

**Empowering Women through Development Aid:
Evidence from a Field Experiment in Afghanistan**

Online Appendix

Sample Selection Procedures

The selection of the sample for the study proceeded in two stages. First, 10 districts were selected from 398 districts in Afghanistan to be included in the study. Second, 50 villages were selected in each of the 10 sample districts. The methods for these selections are described below.

Three main considerations guided the selection of sample districts:

1. *“New” NSP Districts.* In order to facilitate an experimental design, sample districts were selected from the 74 Afghan districts where NSP had not commenced prior to March 31, 2007. Randomization was infeasible outside this set of new districts either because the remaining districts were already fully covered by NSP, in the process of getting fully covered by NSP, or were not intended to be covered by the program at this phase.
2. *Security.* Reducing the security risk to enumerators and participants was of paramount concern when selecting the sample districts for the study. More formally, security conditions had to be judged satisfactory not just by the government and NATO coalition forces on the ground, but also by Harvard University’s human subjects committee. Security concerns that made the areas completely inaccessible for local enumerators eliminated 34 of the 74 new NSP districts from consideration for inclusion in the baseline survey. The selected districts were representative of the average security situation in the country excluding the southern really violent areas.
3. *Minimum of 65 Villages.* Procedures devised by the evaluation team to minimize adverse political or humanitarian consequences of the evaluation stipulated the inclusion of 50 villages per district in the study and the specification of an additional 15 non-evaluation villages for mobilization by NSP. This procedure limited eligibility for the study to districts with 65 villages or more, of which there were 23 new NSP districts.

Ten districts that satisfied all three criteria were included in the study: Balkh district in Balkh province; Khost Wa Firing in Baghlan; Sang Takht in Daykundi; Daulina district in Ghor province; Adraskan, Chisht-e Sharif, Gulran, and Farsi in Herat;¹ and Hisarak and Sherzad in Nangarhar.¹

¹ The overall number of districts satisfying the criteria was eleven, but one of the districts was excluded from the study because of the delays in signing the contract between NSP and the NGO that was contracted for implementing the program.

In each of the ten sample districts, the NGO contracted for implementation of NSP was given responsibility for selecting the 50 sample villages to be included in the evaluation, with the understanding that the evaluation team would randomly select 25 of these villages for NSP mobilization.² In addition to the 50 sample villages, NGOs selected 15 additional villages in the district for participation in NSP, but which were not included in the evaluation. This was done in order to meet political or humanitarian imperatives dictating the prioritization of particular villages for NSP without jeopardizing the integrity of the empirical strategy for inference. The only constraint that was imposed on the selection of these 15 “priority” villages was that none of them appear in the list of 50 “sample” villages. In order to prevent contamination of the control group, the evaluation team took all feasible steps to ensure that the 15 priority villages did not overlap with the 25 NSP sample villages and, where GPS coordinates were available, that they were located a significant far away distance from them.

²This approach was adopted to ensure that the procedures of the evaluation didn’t impose unnecessary logistical costs or complications for participating NGOs. It was also motivated by the assumption that allowing NGOs to select the sample villages would minimize the probability of sample villages being ineligible for participation in NSP due to small size, or which, for security, political, or other reasons, would otherwise create problems if surveyed and/or mobilized by NSP.

Survey Instruments

The baseline and first follow-up surveys were structured around four survey instruments that ascertained key information from male and female villagers and male and female village leaders.

These surveys are explained in greater detail below:

1. *Male Household Questionnaire* (MHH). During the baseline survey, the MHH instrument was administered to ten randomly selected male heads-of-household in each sample village.³ For the first follow-up survey, enumerators were provided with a list of the ten baseline MHH interviewees and administered the MHH questionnaire to this person or, if unavailable, to a male member of the same household.
2. *Male Focus Group Questionnaire* (MFG). The MFG questionnaire was administered to a group of between six and nine key decision makers (which included village leaders and/or members of the village council) convened at the request of the enumerator. Enumerators administering the first follow-up survey were not asked to specifically request the participation of those persons who took part in the baseline MFG interview, although given the common method by which the focus groups were composed, there was overlap across the two surveys.
3. *Female Focus Group Questionnaire* (FFG). The FFG questionnaire was administered to a group of between six and nine women, who tended to be wives or other relatives of the village leaders and/or members of the village women's council. As with the MFG, first follow-up survey enumerators were not asked to explicitly seek the participation of baseline focus group members.
4. *Female Household Questionnaire / Female Individual Questionnaire* (FHH / FI). During the baseline survey, women who participated in the FFG questionnaire were interviewed individually for the female individual (FI) questionnaire. For the first follow-up survey, the decision was made to change the FI questionnaire to a female household (FHH) questionnaire, to be administered to the wife (or another senior women) of the MHH participant in each household. This change in survey procedure was made to ensure that a random sample of female villagers were surveyed in addition to the senior women of

³ Households were randomly sampled in the baseline survey based on a skip-pattern sampling method, which provided a straightforward procedure for enumerators to follow and a random sample of households in areas considered free of periodicity.

the village, so we opted for the additional data on average village women sacrificing the panel dataset on elite women.

Table A1. Comparison of NSP Evaluation Sample with Representative Sample of Afghanistan's Rural Population

Indicator	NRVA (Rural Households)			NSP Follow-up Survey			t-statistics
	Mean	S.E.	Obs.	Mean	S.E.	Obs.	
Age of Male Respondent	43.04	0.12	16,143	42.68	0.23	4,660	1.381
Income from Primary Source (<i>Afghanis</i>)	60,950	468	16,065	58,618	1155	4,554	1.872
Household Engaged in Agriculture	0.661	0.004	16,143	0.723	0.007	4,625	-7.950
Access to Electricity	0.280	0.004	16,121	0.304	0.007	4,656	-3.065
Last Child Born is Alive	0.994	0.001	9,861	0.975	0.004	1,736	4.938
Last Birth Delivered at Home	0.871	0.004	9,817	0.892	0.007	1,744	-2.541
Last Birth Delivered in Hospital	0.065	0.003	9,817	0.036	0.004	1,744	5.625

Table A2: Composition and Coverage of NSP Impact Evaluation Surveys

	Baseline Survey (September 2007)	Follow-up Survey (May -October 2009)
Male Head-of-Household Questionnaire	4,895 in 500 villages	4,666 in 474 villages
Male Focus Group Questionnaire	5,334 participants in 500 villages	3,197 in 469 villages
Female Focus Group Questionnaire	3,670 participants in 406 villages	2,792 in 424 villages
Female Household Questionnaire	Not Conducted	4,234 in 431 villages
Female Individual Questionnaire	3,398 in 406 villages	Not Conducted

Due to deterioration in security conditions affecting 11 treatment and 15 control villages, located primarily in the districts of Sherzad and Daulina could not be surveyed during the first follow-up survey. Cultural sensitivities precluded the administration of female household and female focus group questionnaires in an additional 21 control and 22 treatment villages spread across Sherzad, Daulina, Adraskan, and Chisht-e Sharif. In both cases the attrition was not related to the treatment status of the villages and differences between treatment and control groups in village-level attrition are not statistically significant. Enumerators administering the male household questionnaire were instructed to locate and interview the same households and, whenever possible, the same villagers who participated in the baseline survey. Enumerators were able to successfully locate such respondents in 65 percent of households in which male respondents were interviewed during the baseline survey. The predominant reason for enumerators not being able to interview baseline respondents was that the person was away from home on the day that the survey team visited the village, as it was the time of harvest. Differences between treatment and control groups in individual-level attrition are not statistically significant.

Table A3: Treatment Effect Controlling for Baseline Measures

Outcome Variable	Control Variable from Baseline	Baseline Survey	Treatment Effect	Standard Error	Number of Obs.	R-squared
A. Functionality Of Women's Council (Summary Measure)	Is there a women's council in the village?	FFG	1.208***	[0.123]	415	0.714
B. There Is At Least One Woman In The Village Who Is Well-Respected By Both Men And Women (Female Respondents)	Are the views of the women considered in settling a legal case?	FI	0.077***	[0.015]	4,185	0.28
C. There Is At Least One Woman In The Village Who Is Well-Respected By Both Men And Women (Male Respondents)	Are the views of the women considered in settling a legal case?	FI	0.087***	[0.014]	4,616	0.18
D. Attitudes Toward Women's Participation In Village Governance (Female Respondents; Summary Measure)	Do you think women should have membership of shura?	FI	0.029*	[0.016]	4,119	0.16
	Do you think women should have membership of shura?	MFG	0.036**	[0.016]	3,947	0.16
	No Controls. Sample Restriction	MHH (I)	0.028	[0.021]	2,379	0.19
	Do you think a village itself should elect members of shura?	MHH (I)	0.026	[0.021]	2,357	0.19
	Do you think women should have membership of shura?	MHH (I)	0.017	[0.021]	2,337	0.20
	Do you think a village itself should elect members of shura?	MHH (V)	0.038**	[0.015]	4,234	0.16
E. Attitudes Toward Women's Participation In Village Governance (Male Respondents; Summary Measure)	Do you think women should have membership of shura?	MHH (V)	0.033**	[0.015]	4,234	0.16
	Do you think women should have membership of shura?	FI	0.076***	[0.021]	4,546	0.25
	Do you think women should have membership of shura?	MFG	0.072***	[0.022]	4,346	0.27
	No Controls. Sample Restriction	MHH (I)	0.067***	[0.024]	2,645	0.31
	Do you think a village itself should elect members of shura?	MHH (I)	0.064***	[0.024]	2,621	0.31
	Do you think women should have membership of shura?	MHH (I)	0.062***	[0.024]	2,598	0.32
	Do you think a village itself should elect members of shura?	MHH (V)	0.074***	[0.020]	4,661	0.26
	Do you think women should have membership of shura?	MHH (V)	0.070***	[0.020]	4,661	0.26
F. Socialization And Economic Activity (Female Respondents; Summary Measure)	Socialization And Economic Activity (Summary Measure)	FI	0.096***	[0.017]	4,189	0.31
G. Respondent Engaged In Income Generating Activity During Past 12 Months	Respondent Engaged In Income Generating Activity During Past 12 Months	FFG	0.046**	[0.018]	3,490	0.24
H. Intra-Family Decisions (Female Respondents; Summary Measure)	Intra-Family Decisions (Summary Measure)	FI	-0.005	[0.018]	4,188	0.18

Table A3: Treatment Effect Controlling for Baseline Measures (continued)

Outcome Variable	Control Variable from Baseline	Baseline	Treatment	Standard	Number	R-
		Survey	Effect	Error	of Obs.	squared
I. Women's Status In Broader Society (Female Respondents)	Do you think women should have membership of shura?	FI	0.033*	[0.017]	4,116	0.19
	Should the girls in your village be allowed to go to school?	MFG	0.013	[0.017]	3,972	0.19
	Do you think women should have membership of shura?	MFG	0.027	[0.018]	3,944	0.19
	No Controls. Sample Restriction	MHH (I)	0.035	[0.021]	2,377	0.25
	Do you think women should have membership of shura?	MHH (I)	0.031	[0.021]	2,335	0.26
	Do you think women should have membership of shura?	MHH (V)	0.027*	[0.016]	4,231	0.19
J. Women's Status In Broader Society (Male Respondents)	Do you think women should have membership of shura?	FI	0.014	[0.017]	4,551	0.17
	Should the girls in your village be allowed to go to school?	MFG	0.007	[0.017]	4,377	0.18
	Do you think women should have membership of shura?	MFG	0.009	[0.017]	4,349	0.18
	No Controls. Sample Restriction	MHH (I)	0.010	[0.021]	2,646	0.22
	Do you think women should have membership of shura?	MHH (I)	0.010	[0.021]	2,622	0.22
	Do you think women should have membership of shura?	MHH (V)	0.012	[0.016]	4,666	0.17

Treatment effect is estimated in the regression, which includes a constant and a dummy variable for villages that have been assigned to the treatment group. Robust standard errors adjusted for clustering at the village-cluster level in brackets. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A4. Treatment Effect in Pashtun Regions

Variable	Treatment Effect	Std. Error	Pashtun Non East* Treatment	Std. Error	Pashtun East* Treatment	Std. Error	N	R-squared
A. Functionality Of Women's Council (Summary Measure)	0.086***	[0.018]	-0.031	[0.034]	0.048	[0.030]	4,656	0.18
B. There Is At Least One Woman In The Village Who Is Well-Respected By Both Men And Women (Female Respondents)	0.062***	[0.020]	0.040	[0.032]	0.024	[0.049]	4,225	0.29
C. There Is At Least One Woman In The Village Who Is Well-Respected By Both Men And Women (Male Respondents)	0.086***	[0.018]	-0.031	[0.034]	0.048	[0.030]	4,656	0.18
D. Attitudes Toward Women's Participation In Village Governance (Female Respondents; Summary Measure)	0.069***	[0.020]	-0.079**	[0.033]	-0.071*	[0.043]	4,234	0.15
E. Attitudes Toward Women's Participation In Village Governance (Male Respondents; Summary Measure)	0.100***	[0.029]	-0.07	[0.044]	-0.067	[0.045]	4,661	0.26
F. Socialization And Economic Activity (Female Respondents; Summary Measure)	0.072***	[0.021]	0.031	[0.039]	-0.011	[0.046]	4,229	0.32
G Respondent Engaged In Income Generating Activity During Past 12 Months	0.053**	[0.023]	0.002	[0.034]	0.0001	[0.032]	4,214	0.22
H. Intra-Family Decisions (Female Respondents; Summary Measure)	0.012	[0.023]	-0.076*	[0.043]	-0.012	[0.042]	4,228	0.19
I. Women's Status In Broader Society (Female Respondents)	0.035*	[0.021]	-0.014	[0.046]	0.014	[0.040]	4,231	0.19
J. Women's Status In Broader Society (Male Respondents)	0.003	[0.022]	0.087**	[0.035]	-0.065	[0.041]	4,666	0.18

Robust standard errors adjusted for clustering at the village-cluster level in brackets. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A5. Treatment Effect, Interaction with Village Size

Variable	Treatment Effect	Std. Error	Population	Std. Error	Population* Treatment	Std. Error	N	R-squared
A. Functionality Of Women's Council (Summary Measure)	1.423	[1.121]	0.020	[0.134]	-0.034	[0.174]	424	0.70
B. There Is At Least One Woman In The Village Who Is Well-Respected By Both Men And Women (Female Respondents)	0.179	[0.137]	-0.018	[0.020]	-0.016	[0.022]	4,225	0.29
C. There Is At Least One Woman In The Village Who Is Well-Respected By Both Men And Women (Male Respondents)	0.139	[0.111]	0.033**	[0.014]	-0.008	[0.017]	4,656	0.18
D. Attitudes Toward Women's Participation In Village Governance (Female Respondents; Summary Measure)	0.209	[0.135]	0.022	[0.018]	-0.027	[0.021]	4,234	0.15
E. Attitudes Toward Women's Participation In Village Governance (Male Respondents; Summary Measure)	-0.240	[0.155]	-0.029	[0.021]	0.050**	[0.024]	4,661	0.26
F. Socialization And Economic Activity (Female Respondents; Summary Measure)	0.022	[0.151]	0.002	[0.019]	0.009	[0.024]	4,229	0.32
G Respondent Engaged In Income Generating Activity During Past 12 Months	0.057	[0.140]	0.007	[0.019]	-0.001	[0.021]	4,214	0.22
H. Intra-Family Decisions (Female Respondents; Summary Measure)	-0.144	[0.129]	0.011	[0.020]	0.022	[0.020]	4,228	0.19
I. Women's Status In Broader Society (Female Respondents)	0.137	[0.150]	0.061***	[0.020]	-0.016	[0.023]	4,231	0.19
J. Women's Status In Broader Society (Male Respondents)	0.049	[0.126]	0.031**	[0.014]	-0.006	[0.020]	4,666	0.17

Robust standard errors adjusted for clustering at the village-cluster level in brackets. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A6. Treatment Effect, Interaction with Individual Characteristics

Panel A. Female Owns Land								
	Treatment Effect	Std. Error	Owns Land	Std. Error	Owns Land* Treatment	Std. Error	N	R-squared
B. There Is a Woman Well-Respected By Both Men And Women (Female Respondents)	0.078***	[0.015]	0.039	[0.044]	-0.038	[0.071]	4,225	0.29
C. There Is a Woman Well-Respected By Both Men And Women (Male Respondents)	0.087***	[0.014]	-0.042	[0.056]	-0.037	[0.079]	4,218	0.18
D. Attitudes Toward Women's Participation In Village Governance (Female Respondents)	0.039**	[0.015]	0.089	[0.067]	-0.022	[0.093]	4,228	0.15
E. Attitudes Toward Women's Participation In Village Governance (Male Respondents)	0.104***	[0.023]	0.093	[0.094]	-0.091	[0.125]	4,224	0.25
F. Socialization And Economic Activity (Female Respondents; Summary Measure)	0.069***	[0.016]	0.011	[0.054]	0.215**	[0.086]	4,228	0.32
G Respondent Engaged In Income Generating Activity During Past 12 Months	0.057***	[0.015]	0.116**	[0.056]	-0.12	[0.081]	4,213	0.23
H. Intra-Family Decisions (Female Respondents; Summary Measure)	-0.007	[0.018]	0.211***	[0.049]	-0.06	[0.078]	4,228	0.19
I. Women's Status In Broader Society (Female Respondents)	0.042**	[0.017]	0.139***	[0.048]	-0.252***	[0.092]	4,228	0.19
J. Women's Status In Broader Society (Male Respondents)	0.030*	[0.018]	0.036	[0.057]	0.007	[0.078]	4,227	0.17
Panel B. Female Has Some Education								
	Treatment Effect	Std. Error	Education	Std. Error	Education* Treatment	Std. Error	N	R-squared
B. There Is a Woman Well-Respected By Both Men And Women (Female Respondents)	0.073***	[0.016]	0.037	[0.033]	0.01	[0.045]	4,204	0.29
C. There Is a Woman Well-Respected By Both Men And Women (Male Respondents)	0.071***	[0.016]	-0.056*	[0.030]	0.098**	[0.043]	4,200	0.18
D. Attitudes Toward Women's Participation In Village Governance (Female Respondents)	0.042**	[0.017]	0.015	[0.041]	-0.018	[0.053]	4,210	0.15
E. Attitudes Toward Women's Participation In Village Governance (Male Respondents)	0.074***	[0.023]	-0.128***	[0.043]	0.205***	[0.066]	4,206	0.26
F. Socialization And Economic Activity (Female Respondents; Summary Measure)	0.073***	[0.017]	-0.034	[0.034]	0.034	[0.050]	4,207	0.32
G Respondent Engaged In Income Generating Activity During Past 12 Months	0.060***	[0.017]	0.085**	[0.037]	-0.054	[0.046]	4,194	0.23
H. Intra-Family Decisions (Female Respondents; Summary Measure)	-0.01	[0.019]	-0.004	[0.040]	0.02	[0.055]	4,207	0.19
I. Women's Status In Broader Society (Female Respondents)	0.022	[0.018]	0.096**	[0.038]	0.043	[0.043]	4,210	0.19
J. Women's Status In Broader Society (Male Respondents)	0.027	[0.018]	-0.064	[0.046]	0.057	[0.052]	4,209	0.17
Panel C. Age of Respondent								
	Treatment Effect	Std. Error	Age	Std. Error	Age* Treatment	Std. Error	N	R-squared
B. There Is a Woman Well-Respected By Both Men And Women (Female Respondents)	0.103**	[0.042]	0.001	[0.001]	-0.001	[0.001]	4,217	0.29
C. There Is a Woman Well-Respected By Both Men And Women (Male Respondents)	0.070	[0.046]	-0.002**	[0.001]	0.0004	[0.001]	4,213	0.18
D. Attitudes Toward Women's Participation In Village Governance (Female Respondents)	0.026	[0.048]	-0.0002	[0.001]	0.0004	[0.001]	4,223	0.15
E. Attitudes Toward Women's Participation In Village Governance (Male Respondents)	0.119*	[0.065]	-0.002	[0.001]	-0.0005	[0.002]	4,219	0.25
F. Socialization And Economic Activity (Female Respondents; Summary Measure)	0.158***	[0.052]	0.007***	[0.001]	-0.002*	[0.001]	4,220	0.33
G Respondent Engaged In Income Generating Activity During Past 12 Months	0.122**	[0.048]	-0.0002	[0.001]	-0.002	[0.001]	4,206	0.23
H. Intra-Family Decisions (Female Respondents; Summary Measure)	-0.003	[0.054]	-0.002	[0.001]	-0.0002	[0.001]	4,220	0.19
I. Women's Status In Broader Society (Female Respondents)	0.136**	[0.061]	0.001	[0.001]	-0.003*	[0.002]	4,223	0.19
J. Women's Status In Broader Society (Male Respondents)	0.124**	[0.055]	0.001	[0.001]	-0.003*	[0.001]	4,222	0.18

Robust standard errors adjusted for clustering at the village-cluster level in brackets. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A7. Treatment Effect Controlling for Measures of Economic Welfare

Variable	Treatment Effect	Std. Error	Economic Welfare Measures	N	R-squared
A. Functionality Of Women's Council (Summary Measure)	1.176***	[0.119]	Yes	417	0.72
B. There Is At Least One Woman In The Village Who Is Well-Respected By Both Men And Women (Female Respondents)	0.073***	[0.016]	Yes	3,807	0.31
C. There Is At Least One Woman In The Village Who Is Well-Respected By Both Men And Women (Male Respondents)	0.088***	[0.014]	Yes	4,190	0.20
D. Attitudes Toward Women's Participation In Village Governance (Female Respondents; Summary Measure)	0.035**	[0.016]	Yes	3,816	0.17
E. Attitudes Toward Women's Participation In Village Governance (Male Respondents; Summary Measure)	0.072***	[0.020]	Yes	4,197	0.27
F. Socialization And Economic Activity (Female Respondents; Summary Measure)	0.064***	[0.017]	Yes	3,811	0.33
G Respondent Engaged In Income Generating Activity During Past 12 Months	0.044***	[0.016]	Yes	3,799	0.24
H. Intra-Family Decisions (Female Respondents; Summary Measure)	-0.004	[0.018]	Yes	3,810	0.20
I. Women's Status In Broader Society (Female Respondents)	0.062***	[0.018]	Yes	3,813	0.21
J. Women's Status In Broader Society (Male Respondents)	0.016	[0.017]	Yes	4,200	0.19

Robust standard errors adjusted for clustering at the village-cluster level in brackets. * significant at 10%; ** significant at 5%; *** significant at 1%.

Table A8. Treatment Effect, Interaction with Dummy for Completed Women's Project

Variable	Treatment Effect	Std. Error	Women's Project Finished* Treatment	Std. Error	N	R-squared
A. Functionality Of Women's Council (Summary Measure)	1.175***	[0.124]	0.626	[0.445]	424	0.70
B. There Is a Woman Well-Respected By Both Men And Women (Female Respondents)	0.069***	[0.016]	0.131***	[0.046]	4,225	0.29
C. There Is a Woman Well-Respected By Both Men And Women (Male Respondents)	0.081***	[0.014]	0.119*	[0.060]	4,656	0.18
D. Attitudes Toward Women's Participation In Village Governance (Female Respondents)	0.046***	[0.016]	-0.138**	[0.068]	4,234	0.15
E. Attitudes Toward Women's Participation In Village Governance (Male Respondents)	0.072***	[0.020]	0.032	[0.111]	4,661	0.26
F. Socialization And Economic Activity (Female Respondents; Summary Measure)	0.083***	[0.017]	-0.097	[0.063]	4,229	0.32
G Respondent Engaged In Income Generating Activity During Past 12 Months	0.062***	[0.016]	-0.153***	[0.040]	4,214	0.23
H. Intra-Family Decisions (Female Respondents; Summary Measure)	-0.008	[0.019]	-0.027	[0.060]	4,228	0.19
I. Women's Status In Broader Society (Female Respondents)	0.033*	[0.017]	0.007	[0.093]	4,231	0.19
J. Women's Status In Broader Society (Male Respondents)	0.010	[0.017]	0.035	[0.051]	4,666	0.17

Robust standard errors adjusted for clustering at the village-cluster level in brackets. * significant at 10%; ** significant at 5%; *** significant at 1%.