

MNAGIL-UFGE Impact Evaluation Pre-Result Policy Brief

Evaluating the Impact of SMEPS' Livestock Program on Women's Empowerment in Yemen

Context and Rationale

Yemen has been facing a declining female labor force participation rate for many years; while women's labor force participation was estimated at 29% in 1996 (WB 1998), it had declined to about 5.8% by 2019 (ILO 2019¹). The ongoing conflict beginning 2015 is likely to have further reduced women's participation in the labor force (Tandon et al., 2018), due to multiple factors including economic contraction reducing work opportunities in general, security concerns that particularly affect women's mobility and economic activity and changing social norms in conflict. A rapid survey² conducted by the ILO in Yemen within the first year of the conflict already showed a decline in women's labor force participation by 28 percentage points compared to 12 for men, reflecting the pronounced impact on women. As over 63% of the Yemeni population is estimated to live in rural areas (WDI 2018), the focus on rural women is critical for improving women's labor force participation for the country. Among rural occupations, the livestock sector is critical as it continues to employ large numbers of women, and because its potential contribution to women's employment and entrepreneurship and food security is extremely valuable in the current context of conflict, famine risk, and decreasing opportunities for women's employment in Yemen. A study conducted by World Bank (2010) also shows that animal production in Yemen is 14 times more powerful at reducing poverty than qat³ and horticulture.⁴ Furthermore, the study shows that even households owning no lands or tiny plots own some livestock – goats, sheep and at times cows. In addition, a large percentage of rural households are dependent on selling livestock and livestock products. This income plays an important role for monetary income for the poor, especially female headed rural households, and for women's employment. According to the last Labor Force Survey conducted in Yemen (ILO 2015)⁵, Dairy and Livestock production was the single largest occupation for women in the country, followed by field crop and vegetable growers, tailors, dressmakers and hatters, and then primary education teachers. All these factors point to the centrality of the livestock sector for women's employment and economic empowerment in Yemen.

The proposed IE seeks to assess a WB-supported intervention that targets women livestock breeders in rural areas of Yemen to enhance their opportunities for employment, livelihoods generation, welfare and resilience. This activity seeks to support a rigorous impact evaluation to identify the causal effects of the SMEPS livestock program on women's employment, livelihoods, income, food security, autonomy and empowerment, through a cluster-Randomized Controlled Trial (RCT).

Intervention

Livestock breeders will be provided with financial and technical support. Technical support will be in the form of trainings and linking the beneficiary with livestock field consultants and vets. Financial grants with a ceiling of \$1,050 per beneficiary provided in three installments; first one to rehabilitate barns & pens (\$250); second installment to

¹ International Labour Organization, ILOSTAT database. Data retrieved in September 2019.

² <https://reliefweb.int/sites/reliefweb.int/files/resources/yemen-damage-and-needs-assessment.pdf>

³ A local narcotic crop that is lucrative to grow but has debilitating effects on physical and mental health and productivity. See <https://www.sciencedirect.com/science/article/pii/S2314808X13000031> among other studies.

⁴ "World Bank. 2010. Yemen, Republic of - Coping Strategies in Rural Yemen and Policy Implications. World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/2868> License: CC BY 3.0 IGO."

⁵ https://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_419016.pdf pp76

purchase animal feed and medicine (\$350 to \$450) and third instalment to purchase the animals; 5 to 7 animals (\$350 - \$450). The grants provided to beneficiaries will be financed by the ECRP project; the MNA GIL grant will only be used for the impact evaluation activities.

Evaluation Design

The IE will use a cluster-level randomized control trial to estimate the causal effect of the intervention on the outcomes of interest. The cluster design ensures estimates will not be biased by unintended positive or negative spillover effects. The implementation team will further provide a list of 80 districts that meet selection criteria. One or more targeted village(s) in each targeted district will be selected by the implementation team for inclusion in the study. A screening survey will then be conducted to identify vulnerable households within targeted villages of targeted districts. Household eligibility depends on experience with livestock and the FSAC vulnerability. The screening survey will be conducted in all targeted villages within all 80 targeted districts and will be administered to roughly 5 times the number of eligible potential beneficiaries. Project funding accommodates enrolling approximately 800 beneficiaries in the program. Eligible households will be identified through the screening. If the number of eligible households in a district exceeds 20, then 20 eligible households in each targeted district will be randomly selected to complete the baseline survey (if the number of eligible households is 20 or less, then all eligible households will be selected). This yields a total baseline sample size of 1,600 households.

Districts will be randomly assigned into treatment and control after the baseline survey. This ensures respondent selection follows the same protocol in both treatment and control areas, and also accommodates utilization of baseline data for stratification. The household survey data will be combined with household, village and district-level screening criteria in order to stratify on baseline household income, existing livestock herd, and district-level IPC categorization (or other characteristics deemed important after analyzing baseline data).

Research Questions

This evaluation seeks to answer the following research questions:

1. What is the impact of the program on women's labor force participation and employment, livestock livelihoods, household welfare and women's well-being?
2. In what ways does conflict affect program impacts?
3. How do these impacts compare to other similar programs in stable or conflict-prone regions?
4. Does the program provide a pathway to increase jobs for vulnerable women and improve Female labor force participation, and thus reduce poverty for rural women in unstable environments?

Primary Key Outcomes/Evidence

Livelihood Outcomes: The first set of outcomes relate to livelihoods. This set of outcomes includes women's labor force participation, employment status, livestock herd size and herd dynamics (e.g. birth and death rates), and income, investment and profit from livestock production activities. To assess whether the intervention affects the ways in which livestock are managed, binary indicator variables will be employed for a variety of improved goat production practices targeted by the intervention: using an improved animal shelter, goat manure removal once per week/month, used medicine, used vaccinations, harvested home grown fodder, used mineral block, received an animal health worker visit at home, and access to community animal health worker in their area. Finally, the intervention targets women, so we also consider women's empowerment over livestock production. Specifically, we consider women's ownership of goats, and control over decisions regarding the care and maintenance of goats, sales and renting of goats, and decisions over livestock income.

Household Welfare Outcomes: The second category of outcomes relate to household welfare. We will consider total household income, assets, consumption, food security and women’s empowerment. To reduce dimensionality, summary indices will be employed where applicable. These summary indices will be calculated as standardized inverse covariance weighted (ICW) averages of sub-indicators following Anderson (2008) and applied by Janzen et al. (2019) and other related studies. As noted by Janzen et al. (2019), summary indices help in reaching tractable conclusions about the program reaching broad objectives. Their use can also increase power by aggregating a number of impacts that are not statistically significant but move in the same direction, resulting in a statistically significant impact on index. They also mitigate problems arising from multiple hypothesis testing.

Resilience and Empowerment: The final category of outcomes relates to household resilience and coping strategies in an unstable environment. A range of coping strategies relevant to the local context will be considered and we will also measure women’s decision making within and outside the household, women’s mobility, and other indicators of women’s voice and agency.

Policy Relevance/Implementation

The ECRP project team is keen to use the findings and lessons from the IE to inform future decisions on potential scale-up of this subcomponent, as well as calibrating certain project parameters and features. The IE will also inform the potential for such interventions to achieve intended goals, including those linked to women’s economic empowerment in a wide range of country contexts in MENA and beyond, especially in fragile and conflict-affected settings.

The team is well-positioned to include the research findings in ongoing counterpart dialogue and in WB operations. As this intervention is part of the ECRP, the WB team routinely engages government agencies, especially through regular dialogue with the Ministry of Planning and International Cooperation (MOPIC) to discuss study findings, project progress and implications for scale up and modifications. The team also seeks to disseminate the findings from the Impact Assessment widely to the larger development and humanitarian community working on Yemen during conflict through regular WB-UN deep dive meetings, as well as during routine supervision meetings of the ECRP with the UNDP. At the local level, SMEPS and the SFD coordinate with the governorate agricultural offices and local authorities who help in providing data and in selecting the community committees (CCs) or endorsing existing Village cooperative Councils (VCCs). SMEPS are also planning to share the results of the study with authorities on both sides of the conflict to help in shaping policies/ strategies for future interventions.

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Photos



