

LIVELIHOOD RECOVERY THROUGH COMMUNITY GREENHOUSES IN YEMEN



The war in Yemen continues to devastate livelihoods. Humanitarian aid is restricted and millions are food insecure and at risk of starvation. With no end to the conflict in sight, donors and aid workers are forced to consider longer-term resilience strategies which will support communities to be self-sufficient within a protracted crisis. Utilizing the resources and community skills available, Oxfam has built greenhouses and launched a vegetable production project which will provide food and household incomes in the Abs district of the Hajjah governorate.

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Cover photo: A man holds seeds distributed by Oxfam in Yemen. Photo: Caroline Gluck/Oxfam.

1 BACKGROUND AND INTRODUCTION

Yemen is the largest humanitarian crisis in recent history. An estimated 22.2 million people in the country currently need humanitarian or protection assistance, including 11.3 million who are in acute need. Of these, around 8.4 million are at high risk of starvation.¹

The conflict has displaced more than two million people and disrupted the livelihoods of many vulnerable households. Agriculture and fishery – which employed more than 54% of the rural workforce and was the main source of income for 73% of the population prior to the escalation of conflict – has been severely impacted by insecurity, high input costs, the limited availability of inputs (seeds, fuel, vaccines, drugs and feed) and the collapse of government extension services.

Recognizing the protracted nature of the crisis and stagnating peace processes, Oxfam's Yemen country strategy for 2017–20² has placed a great deal of emphasis on the use of livelihoods opportunities for building resilience and restoring self-reliance. In line with the strategy and recommendations from the Oxfam country learning review, Oxfam has started using the more flexible, innovative funds secured to pilot various activities supporting livelihoods.

One of these programmes is an intervention to pilot community-based vegetable and saplings production in greenhouses as a viable livelihoods strategy for conflict-affected vulnerable households, the outcomes of which will inform future innovative programming.

2 THE COMMUNITY GREENHOUSE INITIATIVE

Since October 2017, Oxfam has been piloting two programmes dealing with community-based greenhouse production of vegetables and saplings/seedlings in Abs District, Hajjah Governorate. The intent is to promote the production of vegetables and fruit as a viable livelihood and income option.



Oxfam greenhouses in Bani Bjra village, Yemen. Photo: Wondwossen Delelegne/Oxfam.

2.1 RESEARCH

A multi-approach participatory analysis included a series of consultations with targeted internally displaced people (IDPs) and their host communities, desk reviews and food security assessments, which led to the decision to pilot vegetable and seedling production. The research revealed that current humanitarian assistance was not enough to meet the minimum food needs of the most vulnerable households, with 85% of IDP households found to be food insecure (moderate to severe). Female-headed households were found to be the most food insecure, so it was important that the livelihoods strategy was inclusive of women. The research also revealed that vegetable and livestock production was both socially and culturally appropriate for women in the area.

With the crisis unlikely to come to an end soon, it was important to be able to pilot a solution that would meet livelihood needs with the resources available. Targeted areas were chosen for the accessibility of water wells and their proximity to markets. A majority of the affected people were engaged in farming prior to the conflict, so were already equipped with the skills and experience necessary for this project. Having a farming background therefore became part of the criteria participate.

2.2 IMPLEMENTATION

Traditionally, Yemeni landowners rent arable land to the landless through a crop-sharing agreement. Oxfam used this method to draw up a memorandum of understanding (MOU) between Oxfam, the beneficiaries, district local authorities and landowners. The MOU stated that landowners would receive 15% of the total income generated from vegetable sales.

Excessive heat in the district makes it very difficult to grow vegetables without modern agronomic methods, so Oxfam invested in greenhouses. The establishment cost is high, but the greenhouses are expected to yield benefits for IDPs and their host communities for at least seven years. Water in the area is scarce, as Abs is located in a lowland zone, so the pilot was implemented at locations where Oxfam had previously supported solar-powered water wells. In addition, Oxfam provided access to drip irrigation technology that reduces the loss of water from evaporation and percolation.

Costs

Oxfam provided the two beneficiary groups with all inputs, materials and tools they needed to start vegetable and seedlings production. To ensure the sustainability of inputs provision, it has been agreed with the beneficiaries to use 35% of the total income from each cycle of production for inputs for the next cycle of production.

The installation process for one site came to around \$40,000 (approximately 16m Yemeni dinar). This included ploughing and levelling the land, as well as purchasing and installing water tanks, a store room, home gardens, plant fences, iron net fences and irrigation tools.

2.3 KEY ACHIEVEMENTS

On target for improved incomes

These pilots have directly benefited a total of 40 vulnerable households from IDP and host communities residing in the villages of Bani Barja and Agm Alshami in Abs District. The beneficiaries include the most vulnerable 26 IDP households, and 19 female-headed households from both IDP and host communities.

Although most vegetables in the greenhouses were not ready for harvest at the time of writing, beneficiaries of the community greenhouses in Agm Alshami have already started earning income from selling tomato and cucumber seedlings. According to feedback, all the beneficiaries are very optimistic that they will meet the targets set in the production plan. On top of meeting targets, the intervention has supported and encouraged the direct beneficiaries to work collaboratively as groups.

Participation of non-beneficiaries

Although the pilot intervention is still in its early stages, there are several positive signs suggesting wider impacts beyond the direct beneficiaries. There has been a high level of interest in vegetable and sapling production among non-beneficiaries in surrounding communities, so this pilot has also benefited residents of surrounding areas, who have been observing and learning better agronomic practices.

Non-beneficiaries who have access to irrigation water have started buying tomato seedlings to grow in their own homesteads. Farmers in surrounding villages have shown high demand for seedlings and saplings of tomato, papaya and mango.

Increased participation by women

The intervention has increased the participation of women in income-earning activities. About 50% of group members are the most vulnerable women. Whether or not the intervention helps the targeted women improve their intrahousehold bargaining power, livelihood recovery and social cohesion will be monitored and measured in the remaining intervention period. Those in femaleheaded households reported that there had not been a significant change in workload, as they were only required to work two days a week, except at the early stages of the crop cycle.

3 WHAT DID WE LEARN?

3.1 WHAT WORKED WELL

Greenhouses

The use of greenhouses has been very effective in dealing with agroecological constraints to successfully grow vegetables in the intervention area. The method has played an important role in reducing the impact of excessive heat on crops and the loss of water through evaporation. It is estimated that 75% of water loss from evaporation has been reduced by using greenhouses.

Working as a group

The group approach to vegetable production has worked effectively. It has enabled not only the joint use of irrigation and greenhouses facilities, but also allowed beneficiaries to help each other through the exchange of knowledge and experience, with labour divided according to capacity and cultural values. For example, women members are responsible for planning, weeding and watering plants and keeping cash, while men members are responsible for land preparation, fertilization and spraying insecticides. Working as a group has not only improved social cohesion but will also increase bargaining power in the purchase of inputs and selling outputs in the future. Each beneficiary group has developed and approved a bylaw to govern or regulate the day-to-day activities of members.

Working with others

The viability of any livelihoods strategies in the context of crisis should primarily depend on use of local resources and systems, and coordination and collaboration at local level. Oxfam has involved key stakeholders in the intervention cycle to effectively use local opportunities in terms of local livelihoods resources, knowledge and systems. The participation of key stakeholders such as community leaders, local authorities, water committees, traders and landowners has been the main factor in the success of the intervention so far.

3.2 WHAT DID NOT WORK WELL

Delays

Delays in the procurement of some inputs at the initial stage delayed the implementation process. As some equipment and materials to establish the greenhouses are not available in local markets, they had to be purchased from the capital, Sanaa, which took more time than initially anticipated. Such potential delays should be considered in future rollouts, or relationships with local private suppliers will need to be established.

Costs

The intervention requires a high level of initial investment to cover the capital costs of establishing greenhouses and irrigation systems, which may be an obstacle in future programmes. However, the rate of return on the investment will increase in the long run, given that the facilities have a predicted life of 5–7 years.

4 CONCLUSION

The intervention is still in its early stages, so the final conclusions have not yet been reached; however, targets are being met. Therefore, beneficiaries are expected to see a financial return that will meet their survival needs, on top of the income already generated. Paired with the participation and enthusiasm of the wider community, this suggests that the pilot is an effective coping strategy that will help participants avoid further negative impacts. Monitoring and data analysis of the pilots will inform future innovative programming.

The next step will be linking beneficiaries with private inputs and potential customers. To this end, Oxfam will pursue different strategies, such as organizing meetings between beneficiaries and local inputs and extension service providers, as well as facilitating 'vegetable field days' to bring farmers, traders and transporters together to exchange information and establish business relationships.

NOTES

- 1 UN Office for the Coordination of Humanitarian Affairs. (2018). *Humanitarian Response Plan Yemen January–December 2018*. https://reliefweb.int/report/yemen/yemen-humanitarian-response-plan-january-december-2018-enar
- 2 Internal Oxfam document.

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