farms and aquatic resources, together with other asset entitlements



PSA data on agricultural wages





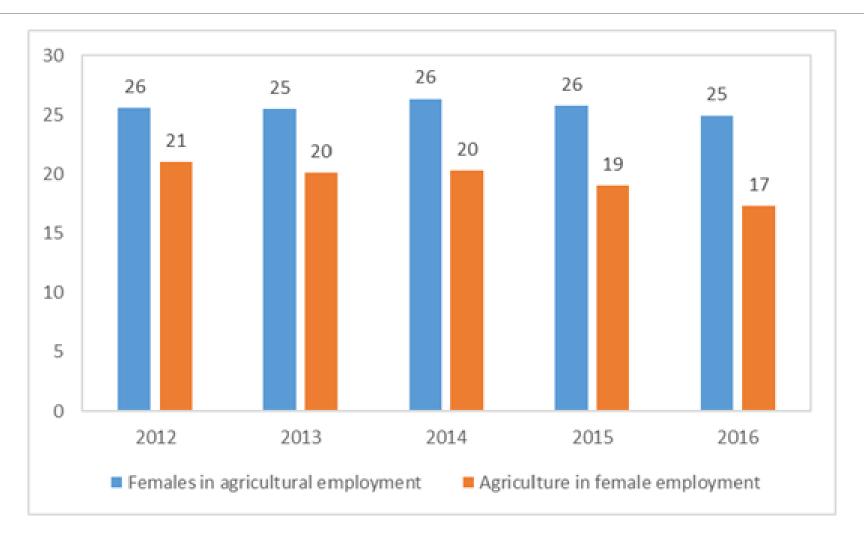
PSA data on wages

- Disaggregates payments by agricultural task
- However: assumes same task is paid the same rate regardless of gender of worker
- Therefore, difference in wages due entirely to differences in activities
- To what extent is wage gap due to differences in activities? To difference in wages per activity?



Agriculture and gender in the Philippines

Employment composition





Wage ratio by type of crop

	2012	2013	2014	2015	2016
All farms	93	96	94	92	94
Palay	91	89	91	92	95
Corn	95	93	93	90	95
Coconut	93	106	102	98	92
Sugarcane	87	83	89	83	93



Man-days per ha, by sex of worker and crop

	Ma	Man-days per ha			Shares in total (%)		
	Male	Female	Total	Male	Female	Total	
Palay	51	11	62	82	18	100	
Corn	180	41	221	81	19	100	
Coconut	21	1	22	94	6	100	
Sugarcane	70	8	79	89	11	100	



Activity breakdown and wages paid, palay farms, 2016

	Male	Females	Daily wage (Php/day)
Land preparation	0.20	0.00	1,246.5
Plowing	3.91	0.00	509.3
Harrowing	5.24	0.26	530.2
Levelling	0.35	0.00	454.6
Pulling & bundling of seedlings	5.38	21.25	271.3
Planting / Transplanting	15.57	26.82	283.8
Irrigation / Watering	7.95	0.80	272.2
Care of crops	15.38	10.52	283.9
Picking of snails	0.04	0.12	289.5
Harvesting	21.33	31.20	278.2
Threshing	8.90	3.02	336.0
Hauling	5.38	0.22	353.0
Drying	10.33	5.75	280.4
Winnowing/Blowing	0.02	0.04	
TOTAL (computed)	100.00	100.00	



Analysis of the gender wage gap

Estimate of wage bias

- PIDS survey of agricultural workers
- Estimate of male-female wage ratio: 79%

	Male workers (n=374)		Female worke	ers (n=123)
	Observations	Average	Observations	Average
Fishing	21	222.43	0	
Other preharvested activities	42	157.60	6	190.90
Fertilizer/pesticide application	28	171.88	26	131.62
Weeding	55	177.76	50	143.04
Planting and related activities	29	214.47	30	165.82
Land preparation	18	258.33	0	
Vegetable raising	13	207.15	2	80.00
Drying	51	136.27	1	150.00
Hauling	63	113.10	3	108.33
Threshing of palay	15	127.33	1	50.00
Harvesting of palay	23	125.22	1	130.00



Re-computing wage differences: case of palay

	$\beta = 1$		$\beta = 0.78$	949
	Male	Female	Male	Female
Land preparation	571.85	571.85	571.85	451.47
Plowing	297.74	297.74	297.74	235.06
Harrowing	306.33	306.33	306.33	241.84
Levelling	299.78	299.78	299.78	236.67
Pulling & bundling of seedlings	271.33	271.33	300.17	236.98
Planting / Transplanting / Replanting	293.78	293.78	311.31	245.78
Irrigation / Watering	272.18	272.18	273.43	215.87
Mechanical weeding	316.28	316.28	316.28	249.70
Manual weeding	265.67	265.67	278.07	219.53
Fertilizer application	316.81	316.81	318.24	251.25
Chemical application	313.97	313.97	315.87	249.38
Picking of snails	289.52	289.52	311.37	245.82
Harvesting	278.15	278.15	292.76	231.13
Threshing	261.08	261.08	267.19	210.94
Hauling	296.33	296.33	296.33	233.95
Drying	280.62	280.62	287.05	226.62
Average on computed data	284.05	279.86	295.08	234.70
Wage gap relative to male (%)	0.00	1.47	0.00	20.46
Published data	307.40	290.65		
Wage gap relative to male (%)	0.00	5.45		



Decomposition of wage difference

	Components			Shares in total (%)		
	Activity difference	Wage difference	Total	Activity difference	Wage difference	
Palay	-0.75	21.21	20.46	-3.6	103.6	100.0
Corn	3.49	20.32	23.80	14.6	85.4	100.0
Coconut	5.46	19.90	25.36	21.5	78.5	100.0
Sugarcane	9.57	19.04	28.60	33.4	68.6	100.0



Implications

Limitation of the study

- Only one estimate of wage bias
- Caution against using this as basis for policy
- Recommend: PSA to collect/report data on wages by activity disaggregated by sex of worker



Conditional implications

 Subject to further confirmation: Compulsory approaches (a la Labor Code) versus Empowerment approaches

Prioritization of women as recipients of government services and transfers - increases bargaining power

Establishment of women's groups active in rural labor market information and advocacy community organization efforts, together with information and advocacy campaigns, with a strong gender dimension, must be rolled out to rural areas (currently focus is in unionized sector in urban areas)

Support for gender mainstreaming and protection of women's rights at the grassroots – grassroots campaigns informing stakeholders, including male farm operators, about women's rights and gender equality, and perhaps stigmatizing discriminatory treatment of women for equal work



