

Supplement to:

Journal of Agriculture and Rural Development in the Tropics and Subtropics

Vol. 120 No. 2 (2019) 205–217 | <https://doi.org/10.17170/kobra-20191212866>



Responses of Filipino farmers to harsh weather phenomena: A risk perception and attitude study

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Table A1: Socio-economic profile of rice farmer-respondents

Variable	Waterside (n = 33)	Lowland (n = 31)	Upland (n = 10)	Total (n = 74)
Gender	%	%	%	%
Male	96.97	77.42	70.00	85.14
Female	3.03	22.58	30.00	14.86
Education				
Elementary Undergraduate	30.30	29.03	50.00	32.43
Elementary Grad.	15.15	9.68	10.00	12.16
High School Undergrad.	15.15	25.81	10.00	18.92
High School Grad.	9.09	3.23	20.00	8.11
College Undergrad.	21.21	19.35	0.00	17.57
College Grad.	6.06	9.68	0.00	6.76
Post-graduate	0.00	3.23	0.00	1.35
Vocational	3.03	0.00	10.00	2.70
Civil Status				
Single	6.06	9.68	10.00	8.11
Married	84.85	74.19	80.00	79.73
Separated	0.00	9.68	0.00	4.05
Widow	9.09	6.45	10.00	8.11
Age				
38-40	12.12	3.23	0.00	6.76
41-50	27.27	16.13	70.00	28.38
51-60	33.33	25.81	10.00	27.03
61-70	24.24	35.48	20.00	28.38
71-80	0.00	16.13	0.00	6.76
81-90	3.03	3.23	0.00	2.70
Main Occupation				
Farming	69.70	83.87	70.00	75.68
Fisherfolk	21.21	0.00	0.00	9.46
Employee	3.03	9.68	10.00	6.76
Vendor	0.00	3.23	10.00	2.70
Sari-sari store	0.00	0.00	0.00	1.35
Construction worker	0.00	3.23	0.00	1.35
Other small businesses	3.03	0.00	0.00	1.35
Handicraft	3.03	0.00	0.00	1.35

Table A1 (continued): Socio-economic profile of rice farmer-respondents

Other occupation				
<i>Farming</i>	30.30	16.13	30.00	24.32
<i>Fisherfolk</i>	24.24	9.68	0.00	14.86
<i>Sari-sari store</i>	0.00	3.23	10.00	2.70
<i>Other small businesses</i>	3.03	0.00	0.00	1.35
<i>Tricycle driver</i>	15.15	12.90	0.00	12.16
<i>Janitor</i>	3.03	0.00	10.00	2.70
<i>Handicraft</i>	3.03	0.00	0.00	1.35
<i>None</i>	21.21	58.06	50.00	40.54
Household size				
1-3	36.36	48.39	30.00	40.54
4-6	51.52	38.71	50.00	45.95
7-9	12.12	9.68	10.00	10.81
10-12	0.00	3.23	10.00	2.70

Table A1: Socio-economic profile of vegetable farmer-respondents

<i>Variable</i>	<i>Waterside (n=7)</i>	<i>Lowland (n=7)</i>	<i>Upland (n=8)</i>	<i>Total (n=22)</i>
Gender				
<i>Male</i>	42.86	57.14	25.00	40.91
<i>Female</i>	57.14	42.86	75.00	59.09
Education				
<i>Elementary Undergrad.</i>	42.86	14.29	25.00	27.27
<i>Elementary Grad.</i>	14.29	28.57	25.00	22.73
<i>High School Undergrad.</i>	42.86	14.29	12.50	22.73
<i>High School Grad.</i>	0.00	28.57	12.50	13.64
<i>College Undergrad.</i>	0.00	0.00	12.50	4.55
<i>College Grad.</i>	0.00	14.29	12.50	9.09
<i>Vocational</i>	0.00	0.00	0.00	0.00
Civil Status				
<i>Single</i>	14.29	0.00	12.50	9.09
<i>Married</i>	71.43	85.71	87.50	81.82
<i>Separated</i>	0.00	14.29	0.00	4.55
<i>Widow</i>	14.29	0.00	0.00	4.55
Age				
38-40	0.00	0.00	25.00	9.09
41-50	28.57	14.29	37.50	27.27
51-60	42.86	71.43	37.50	50.00
61-70	14.29	14.29	0.00	9.09
71-80	0.00	0.00	0.00	0.00
81-90	14.29	0.00	0.00	4.55
Main Occupation				
<i>Farming</i>	71.43	85.71	37.50	63.64
<i>Fisherfolk</i>	28.57	0.00	0.00	9.09
<i>Employee</i>	0.00	14.29	0.00	4.55
<i>Other small businesses</i>	0.00	0.00	50.00	18.18
<i>Livestock</i>	0.00	0.00	12.50	4.55

Table A2 (continued): Socio-economic profile of vegetable farmer-respondents

Other occupation				
Farming	28.57	28.57	62.50	40.91
<i>Fisherfolk</i>	28.57	0.00	0.00	9.09
<i>Vendor</i>	0.00	14.29	0.00	4.55
<i>Tricycle driver</i>	0.00	28.57	0.00	9.09
<i>None</i>	42.86	28.57	37.50	36.36
Household size				
1-3	42.86	42.86	57.14	45.45
4-6	28.57	57.14	14.29	31.82
7-9	28.57	0.00	42.86	22.73

Table B1: Farm profile of rice-farmer respondents

Variable	Waterside (n=33)	Lowland (n=31)	Upland (n=10)	Total (n=74)
Farm Area (ha)	%	%	%	%
0.2 to 1	39.39	48.39	40.00	43.24
1.1 to 2	21.21	19.35	0.00	17.57
2.1 to 3	18.18	12.90	30.00	17.57
3.1 to 4	9.09	9.68	0.00	8.11
4.1 to 5	9.09	3.23	20.00	8.11
>5	3.03	6.45	10.00	5.41
Mean Farm Area:	2.12			
Farming Experience (years)				
1 to 10	12.12	25.81	0.00	16.22
11 to 20	21.21	16.13	50.00	22.97
21 to 30	33.33	19.35	30.00	27.03
31 to 40	21.21	25.81	10.00	21.62
41 to 50	9.09	12.90	0.00	9.46
>50	3.03	0.00	10.00	2.70
Mean farming years:	26.85			
Farm Land Ownership				
Owner	54.54	64.52	0.00	51.35
De facto owner	0.00	0.00	100.00	13.51
Tenant	45.45	35.48	0.00	35.14
Cropping Seasons				
1	84.85	0	100.00	51.35
2	15.15	100.00	0.00	48.65
Dry Season Farm Income (per ha) (PHP)				
0 to 25,000	12.12	16.13	0.00	25.68
25,001 to 50,000	15.15	29.03	0.00	18.92
50,001 to 75,000	18.18	19.35	0.00	16.22
75,001 to 100,000	30.30	9.68	0.00	17.57
100,001 to 125,000	12.12	6.45	0.00	8.11
125,001 to 150,000	12.12	9.68	0.00	9.46
>150,001	0.00	0.00	0.00	0.00
No answer	0.00	9.68	0.00	4.05
Do not plant	0.00	0.00	0.00	0.00
Mean dry season income:	60,512.2			
Wet Season Farm Income (Per ha) (PHP)				
0 to 10,000	12.12	12.90	0.00	10.81
10,001 to 20,000	0.00	16.13	0.00	6.76
20,001 to 30,000	3.03	19.35	0.00	9.46
30,001 to 40,000	0.00	12.90	0.00	5.41
40,001 to 50,000	0.00	3.23	0.00	1.35
>50,001	0.00	16.13	0.00	6.76
No answer	0.00	19.35	0.00	8.11
Do not plant	84.85	0	100.0	51.35
Mean wet season income:	29,695.7			

Table B2: Farm profile of vegetable farmer-respondents

<i>Variable</i>	<i>Waterside (n=7)</i>	<i>Lowland (n=7)</i>	<i>Upland (n=8)</i>	<i>Total (n=22)</i>
<i>Farm Area (ha)</i>	%	%	%	%
0.1 to 1	100.00	100	87.5	95.45
1.1 to 2	0.00	0.00	0.00	0.00
2.1 to 3	0.00	0.00	0.00	0.00
3.1 to 4	0.00	0.00	12.5	4.55
>4	0.00	0.00	0.00	0.00
Mean Farm Area:	0.5318			
<i>Farming Experience</i>				
0 to 10	57.14	57.14	50.00	16.22
11 to 20	28.57	42.86	37.50	10.81
21 to 30	0.00	0.00	0.00	0.00
31 to 40	14.29	0.00	12.50	2.70
41 to 50	0.00	0.00	0.00	0.00
>50	0.00	0.00	0.00	0.00
Mean farming years:	12			
<i>Farm Land Ownership</i>				
Owner	100.00	85.71	37.50	72.73
Tenant	0.00	14.29	62.50	27.27
<i>Total Income (PHP) (every other day)</i>				
1 to 100	28.57	28.57	0.00	18.18
101 to 200	14.29	0.00	12.50	9.09
201 to 300	28.57	42.86	25.00	31.82
301 to 400	14.29	0.00	12.50	9.09
401 to 500	14.29	14.29	0.00	9.09
No Answer	0	14.29	50.00	22.73
Mean income:	241.2			

Table C1: Risk perception of rice and vegetable farmers on drought

	<i>Rice farmers (in %)</i>				<i>Vegetable farmers (in %)</i>			
	Waterside (n=33)	Lowland d (n=31)	Upland (n=10)	Total (n=74)	Waterside (n=7)	Lowland (n=7)	Upland (n=8)	Total (n=22)
Low	45.45	19.35	10.00	29.73	0.00	0.00	25.00	9.09
Medium	6.06	9.68	20.00	9.46	42.86	0.00	25.00	22.73
High	0.00	6.45	20.00	5.41	0.00	57.14	0.00	18.18

Table C2: Risk perception of rice and vegetable farmers on typhoon

	<i>Rice farmers (in %)</i>				<i>Vegetable farmers (in %)</i>			
	Waterside (n=33)	Lowland d (n=31)	Upland (n=10)	Total (n=74)	Waterside (n=7)	Lowland (n=7)	Upland (n=8)	Total (n=22)
Low	12.12	19.35	0.00	13.51	0.00	0.00	12.50	4.55
Medium	24.24	48.39	10.00	32.43	0.00	28.57	25.00	18.18
High	51.52	32.26	70.00	45.95	100.00	57.14	50.00	68.18

Table C3: Risk perception of rice and vegetable farmers on excessive rains

	<i>Rice farmers (in %)</i>				<i>Vegetable farmers (in %)</i>			
	Waterside (n=33)	Lowland d (n=31)	Upland (n=10)	Total (n=74)	Waterside (n=7)	Lowland (n=7)	Upland (n=8)	Total (n=22)
Low	27.27	12.90	20.00	20.27	14.29	0.00	0.00	4.55
Medium	21.21	38.71	10.00	27.03	0.00	14.29	62.50	27.27
High	12.12	6.45	30.00	12.16	28.57	57.14	25.00	36.36

Table C4: Risk perception of rice and vegetable farmers on flood

	<i>Rice farmers (in %)</i>				<i>Vegetable farmers (in %)</i>			
	Waterside (n=33)	Lowland d (n=31)	Upland (n=10)	Total (n=74)	Waterside (n=7)	Lowland (n=7)	Upland (n=8)	Total (n=22)
Low	6.06	35.48	30.00	21.62	14.29	0.00	0.00	4.55
Medium	15.15	25.81	10.00	18.92	14.29	28.57	0.00	13.64
High	72.73	29.03	0.00	44.59	71.43	57.14	0.00	40.91

Table D1: Focus group discussion

Question	Upland (n=3)	Upland (n=3)	Lowland (n=5)	Waterside (n=5)
	Vegetable farmers	Rice farmers		
Cropping Season	n/a	1	2	1
Months per cropping season	n/a	May-September/October	November-April; May-October	March-June
Crops Planted	<i>pechay</i> (<i>Bassica rapa</i>), <i>mustasa</i> (<i>Brassica integrifolia</i> , lettuce (<i>Lactuca sativa</i>), <i>ampalaya</i> (<i>Momordica charantia</i>), tomato (<i>Solanum lycopersicum</i>), eggplant (<i>Solanum melongena</i>), chilis (<i>Capsicum</i>), cabbage (<i>Brassica oleracea</i>), <i>sitaw</i> (<i>Dolichos sesquipedalis</i>)	Rice	Rice	Rice
Irrigated or Rainfed	Rainfed	Rainfed	Irrigated (River)	Irrigated (River)
Hazard (s) experienced	Excessive and continuous rains	Typhoon and Strong winds	Drought; Flood, Typhoon and excessive rains	Flood
Probability of destruction (%)	100	100	50; 100	100
Potential impacts	Total Loss of Production	Loss of Production	No water, strong winds and low production; Low production and pricing	Total loss of production
Risk Perception (severity)	4	3	5; 4	5
Risk attitude	Risk-Neutral	Risk-averse	Risk-neutral; Risk-taker	Risk-averse
Adaptation Practices	Dig canals to let the excess water flow	Proper timing	Proper timing; None	Different source of income: Fishing