TRENDS AND OUTLOOK OF NATURAL RESOURCE USE IN WEST ASIA

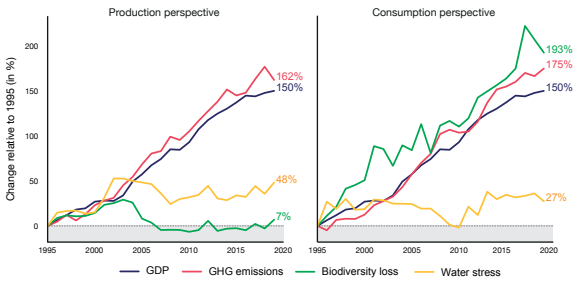
Rapid expansion of production to meet the demand driven by growing populations and economies, and their associated investments in infrastructure has **speeded up natural resource extraction rates and material demands, putting huge pressure on our planetary boundaries**. Global material demand grew substantially from 27.1 billion tonnes in 1970 to around 92 billion tonnes in 2017 (IRP 2019a). Most of this global increase was driven by development in Asia-Pacific and West Asia, with annual rates of increase at 4.5 per cent and 3.4 per cent, respectively (UNEP 2017).

West Asia can play a key role in moving the world economy in a more sustainable direction.

ECONOMIC GROWTH AND ENVIRONMENTAL IMPACTS IN WEST ASIA

There is a strong connection between economic growth and environmental impacts in West Asia.

FIGURE 1. ENVIRONMENTAL IMPACTS VERSUS ECONOMIC GROWTH IN THE WEST ASIA REGION, 1995–2019



WHAT THE GRAPH TELLS US...[1]

From a production perspective (PBA), weak absolute decoupling is found for biodiversity loss, weak relative decoupling for water stress and no decoupling for GHG emissions. When viewed from a consumption perspective (CBA), absolute decoupling for biodiversity disappears and changes into no decoupling. For water stress, there is a sign of very weak absolute decoupling, and for GHG emissions there is no decoupling.

GHG EMISSIONS: Average per capita GHG emissions in 2019 amounted to 12.1 tCO_2eq (PBA) and 10.6 tCO_2eq (CBA). In both cases, GHG emissions were significantly above the global average (6.4 tCO_2eq per capita/year) and similar to the GHG emissions observed in China and the European Union.

BIODIVERSITY LOSS: Nearly 90 per cent of land use-related biodiversity loss is embodied in imported products. Addressing this requires supply chain management action to ensure best practice in producer regions and potentially changing the origins of imports to reduce the biodiversity impacts of consumption.

WATER STRESS: Water stress impacts in the West Asia region have remained mostly unchanged since 1996; however, it can be reduced by improving water productivity, reducing production and can potentially be reduced through trade adjustments, in particular by reducing exports, and potentially adjusting imports. Regions with surplus water could relieve water stress in arid regions by selling water-intensive food products.

1. **PBA** looks at the environmental impacts in a specific country following the extraction and use of natural resources within its borders. **Absolute impact decoupling** indicates that economic activity is increasing while environmental impacts are declining. **Relative impact decoupling** indicates that economic activity is increasing, while environmental impacts are also increasing, but at a much slower rate. **CBA** considers the impacts of the extraction and use of the natural resources in other countries to meet the demand in a specific region, and is the concept underlying footprint studies, such as carbon footprints.

FUTURE SCENARIOS: FROM BUSINESS AS USUAL TOWARDS A MORE SUSTAINABLE PATH

BASELINE HISTORICAL TRENDS SCENARIO

- Business as usual projects a massive increase in total material extraction in West Asia, especially in Saudi Arabia, to support economic and population growth.
- Biomass, metal ores and fossil fuels retain the same production/extraction rates throughout 2015 to 2060. Conversely, the extraction of non-metallic minerals grows substantially, increasing their share from 46 per cent in 2015 to 74 per cent of total material extractions in 2060.
- Per capita material extractions in most countries in West Asia reach their peaks by 2040 but only decrease slightly afterwards.
- GHG emissions in the West Asia region are significantly above the global average and under this scenario are set to increase from 1.6 billion tCO_2eq in 2015 to 5 billion tCO_2eq in 2060.

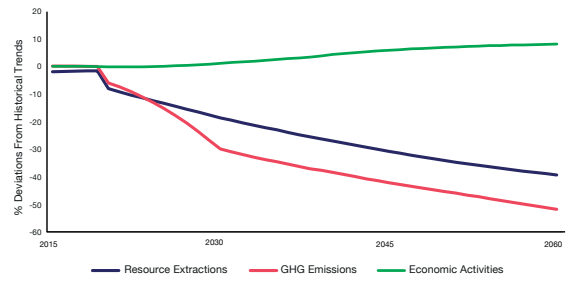
The predicted scale of growth in resource use – without improvements to manage the impacts of extraction, use and disposal of materials and resources – would result in substantial stress on resource supply systems and waste management systems, and unprecedented levels of environmental pressures and impacts.

THE TOWARDS SUSTAINABILITY SCENARIO

- It combines Resource efficiency (RE), sustainable consumption and production (SCP), and climate mitigation policies that complement each other. RE and SCP policies significantly reduce all categories of material extraction and improve resource use productivity in West Asia, thus fostering economic growth relative to Historical Trends. Climate mitigation policies would help West Asia cut massive emission levels, but would also slightly downgrade their economy.
- Non-metallic minerals and gas extraction, especially crude oil and metal ore extraction in West Asia, would be reduced materially with the implementation of Towards Sustainability policies compared with Historical Trends.
- A key component in the Towards Sustainability policies supporting economic growth in West Asia is to improve resource use productivity. Well-being indicators grow faster than resource extraction with improved resource productivity and the relative decoupling of well-being from resource use.

The combination of these policies would provide a win-win solution for the countries of West Asia; pressure on the environment and material extraction is reduced without sacrificing economic growth. A more equal distribution of income and efficient resource use would also be likely.

FIGURE 2. IMPACTS ON ECONOMIC ACTIVITY (REAL GDP), RESOURCE EXTRACTION AND GHG EMISSIONS IN WEST ASIA IN 2015–2060 IN THE TOWARDS SUSTAINABILITY SCENARIO – % DEVIATIONS FROM HISTORICAL TRENDS



WHAT THE GRAPH TELLS US…

From 2015 to 2060 the amounts of resource extraction and GHG emissions show a declining trend for West Asia region, while increasing economic activities (real GDP in 2014 prices). These results prove that **GHG abatement and resource efficiency policies can go hand-in hand with economic growth in the region**. The Towards Sustainability scenario projects that West Asia can achieve significant decoupling after 2040.

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The full report can be downloaded at:
https://www.resourcepanel.org/reports/trends-and-outlook-natural-resource-use-west-asia

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