



# MADE IN YEMEN: A STRATEGY FOR INDUSTRIAL RECOVERY AND ECONOMIC GROWTH

By Saeed Bin Jalal & Ahmed Abdulkader

## EXECUTIVE SUMMARY

Historically, Yemen's industrial sector has been characterized by small-scale, private initiatives, with 78% of establishments employing fewer than four workers and dominated by food, metal, and textile industries. Yemeni industry's reliance on imported inputs and weak infrastructure left it vulnerable even before the 2015 escalation of war. Post-conflict damage has been extensive, with losses exceeding \$35 billion, industrial output collapsing, and over half the workforce displaced. Legal frameworks exist but lack consistent enforcement. Gender disparities remain stark, with women accounting for just 1–6% of industrial employment. Environmental degradation further complicates recovery, driven by outdated laws and limited compliance capacity.

Despite this, some local industries have demonstrated resilience, particularly in informal light manufacturing. Drawing from regional and international models of industrialization, this RYE Policy Brief identifies viable paths for industrial renewal anchored in local resources, community participation, and adaptive governance.

### Key Recommendations:

- **National Industrial Strategy:**

Develop a national industrial strategy in partnership with the private sector, including identification of key

sectors, support measures, and coordination mechanisms.

- **Regulatory Reform:**

Simplify business registration, update laws, and establish industrial arbitration councils.

- **Women's Inclusion:**

Expand training, develop women-friendly zones, and launch targeted financing for female entrepreneurs.

- **Innovation & R&D:**

Fund industrial research labs and foster private-sector innovation partnerships.

- **Infrastructure Development:**

Rehabilitate industrial zones with solar energy, logistics hubs, and streamlined port access.

- **Access to Finance:**

Create an Industrial Finance Fund and expand concessional credit for SMEs.

- **Environmental Sustainability:**

Enforce pollution controls, incentivize clean tech adoption, and integrate safeguards into industrial planning.

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# 1. Introduction

Yemen faces profound economic instability and humanitarian distress due to prolonged conflict and rising regional tensions. A key path to sustainable recovery depends on implementing industrial policies grounded in justice, inclusiveness, and long-term resilience. These policies must promote growth, strengthen competitiveness, and support social equity.

Yemen's industrial sector has historically contributed significantly to national development, through private investment and, especially in the 1970s and 1980s, government policies such as import substitution.<sup>[1]</sup> Following unification in the 1990s, the private sector has dominated the industrial sector, comprising 95% of establishments by decade's end. While challenges persisted – such as poor infrastructure, reliance on imports, limited financing, and low technology capacity – the industrial sector overall experienced modest expansion and relative stability prior to 2015. Since then, the armed conflict has caused a sharp downturn, severely damaging formal industry.<sup>[2]</sup>

Some light manufacturing sectors have shown resilience, however, by leveraging local resources and informal networks. These decentralized operations offer a foundation for gradual recovery amid wider collapse.<sup>[3]</sup> Regional and international experiences also show that well-coordinated national industrial strategies have helped fragile and post-conflict economies generate employment, enhance value addition, and regain economic sovereignty. Yemen can draw from such lessons while tailoring approaches to its own local capacities, rural structures, and community-based resilience.

The Twelfth Development Champions Forum (DCF), held in January 2025 in Amman, Jordan, examined the current state of Yemen's industrial sector. Drawing on the DCF discussions, this Policy Brief outlines Yemen's industrial history, assesses current sectoral challenges, and identifies opportunities for renewal. It examines critical themes such as environmental sustainability, women's economic participation, and institutional reform. This Policy Brief concludes with actionable recommendations for how the Yemeni government, private sector, and international partners can contribute to Yemen's industrial revival, and in turn foster wider socioeconomic stabilization and recovery.

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[1] Ali Abdullateef, "Industrial Manufacturing in Yemen: Challenges, Barriers and Solutions", Industrial Information and Networks Conference (Rabat), 2011, pp. 1–18. Available at: [https://www.aidsmo.org/aiinc5/docs/ali\\_abdellatif\\_paper.doc](https://www.aidsmo.org/aiinc5/docs/ali_abdellatif_paper.doc). Accessed January 21, 2025.

[2] YFCCI, "Performance indicators of the industrial sector in Yemen amid conflict and war", 2023. Available at: <https://fycci-ye.org/upload/1654632323.pdf>. Accessed January 21, 2025.

[3] GIA, "Economic Features", n.d. Available at: <https://investinyemen.org/en/economic-profiles>. Accessed May 4, 2025.

## 2. National Industries Before and After the Conflict

Before 2015, Yemen's industrial sector – driven mainly by extractive and manufacturing industries – was a key contributor to gross domestic product (GDP) and employment. In 2013, it accounted for 31.2% of GDP, with 23% from oil and gas and 8.2% from manufacturing. The sector also employed 14.5% of the labor force.<sup>[4]</sup>

Data from nearly 28,000 industrial establishments show that 78% were micro-enterprises with fewer than four workers, emphasizing the sector's reliance on small-scale, individual initiatives. Large enterprises made up just 0.5% but were the top contributors to jobs as they employed 35.77% of the total workforce in the industrial sector and produced 87.53% of the total production value in the sector.

Despite the sector's size, only 95 out of almost 30,000 establishments held quality certifications, indicating weak regulatory compliance and standards enforcement. Ownership was overwhelmingly local and private – over 99% – with minimal foreign investment or public-sector participation. Industrial activity was most concentrated in governorates like Taiz, Sana'a City, and Ibb, while many other areas remained underdeveloped.

These trends reflect the structural fragility of Yemen's industrial base before the conflict, marked by informality, lack of diversification, and limited investment in quality or scale.

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[4] Central Bureau of Statistics, "Statistical Yearbook 2018", 2018. Available at: <https://cso-ye.org/en/general-statistical-reports/>. Accessed April 5, 2025.

Table 1: Key Indicators of Yemen's Industrial Sector in 2010

Establishments by # of workers			Establishments by industrial activity				Establishments by governorate		Establishments by Ownership	
Establishment Size	Counts	Percentage	Type of activity	Counts	Percentage	Establishments with quality certification	Governorate	Counts	Sector	Percentage
Large (> 50 workers)	142	0.5	Food industry	12161	44%	39	The Capital Secretariat	5020	Public	18%
Medium (50-10 workers)	531	2%	Fabricated Metal Products	4109	15%	3	Taiz	3871	Mixed	14%
Small (9-4 workers)	5322	19%	Non-metallic mineral products	3063	11%	10	Ibb	3402	Private (local)	12%
Micro	21801	78.50%	Garments	3003	11%	1	Hadramawt	2082	Foreign owned	7%
Total	27,796	100%	Water	1558	6%	0	Hodeidah	1911	Joint Private Ownership	7%
			Wood Products	1516	5%	0	Sana'a	1170	Cooperative	4%
			Other Industries	2386	9%	42	Amran	1051	Waqf (Endowment)	4%
			Total	27796	100%	95	Aden	735	NGOs	3%
							Other governorates	8554		31%
							Total	27796		100%

Source: [Ministry of Industry and Trade \(2010\)](#).

Since 2015, Yemen's industrial sector has suffered extensive damage from ongoing conflict. Direct strikes and shelling have destroyed infrastructure, while indirect effects – such as disrupted supply chains, input shortages, and soaring operational costs – have further undermined production.

Between 2015 and 2020, cumulative industrial losses are estimated at \$35 billion, affecting both extractive industries (notably oil and gas) and manufacturing sectors like food and consumer goods.<sup>[5]</sup> The private sector alone reportedly lost around \$4.5 billion.<sup>[6]</sup>

Government and international reports show declining industrial contributions to the economy. From 2019 to 2022, the sector's value-added output rose modestly – from \$3.1 billion to \$4.3 billion – yet remained far below potential. Manufacturing contributed about 10–11% to GDP, while extractive industries increased their share from 3.2% to 7.5% during this period.

Table 2: Industrial Sector Output, 2019-2022

Industrial indicators	2019	2020	2021	2022
Value Added by the Industrial Sector (Million USD)	3.139	2.701	3.159	4.292
Value Added by Manufacturing Industries (Million USD)	2.438	2.098	2.046	2.524
Value Added by Extractive Industries (Million USD)	701	603	1.113	1.768
Manufacturing Industries' Share of GDP (%)	11.14	11.13	10.83	10.65
Extractive Industries' Share of GDP (%)	3.2	3.2	5.89	7.46

Source: [Arab Organization for Industrial Development, Standardization, and Mining \(2024\)](#)

By 2021, both extractive and manufacturing industries were operating at just 27% of their pre-war capacity.<sup>[7]</sup> Widespread factory closures reflected a deep structural decline that continues to hinder national development. Since October 2022, Houthi attacks have suspended oil exports which led to a significant decline in oil production

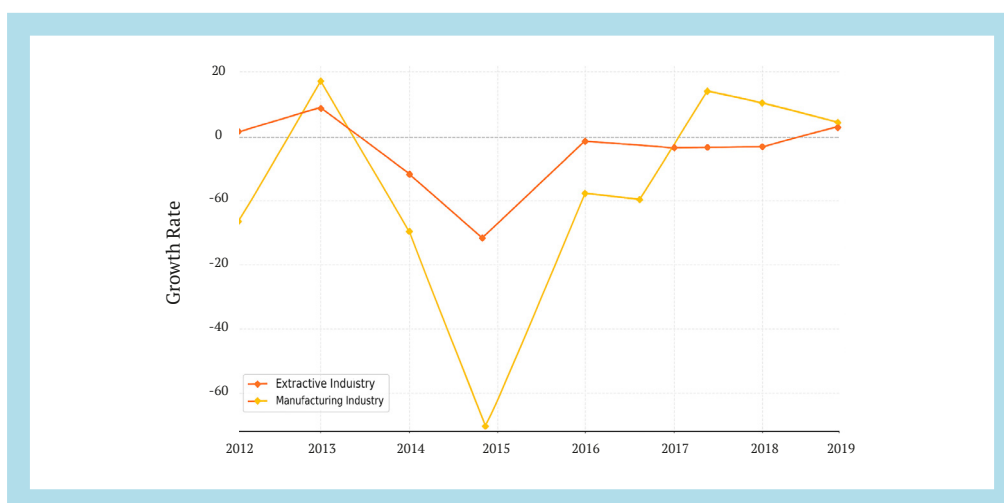
[5] Bassam Gabr, "Industry in Yemen: Encounter with Storms", Yemen Future Net, July 18, 2022. Available at: <https://yemenfuture.net/news/9356>. Accessed January 15, 2025.

[6] Rajeh Mohammed, "Attacks on Yemen's industry, the fiercest of which is dumping," Yemen Future Net, February 13, 2023. Available at: <https://yemenfuture.net/news/13105>. Accessed January 20, 2025.

[7] Rajeh Mohammed, "Attacks on Yemen's industry, the fiercest of which is dumping," Yemen Future Net, February 13, 2023. Available at: <https://yemenfuture.net/news/13105>. Accessed January 20, 2025; "Priorities for Private Sector Recovery in Yemen: Reforming the Business and Investment Climate", Rethinking Yemen's Economy, Policy Brief No. 15, Sana'a Center for Strategic Studies / DeepRoot Consulting / CARPO, September 2019. Available at: [https://devchampions.org/files/Rethinking\\_Yemens\\_Economy-policy\\_brief\\_15.pdf](https://devchampions.org/files/Rethinking_Yemens_Economy-policy_brief_15.pdf). Accessed March 13, 2025.

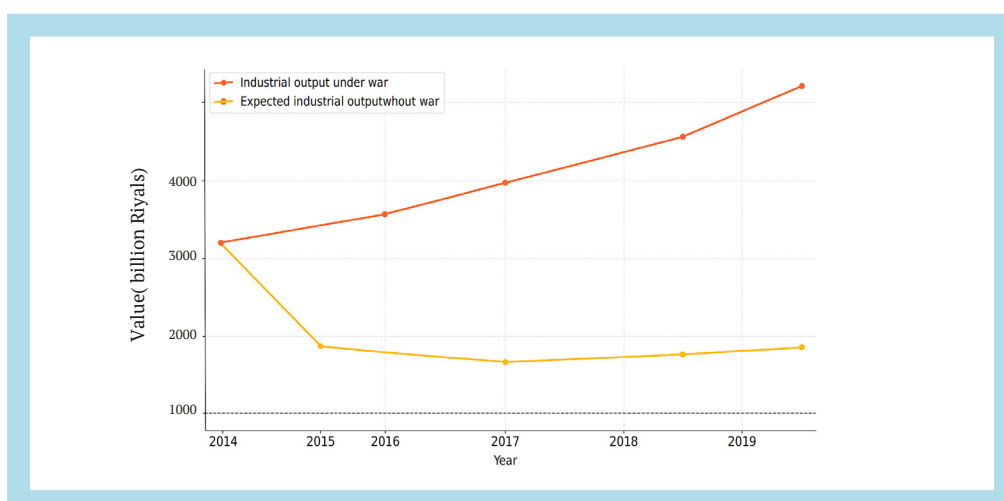
and the share of extractive industries in GDP. These indicators highlight the severity of industrial collapse and underscore the urgency of a recovery strategy anchored in investment, infrastructure rehabilitation, and institutional stability.

Figure 1: Estimated Annual Real Growth, Industrial Sector (2012-2020)



Source: [Performance Indicators of the Industrial Sector in Yemen Amid Conflict and War](#)

Figure 2: Estimated Gross Production Value Contraction, Industrial Sector (2015-2020)



Source: [Performance Indicators of the Industrial Sector in Yemen Amid Conflict and War](#)

## Yemen's Industrial Sector Laws and Regulations

While lack of effective implementation and enforcement have undermined Yemen's legislative attempts to support industrial development, officially the country has enacted various statutes designed to establish an enabling legal infrastructure conducive to investment and growth. This begins with the Yemeni Constitution, which places particular emphasis on small and medium enterprises (SMEs), allocating 20% of industrial zone areas to support industrial entrepreneurship.<sup>[8]</sup>

Since the 1990s, the Yemeni Parliament has also passed various laws to support the industrial sector, which together constitute a strong legal framework for industrial development. Some of the most important of these laws include:

- **Industry Regulation Law:**

Promotes industrial activity, technological diversification, use of local raw materials, and enhanced competitiveness.<sup>[9]</sup>

- **Investment Law:**

Encourages the flow of Yemeni, Arab, and foreign capital to foster a competitive industrial environment.<sup>[10]</sup>

- **Free Zones Law:**

Offers tax and customs incentives to attract foreign investments and boost exports.<sup>[11]</sup>

- **Local Industry Protection Law:**

Shields national production from unfair competition and random imports, improving product quality.<sup>[12]</sup>

- **The Law on the Protection of Innovation in Industrial Designs:**<sup>[13]</sup>

Protects the intellectual rights of industrial designers, which supports industrial identity and encourages innovation and the production of value-added goods.

[8] Constitute Project, "Constitution of the Republic of Yemen", 2015. Available at: [https://www.constituteproject.org/constitution/Yemen\\_2015\\_D.pdf?lang=ar](https://www.constituteproject.org/constitution/Yemen_2015_D.pdf?lang=ar). Accessed June 4, 2025.

[9] MoIT, "Industry Regulation Law No. (20) of 2010", 2010. Available at: <https://adenchamber.com/wp-content/uploads/2024/08/%D9%82%D8%A7%D9%86%D9%88%D9%86-%D8%B1%D9%82%D9%85-20-%D9%84%D8%B3%D9%86%D8%A9-2010%D9%85-%D8%A8%D8%B4%D8%A3%D9%86-%D8%AA%D9%86%D8%B8%D9%8A%D9%85-%D8%A7%D9%84%D8%B5%D9%86%D8%A7%D8%B9%D8%A9.pdf>. Accessed June 4, 2025.

[10] NIC, "Investment Law No. (22) of 2002", 2002. Available at: <http://www.yemen-nic.info/laws/detail.php?ID=6104>. Accessed June 4, 2025.

[11] NIC, "Free Zones Law No. (12) of 1993", 1993. Available at: [http://yemen-nic.info/db/laws\\_ye/detail.php?ID=11399](http://yemen-nic.info/db/laws_ye/detail.php?ID=11399). Accessed June 4, 2025.

[12] MoIT, "Industry Regulation Law No. (20) of 2010", 2010. Available at: <https://adenchamber.com/wp-content/uploads/2024/08/%D9%82%D8%A7%D9%86%D9%88%D9%86-%D8%B1%D9%82%D9%85-20-%D9%84%D8%B3%D9%86%D8%A9-2010%D9%85-%D8%A8%D8%B4%D8%A3%D9%86-%D8%AA%D9%86%D8%B8%D9%8A%D9%85-%D8%A7%D9%84%D8%B5%D9%86%D8%A7%D8%B9%D8%A9.pdf>. Accessed June 16, 2025.

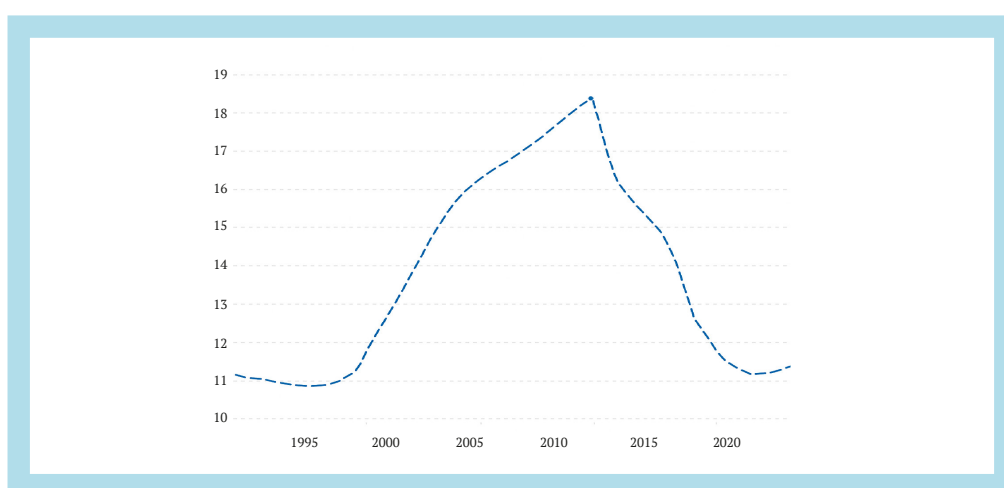
[13] MoIT, "Industrial Designs Law No. (28) of 2010", 2010. Available at [https://adenchamber.com/wp-content/uploads/2024/08/%D9%82%D8%A7%D9%86%D9%88%D9%86-%D8%B1%D9%82%D9%85-28-%D9%84%D8%B3%D9%86%D8%A9-2010-%D8%A8%D8%B4%D8%A3%D9%86-%D8%A7%D9%84%D8%AA%D8%B5%D8%A7%D9%85%D9%8A%D9%85-%D8%A7%D9%84%D8%B5%D9%86%D8%A7%D8%B9%D9%8A%D8%A9\\_1.pdf](https://adenchamber.com/wp-content/uploads/2024/08/%D9%82%D8%A7%D9%86%D9%88%D9%86-%D8%B1%D9%82%D9%85-28-%D9%84%D8%B3%D9%86%D8%A9-2010-%D8%A8%D8%B4%D8%A3%D9%86-%D8%A7%D9%84%D8%AA%D8%B5%D8%A7%D9%85%D9%8A%D9%85-%D8%A7%D9%84%D8%B5%D9%86%D8%A7%D8%B9%D9%8A%D8%A9_1.pdf). Accessed June 16, 2025.



### 3. Labour Force Exclusion

The war has sharply reduced industrial employment in Yemen. According to International Labour Organization data, the sector's share of total employment fell from 19.2% in 2010 to under 11% by 2023.<sup>[14]</sup> The World Bank estimates that between 2015 and 2020, the conflict eliminated around 260,000 jobs and prevented the creation of nearly 500,000 more.<sup>[15]</sup> Infrastructure collapse and investment shortages have forced factories to close or scale back, cutting working hours nearly in half. Roughly 55% of industrial workers lost their jobs, and more than a quarter of private firms in industry, commerce, and services shut down completely.<sup>[16]</sup>

Figure 3: Industrial Sector Employment, % of total, (1990-2023)



Source: [Employment in industry \(% of total employment\) \(modeled ILO estimate\) - Yemen, Rep. | Data](#)

Unemployment remains high across the population, but vulnerable groups – especially women, the elderly, and people with disabilities – face additional barriers, including poor access to healthcare and education.<sup>[17]</sup> Gender disparities persist: Before the war, female labor force participation was just 25.9% in rural areas and 11.5% in urban settings. Most women work in agriculture (87%), with far fewer in education (4.3%) or manufacturing (2.6%).<sup>[18]</sup>

[14] World Bank, “The Status of Yemeni Women: From Ambition to Opportunity”, May 2014. Available at: <https://documents1.worldbank.org/curated/en/707931468334288497/pdf/878200ESW0WhitOn0ARABIC040220140web.pdf>. Accessed June 4, 2025.

[15] World Bank, “Industrial workers (% of total employment) - Yemen, Rep.”, 2025. Available at: [https://data.worldbank.org/indicator/SL.IND.EMPL.ZS?locations=YE&most\\_recent\\_value\\_desc=false](https://data.worldbank.org/indicator/SL.IND.EMPL.ZS?locations=YE&most_recent_value_desc=false). Accessed June 4, 2025.

[16] Amal Nasser, “Private Sector Engagement in Post-Conflict Yemen”, Rethinking Yemen’s Economy Policy Brief No. 7, Sana’a Center for Strategic Studies / DeepRoot Consulting / CARPO, August 2018. Available at: [https://devchampions.org/files/Rethinking\\_Yemens\\_Economy\\_policy\\_brief\\_7.pdf](https://devchampions.org/files/Rethinking_Yemens_Economy_policy_brief_7.pdf). Accessed June 4, 2025.

[17] World Bank, “The Status of Yemeni Women: From Ambition to Opportunity”, May 2014. Available at: <https://documents1.worldbank.org/curated/en/707931468334288497/pdf/878200ESW0WhitOn0ARABIC040220140web.pdf>. Accessed January 7, 2025.

[18] TVET, “National Strategy for Women Labor 2001-2011”, 2011. Available at: <http://www.yemen-nic.info/files/ministations/work/1.pdf>. Accessed April 7, 2025.



In the industrial sector, men account for about 90% of the workforce. Female participation ranges from just 1% to 6%, mainly in large enterprises and labor-intensive fields like textiles, food processing, and pharmaceuticals where around 4% of the female workforce is considered non-paid workers.<sup>[19]</sup> Wage gaps, limited job opportunities, as well as cultural and security constraints further hinder women's economic agency, with the armed conflict exacerbating these factors.<sup>[20]</sup>

Yet, in response to growing hardship and male unemployment, some women have turned to informal entrepreneurship – reviving crafts such as embroidery, weaving, incense making, and heritage gifts.<sup>[21]</sup> These small businesses offer both income and a means to preserve cultural traditions, especially in rural and conflict-affected areas. They are also increasingly important as societal attitudes toward women's work evolve in response to rising male unemployment and mounting economic pressures.<sup>[22]</sup>

Table 3: Industrial Employment in Yemen, by Gender and Nationality (2010)

Establishment Size	Number of Employees by Gender and Nationality											
	Yemenis			Arab			Foreigners			Grand Total		
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
Large	36784	2508	39292	85	-	85	435	9	444	37304	2517	39821
Medium	10322	362	10684	148	1	149	145	1	146	10615	364	10979
Small	24712	91	24803	60	2	62	34	0	34	24806	93	24899
Total	71818	2961	74779	293	3	296	614	10	624	72725	2974	75699

Source: [Ministry of Industry and Trade \(2010\)](#)

[19] WB, "The Status of Yemeni Women: From Ambition to Opportunity", May 2014. Available at: <https://documents1.worldbank.org/curated/en/707931468334288497/pdf/878200ESW0Whit0n0ARABIC040220140web.pdf>. Accessed January 7, 2025.

[20] Fawziah Al-Ammar and Hannah Patchett, "The Repercussions of War on Women in the Yemeni Workforce", July 23, 2019. Available at: [https://devchampions.org/publications/policy-brief/The\\_Repercussions\\_of\\_War\\_on\\_Women\\_in\\_the\\_Yemeni\\_Workforce/](https://devchampions.org/publications/policy-brief/The_Repercussions_of_War_on_Women_in_the_Yemeni_Workforce/). Accessed June 6, 2025.

[21] Hannah Patchett et al., "A Gendered Crisis: Understanding the Experiences of Yemen's War", December 16, 2019. Available at: <https://sanaacenter.org/publications/main-publications/8480>. Accessed February 2, 2025.

[22] Balqees Al-Abdali, "Women's Empowerment in Yemen: Between National Need and International Agenda", November 29, 2024. Available at: <https://yemenfuture.net/researches/27672>. Accessed February 1, 2025. Fawziah Al-Ammar and Hannah Patchett, "The Repercussions of War on Women in the Yemeni Workforce", July 23, 2019. Available at: [https://devchampions.org/publications/policy-brief/The\\_Repercussions\\_of\\_War\\_on\\_Women\\_in\\_the\\_Yemeni\\_Workforce/](https://devchampions.org/publications/policy-brief/The_Repercussions_of_War_on_Women_in_the_Yemeni_Workforce/). Accessed June 6, 2025.

## 4. Environmental Challenges

Yemen's industrial sector places immense strain on natural resources and contributes to air, water, and soil pollution. Yemen is exceptionally vulnerable to climate change, ranking as one of the world's most climate-sensitive nations. This vulnerability poses a significant threat to its development, as 86% of its Sustainable Development Goals are tied to environmental sustainability. The country's environmental risks are largely unaddressed due to weak enforcement, minimal pollution controls, and limited monitoring. Furthermore, institutional fragmentation and chronic underinvestment in essential systems like water and food security only worsen the situation.<sup>[23]</sup>

Among the leading industries driving pollution in Yemen are: oil and gas production, where leaks and emissions have contaminated soil and groundwater in Marib, Shabwa, and Hadramawt;<sup>[24]</sup> chemical industries, with toxic spills and emissions being a danger to public health in Taiz, Hudaydah, and Aden; food production that generates organic waste polluting waterways;

manufacturing that emits dust and solid waste, impacting biodiversity and health; and stone quarrying that contributes to erosion and land degradation.<sup>[25]</sup>

To address these issues, Yemen has enacted over 30 environmental laws and created the Environmental Protection Authority.<sup>[26]</sup> These laws cover industrial pollution control, marine protection, fisheries, investment restrictions on harmful industries, and water resource management. In many instances, however, the official legislation is outdated and fails to reflect current global environmental standards.<sup>[27]</sup> Various factors have also hampered enforcement. For instance, corruption and nepotism regularly undermined regulatory agency efforts, which also often have overlapping institutional mandates.<sup>[28]</sup>

[23] Hesham Mohammed Naji, "Review of Current Environmental Policies and Laws in Yemen", Arab Reform Initiative, March 2023. Available at: <https://s3.eu-central-1.amazonaws.com/storage.arab-reform.net/ari/2023/03/05105221/2023-04-EPP-AR-NRF22-HishamNagui-Yemen-for-website.pdf>. Accessed February 10, 2025. UNIDO, "Annual Report 2016", March 2017. Available at: <https://www.unido.org/sites/default/files/unido-publications/2023-03/Annual-Report-2016-ar.pdf>. Accessed February 3, 2025; ESCWA, "Country Risk Analysis: Yemen", 2023. Available at: [https://www.unescwa.org/sites/default/files/pubs/pdf/country-risk-analysis-yemen-arabic\\_0.pdf](https://www.unescwa.org/sites/default/files/pubs/pdf/country-risk-analysis-yemen-arabic_0.pdf). Accessed February 4, 2025. World Bank Group, "Yemen Country Climate and Development Report", 2024. Available at: <https://documents1.worldbank.org/curated/en/099112824033092191/pdf/P500638190d06202e19ef41cb2ff3cfcec0.pdf>. Accessed February 7, 2025.

[24] Yasmin Al-Eryani, "Oil Extraction Industries' Impacts on Health, Livelihoods and the Environment in Hadramawt", December 16, 2020. Available at: [https://sanaacenter.org/files/Oil\\_Extraction\\_Industries\\_Impacts\\_on\\_Health\\_en-1.pdf](https://sanaacenter.org/files/Oil_Extraction_Industries_Impacts_on_Health_en-1.pdf). Accessed March 13, 2025; Iman al-Gawfi et al., "The Role of Women in Peacebuilding in Yemen", CARPO, February 27, 2020. Available at: [https://carpo-bonn.org/media/pages/publikationen/carpo-briefs/the-role-of-women-in-peacebuilding-in-yemen/28c41a2fc0-1733145171/carpo\\_brief\\_14.pdf](https://carpo-bonn.org/media/pages/publikationen/carpo-briefs/the-role-of-women-in-peacebuilding-in-yemen/28c41a2fc0-1733145171/carpo_brief_14.pdf). Accessed April 9, 2025.

[25] Sahar Mohammed, "Yemen's Environmental Crisis: The Forgotten Consequences of Enduring Conflict", Arab Reform Initiative, June 2023. Available at <https://www.arab-reform.net/publication/yemens-environmental-crisis-the-forgotten-fallout-of-an-enduring-conflict/>. Accessed June 16, 2025; Author interview with Mohammed Al-Abadi, Director General of the Environment Office in Marib Governorate, Accessed February 12, 2025.

[26] NIC, "Database of legislation and laws", n.d. Available at: [http://yemen-nic.info/db/laws\\_ye/detail.php?ID=6715](http://yemen-nic.info/db/laws_ye/detail.php?ID=6715). Accessed January 17, 2025.

[27] Hesham Mohammed Naji, "Review of Current Environmental Policies and Laws in Yemen", Arab Reform Initiative, March 2023. Available at: <https://s3.eu-central-1.amazonaws.com/storage.arab-reform.net/ari/2023/03/05105221/2023-04-EPP-AR-NRF22-HishamNagui-Yemen-for-website.pdf>. Accessed February 10, 2025.

[28] Ibid.

Table 4: Examples of Yemen's Environmental Regulations

Area	Legislation and laws
Industrial pollution control	Law No. (26) of 1995, and Law No. (20) of 2010
Investment and the environment	Law No. (22) of 2002 prohibiting investment in industries harmful to the environment and public health
Marine environment protection	Law No. (26) of 1995, Ministerial Decrees (2007), and the Environmental Compensation System (2010)
Protection of aquatic life	Law No. (2) of 2006 for the Protection of Fisheries
Water resource management	Water Law No. (33) of 2002

While industry is a primary cause of environmental risk, environmental factors also often pose a challenge for industry viability. For instance, water scarcity can disrupt production. Pollution controls and clean energy adoption can increase operational expenses, while firms bear the cost of meeting legal standards without adequate state support. Non-compliance can then lead to financial penalties and liability risks.<sup>[29]</sup>

## 5. Key Challenges Facing the Yemeni Industrial Sector

Yemen's industrial sector faces deep-rooted challenges that undermine its growth and competitiveness. These barriers span policy, infrastructure, financing, and security:

- **Lack of a national industrial development strategy:** The Yemeni government has no official policy initiative to encourage industrial development, and no robust incentives or strategic frameworks to attract investors or foster innovation.<sup>[30]</sup>
- **Limited financing:** Over 60% of businesses rely on self-financing, with just 4% accessing bank loans – well below the regional average. Business incubators and credit access remain scarce, particularly for small and medium enterprises.<sup>[31]</sup>

[29] Al-Arab, "Yemen's environmental disasters and COP 28", November 22, 2023. Available at: <https://alarab.co.uk/%D9%83%D9%88%D8%A7%D8%B1%D8%AB-%D8%A7%D9%84%D9%8A%D9%85%D9%86-%D8%A7%D9%84%D8%A8%D9%8A%D8%A6%D9%8A%D8%A9-%D9%88%D9%83%D9%88%D8%A8-28> Accessed January 16, 2025.

[30] Abdulrab Al-Sayyad, "Obstacles to small and medium enterprises in Yemen", Alandalus Journal for Political and Social Sciences, July 2020, pp. 7, 37. Available at: <https://andalusuniv.net/AUSTNEW/magazine/sh/2020/7/37/ea0f91c7944965fcd11d6cdeb6ae1eac.pdf>. Accessed February 5, 2025.

[31] Nawal Badaji, "Business incubators and their role in developing and growing small and medium enterprises", Albaydha University Journal, Issue 2, September 2020, pp. 170–92. Available at: <https://doi.org/10.56807/buj.v2i2.61>. Accessed March 10, 2025; World Bank, "Yemen Faces Mounting Economic Challenges as Conflict Continues, Regional Tensions Escalate", October 31, 2024. Available at: <https://www.worldbank.org/en/news/press-release/2024/10/31/yemen-faces-mounting-economic-challenges-as-conflict-continues-regional-tensions-escalate>. Accessed February 5, 2025.

- **Currency devaluation:** Since the war, the Yemeni rial has plummeted to around 1,617 per USD in government-controlled areas, with fragmented exchange rates between regions. This has drastically increased the cost of inputs and industrial equipment.<sup>[32]</sup>
- **Double taxation and financial fragmentation:** Divergent fiscal regimes between government and Houthi-controlled areas lead to dual taxation and inconsistent exchange rates, disrupting operations and inflating costs.<sup>[33]</sup>
- **Political and security instability:** Widespread insecurity – factory attacks, arms proliferation, and weak rule of law – deters both domestic and foreign investment. Over 40% of businesses report direct harm from security threats.<sup>[34]</sup>
- **Shrinking consumer demand:** High inflation and falling incomes have eroded household purchasing power, reducing demand for local industrial goods.<sup>[35]</sup>
- **Infrastructure gaps:** Chronic electricity shortages, poor road networks, and limited internet access hinder production and logistics. Power outages alone cost firms an estimated 16% of annual revenue.<sup>[36]</sup>
- **Human capital loss:** Even before the conflict, Yemen lacked skilled labor. Since then, brain drain has accelerated, with professionals seeking safety and work abroad – further depleting industrial expertise.<sup>[37]</sup>
- **Outdated technology:** Limited investment in modern machinery and digital systems has led to inefficiencies and substandard product quality.<sup>[38]</sup>
- **Data and research gaps:** The absence of updated, gender-disaggregated industrial data prevents evidence-based policymaking. The last full industrial survey dates to 2010.
- **Poor marketing and international exposure:** Yemeni products are largely absent from global trade platforms like Expo Dubai, limiting export growth and foreign visibility.<sup>[39]</sup>
- **Foreign competition:** Low-cost imports – often subsidized – undercut local industries, making it harder for domestic firms to compete.<sup>[40]</sup>

These constraints form a complex web that must be addressed through coordinated, multi-sector reforms to enable sustainable industrial revival.

[32] Ibid.

[33] Mohammed Al-Ghubari, “Yemeni food industries... and the challenges of war!”, Ourouba 22, March 2, 2025. Available at: <https://ourouba22.com/article/5115-الصناعات-الغذائية-اليمنية-وتحديات-الحرب>. Accessed March 10, 2025.

[34] World Bank Group, “Yemen Country Climate and Development Report”, 2024. Available at: <https://documents1.worldbank.org/curated/en/099112824033092191/pdf/P500638190d06202e19ef41cb2ff3cfcec0.pdf>. Accessed February 7, 2025.

[35] Ibid.

[36] Rajeh Mohammed, “Attacks on Yemen’s industry, the fiercest of which is dumping,” Yemen Future Net, February 13, 2023. Available at: <https://yemenfuture.net/news/13105>. Accessed January 10, 2025.

[37] “Developing Human Capital”, Rethinking Yemen’s Economy, Policy Brief No.18, DeepRoot Consulting / Sana’a Center for Strategic Studies / CARPO, January 2020. Available at: [https://devchampions.org/files/Rethinking\\_Yemens\\_Economy-policy\\_brief\\_18.pdf](https://devchampions.org/files/Rethinking_Yemens_Economy-policy_brief_18.pdf). Accessed June 4, 2025.

[38] Bassam Gabr, “Industry in Yemen: Encounter with Storms,” Yemen Future Net, July 18, 2022. Available at: <https://yemenfuture.net/news/9356>. Accessed January 15, 2025.

[39] YFCCI, “Performance indicators of the industrial sector in Yemen amid conflict and war”, 2023. Available at: <https://fycci-ye.org/upload/1654632323.pdf>. Accessed January 21, 2025.

[40] Abdulrab Al-Sayyad, “Obstacles to small and medium enterprises in Yemen”, Alandalus Journal for Political and Social Sciences, July 2020, pp. 7, 37. Available at: <https://andalusuniv.net/AUSTNEW/magazine/sh/2020/7/37/ea0f91c7944965fcd11d6cdeb6ae1eac.pdf>. Accessed February 5, 2025.

## 6. Comparative Lessons Regionally and Globally

The critical role a comprehensive industrial strategy can play in a country's economic development is made clear by regional and international experiences. Yemen's closest neighbors on the Arabian Peninsula – Saudi Arabia,<sup>[41]</sup> Oman,<sup>[42]</sup> and the United Arab Emirates<sup>[43]</sup> – all have far-reaching national industrial strategies designed to diversify their economies and support sustainable, long-term growth and productivity gains away from hydrocarbon production. Egypt's latest six-year national industrial strategy, launched in 2024, aims to dramatically grow industrial infrastructure and local manufacturing to boost the sector's contribution to GDP and employment.<sup>[44]</sup> For most of the past 70 years, the Turkish government has been actively involved in national industrial policy, promoting import substitution industrialization through the 1950-70s, then liberalization and export-led growth in the 1980s and 90s, to stabilization, structural reform, and economic rebalancing through the first quarter of this century.<sup>[45]</sup>

Further abroad, Vietnam stands as an example of the generational change effective industrial policy can bring about in post-conflict, developing nations. Initiatives like the Targeted National Program for New Rural Development, along with the efforts of organizations such as Viri, play a crucial role in supporting poverty reduction, promoting fair trade, and driving industrialization.<sup>[46]</sup> The country's agricultural manufacturing sector, valued at \$ 17 billion in 2021, developed with a focus on modernizing production processes to ensure long-term sustainability; as did the textile and clothing industry, which generated exports valued at \$44 billion in 2022, employing over 1.6 million people. These collaborative strategies highlight Vietnam's dedication to preserving cultural traditions while advancing sustainable economic development in rural communities.<sup>[47]</sup>

[41] Arab News, "Saudi crown prince launches national industry strategy", May 30, 2025. Available at: <https://www.arabnews.com/node/2183581/business-economy>. Accessed June 4, 2025.

[42] ESCWA, "Manufacturing for Well-being": Oman's Industrial Strategy 2040", January 2019. Available at: <https://andp.unescwa.org/plans/1202>. Accessed June 4, 2025.

[43] UAE Government Portal, "Operation 300bn, the UAE's industrial strategy", n.d. Available at: <https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/strategies-plans-and-visions/industry-science-and-technology/the-uae-industrial-strategy>. Accessed June 4, 2025.

[44] Hapi Journal, "Kamel El-Wazir announces details of the National Industrial Strategy 2024-2030", October 8, 2024. Available at: <https://hapijournal.com/2024/10/08/%D9%83%D8%A7%D9%85%D9%84-%D8%A7%D9%84%D9%88%D8%B2%D9%8A%D8%B1-%D9%8A%D8%B9%D9%84%D9%86-%D8%AA%D9%81%D8%A7%D8%B5%D9%8A%D9%84-%D8%A7%D9%84%D8%A5%D8%B3%D8%AA%D8%B1%D8%A7%D8%AA%D9%8A%D8%AC%D9%8A%D8%A9/>. Accessed June 4, 2026.

[45] Mina Toksoz et al., "Industrial Policy in Turkey: Rise, Retreat and Return", Chatham House, September 2024. Available at: [https://www.researchgate.net/publication/384711202\\_Industrial\\_Policy\\_in\\_Turkey\\_Rise\\_Retreat\\_and\\_Return](https://www.researchgate.net/publication/384711202_Industrial_Policy_in_Turkey_Rise_Retreat_and_Return). Accessed June 4, 2025.

[46] Trade for Development Centre, "Vietnam Rural Industries and Development Institute", n.d. Available at: <https://www.tdc-enabel.be/en/projecten/viri-vietnam-rural-industries-and-development-institute-3/>. Accessed January 15, 2025.

[47] Government of Vietnam, "Decree No. 52/2018/ND-CP on Development of Rural Trades," April 12, 2018. Available at: <https://english.luatvietnam.vn/decreed-no-52-2018-nd-cp-dated-april-12-2018-of-the-government-on-development-of-rural-trades-161860-doc1.html>. Accessed June 18, 2025; Statista, "Food Processing in Vietnam: Statistics & Facts," n.d. Available at: <https://www.statista.com/topics/8662/food-processing-in-vietnam/>. Accessed January 15, 2025. "Rising Star: Overview of Vietnam's growing textile and garment industry", World Fashion Exchange, "Vietnam's Growing Textile and Garment Industry," June 5, 2023. Available at: <https://www.worldfashionexchange.com/blog/vietnam-growing-textile-and-garment-industry/>. Accessed January 15, 2025.

The successful industrial strategies of Saudi Arabia, the UAE, Oman, Egypt, Turkey, and Vietnam offer a clear roadmap for Yemen's economic recovery. By studying these diverse models—from post-conflict industrialization to economic diversification—Yemen can develop its own comprehensive industrial strategy. This approach would help the country create new jobs, reduce poverty, and build long-term economic resilience, ultimately paving the way for a more prosperous future.



## 7. Policy Recommendations

Yemen's industrial sector has endured profound setbacks due to prolonged conflict, institutional fragmentation, and infrastructure collapse. Once a key contributor to GDP and employment, the industry now operates at a fraction of its former capacity. Yet, local resilience, especially in informal manufacturing and resource-based activities, signals that targeted investment and policy reform could catalyze a meaningful industrial revival.

In addition to revitalizing the industrial sector's capital and infrastructure base, sustainable industrial development requires coordinated action to modernize regulation, expand access to finance, empower women, and promote environmental sustainability. Special emphasis must be placed on small-scale and rural industries that can generate employment quickly and align with local capacities. Rebuilding industrial capacity is also essential for restoring economic sovereignty, reducing dependence on imports, and addressing Yemen's urgent development needs.

The following recommendations are directed at the Yemeni government, the private sector, and international partners. Each group has a distinct yet complementary role to play in shaping an enabling environment for industrial recovery and inclusive economic growth.

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### For the Yemeni Government

- **Develop a National Industrial Strategy:** Partner with the private sector to identify priority sectors and promote them through tariffs, tax breaks, and anti-dumping measures.
- **Improve Regulatory and Institutional Coordination:** Simplify business registration, update industrial laws, and establish coordination among the Ministry of Industry and Trade, Finance Ministry, and Customs Authority.
- **Invest in Industrial Infrastructure:** Rehabilitate roads, power grids, and logistics services in industrial zones; prioritize off-grid solutions like solar energy to reduce costs.
- **Promote Women's Industrial Participation:** Expand vocational and technical training for women and establish women-friendly industrial zones with safe transport and childcare facilities.
- **Enforce Environmental and Health Standards:** Mandate pollution control for high-impact industries and integrate environmental safeguards in all industrial zone planning.



### For the Yemeni Private Sector

- **Strengthen Research and Innovation:** Develop in-house R&D and collaborate with universities and youth-focused innovation competitions.
  - **Champion Female Inclusion:** Support exhibitions and digital platforms that promote female-made products and create inclusive workplaces in industrial ventures.
  - **Adopt Environmentally Sustainable Practices:** Invest in clean technologies and pollution control systems, especially in sectors like cement and stone crushing.
  - **Support National Branding Campaigns:** Co-lead marketing efforts like “Made in Yemen” to increase consumer awareness of domestic products.
  - **Engage in Policy and Strategy Dialogue:** Actively contribute to the design and implementation of national industrial strategies and reforms.
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### For Yemen's International Partners

- **Enhance Industrial Finance Access:** Co-finance an “Industrial Finance Fund” and support concessional loans to manufacturing SMEs, particularly in rural areas.
- **Support Women's Economic Empowerment:** Fund targeted loan programs and training initiatives for women entrepreneurs, in coordination with national authorities and local banks.
- **Promote Environmental Sustainability:** Provide technical and financial assistance for clean technology adoption and environmental compliance in industrial projects.
- **Assist in Legal and Institutional Reform:** Offer expertise to modernize industrial legislation and support digital platforms for business registration and arbitration mechanisms.
- **Facilitate Trade Infrastructure and Customs Reform:** Support improvements to port efficiency, customs procedures, and cross-border trade logistics.

# RETHINKING YEMEN'S ECONOMY

The Rethinking Yemen's Economy (RYE) Initiative and its associated Development Champions Forum aim to contribute to and support the advancement towards inclusive and sustainable development and peace by seeking to achieve the following: a) the enabled inclusive engagement of Yemenis in economic peacebuilding; b) an improved understanding of crucial policy areas related to economic peacebuilding and development in Yemen. The RYE initiative is implemented by DeepRoot Consulting, the Sana'a Center for Strategic Studies and CARPO. It is funded by the European Union.

For more information and previous publications: [www.devchampions.org](http://www.devchampions.org)

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## Implementing Partners

The project is implemented by a consortium of the following three partners:



### The Sana'a Center for Strategic

Studies is an independent think-tank that seeks to foster change through knowledge production with a focus on Yemen and the surrounding region. The Center's publications and programs, offered in both Arabic and English, cover political, social, economic and security related developments, aiming to impact policy locally, regionally, and internationally.

[www.sanaacenter.org](http://www.sanaacenter.org)



### DeepRoot Consulting

is a dynamic social enterprise passionate about Yemen's development. DeepRoot aims to help international development actors, the private sector, local civil society organizations and the Yemeni Government anchor their interventions in a deep understanding of Yemen's national and local contexts, and international best practices.

Our team has decades of combined experience working in Yemen and internationally in the public, private, and nonprofit sectors

[www.deeproot.consulting](http://www.deeproot.consulting)



### CARPO

is a Germany-based organization whose work is situated at the nexus of research, consultancy and exchange with a focus on implementing projects in close cooperation and partnership with stakeholders in the Middle East.

The CARPO team has long-standing experience in the implementation of projects in cooperation with partners from the region and a deep understanding of the Yemeni context.

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