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SUPPORTING THE CONSTRUCTION CONTRACTING SECTOR IN YEMEN FOR STABILIZATION AND RECOVERY

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EXECUTIVE SUMMARY

The construction sector in Yemen, despite being significantly impacted by political and economic crises and the effects of war, continues to be a crucial sector for the country's recovery and reconstruction efforts. Within the wider context of the construction sector in Yemen, this brief presents a comprehensive analysis of the contracting sector, which covers the physical work carried out on the production site such as constructing, renovating, or repairing buildings and structures, as well as other heavy constructions such as roads, bridges, and dams. The brief examines the state of the contracting sector before the war, its transformations over the past three decades, and the challenges it has been facing, such as security issues, ineffective legislation, and widespread corruption leading to informal activities. The brief also highlights the remarkable resilience and adaptability of the contracting sector, and argues that local contractors. with their expertise understanding, are critical for the sector's future and are well-positioned to play a key role in any upcoming reconstruction opportunities.

In addition, this brief explores the state of adopting green building standards in the contracting sector in Yemen, and the importance of integrating sustainable development strategies and environmentally friendly practices. Furthermore, the brief emphasizes the sector's role in job creation, especially for youth, and analyses the role of Yemeni women in the sector and how their participation can be enhanced.

The brief concludes with recommendations for a holistic approach engaging all stakeholders. The recommendations include convening technical meetings between contracting companies and government entities, forming a national committee to formulate a strategic vision, and exploring ways to revitalize the sector so that it can effectively participate in future recovery and development phases.

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1. Introduction

The construction industry is a key contributor to economic and social development, providing essential infrastructure, creating job opportunities, and driving technological advancements. Construction is an economic activity that crosses over all three economic sectors: primary (involving natural resource extraction); secondary (involving the manufacture of building materials and components and the transformation of these materials into finished buildings); and tertiary (encompassing consultancy services such as project management, design, and structural engineering).^[1]

Within the larger construction industry covering the economic sectors mentioned above, the contracting (Arabic: muqawalat) sector plays a crucial role in Yemen, particularly in creating employment opportunities, and especially for young people. The contracting sector covers the physical work carried out on the production site such as constructing, renovating, or repairing buildings and structures as well as other heavy constructions such as roads, bridges, and dams.

The contracting sector is critical for development and job creation in Yemen, especially in post-conflict recovery as this sector can play a key role in demobilization efforts by creating jobs through labor-intensive projects. Therefore, the tenth Development Champions Forum (DCF), convened in Cairo in December 2023, examined the challenges and opportunities encountered by this sector and the impact of successive economic crises on it. The DCF also analyzed different strategies for addressing the debt crisis, the role of women, and the status of environmental sustainability standards in the sector. This brief outlines the current state of the contracting sector in Yemen and provides recommendations for enhancing its capacity to contribute to stability, recovery, and reconstruction efforts.

^[1] Low Sui Pheng and Lau Shing Hou, "The Economy and the Construction Industry," Construction Quality and the Economy: A Study at the Firm Level, (2019): 21–54, https://doi.org/10.1007/978-981-13-5847-0_2. Accessed November 13, 2023.

^{[2] &}quot;The Tenth Development Champions Forum," Cairo, 2-4 December 2023, https://devchampions.org/ar/events/The_Tenth_Development_Champions_Forum/. Accessed December 8, 2023.

2. Background

Construction contracting is one of the key sectors shaping the Yemeni economy, serving as a pillar for various other sectors including commerce, industry, investment, and services. The wider construction sector contributed Yemeni riyal (YR) 275 billion (United States dollar (US\$) 1.4 billion) to the GDP in 2009, growing at a rate of 31% compared to 2008. Additionally, the construction and building sector ranked third in terms of economic growth rate, with a growth rate of approximately 20.77% in 2010 compared to 20.45% in 2009. Overall, in 2010, it contributed 6.3% of the total GDP.

The contracting sector contributes significantly to job creation, providing employment opportunities for both skilled and unskilled workers. Since 2005, the workforce has grown steadily at an annual rate of 5%. In 2010, the sector was estimated to have directly and indirectly employed over 2 million workers, supporting the livelihoods of more than seven million individuals. Furthermore, it offers on-the-job training for various positions that do not necessarily require a university degree, particularly in areas such as concrete and paving works, maintenance, and restoration, thus helping to reduce unemployment. This fosters skill development across different sectors and fields, benefits the local economy, and promotes economic stability.

Notably, the majority of infrastructure projects in Yemen, such as ports, airports, and bridges, have been constructed by Yemeni construction companies, either through direct contracts or in partnership with international corporations. The experience of Yemeni contractors and their understanding of the Yemeni environment has enabled them to successfully execute projects and overcome challenges during implementation. They have proven to be a key partner of the state in the development sector over the past decades.

In the early 1980s, Yemen sought international support, such as from the United Nations Industrial Development Organization and the World Bank, to enhance its contracting sector. Despite implementing some of the recommendations made by these organizations, including the improvement of local industries, the sector's weakness has largely persisted due to resource mismanagement and inadequate oversight.^[6]

^[3] Ibrahim Al-Qadimi, "Bankruptcy threatens Yemeni construction companies [AR]," Al-Jazeera website, September 12, 2011, Al-Jazeera website. Accessed November 15, 2023.

^{[4] &}quot;Contributions of Sectors to Gross Domestic Product Composition [AR]," The National Information Center, (no date), https://yemen-nic.info/contents/econmic/. Accessed November 10, 2023.

^{[5] &}quot;Vision of the General Union of Contractors in the Recovery and Reconstruction Phases," Yemeni Contractors Conference, General Investment Authority, January 2020. Accessed November 7, 2023.

^[6] Basel Sultan and Stephen Kajewski, "The Yemen construction industry: Readying the industry for the successful implementation of sustainability," Queensland University of Technology, 2003, https://www.researchgate.net/publication/27462950_The_Yemen_construction industry Readying the industry for the successful implementation of sustainability. Accessed November 8, 2023.

In 2008, the Contractors Classification and Registration Regulation No. 419 was implemented to assess contracting companies based on their financial, technical, administrative, and operational capabilities. This regulation established criteria for classifying contractors into six grades and outlined the registration requirements. Contractors receive a certificate from the Ministry of Public Works and Roads based on their classification. The regulation also encouraged these companies to formalize their operations by registering in the commercial register, renewing their tax cards, and obtaining practice licenses. This formalization became a prerequisite to qualify for opportunities to contract with the government, and it helped to begin addressing the challenge of widespread informality in the sector. According to 2003 construction survey indicators, the number of contractor establishments reached 794, with the total production value of the formal sector amounting to almost YR 79 billion and employing 28,301 workers. In contrast, the number of buildings where construction activities were carried out by the informal sector was estimated at 235,323, encompassing new construction, additions, and renovations executed by households themselves or through partial construction facilitated by unskilled laborers. The production value of the informal sector amounted to over YR 95 billion, i.e., YR 16 billion more than the formal sector. The widespread informality in the contracting sector has affected the sector's overall ability to adhere to national and international quality specifications and standards and has limited its ability to compete with international companies, especially in large infrastructure projects.

According to data from the Ministry of Public Works and Roads, the sector experienced significant growth between 2007 and 2009. The number of building permits issued increased from 6,703 in 2007 to 8,992 in 2009, and construction areas expanded from 1,735 to 2,383 thousand square meters. Additionally, contracting companies grew from 962 to 1,108 across the six grades during the same period. In 2010, the sector witnessed considerable growth, with the number of companies reaching 1,164, including 66 in the first grade. Additionally, the sector obtained 9,507 building permits. This growth was expected to continue, driven by ongoing development projects and increased investment from the private construction sector.

^{[7] &}quot;Final Report on the Results of the Construction and Building Survey [AR]," Central Statistical Organization, 2003: 21–26, https://yemennic.info/sectors/detail.php?ID=32665. Accessed November 27, 2023.

^{[8] &}quot;Main Construction, Building and Housing Indicators 2009-2011 [AR]," Central Statistical Organization, https://yemen-nic.info/upload/iblock/4524dc921a380d9a4fc4cd8a5165209b.pdf. Accessed November 27, 2023.

^{[9] &}quot;Sectoral information, Building and Construction [AR]," National Information Center, (n.d.), https://yemen-nic.info/sectors/constructing/Accessed November 10, 2023.

3. Impact of Instability and Conflict

Following the events of 2011, the contracting sector in Yemen experienced a significant decline, leading to the suspension of approximately 90% of ongoing projects and a freeze of any new government projects. In 2013, the General Union of Yemeni Contractors (GUYC) warned of a potential collapse in the sector as companies struggled to meet their financial obligations to financiers and workers due to the government's failure to pay its arrears. This led to the imprisonment of 270 contractors due to the government's non-payment of contract amounts, estimated at YR 45 billion. Estimates also indicated that over a million workers were laid off, and the sector incurred losses amounting to US\$80 million. [10] In addition, the real estate market stagnated, which led to further decline in the demand for construction services. These challenges were further compounded by fuel shortages (especially diesel). According to the GUYC, the sector accounted for 5% of fuel consumption in Yemen. Power outages and increased materials and transportation costs made the situation worse. All the aforementioned factors ultimately led to the bankruptcy of around 100 companies and the loss of approximately half a million jobs. [11]

The significant challenges faced by the sector due to instability from 2011 to 2014 paled in comparison to the impact of the subsequent and ongoing armed conflict, which has caused extensive damage to the country's infrastructure and large-scale projects. According to the World Bank, approximately 40% of 500,000 assessed housing assets in 16 Yemeni cities have suffered damage, with more than 113,000 housing units being affected. The estimated cost of this damage is between US\$5.4–6.2 billion.^[12]

The escalation and protraction of the conflict has exacerbated the challenges faced since 2011 and hindered efforts to address them. Out of the sixty-six (66) companies classified as Grade 1 companies in 2010, only 13% (nine companies, two of which are state-owned) remained in that classification grade by 2023. [13] In addition, the prevalence of the informal sector has intensified during the conflict. Findings of a research paper published in 2018 indicated that 91.60% of stakeholders, including homeowners and formal contractors, primarily relied on the informal sector, and only 8.40% use the formal sector. [14] The study indicates that stakeholders prefer to utilize

^{[10] &}quot;The General Union of Contractors warns of the collapse of the construction sector in Yemen due to the accumulation of debts [AR]," Alddali News, December 25, 2013, https://addalinews.com/news/10437. Accessed November 10, 2023.

^[11] Al-Qadimi (2011).

^[12] World Bank, "Yemen Dynamic Needs Assessment: Phase 3," Washington D.C., World Bank Group, December 2020, https://documents.worldbank.org/en/publication/documents-reports/documentdetail/490981607970828629/yemen-dynamic-needs-assessment-phase-3-2020-update. Accessed November 14, 2023.

^[13] In-depth interviews: The author conducted in-depth interviews with the General Federation of Chambers of Commerce, the Yemeni Contractors Union, and representatives from two companies in the construction sector on November 14 and 18, 2023.

^{[14] &}quot;Political Instability and the Informal Construction Sector in Yemen," International Journal of Civil Engineering and Technology, 9, No. 1, November 2018: 1228–1235, https://www.researchgate.net/publication/329656549_Political_instability_and_the_informal_construction_sector_in Yemen. Accessed November 8, 2023.

the informal sector due to the weakness of regulations and legal systems to resolve disputes and carry out contract obligations, the high corruption in the legal and administrative institutions which obstructs all types of formal construction activities, and the complications and unclear expenses involved in utilizing the formal sector.

In 2020, two conferences were organized for the contracting sector: the "Contractors of Yemen: Leadership and Pioneering" conference in Sana'a in January, organized by the General Investment Authority in Sana'a and General Union of Yemeni Contractors; and the "Aden First Conference and Exhibition for Building and Constructing" in October, organized by the Investor Foundation in collaboration with the Chamber of Commerce and Industry – Aden, and the General Investment Authority in Aden, but with little coordination between the organizers of the two events. The main demand from the entities representing the sector in both conferences was the payment of previous financial debts owed by the government to contractors. They suggested allocating part of the oil and gas revenues or seeking external financing to repay those debts. They also demanded mechanisms to address the challenge of stalled projects due to the war.^[15]

During the ongoing conflict, funding from international donors represented a lifeline to the contracting sector, helping to bolster the local economy and enhance capacities through partnerships with local companies and service providers. For example, a US\$150 million project agreement was signed between the World Bank and the United Nations Office for Project Services (UNOPS) in November 2017. This agreement aimed to restore essential services in several cities and was implemented in collaboration with three Yemeni entities: the PWP, the Road Maintenance Fund, and the Urban Water Projects Management Unit. The project targeted 19 cities and included the rehabilitation of 400 kilometers of urban roads. Notably, this project created 1.5 million working days for skilled and unskilled workers, contributing to the support and growth of the contracting sector. [16] In addition, in 2022, the World Bank provided US\$170 million in funding to UNOPS through the Integrated Urban Emergency Services Project in Yemen, resulting in more than 230 kilometers of rehabilitated roads in eight Yemeni cities. [17]

Figure 1 provides a summary of the strengths and weaknesses of the contracting sector, as well as the opportunities and challenges that it currently faces.

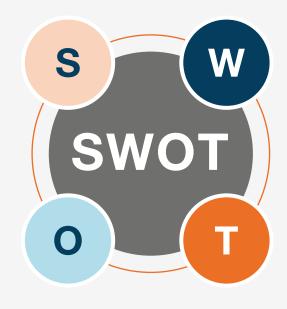
^[15] General Authority of Investment, unpublished papers, January, 2020, Accessed November 7, 2023.

^{[16] &}quot;Agreement signed for \$150 million project to support Yemen's conflict-affected cities," November 2017, UNOPS, https://www.unops.org/news-and-stories/news/agreement-signed-for-us-150-million-project-to-support-yemens-conflict-affected-cities-1. Accessed November 20, 2023.

^{[17] &}quot;To further improve critical urban services across Yemen," UNOPS, April 2022, https://www.unops.org/news-and-stories/news/unops-to-further-improve-critical-urban-services-across-yemen. Accessed November 20, 2023.

STRENGHTS

- The sector is highly resilient and adaptive to new conditions.
- Understanding of Yemeni context and construction practices.
- Qualified to embark on new projects with potential to scale up.
- Syndicates and unions continue to operate as single entities across the country.
- Sector companies are family-owned, creating strong cohesion.



WEAKNESSES

- Weak localization of international expertise: local firms playing subcontracting roles.
- Capacity building for workforce does not meet modern standards and requirements.
- Slow completion of projects: unavaiability of materials on site or in the market.
- Low productivity of workforce compounded by administrative hurdles.
- Weak technical and feasibility studies.

OPPORTUNITIES

- Yemen's strategic location can magnitize regional and international investments.
- Ceasefire in 2023 allows the sector to plan and reprioritise reconstruction in the recovery phase.
- Recovery phase offers several opportunities for the sector, boosting growth.

- Financial opportunities from international investors.
- Collaboration with international firms for transferring expertise to Yemenis.

THREATS

- Absence of a coherent national system of laws and standards.
- Power overlap between relevant ministries and authorities can use failures.
- Price imbalances and currency fluctuation in different regions across Yemen.
- Lack of financial coverage for project values: no financial institution dedicated to construction.
- Complicated procedures for obtaining permits and accepting designs.

4. Application of Environmental Standards in the Contracting Sector

Despite the significant environmental footprint of the contracting sector in Yemen, interviews with relevant stakeholders revealed that compliance with environmental standards is generally not perceived as a priority in the sector, and there is little awareness of such standards. Law number 26 of 1995 on Environment Protection and law number 19 of 2002 on Construction together with their executive bylaws represent the high-level legal framework governing environmental aspects related to the contracting sector. However, these legal frameworks have not been translated into specific industry standards and codes, and their application and enforcement have been weak at best.

The sector's environmental impact includes construction waste, transportation, air pollution, water usage, energy consumption, disposal of waste oils and grease residues, depletion of natural resources, and impact on biological diversity. However, the lack of industry standards and codes related to the environment, and the low capacity of institutions to enforce any existing regulations especially since the ongoing conflict started, have left the application of environmental standards in the contracting sector as the exception and not the rule. Even before the conflict, contracting companies have usually adhered to environmental protection and sustainability standards only when the financing entity (government or donors) explicitly required it, a budget had been allocated to cover the cost of implementing these standards and measures, and clear verification measures were included in the contract.

The Social Fund for Development (SFD) and the Public Works Project (PWP) represent notable exceptions in this regard. With funding from the World Bank and other donors, these agencies have built their institutional capacity to improve their own environmental and social measures. They have trained thousands of engineers, consultants, contractors and workers across Yemen to implement and monitor environmental and social standards in their projects. The PWP has also established an Environmental and Social Safeguards Unit and produced a manual on environmental and occupational health and safety guidelines to protect the environment and workers at work sites.^[18]

^[18] Amer Abdulwahab Ali Al-Ghorbany, "Improving environmental and safety standards on projects in Yemen even during conflict," World Bank Blogs, December 22, 2021, https://blogs.worldbank.org/en/arabvoices/improving-environmental-and-safety-standards-projects-yemen-even-during-conflict. Accessed October 20, 2023.

5. The Role of Yemeni Women in the Contracting Sector

The construction industry relies heavily on physical strength, leading to it being dominated by men in a country where social and cultural factors also limit women's participation in such professions. Despite the presence of many female engineering graduates and licensed professionals, men dominate roles such as engineering supervision and project management. This is due to various factors, including security threats, violence, and discrimination. [19] Despite their academic qualifications, female engineers lack practical experience and face significant challenges in the job market due to societal restrictions on their entry into these sectors. This limits their opportunities to learn and gain valuable skills. There is insufficient research studying women's participation in this sector, but a field study conducted in Taiz on obstacles facing female engineering graduates found that the main barriers include traditional views on women's work and the impact of the ongoing war, which has led to a lack of job opportunities and low wages. The study found that around 40% of female engineers are frustrated by the lack of job prospects, another 40% have stopped looking for work, and about two-thirds have not registered with recruitment agencies.[20]

During a discussion workshop conducted for this brief with female contractors and engineers from five governorates, some with over 15 years of experience, the author of this paper learned that in addition to the general challenges faced by the sector, these female contractors and engineers encounter additional challenges such as limited financial resources, family restrictions, societal bias and unclear career paths after graduation. Despite these challenges, there are several noteworthy women-owned and women-led enterprises that have demonstrated their capabilities in projects such as the construction of structures, the installation of solar systems, and restoration projects. However, their involvement in infrastructure projects is limited chiefly to supervisory roles and not in contracting. [21]

Internationally funded projects, usually supported by donor institutions such as the World Bank's International Development Association and the German Reconstruction Fund and implemented by the SFD and PWP, have played a key role in promoting women's participation as contractors and supervisors at construction sites, as well as their participation in projects such as cash-for-work. [22] For example, after receiving

^[19] Fawziah Al-Ammar and Hannah Patchett, "The repercussions of war on women in the Yemeni workforce," Rethinking Yemen's Economy, RYE Policy Brief 13, Sana'a Center for Strategic Studies/DeepRoot Consulting/CARPO, July 23, 2019, https://devchampions.org/files/Rethinking_Yemens_Economy-policy_brief_13.pdf. Accessed November 28, 2023.

^[20] Abdelnour et al, "Challenges to Female Engineers' Employment in the Conservative and Unstable Society of Taiz State: A Survey Study," Sustainability 15, no. 20, 2023: 14949, https://www.mdpi.com/2071-1050/15/20/14919. Accessed November 28, 2023.

^[21] A workshop held by the author with businesswomen working in the contracting sector from five governorates (Sana'a, Aden, Taiz, Lahj, Dhamar), December 19, 2023.

^[22] Zena Ali Ahmad, "Yemeni Women: Leading into the Future," UNDP, March 16, 2023, https://www.undp.org/yemen/blog/yemeni-women-leading-future. Accessed November 29, 2023.

training and support by the SFD, displaced women have competed for contracts to implement simple projects such as painting the sidewalks, paving the streets with stone, and plastering, with one female contractor awarded a tender to pave a road in Taiz governorate. These women were able to provide job opportunities for other displaced women, improving their chances of living a decent life. [24]

^[23] Louay Sultan, "Yemeni Women Break into Monopolized Male Professions: The First Yemeni Woman Worker in Contracting [AR]," Khuyut Platform, May 3, 2023, https://www.khuyut.com/blog/wom-work. Accessed November 28, 2023.

^{[24] &}quot;Displaced Women Making Their Way to Contraction [AR]," Cash-for-Work Project, Social Fund for Development, https://www.sfd-yemen.org/ar/content/18/236. Accessed December 10, 2023.

Public Works Project

Established in 1996, the PWP has not only been a key channel for international aid used for local projects, but has made significant contributions to creating job opportunities, upgrading the capacity of contracting professionals, supporting environmental responsibility, and increasing women's participation in the contracting sector.

Environmental action: The PWP produced a manual on environmental and occupational health and safety guidelines to protect the environment and workers at work sites. It expects contracting companies to comply with these standards and to educate and train their workers on occupational and environmental health and safety.

Women's Participation: The PWP also established a unit dedicated to promoting women's participation and issued a work manual which included mechanisms to increase women's participation in selecting, designing, and implementing projects. As a result, women's participation in public works projects has improved considerably. By June 2017, women had been active participants in the selection of 40% (117 projects) of the total number of PWP projects and in 54 of those projects, the number of women exceeded the number of men in the project selection process. Additionally, 114 women's community councils were formed, with 3,430 women members. Furthermore, the PWP contracted 65 female engineering consultants, approximately 15% of the total number of consultants. In 2018, 80% of the participants in 1,058 sub-projects across 22 governorates were women, totaling 4,725 women, and by 2020 the number had reached 5,000 women (representing 95% of project participants). Women were given job opportunities as engineers, researchers, and consultants, and over 450 women were hired for field supervision, tender analysis, identifying community needs, and other tasks.

Contributions during the conflict: Since the conflict started, PWP has successfully trained hundreds of engineers to oversee project construction, ensure quality control, and assess environmental impact. Recognizing the high competition among contractors looking for employment, the PWP has provided job opportunities to 770 contractors who had been unemployed for a significant period. Furthermore, over 2,377 consulting engineers were engaged in projects and priority was given to those in governorates where the projects were being carried out. This approach has helped to streamline the workflow and leverage the expertise of contractors in remote areas, utilizing their knowledge of local customs and traditions. During the period 2014 to 2022, the PWP implemented 4,554 projects with a total cost of over US\$200 million across the education, agriculture, water and sanitation, and paving and improvement sectors. These projects impacted over 13.5 million beneficiaries and generated over 3.5 million job opportunities (in person months).^[25]

^[25] Total numbers for the period 2014–2022 have been calculated by the author based on published PWP annual reports. The total numbers for the period exclude the year 2021 as the annual report for that year did not disclose specific numbers. See reports at: https://www.pwpyemen.org/index.php/en/media-center-en/publications/category/2-annual-reports

6. Recommendations

The contracting sector in Yemen plays a critical role in driving economic growth, job creation, and post-conflict recovery. A few of the larger contracting companies have been able to survive the extremely challenging operating environment in Yemen since 2011, albeit with significant damages and losses. Efforts by some of the national institutions supported by funding from international donors and development agencies have provided a lifeline to the sector, built the capacity of smaller contractors, and helped in improving environmental standards and women's participation in the sector. However, the sector requires substantial support to enable it to recover and contribute positively to stabilization efforts in Yemen.

Collaboration between contracting companies, industry associations and unions, government authorities, and international development partners is key to develop a shared understanding of the current situation of the sector, a common vision for the way forward, an action plan for priority interventions, and an agreement on the expected roles of the different actors in implementing the interventions.

The following sub-sections provide practical recommendations that are feasible to implement within the current context to support the contracting sector.

To GUYC and Other Institutions Representing the Contracting Sector:

- 1. **Initiate Technical Meetings:** Facilitate discussions among construction companies, public authorities in both Aden and Sana'a, and other stakeholders to address sector issues and foster public-private dialogue.
- 2. **Form National Committee:** Create a committee with representatives from all relevant stakeholders to develop a strategic vision and set a roadmap to develop the sector.
- 3. **Prepare Comprehensive Reparation Files:** Contribute to any future peace talks by developing detailed reports and data of damage to the sector and compensations needed, together with visions and plans to revive the sector.

4. Capacity Building:

- Conduct gap analysis and training needs assessments.
- Explore partnerships with universities, vocational training centers, civil society organizations, and international development agencies to develop training, internship and reintegration programs for youth (particularly former combatants) in various stages of recovery and reconstruction.
- Develop targeted training programs to enhance the technical and practical skills of female engineers and contractors.

- 5. **Improve Financing:** Coordinate with banks to address credit issues and streamline processes for guarantees and credits.
- 6. **Establish Dispute Resolution Centers:** Set up or enhance existing centers for settling disputes and arbitration.

7. Promote Environmental Sustainability:

- Conduct training programs for contractors, engineers, and workers on waste management, energy efficiency, and environmental protection.
- Partner with academic institutions to integrate environmental management into engineering curricula.
- Promote recycling and reuse of construction materials and establish clear guidelines for proper disposal of hazardous materials.
- 8. **Encourage Women's Participation:** Support women in obtaining membership in sector entities and participating in decision-making roles; create a database of women working in the sector; and produce case studies on women in the sector, identifying challenges and celebrating successes.
- 9. **Develop a Unified Information System:** Develop a system to improve practices and transparency within the sector, including indicators such as sustainable development indicators in construction and periodic analysis of price items that are usually part of contracting and supply contracts.

To Contracting Companies:

- 1. **Form Alliances:** Develop strategic partnerships between consulting firms, material manufacturers, and contractors to enhance expertise for future mega projects.
- 2. **Improve Governance Practices:** Assess the adequacy of governance in administrative, financial, and legal areas of operation, and develop quality assurance, control and audit systems to help in qualifying for internationally funded projects.
- 3. **Participate Actively:** Engage in coalitions and economic entities related to the contracting sector.
- 4. **Follow Green Building Standards:** Prioritize environmental considerations in materials and designs, manage waste, and promote energy and water efficiency.
- 5. **Introduce Flexible Workplace Policies:** Accommodate the needs of female workforce, including flexible hours, safe transportation, and childcare facilities.
- 6. **Embrace Social Responsibility:** Train graduates, adopt apprenticeship programs, and support scientific research.

To Government Authorities:

- 1. **Assess Damage:** Work with other stakeholders to conduct a comprehensive inventory of infrastructure and property damage to determine recovery needs, including damage to the contracting sector and its companies and equipment.
- 2. **Identify Stalled Projects:** Collaborate with sector entities to address stalled projects since 2011 and develop practical and fair solutions to address government arrears.
- 3. **Form Technical Team:** Establish a multistakeholder team to prepare standards and plans for reconstruction based on damage assessment.
- 4. **Launch Registration Window:** Create a registration system for contracting companies to join reconstruction efforts and develop databases on contracting companies with their status and details of past projects.
- 5. **Establish Revolving Fund:** Set up a fund with contributions from all contracting companies to facilitate issuance of bank guarantees, which can support the growth of small and medium companies and women-owned enterprises.
- 6. **Create Contractors Guide:** Develop a guide for contractors to ensure compliance with best practices.

7. Review Regulations:

- Update laws and procedures in consultation with sector stakeholders to align with international standards and streamline bureaucracy.
- Adjust contractor classification mechanisms to support sector development.
- Work with sector stakeholders to establish and enforce clear, industry-specific environmental standards for construction and contracting activities, aligning with international best practices.
- Strengthen enforcement mechanisms by training inspectors and allocating resources to oversight agencies.
- Ensure environmental protection measures are included in contractor classification mechanisms and mandatory in government-funded contracts, with clear penalties for non-compliance.
- 8. **Activate Skills Fund:** Link the Skills Development Fund with international centers for workforce improvement and ensure women inclusion in the fund's programs and activities.
- 9. **Build Government Capacity**, including through learning from international practices and adapting it to fit the Yemeni context.
- 10. **Invest in Local Industry**: Support investments in the local building materials industry, including research and development.

To International Donors and Development Agencies:

1. Provide Technical and Financial Support:

- Build the capacity of private and public stakeholders in the sector, including in damage assessment and reconstruction efforts.
- Launch national and community-level campaigns to shift societal perceptions about women's roles in construction and contracting and highlight success stories of female professionals and contractors to inspire and encourage women's participation.
- Provide grants or microloans to micro and small enterprises, especially those that are women-led, to promote formalization and growth.
- 2. **Ensure Local Sector Involvement:** Develop frameworks to ensure a leading role for Yemeni companies in reconstruction and support knowledge and skills transfer between international companies and local ones.
- 3. Address the Debt Crisis in the Contracting Sector: Collaborate with the Yemeni Government to develop innovative financing solutions to clear government arrears to revive the contracting sector, which will also contribute to addressing banking sector challenges.
- 4. **Promote Environmental Protection:** Ensure environmental protection measures are included and mandatory in donor-funded contracts, with clear penalties for non-compliance.
- 5. **Support Women Inclusion:** Mandate the inclusion of women contractors and engineers in donor-funded projects as a condition for funding and ensure equal opportunities for women to compete for contracts and supervisory roles within these projects.

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

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Ghadeer is an economic researcher and a corporate and banking governance consultant. She is an independent board member accredited by the International Finance Corporation (IFC) and the Yemeni Institute of Directors (YIoD). Ghadeer holds a bachelor's degree in information systems and e-commerce. From 2017 to 2023, she managed the Yemen Business Club (YBC), the most prominent economic organization supporting private sector issues in Yemen. Ghadeer also managed the YIoD, the governance arm, and the Business Support Center for the Entrepreneurship Sector. She has worked closely with the Yemeni private sector through the YBC for ten years. Ghadeer was part of the team that published the Bank Governance Manual with the IFC and the Central Bank of Yemen. She also managed the project of issuing the SME Governance Manual in Yemen for two years and worked as a focal point for the Global Competitiveness, the Global Risks, and Tomorrow's Markets reports in Yemen for six years with the World Economic Forum.

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.

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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 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

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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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