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# WOMEN'S EMPOWERMENT IN TUNISIA

Impact evaluation of the project 'AMAL:  
Supporting Women's Transformative  
Leadership' in Tunisia

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Effectiveness Review Series 2016/17

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# EXECUTIVE SUMMARY

Oxfam GB's Global Performance Framework is part of the organization's effort to better understand and communicate its effectiveness, as well as enhance learning across the organization. Under this Framework, a small number of completed or mature projects are selected at random each year for an evaluation of their impact, known as an Effectiveness Review. The project 'AMAL<sup>1</sup>: Supporting Women's Transformative Leadership in the Middle East'<sup>1</sup> (LEBA49) was one of those selected for an Effectiveness Review in the 2016/17 financial year. The project was selected under the global outcome indicator of Women's Empowerment, which is defined as change in empowerment of supported women – measured by a composite index assessing indicators of empowerment that are relevant to the socio-economic context of the project under analysis.

The project 'AMAL: Supporting Women's Transformative Leadership' is a multi-country programme operating in Morocco, Tunisia, OPT and Yemen, with regional coordination from Lebanon. Given logistical and financial limitations, it was decided to focus the evaluation on the Tunisian component, as this was identified as having the greatest potential for future learning. Thus, the results from this Effectiveness Review are not meant to be indicative of the overall impact of AMAL, but more a focused assessment for the Tunisia component.

## PROJECT DESCRIPTION

The AMAL project operating in Tunisia started in 2012, following the revolution of 2011, with the objective to increase women's awareness of their political and socio-economic rights, and support women to play a more active role in the political and socio-economic life of their community and country. Three partner organizations implemented the project: the League of Tunisian Women Voters (LET), the Tunisian Association of Democratic Women (ATFD) and the Association of Tunisian Women for Research and Development (AFTURD) in collaboration with Oxfam in Tunisia. The three partner organizations engaged with a variety of different women, employing a range of activities to reach this goal. Project undertakings included extended training, mentoring, group engagement and activities in a variety of thematic areas. The project directly supported 410 women, and it is estimated to have indirectly supported more than 5,000 women.

## EVALUATION DESIGN

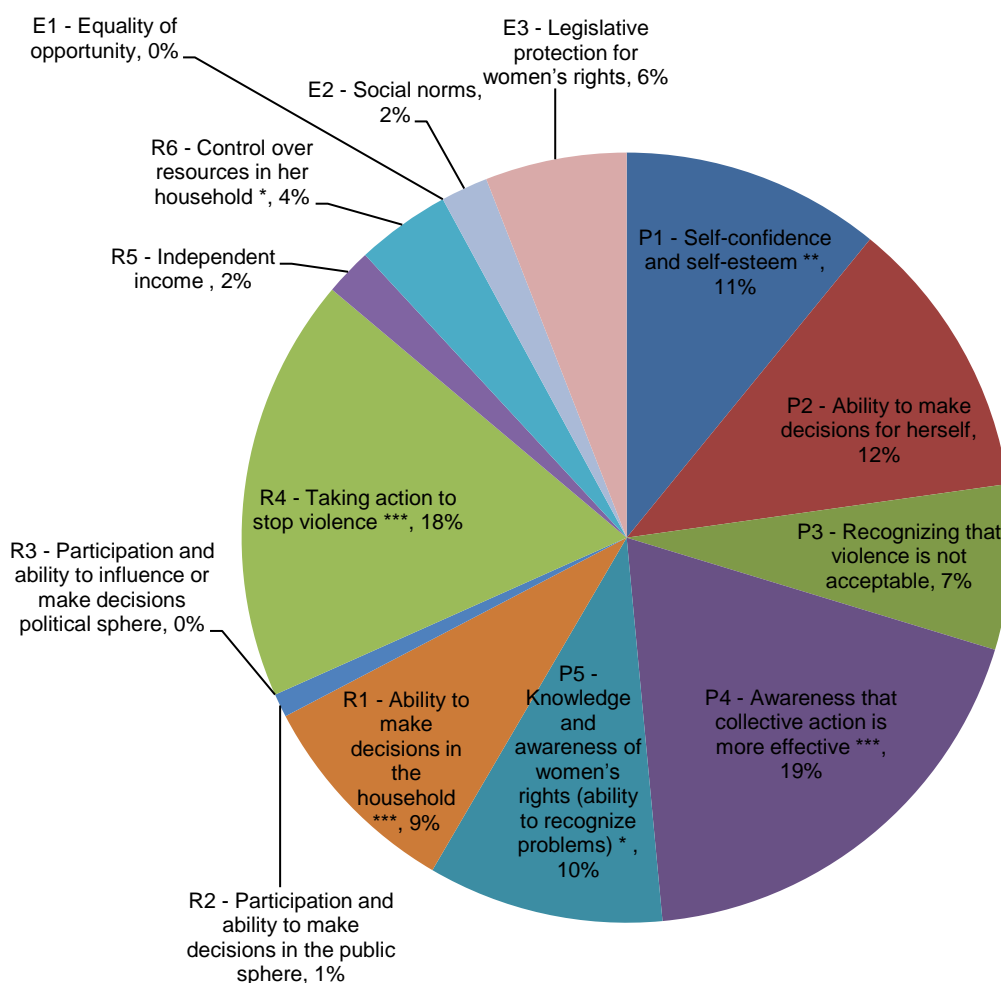
The project was still being implemented when the evaluation was conducted in November 2016 in the regions of Tunis, Kelibia, Sousse, Kef and Kasserine in Tunisia. The purpose was to evaluate the impact of the AMAL project in Tunisia in promoting women's empowerment and achieving its objectives: increasing women's awareness of their political and socio-economic rights, and supporting women to play a more active role in the political and socio-economic life of their community and country. The evaluation adopted a quasi-experimental impact evaluation design comparing outcome indicators from a randomly selected sample of women who had been directly involved in activities rolled out under the AMAL project with women selected from comparison groups.

# MEASURING WOMEN'S EMPOWERMENT

Oxfam has developed a tool based on a composite index to measure women's empowerment – a complex and hard-to-measure concept. The tool is based on a framework that remains unchanged, while the characteristics and indicators that make up the index change from context to context, aiming to capture the characteristics of an 'empowered woman' in the particular socio-economic context of the analysis. The evaluation identified 14 characteristics that describe an empowered woman in Tunisia. Each characteristic was transformed into an indicator and measured using individual questionnaires.

The evaluation also employed an innovative approach based on a Discrete Choice Experiment (DCE) to reveal the relative importance of each indicator. A DCE is a stated-choice method that consists of presenting hypothetical scenarios to respondents in order to reveal their preferences. Responses were then used to provide relative weights for the individual indicators, reflecting respondents' revealed preferences and opinions on what an empowered woman in Tunisia looks like. According to the DCE exercise, it appears that the most important characteristics for describing an empowered woman in Tunisia are her awareness of the benefits in participating in collective actions, followed by her ability to take actions to stop violence. A full list of indicators used for measuring women's empowerment and the relative weights are provided in the figure below.

**Figure 1: Indicators used to measure women's empowerment weighted using the Discrete Choice Experiment**











# RESULTS







The evaluation found positive and significant results on overall women’s empowerment. Project participants scored positively, on average, in 58 percent of the indicators, compared with 51 percent for women not involved in the project. This difference is statistically significant, suggesting that the project had a positive impact on overall women’s empowerment. By using a weighted empowerment index the averages are reduced both for the intervention and comparison group, yet the difference is still statistically significant, confirming an overall positive impact of the project on women’s empowerment.

The evaluation provides good evidence that the project had a positive and significant impact on knowledge and awareness of women’s rights among women in civil society and in political parties. There is also compelling evidence that the project had a positive and significant impact on women’s participation in groups and events, as well as in the extent to which they take decisions in these groups and events.

Exploring other empowerment indicators, it appears that high numbers of women who participated in the project reported the ability to make decisions for themselves, and recognition of the unacceptability of violence (81 percent of the respondents reported being able to make decisions for themselves, and 84 percent reported that violence was unacceptable). However, these proportions are not statistically significantly different from the women in the comparison group. Measurements for women’s awareness of the benefits in participating in collective action also appears to be high both for women participating in the project (70 percent on average) and in the matched comparison group. While the difference is not significantly different from zero for the overall sample, this indicator is positive and significant among rural women.

**Table 1: Evidence of impact**

	Weight From DCE	Evidence of impact
<b>Personal</b>		
 Self-confidence and self-esteem	11%	No
 Ability to make decisions for herself	12%	No
 Recognizing that violence is not acceptable	7%	No
 Awareness that collective action is more effective	19%	No (Yes, among rural women)
 Knowledge and awareness of women’s rights (ability to recognize problems)	10%	Yes
<b>Relational</b>		
 Ability to make decisions in the household	9%	No
 Participation and ability to make decisions in the public sphere	1%	Yes
 Participation and ability to influence or make decisions political sphere	0%	Yes

	Taking action to stop violence	18%	Yes
	Independent income	2%	Yes
	Control over resources in her household	4%	No
<b>Environmental</b>			
	Equality of opportunity	0%	No
	Social norms	2%	No
	Legislative protection for women's rights	6%	No

There is evidence of greater contribution to household income from women involved into the project. However, there is no evidence of greater household decision-making or greater control over household resources among project participants.

The evaluation also finds positive and significant results of the project on women's willingness to report a man in cases of being a victim of violence. While there is no evidence suggesting any negative effect of the project on women's exposure to violence, it is important to report that 35 percent of the women in the sample reported being exposed to at least one episode of psychological violence in the previous 12 months, and 14 percent reported at least one episode of physical violence and 3 percent reported at least one episode of sexual violence.

Finally, there appear to be no measurable differences between project participants and matched comparison women on indicators measuring social norms, legislative protection of women's rights and equality of opportunity.

## PROGRAMME LEARNING CONSIDERATIONS

### **Consider mitigation activities for unintended effects, such as violence against women.**

The evaluation identified that overall 14 percent of the women interviewed reported at least one episode of physical violence. While there is no evidence that the project under analysis exacerbated this phenomenon, future projects working with women's empowerment are advised to closely monitor gender-based violence and introduce specific interventions to support victims of this phenomenon.

### **Identify strategies for supporting changes at environmental level.**

The evaluation found evidence of a positive and significant effect among women engaged in political parties and civil society organizations in improving knowledge and awareness of women's rights, as well as increasing participation and influence in the political sphere. However, the evaluation did not find changes in social norms, legislative protection for women's rights or equality of opportunity. While this may well be due to measurement issues, there is a

shared recognition among project partners that changes at environmental level require interventions on a more extended time-frame than the one conducted by the project, targeting social norms, beliefs and attitudes.

## **Consider sustainability during project design and implementation.**

The evaluation found a positive and significant effect among rural women on improving awareness of group participation and group decision-making. However, there are questions whether this effect will last into the future. The project did not have an exit strategy and operated under the assumption it would continue its activities in the future. It is therefore not clear whether its activities will sustain impact over time. Future projects are advised to operate considering sustainability planning exit strategies during the intervention design.

## **Consider engaging with different actors, including men and youth.**

The evaluation did not find evidence of impact in changing household decision-making and control over resources within the household. The evaluation recognizes that the project already directly worked with a variety of different types of women (i.e., urban women involved in political parties or civil society organizations, as well as rural women) and engaged with local and national actors for advocacy interventions on health-care coverage. To seek changes within the household, other projects have, for example, also experimented with working with both men and youth.

# 1 INTRODUCTION

Oxfam GB's Global Performance Framework is part of the organization's effort to better understand and communicate its effectiveness, as well as enhance learning across the organization. Under this Framework, a small number of completed or mature projects are selected at random each year for an evaluation of their impact, known as an Effectiveness Review. The project 'AMAL: Supporting Women's Transformative Leadership' was one of those selected for an Effectiveness Review in the 2016/17 financial year.

The project was selected under the global outcome indicator of Women's Empowerment, which is defined as change in empowerment of supported women – measured by a composite index assessing indicators of empowerment that are relevant to the socio-economic context of the project under analysis.

The project 'AMAL: Supporting Women's Transformative Leadership' is a multi-country programme, operating in Morocco, Tunisia, OPT and Yemen, with regional coordination from Lebanon. It started in October 2012 with an overall budget of \$6,808,060 over a three-year period. Given the complexity and diversity of the interventions, the evaluation team, in coordination with the regional programme team, decided to focus the Effectiveness Review on one specific country, Tunisia, which was considered to have the greatest potential for future learning. As such, the results coming from this Effectiveness Review only assess the impact of the Tunisia component of the project and cannot be taken as indicative of the overall impact of AMAL.

The AMAL project began in Tunisia in 2012 and was implemented by three partner organizations: the League of Tunisian Women Voters (LET), the Tunisian Association of Democratic Women (ATFD) and the Association of Tunisian Women for Research and Development (AFTURD). The project directly supported 410 women, and it is estimated to have indirectly supported more than 5,000 women. The project was still under implementation when the evaluation was conducted in November 2016 in the regions of Tunis, Kelibia, Sousse, Kef and Kasserine in Tunisia.

The questions for this evaluation were:

- What has been the impact of the project's activities implemented at community level in promoting women's empowerment?
- What has been the impact of the project in changing other outcome indicators connected with the project logic among communities where the project was implemented?
- What characteristics of empowerment are considered the most relevant among project participants?

Figure 1.1: Map of Tunisia



Source: mapopensource.com

This report presents the findings of the Effectiveness Review. Section 2 describes the project. Section 3 presents the evaluation design and Section 4 explains how this design was implemented. Section 5 describes the Discrete Choice Experiment (DCE) and how women's empowerment was measured for this evaluation. Section 6 presents the results of the data analysis, including the descriptive statistics of the population surveyed and the differences in outcome measures between the intervention and comparison groups. Section 7 concludes with a summary of the findings and some considerations for future learning.

## 2 PROJECT DESCRIPTION

Following the uprising of the popular revolution in 2011, the project worked with both pre-existing and newly formed partner organizations to increase women's awareness of their political and socio-economic rights, and support women to play a more active role in the political and socio-economic life of their community and country.

The three partner organizations, LET, ATFD and AFTURD, engaged with a variety of different women, employing a range of activities to reach these goals. Project undertakings included training and engagement activities on a variety of thematic areas, such as human rights, leadership, gender and violence. Engagement activities included interactive theatre, screening movies, group discussions and public events.

All these activities were carried out with the aim of increasing women's knowledge and awareness of women's rights, and facilitating women's participation in civil society and political groups. The project intended to provide women with the tools and skills required for increasing their decision-making power in society.

The activities conducted can be divided into two broad categories: those carried out with rural women, and those carried out with women involved in civil society or the political sphere (henceforth described in this report as political women).

LET focused on the capacity-building of political women, including coaching and mentoring for women leaders, training on public speaking and press interactions, advocacy, and gender-based violence. LET also delivered 'community mobilization' training in a rural village in the Kelibia region.

AFTURD focused on supporting rural women in Kef and Kasserine. It worked directly with local organizations providing training on advocacy and human rights, and conducting door-to-door engagement and communication activities.

ATFD conducted training and engagement activities to promote political and socio-economic rights for women both in civil society and in rural settings. ATFD organized training and counselling sessions for women victims of violence and conducted advocacy activities to enable access to health care. It also engaged with journalists and the media to change the role and image of women in the media.

The underlying project's impact pathway worked as follows. Project activities were conducted with the aim of increasing knowledge and awareness of women's rights, as well as increasing self-confidence to enable women to take action in demanding their rights. Action could take the form of collective action with other women as well as with greater political participation. Collective action and political participation provides greater decision-making power for women in the public and political spheres, ultimately resulting in greater women's leadership.

# 3 EVALUATION DESIGN

The central problem presented in designing an impact evaluation of any social programme is how to compare the outcomes that result from that programme with *what would have been the case* without that programme having been carried out. In the case of this Effectiveness Review, the situation of women involved in the project was examined through an individual questionnaire – but clearly it was not possible to observe what their situation would have been had they not had the opportunity to participate in this project. In any evaluation, that ‘counterfactual’ situation cannot be directly observed, it can only be estimated.

In the evaluation of programmes that involve a large number of units (whether individuals, households or communities), common practice is to make a comparison between units that were subject to the programme and units that were not. As long as the two groups can be assumed to be similar in all respects except for the implementation of the specific programme, observing the situation of units where the programme was not implemented can provide a good estimate of the counterfactual.

An ideal approach to an evaluation such as this is to allow for a random selection process for the units in which the programme will be implemented. Random selection minimizes the probability of there being systematic differences between the programme and non-programme units, and so maximizes the confidence that any differences in outcome are due to the effects of the programme.

In the case of the project examined in this Effectiveness Review, the unit at which the programme was implemented was the individual. In particular, two types of women can be identified as being directly involved in project activities: rural women and political women.

A ‘quasi-experimental’ evaluation design was adopted in which the situation of women in those communities where the project was not implemented was assumed to provide a reasonable counterfactual for the situation of women in the implementation communities. Women involved in the project were ‘matched’ with women with similar characteristics in non-project (or ‘comparison’) groups. More information on the selection and sampling is presented in Section 4.

Individual women were then matched on the basis of a variety of characteristics – including education, employment, wealth, contribution to household income, and participation in groups, political parties and public events. Since some of these characteristics may have been affected by the project itself (particularly those relating to engagement in groups, political participation and public events), matching was performed on the basis of these indicators *before* the implementation of the project. Relevant baseline data were not available, so survey respondents were asked to recall some basic information about their household’s and personal situation from 2011, before the project was implemented. Although this recall data is unlikely to be completely accurate, it should not have led to significant bias in the estimates as long as measurement errors due to the recall data were not significantly different for respondents in the intervention and comparison groups. Tests on the validity of the propensity-score matching procedure are reported in Appendix 2. Further robustness checks on the validity of the results, additional analysis and alternative matching procedures are reported in Appendix 3. Finally, Appendix 4 examines heterogeneous effects in the impact of the project distinguishing rural women from women in political parties or civil society.

# 4 DATA

## 4.1 SAMPLING OF INTERVENTION AND COMPARISON GROUPS

To identify the sample of intervention and comparison individuals, the evaluation used different sampling approaches depending on the partner organization and whether the project worked with women from rural areas or women from political parties and civil society.

Table 4.1 provides a summary of the number of project participants from which the sample frame was drawn. LET conducted training for women involved in political parties, 165 of them completed the entire cycle of training (94 in Tunis and 71 in Kelibia). LET also conducted training and community engagement with 25 women in one village in the Kelibia region. ATFD conducted its activities in Sousse and Tunis with more than 150 women from civil society. It also conducted training and community engagement with 12 women in one rural village in the Sousse region. Finally, AFTURD focused only on activities with rural women in the regions of Kef and Kasserine, directly working with 81 women.

**Table 4.1: Sample frame**

Type women	Region	LET	ATFD	AFTURD
<i>Political women</i>	Kelibia	71		
	Tunis	94		
<i>Rural women</i>	Kelibia	25		
<i>Women in civil society</i>	Sousse		81	
	Tunis		72	
<i>Rural women</i>	Sousse		12	
<i>Rural women</i>	Kef			37
	Kasserine			44
<b>Total</b>		<b>190</b>	<b>165</b>	<b>81</b>

In order to select respondents in the intervention group, equal weight was assigned to each of the three partners, despite the fact they were working with different numbers of women. For each partner organization, 74 respondents were randomly selected across the list of women that they had worked with.

Table 4.2 provides a summary for both intervention and comparison groups.

**Table 4.2: Sample intervention and comparison groups**

		Intervention   Comparison		
Type women	Region	LET	ATFD	AFTURD
<i>Political women</i>	Kelibia	28   35		
	Tunis	37   46		
<i>Rural women</i>	Kelibia	10   12		
<i>Women in civil society</i>	Sousse	36   46		
	Tunis	32   41		
<i>Rural women</i>	Sousse	5   7		
<i>Rural women</i>	Kef	37   47		
	Kasserine	37   47		
<b>Total</b>		<b>74   93</b>	<b>74   93</b>	<b>74   93</b>

For the comparison group, different approaches were used depending on the partner and whether they were rural women or political women or women from civil society. Each approach was done to minimize unobservable differences caused by self-selection.

Comparison political women for LET were identified by asking respondents from the intervention group to provide contacts of other women in their own political party but who did not participate in any of the LET activities. From this list, 35 respondents were randomly selected in Kelibia and 46 in Tunis.

Comparison women from civil society for ATFD were identified by selecting five other civil society organizations from which we randomly chose activists for interviews. In Sousse 46 women were interviewed and 41 were interviewed in Tunis.

Comparison rural women for LED, ATFD and AFTURD were identified by first selecting two comparison villages for each intervention village. The village had to share similar socio-economic characteristics with the intervention village and be located in the same region. Then women were randomly selected within each village. In total, 12 women were interviewed from two villages in Kelibia region, seven from two villages in the Sousse region and 93 from four villages in Kef and Kasserine.

Interviews were carried out using mobile devices. The questionnaire was created in a piece of Open Data Kit software, called *SurveyCTO*, and then downloaded onto a mobile phone given to each enumerator. The functionality of the mobile phones was reduced so that they could only be used for data-collection purposes. The data were uploaded nightly by field supervisors and checked by the evaluation team to ensure high data quality.

## 4.2 ANALYSIS OF BASELINE CHARACTERISTICS

Before analysing the effects of the project on women’s empowerment, we compared women from intervention and comparison groups in terms of their socio-economic characteristics in 2011 (that is, before the project began). This helped to check the suitability of the comparison group, and ascertain what variables should be included in the main analysis to control for observable differences between project and non-project households. These data were based on information recalled during the questionnaire or reconstructed from the household composition at the time of the survey.

The full comparison is shown in Table 4.3.

**Table 4.3: Baseline characteristics before matching**

	Intervention mean	Comparison mean	Difference
<i>Household (HH) size</i>	3.967	4.390	-0.422***
<i>1[Head of HH has university education]</i>	0.600	0.720	-0.120***
<i>1[Head of HH is able to work]</i>	0.833	0.896	-0.064**
<i>Wealth index 2011 normalized</i>	0.010	-0.007	0.017
<i>1[Respondent worked in the formal sector in 2011]</i>	0.330	0.241	0.089**
<i>1[Income share &gt;= 50% in 2011]</i>	0.330	0.231	0.099**
<i>1[Respondent has university education]</i>	0.521	0.528	-0.007
<i>1[Respondent is able to work]</i>	0.944	0.979	-0.035**
<i>1[Type respondent RURAL woman]</i>	0.637	0.600	0.037
<i>1[Public event participation in 2011]</i>	0.470	0.255	0.215***
<i>1[Political participation 2011]</i>	0.167	0.128	0.040
<i>1[Group participation in 2011]</i>	0.400	0.200	0.200***

There are no significant differences between the intervention and comparison group respondents' wealth or educational levels or the proportion of rural women (by sampling design). However, there are some small but significant differences in indicators, such as household size, education and ability of the head of the household to work, respondents' participation in the labour force and contribution to household income.

There is a large and significant difference between intervention and comparison groups in public event participation and group participation back in 2011 before the project started. These differences, which existed before the project, had the potential to bias any comparison of the project's outcomes between the project and comparison villages. It was therefore important to control for these baseline differences when making such comparisons. As mentioned in Section 3, the main approach used in this Effectiveness Review was propensity-score matching (PSM). The full details of the matching procedure applied are described in Appendix 2. After matching, women in the project and comparison villages were reasonably well-balanced in terms of the recalled baseline data, with few significant differences between them. Not all of the women could be matched, and accordingly five of the 290 women surveyed in the comparison group and one of the 215 women surveyed in the intervention group had to be dropped from the analysis.

# 5 MEASURING WOMEN'S EMPOWERMENT IN TUNISIA

The project under review specifically aimed to promote women's awareness and confidence in expressing their political and socio-economic rights as well as supporting women in playing a more active role as transformative leaders. Additionally, this evaluation investigated the effect of the project on women's empowerment more broadly.

In order to be able to measure women's empowerment, Oxfam developed a measurement tool based on a composite index designed to assess this complex and hard-to-measure concept. The tool is based on a framework that remains unchanged, while the characteristics and indicators that make up the index change from context to context, aiming to capture the characteristics of an 'empowered woman' in the socio-economic context of analysis. The index provides a concise, but comprehensive, measure of women's empowerment, while also allowing analysis by level of change or the individual indicator.

Women's empowerment is defined as the process whereby women's and girls' lives are transformed from a situation where they have limited power to a situation where their power is enhanced. The measurement framework recognizes three levels where change can take place: personal, relational and environmental. Changes at a personal level refer to changes taking place within the person – changes in how the person sees herself, how she considers her role and that of other women in their society: their economic role and their confidence in deciding and taking actions concerning themselves. Changes at the relational level refer to changes in the relationships and power relations within the woman's surrounding network. This includes, for example, changes within the household, the community, markets and local authorities. Finally, changes at environmental level take place in the broader context. These can be informal changes, such as social norms, attitudes, and the beliefs of wider society, as well as formal changes in the political and legislative framework.















The evaluation team, together with programme staff and partner organizations, identified 14 characteristics that describe an empowered woman in Tunisia. Each characteristic was transformed into an indicator and measured with an individual questionnaire.

Table 5.1 provides a summary of the indicators describing an empowered woman in Tunisia. It is important to note that while not all characteristics considered in measuring women's empowerment may be directly linked to the project activities, all were deemed to be important to describe an empowered woman in this particular context.

In order to combine all 14 indicators into a unique composite index, a benchmark was defined for each characteristic to identify what it means for a woman to be empowered in relation to the characteristic in question. The composite index measures the proportion of characteristics in which a woman scores positively across the 14 empowerment indicators. Details of the thresholds employed in each indicator can be found in Appendix 1.

Further details of the measurement approach can be found in the Oxfam publication *A 'How to' guide to measuring women's empowerment*.

**Table 5.1: Women’s Empowerment in Tunisia with weights**

		<b>Weight From DCE</b>
<b>Personal</b>		
 Self-confidence and self-esteem	She feels that she has a number of good qualities	11%
 Ability to make decisions for herself	She can personally take decisions regarding herself	12%
 Recognizing that violence is not acceptable	She considers it unacceptable for a man to beat his wife	7%
 Awareness that collective action is more effective	She believes that acting as a group is effective to solve issues	19%
 Knowledge and awareness of women’s rights (ability to recognize problems)	She thinks that men and women should have the same rights	10%
<b>Relational</b>		
 Ability to make decisions in the household	She is able to make decisions within the household	9%
 Participation and ability to make decisions in the <b>public</b> sphere	She actively participates in civil society and associations	1%
 Participation and ability to influence or make decisions political sphere	She actively participates in political parties	0%
 Taking action to stop violence	In cases of experience of violence, she is able to report it	18%
 Independent income	She has an independent source of income	2%
 Control over resources in her household	She has control over assets and resources in her household	4%
<b>Environmental</b>		
 Equality of opportunity	She lives in a community that ensures that women have equal political opportunities with men	0%
 Social norms	She lives in a society that allows her to be free	2%
 Legislative protection for women’s rights	She lives in a society where women’s rights are enshrined in law	6%

## 5.1 DISCRETE CHOICE EXPERIMENT

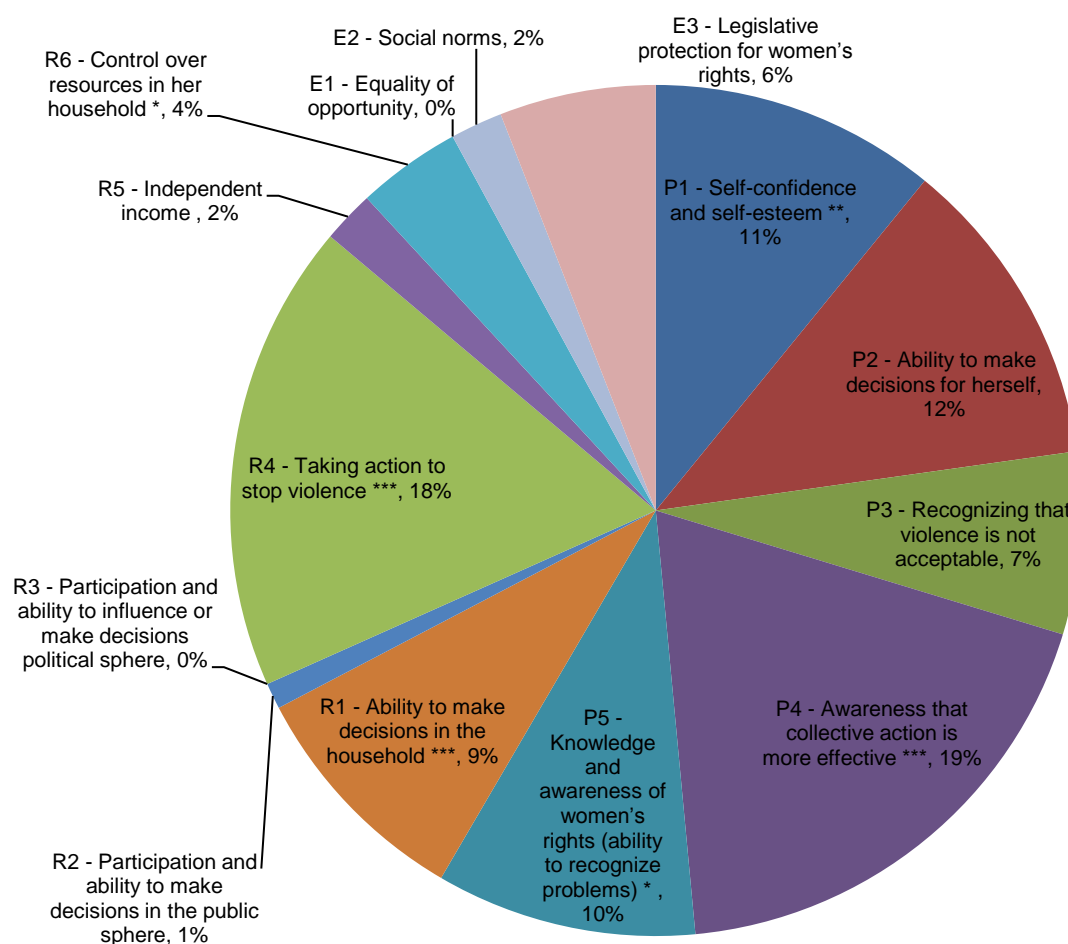
This evaluation, in collaboration with Natalie Nairi Quinn, a researcher from the University of Oxford, piloted an innovative approach based on a Discrete Choice Experiment (DCE) in order to construct a women's empowerment measure that reflects the perceptions and opinions of the women involved in the study.

A DCE is a stated-choice method that consists of presenting hypothetical scenarios to respondents in order to reveal their preferences. A DCE was then applied to the indicator's weights to construct the final composite index, revealing the relative importance respondents assigned to the 14 empowerment characteristics.

At the end of the questionnaire, respondents were shown two hypothetical women presenting different characteristics (based on the 14 characteristics identified for measuring empowerment), and were asked to indicate which woman they considered to be more empowered. Responses were then used to provide weights for the individual indicators, reflecting respondents' revealed preferences and opinions on what an empowered woman looks like.

Table 5.1 and Figure 5.1 provide a summary of the indicators describing an empowered woman in Tunisia, and the relative weights assigned to each indicator using the DCE.

**Figure 5.1: Women's Empowerment weights**



According to the DCE exercise, it appears that the most important characteristic for an empowered woman in Tunisia is '*being aware of the benefits in participating in collective actions*', accounting for 19 percent of the total index. Followed by '*being able to take action to stop violence*' (18 percent of the total index).

'*Self-confidence*' and '*ability to make decision for herself*' are also considered important characteristics, accounting respectively for 11 and 12 percent. Finally, '*knowledge and awareness of women's rights*' is also considered important, accounting for 10 percent of the index. These five indicators represent 70 percent of the total weights for all the 14 indicators identified.

A previous evaluation<sup>2</sup> identified economic empowerment as a point that the project should consider improving. Results from the DCE seem to be suggesting that the indicator referring to '*independent income*' is not a priority for describing an empowered woman in Tunisia. However, this result alone does not suggest that economic empowerment is not a driver for empowerment. It could, for example, suggest that respondents consider independent income (or involvement in the labour market) as a personal choice that women should be able to take without determining whether they are considered empowered or not.

# 6 RESULTS

## 6.1 INTRODUCTION

This report is intended to be free from excessive technical jargon, with more detailed technical information being restricted to the appendices and footnotes. However, there are some statistical concepts that cannot be avoided in discussing the results. In this report, results will usually be stated as the average difference between women directly involved in the project (the 'intervention group') and matched comparison women (the 'comparison group').

In the tables of results on the following pages, statistical significance will be indicated by asterisks, with three asterisks (\*\*\*) indicating a  $p$ -value of less than 1 percent, two asterisks (\*\*) indicating a  $p$ -value of less than 5 percent and one asterisk (\*) indicating a  $p$ -value of less than 10 percent. The higher the  $p$ -value, the less confident we are that the measured estimate reflects the true impact. Results with a  $p$ -value of more than 10 percent are not considered to be statistically significant.

The results are shown after correcting for observable baseline differences between the women interviewed in the intervention group and in the women in comparison villages using a propensity-score matching (PSM) procedure. The details of this procedure are discussed in Appendix 2. All outcomes have also been tested for robustness to alternative statistical models in Appendix 3. Finally, Appendix 4 examines heterogeneous effects in the impact of the project distinguishing rural women from women in political parties or civil society.

## 6.2 INVOLVEMENT IN PROJECT ACTIVITIES

Before considering the project's effect on outcomes, it is important to examine whether the respondents reported having participated in the activities implemented under this project.

As presented in Section 2, the project conducted activities in a number of different ways. This included training and other engagement activities. Figure 6.1 shows the proportion of women in the intervention and comparison groups that reported having received training in the following thematic areas since 2012.

**Figure 6.1: Training received by the respondent in the following thematic areas**

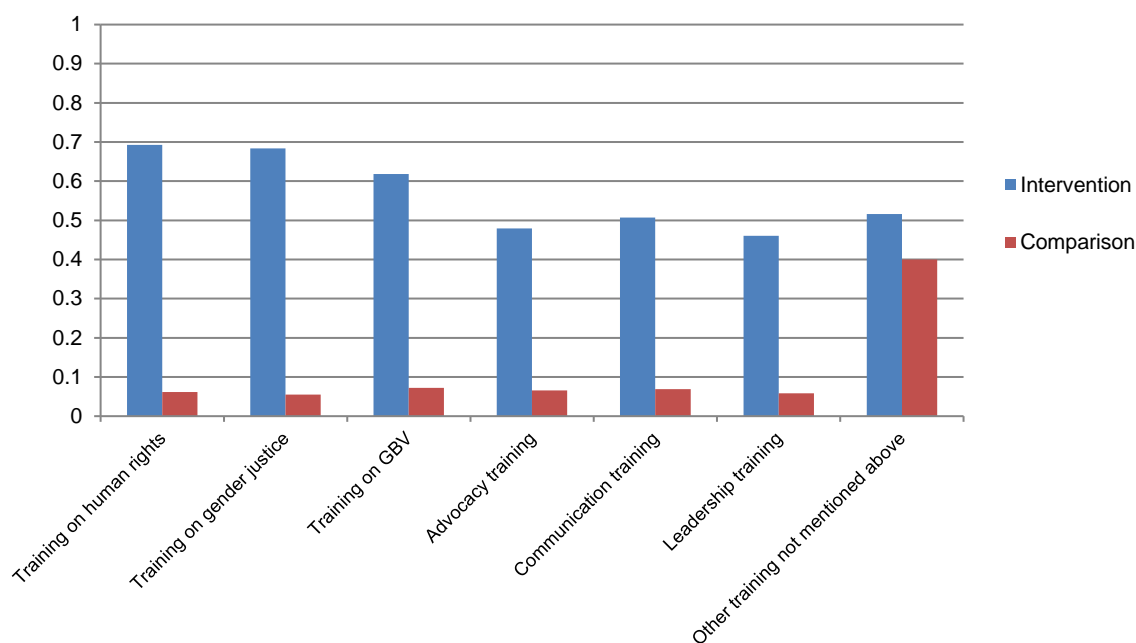


Figure 6.1 provides good evidence that the women identified in the comparison group were exposed to a significantly lower amount of training on human rights, gender justice, GBV, advocacy, communication and leadership. This gives more confidence in the validity of the choice of the comparison group.

## 6.3 IMPACT ON WOMEN'S EMPOWERMENT

This section examines the differences between the intervention and comparison groups on women's empowerment indicators and the overall women's empowerment index described in Section 5.

The outcome measures examined in this section are:

- Overall women's empowerment.
- Personal level indicators of change.
- Relational level indicators of change.
- Environmental level indicators of change.

### 6.3.1 Overall women's empowerment

Table 6.1 shows the two measures of women's empowerment presented in Section 5. The first column in Table 6.1 presents estimates of the average difference in the overall empowerment index between the intervention and comparison groups. This measure represents the proportion of characteristics in which women scored positively across the 14 indicators describing empowerment. Estimates suggest that women living in project communities score positively in, on average, 55 percent of the indicators, compared with women not living in communities involved in the project, who score positively, on average, in only 48 percent of the indicators. This difference is statistically significant, showing a positive and significant impact of the project on overall women's empowerment.

The second column in Table 6.1 presents estimates on the average difference in the empowerment index using the weighting from the Discrete Choice Experiment. Surprisingly, the average weighted empowerment index is reduced for both the intervention and comparison groups; however, the difference is still statistically significant.

**Table 6.1: Overall women’s empowerment**

	Empowerment index (un-weighted)	Empowerment index (weighted)
<i>Intervention group mean:</i>	0.58	0.46
<i>Comparison group mean:</i>	0.51	0.43
<i>Difference:</i>	0.07***	0.04**
	(0.02)	(0.02)
<i>Observations intervention:</i>	214	214
<i>Observations:</i>	498	498

Notes: Standard errors in parentheses; \* p<0.1, \*\* p<0.05, \*\*\* p<0.01; PSM estimates are bootstrapped with 1,000 repetitions. All means are calculated *after* matching.

Table A4.1 provides estimates of the project’s effect on the overall multidimensional index for women involved in political and civil society as well as for women living in rural communities. It appears that, on average, the project effect on the overall measure of empowerment is present in both political and rural women when considering the un-weighted empowerment measure, but only in the rural women group when considering the weighted empowerment measure.

The following sections present in detail indicators and dimensions included in the index.

### 6.3.2 Personal

This first level of change refers to changes taking place within the person. This dimension measures changes in personal self-confidence, opinions, attitudes and beliefs. It measures changes in how a woman sees herself and perceives herself in society, and what capability she has to decide her actions and carry them out.

In the context under analysis, the following indicators have been identified:

1. Self-confidence.
2. Ability to make decisions for herself.
3. Non-acceptability of violence.
4. Awareness that collective action is effective.
5. Knowledge and awareness of women’s rights.

Table 6.2 provides estimates for the five indicators identified under changes at personal level. The discussion below will only cover a brief interpretation of the results. For more details on the exact wording and cut-off points used for constructing the individual indicators, please refer to Appendix 1.

**Table 6.2: Indicators of change at the personal level**

	1[Self-confidence]	1[Ability to make decisions for herself]	1[Respondent DOES NOT accept violence]	1[Awareness that collective action is effective]	1[Knowledge and awareness of women's rights]
<i>Intervention group mean:</i>	0.56	0.81	0.84	0.69	0.46
<i>Comparison group mean:</i>	0.56	0.85	0.80	0.64	0.31
<i>Difference:</i>	-0.01	-0.04	0.04	0.05	0.16***
	(0.05)	(0.03)	(0.04)	(0.05)	(0.05)
<i>Observations intervention:</i>	214	214	214	214	214
<i>Observations:</i>	498	498	498	498	498

Notes: Standard errors in parentheses; \* p<0.1, \*\* p<0.05, \*\*\* p<0.01; PSM estimates are bootstrapped with 1,000 repetitions. All means are calculated after matching.

**Self-confidence/self-esteem** measures the attitude the respondent has towards herself. The first column in Table 6.2 provides estimates on the proportion of women in the intervention and comparison groups who were considered to have provided answers indicating high levels of self-confidence. Estimates suggest that, on average, both intervention and comparison groups present similar levels of self-confidence, with no difference between the two groups.

**Ability to make decisions for herself** measures whether the respondent reported being able to take decisions for herself. This includes decisions such as: visiting relatives outside the house, participating in group activities, participating in demonstrations, running in local elections, and deciding where to work. The second column in Table 6.2 provides evidence that more than 80 percent of women in both the intervention and comparison groups reported being able to take decisions for themselves. However, there appears to be no difference between the two groups.<sup>3</sup>

**Non-acceptability of violence** measures whether the respondent considers it unacceptable for a man to beat his wife. The third column in Table 6.2 suggests that 84 percent of women in the intervention group, and 80 percent in the comparison group, consider it unacceptable for a man to beat his wife.<sup>4</sup> However, this difference is not statistically significant.

**Awareness that collective action is effective** measures whether a woman believes that acting as a group is effective in solving issues. According to the DCE this represents the most important indicator describing an empowered woman in Tunisia. The fourth column in Table 6.2 suggests that almost 70 percent of women in the intervention group strongly believe that it is better for women to work together to solve problems, and that acting as a group is more effective in solving issues than acting alone, compared with 64 percent in the comparison group. This difference is not statistically significantly different from zero. When disaggregating the project's impact on the type of women, we find that there is a positive and significant impact on this indicator among rural women (Table A4.2).

**Knowledge and awareness of women's rights** measures whether the respondent thinks that men and women should have the same rights. It assesses whether respondents possess knowledge of their rights, as well as expressing opinions in favour of women's rights. The final column in Table 6.2 suggests that the project had a positive and significant effect on this indicator. In particular Table A4.2 suggests that this overall positive effect is mainly driven by positive results among political women.

### 6.3.3 Relational

This second level of change measures changes taking place in power relations within the woman's surrounding network. This can be expressed as changes in power relations among individuals. In the context of the project this evaluation identified the following indicators:

1. Ability to make decisions within the household.
2. Group decision-making.
3. Participation and ability to influence or make decisions in the political sphere.
4. Taking actions to stop violence.
5. Independent income.
6. Control over resources.

Table 6.3 provides estimates for the six indicators identified under changes at relational level. Appendix 1 provides details on the exact cut-off point for each indicator.

**Table 6.3: Indicators of change at the relational level**

	1[Ability to make decisions in the HH]	1[Group decision-making]	1[Participation and ability to influence or make decisions in political sphere]	1[Action to stop violence]	1[Independent income]	1[Control over resources]
<i>Intervention group mean:</i>	0.54	0.68	0.34	0.80	0.44	0.42
<i>Comparison group mean:</i>	0.50	0.37	0.19	0.69	0.30	0.41
<i>Difference:</i>	0.04	0.31***	0.15***	0.11**	0.14***	0.01
	(0.05)	(0.05)	(0.04)	(0.04)	(0.05)	(0.05)
<i>Observations intervention:</i>	214	214	214	214	214	214
<i>Observations:</i>	498	498	498	498	498	498

Notes: Standard errors in parentheses; \* p<0.1, \*\* p<0.05, \*\*\* p<0.01; PSM estimates are bootstrapped with 1,000 repetitions. All means are calculated after matching.

**Ability to make decisions in the household** measures the extent to which the respondent is involved in taking decisions in her own household. Each respondent was asked who normally makes decisions in seven activities in different areas, including decisions on whether and when to have children, the education of the children, who cooks and clean the house, how to spend money, and when to go to the health centre. The first column of Table 6.6 reports the proportion of women that reported having sole or joint decision-making power within the household in all the activities investigated. On average, 54 percent of respondents reported being involved in all household decisions, compared with 50 percent in the comparison group. There appears to be no statistically significant differences between the two groups.<sup>5</sup>

**Group decision-making** measures the extent to which the respondent actively participates in established groups and in taking important decisions in it. The second column in Table 6.3 reports the proportion of women who report participating in groups (women's associations, NGOs, development, cultural or religious associations) and being involved in organizing,

managing, or taking important decisions within the group. On average, 68 percent of the respondents in the intervention group reported participating and being involved in taking important decisions in at least one group, compared with only 37 percent of the respondents in the comparison group. This shows a positive and significant impact of the project on women's group decision-making.

**Participation and ability to make decisions in the public sphere** measures whether the respondent actively participates in public events (village development meetings, demonstrations, public meetings, etc.) and is involved in taking important decisions in it. The third column in Table 6.3 provides estimates of the proportion of women who participated and contributed to a large extent in at least one public event in the last 12 months. The project seems to have had a positive and significant effect on this indicator. Estimates suggest that this effect is mainly driven by positive results among political women.

**Taking action to stop violence** measures whether the respondent would be willing to report a man in the case of experiencing violence. Estimates in the fourth column of Table 6.3 suggest that almost 80 percent of the women in the intervention group reported being willing to report a man in a case of violence, or they had reported doing so in the last 12 months. This is compared with almost 70 percent of the women in the comparison group. This result suggests more confidence in taking action to stop violence that comes as a result of the project.

**Independent income** measures whether the respondent has an independent source of income. Estimates in the fifth column of Table 6.3 suggest that 44 percent of the women in the intervention group are considered to have an independent source of income, compared with only 30 percent in the comparison group. This positive and significant difference is present both for the rural and political subgroups. These results are confirmed also by other estimates looking at change over time in contribution to overall household income.

Finally, **control over resources** measures whether a woman has control over assets and resources in her household. This indicator can be seen to be linked to the indicator looking at household decision-making. In addition, estimates in the final column in Table 6.3 suggest that the project has had no impact in changing household power dynamics.

## 6.3.4 Environmental

The final level of empowerment measures changes in the broader environment. The following indicators were identified for this evaluation:

1. Equality of opportunity.
2. Social norms.
3. Legislative protection.

Table 6.4 provides estimates of the indicators identified under this dimension. Appendix 1 provides details on the how the indicators were constructed.

**Table 6.4: Indicators of change at the environmental level**

	1[Equality of Opportunity]	1[Social norms]	1[Legislative protection]
<i>Intervention group mean:</i>	0.56	0.43	0.47
<i>Comparison group mean:</i>	0.48	0.50	0.46
<i>Difference:</i>	0.08	-0.07	0.01
	(0.05)	(0.05)	(0.05)
<i>Observations intervention:</i>	214	214	214
<i>Observations:</i>	498	498	498

Notes: Standard errors in parentheses; \* p<0.1, \*\* p<0.05, \*\*\* p<0.01; PSM estimates are bootstrapped with 1,000 repetitions. All means are calculated after matching.

**Equality of opportunity** measures whether the respondent lives in a community that ensures that women have equal political opportunities to men. Estimates in the first column in Table 6.4 suggest that roughly half of the respondents in both groups are themselves, or personally know a woman, in a position of power.

**Social norms** are shared beliefs about what is typical and appropriate behaviour in a group. The indicator for social norms measures whether the respondent considers men and women in her community to have opinions that respect women’s freedom.<sup>6</sup> Estimates suggest that, on average, there are no statistically significant differences in the perception of social norms in the community between the two groups.

**Legislative protection for women’s rights** measures whether a woman lives in a society where women’s rights are enshrined in law. Estimates in the third column in Table 6.4 measure whether she has experienced circumstances that prevented her exercising her rights. On average, there are no statistically significant differences between the intervention and comparison groups on this indicator.

## 6.4 IMPACT ON PROJECT’S OTHER OUTCOMES

This section will examine the differences between intervention and comparison groups on the project’s objective to increase women’s awareness of their political and socio-economic rights, and supporting women to play a more active role in the political and socio-economic life of their community and country.

### 6.4.1 Women’s rights – knowledge and awareness

The project conducted a number of training and engagement activities on a variety of thematic areas, including human rights, leadership, gender, and violence. These activities were carried out with the aim of increasing women’s knowledge and awareness of women’s rights. Estimates in Table 6.5 provide evidence that the project was successful in increasing both knowledge and awareness of women’s rights among project participants. Positive impact on this indicator seems to be mainly driven by political women (Table A4.5).

**Table 6.5: Indicators of knowledge and awareness of women's rights**

	<b>Knowledge (Number correct answers [0–3])</b>	<b>Answers reflecting awareness of women's rights (number answers [0–4])</b>
<i>Intervention group mean:</i>	2.52	3.99
<i>Comparison group mean:</i>	2.18	3.68
<i>Difference:</i>	0.35***	0.32**
	(0.11)	(0.14)
<i>Observations intervention:</i>	214	214
<i>Observations:</i>	498	498

Notes: Standard errors in parentheses; \* p<0.1, \*\* p<0.05, \*\*\* p<0.01; PSM estimates are bootstrapped with 1,000 repetitions. All means are calculated after matching.

## 6.4.2 Collective action: participation and decision-making

The project attempted to facilitate women's participation in civil society and political groups. Estimates in Table 6.6 provide good evidence that women involved in the project have increased participation in groups (77 percent of project participants) and in public events (47 percent of project participants). These proportions are significantly higher than in the matched comparison group.

Political participation has increased among project participants by 14 percent, but there is no evidence that it has increased significantly more than in the comparison group. However, women who participated in the project seem to be more likely to run for election in a political competition compared with women who did not participate.

**Table 6.6: Participation in collective action**

	<b>1[Group participation increased]</b>	<b>1[Political participation increased]</b>	<b>Since 2011, have you ever run for election in a political competition?</b>	<b>1[Event participation increased]</b>
<i>Intervention group mean:</i>	0.77	0.14	0.11	0.47
<i>Comparison group mean:</i>	0.35	0.11	0.05	0.20
<i>Difference:</i>	0.41***	0.03	0.06**	0.27***
	(0.05)	(0.03)	(0.03)	(0.04)
<i>Observations intervention:</i>	214	214	214	214
<i>Observations:</i>	0.77	0.14	498	0.47

Notes: Standard errors in parentheses; \* p<0.1, \*\* p<0.05, \*\*\* p<0.01; PSM estimates are bootstrapped with 1,000 repetitions. All means are calculated after matching.

Table 6.7 provides good evidence that the level of engagement in taking important decisions in groups and public event is also statistically significantly higher in the intervention group than in the comparison group. Project participants reported being involved in taking important decisions in almost two groups (including women’s associations, youth associations, NGOs, development associations, cultural and religious groups) and two events (including village development meetings, demonstrations, conferences or public meetings, etc.) in the last 12 months, compared with an average of one in the comparison group.

**Table 6.7: Decision-making in collective action**

	<b>Number of groups involved in taking decisions</b>	<b>Political participation decision-making</b>	<b>Number of events involved in taking decisions</b>
<i>Intervention group mean:</i>	1.67	0.28	1.91
<i>Comparison group mean:</i>	0.98	0.23	1.14
<i>Difference:</i>	0.69***	0.05	0.77***
	(0.15)	(0.05)	(0.20)
<i>Observations intervention:</i>	214	214	214
<i>Observations:</i>	498	498	498

Notes: Standard errors in parentheses; \* p<0.1, \*\* p<0.05, \*\*\* p<0.01; PSM estimates are bootstrapped with 1,000 repetitions. All means are calculated after matching.

## 6.5 IMPACT ON UNINTENDED PROJECT OUTCOMES

Finally, the evaluation investigated possible unintended negative outcomes, such as violence. We are conscious that empowerment projects trying to change power structures within the household and the community might induce an unintended negative reaction from actors threatened by those changes.

The evaluation investigated if the respondent had been the victim of episodes of violence in the 12 months prior to the survey. Table 6.8 indicates that there is no evidence suggesting that the project had any effect on exposure to violence. However, it is worth noting that the number of cases of violence remains high, with 37 percent of the project participants reporting being exposed to at least one episode of psychological violence, 14 percent of the project participants reporting at least one episode of physical violence, and 3 percent reporting sexual violence in the previous 12 months. These data, combined with the fact that respondents in the DCE identified ‘*ability to take action against violence*’ as a particularly important empowerment characteristic, would suggest that exposure to violence is an area that requires further attention.

**Table 6.8: Exposure to violence**

	1[Received violence (any)]	1[Received violence (psychological)]	1[Received violence (physical)]	1[Received violence (sexual)]
<i>Intervention group mean:</i>	0.37	0.37	0.14	0.03
<i>Comparison group mean:</i>	0.30	0.30	0.13	0.03
<i>Difference:</i>	0.07	0.07	0.01	-0.00
	(0.05)	(0.05)	(0.03)	(0.02)
<i>Observations intervention:</i>	214	214	214	214
<i>Observations:</i>	497	498	497	497

Notes: Standard errors in parentheses; \* p<0.1, \*\* p<0.05, \*\*\* p<0.01; PSM estimates are bootstrapped with 1,000 repetitions. All means are calculated after matching.

# 7 CONCLUSIONS

## 7.1 CONCLUSIONS

This evaluation has found evidence that the Tunisian component of the project 'AMAL: Supporting Women's Transformative Leadership' had a positive impact on overall women's empowerment. To measure women's empowerment, the evaluation identified 14 characteristics describing an empowered woman in Tunisia and assigned each a measurable indicator. It assessed how women involved in the project compared in these indicators relative to similar women not involved in the project. Project participants scored positively, on average, in 58 percent of the indicators, compared with 51 percent for women not involved in the project. This difference is statistically significant, suggesting that the project has had a positive impact on overall women's empowerment.

The evaluation also employed an innovative Discrete Choice Experiment to reveal the relative importance of each indicator according to the women who took part in the survey. Responses were used to provide evidence on what the characteristics of an empowered woman in Tunisia look like and assign relative weights to the individual indicators in the composite index. By using a weighted empowerment index the average is reduced both for the intervention and comparison groups, yet the difference is still statistically significant, confirming an overall positive impact of the project on women's empowerment.

According to the DCE exercise, it appears that women who participated in the survey consider awareness of the benefits of participating in collective actions, and the ability to take actions to stop violence as the most important characteristics for describing an empowered woman in Tunisia.

Measures for women's awareness of the benefits of participating in collective actions appear to be high both for women participating in the project (70 percent, on average) and the comparison group. While the difference is not statistically significant for the overall sample, the project appears to have had a positive and significant impact on rural women. There is also compelling evidence that the project had a positive and significant impact on group and event participation, as well as decision-making in these events and groups.

The evaluation also found positive and significant results of the project on women's willingness to report a man in the case of being a victim of violence. While there is no evidence suggesting any negative effect of the project on women's exposure to violence, it is important to report that 37 percent of the project participants reported being exposed to at least one episode of psychological violence in the last 12 months, and 14 and 3 percent respectively reported at least one episode of physical or sexual violence.

The DCE also identified self-confidence, the ability to make decisions for herself, and knowledge and awareness of women's rights as other important characteristics for describing a woman's empowerment in Tunisia. There is good evidence that the project had a positive and significant impact on knowledge and awareness of women's rights among women in civil society and political parties. Women who participated in the project reported high levels of ability to make decisions for themselves, but this was not significantly different from women in the comparison groups.

## 7.2 PROGRAMME LEARNING CONSIDERATIONS

### **Consider mitigation activities for unintended effects, such as violence against women.**

The evaluation identified that overall more than 14 percent of the women interviewed reported at least one episode of physical violence. While there is no evidence that the project under analysis exacerbated this phenomenon, future projects working with women's empowerment are advised to closely monitor gender-based violence and take measures to support victims this phenomenon.

### **Identify strategies for supporting changes at environmental level.**

The evaluation found evidence of a positive and significant effect among women engaged in political parties and civil society organizations in improving knowledge and awareness of women's rights, as well as increasing participation and influence in the political sphere. However, the evaluation did not find changes in social norms, legislative protection for women's rights or equality of opportunity. While this may well be due to measurement issues, there is a shared recognition among project partners that changes at environmental level require interventions on a more extended time-frame than the one conducted by the project targeting social norms, beliefs and attitudes.

### **Consider sustainability during project design and implementation.**

The evaluation found a positive and significant effect among rural women on improving awareness of group participation and group decision-making. However, there are questions whether this effect will last into the future. The project did not have an exit strategy and operated under the assumption it would continue its activities in the future. It is therefore not clear whether its activities will sustain impact over time. Future projects are advised to operate considering sustainability planning exit strategies during the intervention design.

### **Consider engaging with different actors, including men and youth.**

The evaluation did not find evidence of impact in changing households decision-making and control over resources within the household. The evaluation recognizes that the project already directly worked with a variety of different types of women (i.e. urban women involved in political parties or civil society organizations, as well as rural women) and engaged with local and national actors for advocacy interventions on health-care coverage. To seek changes within the household, other projects have, for example, also experimented with working with both men and youth.

# APPENDIX 1: THRESHOLDS FOR CHARACTERISTICS OF WOMEN'S EMPOWERMENT

Level	Characteristic	Threshold: a woman scores positively if...
<b>Personal</b>	<i>Self-confidence</i>	She agrees or strongly agrees with the following statements: <ul style="list-style-type: none"> <li>• I feel that I have a number of good qualities</li> <li>• I handle new situations with relative comfort and ease</li> <li>• I feel positive and energized about life</li> </ul>
	<i>Ability to make decisions for herself</i>	She is solely or jointly involved in taking all these decisions: <ul style="list-style-type: none"> <li>• Whether you personally can visit relatives outside the house</li> <li>• Whether you personally can participate in group activities (NGOS, associations, political parties)</li> <li>• Whether you personally can participate in demonstrations</li> <li>• Whether you personally can run in local elections</li> <li>• Whether you personally decide where to work</li> </ul>
	<i>Recognizing that violence is not acceptable</i>	She considers violence against a woman not acceptable in any of the following circumstances: <ul style="list-style-type: none"> <li>• If she disobeys her husband or other family members</li> <li>• If he suspects that she has been unfaithful</li> <li>• If she neglects the children</li> <li>• If she spends money without permission</li> <li>• If she goes out without permission</li> <li>• If he is drunk</li> <li>• Any other case not mentioned above</li> </ul>
	<i>Awareness that collective action is more effective</i>	She strongly believes that: <ul style="list-style-type: none"> <li>• Acting as a group is more effective in solving issues than solving issues by herself</li> <li>• It is better for women to work together to solve problems</li> </ul>
	<i>Knowledge and awareness of women's rights (ability to recognize problems)</i>	She responds correctly at least to two out of four of the following questions. <ul style="list-style-type: none"> <li>• If you are poor and do not own any insurance, does the omnda have the right to refuse to provide you with the poor certificate? (No)</li> <li>• Are you entitled to have access to health care with only your own white/yellow carnet? (Yes)</li> <li>• Are you entitled to have access to health care with only a copy of your husband's carnet? (Yes)</li> <li>• According to the current law, can a man who sexually violates a girl avoid prison if he marries her? (Yes)</li> </ul> AND she strongly agrees with the following statements:

Level	Characteristic	Threshold: a woman scores positively if...
		<ul style="list-style-type: none"> <li>• Women's salaries should be the same as men's salaries</li> <li>• Women have the right to participate in civil society</li> </ul> AND she strongly disagrees with the following statements: <ul style="list-style-type: none"> <li>• Men have priority in accessing jobs over women</li> <li>• Boys should have priority in accessing education</li> <li>• Men's reasoning is more accurate than women's</li> </ul>
<b>Relational</b>	<i>Ability to make decisions in the household</i>	She is solely or jointly involved in taking all these decisions in the household <ul style="list-style-type: none"> <li>• Whether and when to have children</li> <li>• Whether she can travel outside</li> <li>• The education of her children</li> <li>• Who cooks, clean the house, or take care of people</li> <li>• How much of the crops harvested should be kept for consumption in the household</li> <li>• How to spend the money made from income-generating activity</li> <li>• When to go to the health centre</li> </ul>
	<i>Participation and ability to make decisions in the public sphere</i>	She is involved in managing and taking important decisions in at least one of these groups: <ul style="list-style-type: none"> <li>• Women's associations</li> <li>• Youth associations</li> <li>• NGOs</li> <li>• Development associations</li> <li>• Religious associations</li> <li>• Cultural groups</li> <li>• Other civil society organizations</li> </ul>
	<i>Participation and ability to influence or make decisions in political sphere</i>	She is involved to a large extent in organizing, managing, or taking important decisions in at least one of the following: <ul style="list-style-type: none"> <li>• Village development meetings</li> <li>• Demonstrations or other collective actions</li> <li>• Conferences/public presentations/public meetings</li> <li>• Strategic development for NGOs</li> <li>• Preparation documents, policy briefs, flyers</li> <li>• Media appearance</li> <li>• Other public events (only if it does not fit into one of the other categories)</li> </ul>
	<i>Taking action to stop violence</i>	She would be willing to report violence against her OR she reported the violence if she was a victim in the last 12 months.

Level	Characteristic	Threshold: a woman scores positively if...
	<i>Independent income</i>	She is involved in at least one productive activity AND she contributes at least 30 percent of the total household income.
	<i>Control over resources in her household</i>	She has the final say to sell, buy more or replace at least 75 percent of the assets owned by the household.
<b>Environmental</b>	<i>Equality of opportunity</i>	She is a member of OR personally knows a woman in: <ul style="list-style-type: none"> <li>• Political party</li> <li>• Municipality</li> <li>• Instance (regulatory body)</li> <li>• Regional government</li> <li>• Parliament</li> </ul>
	<i>Social norms</i>	Men in her community would not consider it acceptable for a man to beat his wife under any condition OR She considers other MEN and WOMEN in the community in choosing the highlighted statements (when asked to choose between the two): <ul style="list-style-type: none"> <li>• <u>A woman can be a leader, just like a man can</u>/Men are better leaders than women</li> <li>• <u>I feel free to choose what clothes to wear</u>/I care what other people think about what I wear</li> <li>• The real place for women is the household/<u>Women can be part of public society</u></li> <li>• In cases of sexual violence, only the woman is responsible/<u>In cases of sexual violence, the woman is the victim</u></li> </ul>
	<i>Legislative protection for women's rights</i>	She responded NO to both questions below: <ul style="list-style-type: none"> <li>• According to the law, the omda does not have the right to refuse to provide you with a poor certificate. Are you aware of cases when this law has not been applied?</li> <li>• According to the law, you are entitled to access to health care with only your own carnet or only your husband's. In the last year, have you experienced that this law has not been applied?</li> </ul>

## APPENDIX 2: METHODOLOGY USED FOR PROPENSITY-SCORE MATCHING

The analysis of outcome variables presented in Section 5 of this report involved group mean comparisons using propensity-score matching (PSM). The basic principle of PSM is to match each participant with a non-participant that was observationally similar at baseline and to obtain the treatment effect by averaging the differences in outcomes across the two groups after project completion. Unsurprisingly, there are different approaches to matching, i.e. to determining whether or not a household is observationally 'similar' to another household. For an overview, we refer to Caliendo and Kopeinig (2008).<sup>7</sup> This appendix describes and tests the specific matching procedure followed in this Effectiveness Review.

### Estimating propensity scores

Given that it is extremely hard to find two individuals with exactly the same characteristics, Rosenbaum and Rubin (1983) demonstrate that it is possible to match individuals using a prior probability for an individual to be in the intervention group, naming it *propensity score*. More specifically, propensity scores are obtained by pooling the units from both the intervention and comparison groups and using a statistical probability model (e.g. a probit regression) to estimate the probability of participating in the project, conditional on a set of observed characteristics.

Table A2.1 presents the probit regression results used to estimate the propensity scores in our context. To guarantee that none of the matching variables were affected by the intervention, we only considered variables related to baseline, and only those variables that were unlikely to have been influenced by anticipation of project participation (Caliendo and Kopeinig, 2008).

**Table A2.1: Estimating the propensity score**

	<b>Marginal effect</b>	<b>Standard error</b>
Household (HH) size	-0.02	0.01
1[Head of HH has University education]	-0.18**	0.07
1[Head of HH is able to work]	-0.17*	0.07
1 <sup>st</sup> quintile (Wealth index 2011 normalized)	-0.01	0.10
2 <sup>nd</sup> quintile (Wealth index 2011 normalized)	0.03	0.09
4 <sup>th</sup> quintile (Wealth index 2011 normalized)	-0.16*	0.07
5 <sup>th</sup> quintile (Wealth index 2011 normalized)	-0.03	0.08
1[Respondent worked in the formal sector in 2011]	0.00	0.07
1[Income share >= 50% in 2011]	0.05	0.06
1[Respondent has University education]	0.18*	0.07
1[Respondent is able to work]	-0.22	0.13
1[Type respondent RURAL woman]	-0.02	0.08
1[Public event participation in 2011]	0.17**	0.06
1[Political participation 2011]	0.01	0.07
1[Group participation in 2011]	0.22***	0.06
Observations	504	

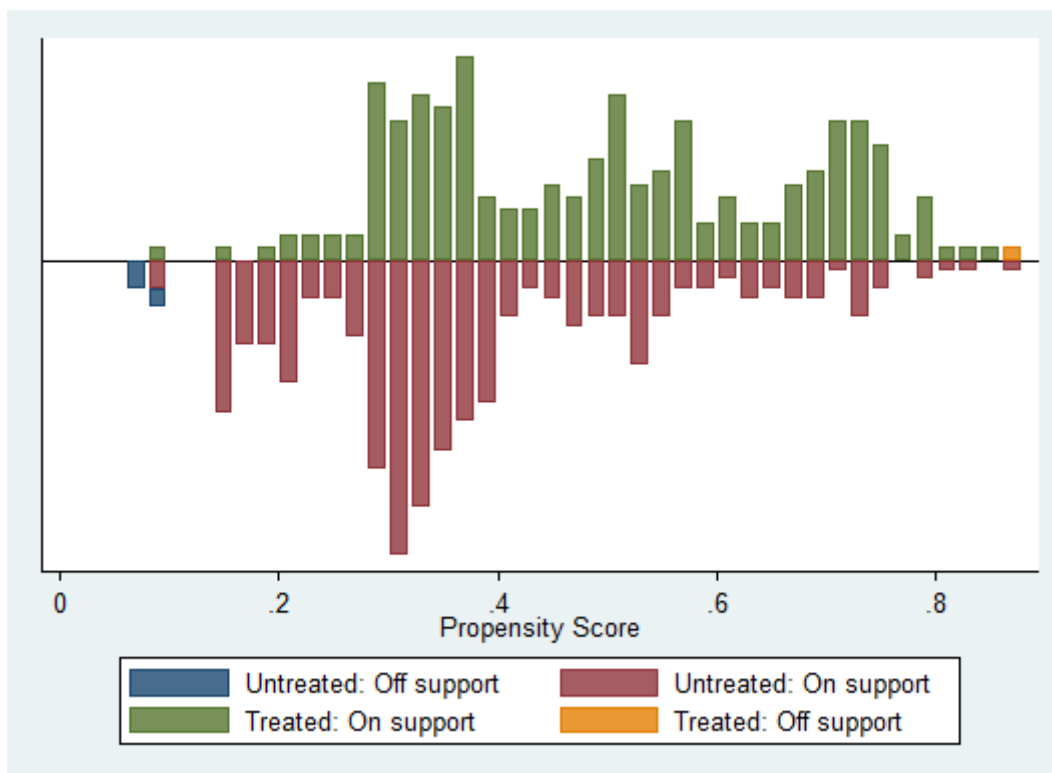
Marginal effects. Variables dated 2011 are estimates, based on recall data. Dependent variable is binary, taking 1 for women involved in the project, and 0 otherwise. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

## Defining the region of common support

After estimating the propensity scores, the presence of a good *common support area* needs to be checked. The area of common support is the region where the propensity-score distributions of the treatment and comparison groups overlap. The common support assumption ensures that ‘treatment observations have a comparison observation “nearby” in the propensity-score distribution’ (Heckman, LaLonde and Smith, 1999). Since some significant differences were found between the intervention and comparison groups in terms of their baseline characteristics (as detailed in Section 4.2), some of the women in the intervention group were too different from the comparison group to allow for meaningful comparison. We used a minima and maxima comparison, deleting all observations whose propensity score was smaller than the minimum and larger than the maximum in the opposite group (Caliendo and Kopeinig, 2008). Only 1 of the 215 women interviewed in the intervention group was dropped because they lay outside the area of common support. Therefore, there are limited concerns regarding the sample not being representative of the intervention population.

Figure A2.1 illustrates the propensity scores and shows the proportion of women lying on and off the areas of common support, by treatment group.

**Figure A2.1: Propensity score on and off area of common support**



## Matching intervention and comparison households

Following Rosenbaum and Rubin (1983), after estimating the propensity scores and defining the area of common support, individuals are matched on the basis of their propensity score. The literature has developed a variety of matching procedures. For the main results presented in this Effectiveness Review we chose to employ the method of kernel matching. Kernel matching weights the contribution of each comparison group member, attaching greater weight to those comparison observations that provide a better match with the treatment observations. One common approach is to use the normal distribution with mean zero as a kernel, and weights given by the distribution of the differences in propensity score. Thus 'good' matches are given greater weight than 'poor' matches.

The *psmatch2* module in Stata was used with a bandwidth of 0.06 and with the analysis restricted to the area of common support.

When using PSM, standard errors of the estimates were bootstrapped using 1,000 repetitions, to account for the additional variation caused by the estimation of the propensity scores and the determination of the common support.<sup>8</sup>

## Check balancing

For PSM to be valid, the intervention group and the matched comparison group need to be balanced, in that they need to be similar in terms of their observed baseline characteristics. This should be checked. The most straightforward method to do this is to test whether there are any significant differences in baseline covariates between the intervention and comparison groups in the matched sample, as reported in Table A2.2. None of the variables implemented for the matching are statistically significant in the matched sample.

**Table A2.2: Balancing test**

Variable	Un-matched Matched	Treated Mean	Comparison mean	% bias	% reduction bias	t	p> t	V_e(T) / V_e(C)
<i>Household size</i>	U	3.9813	4.3803	-23.4		-2.59	0.010	0.91
	M	3.9813	4.0569	-4.4	81.1	-0.47	0.638	1.00
<i>1[Head of HH has University education]</i>	U	.59813	.71479	-24.7		-2.74	0.006	1.04
	M	.59813	.62792	-6.3	74.5	-0.63	0.528	0.89
<i>1[Head of HH is able to work]</i>	U	.83645	.89437	-17.0		-1.90	0.058	1.46*
	M	.83645	.83307	1.0	94.2	0.09	0.925	0.98
<i>1st quintile (Wealth index 2011 normalized)</i>	U	.18692	.21127	-6.1		-0.67	0.503	0.91
	M	.18692	.18391	0.8	87.7	0.08	0.936	1.02
<i>2nd quintile (Wealth index 2011)</i>	U	.20093	.20423	-0.8		-0.09	0.928	0.98
	M	.20093	.22348	-5.6	-585.1	-0.57	0.569	0.84
<i>4th quintile (Wealth index 2011)</i>	U	.16355	.21127	-12.2		-1.34	0.180	0.86
	M	.16355	.15821	1.4	88.8	0.15	0.881	1.02
<i>5th quintile (Wealth index 2011)</i>	U	.21963	.19014	7.3		0.81	0.419	1.05
	M	.21963	.18464	8.7	-18.7	0.90	0.369	1.07
<i>1[Respondent worked in the formal sector in 2011] sector</i>	U	.33178	.24296	19.7		2.19	0.029	1.09
	M	.33178	.30083	6.9	65.2	0.69	0.492	0.80
<i>1[Income share &gt;= 50% in 2011]</i>	U	.33178	.23592	21.3		2.37	0.018	1.19
	M	.33178	.31266	4.3	80.1	0.42	0.673	0.91
<i>1[Respondent has university education]</i>	U	.51869	.53873	-4.0		-0.44	0.658	0.97
	M	.51869	.55376	-7.0	-75.0	-0.73	0.468	0.87
<i>1[Respondent is able to work]</i>	U	.9486	.97887	-16.2		-1.84	0.066	2.41**
	M	.9486	.95166	-1.6	89.9	-0.15	0.885	1.07
<i>1[Type respondent RURAL woman]</i>	U	.64019	.59155	10.0		1.10	0.271	0.91
	M	.64019	.62236	3.7	63.3	0.38	0.703	0.93

1[Public event participation in 2011]	U	.46729	.25704	44.7		4.99	0.000	1.12
	M	.46729	.45701	2.2	95.1	0.21	0.832	0.95
1[Political participation 2011]	U	.16822	.13028	10.6		1.18	0.237	1.20
	M	.16822	.15799	2.9	73.0	0.29	0.775	0.97
1[Group participation in 2011]	U	.40187	.2007	44.8		5.03	0.000	1.31*
	M	.40187	.39122	2.4	94.7	0.22	0.822	0.90

# APPENDIX 3: ROBUSTNESS CHECKS

In order to address the validity of the results presented in Section 5, a series of robustness checks were carried out to check if the preferred matching algorithm is the one that best performs the matching between intervention and comparison groups. This section presents a number of alternative matching algorithms used to test the robustness of the estimates presented in Section 5.

## 1. Multivariate regression

The first basic specification for estimating the impact of project participation is an OLS model (when the dependent is continuous) or probit model when the dependent is binary.

$$Y_i = \alpha + \beta_1 \text{Project participation}_i + \delta' X_i + \varepsilon_i$$

Where  $Y_i$  is the dependent variable;  $X_i$  is a vector of household covariates used in the model in Table A2.1; finally, the variable of interest is the dummy variable *Project Participation* that assumes a value equal to one when the household is enrolled in the project, zero otherwise. When the dependent variable  $Y_i$  is binary variable, a probit model replaces the OLS specification. It is important to note that in the absence of randomized allocation of the project among the population in our sample, OLS and probit models fail to identify the causal effect of the programme, and can only account for observable differences between intervention and comparison groups. Only the estimate of  $\beta_1$  will be reported.

## 2. Propensity-Score Weighting

Following the example of Hirano and Imbens (2001)<sup>9</sup> we implemented a regression adjustment with weights based on the propensity score. The average treatment effect can be estimated in a parametric framework as follows:

$$Y_i = \alpha + \beta_1 \text{Project participation}_i + \delta_2' Z_i + \delta_1' X_i + \varepsilon_i$$

Where  $Y_i$  represents the outcome of interest;  $\text{Project participation}_i$  is a dummy binary variable equal to one if an individual/household is enrolled into the programme and zero otherwise;  $X_i$  is a vector of matching covariates used to estimate the propensity score match; and  $Z_i$  is a vector of control variables which cannot be used for the matching as they are not supposed to influence project participation. The regression is estimated with weights equal to one for the treated units and  $\hat{e}(x)/(1 - \hat{e}(x))$  for control units. This parametric regression analysis framework has the advantage of exploring heterogeneity in the treatment effect. Moreover, it allows controlling for variables that cannot be included in the propensity-score equation. The robustness check tables will only report  $\beta_1$ .

## 3. Propensity-Score Matching – Nearest Neighbour

The Nearest Neighbour (NN) matching algorithm finds an observation from the comparison group to be matched with an observation from a treated individual that is closest in terms of their propensity score.<sup>10</sup> In this robustness check we apply the NN method estimating the average treatment effect on the treated, with one match per observation, using Abadie-Imbens standard deviations and exact match on the baseline wealth quintiles.

**Table A3.1: Overall women's empowerment index**

	1	2
	Empowerment base index (un-weighted)	Empowerment base index (weighted)
<i>OLS</i>	0.06*** (0.01)	0.03** (0.01)
<i>N</i>	504	504
<i>Propensity-Score Weighting</i>	0.06*** (0.01)	0.03** (0.01)
<i>N</i>	498	498
<i>Nearest neighbour</i>	0.06*** (0.02)	0.03* (0.02)
<i>N</i>	498	498

Standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table A3.2: Indicators of change at personal level**

	1	2	3	4	5
	1[Self-confidence]	1[Ability to make decisions for herself]	1[Respondent DOES NOT accept violence]	1[Awareness that collective action is more effective]	1[Ability to recognize problems]
<i>OLS</i>	0.00 (0.05)	-0.06* (0.03)	0.03 (0.03)	0.05 (0.05)	0.15*** (0.04)
<i>N</i>	504	504	504	504	504
<i>Propensity-Score Weighting</i>	-0.02 (0.05)	-0.05 (0.03)	0.02 (0.03)	0.05 (0.05)	0.15*** (0.05)
<i>N</i>	498	498	498	498	498
<i>Nearest neighbour</i>	-0.06 (0.06)	-0.05 (0.04)	0.06 (0.04)	0.00 (0.07)	0.18*** (0.06)
<i>N</i>	498	498	498	498	498

Standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table A3.3: Indicators of change at relational level**

	1	2	3	4	5	6
	1[Ability to make decisions in the HH]	1[Group decision-making]	1[Participation and ability to influence or make decisions in political sphere]	1[Action to stop violence]	1[Independent income]	1[Control over resources]
<i>OLS</i>	0.02 (0.04)	0.32*** (0.04)	0.14*** (0.04)	0.08* (0.04)	0.12*** (0.04)	-0.01 (0.04)
<i>N</i>	504	504	504	504	504	504
<i>Propensity-Score Weighting</i>	0.03 (0.04)	0.30*** (0.04)	0.14*** (0.04)	0.10** (0.04)	0.13*** (0.04)	-0.00 (0.04)
<i>N</i>	498	498	498	498	498	498
<i>Nearest neighbour</i>	-0.01 (0.06)	0.30*** (0.06)	0.14*** (0.05)	0.19*** (0.06)	0.11* (0.06)	0.00 (0.05)
<i>N</i>	498	498	498	498	498	498

Standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table A3.4: Indicators of change at environmental level**

	1	2	3
	1[Equality of opportunity]	1[Social norms]	1[Legislative protection]
<i>OLS</i>	0.05 (0.03)	-0.05 (0.05)	0.01 (0.05)
<i>N</i>	504	504	504
<i>Propensity-Score Weighting</i>	0.08** (0.04)	-0.06 (0.05)	-0.01 (0.05)
<i>N</i>	498	498	498
<i>Nearest neighbour</i>	0.06 (0.06)	-0.11* (0.06)	0.06 (0.06)
<i>N</i>	498	498	498

Standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table A3.5: Indicators of knowledge of women's rights**

	1	2	3	4
	Correct answers	1[Correct answer – does the omda have the right to refuse to provide you the poor certificate	1[Correct answer - Are you entitled to have access to health care with only your own carnet	1[Correct answer - Are you entitled to have access to health care with only your husband's carnet
OLS	0.34*** (0.10)	0.11** (0.04)	0.08* (0.04)	0.09* (0.04)
N	504	504	504	504
Propensity-Score Weighting	0.36*** (0.10)	0.11*** (0.04)	0.09* (0.05)	0.11** (0.05)
N	498	498	498	498
Nearest neighbour	0.18 (0.15)	0.12* (0.07)	-0.00 (0.07)	0.02 (0.06)
N	498	498	498	498

Standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table A3.6: Indicators of awareness of women's rights**

	1	2	3	4	5	6
	Answers reflecting awareness of women's rights	1[strongly disagree: Men have the priority in accessing jobs over women]	1[strongly agree: Women's salaries should be the same as men's salaries]	1[strongly disagree: Boys should have priority access to education]	1[strongly disagree: Men's reasoning is more accurate than women's]	1[strongly agree: Women have the right to participate in civil society]
OLS	0.29** (0.12)	0.06 (0.04)	0.05 (0.04)	0.08** (0.04)	0.05 (0.04)	0.05** (0.02)
N	504	504	504	504	504	504
Propensity-Score Weighting	0.28** (0.12)	0.04 (0.04)	0.06 (0.04)	0.08** (0.04)	0.04 (0.04)	0.05** (0.02)
N	498	498	498	498	498	498
Nearest neighbour	0.46*** (0.18)	0.12** (0.06)	0.12* (0.06)	0.10** (0.05)	0.09 (0.05)	0.03 (0.03)
N	498	498	498	498	498	498

Standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table A3.7: Participation in collective action**

	1	2	3	4
	1[Group participation increased]	1[Political participation increased]	Since 2011, have you ever run for election in a political competition?	1[Event participation increased]
<i>OLS</i>	0.89*** (0.10)	0.04 (0.04)	0.05** (0.02)	0.79*** (0.15)
<i>N</i>	504	504	504	504
<i>Propensity-Score Weighting</i>	0.90*** (0.11)	0.05 (0.04)	0.05* (0.03)	0.76*** (0.17)
<i>N</i>	498	498	498	498
<i>Nearest neighbour</i>	0.94*** (0.15)	0.01 (0.05)	0.05* (0.03)	0.79*** (0.24)
<i>N</i>	498	498	498	498

Standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table A3.8: Decision-making in collective action**

	1	2	3
	Number of groups where involved in taking decisions	Number of political groups involved in taking decisions	Number of events where involved in taking decisions
<i>OLS</i>	0.65*** (0.11)	0.04 (0.04)	0.72*** (0.16)
<i>N</i>	504	504	504
<i>Propensity-Score Weighting</i>	0.64*** (0.12)	0.03 (0.04)	0.70*** (0.18)
<i>N</i>	498	498	498
<i>Nearest neighbour</i>	0.74*** (0.16)	0.02 (0.05)	0.79*** (0.24)
<i>N</i>	498	498	498

Standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

**Table A3.9: Exposure to violence**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
	<b>1[Received violence (any)]</b>	<b>1[Received violence (psychological)]</b>	<b>1[Received violence (physical)]</b>	<b>1[Received violence (sexual)]</b>
<i>OLS</i>	0.03 (0.04)	0.03 (0.04)	-0.01 (0.03)	-0.01 (0.02)
<i>N</i>	503	504	503	503
<i>Propensity-Score Weighting</i>	0.08* (0.04)	0.07 (0.04)	0.01 (0.03)	-0.00 (0.02)
<i>N</i>	497	498	497	497
<i>Nearest neighbour</i>	0.10 (0.07)	0.10 (0.07)	0.03 (0.05)	-0.03 (0.03)
<i>N</i>	497	498	497	497

Standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

## APPENDIX 4: SUBGROUP ANALYSIS

In this appendix, we consider whether the project had differential effects depending on the organization and therefore the type of activities implemented.

To assess whether different activities had different effects on the outcome of interest, we ran a propensity-score weighting, similar to the robustness checks in Appendix 4.

However, in addition to project participation ( $\tau_i$ ), we added ( $D_i$ ), which is a variable that takes the value 1 if the woman lived in rural communities, zero if they were considered as a political woman; and finally, we added a so-called ‘interaction’ variable, which is simply the intervention status ( $\tau_i$ ) multiplied by the dummy variable referring to legal support activities ( $D_i$ ).

The regression model also includes the matching variables as covariates ( $X_i$ ), to control for observable baseline differences between the project and non-project households when estimating the effects of the project. The regression is estimated with weights equal to one for the treated units and  $\hat{e}(x)/(1 - \hat{e}(x))$  for control units.

$$Y_i = \alpha + \beta_1 \tau_i + \beta_2 D_i + \beta_3 (\tau_i \times D_i) + X_i' \delta + \varepsilon_i$$

What we are interested is in the coefficient  $\beta_1$  which tells us the effect of the project for political women and  $\beta_1 + \beta_3$  which tells us the effect of the project for rural women. The coefficient  $\beta_3$  suggests whether there have been differential effects of the project on whether the woman was from a rural community or from a political party or civil society.

Tables in this appendix will just report estimates for  $\beta_1$  and  $\beta_1 + \beta_3$ .

**Table A4.1: Differential effects on women’s empowerment by type of intervention**

	Empowerment index (un-weighted)	Empowerment index (weighted)
1[Political women]	0.04* (0.02)	0.02 (0.02)
1[Rural women]	0.09*** (0.02)	0.05* (0.02)

Robust standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

**Table A4.2: Differential effects on personal level indicators by type of intervention**

	1[Self-confidence]	1[Ability to make decisions for herself]	1[Respondent DOES NOT accept violence]	1[Awareness that collective action is more effective]	1[Knowledge and awareness of women’s rights]
1[Political women]	0.01 (0.06)	-0.04 (0.02)	0.01 (0.03)	-0.05 (0.06)	0.26*** (0.06)
1[Rural women]	-0.07 (0.07)	-0.06 (0.07)	0.04 (0.07)	0.24** (0.08)	-0.04 (0.07)
	498	498	498	498	498

Robust standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

**Table A4.3: Differential effects on relational level indicators by type of intervention**

	1[Ability to make decisions in the HH]	1[Group decision-making]	1[Participation and ability to influence or make decisions in political sphere]	1[Action to stop violence]	1[Independent income]	1[Control over resources]
<i>1[Political women]</i>	0.03 (0.05)	0.19** (0.06)	0.19** (0.06)	0.09 (0.05)	0.11* (0.06)	-0.03 (0.05)
<i>1[Rural women]</i>	0.04 (0.08)	0.51*** (0.06)	0.06 (0.03)	0.11 (0.08)	0.15* (0.06)	0.06 (0.06)

Robust standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

**Table A4.4: Differential effects on environmental level indicators by type of intervention**

	1[Equality of Opportunity]	1[Social norms]	1[Legislative protection]
<i>1[Political women]</i>	0.11 (0.06)	-0.06 (0.07)	-0.08 (0.06)
<i>1[Rural women]</i>	0.06 (0.04)	-0.07 (0.08)	0.11 (0.08)

Robust standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

**Table A4.5: Differential effects on knowledge and awareness of women's rights by type of intervention**

	Correct answers (knowledge)	Answers reflecting awareness of women's rights
<i>1[Political women]</i>	0.37** (0.12)	0.32** (0.12)
<i>1[Rural women]</i>	0.36 (0.19)	0.22 (0.26)

Robust standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

**Table A4.6: Differential effects on participation in collective actions by type of intervention**

	<b>1[Group participation increased]</b>	<b>1[Political participation increased]</b>	<b>Since 2011, have you ever run for election in a political competition?</b>	<b>1[Event participation increased]</b>
<i>1[Political women]</i>	0.16**	0.04	0.07	0.07
	(0.06)	(0.05)	(0.04)	(0.06)
<i>1[Rural women]</i>	0.86***	0.01	0.01	0.62***
	(0.04)	(0.01)	(0.01)	(0.06)

Robust standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

**Table A4.7: Differential effects on participation in collective actions by type of intervention**

	<b>Number of groups where involved in taking decisions</b>	<b>Number of political groups involved in taking decisions</b>	<b>Number of events where involved in taking decisions</b>
<i>1[Political women]</i>	0.55**	0.04	0.72**
	(0.18)	(0.06)	(0.26)
<i>1[Rural women]</i>	0.80***	0.02	0.67***
	(0.13)	(0.02)	(0.15)

Robust standard errors in parentheses; \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

# NOTES

- 1 The word 'amal' is Arabic for 'hope'
- 2 AMAL Programme Mid-Term Review – August 2014
- 3 The analysis did not reveal significant differences, even by assessing each individual decision separately.
- 4 This is significantly higher than the national statistics where 50% of women consider violence acceptable. This discrepancy is due to the fact that this survey data area is not a representative sample of the national population. The sampling strategy was designed to allow comparability between project participants and similar comparable women. A large proportion of women involved in the project are also involved in civil society and political parties, and are therefore presumably more likely to have certain views. However, when analysing only the comparison group in rural areas, for which the sampling strategy did not aim to replicate the self-selection process, we find data more in line with the national statistics (55% of women consider violence unacceptable).
- 5 The analysis did not reveal significant differences even by assessing independently each of the six specific decisions investigated within the household.
- 6 A woman was considered empowered under this indicator if she responded that she thinks that most of the other men and women in her community agree with the following statement:
  - *a woman can be a leader, just like a man can instead of the sentence men are better leaders than women*
  - *I feel free to choose which clothes to wear instead of the sentence I care what other people think about what I wear*
  - *women can be part of the public society instead of the sentence the real place for women is the household*
  - *in cases of sexual violence, the woman is the victim instead of the sentence in cases of sexual violence, the woman only is responsible.*
- 7 Caliendo, M. and Kopeinig, S. 2008. Some Practical Guidance for the Implementation of Propensity Score Matching, *Journal of Economic Surveys*, Wiley Blackwell, vol. 22(1), pages 31–72.
- 8 Bootstrapping is a statistical procedure where repeated samples are drawn from the original sample with replacement. This results in a statistical distribution of parameter estimates (the sampling distribution). The bootstrapped standard error is the standard deviation of this sampling distribution and it can be shown that as the number of repeated samples becomes large, provided certain technical conditions are met, this is a good estimate for the standard error of the estimate.
- 9 Hirano, K. and Imbens, G.W. (2001), Estimation of Causal Effects using Propensity Score Weighting: An Application to Data on Right Heart Catheterization. *Health Services & Outcomes Research Methodology*, vol. 2, pp. 259–278.
- 10 Several variants of NN matching are possible, e.g. NN matching 'with replacement' and 'without replacement'. In the former case, an untreated individual can be used more than once as a match, whereas in the latter case it is considered only once. Matching with replacement involves a trade-off between bias and variance. If we allow replacement, the average quality of matching will increase and the bias will decrease. This is of particular interest with data where the propensity score distribution is very different in the treatment group and the control group (Caliendo and Kopeinig, 2008).

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