[Company name]  [Company address]

Research on yemen community and how to improve disaster resilience in the community

Yemen, one of the poorest Arab countries, is highly dependent on declining revenues from relatively small oil and gas reserves. A complex civil war has exacerbated economic problems, unemployment, and shortages of food, water, and medical resources.

In order to come up with ways to improve disaster resilience in any community, we must first look into the said community and see what they are facing first, each community has their own challenges and problems that they face therefore just like any big move you make in life you must have a strategy, you first have to do a reconnaissance of the area, when you do the reconnaissance you will get information and knowledge of the problem affecting the area, from there you can work on a plan on how to help them.

The following is an example of a man who was afflicted by disaster and how Oxfam, a British-founded confederation of 21 independent charitable organizations focusing on the alleviation of global poverty, founded in 1942 and led by Oxfam International, was able to help the afflicted man.

Last year, in the rainy season, Mohammed\*, 22, a barber from Reef Ibb, was forced to close his shop. Heavy rains had caused widespread damage that he could not afford to repair. Mohammed – who is the sole breadwinner for his mother, brothers, and sisters, and has a physical disability – was faced with financial ruin.

But today, the shop is open again. With Oxfam’s support, Mohammed has repaired the ceiling, installed a chair and mirrors, and purchased shaving supplies, including scissors, a shaving machine and sterilisers.

“Receiving cash support gave me the flexibility to add more money by re-opening my barber shop,” says Mohammed.

Such support that builds resilience through tough times is hugely needed in Yemen, which faces one of the worst humanitarian crises in the world.

Since the escalation of hostilities in 2015, 19,000 civilians have been killed in the conflict, over four million have been displaced and more than 21 million people need humanitarian assistance. Economic collapse has led to widespread hunger, further worsening conditions for millions of people who are wondering where their next meal will come from.

The effects of climate change and environmental degradation are also being felt. The risks of flooding, drought, and severe sandstorms have been present across the country, with an increase in deforestation and desertification causing more harm. Oxfam in Yemen and our partners are working to support communities build resilience to the many shocks with which they are faced.

A recent four-month emergency initiative in Ibb Governorate, central Yemen, funded by the **Disasters Emergency Committee** (DEC), set up three projects that supported conflict-affected families and revived their businesses’ resilience.

**1 . BUILDING THE RESILIENCE OF SMALL BUSINESSES**

Oxfam has helped more than 250 families to start or reopen their own small business in two districts of Ibb governorate. Small projects such as barbers, tailors, butchers, carpenters and plumbers have been empowered and supported with emergency cash assistance.

Hadya\*, 58, is a grocery shopkeeper in Ibb governorate. She is the sole breadwinner for her family of five sons, daughters and retired husband. The war made things even harder. “We were worried, our survival was threatened,” she said.

Before Oxfam’s emergency cash project, Hadya had closed her shop due to a lack of business. Her debts were growing, and she couldn’t keep up with payments, damaging her relationships with suppliers. Now, thanks to Oxfam’s livelihood cash support, she has been able to reopen and is now able to pay off debts and buy goods, and the community has also started asking for groceries again.

Hadya says: “After reopening my grocery store, I am finally able to provide for my children with food and expenses, and enrol my children back in school. I was also able to secure monthly lifesaving medicines for my husband.”

**2 . ENHANCING RESILIENCE THROUGH SOLAR-POWERED ACCESS TO WATER**

Many Yemeni rural communities rely on unsanitary and unreliable water sources, which leaves them especially vulnerable to droughts or storms. Through this DEC-funded project, Oxfam installed sustainable, solar-powered water systems as a reliable source of fresh water in four rural communities in Reef Ibb district. This included switching from diesel-powered to solar-powered water pumping systems to provide water for large communities.

Installing these systems is just the start. True resilience building means ensuring the financial and operational sustainability of these solar-powered water systems – and helping to spread the benefits by promoting this technology in other communities.

Oxfam has trained four water committees of local beneficiaries to work on managing and maintaining the new solar water projects; and it has worked to strengthen networks that link institutions, communities, and private suppliers to support the maintenance of the new solar pumping infrastructure.

**Access to clean water sources has been a historical issue for rural communities across Yemen.**

 Moa’ad\*, one of our beneficiaries, said: “This support must continue: a person can survive with little food for some time but it is impossible to live without clean water, it is key to our survival. This project Oxfam implemented will make our lives much easier – I can say that here at Bani Moharram village, [we] are spared the burden of walking distances to the nearest water source when we are out of fuel to pump water. Thanks to Oxfam for this crucial support.”

**3 . BUILDING RESILIENCE TO CLIMATE SHOCKS**

Over the past decade, climate shocks have become frequent in Yemen and one of the key challenges that further exacerbate what is already one of the world’s worst humanitarian crises. And it is the most vulnerable people – who are least responsible for its causes – who bear significant losses. Last month, torrential rains and flooding hit several areas across the country, causing extensive damage to public infrastructure such as sewage systems, shelters for displaced people, and other property. Initial reports also indicate that flash floods killed or injured dozens of civilians.

Through the Protection Cash Assistance project, Oxfam supported many families to help protect themselves against climate shocks. For example, a newly built house in the Sahoul area, of rural Ibb district, had been damaged by the floods. Oxfam supported the woman living in the house with her sons and daughters with a cash voucher to help them build a protection wall to help protect them from future floodings.

But there is so much more that can be done to protect fragile communities and infrastructure. So, our next challenge is to ask donors to provide more assistance to confront the effects of climate change, as well as coping with the effects of the deadly war.

**LISTENING TO COMMUNITIES**

A priority of this work has been to really listen to communities. Selecting who and where to target for assistance has been done in partnership with communities. Together, we worked to rank districts based on vulnerability criteria, including proximity to markets, income options, access to water, and access to assistance. Then at the smaller, sub-district and village level, local authorities and community leaders worked with us on another round of mapping and ranking. This process ensures that the most vulnerable communities are targeted but also enhances the community’s access to services.

These examples show that we can enhance resilience – with meaningful community involvement – even in emergency and short-term projects. In fact, these successes should encourage mainstreaming resilience in future projects in Yemen. We need to make sure that all the support we provide as aid organisations doesn’t just help in the short term; we can and should always also support people’s capacity to cope with Yemen’s uncertain future.

**Definition of Community Resilience in the Context of National Health Security**

The definition draws upon both the literature review (Norris, 2008; Chandra et al., 2010; HHS, 2009; HHS, 2010a), as well as discussions with focus group participants.

**Definition of Community Resilience**

 **Main Definition:**

Community resilience entails the ongoing and developing capacity of the community to account for its vulnerabilities and develop capabilities that aid that community in

 (1) preventing, withstanding, and mitigating the stress of a health incident;

 (2) recovering in a way that restores the community to a state of self-sufficiency and at least the same level of health and social functioning after a health incident; and

 (3) using knowledge from a past response to strengthen the community’s ability to withstand the next health incident.

 **Key Components:**

 Key components or “building blocks” of community resilience that affect both a community’s pre-event vulnerability to disaster and its adaptive capacity to recover include the physical and psychological health of the population; social and economic well-being; individual, family, and community knowledge and attitudes regarding self-reliance and self

help; effective risk communication; level of social integration of government and nongovernmental organizations

The definition emphasizes the following concepts, which focus group participants suggested would be evident in a resilient community

: • Engagement at the community level, including a sense of cohesiveness and neighborhood involvement or integration •

Partnership among organizations, including integrated pre-event planning, exercises, and agreements

• Sustained local leadership supported by partnership with state and federal government

 • Effective and culturally relevant education about risks

 • Optimal community health and access to quality health services

 • Integration of preparedness and wellness •

Rapid restoration of services and social networks

 • Individual-level preparedness and self-sufficiency

 • Targeted strategies that empower and engage vulnerable populations

• Financial resiliency of families and businesses, and efficient leveraging of resources for recovery

. We acknowledge that the definition of “community” can widely vary;

 it can be a geographic term or can be bounded by membership to a cultural group. Although it will be important for local planning teams to define community boundaries with community stakeholders, for the purpose of this roadmap, we primarily use a geographic definition guided by the catchment area of the local health department (e.g., city/county/parish/municipality).

**Levers for Building Community Resilience**

To identify key activities for building and strengthening community resilience, we drew on findings from the literature review, focus groups, and SME meetings to define eight “levers” that can be used by communities to strengthen community resilience in the context of the health security.

 The levers are designed to strengthen the five core components which are correlated with community resilience in the specific context of enhancing health security or public health preparedness. The components are the main domains or factors associated with community resilience, such as the health of the population. The levers are the means of reaching the components, such as improving a population’s access to health services.

The levers are highlighted in boldface type below:

• Wellness and access contribute to the development of the social and economic wellbeing of a community and the physical and psychological health of the population.

 • Specific to the disaster experience, education can be used to improve effective risk communication, engagement and self-sufficiency are needed to build social connectedness, and partnership helps ensure that government and nongovernmental organizations (NGOs) are integrated and involved in resilience-building and disaster planning.

 Levers and Core Components of Community Resilience

 Core components of community resilience

 Ongoing activities Community context , Ongoing disaster experience, Ongoing development of community resilience Social connectedness for resource exchange, cohesion, response, and recovery Integration and involvement of organizations (govt/ NGO) in planning, response, and recovery Effective risk communication information for all populations Social and economic well-being of the community Physical and psychological health of population.

• Quality and efficiency are ongoing levers that cut across all levers and core components of community resilience.

**Activities for Building Community Resilience**

 Because activities related to the levers strengthen each of the components of community resilience, a community moves closer to achieving community resilience as it conducts more activities. This process is shown because developing resilience is not static but rather is an iterative and ongoing process

. The main body of this describes suggested activities that communities can use or build on to strengthen community resilience in specific areas. The activities presented in the report offer a range of ideas that can be implemented by communities according to their specific needs. It will be important for communities to use the roadmap as a starting point for local community resilience strategy development (see next section). None of these activities has undergone rigorous evaluation. Before a community resilience toolkit can be developed, communities will need to use this roadmap, report on lessons learned, and assess the impact of implementing particular activities

 **Implementation and Measurement of Community Resilience–Building Activities**

As communities review this roadmap, it is important to determine an approach to implementation, including monitoring and evaluating implementation and determining the effectiveness of particular activities.

 These implementation questions include the following:

 • How will we know if these activities are working?

 • What capacities are needed for communities to fully implement community resilience– building activities?

 • How long will it take communities to achieve full implementation of community resilience–building activities?

**How Will We Know If Community Resilience–Building Activities Are Working?**

Measurement of community resilience is essential for the operationalization and implementation of community resilience. Measurement will allow communities, states, and the nation as a whole to assess hypothesized links between inputs into the community resilience process (e.g., community partnerships and education of community members) and outcomes (e.g., greater resilience). Measurement is also critical to track progress in building community resilience at the local level. we suggest some potential areas of measurement for community resilience. Testing of proposed measures will be needed to develop the evidence base, refine the measures, and inform the next generation of measures.

**What Capacities Are Needed for Communities to Fully Implement Community Resilience– Building Activities?**

 Much as in traditional public health practice, implementing community resilience–building activities requires the capacity to build and maintain strong and reliable partnerships (e.g., the partnership lever), mobilize community members (e.g., the engagement lever), and use data and information for evaluation, monitoring, and decisionmaking (e.g., the quality lever). Strong and reliable partnerships involve a diverse array of public, private, governmental, and nongovernmental organizations (e.g., academic institutions, healthcare providers, advocacy groups, media outlets, businesses). In building partnerships, communities will have to consider such questions as who should take the lead in establishing partnerships and how community resilience–building activities might need to be adapted for specific communities. Engagement and self-sufficiency also require the capacity to mobilize partnerships. Models such as the Mobilizing for Action through Planning and Partnership (MAPP) have been developed to support community mobilization efforts (Mays, 2010). Finally, state and local health agencies are increasingly utilizing performance standards, measures, monitoring, and quality improvement processes.

 **How Long Will It Take for Communities to Achieve Full Implementation of Community Resilience–Building Activities?**

 Implementing community resilience activities takes time. In order to appropriately gauge expectations, a richer understanding of the process of implementation is needed. In addition, implementation planning should acknowledge the activities that communities are already pursuing to enhance resilience. It can be helpful to draw guidance from a model of implementation that outlines the stages that a community must pass through before full implementation is achieved (Simpson, 2002). One such model is the Simpson Transfer Model, in which diffusion happens in four stages: exposure, adoption, implementation, and practice (Simpson, 2002). Communities must first be exposed to community resilience–building and then can build the capacity needed to adopt activities to build resilience. Once organizations have the capacity to implement community resilience–building activities, they begin early implementation, followed by practice of the activities until they become institutionalized. Appropriate monitoring and evaluation can help communities assess what stage of implementation they are in and gauge outcomes accordingly.

**Conclusion and Future Research Directions**

This roadmap represents an important step forward in identifying the critical elements of community resilience to support national health security and offers a practical list of potential activities for building resilience before a disaster. The report also suggests several areas in which the evidence base for community resilience needs to be strengthened.

 Clarification in such areas as the following should identify best practices in community resilience-building and measure the overall effect of increasing community resilience:

**Wellness and Access:** What are the best ways to frame preparedness in the context of wellness messaging? How should communities convey the connection between individual/ family and community preparedness?

 **Education:** How do we link better risk communication with improved community resilience?

**Engagement:** How can we use advanced technologies, including new social media, to inform the public, facilitate the social re-engagement of people after a disaster, and promote social connectedness?

**Self-Sufficiency:** What are the best means to incentivize individual and community preparedness? What policies, including financial and other incentives, will work?

**Partnership:** What is the best way to integrate nongovernmental organizations in planning, and what is the most effective way to assess the capacities and capabilities of specific NGO partners?

 **Quality and Efficiency:** What are the best metrics for monitoring and evaluating resilience–building activities? Which baseline data are most critical for assessing key community resilience components and elements?