

Consolidated Executive Summary



Destruction caused by the conflict in Aden, Yemen. | Photo Credit: UNDP Yemen

Studies on Impact of War in Yemen

Report# 1

Assessing the Impact of War on Development in Yemen

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Report# 2

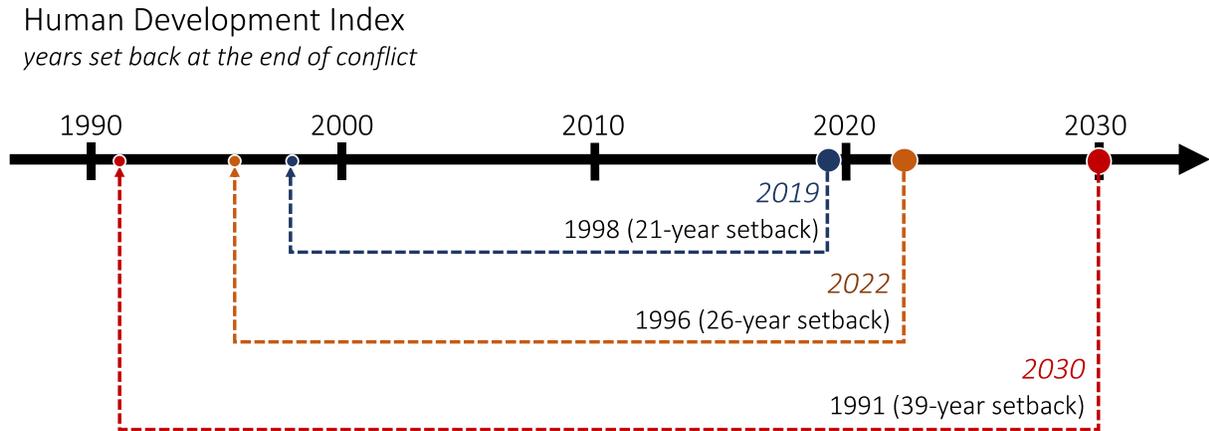
**Assessing the Impact of War in Yemen on Achieving the
Sustainable Development Goals**

Assessing the Impact of War on Development in Yemen is motivated by a desire to better understand the impact of conflict in Yemen across multiple pathways of human development. We assess this by calibrating the International Futures (IFs) model and using it to create four alternative scenarios. These scenarios reflect three potential pathways of conflict development (ending in 2019, 2022 and 2030), as well as a counterfactual world in which conflict did not escalate after 2014. These scenarios are then used to estimate the impact of conflict on development across multiple issue areas (demographic, economic, education, infrastructure, health, etc.).

Prior to the escalation of conflict in 2015, development in Yemen was strained. A country of 30 million people, Yemen ranked: (a) 153rd on the Human Development Index (HDI); (b) 138th in extreme poverty; (c) 147th in life expectancy; (d) 172nd in educational attainment; and, (e) was in the World Bank low-middle income category. Projections suggest that Yemen would not have achieved any of the Sustainable Development Goals (SDGs) by 2030 even in the absence of conflict.

The ongoing conflict has further reduced the pace of development. The impacts of conflict in Yemen are devastating—with nearly a quarter of a million people killed directly by fighting and indirectly through lack of access to food, health services, and infrastructure. Of the dead, 60 per cent are children under the age of five. The long-term impacts of conflict are vast and place it among the most destructive conflicts since the end of the Cold War. The conflict has already set back human development by 21 years (Figure 1). If the conflict were to end in 2022, development would be set back 26 years – over one generation. If the conflict persists through 2030, the setback grows to nearly four decades, or more than one-and-a-half generations. In this case, one-in-five surviving Yemenis will be physically stunted because of the conflict.

Figure 1: How long does conflict in Yemen set back human development?



The conflict in Yemen is devastating to development gains and disproportionately impacts children. By 2030 we estimate that indirect deaths (caused by lack of access to food, health care and infrastructure services) will be five times greater than direct deaths. Most of those deaths are of infants and children, with an estimated 1.5 million killed by 2030 if conflict persists. Table 1 shows the impact of ending the conflict in 2019, 2022 and 2030 on indicators of development compared with a *No Conflict* scenario.

Table 1: Summary of results, reporting human development indicators in the last year of the conflict according to each scenario. Gross Domestic Product (GDP) per capita, extreme poverty, and malnourished children 2014 data from World Bank World Development Indicators (WDI); infant mortality 2014 data from UNPD World Population Prospects. *Poverty line of US \$1.90 a day.

		Last year of conflict			
Scenario		2014	2019	2022	2030
Direct conflict deaths (cumulative difference)	<i>Conflict</i>		102,000	166,000	296,000
Indirect conflict deaths (cumulative difference)	<i>Conflict</i>		131,000	316,000	1,484,000
GDP per capita (PPP) thousand US	<i>No Conflict</i>	3.8	4.0	4.3	5.9
	<i>Conflict</i>	3.8	2.0	1.7	1.3
Extreme poverty* percent of population	<i>No Conflict</i>	18.8	18.7	15.4	6.6
	<i>Conflict</i>	18.8	58.3	64.8	77.6
Infant mortality deaths per 1,000 births	<i>No Conflict</i>	46.3	36.7	32.2	21.3
	<i>Conflict</i>	46.3	69.6	81.5	136.6
Malnourished children percent of children	<i>No Conflict</i>	42.1	36.5	33.5	24.6
	<i>Conflict</i>	42.1	50.5	57.3	79.5

The second report, *Assessing the Impact of War in Yemen on Achieving the SDGs*, expands upon previous research¹ by first analyzing how the conflict is changing development across four Sustainable Development Goals (SDGs). The four SDGs were chosen based upon core United Nations Development Programme (UNDP) priorities and are: *SDG 1: No Poverty*; *SDG2: Zero Hunger*; *SDG 8: Decent Work and Economic Growth*; and, *SDG 10: Reduced Inequalities*.

If conflict persists past 2019, Yemen will have the greatest depth of poverty, second poorest imbalance in gender development, lowest calories per capita, second greatest reduction in economic activity relative to 2014, and second poorest income inequality of any country in the world. Figure 2 shows Yemen’s rank out of 186 countries across four SDG categories should conflict persist through 2030.



Figure 2: Yemen's global ranking across eight development indicators associated with four SDGs in a scenario of continued conflict in Yemen. The higher the number, the lower the standing.

In addition, the second report explores the impact of conflict on development in Yemen by creating alternative scenarios. These can be used to measure the *conflict-attributable* impact of war on development. Two alternative scenarios are used to measure this impact:

¹ Moyer et al., "Assessing the Impact of War on Development in Yemen."

- *No Conflict*: a counter-factual scenario simulating Yemeni development in the absence of conflict from 2014-2030;
- *Conflict 2030*: a scenario that is calibrated to Yemeni development during conflict (from 2014-2019) that also projects the future impact of conflict on development (from 2020-2030).

Using these scenarios, we show that the *conflict-attributable* impact of war in Yemen on development through 2019 includes:

- Pushing 11.7 million people into extreme poverty;
- Thrusting 4.9 million people, including 600,000 children younger than five into malnourishment;
- Reducing economic growth by USD 88.8 billion; and,
- Driving Yemen to be the second-most unequal country in the world.

A final scenario models the impact of ending the conflict in Yemen at the end of 2019. In the *Conflict Ends 2019* scenario millions are lifted out of poverty, hunger is improved, economic activity increased, and income inequality reduced.

The uniquely large impact of war on development in Yemen is driven by two factors: (1) the country is and has historically been very dependent on food imports; and, (2) unlike some conflict countries, the population is largely unable to emigrate (for political and geographic reasons).

It is irrefutable that the conflict has caused a uniquely large amount of suffering. But it is less clear how to mitigate that suffering. A range of alternative policy choices are available. The final section of the report evaluates how distinct *development pathways* that reflect some of these choices can reduce suffering in Yemen. To analyze these dynamics this report uses four alternative scenarios, finding that:

1. Increasing *Household Consumption* raises demand for food and reduces poverty but has a limited impact on overall malnutrition as it does little to increase the supply of food;
2. Improving *Food Distribution* reduces both adult and child malnutrition but does not significantly reduce poverty or increase incomes;
3. Increasing access to *Water and Sanitation* improves human well-being in the long-run by reducing communicable disease prevalence and malnutrition; and,
4. Targeting *Child Malnutrition* reduces human suffering and lowers stunting associated with severe child undernutrition but does little to reduce poverty.

Figure 3 measures the progress toward SDG achievement across the scenarios analyzed in this report. In the *No Conflict* scenario, Yemen is projected to close the gap to full SDG achievement by 45 per cent.² In the *Conflict 2030* scenario, however, Yemen's SDG progress is reversed by 67 per cent compared to 2015. The four additional development pathways scenarios also show set-backs relative to 2015 values.

The only scenario explored in this research where developmental progress rebounds relative to 2015 levels is *Conflict Ends 2019*. Should the conflict end, it is projected that by 2030 Yemen will be eight per cent closer to achieving some of the SDGs than it was in 2015 due to – among others – increased economic

² The indicators are drawn from variables related to SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-being), SDG 4 (Quality Education), SDG 6 (Clean Water and Sanitation) and SDG 7 (Affordable and Clean Energy). Variables measuring similar indicators are averaged before distance is calculated.

growth and reduced poverty and malnutrition. Though, even in this scenario developmental gains are extremely limited and barely reach levels of development prior to conflict.

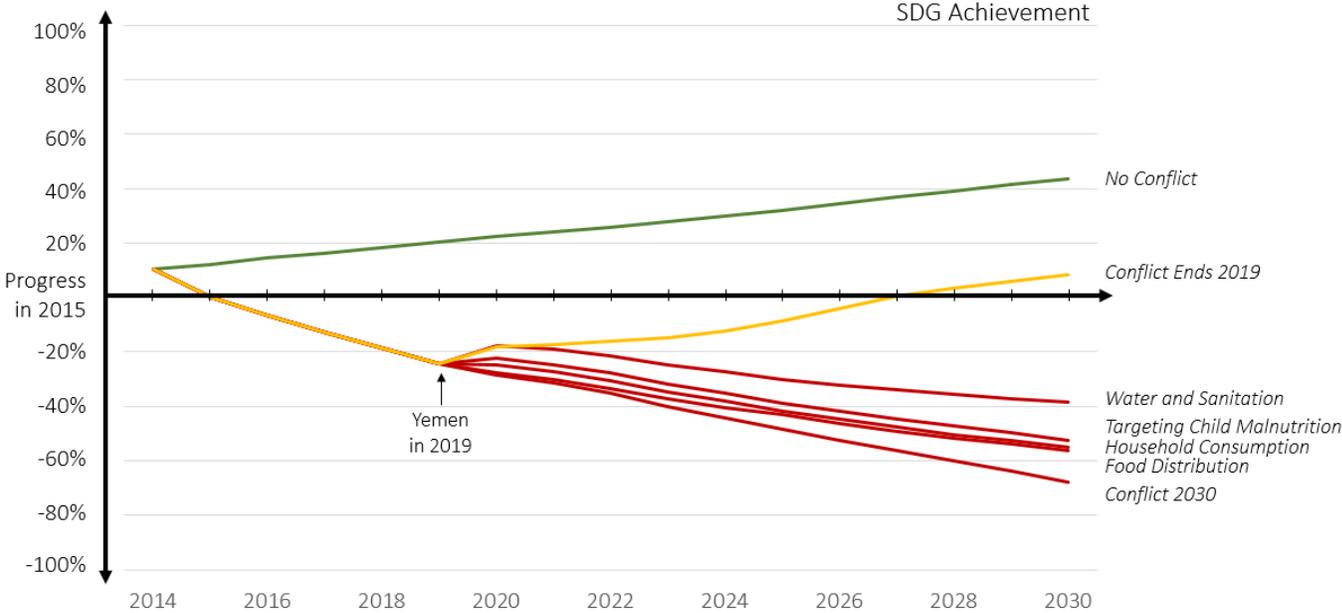


Figure 3: Weighted average distance from SDG achievement across alternative scenarios. Vertical axis represents distance from SDG achievement benchmarked to 2015 values in the conflict scenarios (causing the No Conflict scenario values to be greater than zero in 2015).

If Yemen remains at war through 2030, the costs will be generational. Not only will the overwhelming portion of Yemenis live in poverty, but the depth of poverty will be the worst in the world. The population overwhelmingly will be malnourished, and many of those who survive will be faced with lifelong stunting, along with the associated impacts on health, education and productivity. The economy will be fundamentally altered, with GDP per capita ranking among the worst globally. And severe inequality will tear at the social fabric making Yemen more vulnerable to an ongoing and vicious cycle of conflict, regional instability, and suffering.

This research shows that there are no paths to significantly mitigating this suffering during conflict. The only reasonable path forward is to end the war.

Note

The United Nations Development Programme (UNDP) in Yemen commissioned the Frederick S. Pardee Centre for International Futures, Josef Korbel School of International Studies, University of Denver, to conduct a series of studies to assess the impact of war on development in Yemen.

*The first of these studies, *Assessing the Impact of War on Development in Yemen*, was launched in Amman on 23 April 2019. The second report, *Assessing the Impact of War in Yemen on Achieving the Sustainable Development Goals*, was released on 26 September 2019.*

The views expressed in the studies are those of the author(s) and do not necessarily represent those of the United Nations, including UNDP, or the Member States of the United Nations.