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2025

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Acknowledgment

I would like to express my heartfelt gratitude to everyone who helped and contributed to the successful completion of this project. My heartfelt gratitude goes to [Dr. Aisha Thawaba](#), [Mrs. Nora Thawaba](#), [Dr. Sarah Al Zubairy](#), and [Dr. Wafaa Al-Madhaji](#) for their significant assistance in supporting me during this project.

Again, I'd like to acknowledge [Dr. Sarah](#) for developing, publishing, and collecting the online questionnaire, as well as [Dr. Wafaa](#) for participating and providing helpful and informed advise. Their devotion, skill, and unflinching support contributed to developing this study.

Finally, I'd like to express my gratitude to the [ADO Organization](#) for selecting me for this humanitarian and environmental effort, which has really expanded my knowledge base. Finally, I'd want to convey my gratitude to everyone who contributed direction, encouragement, and constructive feedback throughout the report's writing process.

Executive Summary

Yemen stands at the crossroads of **climate change**, **humanitarian crises**, **development challenges**, and **peacebuilding efforts**, making it one of the most complex and pressing emergencies in the world. The country faces prolonged conflict, economic collapse, food insecurity, and environmental degradation, affecting over **21.6 million** people in need of urgent assistance. Rising temperatures, increasing droughts, water scarcity, and extreme weather events are further intensifying resource-driven conflicts, displacement, and instability. Addressing these interconnected crises requires a coordinated, integrated strategy that combines **humanitarian** assistance, **development**, and **peacebuilding**—commonly known as the **Humanitarian-Development-Peace (HDP) Nexus approach**.

The **Yemen Nexus Initiative (YNI)** is a transformative response that seeks to bridge the gap between immediate relief efforts and long-term resilience-building strategies. By implementing the **HDP Nexus** principles, **YNI** promotes food security, economic recovery, climate adaptation, and social cohesion, with a particular focus on key **governorates** such as **Taiz** and **Aden**. The initiative funds and supports programs that restore livelihoods, strengthen governance structures, and enhance community-driven adaptation strategies. Special attention is given to climate-smart agriculture, water resource management, and disaster risk reduction, recognizing **climate change** as a key driver of displacement and conflict.

Challenges and Barriers

Despite its innovative and integrated approach, **YNI** faces significant structural, financial, and operational challenges:

- **Fragmented Governance and Coordination:** Weak coordination between **humanitarian**, **development**, and **peacebuilding** sectors leads to disjointed efforts and inefficiencies.
- **Financial Constraints:** Short-term funding cycles and a lack of sustainable financing hinder long-term resilience-building programs.

- **Limited Institutional Capacity:** Many local institutions lack the necessary resources and expertise to effectively implement climate adaptation and **development** projects.
- **Inadequate Monitoring and Data Collection:** There is a major gap in tracking and evaluating the long-term impact of climate resilience and **peacebuilding** initiatives.

Pathways to Sustainable Impact

For the **Nexus approach** to be truly effective, organizations, policymakers, and international partners must adopt stronger coordination mechanisms, innovative funding models, and community-driven solutions. **Key recommendations include:**

1. **Enhancing Cross-Sector Collaboration:** Establishing joint coordination platforms and improved data-sharing systems to maximize impact and efficiency.
2. **Securing Sustainable Financing:** Shifting from short-term emergency relief to multi-year resilience-building investments, including **public-private partnerships (PPPs)** for climate adaptation.
3. **Strengthening Local Capacity:** Supporting community-led climate adaptation programs, training initiatives, and local governance strengthening to promote long-term sustainability.
4. **Improving Climate Data Monitoring:** Utilizing **GIS, remote sensing**, and standardized impact assessment frameworks to track progress, measure impact, and ensure accountability in resilience-building efforts.

Yemen's climate crisis is not just an environmental issue—it is a **humanitarian, economic, and security challenge** that demands immediate and long-term action. The **Yemen Nexus Initiative** represents a critical step toward resilience, recovery, and **peacebuilding** by integrating climate adaptation, **humanitarian** aid, and **development** efforts. With stronger partnerships, increased investment, and community-driven solutions, **Yemen** can overcome its challenges and build a future where resilience and sustainability go hand in hand.

Preface

This paper is divided into three sections, each addressing an important component of **climate change** and the **Nexus** strategy in **Yemen**. It intends to give a complete overview of the country's environmental concerns while also investigating potential responses that combine water, energy, and food security.

Part One: establishes the groundwork for the study by explaining the **Nexus** idea and its application to **Yemen's** distinct socio-environmental landscape. This section focuses on the theoretical framework and background required to understand how interconnected systems work in addressing resource management concerns.

Part two: examines the effects of **climate change** in six **governorates**: **Hadramout**, **Marib**, **Aden**, **Al-Hodeidah**, **Hajjah**, and **Taiz**. It investigates how **climate change** influences water availability, food production, and energy access in these areas. This section also looks at **Nexus**-based actions that can help to reduce climate risks and increase resilience.

Part three: offers findings from an online questionnaire study of **Yemeni** local groups. This section examines major findings from stakeholders involved in climate adaptation and resource management, providing a localized perspective on the viability and efficacy of **Nexus**-based approaches. This section finishes with major suggestions that outline concrete solutions for improving **climate resilience** and sustainable resource management in **Yemen**.

The present study aims to add to **Yemen's** continuing discourse on **climate resilience** and sustainable development. By combining empirical findings with stakeholder viewpoints, we would like to advise policies and initiatives that solve the country's pressing environmental and **humanitarian** concerns.

We extend our gratitude to all contributors that participate the online questionnaire. Their valuable insights and cooperation have been instrumental in shaping this study.

PART I

Nexus Definition & Methodology



NEXUS

Framing the Nexus: Definition, Objectives, and Methodology

I. Introduction

The **Yemen Nexus Initiative (YNI)** is a comprehensive attempt to improve the integration of humanitarian, development, and peacebuilding initiatives in **Yemen**, addressing the country's multifaceted difficulties. By implementing the **Humanitarian-Development-Peace (HDP) Nexus** principles, **YNI** supports coordinated responses that link short-term humanitarian assistance with long-term development and peacebuilding tactics. For example, the project funds programs that address food security, restore livelihoods, and promote community interaction in governorates such as **Taiz** and **Aden**. **YNI** prioritizes stakeholder engagement, bringing together local governments, international organizations, and civil society to develop and execute context-specific solutions. Despite these advances, the program faces problems such as fragmented governance, financial deficits, and ongoing insecurity, which frequently impede seamless integration. Nonetheless, **YNI** is an important step toward increasing resilience and sustainability in **Yemen's** recovery efforts¹.

The complex and protracted crises in **Yemen** have created an unprecedented need for integrated solutions that address the interplay of humanitarian, development, and peacebuilding challenges. **Yemen** faces one of the world's worst humanitarian crises, with over **21.6 million people** in need of assistance due to ongoing conflict, economic collapse, and climate-related shocks². This crisis is compounded by institutional fragility, resource scarcity, and social fragmentation, leaving the country in a state of acute vulnerability. Addressing these challenges requires moving beyond siloed interventions to adopt a more coordinated and holistic approach.

¹ UNDP, 2023; OCHA, 2023; World Bank, 2022

² United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA). (2023). Yemen Humanitarian Needs Overview. Retrieved from <https://www.unocha.org/>

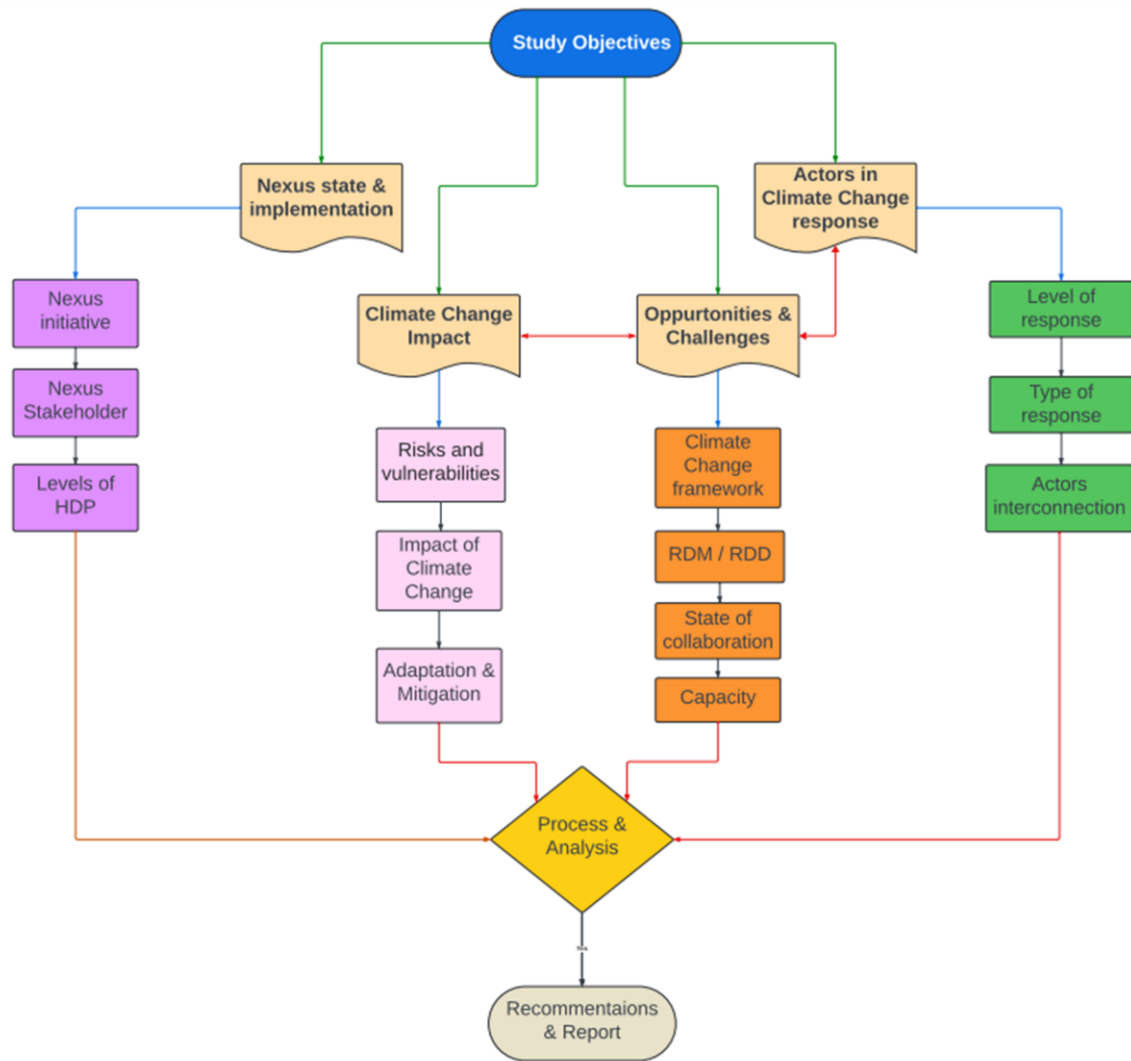


Fig. 1: a flowchart depicts the objectives of the study.

II. Study Objectives

The fundamental purpose of the present study can be summarized as shown in Fig. 1. The current study focuses primarily on **Nexus** implementation in **Yemen** and the influence of climate change on the **Nexus** methodology. The following paragraph explains these objectives in four points as follows:

1. **Review Existing Nexus Initiatives and Projects:** Examine ongoing programs and their alignment with the **HDP Nexus** principles.

2. **Identify Key Stakeholders Involved in Nexus-Related Work:** Map out the main actors—national, international, and local—contributing to humanitarian, development, and peacebuilding efforts.
3. **Analyze the Level of Integration Between Humanitarian, Development, and Peacebuilding Actors:** Assess the extent to which **Nexus** principles are operationalized in practice, identifying gaps and opportunities for improvement.
4. **Examine Climate Change Impact:**

Identify climate-related risks and vulnerabilities in **Yemen**. Also, evaluate how climate change affects **Nexus** initiatives and explore adaptation/mitigation strategies.
5. **Explore Integration of Climate Change into Nexus Approaches:**

Analyze policy and institutional frameworks for climate change and disaster risk reduction. Also, Identify gaps and opportunities for coordination and capacity building among actors.
6. **Map Climate Change Actors and Responses:**

Classify national and local actors and their climate change responses (e.g., mitigation, adaptation, policymaking). Analyze the interconnected roles of these actors in addressing climate change challenges.

The findings will be reviewed and documented in final reports, including recommendations.

III. Study Methodology

This study employs a mixed-methods approach to investigating the implementation and problems of the **Humanitarian-Development-Peace (HDP) Nexus** in **Yemen**. The methodology combines qualitative and quantitative data collecting and analysis to provide a thorough knowledge of **Nexus** policies and their

implementation in the governorates of **Taiz, Aden, Marib, Al-Hodeidah, Hajjah** and **Hadhramout**.

To provide the theoretical framework and contextual background, the study uses secondary data sources such as reports from international organizations, policy documents, and academic literature. Primary data is gathered through interviews and focus group discussions with important stakeholders such as government representatives, foreign and local **Non-Governmental Organizations (NGOs)**, and community leaders. This approach captures a wide range of perspectives, allowing gaps, difficulties, and best practices to be identified.

The study also includes a case study analysis of specific **Nexus** projects in **Yemen** to assess their impact and sustainability. By combining information from numerous sources, the technique ensures a thorough and nuanced examination of **Nexus** implementation in **Yemen's** complex and changing environment.

1. Literature Review.

The research began with a careful review of the relevant literature, papers, and policy documents. This phase was critical in creating the theoretical underpinning for the **Nexus** approach and its implementation in **Yemen**, which is fragile and influenced by external factors such as climate change. The key activities included the following:

- **Examining Global Nexus Frameworks:** To better understand global best practices, we examined documents such as the **OECD-DAC** Recommendation on the **HDP Nexus (2019)** and publications from the **United Nations** and other multilateral organizations.
- **Yemen-Specific Analysis:** Reports and policies relevant to **Yemen**, such as climate vulnerability assessments, humanitarian initiatives, and development plans, were analyzed to contextualize the **Nexus** approach in **Yemen's** unique setting.
- **Identifying Gaps:** The review contributed to the identification of gaps in existing studies, particularly in the integration of climate adaptation within **Yemen's Nexus** framework.

2. Data Collection.

Data was collected using a variety of approaches to ensure a thorough understanding of the **Nexus approach's** application and its relationship with climate change in **Yemen**. The main activities included:

a. Interviews with key stakeholders.

b. Document Analysis

3. Data Analysis and Synthesis

The collected data was systematically analyzed and synthesized to identify key trends, challenges, and opportunities in implementing the **Nexus approach** in **Yemen**.

a. Thematic Analysis

Data from interviews, documents, and field visits were arranged in subject areas such as:

- Integration of humanitarian, development, and peacebuilding operations.
- Climate adaption strategies for the **Nexus** framework.
- Challenges in coordination, funding, and implementation.

b. Comparative Analysis

Findings from **Yemen** were compared with global best practices in **Nexus** implementation to highlight areas of alignment and divergence.

c. Stakeholder Validation

Preliminary findings were shared with key stakeholders to validate interpretations and ensure accuracy. Feedback from this process was incorporated into the final analysis.

4. Report Writing

The final stage involved compiling the analyzed data and findings into a comprehensive report. This report aims to:

Provide an overview of the **Nexus** approach and its relevance in **Yemen**.

- Highlight the intersection of climate change and fragility within the **Nexus** framework.

- Offer recommendations for enhancing **Nexus** implementation in Yemen, particularly in addressing climate change.

IV. Study Limitations

This study encounters several limitations and obstructions that may affect its comprehensiveness. One significant constraint is time limitations, which restrict the depth of data collection and analysis. The limited timeframe prevents extensive fieldwork and prolonged engagement with stakeholders, which are essential for a more thorough exploration of **Nexus** implementation in **Yemen**.

Additionally, the inability to interview key individuals, such as senior policymakers, international agency representatives, and local authorities, hinders the study's ability to capture critical insights into decision-making processes and high-level coordination efforts. This gap arises due to logistical challenges, conflicting schedules, and security constraints.

Furthermore, reliance on secondary data and reports due to these constraints may introduce biases or inaccuracies, as some sources lack up-to-date information or specific regional insights. Despite these challenges, the study incorporates diverse data sources and adopts the scientific approach to enhance the reliability and validity of its findings.

V. What is Nexus

The **Humanitarian-Development-Peace (HDP) Nexus**, also known as the **Nexus**, is an integrated framework that aims to bridge gaps and improve coordination and alignment among three traditionally distinct spheres of action: **humanitarian assistance**, **development efforts**, and **peacebuilding initiatives**. The method seeks to improve coordination and coherence among various actors in order to address the underlying causes of crises, minimize vulnerabilities, and promote long-term stability³.

³ OECD (2020). States of Fragility 2020: Building Resilience. Organisation for Economic Co-operation and Development. Retrieved from <https://www.oecd.org>

VI. Nexus Strategy vs Nexus Objectives

Nexus strategy and **Nexus objectives** differ in terms of focus and breadth. While **objectives** define what the **Nexus** method seeks to achieve, **strategies** indicate how these goals are operationalized and implemented. The following is an explanation for those two different terms.

Nexus strategy provides the **roadmap** for achieving those goals effectively. For instance, in **Yemen**, integrating water and sanitation projects with peacebuilding initiatives is part of a strategy to achieve the objective of reducing community tensions and fostering resilience, while the **objectives** define the **destination** or the **purpose** of the **Nexus approach**, such as fostering resilience or reducing vulnerabilities⁴.

Nexus strategy includes:

- **Humanitarian** relief entails providing immediate aid to preserve lives and alleviate suffering in crisis-affected communities.
- **Development** refers to the implementation of long-term projects that enhance systems and increase resilience, such as health care, education, and livelihoods.
- **Peacebuilding** involves facilitating conflict resolution, strengthening social cohesiveness, and addressing the core causes of instability in order to promote long-term peace⁵.

The key **objectives** of the **Nexus approach** are:

1. Strengthening Resilience and Reducing Vulnerabilities

The **Nexus** aims to build the resilience of affected communities by addressing both immediate needs and underlying vulnerabilities. For instance, in conflict-affected areas like **Yemen**, this involves not only providing emergency aid but also creating sustainable livelihoods and strengthening local governance

⁴ UNICEF. (2023). Integrated Programming for Water and Sanitation in Fragile Contexts.

⁵ UNDP. (2023). Enhanced Rural Resilience in Yemen (ERRY) Program Overview.

structures⁶. Programs such as the **Enhanced Rural Resilience in Yemen (ERRY)** focus on empowering rural communities through livelihood support and social cohesion efforts.

2. Promoting Long-Term Development While Addressing Humanitarian Needs

By integrating development into humanitarian responses, the **Nexus** seeks to break the cycle of dependency on aid. This includes infrastructure rebuilding, education access, and economic development projects alongside emergency relief efforts. For example, **UNICEF** has implemented programs in Yemen that combine immediate health and sanitation services with long-term capacity building for local systems⁷.

3. Fostering Peacebuilding and Social Cohesion

The **Nexus** emphasizes addressing the root causes of conflict and fostering dialogue among communities. Peacebuilding initiatives are embedded within humanitarian and development actions, such as dispute resolution programs and community-led development efforts in conflict-prone areas like **Taiz** and **Marib**⁸. By addressing grievances and promoting social inclusion, the **Nexus** seeks to create a foundation for sustainable peace.

4. Enhancing Coordination Among Stakeholders

One of the core objectives of the **Nexus** is to enhance coordination between humanitarian, development, and peacebuilding actors. This involves joint planning, shared assessments, and collaborative program design to ensure coherence and maximize impact. In **Yemen**, the **Nexus** approach has facilitated partnerships between **UN** agencies, **NGOs**, and local authorities to implement integrated programs⁹.

⁶ UNDP. (2023). Enhanced Rural Resilience in Yemen (ERRY) Program Overview.

⁷ UNICEF. (2023). Integrated Programming for Water and Sanitation in Fragile Contexts.

⁸ OCHA (2023). Yemen Humanitarian Needs Overview 2023. United Nations Office for the Coordination of Humanitarian Affairs. Retrieved from <https://www.unocha.org>

⁹ FAO. (2023). Building Resilient Livelihoods in Yemen.

5. Aligning Funding and Policies for Integrated Solutions

The **Nexus** strives to align funding mechanisms and policies to support comprehensive and multi-sectoral interventions. Flexible and multi-year funding streams are essential to allow for a seamless transition from emergency responses to development and peacebuilding initiatives¹⁰.

VII. What is Durable in the context of Humanitarians

In the humanitarian context, "**Durable**" refers to long-term, sustainable solutions that address the root causes of vulnerability and displacement, allowing impacted people and communities to reconstruct their lives with stability, security, and dignity. These initiatives aim to go beyond short-term relief by increasing resilience and decreasing reliance on humanitarian aid.

Key aspects of durability in humanitarian contexts include long-term solutions for displacement.

5. Durable Solutions for Displacement:

- Address the long-term needs of displaced populations (e.g., refugees, internally displaced persons) through:
 - Voluntary Repatriation: Safe and dignified return to their place of origin¹¹.
 - Local integration entails permanent residency and incorporation into the host community¹².
 - Resettlement is the relocation to a third country or territory.

¹⁰ World Bank. (2022). Multi-Sector Approaches in Conflict-Affected Areas.

¹¹ UNHCR (2016). Handbook on Voluntary Repatriation: International Protection. United Nations High Commissioner for Refugees. Retrieved from <https://www.unhcr.org>

¹² IASC (2020). Framework on Durable Solutions for Internally Displaced Persons. Inter-Agency Standing Committee. Retrieved from <https://interagencystandingcommittee.org>

6. Resilience Building:

- Strengthening the capacity of individuals, households, and communities to cope with future crises and reduce reliance on external assistance¹³.

7. Sustainability:

- Ensuring that interventions (e.g., housing, livelihoods, education, infrastructure) are sustainable and adaptable to changing conditions, including climate impacts¹⁴.

8. Alignment with Development Goals:

- Linking humanitarian efforts with development programs to create long-term impacts that align with broader socio-economic objectives¹⁵.

As an example from reality, while temporary shelters for displaced families address urgent needs, permanent housing with access to clean water, education, and livelihood opportunities fosters self-reliance and long-term stability.

VIII. Nexus Approach vs Durable Solution in the context of Humanitarians

The **Nexus Approach** and **Durable Solutions** are interconnected but different frameworks for solving complex humanitarian issues. The **Nexus Approach** emphasizes the integration of humanitarian, development, and peacebuilding activities to produce holistic and long-term benefits, especially in fragile and conflict-affected areas. It aims to close the gap between short-term emergency responses and long-term development objectives by promoting resilience and lowering vulnerabilities¹⁶. **Durable Solutions**, on the other hand, are primarily focused on

¹³ World Bank (2020). Yemen: Country Risk Profile. Retrieved from <https://www.worldbank.org>

¹⁴ IOM (2021). Sustainable Solutions for Displacement Settings. International Organization for Migration. Retrieved from <https://www.iom.int>

¹⁵ OECD (2020). States of Fragility 2020: Building Resilience. Organisation for Economic Co-operation and Development. Retrieved from <https://www.oecd.org>

¹⁶ IASC (2020). Framework on Durable Solutions for Internally Displaced Persons. Inter-Agency Standing Committee. Retrieved from <https://interagencystandingcommittee.org>

meeting the long-term needs of displaced populations, allowing them to rebuild their lives with stability and dignity through voluntary repatriation, local integration, or resettlement¹⁷. While the **Nexus Approach** incorporates systemic reform and cross-sectoral collaboration, **Durable Solutions** focuses on addressing displacement and ensuring sustainable livelihoods for affected people.

¹⁷ UNHCR (2016). Handbook on Voluntary Repatriation: International Protection. United Nations High Commissioner for Refugees. Retrieved from <https://www.unhcr.org>



PART II

Nexus Approach



The Humanitarian-Development-Peace Nexus and Climate Resilience: Pathways for Sustainable Recovery in Yemen

I. Yemen Nexus Initiative (YNI)

Background

This section focuses on the **Nexus Initiative's** potential in **Yemen**, giving a framework for integrated humanitarian, development, and peacebuilding initiatives while also reviewing the initiative's successes and obstacles.

The **Yemen Nexus Initiative (YNI)** is a comprehensive attempt to improve the integration of humanitarian, development, and peacebuilding initiatives in **Yemen**, addressing the country's multifaceted difficulties. By implementing the **Humanitarian-Development-Peace (HDP) Nexus** principles, **YNI** supports coordinated responses that link short-term humanitarian assistance with long-term development and peacebuilding tactics. For example, the project funds programs that address food security, restore livelihoods, and promote community interaction in governorates such as **Taiz** and **Aden**. **YNI** prioritizes stakeholder engagement, bringing together local governments, international organizations, and civil society to develop and execute context-specific solutions. Despite these advances, the program faces problems such as fragmented governance, financial deficits, and ongoing insecurity, which frequently impede seamless integration. Nonetheless, **YNI** is an important step toward increasing resilience and sustainability in **Yemen's** recovery efforts¹.

¹ UN OCHA, 2023, UNDP. (2022). Enhanced Rural Resilience in Yemen (ERRY) Project Overview, World Bank. (2022). Yemen Climate Impact Report.

The Nexus Initiative in Yemen: A Holistic Approach to Conflict Recovery

The ongoing conflict in [Yemen](#), which began in **2014**, has devastated the country, causing what many describe as the world's worst humanitarian crisis. Millions of people are in urgent need of food, clean water, healthcare, and shelter, while infrastructure has crumbled under the weight of prolonged conflict. In response, the international community has increasingly adopted the **Humanitarian-Development-Peace (HDP) Nexus approach**, which aims to align short-term emergency relief with longer-term development and peacebuilding efforts. In [Yemen](#), this framework has become known as the **Nexus Initiative**, and it is helping to shape a more coordinated and sustainable response to the crisis.

The Crisis in Yemen

[Yemen's](#) conflict began as a political struggle but has since evolved into a regional proxy war, drawing in outside powers and exacerbating the suffering of its citizens. The **United Nations Office for the Coordination of Humanitarian Affairs (OCHA)** estimates that over **24 million** people in [Yemen](#)—roughly **80%** of the population—are in need of humanitarian assistance². The war has devastated public infrastructure, including hospitals, schools, and water facilities, leaving many communities without essential services.

Traditional humanitarian interventions have focused on providing immediate relief, but this approach has often been insufficient for long-term recovery. With ongoing conflict and lack of a functioning state, development efforts have been stalled, while peace processes have faced significant challenges. This situation has led to calls for a more integrated strategy that addresses not only the immediate humanitarian needs but also the root causes of conflict and underdevelopment.

² UN OCHA, 2023.

The Nexus Initiative: Bridging Humanitarian, Development, and Peacebuilding Efforts

The **Nexus Initiative** in **Yemen** follows the broader global **HDP Nexus framework**, which was formalized by the **UN** and the **World Bank** in **2016**. The core principle of this framework is that humanitarian aid, development programming, and peacebuilding must be interlinked, addressing short-term needs while simultaneously working towards long-term solutions³. In **Yemen**, this approach is particularly important because of the complex and interwoven challenges that the country faces.

Humanitarian Aid

1. Humanitarian agencies in **Yemen** focus on lifesaving interventions, such as food aid, healthcare, and shelter. However, a **Nexus-based approach** ensures that these interventions do not operate in isolation. For example, rather than simply distributing food, organizations under the **Nexus Initiative** work to rebuild local food systems and support agricultural development, helping communities regain self-sufficiency in the long term.

2. Development:

The development component of the **Nexus Initiative** seeks to address the structural issues that have worsened **Yemen's** crisis, such as poverty, unemployment, and broken infrastructure. In this context, development agencies have been working on rebuilding water networks, rehabilitating schools, and training healthcare workers. Crucially, these efforts are designed to complement humanitarian aid, laying the groundwork for a more resilient society.

3. Peacebuilding:

Peacebuilding under the **Nexus Initiative** focuses on conflict resolution at the community level, as well as on broader national reconciliation efforts. Local peacebuilding initiatives often involve bringing conflicting groups together to resolve disputes over resources, such as water or grazing land, which are

³ World Bank, 2017

increasingly scarce due to the war and climate change⁴. These local peacebuilding efforts are seen as essential in fostering stability and trust in communities.

Successes and Challenges of the Nexus Initiative

The **Nexus Initiative** is a promising step towards addressing **Yemen's** overlapping challenges, but it is not without obstacles. One of the key successes has been enhanced coordination among international agencies, which have historically worked in silos. For example, the **UN Development Program (UNDP)** and the **World Food Program (WFP)** have partnered to create job opportunities in areas hit hardest by the conflict, aligning their respective humanitarian and development goals⁵.

At the local level, community-based peacebuilding initiatives have shown potential. In **Taiz** and **Hudaydah**, for instance, local mediation efforts have succeeded in reducing conflict over natural resources and fostering trust among local leaders⁶. These initiatives, while small-scale, highlight the potential for peacebuilding when local communities are empowered.

However, the **Nexus Initiative** also faces significant challenges, primarily due to the continuing instability in the country. Large-scale peacebuilding efforts have been hampered by ongoing violence, and development programs are often disrupted by security concerns. Additionally, funding gaps pose a serious threat to the sustainability of **Nexus-based interventions**. According to the **United Nations**, **Yemen** remains severely underfunded despite international pledges, with humanitarian organizations struggling to secure the resources needed for both emergency aid and long-term projects⁷.

The Way Forward

Despite the challenges, the **Nexus Initiative** represents a crucial evolution in how the international community approaches complex crises like **Yemen's**. Its focus on linking humanitarian aid, development, and peacebuilding recognizes that none of

⁴ Sana'a Center for Strategic Studies, 2022

⁵ UNDP, 2020

⁶ Saferworld, 2021

⁷ UN OCHA, 2023

these elements alone can solve the country's deep-rooted issues. Going forward, the success of the Nexus Initiative will depend on several factors:

1. **Enhanced Coordination:** Coordination among international and local actors is critical for ensuring that **Nexus** programs are effective. This includes harmonizing goals, sharing data, and integrating local knowledge into the design of interventions.
2. **Sustained Funding:** To maintain momentum, the international community must continue to provide funding that supports both immediate relief and long-term development efforts. Bridging the funding gap will require renewed commitment from donor countries and international institutions.
3. **Inclusive Peacebuilding:** A successful peace process in **Yemen** will need to be inclusive, incorporating local actors, civil society, and marginalized groups. Efforts at the national level must be complemented by local peacebuilding initiatives that address the specific needs and concerns of different communities.
4. **Adapting to Context:** As the situation in **Yemen** evolves, so too must the **Nexus approach**. Flexibility and the ability to adapt to changing conditions—whether related to security, climate change, or new development challenges—will be essential for the Initiative's long-term success.

The **Nexus Initiative** in **Yemen** represents a critical step forward in addressing one of the most complex crises in the modern world. By integrating humanitarian aid, development, and peacebuilding, it offers a more sustainable path to recovery and peace. While significant challenges remain, particularly in terms of funding and security, the successes of local peacebuilding and coordinated interventions show that this approach has the potential to transform **Yemen's** future. For the millions of **Yemenis** in need, the **Nexus Initiative** offers a glimmer of hope in an otherwise bleak landscape.

II. Literature Review: The Nexus Approach and Climate Change in Yemen

The intersection of the **Humanitarian-Development-Peace (HDP) Nexus** approach and climate change in **Yemen** has garnered increasing attention due to the country's protracted conflict, fragile governance, and vulnerability to environmental stressors. This literature review synthesizes key findings from academic studies, reports, and policy documents to provide an overview of the relevance and implementation of the **Nexus** approach in addressing **Yemen's** climate-related challenges.

The Humanitarian-Development-Peace Nexus Approach

The **HDP Nexus** approach seeks to bridge the divide between humanitarian aid, development initiatives, and peacebuilding efforts, particularly in fragile contexts like **Yemen**. According to **UN** reports, the **Nexus** approach emphasizes fostering resilience, addressing root causes of crises, and promoting coherence among diverse stakeholders⁸. The **Yemen Nexus Initiative (YNI)**, a key effort in operationalizing the approach, aims to integrate these three pillars to achieve long-term stability and sustainable development.

However, the implementation of the **Nexus** in **Yemen** faces significant challenges. Literature highlights the fragmented coordination among stakeholders and the difficulty of aligning short-term humanitarian needs with longer-term development goals amidst ongoing conflict⁹. Despite these obstacles, the **Nexus** framework has shown potential for promoting localized solutions and community participation in addressing systemic issues, including climate adaptation and resource management.

⁸ UNDP. (2022). Yemen Annual Report.

⁹ ICRC. (2023). Nexus Analysis in Conflict Settings: Yemen Case Study.

Climate Change Impacts in Yemen

Yemen is among the world's most vulnerable countries to climate change, as evidenced by its high ranking in the **Global Climate Risk Index**¹⁰. The country faces recurring floods, droughts, and desertification, exacerbating food and water insecurity. Research underscores that these environmental stressors amplify existing vulnerabilities and fuel competition over scarce resources, which, in turn, exacerbates conflict¹¹.

Climate change is particularly impactful on agriculture and water resources, which are vital for rural livelihoods. Studies by **FAO**¹² and **UNEP** highlight the need for integrated water resource management and climate-resilient agricultural practices as key strategies for mitigating these effects. Furthermore, the intersection of climate change and conflict complicates humanitarian interventions, emphasizing the importance of **Nexus**-driven approaches to address these interconnected challenges.

Intersection of the Nexus Approach and Climate Change in Yemen

The **Nexus** approach provides a strategic framework for addressing the climate-conflict **Nexus** in **Yemen**. Several reports stress the role of climate change as both a driver and multiplier of conflict, particularly in resource-scarce regions like **Taiz** and **Al-Hodeidah**¹³. The literature suggests that integrating climate adaptation into peacebuilding and development programs can reduce tensions over natural resources and promote resilience in affected communities.

Notable initiatives include the **Enhanced Rural Resilience in Yemen (ERRY)** project, which focuses on climate adaptation while fostering community-level peacebuilding and development. By promoting renewable energy solutions and water management systems, the project exemplifies the practical application of **Nexus** principles in climate-stressed environments¹⁴.

¹⁰ Germanwatch, (2023). Global Climate Risk Index Report.

¹¹ World Bank. (2022). Yemen Climate Impact Report.

¹² FAO. (2022). Yemen Climate-Resilient Agriculture and Water Management Strategies.

¹³ UNFCCC. (2023). Yemen Vulnerability Report.

¹⁴ UNDP. (2022). Enhanced Rural Resilience in Yemen (ERRY) Project Overview.

Gaps and Challenges in the Literature

Although the **Nexus** approach is widely recognized as a promising framework, there are limited case studies and empirical data on its effectiveness in **Yemen**. The ongoing conflict and lack of robust governance impede the comprehensive implementation of **Nexus** strategies. Moreover, there is insufficient integration of climate considerations into peacebuilding initiatives, highlighting a critical gap in policy coherence¹⁵.

Highlights

The reviewed literature underscores the relevance of the **HDP Nexus** approach in addressing the interconnected challenges of climate change and conflict in **Yemen**. While promising examples of **Nexus**-based interventions exist, significant gaps remain in policy coherence, stakeholder coordination, and empirical evidence. Future research and implementation efforts should focus on localized, community-driven solutions and robust monitoring frameworks to enhance the effectiveness of the **Nexus** approach in **Yemen**.

III. In the Context of the Yemen Crisis: Humanitarian, Development, and Peacebuilding Needs

Triple Nexus

The ongoing crisis in **Yemen**, which began in **2015**, has evolved into one of the most complex and devastating humanitarian catastrophes globally, resulting from a confluence of armed conflict, economic collapse, and systemic governance failure. Since the escalation of hostilities in **2015**, the country has endured widespread destruction, displacement, and loss of life, leaving millions dependent on humanitarian aid. This multifaceted crisis has also highlighted the necessity for an integrated response that addresses **Yemen's** immediate humanitarian needs while laying the foundation for sustainable development and lasting peace. According to the **United Nations**, over **23 million** people—approximately **75%** of **Yemen's**

¹⁵ ICRC. (2023). Nexus Analysis in Conflict Settings: Yemen Case Study.

population—require some form of **humanitarian** assistance. Key sectors, including healthcare, education, and water systems, have collapsed or operate at minimal capacity, with many areas relying entirely on humanitarian aid to meet basic needs. In **governorates** such as **Taiz**, **Marib**, **Aden**, and **Al-Hodeidah**, the impacts of conflict are felt acutely, with food insecurity, lack of livelihoods, and ongoing displacement creating further strain on already fragile communities. Simultaneously, the absence of effective governance and persistent violence impede **development** and **peacebuilding** efforts, highlighting the urgent need for coordinated, multi-sectoral approaches.

Humanitarian Needs

Yemen faces a dire **humanitarian** crisis with unprecedented levels of need. The **United Nations Office for the Coordination of Humanitarian Affairs**¹⁶ estimates that **21.6 million people**, including **80% of women and children**, require life-saving assistance. Among these, **17 million people** are food insecure, with famine-like conditions reported in specific regions such as **Hajjah** and **Al-Hodeidah**. The conflict has decimated agricultural production, disrupted markets, and caused widespread displacement, severely impacting access to food and livelihoods¹⁷.

In addition to food insecurity, **Yemen** suffers from severe health crises. The destruction of healthcare facilities—many of which have been targeted during the conflict—has left the population vulnerable to diseases such as **cholera**, **malaria**, and **diphtheria**. **Cholera** outbreaks alone have resulted in over **2.5 million** suspected cases since **2017**¹⁸. Maternal and child healthcare has deteriorated dramatically, with **one woman and six newborns dying every two hours** due to preventable complications¹⁹. **Yemen's** water infrastructure is another critical area of concern. The ongoing destruction of water supply systems has forced over **16 million people** to rely on unsafe water sources, exacerbating the public health crisis and increasing the prevalence of waterborne diseases²⁰. Without sustained

¹⁶ UNOCHA, 2023

¹⁷ World Food Program, 2022

¹⁸ World Health Organization, 2023

¹⁹ UNICEF, 2023

²⁰ International Organization for Migration, 2022

humanitarian support, these conditions will likely worsen, deepening the suffering of millions.

Developmental Needs

The prolonged conflict has not only caused immediate suffering but also reversed decades of developmental progress, leaving **Yemen** as one of the least developed countries in the world. The economy has shrunk dramatically, with the **GDP** per capita declining by **over 50% since 2015**, according to the **World Bank (2023)**. **Yemen's** reliance on imports, coupled with blockades and disrupted trade routes, has driven inflation and rendered basic commodities unaffordable for most households.

The collapse of public infrastructure has created severe challenges in education, employment, and public services. Over **2 million children** are out of school, while **over 2,500 schools** have been damaged, occupied, or used for military purposes²¹. Education, a key driver of long-term development, is at risk of being permanently disrupted for a generation of **Yemeni** youth.

Employment opportunities remain scarce, with more than **80%** of the population living below the poverty line²². Many families have turned to negative coping mechanisms, such as child labor and early marriage, further exacerbating **Yemen's** social challenges. Addressing these developmental needs requires sustained investment in rebuilding infrastructure, diversifying the economy, and ensuring access to essential services like healthcare and education.

Peacebuilding Needs

While **humanitarian** relief and **developmental** strategies are critical, they cannot succeed without addressing the root causes of **Yemen's** crisis through **peacebuilding** efforts. **Yemen's** conflict is deeply rooted in historical grievances over resource allocation, regional inequalities, and weak governance. The war has fragmented the country into various factions, with competing interests among local actors, tribal groups, and regional powers²³.

²¹ UNICEF, 2023

²² UNDP, 2022

²³ International Crisis Group, 2023

International mediation efforts, such as the **Stockholm Agreement (2018)** and the recent ceasefire facilitated by the **United Nations**, have provided temporary respite but failed to achieve a sustainable resolution. A key challenge lies in the lack of trust among the warring parties and the exclusion of marginalized groups, including women and minorities, from formal peace negotiations.

Successful peacebuilding in **Yemen** must prioritize inclusivity by engaging all stakeholders, including grassroots organizations and local leaders, in dialogue and decision-making. Efforts should also address the **socioeconomic grievances** that fuel the conflict, such as disparities in resource distribution and access to services. Reintegrating displaced populations and rebuilding social cohesion will be vital to preventing future conflicts.

Interconnected Needs

Yemen's challenges are not isolated; **humanitarian**, **development**, and **peacebuilding** needs are deeply interconnected. For instance, restoring access to education is not just a **developmental** goal but also a **peacebuilding** tool that reduces the vulnerability of youth to recruitment by armed groups. Similarly, rebuilding water and healthcare infrastructure can enhance trust in institutions while improving living conditions, contributing to both peace and development.

The **Humanitarian-Development-Peace (HDP) Nexus approach** provides a strategic framework for addressing these interconnected needs. This approach emphasizes a coordinated response that aligns immediate **humanitarian** relief with long-term **developmental** goals and **peacebuilding** strategies, ensuring that interventions are sustainable and conflict-sensitive.

The **Yemen** crisis presents a stark reminder of the devastating impact of prolonged conflict on human lives, development, and social cohesion. Meeting **Yemen's** **humanitarian**, **developmental**, and **peacebuilding** needs requires an integrated, multisectoral response that not only addresses immediate suffering but also builds the foundation for a resilient and peaceful future. By adopting the **HDP Nexus approach**, the international community can work towards a comprehensive solution that empowers **Yemenis** to overcome the crisis and rebuild their nation.

IV. Overview of the Humanitarian-Development-Peace (HDP) Nexus Approach

The **Humanitarian-Development-Peace (HDP) Nexus approach** is a strategic framework designed to tackle the interconnected and recurring challenges of **crises**, **development**, and **peacebuilding**. In **Yemen**, where prolonged conflict and instability have led to overlapping issues, the **HDP Nexus** offers a pathway to strengthen resilience, close gaps between emergency relief and long-term development, and support sustainable peace. Widely acknowledged as vital for addressing complex crises such as **Yemen's**, this approach seeks to harmonize immediate relief with structural reforms to foster resilience and stability.

A Unified Strategy for a Complex Crisis

Yemen's multifaceted crisis—a combination of acute humanitarian needs, fragile development progress, and persistent conflict—calls for an integrated approach. The **HDP Nexus** in **Yemen** emphasizes harmonizing immediate **humanitarian** assistance with strategies that build livelihoods and strengthen governance systems. This unified strategy bridges the divide between short-term crisis response and long-term **development**, ensuring that **humanitarian** efforts lay the groundwork for recovery and growth.

Breaking Silos to Promote Synergy

The **HDP Nexus approach** in **Yemen** seeks to break down traditional silos between **humanitarian** actors, **development** practitioners, and **peacebuilders**. By fostering collaboration and shared objectives, the **Nexus** aims to create a coherent strategy that addresses both the symptoms and root causes of **Yemen's** challenges. For example, integrating peacebuilding initiatives into development programs ensures that progress in one domain reinforces gains in others, ultimately contributing to a sustainable resolution of **Yemen's** crisis.

Addressing Root Causes of Vulnerability

Yemen's vulnerability is driven by systemic issues such as poverty, weak governance, and limited infrastructure. The **HDP Nexus approach** prioritizes addressing these root causes through capacity building, institutional strengthening, and investments in sustainable **development**. By focusing on the underlying drivers of fragility, the **Nexus approach** aims to reduce reliance on external assistance and promote self-reliance among affected communities.

Focus on Long-term Resilience

Humanitarian efforts in **Yemen** often face the risk of creating dependency. The **HDP Nexus** shifts the focus towards resilience by integrating livelihood programs, restoring basic services, and creating opportunities for community empowerment alongside life-saving aid. For instance, coupling food aid with agricultural training programs helps communities transition from dependence on external support to self-sufficiency.

Peace as a Cornerstone of Development

Without peace, **development** in **Yemen** remains fragile. The **Nexus approach** emphasizes the critical role of **peacebuilding**—from fostering dialogue between conflicting parties to supporting local reconciliation initiatives—as a prerequisite for long-term stability and growth. Peace is not just an outcome but a necessary foundation for all **HDP Nexus** interventions, ensuring that **humanitarian** and **development** gains are sustainable.

Localization as a Nexus Priority

The **HDP Nexus approach** in **Yemen** underscores the importance of involving local communities in decision-making. Empowering local actors ensures that interventions are culturally relevant, sustainable, and aligned with the needs of those most affected by the crisis. Localization not only enhances the effectiveness of interventions but also strengthens community ownership, a critical factor for long-term resilience.

Leveraging Multi-Sectoral Coordination

The **HDP Nexus** encourages multi-sectoral collaboration in **Yemen** by linking **humanitarian** relief (e.g., food security and health) with **development** efforts (e.g., education and infrastructure) and **peacebuilding** activities (e.g., mediation and social cohesion). This alignment maximizes impact and reduces duplication of efforts. For instance, a coordinated effort to rebuild schools can simultaneously address educational needs, create jobs, and foster social cohesion within communities.

Integrating Climate Adaptation and Environmental Recovery

Yemen's increasing susceptibility to climate-related disasters, such as droughts and floods, highlights the need for climate-sensitive interventions. The **HDP Nexus approach** integrates disaster risk reduction, environmental recovery, and sustainable resource management as critical components of **development** and resilience-building. This integration ensures that climate adaptation measures are woven into broader strategies, reducing the risk of future crises and safeguarding **development** gains.

Guided by Global Principles but Grounded in Local Realities

While aligned with global **HDP Nexus** principles, the approach in **Yemen** is tailored to the country's unique sociopolitical dynamics, including tribal systems, regional disparities, and the role of international actors in peace processes. This contextualization ensures that the **Nexus approach** is not only theoretically sound but also practically applicable, addressing the specific challenges and opportunities within **Yemen**.

A Platform for Sustainable Partnerships

The **Nexus** method provides a framework for long-term partnerships in **Yemen**, bringing together **governments, donors, UN agencies, non-governmental organizations (NGOs), and private sector entities** to pool resources and expertise toward common goals. The **HDP Nexus** promotes inclusive and long-term collaborations by combining **humanitarian relief, development, and peacebuilding**.

This coordinated approach has the potential to help **Yemen** achieve resilience, stability, and long-term peace in the face of ongoing challenges. Its success is dependent on stakeholders' ability to collaborate, implement specialized strategies, and remain committed to meeting the country's complex needs.

V. Current State of Nexus Implementation in Yemen

The **Humanitarian-Development-Peace (HDP) Nexus** implementation in **Yemen** is still in its early phases, with a mix of promising initiatives and ongoing obstacles. **Yemen's** long-running conflict, exacerbated by **climate change**, economic collapse, and poor governance, has produced an urgent need for integrated methods that address immediate **humanitarian** needs while also promoting long-term **development** and **peacemaking**. However, the **Nexus's** operationalization in **Yemen** has been hampered by a number of circumstances, including fragmented governance, security concerns, and a lack of coordination between international funders and local partners²⁴.

Several programs have attempted to adopt the **Nexus** technique. For example, the **Enhanced Rural Resilience in Yemen (ERRY)** program, led by the **UNDP** in conjunction with the **FAO**, **ILO**, and **WFP**, aims to improve livelihoods, reduce vulnerability, and promote social cohesion in rural communities²⁵. Similarly, **UNICEF** has combined **humanitarian** and **development** efforts through initiatives such as water and sanitation projects, which seek to give both immediate relief and long-term sustainability²⁶. Despite these efforts, gaps remain in the alignment of **humanitarian**, **development**, and **peacebuilding** actions, with many initiatives functioning in silos. Furthermore, funding allocations are disproportionately channeled toward emergency relief, often undermining **development** and **peacebuilding** activities that are crucial for long-term rehabilitation²⁷.

²⁴ UNDP, 2023; OCHA, 2023

²⁵ UNDP, 2023

²⁶ UNICEF, 2023

²⁷ OCHA, 2023

Who is responsible for implementing the Nexus in Yemen?

Nexus-related activity in **Yemen** involves a number of national and international stakeholders, including:

1. United Nations Agencies:

- **UNDP** focuses on resilience building, livelihoods, and governance. **WFP** and **FAO** should implement integrated food security and agriculture projects.
- **UNICEF** combines humanitarian assistance with development in the health, education, and water sectors.

2. International Donors and Organizations:

- The **World Bank** supports development programs such as the **Yemen Integrated Urban Services Emergency Project**, which connects infrastructure restoration to community stability.

3. European Union:

- **Encourages** programs that combine humanitarian and development efforts. **USAID** and **DFID** encourage multi-sectoral approaches to humanitarian and developmental needs.

4. Local Government and Civil Society Organizations (CSOs):

- Local governance entities, such as **governorate** councils and tribal administrations, frequently play critical roles in enabling **Nexus** projects at the grassroots level. **CSOs** such as the **Yemen Women's Union** and **Mwatana for Human Rights** carry on community-based **Nexus** activities.

5. Non-governmental Organizations (NGOs):

- International **non-governmental organizations (NGOs)** such as **Oxfam**, **Save the Children**, and **CARE** International work on integrated programs that link humanitarian help with sustainable development.

Challenges in Implementation:

- **Security Concerns:** Persistent conflict restricts access to certain zones, making **Nexus** techniques harder to execute successfully.
- **Coordination gaps:** Weak alignment among humanitarian, development, and peacebuilding actors results in duplication of efforts and squandered opportunities.
- **financing Imbalances:** The majority of financing is directed toward short-term humanitarian relief, leaving little for development and peacebuilding.
- **Fragmented Government:** Divisions between de facto authority and internationally recognized **governments** impede effective implementation.

While **Nexus** implementation in **Yemen** has shown potential through targeted programming and stakeholder participation, significant problems remain. To ensure sustainability and impact, these efforts must be scaled up through improved coordination, equal funding across **Nexus** pillars, and active involvement with local actors.

VI. Key Actors in Climate Change

Undercurrents investigates the complex relationship between war, rising climate-related risks, and environmental degradation in **Yemen**, all of which endanger security and fuel future conflict, particularly at the grassroots level. The review, carried out in collaboration with the **European Institute of Peace**, explains why climatic and environmental action must be included into **Yemen's** conflict mitigation and peacebuilding processes at all levels.

Yemen, a country grappling with significant environmental and **humanitarian** challenges, is particularly vulnerable to the impacts of **climate change**. The escalating issues of water scarcity, extreme weather events, and food insecurity make **climate change** responses crucial. Addressing these challenges involves a collaborative effort by a diverse range of actors, including national **government** bodies, international organizations, local **NGOs**, and community-based stakeholders. The primary actors

engaging in **climate change** responses in **Yemen** at the national and local levels are classified as follows:

National Governmental Actors:

- **Environmental Protection Authority (EPA):** The **Environmental Protection Authority** serves as **Yemen's** primary governmental organization for regulating environmental laws and implementing climate action initiatives. The **EPA** oversees the development of national adaptation and mitigation plans, attempting to match **Yemen's** environmental policies with global sustainability goals. The **EPA** contributes significantly to climate resilience by working on projects such as the **National Adaptation Plan**²⁸.
- **Ministry of Water and Environment:** **Yemen's** **Ministry of Water and Environment** focuses on addressing the country's acute water scarcity, a problem exacerbated by **climate change**. The ministry develops policies to improve water management, mitigate drought impacts, and ensure water security for vulnerable communities²⁹.
- **National Water Resources Authority (NWRA):** The **NWRA** operates at both national and local levels, monitoring **Yemen's** water resources and implementing conservation practices. By tackling issues like over-extraction of groundwater and promoting sustainable usage, the **NWRA** helps alleviate the water crisis worsened by **climate change**³⁰.

International Organizations:

- **United Nations Development Program (UNDP):** **UNDP** supports **Yemen** through capacity-building initiatives and funding for climate resilience

²⁸ Environmental Protection Authority (EPA). (2021). Yemen's National Adaptation Plan. Retrieved from <https://www.epa.gov.ye>

²⁹ United Nations Development Program (UNDP). (2020). Supporting Climate Resilience in Yemen. Retrieved from <https://www.undp.org>

³⁰ National Water Resources Authority (NWRA). (2021). Water Resource Management in Yemen. Retrieved from <https://www.nwra.gov.ye>

projects. It also collaborates with local stakeholders to implement sustainable solutions³¹.

- **Food and Agriculture Organization (FAO):** FAO addresses climate-related challenges in **Yemen's** agricultural sector by promoting sustainable farming practices and improving food security³².

Local Non-Governmental Organizations (NGOs):

- **Yemen Climate Change Initiative (YCCI):** A grassroots organization focusing on raising awareness and advocating for climate adaptation projects at the community level³³.
- **National Water Resources Authority (NWRA):** NWRA works at the local level to monitor water usage and implement conservation measures to address water scarcity challenges exacerbated by **climate change**³⁴.

Community-Based Actors:

- **Local Councils:** These councils play an essential role in coordinating disaster response efforts and mobilizing resources for climate resilience at the community level³⁵.
- **Farmers and Agricultural Cooperatives:** Local farmers and cooperatives are key players in implementing sustainable practices to reduce vulnerability to droughts and floods³⁶.

These actors collectively contribute to **Yemen's climate change** responses by addressing both immediate challenges and long-term resilience strategies.

³¹ UNDP, 2020

³² Food and Agriculture Organization (FAO). (2019). Building Climate Resilience in Yemen's Agriculture Sector. Retrieved from <https://www.fao.org>.

³³ Yemen Climate Change Initiative (YCCI). (2022). Community-Based Adaptation Strategies. Retrieved from <https://www.ycci.org>

³⁴ National Water Resources Authority (NWRA). (2021). Water Resource Management in Yemen. Retrieved from <https://www.nwra.gov.ye>

³⁵ World Bank. (2021). Local Governance and Climate Resilience in Yemen. Retrieved from <https://www.worldbank.org>

³⁶ Food and Agriculture Organization (FAO). (2019). Building Climate Resilience in Yemen's Agriculture Sector. Retrieved from <https://www.fao.org>.

VII. Classify the main actors involved in climate change responses at national, and local levels in Yemen

Yemen's response to **climate change** involves a complex interplay of national and local actors, including **government** agencies, international organizations, and local communities.

National Level Actors:

1. Government Ministries and Agencies:

- **Ministry of Water and Environment (MWE):** Tasked with formulating and implementing environmental policies, the **MWE** plays a pivotal role in coordinating **climate change** mitigation and adaptation strategies.
- **Ministry of Agriculture and Irrigation (MAI):** This ministry focuses on sustainable agricultural practices and water resource management, essential for addressing climate-induced challenges like desertification and water scarcity.

2. Supreme Council for the Environment:

- Established to oversee environmental protection initiatives, this council is instrumental in integrating climate change considerations into national development plans.

3. National Meteorological Center:

- Provides critical climate data and early warning systems to inform disaster preparedness and response efforts.

Local Level Actors:

1. Local Environmental Protection Authorities:

- Operating under the **MWE**, these bodies are responsible for implementing environmental policies at the governorate level, including **climate change** adaptation measures.

2. Local Councils and Municipalities:

- Tasked with urban planning and infrastructure development, local councils are key in integrating climate resilience into community planning and resource management.

3. Community-Based Organizations (CBOs):

- These grassroots entities engage in environmental education, sustainable agriculture, and local disaster risk reduction initiatives, fostering community resilience to climate impacts.

International and Non-Governmental Organizations (NGOs):

1. United Nations Development Program (UNDP):

- Supports **Yemen** in developing and implementing **climate change** adaptation and mitigation projects, including capacity-building and policy development.

2. International Organization for Migration (IOM):

- Focuses on strengthening community capacities to mitigate, prepare for, and respond to disasters, with an emphasis on local community participation.

3. World Food Program (WFP):

- Addresses food insecurity exacerbated by **climate change** through emergency food assistance and sustainable agricultural practices.

4. World Health Organization (WHO):

- Provides health support during climate-induced disasters, including medical supplies and health services.

5. Local and International NGOs:

- Organizations such as the **Yemen Red Crescent Society** and various local **NGOs** play crucial roles in disaster response, environmental education, and community-based adaptation projects.

Challenges and Coordination:

The ongoing conflict in **Yemen** has significantly hindered the effectiveness of these actors. Local authorities often lack the capacity and resources to implement **climate change** initiatives effectively. International organizations face challenges in delivering aid due to security concerns and logistical difficulties. For instance, during the **2020**

floods, local councils had limited ability to provide immediate services, and international donors, in collaboration with national **NGOs**, remained the main source of disaster assistance.

Despite these challenges, there is a concerted effort to enhance coordination among **national and local actors, international organizations, and communities** to build resilience against **climate change impacts**. Conferences and workshops, such as those held in **Mukalla**, aim to develop responses to environmental degradation and build capacity among local authorities.

In summary, **Yemen's climate change** response involves a multi-tiered approach with various actors at the national and local levels, each facing unique challenges but collectively working towards building resilience and sustainable development.

VIII. The Role of Stakeholders in the Nexus Approach in Yemen

The protracted crisis in **Yemen**, marked by ongoing conflict, severe **humanitarian** needs, and underdevelopment, has necessitated a comprehensive and integrated approach to aid delivery and **peacebuilding**. The **Humanitarian-Development-Peace (HDP) Nexus** framework provides a way to address these interconnected challenges by aligning short-term **humanitarian** aid with long-term **development** and **peacebuilding** efforts. Stakeholders in **Yemen** play a pivotal role in implementing the **Nexus approach**, and their collaboration and contributions are vital to ensuring sustainable recovery for the country.

Key Nexus Stakeholders in Yemen

The **Nexus approach** relies on a diverse array of stakeholders, each contributing unique expertise and resources. These stakeholders include international organizations, local actors, civil society groups, and donor agencies.

International Organizations

International organizations, such as the **United Nations agencies**, are at the forefront of **Nexus-based interventions** in **Yemen**. For example:

- **United Nations Development Program (UNDP):** UNDP focuses on rebuilding essential infrastructure, enhancing livelihoods, and fostering resilience at the community level. Their projects often align development efforts with humanitarian goals, such as integrating cash-for-work initiatives into post-conflict reconstruction³⁷.
- **World Food Program (WFP):** WFP not only provides food assistance but also supports local food production systems and agricultural development to reduce dependency on aid³⁸.
- **United Nations Children's Fund (UNICEF):** UNICEF combines humanitarian aid with development by rehabilitating schools and water systems while providing immediate support to vulnerable children and families.

Local and National Government Actors

Local governance structures are critical stakeholders in **Nexus** programming. Despite the fragmented political situation in **Yemen**, local councils and authorities often collaborate with international agencies to implement projects. For example, in **Aden** and **Hadramout**, local **governments** have worked with international donors to restore water infrastructure and healthcare services, aligning **humanitarian** aid with long-term **development** needs³⁹.

Civil Society Organizations (CSOs)

Local civil society organizations are instrumental in ensuring that **Nexus** programs are context-sensitive and community-driven. **CSOs** often mediate between local communities and international agencies, providing valuable insights into local needs and priorities. For instance, the **Yemen Women's Union** has been active in supporting community-level **peacebuilding** initiatives and advocating for the inclusion of women in recovery efforts.

³⁷ UNDP. (2020). The Nexus Approach in Yemen: Aligning Humanitarian and Development Goals. Retrieved from UNDP.

³⁸ World Food Program (WFP). (2023). Yemen: Emergency Response and Food Security. Retrieved from WFP.

³⁹ Yemen Climate Change Initiative (YCCI). (2022). Community-Based Adaptation Strategies. Retrieved from <https://www.ycci.org>.

Donor Agencies

Donors are key stakeholders in financing **Nexus**-based projects. Major contributors include:

- **European Union (EU):** The **EU** has committed significant resources to **Nexus** programs in **Yemen**, focusing on stabilizing communities, restoring basic services, and supporting local governance⁴⁰.
- **World Bank:** The **World Bank's** engagement in **Yemen** emphasizes recovery and reconstruction, particularly in health, education, and infrastructure sectors, which align closely with the **Nexus** framework.

Community Members and Local Leaders

Communities and traditional leaders are central to the success of the **Nexus approach**. Their participation ensures that programs are relevant and sustainable. For example: Local mediators in **Taiz** have played a critical role in resolving disputes over water resources, helping to bridge **peacebuilding** with **humanitarian** and **development** efforts⁴¹.

Stakeholder Contributions to the Nexus Approach in Yemen

The effective implementation of the **Nexus approach** in **Yemen** relies on coordinated efforts among stakeholders. Key contributions include:

1. Humanitarian Response

Stakeholders work to address **Yemen's** immediate **humanitarian** needs, such as food insecurity, healthcare, and shelter. International agencies like **WFP** and **UNICEF** provide lifesaving assistance while integrating programs that promote resilience and recovery.

2. Development Initiatives

Development actors focus on rebuilding **Yemen's** infrastructure and institutions. For instance, **UNDP** and the **World Bank** collaborate with local authorities to restore water systems and hospitals, providing a foundation for long-term stability.

⁴⁰ European Union External Action. (2023). The EU's Role in Supporting Yemen's Recovery. Retrieved from EU External Action.

⁴¹ Saferworld. (2021). Pathways for Peace in Yemen: Localized Conflict Resolution. Retrieved from Saferworld.

3. Peacebuilding Efforts

Peacebuilding is a critical pillar of the **Nexus** approach in **Yemen**. Local organizations and community leaders often mediate conflicts over scarce resources, while international stakeholders support national-level reconciliation efforts. For example, the **Peace Support Facility**, established by **UN** agencies, funds locally-driven **peacebuilding** projects.

Challenges Facing Nexus Stakeholders

Despite their critical roles, **Nexus** stakeholders in **Yemen** face significant challenges:

1. **Fragmented Political Landscape:** The division of **Yemen** between multiple factions makes coordination among stakeholders difficult. Local governance structures often lack the capacity to fully participate in **Nexus** programs.
2. **Funding Gaps:** Humanitarian aid in **Yemen** remains severely underfunded, and donor commitments often prioritize emergency response over long-term **development** and **peacebuilding**⁴².
3. **Security Risks:** Ongoing conflict and instability frequently disrupt program implementation, particularly in remote and contested areas.
4. **Lack of Coordination:** Despite efforts to integrate **Nexus** pillars, many stakeholders continue to operate in silos, limiting the impact of their interventions.

Recommendations for Enhancing Stakeholder Collaboration

1. **Strengthen Coordination Mechanisms:** Platforms like the **Yemen Humanitarian Response Plan (HRP)** and the **Yemen Humanitarian Fund (YHF)** should expand their scope to include **development** and **peacebuilding** actors, fostering greater collaboration among **Nexus** stakeholders.

⁴² OCHA. (2023). Yemen Humanitarian Needs Overview.

2. **Increase Funding for Nexus Programs:** Donors should prioritize multi-year funding that supports integrated **Nexus** programming, ensuring that **humanitarian** aid transitions into **development** and **peacebuilding**.
3. **Empower Local Stakeholders:** International organizations should invest in capacity-building for local actors, enabling them to take a more active role in implementing **Nexus** initiatives.
4. **Promote Inclusive Peacebuilding:** **Nexus** programs must address the needs of marginalized groups, including women and displaced populations, to ensure long-term stability.

The **Nexus** approach in **Yemen** represents a critical evolution in how stakeholders address the country's overlapping crises. By integrating **humanitarian**, **development**, and **peacebuilding** efforts, the **Nexus** framework offers a pathway to sustainable recovery. However, achieving its full potential requires enhanced collaboration among stakeholders, sustained funding, and a commitment to addressing root causes of conflict. For **Yemen**, a coordinated and inclusive approach is not just an ideal—it is a necessity for building a peaceful and resilient future.

IX. Challenges in Achieving Nexus Strategies / Objectives

Challenges in Achieving **Nexus** Strategies

Implementing the **Humanitarian-Development-Peace (HDP) Nexus strategies** faces significant challenges, particularly in fragile and conflict-affected contexts such as **Yemen**. These challenges arise from the complexity of integrating diverse sectors and actors into cohesive and sustainable efforts.

Fragmented Governance and Political Instability

In conflict-affected countries like **Yemen**, fragmented governance structures, weak institutions, and ongoing political instability undermine the coordination necessary for

Nexus strategies. Competing authorities and local power dynamics make it difficult to implement integrated programs effectively⁴³. For example, different factions in **Yemen's governorates**, such as **Taiz**, **Marib**, and **Al-Hodeidah**, often have conflicting priorities, which hampers collaboration between stakeholders.

Lack of Coordination Among Stakeholders

Nexus strategies require close collaboration between **humanitarian**, **development**, and **peacebuilding** actors. However, operational silos, differing mandates, and competing agendas among international organizations, **NGOs**, and local **governments** frequently lead to inefficiencies and duplication of efforts⁴⁴.

In **Yemen**, **humanitarian** actors often prioritize immediate life-saving needs, while development organizations focus on long-term goals, creating gaps in planning and execution.

Inadequate and Fragmented Funding Mechanisms

Funding streams are often sector-specific, short-term, and rigid, making it challenging to implement integrated and flexible **Nexus** strategies. Multi-year funding, essential for transitioning from humanitarian relief to **development** and **peacebuilding**, is often unavailable. Donor fatigue and conflicting global crises have increased **Yemen's** finance challenges⁴⁵.

Security and Access Constraints

Ongoing conflict and insecurity in **Yemen** severely limit access to affected populations, particularly in contested areas like **Taiz** and **Marib**. These conditions hinder the delivery of integrated programs and disrupt project timelines⁴⁶. Aid workers and local partners are often at risk, and supply chains are frequently disrupted by violence, blockades, or bureaucratic hurdles.

⁴³ OCHA. (2023). Yemen Humanitarian Needs Overview.

⁴⁴ UNDP. (2023). Enhanced Rural Resilience in Yemen (ERRY) Program Overview.

⁴⁵ World Bank. (2022). Yemen Climate Impact Report.

⁴⁶ OCHA (2023). Yemen Humanitarian Needs Overview 2023. United Nations Office for the Coordination of Humanitarian Affairs. Retrieved from <https://www.unocha.org>

Limited Local Capacity and Community Engagement

Effective **Nexus** strategies require strong local ownership and capacity, but in **Yemen**, years of conflict and economic collapse have weakened local institutions and governance structures. Moreover, insufficient community engagement can lead to a lack of trust and support, which undermines the sustainability of **Nexus** initiatives⁴⁷.

Difficulty in Measuring Impact and Accountability

The complexity of **Nexus** strategies, which combine **humanitarian**, **development**, and **peacebuilding** objectives, makes it challenging to establish clear metrics for success and accountability. Regarding **Yemen**, overlapping crises such as food insecurity, displacement, and conflict make it difficult to assign outcomes to specific interventions or demonstrate measurable progress⁴⁸.

Global and Regional Political Dynamics

Geopolitical interests and external interventions complicate the implementation of **Nexus strategies** in **Yemen**. Competing agendas among international actors often influence funding priorities and program designs, sometimes favoring short-term relief over sustainable solutions⁴⁹.

Addressing Challenges

To address these issues, stakeholders should prioritize:

- Flexible, multi-year funding to promote integrated approaches.
- Improved coordination systems at the national and local levels.
- Investing in local capacity **development** and governance systems.
- Improved security mechanisms to ensure safe access to the affected regions.
- Comprehensive monitoring and evaluation tools for tracking progress and adjusting tactics.

⁴⁷ Oxfam. (2023). Pathways to Sustainable Recovery: Lessons from Yemen Nexus Implementation.

⁴⁸ UNICEF. (2023). Integrated Programming for Water and Sanitation in Fragile Contexts.

⁴⁹ FAO. (2023). Building Resilient Livelihoods in Yemen.

Challenges in Achieving Nexus Objectives

The **Humanitarian-Development-Peace (HDP) Nexus** aims seek to generate long-term solutions by addressing immediate needs, encouraging **development**, and promoting peace. However, accomplishing these goals poses enormous problems, particularly in fragile and conflict-affected environments such as **Yemen**.

Fragmented Governance and Weak Institutions

Achieving **Nexus objectives** requires strong and unified governance, but **Yemen's** fragmented political landscape complicates coordination between **humanitarian**, **development**, and **peacebuilding** efforts. Weak institutions and competing authorities, particularly in **governorates** such as **Taiz** and **Marib**, create barriers to the implementation of coherent policies and programs⁵⁰.

Lack of Coordination Among Actors

Nexus objectives rely on collaboration between diverse stakeholders, including local governments, **NGOs**, international organizations, and donors. However, operational silos and differing mandates often result in misaligned priorities. Across **Yemen**, **humanitarian** actors emphasize life-saving relief, while **development** and **peacebuilding** actors target long-term solutions, resulting in gaps in achieving integrated goals⁵¹.

Rigid and Inadequate Funding Mechanisms

Funding for **Nexus** objectives often remains compartmentalized into short-term emergency relief or sector-specific projects, with limited flexibility to address overlapping needs. Multi-year, flexible funding—critical for achieving the transition from **humanitarian** relief to sustainable **development** and **peacebuilding**—is scarce in **Yemen** due to donor fatigue and competing global crises⁵².

⁵⁰ OCHA (2023). Yemen Humanitarian Needs Overview 2023. United Nations Office for the Coordination of Humanitarian Affairs. Retrieved from <https://www.unocha.org>

⁵¹ UNDP. (2023). Enhanced Rural Resilience in Yemen (ERRY) Program Overview.

⁵² World Bank. (2022). Yemen Climate Impact Report.

Security and Access Constraints

Ongoing conflict and insecurity in **Yemen**, particularly in **governorates** such as **Taiz** and **Marib**, hinder access to affected communities, delaying or preventing the implementation of **Nexus programs**. Aid workers and **development** practitioners face risks from violence, blockades, and bureaucratic obstacles, further complicating efforts to achieve **Nexus objectives**⁵³.

Complexity of Addressing Root Causes

The **Nexus approach** seeks to address the core causes of crises, such as poverty, inequality, and violence, but these challenges are deeply ingrained and demand long-term commitment, which is difficult to maintain in unpredictable environments like **Yemen**. For example, addressing food insecurity in **Yemen** involves not only delivering emergency aid but also tackling systemic issues like disrupted agricultural systems and market access⁵⁴.

Limited Local Ownership and Community Engagement

Achieving **Nexus objectives** requires strong local ownership and participation, but in **Yemen**, prolonged conflict has eroded trust in institutions and limited community engagement. Programs often lack meaningful input from local stakeholders, leading to reduced sustainability and acceptance⁵⁵.

Inadequate Monitoring and Evaluation Mechanisms

Measuring the progress and impact of **Nexus objectives** is challenging due to their multi-dimensional nature, which combines **humanitarian**, **development**, and **peacebuilding** outcomes. Throughout **Yemen**, several crises such as displacement, food insecurity, and violence make it challenging to develop clear measures and accountability for **Nexus initiatives**⁵⁶.

⁵³ UNICEF. (2023). Integrated Programming for Water and Sanitation in Fragile Contexts.

⁵⁴ FAO. (2023). Building Resilient Livelihoods in Yemen.

⁵⁵ Oxfam. (2023). Pathways to Sustainable Recovery: Lessons from Yemen Nexus Implementation.

⁵⁶ UNDP. (2023). Enhanced Rural Resilience in Yemen (ERRY) Program Overview.

Global and Regional Political Dynamics

External political and economic interests often influence the design and implementation of **Nexus programs**, sometimes prioritizing short-term goals over sustainable solutions. In **Yemen**, geopolitical rivalries and regional dynamics have exacerbated the conflict, complicating efforts to align **humanitarian, development, and peacebuilding** objectives⁵⁷.

Addressing the Challenges

To overcome these challenges and reach **Nexus** objectives, stakeholders must develop governance and institutional capacities at both the **national** and **local** levels, as well as promote inclusive and participatory ways to assure local ownership. Aligning financial mechanisms with long-term, integrated planning is critical to supporting sustainable efforts, as is improving cooperation among players through collaborative planning and shared frameworks. Furthermore, the **development** of rigorous monitoring and evaluation mechanisms is critical for tracking progress, identifying gaps, and effectively adapting tactics, fostering a complete and unified approach to addressing linked difficulties.

X. Towards Coherence: HDP Nexus Integration in Yemen - Challenges and Opportunities

The **Humanitarian-Development-Peace (HDP) Nexus** aims to align emergency relief, long-term **development**, and **peacebuilding** efforts in conflict-affected and fragile contexts. In **Yemen**, where a complex and protracted conflict has created one of the world's worst **humanitarian** crises, integration across these three pillars is critical to achieving sustainable solutions. However, the current level of integration among

⁵⁷ OCHA (2023). Yemen Humanitarian Needs Overview 2023. United Nations Office for the Coordination of Humanitarian Affairs. Retrieved from <https://www.unocha.org>

humanitarian, development, and peacebuilding actors in Yemen reveals both progress and significant gaps.

Humanitarian, Development, and Peacebuilding Actors in Yemen

▪ Humanitarian Actors

Humanitarian organizations in Yemen are focusing on addressing urgent needs such as food insecurity, healthcare, and shelter, with key actors playing pivotal roles in these efforts. The **World Food Program (WFP)** provides emergency food assistance to millions of Yemenis monthly, helping to combat widespread hunger. **UNICEF** provides life-saving interventions for malnourished children while ensuring access to clean water and sanitation, addressing critical health and hygiene. Additionally, international **NGOs** such as **Médecins Sans Frontières (Doctors Without Borders)** and **Save the Children** provide essential medical care and services to displaced populations, ensuring that vulnerable communities receive the support they need amidst the ongoing crisis.

▪ Development Actors

To promote long-term recovery, Yemeni development agencies prioritize repairing vital infrastructure, restoring basic services, and strengthening community resilience. The **United Nations Development Program (UNDP)** plays an important role in reconstructing roads, water networks, and healthcare facilities, ensuring that basic services are restored in war regions. The **World Bank** participates by funding programs that attempt to reconstruct social services and strengthen local governance systems, so laying the groundwork for long-term growth. Furthermore, local groups play an important role in encouraging vocational training and conducting small-scale economic recovery projects, allowing communities to achieve self-sufficiency and economic stability.

▪ Peacebuilding Actors

Peacebuilding activities in **Yemen** are centered on resolving conflicts at both the national and local levels, with major actors playing important roles in promoting stability and reconciliation. The **UN Special Envoy** for **Yemen** coordinates negotiations between warring parties to reach a political settlement and end the long-running conflict. **Saferworld** and the **Yemen Women's Union** fund grassroots **peacebuilding** programs that prioritize the participation of women and marginalized groups in conflict resolution processes. Community leaders also participate by mediating resource disputes, such as those over water and grazing land, thereby reducing tensions and promoting local stability in impacted areas.

Level of Integration: Progress and Challenges

▪ Progress in Integration

1. Linking Humanitarian and Development Efforts:

The significance of merging **humanitarian** and **development** programming in **Yemen** is becoming more widely recognized in order to achieve long-term solutions. For example, the **World Food Program (WFP)** has worked with development actors to construct food security and livelihoods initiatives, giving farmers with agricultural training and inputs to help them transition from relying on food aid to self-sufficient production⁵⁸. Similarly, the **United Nations Development Program (UNDP)** has prioritized water network rehabilitation, which supports **humanitarian** operations by lowering reliance on emergency water trucking and enabling more long-term access to clean water⁵⁹.

2. Peacebuilding Integration at the Local Level:

Localized **peacebuilding** efforts in **Yemen** have had modest effectiveness in integrating with **development** and **humanitarian** programs, resulting in more cohesive and durable effects. For instance, in **Taiz** and **Hodiedah**, **Saferworld** has assisted local mediators in resolving disputes over water and grazing land. These

⁵⁸ World Food Program (WFP). (2023). Yemen: Emergency Response and Food Security. Retrieved from WFP.

⁵⁹ United Nations Development Programme (UNDP). (2020). The Nexus Approach in Yemen: Aligning Humanitarian and Development Goals. Retrieved from UNDP.

mediation initiatives have lowered tensions in communities and provided a more stable environment, allowing for the implementation of development projects and developing long-term resilience⁶⁰.

3. Donor Support for Nexus Initiatives:

Some donors, such as the **European Union (EU)** and the **World Bank (WB)**, have stressed multi-sectoral approaches, supporting programs that address overlapping **humanitarian, development, and peacebuilding** needs.

Challenges in Integration

1. Fragmented Coordination Mechanisms:

Fragmented coordination mechanisms continue to provide a substantial obstacle to the efficient integration of **humanitarian, development, and peacebuilding** operations in **Yemen**, with many actors operating in silos due to competing mandates, financing streams, and agendas. **Humanitarian** players frequently prioritize rapid relief operations, whereas **development** and **peacebuilding** programs require longer timelines and stable circumstances to flourish. Furthermore, coordination platforms like the **Yemen Humanitarian Response Plan (HRP)** lack sufficient mechanisms for successfully integrating **development** and **peacebuilding** actors, limiting chances for collaborative planning and execution⁶¹.

2. Conflict and Instability:

Ongoing violence in **Yemen** continues to stymie **development** and **peacebuilding** efforts, particularly in contested areas, posing significant obstacles to progress. **Humanitarian** access is frequently restricted due to security concerns, which limits prospects for collaboration and integrated programming. For example, projects targeted at restoring critical infrastructure such as schools and health facilities are routinely delayed or canceled, weakening attempts to fulfill both immediate needs and long-term recovery goals.

⁶⁰ Saferworld. (2021). Pathways for Peace in Yemen: Localized Conflict Resolution. Retrieved from Saferworld.

⁶¹ United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA). (2023). Yemen Humanitarian Response Plan. Retrieved from UN OCHA.

3. Funding Gaps and Donor Priorities:

Yemen's donor funding has largely prioritized **humanitarian** help above long-term **development** and **peacebuilding** activities, creating a huge imbalance that impedes long-term recovery. According to **UN OCHA**, **Yemen's 2023 Humanitarian Response Plan** is **50%** underfunded, with even lower funding going toward **development** and **peacebuilding** projects. This financing inequality hinders stakeholders' ability to address the core causes of the crisis and build resilience, creating important gaps in efforts to support stability and long-term recovery.

4. Lack of Inclusive Peacebuilding:

While local **peacebuilding** efforts have shown promise, national-level peace negotiations remain disconnected from ground realities. Marginalized groups, including women and displaced populations, are often excluded from peace processes, limiting their integration with broader **humanitarian** and **development** goals.

Opportunities for Enhanced Integration

1. Strengthening Coordination Mechanisms:

Platforms like the **Yemen Humanitarian Fund (YHF)** and **UN Cluster System** should expand to include **development** and **peacebuilding** actors, fostering joint planning and implementation.

2. Multi-Year and Flexible Funding:

Donors should prioritize multi-year funding that bridges **humanitarian** and **development** efforts, enabling actors to address immediate needs while building resilience.

3. Scaling Up Local Integration Efforts:

Successful community-level programs, such as local dispute resolution initiatives, should be scaled up and linked with national-level **peacebuilding** and **development** strategies.

4. Incorporating Climate Adaptation into Nexus Programming:

Addressing climate-related challenges, such as water scarcity and desertification, offers a natural entry point for integrating **humanitarian**, **development**, and **peacebuilding** efforts in **Yemen**.

The integration between **humanitarian**, **development**, and **peacebuilding** actors in **Yemen** remains a work in progress. While there have been successes in linking **humanitarian** and **development** efforts, and localized **peacebuilding** initiatives have shown promise, significant challenges persist. To achieve meaningful integration, stakeholders must address coordination gaps, secure sustained and balanced funding, and ensure that **peacebuilding** efforts are inclusive and grounded in local realities. The **HDP Nexus** framework offers a pathway to a more sustainable and cohesive response to **Yemen's** crisis, but its success will depend on the commitment of all stakeholders to work collaboratively and holistically.

XI. Tackling Climate Change in Yemen: A Collaborative Effort Across Actors

Yemen, one of the most vulnerable countries to **climate change**, faces severe challenges such as water scarcity, desertification, and extreme weather events. These issues are compounded by ongoing conflict, making climate resilience a critical necessity. Addressing **Yemen's** climate crisis requires coordinated efforts from various stakeholders, each contributing through mitigation, adaptation, advocacy, policymaking, funding, and innovation. Below is an overview of the roles and actions undertaken by different actors in **Yemen**.

International Organizations

International organizations play a pivotal role in addressing **Yemen's** climate challenges through mitigation, adaptation, advocacy, funding, and innovation. Organizations such as the **United Nations Development Program (UNDP)** and the **Food and Agriculture Organization (FAO)** are actively combating desertification,

restoring degraded lands, and promoting sustainable agricultural practices to reduce carbon emissions and environmental degradation. Initiatives like **FAO's** Farmer Field Schools educate farmers on minimizing environmental impacts, thereby reducing deforestation and enhancing soil conservation⁶². Adaptation efforts led by **UNDP** and the **United Nations Environment Program (UNEP)** focus on building climate-resilient infrastructure, training farmers to grow drought-resistant crops, and improving water management, exemplified by the "**Enhanced Rural Resilience in Yemen**" (**ERRY**) **project**, which strengthens water access and food security⁶³. Advocacy by global organizations, including the **UNFCCC** and the **World Bank**, highlights **Yemen's** vulnerability to climate-induced disasters, as seen in **Yemen's** inclusion in the **Global Climate Risk Index**, which drives funding and policy attention⁶⁴. Financial support from entities like the **Green Climate Fund (GCF)** and the **World Bank** enables grassroots adaptation measures, such as community-based water projects that mitigate drought impacts⁶⁵. Moreover, innovation projects, such as **UNDP's** introduction of solar-powered water pumps and microgrids, provide sustainable energy solutions while reducing reliance on fossil fuels⁶⁶. Together, these efforts address both immediate and long-term climate resilience needs in **Yemen**.

National Government Bodies

National government bodies in **Yemen** play a critical role in climate policy, mitigation, adaptation, and advocacy, despite significant challenges posed by conflict and weak governance. Through its **National Adaptation Program of Action (NAPA)**, the **government** prioritizes water resource management, sustainable agriculture, and disaster risk reduction, with the **Ministry of Water and Environment** leading efforts to integrate climate adaptation into national strategies⁶⁷. Mitigation efforts, often supported by international organizations like **FAO**, focus on reducing deforestation

⁶² https://www.fao.org/environmental-social-safeguards/project-detail/resilient-and-sustainable-livelihoods-for-rural-yemen/en?utm_source=chatgpt.com

⁶³ https://annualreport.undp.org/2022/index.html?utm_source=chatgpt.com

⁶⁴ https://www.germanwatch.org/en/19777?utm_source=chatgpt.com

⁶⁵ https://www.greenclimate.fund/projects?utm_source=chatgpt.com

⁶⁶ https://www.undp.org/yemen/publications/solar-interventions-yemen?utm_source=chatgpt.com

⁶⁷ Republic of Yemen. (2009). *Yemen National Adaptation Programme of Action (NAPA)*. United Nations Development Programme (UNDP).

and promoting sustainable land use, which helps lower emissions from agriculture and prevent further environmental degradation⁶⁸. To address water scarcity, the **government** has initiated small-scale irrigation projects and established the **National Water Resources Authority (NWRA)** to oversee water resource allocation, though institutional weaknesses and resource limitations hinder progress⁶⁹. On the advocacy front, **Yemen** actively seeks regional and international climate finance, leveraging platforms like the **Arab League** to highlight the disproportionate impacts of climate change and build regional partnerships for action⁷⁰. These efforts lay the groundwork for coordinated climate responses, though substantial challenges remain in achieving effective implementation.

Local Communities

Local communities in **Yemen** are at the forefront of climate adaptation, employing indigenous knowledge and innovative solutions to address environmental challenges. Traditional practices, such as rainwater harvesting, constructing terraces to prevent soil erosion, and cultivating drought-resistant crops, play a vital role in strengthening resilience against drought and desertification⁷¹. Alongside these practices, communities have adopted modern technologies like solar-powered irrigation systems and water-saving techniques to combat water scarcity. For instance, farmers in **Hadhramout** and **Taiz** utilize solar-powered pumps for irrigation, reducing dependency on fuel imports and mitigating environmental damage⁷². These combined efforts highlight the importance of community-driven initiatives in enhancing climate resilience.

⁶⁸ Food and Agriculture Organization of the United Nations. (2021). Resilient and Sustainable Livelihoods for Rural Yemen. FAO. Retrieved from <https://openknowledge.fao.org/handle/1832/105984>

⁶⁹ United Nations Development Programme. (2022). Water Resources Challenges in Yemen. UNDP.

⁷⁰ United Nations Office for the Coordination of Humanitarian Affairs. (2022). Yemen Humanitarian Response Plan 2022 (April 2022) [EN/AR]. United Nations Office for the Coordination of Humanitarian Affairs.

⁷¹ United Nations Development Program. (2023). *Supporting climate resilient agriculture in Yemen*. UNDP.

⁷² United States Agency for International Development. (2023). *Enterprising Woman Farmer Sees the Light, Invests in Climate-smart Green Energy*. USAID.

Non-Governmental Organizations (NGOs)

Non-governmental organizations (NGOs) play a crucial role in **Yemen's** climate resilience through mitigation, adaptation, and advocacy. Organizations like **CARE International** and **Oxfam** implement small-scale reforestation projects and promote energy-efficient technologies to reduce emissions and protect ecosystems, mitigating the environmental impact of deforestation and unsustainable practices⁷³. **NGOs** also enhance local adaptation efforts by building water storage facilities and training farmers in sustainable practices; for instance, **CARE's** resilience programs in **Lahj governorate** support drought-affected communities, reducing their vulnerability to climate shocks⁷⁴. Additionally, **NGOs** advocate for global climate justice by raising awareness of **Yemen's** minimal contribution to global emissions but high exposure to climate risks, strengthening calls for international climate finance and action. Through these efforts, **NGOs** significantly contribute to addressing **Yemen's** climate challenges.

Private Sector

The private sector in **Yemen** plays a vital role in addressing climate challenges through innovation and funding. Companies are introducing renewable energy solutions, such as solar panels, to tackle energy scarcity and promote environmental sustainability. Local firms, for example, supply affordable solar kits to households and farmers, expanding access to clean energy while reducing emissions^{75,76}. Additionally, the private sector supports adaptation initiatives by providing micro-loans to farmers for investing in water-efficient technologies, empowering communities to adopt sustainable practices. These efforts highlight the sector's potential to drive climate resilience through both technological and financial support.

⁷³ Oxfam Australia. (n.d.). *Yemen crisis*. Oxfam Australia. Retrieved from <https://www.oxfam.org.au/what-we-do/humanitarian-emergencies/yemen-crisis/>

⁷⁴ CARE International. (2022). *CARE Yemen Annual Report FY 22*. CARE International. https://www.care-international.org/our-work/where-we-work/yemen?utm_source=chatgpt.com

⁷⁵ International Renewable Energy Agency. (2022). *Renewable Capacity Statistics 2022*. IRENA.

⁷⁶ International Energy Agency. (n.d.). *Yemen - Countries & Regions*. IEA.

XII. Combating Climate Change in Yemen: Roles of Key Actors

Yemen confronts considerable hurdles in tackling **climate change**, with many interconnected players working to mitigate its effects. The **Yemeni government** has recognized water resources, agriculture, and coastal zones as particularly vulnerable sectors, and is working to encourage sustainable water usage, safeguard agricultural diversity, and establish sustainable agricultural initiatives⁷⁷. The **United Nations Development Program (UNDP)** plays an important role in empowering **Yemeni women** to participate to global climate action through projects such as the **Youth Leadership Program**. Local authorities in **Yemen** have also played an important role in reacting to environmental degradation, emphasizing the need for targeted climate action⁷⁸.

International institutions such as the **World Bank** have examined the effects of **climate change** on **Yemen's** water and agricultural sectors and made policy suggestions to strengthen resilience⁷⁹. Civil society and local communities are actively working to prevent the negative consequences of climate change by implementing adaption techniques such as sustainable water management and agricultural practices⁸⁰. Despite these efforts, **Yemen's** political instability and fragmented governance pose substantial hurdles, impeding full compliance with international climate agreements and isolating the country from global climate finance programs⁸¹. Nonetheless, active participation by local authorities, civil society, and foreign partners offers an opportunity to strengthen **Yemen's** climate resilience through collaborative efforts.

⁷⁷ UNDP. (2021). Building Climate Resilience in Yemen. Retrieved from <https://www.undp.org>

⁷⁸ Reliefweb UNHCR. (2021). Climate Change, Displacement, and Vulnerability in Yemen. Retrieved from <https://www.unhcr.org>

⁷⁹ World Bank. (2021). Climate Risk Profile: Yemen Retrieved from <https://climateknowledgeportal.worldbank.org>

⁸⁰ https://www.yemenpolicy.org/?utm_source=chatgpt.com

⁸¹ <https://arabcenterdc.org/publications/>

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