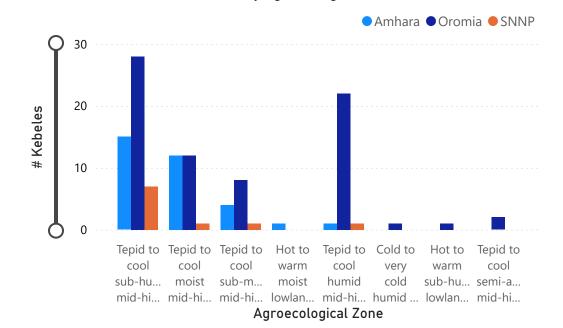
Distribution of sample households by region and zone.

Tepid to Tepid to Tepid to Tepid to Tepid to Cold to Hot to Hot to cool cool cool cool cool cool very warm warm humid ... sub-hu... moist ... Sub-m... semi-a... cold h... sub-hu... moist l... Agroecological Zone

Distribution of sample Kebeles by region and zone. Household by Agroecological Zone



Descriptive statistics of variables used in the models.

Variables	Household_ Mean	Household_ Std	Men_ Mean	Men_ Std	Women_ Mean	Women_ Std
Age of respondent	50.35	12.10	50.37	12.12	41.39	10.25
Amhara region	0.23	0.42	NA	NA	NA	NA
Assets owned	0.27	0.16	NA	NA	NA	NA
Bold grain	0.49	0.50	0.49	0.5	0.47	0.5
Contact with government extension worker	0.81	0.39	0.82	0.39	0.63	0.48
Disease resistance	0.68	0.47	0.68	0.47	0.64	0.5
Education of respondent	5.47	5.67	6.05	5.66	1.23	2.61
Farm size	1.88	1.27	NA	NA	NA	NA
Gender head	90.44	29.42	NA	NA	NA	NA
Good adaptation	0.74	0.44	0.75	0.43	0.73	0.45
Good taste & cooking quality	0.27	0.44	0.26	0.44	0.32	0.47
High straw yield	0.53	0.50	0.54	0.5	0.45	0.5
High yield	0.81	0.40	0.81	0.39	0.81	0.4
Household size	6.06	2.14	NA	NA	NA	NA
Improved wheat variety use	0.49	0.50	0.49	0.5	0.38	0.49
Lagged rainfall amount received	1,235.34	214.39	NA	NA	NA	NA
Livestock owned	6.99	4.70	NA	NA	NA	NA
Member of farmers' group	0.27	0.44	0.27	0.44	0.13	0.34
Member of savings and credit group	0.11	0.31	0.11	0.31	0.06	0.24
Member of Eddir	0.77	0.42	0.77	0.42	0.65	0.48
Member of Equb	0.03	0.18	0.03	0.18	0.03	0.16
Mobile phone owned	0.59	0.49	NA	NA	NA	NA
Number of social networks in the village	3.56	6.05	3.64	6.13	2.08	4.1
Observation	1,088.00		994		1088	
Oromia region	0.62	0.49	NA	NA	NA	NA
Rainfall shock (Index)	0.78	0.52	NA	NA	NA	NA
Rainfall surplus	0.88	0.32	NA	NA	NA	NA
SNNP region	0.15	0.21	NA	NA	NA	NA

Trait preferences between men and women respondents.

Traits	Men (%)	Men (%) Std Error	Women (%)	Women (%) Std Error	Standard error Significance level
Bold grain	48.78	-1.59	47.24	-1.51	
Disease resistance	67.58	-1.49	63.79	-1.54	0.10
Good adaptation	74.90	-1.38	72.79	-1.35	
Good cooking & taste quality	26.02	-1.40	32.26	-1.42	0.01
High straw yield	54.17	-1.59	45.31	-1.51	0.01
High yield	81.20	-1.25	80.51	-1.20	

Trait preferences for men with rainfall endowment

Trait preferences for women with rainfall endowment

Traits	Men_Rainfall deficit (%)	Men_Rainfall surplus (%)	Men_Difference(%)	Traits	Women_Rainfall deficit (%)	Women_Rainfall surplus (%)	Women_Difference (%
Bold grain	41.23	49.77	?8.54	Bold grain	44.17	47.62	?3.46
Disease resistance	58.77	68.74	?9.96	Disease resistance	55.83	64.77	?8.94
Good adaptation	85.09	73.36	11.52	Good adaptation	86.67	71.07	15.59
Good taste & cooking quality	23.68	26.32	2.63	Good taste & cooking	quality 43.33	30.89	12.44
High straw yield	34.21	56.78	-22.57	High straw yield	25.00	47.83	-22.83
High yield	87.72	80.34	7.37	High yield	85.83	79.86	5.98

Variable	s ×	
All	\vee	

Multivariate probit estimation of the determinants of wheat trait preferences for women respondents.

Multivariate probit estimation of the determinants of wheat trait preferences for men respondents.

Variables	High yield	High straw yield	Good taste and cooking quality	Good adaptation	Disease resistant	Bold grain
Education of man respondent (years of	?0.008	0.008	?0.002	?0.011	?0.014*	0.009
schooling) Age of man respondent (years)	?0.009	?0.006	?0.008	?0.011*	0.006	?0.012**
Rainfall shock (Index)	?0.030	0.402***	0.300***	?0.020	0.164	0.188**
Education of woman respondent (years of schooling)		?0.047***	0.007	?0.021	0.003	?0.041**
Household size (persons)	?0.028	?0.015	?0.039*	?0.039*	0.011	?0.05**
Man respondent is member of farmers' group (1) = yes)	0.176	?0.141	0.251**	?0.059	0.331***	0.001
Man respondent is member of Equb (1 = yes)	0.692*	0.242	?0.295	?0.07	0.145	0.306
Woman respondent is member of Equb (1 = yes)	?0.409	0.271	?0.0945	?0.0871	0.319	?0.188
Woman respondent has had contact with government extension worker (1 = yes)	?0.258*	0.384***	0.789***	?0.131	0.356***	0.463***
Household used improved wheat variety (1 = if men respondent said 'yes')	?0.056	0.135	?0.210	?0.191	0.008	0.121
Constant	?0.201	1.114**	?0.731	?0.258	?0.972**	?0.150
Man respondent has had contact with government extension worker (1 = yes)	?0.210	?0.515***	?0.702***	?0.281*	0.068	?0.242*
Household used improved wheat variety (1 = if women respondent said 'yes')	?0.374**	?0.315**	0.192	?0.322**	0.471***	0.042
Rainfall surplus (dummy: 1 = yes)	?0.269	0.557***	?0.555***	?0.508***	?0.0237	?0.177
Lagged rainfall amount received (mm/year)	0.001**	?0.001***	0	0.001	0	?0.000
Number of social networks man respondent has in the village	?0.001	?0.016	0.008	0.009	0.002	0.008
Age of woman respondent (years)	0.004	?0.001	0.009	0.0103	?0.00287	0.009
Livestock owned (TLU)	0.01	0.012	?0.014	0.012	?0.019*	?0.009
Woman respondent is member of savings and credit group (1) = yes)	?0.125	?0.007	0.067	0.014	0.236	0.465**
Number of social networks woman respondent has in the village	0.005	0.038**	?0.013	0.034*	0.006	?0.011
Farm size (ha)	?0.001	0.06	?0.031	0.056	0.022	0.061*
Amhara region (dummy: 1 = yes)	0.29	?0.388**	0.989***	0.125	0.094	0.302*
Man respondent is member of savings and credit group (1) = yes)	0.574**	0.217	0.286*	0.133	?0.262	0.129
Woman respondent is member of Eddir (1 = yes)	0.034	?0.112	0.079	0.134	0.145	?0.276**
Household owns mobile phone (1 = yes)	?0.019	?0.353***	0.529***	0.184	0.497***	0.03
Oromia region (dummy: 1 = yes)	0.566***	?0.237	0.233	0.345**	0.922***	0.833***
Woman respondent is member of farmers' group (1) = yes)	?0.0918	?0.263*	?0.004	0.366**	?0.058	?0.031
Assets owned (Index)	1.864***	?0.609*	0.02	0.548	?0.196	0.422
Sex of household head (dummy, 1 = male)	0.297	0.149	0.062	0.606***	?0.009	0.098
Man respondent is member of Eddir (1 = yes)	0.512***	0.115	0.035	0.619***	?0.665***	?0.170

Variables	High yield	High straw yield	Good taste and cooking quality	Good adaptation	Disease resistant	Bold grain
Age of man respondent (years)	?0.009	?0.006	?0.008	?0.011*	0.006	?0.012**
Age of woman respondent (years)	0.004	?0.001	0.009	0.0103	?0.00287	0.009
Amhara region (dummy: 1 = yes)	0.29	?0.388**	0.989***	0.125	0.094	0.302*
Assets owned (Index)	1.864***	?0.609*	0.02	0.548	?0.196	0.422
Constant	?0.201	1.114**	?0.731	?0.258	?0.972**	?0.150
Education of man respondent (years of schooling)	?0.008	0.008	?0.002	?0.011	?0.014*	0.009
Education of woman respondent (years of schooling)	0.0023	?0.047***	0.007	?0.021	0.003	?0.041**
Farm size (ha)	?0.001	0.06	?0.031	0.056	0.022	0.061*
Household owns mobile phone (1 = yes)	?0.019	?0.353***	0.529***	0.184	0.497***	0.03
Household size (persons)	?0.028	?0.015	?0.039*	?0.039*	0.011	?0.05**
Household used improved wheat variety (1 = if men respondent said 'yes')	?0.056	0.135	?0.210	?0.191	0.008	0.121
Household used improved wheat variety (1 = if women respondent said 'yes')	?0.374**	?0.315**	0.192	?0.322**	0.471***	0.042
Lagged rainfall amount received (mm/year)	0.001**	?0.001***	0	0.001	0	?0.000
Livestock owned (TLU)	0.01	0.012	?0.014	0.012	?0.019*	?0.009
Man respondent has had contact with government extension worker (1 = yes)	?0.210	?0.515***	?0.702***	?0.281*	0.068	?0.242*
Man respondent is member of farmers' group (1) = yes)	0.176	?0.141	0.251**	?0.059	0.331***	0.001
Man respondent is member of savings and credit group (1) = yes)	0.574**	0.217	0.286*	0.133	?0.262	0.129
Man respondent is member of Eddir (1 = yes)	0.512***	0.115	0.035	0.619***	?0.665***	?0.170
Man respondent is member of Equb (1 = yes)	0.692*	0.242	?0.295	?0.07	0.145	0.306
Number of social networks man respondent	?0.001	?0.016	0.008	0.009	0.002	0.008
has in the village						
Number of social networks woman respondent has in the village	0.005	0.038**	?0.013	0.034*	0.006	?0.011
Oromia region (dummy: 1 = yes)	0.566***	?0.237	0.233	0.345**	0.922***	0.833***
Rainfall shock (Index)	?0.030	0.402***	0.300***	?0.020	0.164	0.188**
Rainfall surplus (dummy: 1 = yes)	?0.269	0.557***	?0.555***	?0.508***	?0.0237	?0.177
Sex of household head (dummy, 1 = male)	0.297	0.149	0.062	0.606***	?0.009	0.098
Woman respondent has had contact with government extension worker (1 = yes)	?0.258*	0.384***	0.789***	?0.131	0.356***	0.463***
Woman respondent is member of farmers' group (1) = yes)	?0.0918	?0.263*	?0.004	0.366**	?0.058	?0.031
Woman respondent is member of savings and credit group (1) = yes)	?0.125	?0.007	0.067	0.014	0.236	0.465**
Woman respondent is member of Eddir (1 = yes)	0.034	?0.112	0.079	0.134	0.145	?0.276**
Woman respondent is member of Equb (1 = yes)	?0.409	0.271	?0.0945	?0.0871	0.319	?0.188

Correlation coefficient of error terms obtained from the MVP model estimation of the traits.

Traits ▼	Women_Corre lation coefficient	Women_S td error	Women_Standar d error significance level	Men_Correlation coefficient	Men_Std error	Men_std Error Significance level
High yield and High straw yield	0.003	-0.06		0.009	-0.06	
High yield and Good taste & cooking quality	0.118**	-0.07	0.05	0.083	-0.07	
High yield and Good adaptation	0.422***	-0.06	0.01	0.448***	-0.07	0.01
High yield and Disease resistance	?0.166**	-0.06	0.05	?0.025	-0.06	
High yield and Bold grain	0.007	-0.06		0.076	-0.06	
High straw yield and Good taste & cooking quality	?0.113**	-0.06	0.05	0.287***	-0.06	0.01
High straw yield and Disease resistance	?0.019	-0.06		0.019	-0.06	
High straw yield and Bold grain	0.146***	-0.05	0.01	0.351***	-0.06	0.01
Good adaptation and High straw yield	0.098**	-0.06	0.05	0.002	-0.06	
Good adaptation and Good taste & cooking quality	0.057	-0.06		0.122**	-0.06	0.05
Good adaptation and Disease resistance	?0.037	-0.06		?0.025	-0.06	
Good adaptation and Bold grain	0.111**	-0.06	0.05	0.065	-0.06	
Disease resistance and Good taste & cooking quality	0.197***	-0.06	0.01	0.02	-0.06	
Disease resistance and Bold grain	0.205***	-0.05	0.01	0.233***	-0.06	0.01
Bold grain and Good taste & cooking quality	0.346***	-0.06	0.01	0.325***	-0.06	0.01

Variable Type	Variables	Definition of variables
Explanatory Variables	Age of respondent	Age of the respondent in the household (in years)
Explanatory Variables	Amhara region	Dummy variable (1 = if the household is in Amhara region, 0 otherwise)
Explanatory Variables	Assets owned	Asset index calculated from twelve types of different assets owned by the household (ind
Explanatory Variables	Contact with government extension worker	Dummy variable (1 = if the respondent had any contact with government extension ager
Explanatory Variables	Education of respondent	Education level of the respondent (years of schooling)
Explanatory Variables	Farm size	Total size of agricultural land cultivated by the household in hectares (ha)
Explanatory Variables	Gender head	Gender of the head of the household (1 = male head, zero otherwise)
Explanatory Variables	Household size	Household size: total of all household members who live and share meals together in the
Explanatory Variables	Improved wheat variety use	Dummy variable (1 = if the respondent indicated that he has cultivated improved wheat
Explanatory Variables	Lagged rainfall amount received	Total amount of rainfall that the household received in the lagged year prior to the surve
Explanatory Variables	Livestock owned	Tropical livestock unit (TLU) is used to normalize number of livestock to the equivalent of respectively
Explanatory Variables	Member of farmers' group	Dummy variable (1 = if the respondent is a member of farmers' group, 0 otherwise)
Explanatory Variables	Member of savings and credit group	Dummy variable (1 = self-reported ability to access credit finance or savings for any purp otherwise.
Explanatory Variables	Member of Eddir	Dummy variable (1 = if the respondent is a member of Eddir, 0 otherwise)
Explanatory Variables	Member of Equb	Dummy variable (1 = if the respondent is a member of Equb, 0 otherwise)
Explanatory Variables	Mobile phone owned	Dummy variable. Self-reported = 1 if the household owned a mobile phone, 0 otherwise.
Explanatory Variables	Number of social networks in the village	The number of people (network) that the respondent has in the village that he can count
Explanatory Variables	Oromia region	Dummy variable (1 = if the household is in Oromia region, 0 otherwise)
Explanatory Variables	Rainfall shock (Index)	Rainfall shock (index) that the household experiences. This is calculated by taking the abs season and the historical average of the 21 years rainfall divided by the standard deviatic
Explanatory Variables	Rainfall surplus	Dummy variable (1 = if the household is in rainfall surplus area, 0 otherwise)
Explanatory Variables	SNNP region	Dummy variable (1 = if the household is in SNNP region, 0 otherwise)
Outcome variables	Bold grain	Bold grain trait varieties (1 = if the respondent agrees this trait is important, 0 otherwise)
Outcome variables	Disease resistance	Disease resistance trait varieties (1 = if the respondent agrees this trait is important, 0 oth
Outcome variables	Good adaptation	Good adaptation trait varieties (1 = if the respondent agrees this trait is important, 0 other
Outcome variables	Good taste & cooking quality	Good taste & cooking quality trait varieties (1 = if the respondent agrees this trait is important to the cooking quality trait varieties (1 = if the respondent agrees this trait is important to the cooking quality trait varieties (1 = if the respondent agrees this trait is important to the cooking quality trait varieties (1 = if the respondent agrees this trait is important to the cooking quality trait varieties (1 = if the respondent agrees this trait is important to the cooking quality trait varieties (1 = if the respondent agrees this trait is important to the cooking quality trait varieties (1 = if the respondent agrees this trait is important to the cooking quality trait varieties (1 = if the respondent agrees this trait is important to the cooking quality trait varieties (1 = if the respondent agrees this trait is important to the cooking quality trait varieties (1 = if the respondent agrees this trait is important to the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the respondent agrees the cooking quality trait varieties (1 = if the res
Outcome variables	High straw yield	High straw yield trait varieties (1 = if the respondent agrees this trait is important, 0 othe
Outcome variables	High yield	High yielding trait varieties (1 = if the respondent agrees this trait is important, 0 otherwi
Sample Size	Observation	Sample size