Da Nang
SME Resilience Profile

Nam O Fish Sauce Community – Between Tradition and Innovation

CATALYSING CITY RESILIENCE SOLUTIONS FOR SMALL BUSINESS
Contents

4 Introduction
5 Context
8 Understanding the SME Ecosystem
11 Shocks and Stresses
13 Gaps and Opportunities for Resilient Recovery

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Introduction

Catalyzing City Resilience Solutions

In Da Nang (Vietnam), the Resilient Cities Network (R-Cities) is running the Catalyzing City Resilience Solutions (CCRS) program with support from the Citi Foundation to help the local economy recover from the Covid-19 pandemic. This recovery will catalyze urban resilience by empowering and strengthening a selection of critical small and medium enterprises (SMEs) to develop locally relevant solutions.

Together with the local government in Da Nang, R-Cities has identified the opportunity to use the CCRS program to support the traditional fish sauce industry in the Nam O community to adapt to change.

SME Resilience Profile

To ensure that all program activities respond to the city’s needs and are grounded in the realities that the critical SMEs are facing, the CCRS program starts by assessing the challenges that the fish sauce industry in Nam O is facing to understand the role, relationship and impact of the industry for the community. This Da Nang Nam O “resilience profile” presents the summary of the assessment result carried out by the local implementation partner: Building up Sustainability Center (BUS), in close coordination with Da Nang Agency of Sea and Islands (DASI), Department of Natural Resources and Environment (DONRE).

Context

Why Nam O fish sauce, Da Nang

In the early 20th century, people began to settle in the Nam O area, approximately 3 km from the base of the Hai Van Pass, in the northern region of Da Nang city (Vietnam). The coastal village is part of two wards – Hoa Hiep Bac ward and Hoa Hiep Nam ward – within the Lien Chieu district of Da Nang city (Figure 1). The Nam O area consists of three main residential areas: Nam O 2.1 and Nam O 2.2 in the Hoa Hiep Nam ward, and Xuan Duong in the Hoa Hiep Bac ward. Nam O covers an area of about 3.65 km², with a population of about 5,800 people in over 1,200 households, where 18% of the population is considered to live in poor households (Table 1).

1 Source administrative map of Da Nang City: https://bandovietnam.com.vn/phan-do-thanh-pho-da-nang
As a coastal area, Nam O has great potential in terms of natural resources, including its beach. The area also has a rich tradition of producing authentic fish sauce, which has been designated as a heritage product by the Ministry of Culture, Sports and Tourism of Vietnam. The fish sauce industry is closely linked to the fisheries industry, which is one of the main sources of livelihood in the area. In the past, the firecracker industry was a major player in the local economy, but home-based firecracker production has not existed since 1995. Fisheries and fish sauce have become the main industry sectors in Nam O (Figure 3).

TABLE 1 HOUSEHOLDS BY FINANCIAL CAPACITY IN NAM O

<table>
<thead>
<tr>
<th>Poor households</th>
<th>Near-poor households</th>
<th>Middle-income households</th>
<th>High-income households</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>44</td>
<td>800</td>
<td>200</td>
</tr>
</tbody>
</table>

Recognizing the potential of the area, in 2019 Da Nang city approved a project to conserve the Nam O fish sauce craft village and promote tourism. This project aims to preserve the heritage value of the fish sauce craft and promote its products. However, this ambition is challenging, as younger generations are moving away from the industry and changes in the environment and climate are making fish sauce more difficult to produce.

As stated in the Decision of Da Nang People’s Committee No. 1142/QĐ-UBND about preserving Nam O fish sauce craft village as part of tourism development in Da Nang.

Figure 2: Coast of Nam O with basket boats used for fishing.

Figure 3: Principle livelihoods in Nam O area over time.

1. Before 1975: Fishery
3. 1994 – 2008: Boom of fish sauce industry (Employees’ age: 40-60 and >60 years old)
4. 2008 – 2019: Transition to industry workers
5. 2020 – present: Fish sauce production

2. Home-based firecracker production was prohibited through the Prime Minister Directive No. 406-TTg year 1995.
Understanding the SME Ecosystem

The Nam O fish sauce community

The service-trade industry in Da Nang is considered the city’s economic spearhead, with SMEs accounting for 96% of all businesses in the area. In 2022, 3,530 enterprises were recorded, contributing 45% of the city’s gross domestic product, employing around 60% of the city’s workers. These SMEs promote economic growth, increase incomes and reduce poverty. They create jobs, attract idle capital and contribute to increased societal capital flows.

In Nam O, it is estimated that there are 93 active fish sauce producers, with 64 of them being members of the Nam O Fish Sauce Traditional Craft Village Association. These members include 30 households that make traditional fish sauce, 29 small-sized establishments with their own registered brands, two cooperatives, one enterprise and two members of the fishing group\(^4\) (Table 2).

Previously, local fishermen provided raw materials for traditional fish sauce producers until about 2010. However, in 2011, regulations restricted in-shore fishing activities for traditional vessels\(^5\). The aim of moving the activities of large, high-powered vessels to off-shore areas was to protect marine biota in the longer term. However, as a consequence, it significantly decreased the number of fishing households. In 2011, there were 606 households, including 167 fishing households and around 80 members of the Nam O Fish Sauce Traditional Craft Village Association. At the time of writing, only about 170 fishing households use basket boats for fishing near the shore.

The employees in these business establishments tend to be of a similar, relatively advanced age, with 90% of them being 40 or more years old. Because of the lack of livelihood stability offered by the fish sauce industry and in the context of the economic transformations which have been unfolding since 2010, the younger generation has shown a preference for other professions rather than taking over traditional occupations. While the numbers of both fisheries and fish sauce manufacturers are decreasing, they remain the main livelihood means for a critical proportion of the Nam O population. So, supporting the adaptability of these businesses and the people relying on the industry is pivotal.

One of the biggest challenges is developing the product market. Producers face many difficulties in this area, such as needing help to access digital technology. The heritage status of Nam O fish sauce is due to its authenticity: it is produced with pure fish and no added artificial ingredients, resulting in a stronger taste but also a higher price than factory-produced fish sauce. So, Nam O products have unique value, but this brings with it, barriers to their marketing as their receptive audience is quite niche. For an overview of fish sauce production, see Figure 4.

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\(^4\) Stated by the People’s Committee of Lien Chieu District in the report of Lien Chieu eco-socio conditions, 2021
\(^5\) Stated in the Decision of Da Nang People’s Committee No 8329/QD-UBND year 2007 about a program to protect and develop Da Nang’s fisheries resources by 2010
Introduction Context Understanding the SME Ecosystem Shocks and Stresses Opportunities for Resilient Recovery

Nam O fish sauce business process map

![Process Map](image)

<table>
<thead>
<tr>
<th>Process</th>
<th>Stakeholders</th>
<th>Input</th>
<th>Fish sauce production</th>
<th>Output</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement/provision of:</td>
<td>Suppliers around Nam O, within and outside Da Nang. Occasionally, events such as an insufficient supply of high-quality salt can disrupt fish sauce production.</td>
<td>Raw fish (fresh black anchovies) and salt</td>
<td>Selection of fish, washing, and mixing with sea salt</td>
<td>Packaging fish sauce in plastic or (less commonly) glass bottles</td>
<td>Marketing</td>
</tr>
<tr>
<td>- Terracotta or plastic barrels</td>
<td>- Plastic or glass bottles</td>
<td>Twelve-month fermentation process (in plastic barrels more commonly than in terracotta)</td>
<td>Filtering method</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FIGURE 4** Nam O fish sauce business process map

Shocks and Stresses
Resilience challenges of Nam O and the fish sauce industry

**Shocks**
- Pandemic
- Extreme weather events

**Stresses**
- Shift in labor structure
- Inadequate transportation infrastructure and modes
- Inflation and increased prices

Various shocks and stresses have affected the fish sauce industry in the Nam O area.

**Acute shocks**

**Extreme weather events:** the traditional village of Nam O is in the coastal area of Da Nang city. Its climate, ordinarily of a tropical monsoon type, is affected by intense natural disasters such as flooding, storms and tropical depressions. Nam O village is also experiencing rainfalls of greater volume and higher frequency, negatively impacting the quality of fish sauce produced.

**The Covid-19 pandemic:** interestingly, the pandemic included a positive aspect for the Nam O fish sauce community: fish sauce production in Nam O increased to 1.5-2 times its pre-pandemic level. This can be explained in part by the larger fish sauce producers’ sourcing being interrupted by the city’s social distancing regulations. In addition, small-scale producers in Nam O could still market their products through direct selling to consumers. By contrast, cooperatives and larger businesses saw their sales decreased by half because shopping malls and supermarkets were temporarily closed.
Chronic stresses

A disappearing fishing industry: as mentioned above, the number of fishermen has decreased in recent decades. One cause of this is the limitation on the types of vessels that are allowed to operate in the in-shore area, which has an impact on the availability of raw materials for fish sauce production. In addition, the plan for the new Nam O “ecotourism resort” has had side effects: while the project seeks to improve local infrastructure and bring more people to the area to better support local businesses, the space for fishermen’s boats to find anchorage and shelter must be re-allocated elsewhere. As a result, many households are changing their occupations from fishing to (primarily) manufacturing.

Decreased quality and quantity of fish in Nam O: here, unpredictable changes in the weather are responsible, along with the need to transport anchovies from areas farther from Nam O (e.g. Sa Huynh, Quang Ngai Province). In-depth interviews revealed that this source of input fish, because it is frozen (mixed with fresh water), is unsatisfactory and does not meet the requirements of traditional fish sauce production in Nam O. So, the quality of fish sauce has been lower since 2010, with the new restriction.

The higher cost of traditional fish sauce production: the increasing cost of input materials and fish sauce containers is also due to inflation. For instance, the price of 50 kg of high-quality salt increased from 100,000 Vietnamese Dong (4.26 US dollars) in 2020 to 200,000 Vietnamese Dong (8.52 US dollars) in 2022. Notably, the source of output consumers is not guaranteed, leading to a need for a more stable market price for Nam O fish sauce to ensure producers can recover their invested capital. In this way, the proportion of households producing traditional fish sauce has tended to level off and gradually decrease.

9 Using the conversion rate of 1 US dollar = 23,617 Vietnamese Dong according to XE.com on 6 February 2023.

Gaps and Opportunities for Resilient Recovery

Rethinking the business model for the fish sauce industry

Efforts are underway to better support the fish sauce industry, such as supporting the local fisheries industry, the provider of raw materials for the fish sauce industry. The People’s Committee of Da Nang City has directed the Department of Industry and Trade support social capital loans for fishermen to purchase tools for off-shore fishing. However, in-depth interviews reveal that the local fishermen do not have sufficient capacity or experience to shift from in-shore fishing to off-shore fishing. So, borrowing money to move away from shore is not a viable option.

The considerations above make it vital to adopt a holistic view of the challenges face by the Nam O fish sauce community. There are four main concerns to address to ensure a more resilient and sustainable future for Nam O: the threats of climate change, the negative impacts of urbanization, the decline of culture, and livelihood stresses (Figure 5).
Four pillars of a resilient strategy for the Nam O fish sauce community

Reflecting on these four concerns, the opportunities identified above and the CCRS program’s objectives to support the smaller fish sauce businesses in Nam O, several initial recommendations emerge:

- Standardizing fish sauce production
- Building a stronger brand that caters to environmentally conscious consumers by improving production and changing bottling materials (using terracotta barrels and glass bottles instead of plastic, etc.)
- Formulating a communications strategy to better market small and medium-sized households producing fish sauce
- Strengthening the roles and engagement of the management board of Nam O Fish Sauce Traditional Craft Village Association
- Developing community-based ecotourism models using routes from upstream to downstream destinations, aiming for economic resilience associated with the conservation of the traditional Nam O fish sauce village culture.