

S1. Case Study

To cover the geographical boundary of this research, we concentrated on the area within the spatial boundaries presented in panel A of Figure S1. We simulated the model, traced the surface and underground water flows, and extracted the results of the hydrological model for this spatial scope. While the model operates at the grid cell level within these spatial boundaries, results are aggregated by country-river basin. The panel B of Figure S1 shows the boundaries of the countries included in this study including: Iran, Israel, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates, Turkey, West Bank, and Yemen. The results are finally aggregated to Iran, Iraq, Jordan, Lebanon, Saudi Arabia, Syria, Turkey, and the Rest of the Middle East (RME). Panel C of Figure S1 shows boundaries of the river basins of the region. Finally, panel D of Figure S1 represents the ET basin. The temporal dimension of the simulation with hydrological model is from 2016 to 2055 to assess water scarcity between 2016 and 2050.

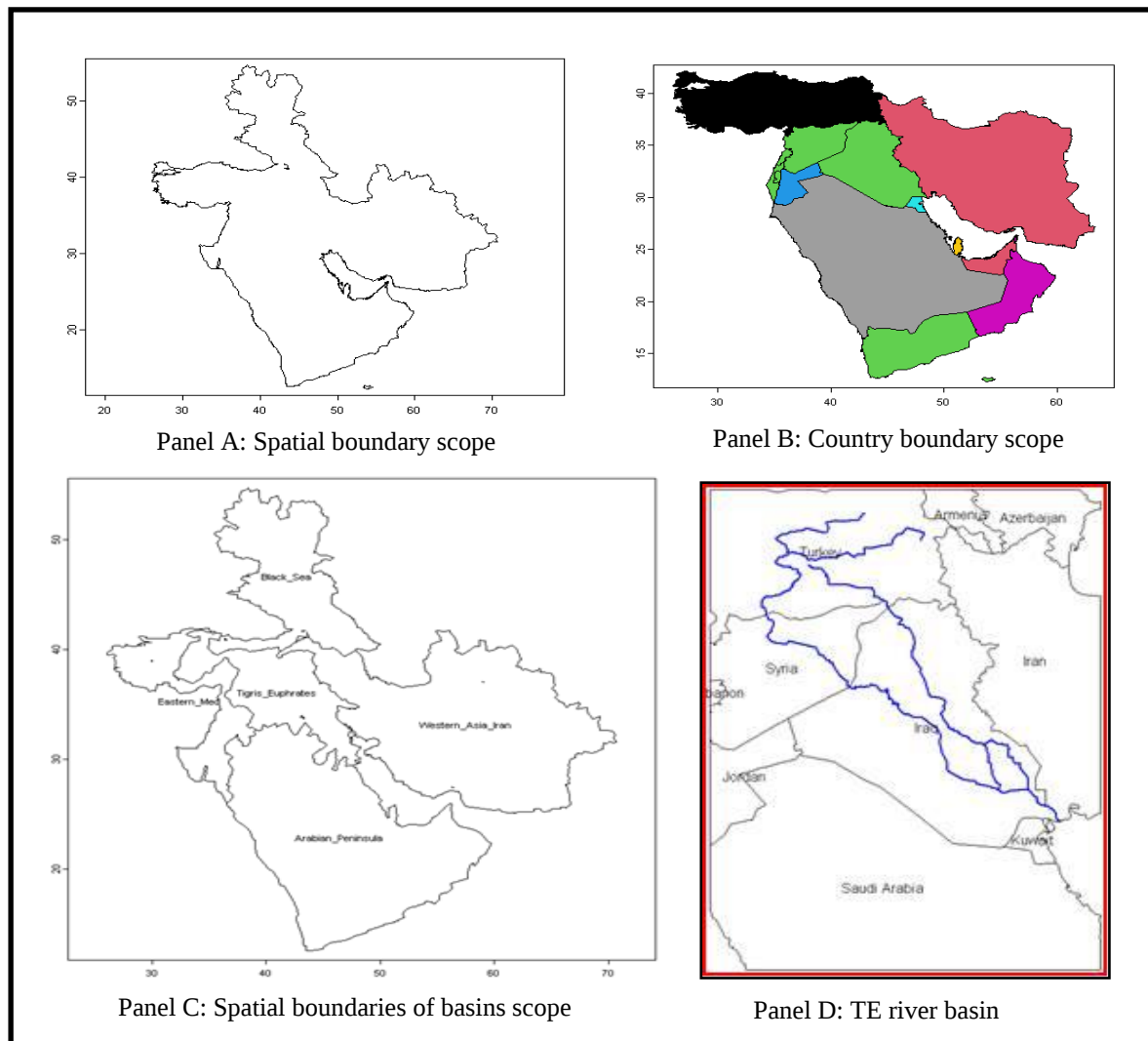


Figure S1. Panel A. Spatial boundary of the region; Panel B. Country scope of the study; Panel C. River basins' boundaries; and Panel D. Tigris and Euphrates rivers. The axes show the longitude and latitude. Left: river basin borders. Right: country borders.

In 2016, Turkey with GDP of \$863.7 billion had the largest economy in the Middle East, followed by Saudi Arabia (GDP of \$654.3 billion), Iran (GDP of \$418.9 billion), Iraq (GDP of \$170.6 billion), Lebanon (GDP of \$51.8 billion), Jordan, (GDP of \$38.7 billion), and Syria (GDP of \$27.8 billion). The combined GDP of the Rest of the Middle East was \$1,077 billion in 2016. The share of agricultural activities in the GDP is small in the Middle East region (10% of GDP and less). On the other hand, the share of services is relatively large (more than 50%), except Saudi Arabia. The share of industrial activities is larger than services and agriculture in Saudi Arabia, due to crude oil extraction and production of petroleum products.

Turkey and Iran have the largest harvested areas, 12.3 and 17.8 million hectares in 2016, respectively (Figure S2 – Panel A). Then Syria and Iraq represent significantly smaller areas of 4 and 1.8 million hectares, respectively (Figure S2 – Panel A). Other countries have limited harvested areas, from 0.2 million hectares in Jordan to 0.9 million hectares in Saudi Arabia (Figure S2 – Panel A). Wheat, coarse grains, fruits and vegetables account for most of the harvested area in the region (Figure S2). Rice and sugar crops are rarely produced in the Middle East. Turkey, Iran and Syria collectively account for more than 85% of the total harvested area in the region (not in Figure S2).

Wheat has the largest share in harvested area across countries in the Middle East, except for Jordan and Lebanon (Table S1). Vegetables and fruits have usually the largest shares in production. With some exceptions, vegetables and fruits have the largest value shares as well. Rice and sugar crops have very small shares in harvested area and crop values across the Middle East.

The available area of cropland in the Middle East is mainly distributed in very dried Agro-ecological Zones (AEZs) of very dry (AEZ7), dry (AEZ8), moist and semi-arid (AEZ9), and warm, temperate, and dry (AEZ10) (Figure S3). This reflects the fact that crop production in the Middle East needs intensive irrigation. Across all AEZs, wheat, coarse grains, vegetables, and fruits have large shares of the harvested area (Figure S4). Then oilseeds have large shares in AEZ8, AEZ9 and AEZ10. Paddy rice also has a small share in harvested area in AEZ7 and AEZ8 (Figure S4). Irrigation varies across AEZs. The area of non-irrigated land in the Middle East is larger than the area of irrigated land (Figure S5). However, since the productivity of non-irrigated land is low in the Middle East, these lands make small contributions to food production. Most of the non-irrigated harvested areas are located in dry (AEZ8) and very dry (AEZ9) areas in Turkey and Iran (Figure S5).

Since 1960, crop production has increased across the Middle East significantly with some exceptions (Figure S6). Technological progress in crop production and extracting more water from unsustainable resources have contributed to the expansion in crop production in the Middle East. Maintaining the observed historical trend in crop production in the region will be a challenging task as water scarcity is expected to surge due to climate change. While crop production has increased over time in the Middle East, the share of agriculture in GDP of each country has diminished largely across the region (Figure S7). This suggests that the Middle Eastern economies are mostly moving from agriculture to more industry and service-based economies. For some countries in this region (e.g., Saudi Arabia or Lebanon), the agricultural sector historically has a limited share of the GDP.

The Middle East is one of the most water-scarce regions in the world. Jordan, Iraq, Iran, and Saudi Arabia are the driest countries, in terms of rainfall (Figure S8). The trends in rainfall in

these countries were significantly declining over time. Turkey and Lebanon have more rainfall. The trends in rainfall in these countries were relatively flat over time (Figure S8). Reductions in rainfall are expected to continue in the future. While the trends show that water availability could decline in the future in the Middle East, in this research we use a hydrological model to estimate the extent to which climate change will affect water scarcity in the future.

Approach 2. While climate models have some agreement regarding temperature change, there is a large disagreement regarding precipitation. It is a standard practice to take a multi-model ensemble mean for temperature in the climate impact literature. However, the ensemble means for precipitation can be misleading due to the weak performance of some climate models regarding precipitation (McMahon, Peel, and Karoly 2015). The National Aeronautics Space Administration (NASA) of the United States has developed a data set that provides gridded future projections on daily temperature and precipitation for the whole world, NASA Earth Exchange Global Daily Downscaled Projections (NEX-GDDP-CMIP6) (Thrasher, B. et al. 2021; 2022). This data set includes downscaled climate scenarios for the globe that are derived from various General Circulation Model (GCM) runs conducted under the Coupled Model Intercomparison Project Phase 6. The dataset compiles climate projections from various CMIP6 GCMs for the period from 2015 to 2100. Ideally, we would like to run the hydrological model with each GCM output. However, this would require very large computing resources. Instead, we choose just one GCM model, MIROC-ES2L, from the NEX-GDDP-CMIP6 dataset¹. We use MIROC-ES2L model daily temperature and precipitation projections for the 2016-2055 period for SSP2-RCP4.5 and SSP5-RCP8.5 climate scenarios. Henceforth, we refer to the projections provided by this model as **Selected Model**.

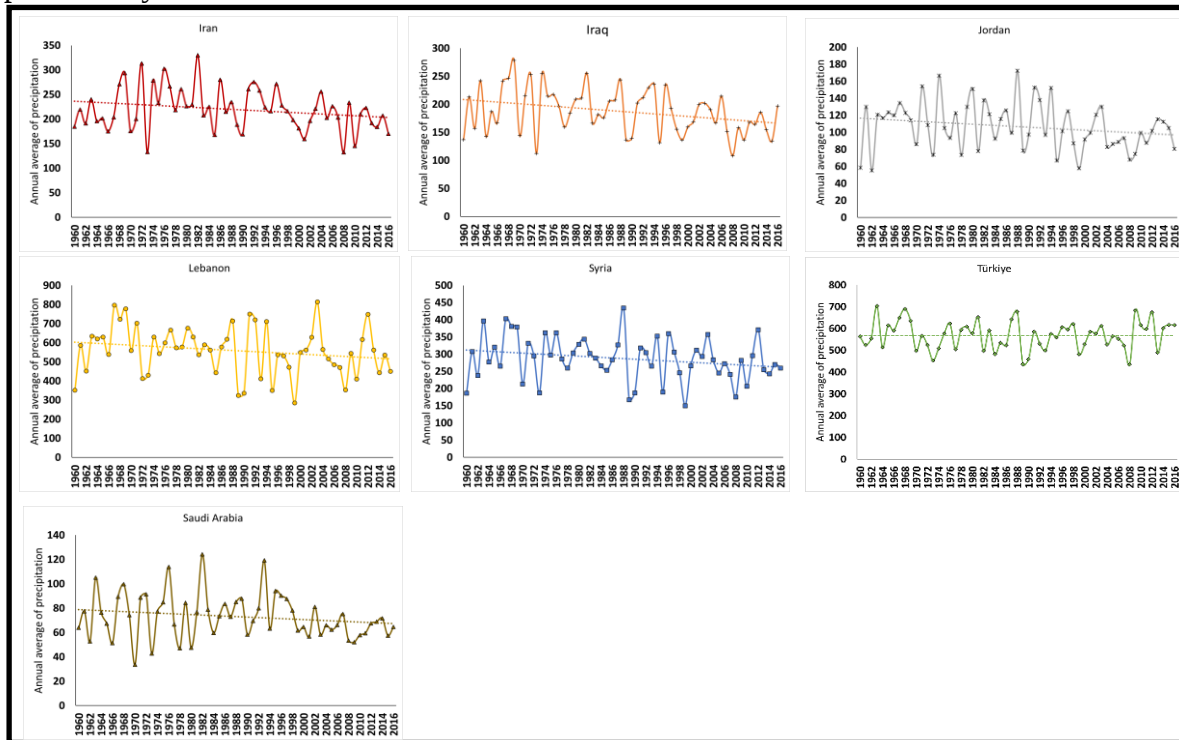


Figure S2. Annual average of precipitation by country

¹ Following the approach of Abbasain et al. (2019), we systematically compared the projections of GCMs with the actual observations for the Middle East region over the 1980-2005 period. According to this comparison, we learned that the projections made by models in the MIROC family have the least deviation from actual observations for the Middle East region.

Table S1. Crop shares (%) in harvested area, crop production, and crop values by country in 2016
Source: FAOSTAT and GTAP-BIO-W data base

Description		Paddy Rice	Wheat	Coarse Grains	Oilseeds	Sugar Crops	Vegetables	Fruits & Others
Iran	Area	4.5	46.3	14.3	3.2	1.6	12.6	17.6
	Production	3.3	15.5	5.3	0.7	18.5	35.8	20.8
	Value	7.4	11.9	3.1	1.6	2.2	27.6	46.3
Iraq	Area	2.0	48.8	18.5	0.4	0.4	6.9	23.0
	Production	2.8	47.8	12.7	0.3	0.8	20.5	15.0
	Value	3.5	43.8	12.7	1.5	0.0	19.5	18.9
Jordan	Area	0.0	13.5	19.5	31.0	0.0	23.7	12.3
	Production	0.0	1.1	2.6	4.1	0.0	77.1	15.1
	Value	0.0	1.6	2.2	9.2	0.0	65.6	21.3
Lebanon	Area	0.0	17.6	6.5	25.2	0.1	24.8	25.9
	Production	0.0	6.1	1.5	5.1	0.3	53.0	33.9
	Value	0.1	2.1	0.5	7.2	0.4	45.7	44.0
Saudi	Area	0.0	26.5	24.0	1.0	0.0	20.2	28.4
	Production	0.0	16.5	6.8	0.4	0.0	44.4	31.8
	Value	1.4	6.4	2.1	0.1	0.0	30.1	59.8
Syria	Area	0.0	32.2	22.8	19.1	0.4	9.6	15.9
	Production	0.0	26.1	6.1	8.2	6.8	26.9	25.9
	Value	0.4	17.9	3.7	22.1	0.7	22.4	32.8
Türkiye	Area	0.7	42.9	20.5	12.5	1.8	10.8	11.0
	Production	0.8	18.0	12.0	3.8	17.0	32.5	15.8
	Value	1.1	12.8	7.2	10.5	2.9	33.8	31.8
RME	Area	0.0	5.2	41.6	9.5	0.0	18.2	25.5
	Production	0.0	1.4	6.9	2.6	0.0	51.9	37.2
	Value	1.8	4.9	6.0	1.6	0.8	39.3	45.6

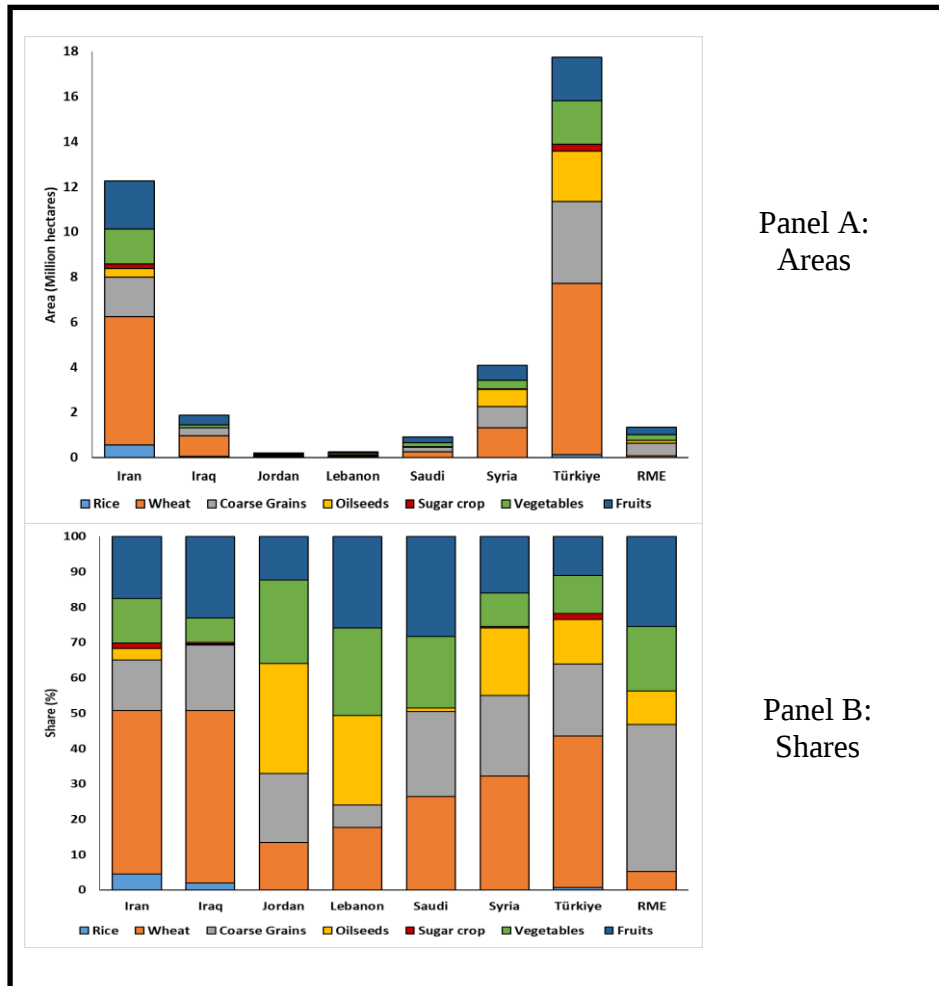


Figure S3. Harvested area by country and crop in the Middle East in 2016.

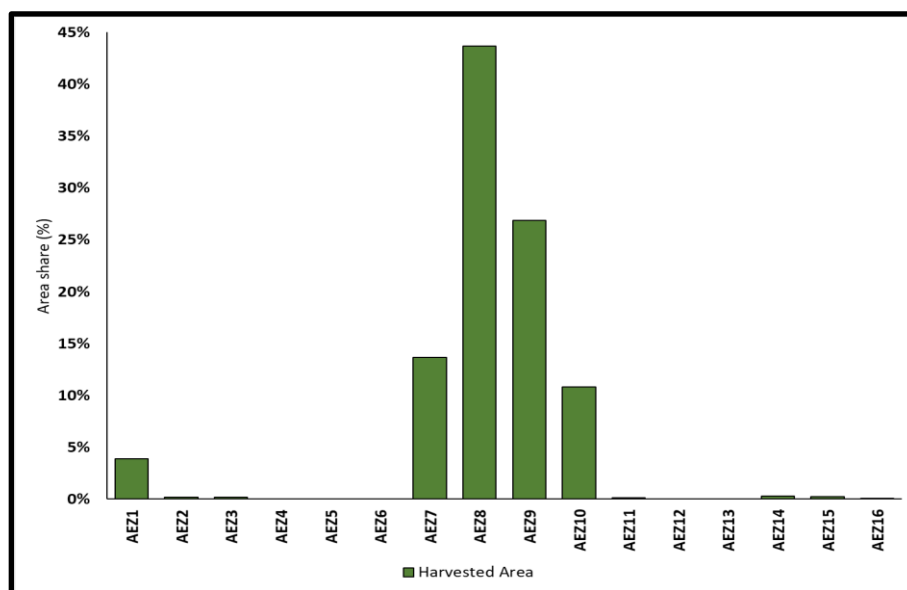


Figure S4. Distribution of cropland across AEZs in the Middle East

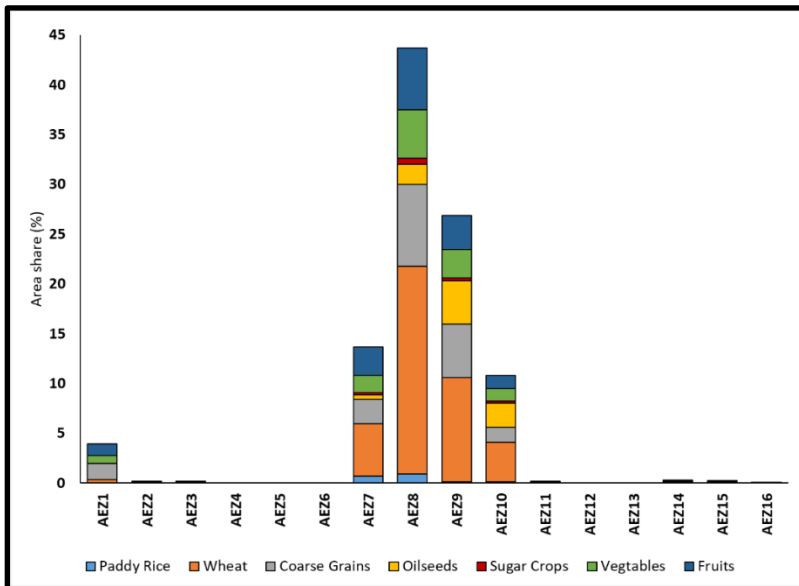


Figure S5. Distribution of land among AEZs by crop categories

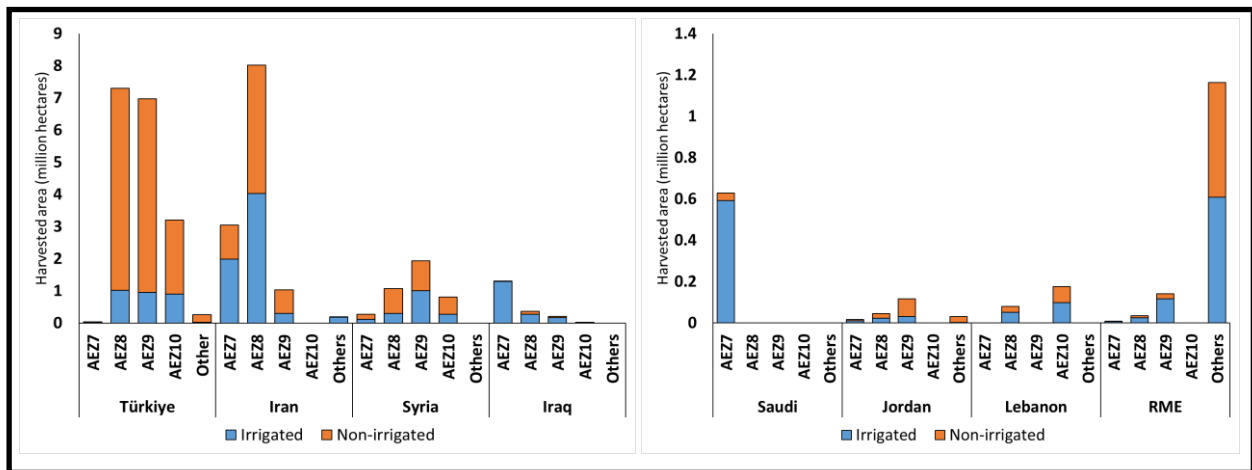


Figure S6. Harvested areas across AEZs by country and irrigation type

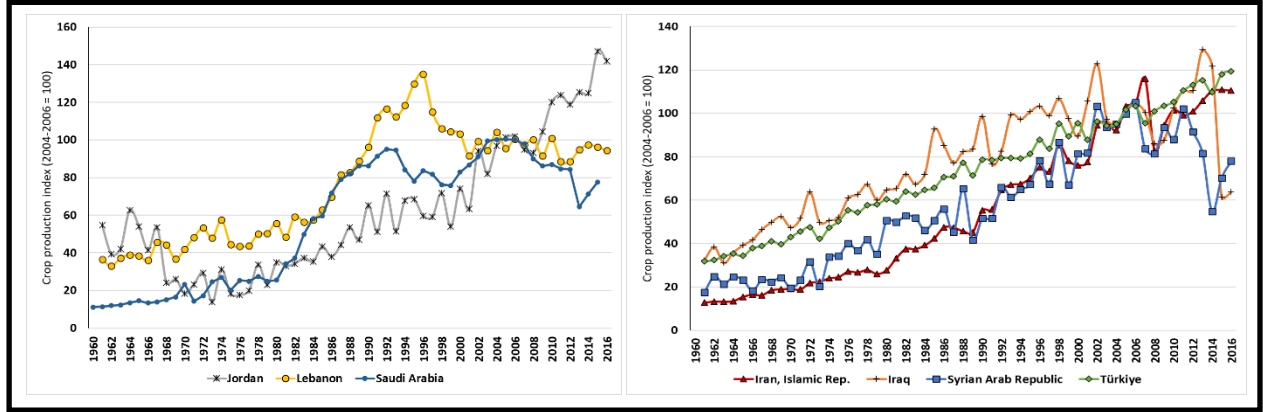


Figure S7. Index of crop production (2004-2006 = 100) by country

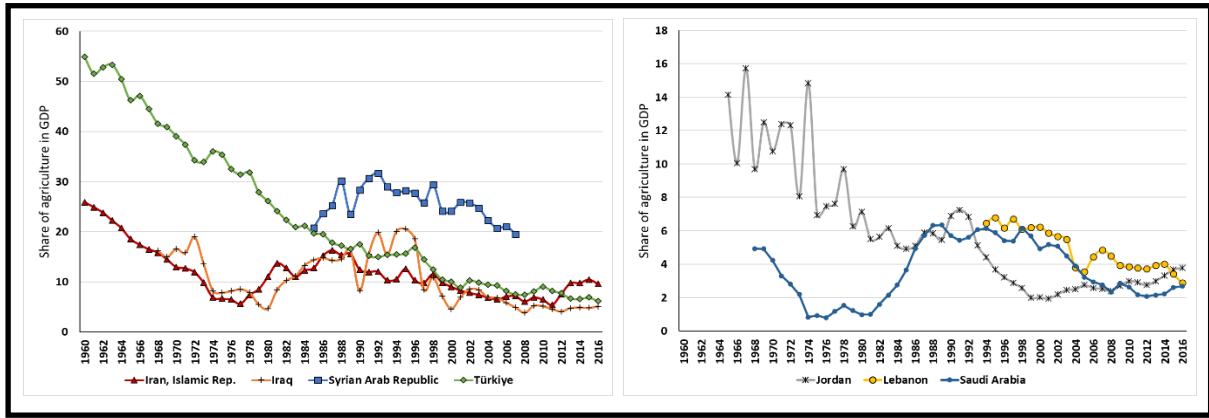


Figure S8. Share of agriculture in GDP by country

S2. Water scarcity and capital productivity

As noted in the introduction section, water scarcity could negatively affect the productivity of the existing capital assets (infrastructure, equipment, and machinery) or make them idle. One can observe this phenomenon frequently across the Middle East. However, the extent to which this phenomenon could reduce the productivity of capital assets or make them idle has not been quantified yet. To take this important effect into account, in this paper, we established a relationship between the rate of water scarcity and the productivity of capital assets at the macro level using the following elasticity:

$$\alpha = - \frac{\% \text{ change in productivity of capital in region } r}{\% \text{ change in water scarcity in region } r} \quad (1)$$

With no change in water scarcity, there will be no reduction in the productivity of capital. An increase in water scarcity will reduce the productivity of capital and vice versa. Given the uncertainty of the magnitude of this elasticity, we used two relatively small values of 0.1 and 0.15 for this elasticity. For example, with $\alpha = 0.1$, an increase in water scarcity by 5% leads to a reduction in capital efficiency by 0.5%. Henceforth, we identify simulations with $\alpha = 0.1$ as EOC1 and simulations with $\alpha = 0.15$ as EOC2.

S3. Scenarios

Table S2. Baseline scenarios and their labels.

Scenarios	Ensemble		Selected Model	
	RCP4.5	RCP8.5	SSP2-RCP4.5	SSP5-RCP8.5
$\alpha = 0.1$: EOC1	B-EOC1-E1	B-EOC1-E2	B-EOC1-S1	B-EOC1-S2
$\alpha = 0.15$: EOC2	B-EOC2-E1	B-EOC2-E2	B-EOC2-S1	B-EOC2-S2

Table S3. Policy scenarios for water use efficiency, tariff removal, and water flow

Scenarios		Ensemble		Selected Model	
		RCP4.5	RCP8.5	SSP2-RCP4.5	SSP5-RCP8.5
WUE of -10%	EOC1	W1-EOC1-E1	W1-EOC1-E2	W1-EOC1-S1	W1-EOC1-S2
	EOC2	W1-EOC2-E1	W1-EOC2-E2	W1-EOC2-S1	W1-EOC2-S2
WUE of 10%	EOC1	W2-EOC1-E1	W2-EOC1-E2	W2-EOC1-S1	W2-EOC1-S2
	EOC2	W2-EOC2-E1	W2-EOC2-E2	W2-EOC2-S1	W2-EOC2-S2
WUE of 20%	EOC1	W3-EOC1-E1	W3-EOC1-E2	W3-EOC1-S1	W3-EOC1-S2
	EOC2	W3-EOC2-E1	W3-EOC2-E2	W3-EOC2-S1	W3-EOC2-S2
Food Tariff removal	EOC1	T1-EOC1-E1	T1-EOC1-E2	T1-EOC1-S1	T1-EOC1-S2
	EOC2	T1-EOC2-E1	T1-EOC2-E2	T1-EOC2-S1	T1-EOC2-S2
Overall tariff removal	EOC1	T2-EOC1-E1	T2-EOC1-E2	T2-EOC1-S1	T2-EOC1-S2
	EOC2	T2-EOC2-E1	T2-EOC2-E2	T2-EOC2-S1	T2-EOC2-S2
20% reduction in water flow	EOC1	R1-EOC1-E1	R1-EOC1-E2	R1-EOC1-S1	R1-EOC1-S2
	EOC2	R1-EOC2-E1	R1-EOC2-E2	R1-EOC2-S1	R1-EOC2-S2

Table S4. Policy scenarios for no/full collaboration cases among the ET riparian countries

Scenarios	Ensemble: RCP4.5	Selected Model: SSP5-RCP8.5
No collaboration	NOCO-ENSEMBLE	NOCO-SELECTED
Full collaboration	FULLCO-ENSEMBLE	FULLCO-SELECTED

S4. Water Scarcity results

Table S5. Index of water scarcity by country under RCP4.5 and the baseline scenarios*

Country	Ensembled	Selected
Iran	-5.1	-5.9
Iraq	-4.6	-4.6
Syria	1.0	-8.0
Turkey	-2.6	-6.6

* Figures represent % changes in the index of water scarcity between 2016-2050

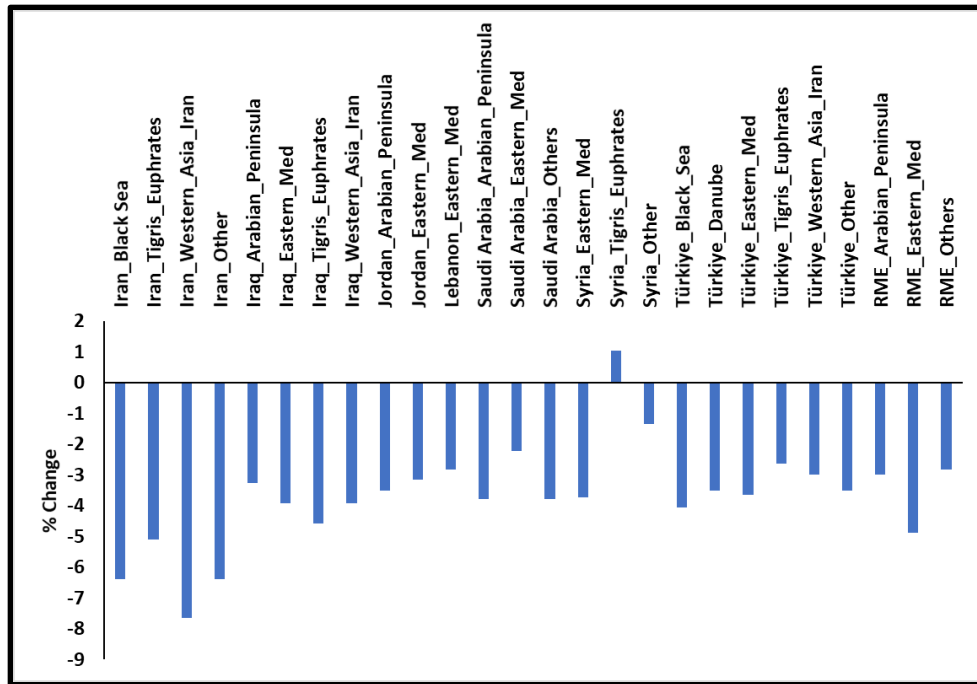


Figure S9. Index of water scarcity under RCP4.5 with the ensemble approach

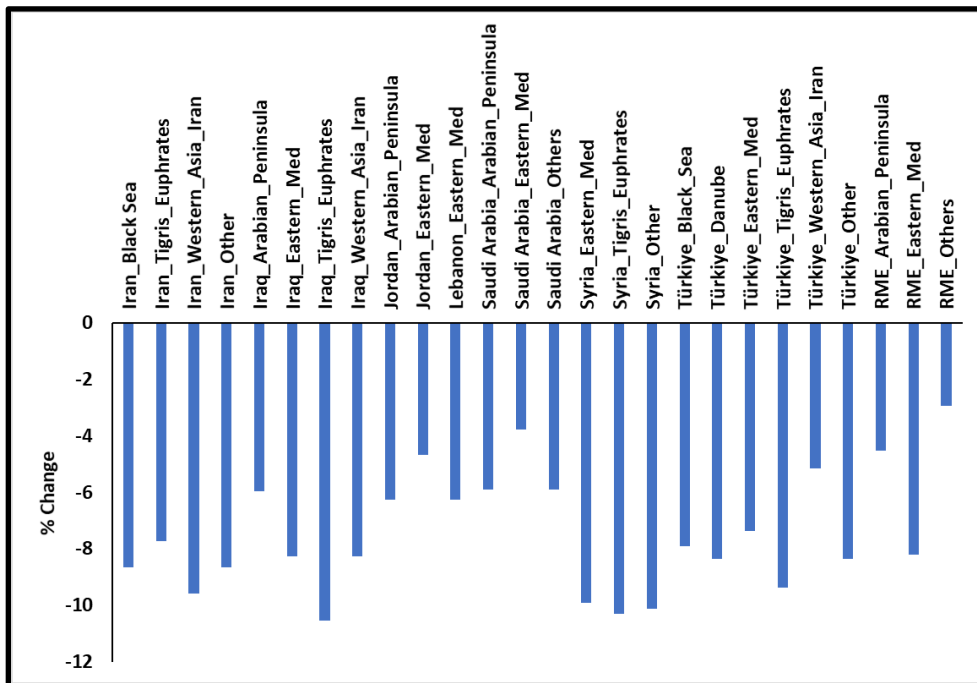


Figure S10. Index of water scarcity under RCP8.5 with the ensemble approach

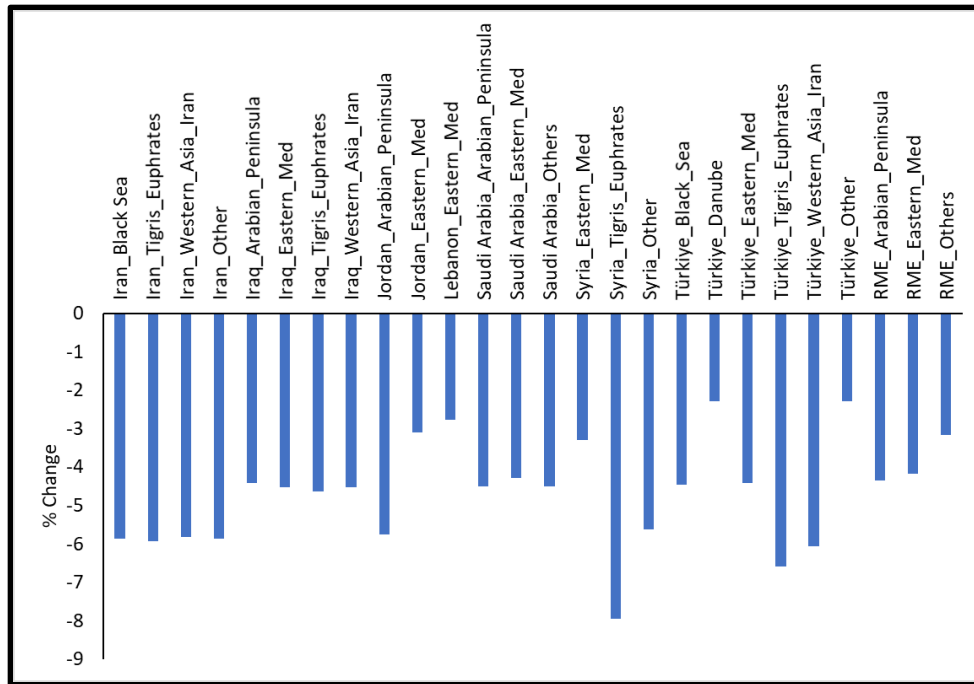


Figure S11. Index of water scarcity under SSP2-RCP4.5 with the selected model

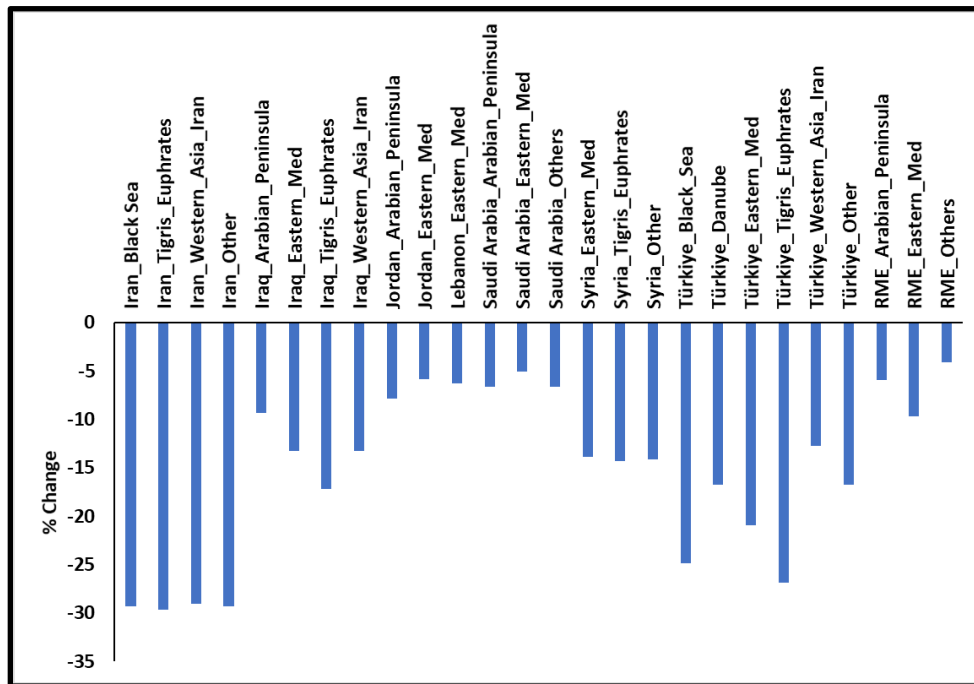


Figure S12. Index of water scarcity under SSP5-RCP8.5 with the selected model

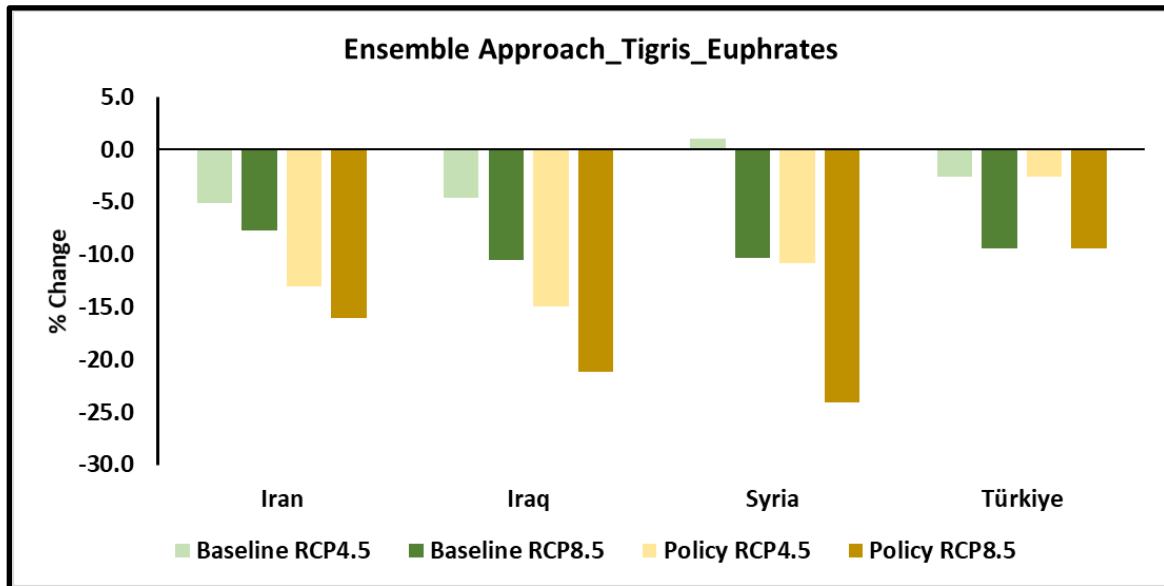


Figure S13. Index of water scarcity: Baseline scenarios versus policy scenarios with the ensemble approach: Policy scenarios represent baselines in combination with a 20% reduction in water flow from upstream to downstream of ET basin with ensemble approach

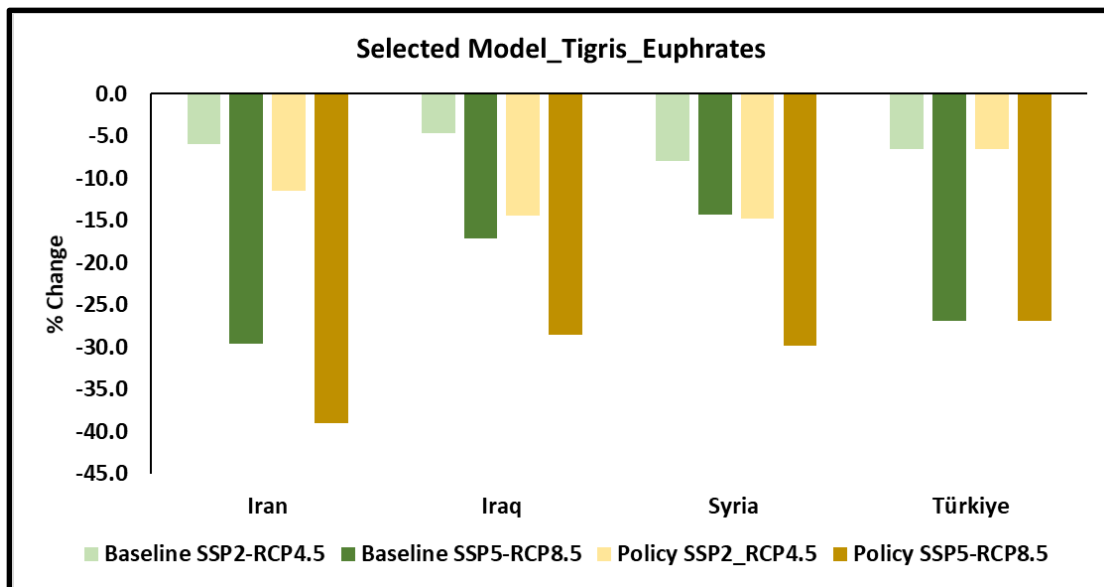


Figure S14. Index of water scarcity: Baseline scenarios versus policy scenarios with the selected model: Policy scenarios represent baselines in combination with a 20% reduction in water flow from upstream to downstream of ET basin with ensemble approach

S5. Impacts on GDP

Table S6. %Changes in the real GDP by country under the examined baseline scenarios

Country/Scenario	B-EOC1-E1	B-EOC1-E2	B-EOC1-S1	B-EOC1-S2	B-EOC2-E1	B-EOC2-E2	B-EOC2-S1	B-EOC2-S2
Iran	-1.26	-1.57	-1.06	-4.82	-1.59	-1.99	-1.31	-6.26
Iraq	-0.69	-1.39	-0.72	-2.43	-0.82	-1.69	-0.86	-2.92
Jordan	-0.41	-0.64	-0.42	-0.92	-0.54	-0.83	-0.54	-1.14
Lebanon	-0.34	-0.76	-0.34	-0.88	-0.45	-1.01	-0.46	-1.13
Saudi Arabia	-0.34	-0.54	-0.41	-0.62	-0.49	-0.77	-0.59	-0.88
Syria	-0.30	-2.02	-1.37	-2.89	-0.30	-2.44	-1.65	-3.47
Turkey	-0.60	-1.52	-0.93	-5.00	-0.74	-1.88	-1.15	-6.00
RME	-0.41	-0.63	-0.58	-0.86	-0.53	-0.81	-0.75	-1.10
Total	-0.57	-1.02	-0.71	-2.50	-0.72	-1.30	-0.90	-3.11

Table S7. Changes in the real GDP by country under the examined baseline scenarios
(billion USD)

Country/Scenario	B-EOC1-E1	B-EOC1-E2	B-EOC1-S1	B-EOC1-S2	B-EOC2-E1	B-EOC2-E2	B-EOC2-S1	B-EOC2-S2
Iran	-5.3	-6.6	-4.4	-20.2	-6.7	-8.3	-5.5	-26.2
Iraq	-1.2	-2.4	-1.2	-4.1	-1.4	-2.9	-1.5	-5.0
Jordan	-0.2	-0.2	-0.2	-0.4	-0.2	-0.3	-0.2	-0.4
Lebanon	-0.2	-0.4	-0.2	-0.5	-0.2	-0.5	-0.2	-0.6
Saudi Arabia	-2.2	-3.5	-2.7	-4.0	-3.2	-5.1	-3.8	-5.8
Syria	-0.1	-0.6	-0.4	-0.8	-0.1	-0.7	-0.5	-1.0
Turkey	-5.2	-13.2	-8.0	-43.2	-6.4	-16.2	-9.9	-51.8
RME	-4.4	-6.7	-6.2	-9.3	-5.8	-8.7	-8.1	-11.9
Total	-18.7	-33.6	-23.3	-82.5	-23.9	-42.8	-29.7	-102.7

Table S8. %Changes in the real GDP by country under 10% decrease in water use efficiency scenarios

Country/Scenario	W1-EOC1-E1	W1-EOC1-E2	W1-EOC1-S1	W1-EOC1-S2	W1-EOC2-E1	W1-EOC2-E2	W1-EOC2-S1	W1-EOC2-S2
Iran	-1.38	-1.69	-1.18	-4.95	-1.73	-2.13	-1.45	-6.41
Iraq	-1.74	-2.48	-1.77	-3.53	-2.14	-3.05	-2.18	-4.29
Jordan	-0.46	-0.69	-0.47	-0.97	-0.58	-0.88	-0.59	-1.19
Lebanon	-0.37	-0.79	-0.37	-0.91	-0.48	-1.04	-0.48	-1.16
Saudi Arabia	-0.35	-0.54	-0.41	-0.62	-0.50	-0.78	-0.59	-0.89
Syria	-1.55	-3.31	-2.64	-4.19	-1.86	-4.01	-3.21	-5.04
Turkey	-1.32	-2.29	-1.66	-5.89	-1.64	-2.81	-2.06	-7.03
RME	-0.42	-0.64	-0.59	-0.87	-0.54	-0.82	-0.76	-1.11
Total	-0.84	-1.30	-0.71	-2.50	-1.07	-1.65	-0.90	-3.11

Table S9. Changes in the real GDP by country under 10% decrease in water use efficiency scenarios (billion USD)

Country/Scenario	W1-EOC1-E1	W1-EOC1-E2	W1-EOC1-S1	W1-EOC1-S2	W1-EOC2-E1	W1-EOC2-E2	W1-EOC2-S1	W1-EOC2-S2
Iran	-5.8	-7.1	-4.9	-20.8	-7.2	-8.9	-6.1	-26.8
Iraq	-3.0	-4.2	-3.0	-6.0	-3.7	-5.2	-3.7	-7.3
Jordan	-0.2	-0.3	-0.2	-0.4	-0.2	-0.3	-0.2	-0.5
Lebanon	-0.2	-0.4	-0.2	-0.5	-0.3	-0.5	-0.3	-0.6
Saudi Arabia	-2.3	-3.5	-2.7	-4.1	-3.3	-5.1	-3.9	-5.8
Syria	-0.4	-0.9	-0.7	-1.2	-0.5	-1.1	-0.9	-1.4
Turkey	-11.4	-19.7	-14.4	-50.8	-14.2	-24.3	-17.8	-60.8
RME	-4.5	-6.9	-6.3	-9.4	-5.9	-8.9	-8.2	-12.0
Total	-27.8	-43.1	-32.4	-93.1	-35.2	-54.4	-41.1	-115.1

Table S10. %Changes in the real GDP by country under 10% increase in water use efficiency scenarios

Country/Scenario	W2-EOC1-E1	W2-EOC1-E2	W2-EOC1-S1	W2-EOC1-S2	W2-EOC2-E1	W2-EOC2-E2	W2-EOC2-S1	W2-EOC2-S2
Iran	-1.16	-1.46	-0.96	-4.70	-1.47	-1.86	-1.19	-6.12
Iraq	0.14	-0.47	0.11	-1.44	0.27	-0.52	0.24	-1.68
Jordan	-0.37	-0.60	-0.37	-0.87	-0.50	-0.79	-0.50	-1.10
Lebanon	-0.31	-0.73	-0.32	-0.85	-0.43	-0.99	-0.43	-1.10
Saudi Arabia	-0.34	-0.53	-0.40	-0.61	-0.49	-0.77	-0.58	-0.88
Syria	0.78	-0.86	-0.25	-1.70	1.06	-1.01	-0.25	-2.02
Turkey	0.03	-0.85	-0.28	-4.20	0.07	-1.04	-0.33	-5.06
RME	-0.40	-0.62	-0.57	-0.85	-0.53	-0.80	-0.75	-1.09
Total	-0.33	-0.76	-0.47	-2.21	-0.43	-0.98	-0.60	-2.77

Table S11. Changes in the real GDP by country under 10% increase in water use efficiency scenarios (billion USD)

Country/Scenario	W2-EOC1-E1	W2-EOC1-E2	W2-EOC1-S1	W2-EOC1-S2	W2-EOC2-E1	W2-EOC2-E2	W2-EOC2-S1	W2-EOC2-S2
Iran	-4.9	-6.1	-4.0	-19.7	-6.2	-7.8	-5.0	-25.7
Iraq	0.2	-0.8	0.2	-2.5	0.5	-0.9	0.4	-2.9
Jordan	-0.1	-0.2	-0.1	-0.3	-0.2	-0.3	-0.2	-0.4
Lebanon	-0.2	-0.4	-0.2	-0.4	-0.2	-0.5	-0.2	-0.6
Saudi Arabia	-2.2	-3.5	-2.6	-4.0	-3.2	-5.0	-3.8	-5.8
Syria	0.2	-0.2	-0.1	-0.5	0.3	-0.3	-0.1	-0.6
Turkey	0.3	-7.3	-2.4	-36.3	0.6	-9.0	-2.9	-43.7
RME	-4.3	-6.7	-6.1	-9.2	-5.7	-8.7	-8.0	-11.8
Total	-11.0	-25.2	-15.4	-72.9	-14.1	-32.4	-19.8	-91.3

Table S12. %Changes in the real GDP by country under 20% increase in water use efficiency scenarios

Country/Scenario	W3-EOC1-E1	W3-EOC1-E2	W3-EOC1-S1	W3-EOC1-S2	W3-EOC2-E1	W3-EOC2-E2	W3-EOC2-S1	W3-EOC2-S2
Iran	-1.07	-1.37	-0.88	-4.59	-1.36	-1.75	-1.09	-6.00
Iraq	0.76	0.27	0.73	-0.59	1.12	0.46	1.09	-0.60
Jordan	-0.34	-0.56	-0.34	-0.83	-0.47	-0.75	-0.47	-1.06
Lebanon	-0.29	-0.71	-0.30	-0.83	-0.41	-0.96	-0.41	-1.08
Saudi Arabia	-0.33	-0.52	-0.40	-0.61	-0.49	-0.77	-0.58	-0.87
Syria	1.64	0.16	0.72	-0.63	2.21	0.27	0.99	-0.70
Turkey	0.58	-0.24	0.28	-3.47	0.77	-0.28	0.39	-4.20
RME	-0.40	-0.61	-0.56	-0.84	-0.52	-0.80	-0.74	-1.09
Total	-0.14	-0.54	-0.26	-1.94	-0.17	-0.70	-0.34	-2.45

Table S13. Changes in the real GDP by country under 20% increase in water use efficiency scenarios (billion USD)

Country/Scenario	W3-EOC1-E1	W3-EOC1-E2	W3-EOC1-S1	W3-EOC1-S2	W3-EOC2-E1	W3-EOC2-E2	W3-EOC2-S1	W3-EOC2-S2
Iran	-4.5	-5.7	-4.5	-20.3	-5.7	-7.3	-5.6	-26.3
Iraq	1.3	0.5	-1.2	-4.2	1.9	0.8	-1.5	-5.0
Jordan	-0.1	-0.2	-0.2	-0.4	-0.2	-0.3	-0.2	-0.4
Lebanon	-0.2	-0.4	-0.2	-0.5	-0.2	-0.5	-0.2	-0.6
Saudi Arabia	-2.2	-3.4	-2.7	-4.0	-3.2	-5.0	-3.8	-5.8
Syria	0.5	0.0	-0.4	-0.8	0.6	0.1	-0.4	-1.0
Turkey	5.0	-2.1	-8.0	-43.2	6.7	-2.4	-9.9	-51.9
RME	-4.3	-6.6	-6.2	-9.3	-5.6	-8.6	-8.1	-11.8
Total	-4.5	-17.9	-23.3	-82.6	-5.7	-23.3	-29.8	-102.8

Table S14. %Changes in the real GDP by country under the agricultural and food tariff removal scenarios

Country/Scenario	T1-EOC1-E1	T1-EOC1-E2	T1-EOC1-S1	T1-EOC1-S2	T1-EOC2-E1	T1-EOC2-E2	T1-EOC2-S1	T1-EOC2-S2
Iran	-1.27	-1.59	-1.07	-4.84	-1.60	-2.00	-1.33	-6.28
Iraq	-0.69	-1.39	-0.72	-2.44	-0.82	-1.69	-0.86	-2.92
Jordan	-0.41	-0.64	-0.41	-0.92	-0.53	-0.83	-0.54	-1.14
Lebanon	-0.34	-0.76	-0.34	-0.88	-0.45	-1.01	-0.46	-1.13
Saudi Arabia	-0.34	-0.54	-0.41	-0.62	-0.49	-0.77	-0.59	-0.88
Syria	-0.25	-1.97	-1.33	-2.85	-0.26	-2.39	-1.60	-3.43
Turkey	-0.60	-1.52	-0.93	-5.01	-0.74	-1.88	-1.15	-6.01
RME	-0.41	-0.63	-0.58	-0.86	-0.53	-0.81	-0.75	-1.10
Total	-0.57	-1.02	-0.71	-2.50	-0.72	-1.30	-0.90	-3.11

Table S15. Changes in the real GDP by country under the agricultural and food tariff removal scenarios (billion USD)

Country/Scenario	T1-EOC1-E1	T1-EOC1-E2	T1-EOC1-S1	T1-EOC1-S2	T1-EOC2-E1	T1-EOC2-E2	T1-EOC2-S1	T1-EOC2-S2
Iran	-5.3	-6.6	-4.5	-20.3	-6.7	-8.4	-5.6	-26.3
Iraq	-1.2	-2.4	-1.2	-4.2	-1.4	-2.9	-1.5	-5.0
Jordan	-0.2	-0.2	-0.2	-0.4	-0.2	-0.3	-0.2	-0.4
Lebanon	-0.2	-0.4	-0.2	-0.5	-0.2	-0.5	-0.2	-0.6
Saudi Arabia	-2.2	-3.5	-2.7	-4.0	-3.2	-5.1	-3.8	-5.8
Syria	-0.1	-0.5	-0.4	-0.8	-0.1	-0.7	-0.4	-1.0
Turkey	-5.2	-13.2	-8.0	-43.2	-6.3	-16.2	-9.9	-51.9
RME	-4.4	-6.7	-6.2	-9.3	-5.7	-8.7	-8.1	-11.8
Total	-18.7	-33.6	-23.3	-82.6	-23.9	-42.8	-29.8	-102.8

Table S16. %Changes in the real GDP by country under the scenarios of 20% reduction in water flow of upstream

Country/Scenario	R1-EOC1-E1	R1-EOC1-E2	R1-EOC1-S1	R1-EOC1-S2	R1-EOC2-E1	R1-EOC2-E2	R1-EOC2-S1	R1-EOC2-S2
Iran	-1.33	-1.67	-1.13	-4.98	-1.68	-2.11	-1.39	-6.44
Iraq	-0.71	-2.66	-1.76	-3.94	-0.84	-3.29	-2.18	-4.81
Jordan	-0.42	-0.68	-0.45	-0.96	-0.55	-0.87	-0.57	-1.19
Lebanon	-0.35	-0.77	-0.36	-0.90	-0.46	-1.03	-0.47	-1.15
Saudi Arabia	-0.34	-0.54	-0.41	-0.62	-0.49	-0.78	-0.59	-0.88
Syria	-1.76	-4.01	-2.29	-5.30	-2.13	-4.87	-2.77	-6.39
Turkey	-0.60	-1.54	-0.94	-5.02	-0.74	-1.89	-1.16	-6.02
RME	-0.41	-0.63	-0.58	-0.87	-0.54	-0.82	-0.76	-1.11
Total	-0.59	-1.12	-0.78	-2.62	-0.75	-1.42	-0.99	-3.26

Table S17. Changes in the real GDP by country under the scenarios of 20% reduction in water flow of upstream (billion USD)

Country/Scenario	R1-EOC1-E1	R1-EOC1-E2	R1-EOC1-S1	R1-EOC1-S2	R1-EOC2-E1	R1-EOC2-E2	R1-EOC2-S1	R1-EOC2-S2
Iran	-5.6	-7.0	-4.7	-20.8	-7.0	-8.8	-5.8	-27.0
Iraq	-1.2	-4.5	-3.0	-6.7	-1.4	-5.6	-3.7	-8.2
Jordan	-0.2	-0.3	-0.2	-0.4	-0.2	-0.3	-0.2	-0.5
Lebanon	-0.2	-0.4	-0.2	-0.5	-0.2	-0.5	-0.2	-0.6
Saudi Arabia	-2.2	-3.5	-2.7	-4.1	-3.2	-5.1	-3.8	-5.8
Syria	-0.5	-1.1	-0.6	-1.5	-0.6	-1.4	-0.8	-1.8
Turkey	-5.2	-13.3	-8.1	-43.3	-6.4	-16.3	-10.0	-52.0
RME	-4.4	-6.8	-6.3	-9.3	-5.8	-8.8	-8.1	-11.9
Total	-19.5	-36.9	-25.7	-86.6	-24.9	-46.9	-32.8	-107.7

Table S18. %Changes in the real GDP by country under no collaboration and full collaboration scenarios

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	-1.84	-6.58	ET Countries	0.88	-2.88
Iraq	-3.60	-6.18	Jordan	-0.46	-1.13
Jordan	-0.62	-1.23	Lebanon	-0.39	-1.13
Lebanon	-0.50	-1.17	Saudi Arabia	-0.48	-0.90
Saudi Arabia	-0.50	-0.89	RME	-0.51	-1.11
Syria	-3.70	-7.90	Total	0.12	-1.86
Turkey	-1.65	-7.05			
RME	-0.55	-1.11			
Total	-1.18	-3.63			

Table S19. Changes in the real GDP by country under no collaboration and full collaboration scenarios (billion USD)

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	-7.71	-27.55	ET Countries	13.03	-42.70
Iraq	-6.14	-10.53	Jordan	-0.18	-0.44
Jordan	-0.24	-0.48	Lebanon	-0.20	-0.58
Lebanon	-0.26	-0.60	Saudi Arabia	-3.14	-5.91
Saudi Arabia	-3.27	-5.80	RME	-5.49	-11.91
Syria	-1.03	-2.20	Total	4.02	-62.28
Turkey	-14.25	-60.86			
RME	-5.92	-11.99			
Total	-38.82	-120.01			

S6. Impact on sectoral outputs

Table S20. Percent changes in sectoral outputs under baseline ensemble scenarios

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
B-EOC1-E1	Iran	-3.1	-2.4	-1.8	-0.4	-1.4	-1.4
	Iraq	-6.3	-0.7	-1.5	-0.3	-1.0	-0.9
	Jordan	-1.1	-1.0	-0.2	-0.4	-0.4	-0.4
	Lebanon	-1.7	-0.4	-0.2	-0.3	-0.4	-0.3
	Saudi Arabia	-3.7	-0.5	-0.7	-0.3	-0.8	-0.5
	Syria	-1.0	-0.2	-0.5	0.2	0.0	-0.2
	Turkey	-3.3	-1.0	-0.8	-0.5	-0.4	-0.6
	RME	-2.1	-0.2	-0.6	-0.1	-0.5	-0.6
B-EOC1-E2	Iran	-3.5	-2.9	-2.1	-0.5	-1.7	-1.8
	Iraq	-11.0	-2.5	-2.9	-0.7	-2.2	-1.8
	Jordan	-1.2	-1.8	-0.3	-0.6	-0.7	-0.7
	Lebanon	-3.7	-1.0	-0.7	-0.7	-0.9	-0.7
	Saudi Arabia	-4.5	-0.8	-1.0	-0.5	-1.2	-0.8
	Syria	-6.3	-2.1	-3.2	0.3	-0.1	-1.6
	Turkey	-7.5	-2.6	-1.9	-1.3	-1.1	-1.4
	RME	-2.4	-0.3	-0.8	-0.2	-0.7	-0.9
B-EOC2-E1	Iran	-3.1	-2.6	-2.0	-0.6	-1.8	-1.9
	Iraq	-6.3	-0.8	-1.6	-0.4	-1.3	-1.0
	Jordan	-1.1	-0.9	-0.3	-0.5	-0.6	-0.6
	Lebanon	-1.7	-0.5	-0.3	-0.5	-0.5	-0.4
	Saudi Arabia	-3.7	-0.8	-0.8	-0.4	-1.2	-0.7
	Syria	-1.0	-0.2	-0.5	0.2	0.0	-0.2
	Turkey	-3.3	-1.1	-0.9	-0.6	-0.5	-0.7
	RME	-2.1	-0.2	-0.7	-0.2	-0.7	-0.7
B-EOC2-E2	Iran	-3.5	-4.1	-3.1	-2.8	-2.7	-2.4
	Iraq	-11.0	-5.0	-4.0	-3.2	-4.8	-4.6
	Jordan	-1.2	-1.3	-1.3	-0.9	-1.0	-0.3
	Lebanon	-3.6	-3.1	-1.2	-1.8	-1.4	-1.3
	Saudi Arabia	-4.6	-2.9	-3.0	-1.6	-1.7	-2.3
	Syria	-6.3	-5.0	-3.8	-4.2	-3.4	-4.3
	Turkey	-7.5	-4.7	-3.1	-3.5	-3.7	-3.0
	RME	-2.4	-0.5	0.0	-0.4	-0.9	-0.8

Table S21. Percent changes in sectoral outputs under baseline selected model scenarios

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
B-EOC1-S1	Iran	-2.8	-2.1	-1.6	-0.3	-1.1	-1.2
	Iraq	-6.4	-0.8	-1.5	-0.3	-1.1	-0.9
	Jordan	-0.9	-1.1	-0.2	-0.4	-0.5	-0.4
	Lebanon	-1.6	-0.5	-0.2	-0.3	-0.4	-0.3
	Saudi Arabia	-4.0	-0.6	-0.8	-0.3	-0.9	-0.6
	Syria	-4.4	-1.3	-2.1	0.3	0.1	-1.1
	Turkey	-4.8	-1.5	-1.2	-0.8	-0.7	-0.9
	RME	-2.2	-0.3	-0.7	-0.2	-0.7	-0.8
B-EOC1-S2	Iran	-8.1	-7.2	-5.4	-0.7	-5.3	-5.8
	Iraq	-16.2	-4.4	-5.0	-1.3	-3.9	-3.2
	Jordan	-0.9	-3.2	-0.3	-0.8	-1.2	-0.9
	Lebanon	-3.6	-1.3	-0.7	-0.9	-1.3	-0.8
	Saudi Arabia	-4.4	-0.9	-1.3	-0.5	-1.5	-1.0
	Syria	-8.6	-3.2	-4.9	0.4	-0.6	-2.3
	Turkey	-20.0	-7.4	-6.0	-4.3	-3.9	-4.8
	RME	-2.4	-0.4	-1.2	-0.2	-1.0	-1.2
B-EOC2-S1	Iran	-2.8	-2.3	-1.7	-0.5	-1.5	-1.5
	Iraq	-6.4	-0.9	-1.7	-0.5	-1.3	-1.0
	Jordan	-0.9	-1.1	-0.3	-0.5	-0.6	-0.6
	Lebanon	-1.6	-0.5	-0.3	-0.5	-0.5	-0.4
	Saudi Arabia	-4.0	-1.0	-1.0	-0.5	-1.4	-0.9
	Syria	-4.4	-1.5	-2.2	0.1	-0.3	-1.4
	Turkey	-4.8	-1.7	-1.3	-0.9	-0.8	-1.1
	RME	-2.2	-0.3	-0.8	-0.3	-1.0	-1.0
B-EOC2-S2	Iran	-8.0	-9.3	-7.9	-7.4	-7.0	-6.3
	Iraq	-16.2	-8.2	-7.0	-5.7	-8.0	-7.6
	Jordan	-0.9	-1.4	-2.2	-1.2	-1.5	-0.1
	Lebanon	-3.6	-3.2	-1.4	-2.1	-1.7	-1.4
	Saudi Arabia	-4.5	-3.0	-3.8	-1.9	-2.0	-2.9
	Syria	-8.5	-6.7	-5.7	-5.8	-4.6	-6.0
	Turkey	-19.9	-14.1	-10.2	-10.0	-10.5	-8.8
	RME	-2.4	-0.5	-0.2	-0.9	-1.4	-1.1

Table S22. Percent changes in sectoral outputs under 10% decrease in water use efficiency scenarios

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
W1-EOC1-E1	Iran	-3.2	-2.7	-1.9	-0.4	-1.5	-1.6
	Iraq	-13.7	-3.3	-3.6	-0.9	-2.8	-2.2
	Jordan	-0.6	-1.6	-0.2	-0.4	-0.6	-0.5
	Lebanon	-1.7	-0.5	-0.2	-0.4	-0.5	-0.3
	Saudi Arabia	-3.6	-0.5	-0.7	-0.3	-0.8	-0.5
	Syria	-4.9	-1.6	-2.5	0.3	-0.1	-1.2
	Turkey	-6.4	-2.2	-1.6	-1.1	-1.0	-1.2
	RME	-2.0	-0.3	-0.6	-0.1	-0.5	-0.6
W1-EOC1-E2	Iran	-3.6	-3.3	-2.3	-0.5	-1.9	-2.0
	Iraq	-18.0	-4.6	-5.1	-1.3	-3.9	-3.1
	Jordan	-0.8	-2.3	-0.3	-0.6	-0.9	-0.7
	Lebanon	-3.6	-1.0	-0.7	-0.8	-1.0	-0.7
	Saudi Arabia	-4.4	-0.8	-1.1	-0.5	-1.2	-0.8
	Syria	-10.0	-3.4	-5.1	0.5	-0.3	-2.6
	Turkey	-10.4	-3.7	-2.8	-2.0	-1.7	-2.2
	RME	-2.4	-0.3	-0.9	-0.2	-0.7	-0.9
W1-EOC2-E1	Iran	-3.2	-2.9	-2.1	-0.6	-2.0	-2.0
	Iraq	-13.7	-3.6	-4.1	-1.4	-3.4	-2.6
	Jordan	-0.6	-1.5	-0.3	-0.6	-0.7	-0.6
	Lebanon	-1.6	-0.6	-0.3	-0.5	-0.6	-0.4
	Saudi Arabia	-3.6	-0.8	-0.9	-0.4	-1.2	-0.8
	Syria	-4.9	-1.8	-2.6	0.0	-0.5	-1.6
	Turkey	-6.3	-2.4	-1.8	-1.4	-1.2	-1.6
	RME	-2.0	-0.3	-0.7	-0.2	-0.7	-0.7
W1-EOC2-E2	Iran	-3.6	-4.4	-3.3	-3.1	-2.9	-2.5
	Iraq	-18.1	-9.4	-8.1	-6.4	-9.7	-9.1
	Jordan	-0.8	-1.3	-1.6	-1.0	-1.2	-0.1
	Lebanon	-3.6	-3.1	-1.3	-1.9	-1.5	-1.3
	Saudi Arabia	-4.5	-2.9	-3.1	-1.6	-1.7	-2.4
	Syria	-10.0	-7.4	-6.4	-6.6	-5.3	-6.6
	Turkey	-10.3	-6.9	-4.8	-5.0	-5.3	-4.3
	RME	-2.4	-0.5	0.0	-0.5	-0.9	-0.8

Table S23. Percent changes in sectoral outputs under 10% decrease in water use efficiency scenarios

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
W1-EOC1-S1	Iran	-2.9	-2.4	-1.7	-0.3	-1.3	-1.3
	Iraq	-13.8	-3.4	-3.7	-0.9	-2.8	-2.2
	Jordan	-0.4	-1.7	-0.2	-0.4	-0.6	-0.5
	Lebanon	-1.6	-0.5	-0.2	-0.4	-0.5	-0.3
	Saudi Arabia	-3.9	-0.6	-0.8	-0.3	-0.9	-0.6
	Syria	-8.1	-2.7	-4.1	0.4	-0.1	-2.1
	Turkey	-7.7	-2.7	-2.0	-1.4	-1.2	-1.6
	RME	-2.1	-0.3	-0.7	-0.2	-0.7	-0.8
W1-EOC1-S2	Iran	-8.2	-7.5	-5.5	-0.7	-5.4	-5.9
	Iraq	-22.4	-6.2	-7.2	-1.9	-5.6	-4.5
	Jordan	-0.6	-3.6	-0.2	-0.9	-1.3	-1.0
	Lebanon	-3.6	-1.3	-0.7	-0.9	-1.3	-0.8
	Saudi Arabia	-4.3	-0.8	-1.3	-0.5	-1.5	-1.0
	Syria	-12.2	-4.4	-6.7	0.5	-0.8	-3.4
	Turkey	-22.2	-8.4	-7.0	-5.0	-4.7	-5.6
	RME	-2.3	-0.4	-1.2	-0.2	-1.0	-1.2
W1-EOC2-S1	Iran	-2.8	-2.6	-1.9	-0.5	-1.7	-1.7
	Iraq	-13.8	-3.7	-4.1	-1.4	-3.5	-2.7
	Jordan	-0.4	-1.6	-0.3	-0.6	-0.7	-0.6
	Lebanon	-1.6	-0.6	-0.3	-0.5	-0.6	-0.4
	Saudi Arabia	-3.9	-0.9	-1.0	-0.5	-1.4	-0.9
	Syria	-8.1	-3.1	-4.2	-0.1	-0.9	-2.8
	Turkey	-7.7	-2.9	-2.3	-1.7	-1.6	-2.0
	RME	-2.1	-0.3	-0.9	-0.3	-1.0	-1.0
W1-EOC2-S2	Iran	-8.1	-9.6	-8.1	-7.7	-7.2	-6.4
	Iraq	-22.6	-12.3	-10.8	-8.7	-12.4	-11.7
	Jordan	-0.6	-1.5	-2.4	-1.2	-1.6	0.1
	Lebanon	-3.6	-3.3	-1.5	-2.1	-1.7	-1.4
	Saudi Arabia	-4.4	-3.0	-3.9	-1.9	-2.0	-3.0
	Syria	-12.2	-9.1	-8.2	-8.1	-6.4	-8.2
	Turkey	-22.1	-15.9	-11.6	-11.3	-11.9	-10.0
	RME	-2.3	-0.5	-0.2	-1.0	-1.4	-1.1

Table S24. Percent changes in sectoral outputs under 10% increase in water use efficiency scenarios

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
W2-EOC1-E1	Iran	-3.0	-2.1	-1.7	-0.4	-1.2	-1.3
	Iraq	-0.5	1.8	0.1	0.2	0.4	0.2
	Jordan	-1.7	-0.6	-0.3	-0.4	-0.3	-0.4
	Lebanon	-1.7	-0.3	-0.2	-0.3	-0.3	-0.3
	Saudi Arabia	-3.8	-0.6	-0.6	-0.3	-0.8	-0.5
	Syria	2.2	1.2	1.3	0.1	0.2	0.7
	Turkey	-0.4	0.2	0.0	0.0	0.0	0.0
	RME	-2.2	-0.2	-0.6	-0.1	-0.5	-0.5
W2-EOC1-E2	Iran	-3.4	-2.7	-2.0	-0.4	-1.6	-1.7
	Iraq	-4.3	0.1	-1.0	-0.2	-0.7	-0.6
	Jordan	-1.7	-1.3	-0.4	-0.6	-0.6	-0.6
	Lebanon	-3.7	-0.9	-0.7	-0.7	-0.8	-0.6
	Saudi Arabia	-4.6	-0.8	-1.0	-0.5	-1.2	-0.8
	Syria	-2.8	-0.8	-1.4	0.2	0.0	-0.6
	Turkey	-4.7	-1.5	-1.1	-0.7	-0.6	-0.8
	RME	-2.5	-0.3	-0.8	-0.2	-0.7	-0.8
W2-EOC2-E1	Iran	-3.0	-2.3	-1.9	-0.5	-1.6	-1.7
	Iraq	-0.4	1.9	0.3	0.4	0.6	0.3
	Jordan	-1.6	-0.5	-0.4	-0.5	-0.5	-0.5
	Lebanon	-1.7	-0.4	-0.3	-0.4	-0.4	-0.4
	Saudi Arabia	-3.8	-0.8	-0.8	-0.4	-1.2	-0.7
	Syria	2.2	1.3	1.4	0.4	0.5	1.1
	Turkey	-0.4	0.2	0.0	0.1	0.1	0.1
	RME	-2.2	-0.2	-0.6	-0.2	-0.7	-0.7
W2-EOC2-E2	Iran	-3.4	-3.9	-2.9	-2.6	-2.6	-2.3
	Iraq	-4.3	-0.9	-0.4	-0.4	-0.6	-0.6
	Jordan	-1.6	-1.4	-1.1	-0.9	-0.9	-0.4
	Lebanon	-3.7	-3.0	-1.2	-1.8	-1.4	-1.3
	Saudi Arabia	-4.7	-2.9	-2.9	-1.5	-1.7	-2.2
	Syria	-2.8	-2.6	-1.2	-1.9	-1.6	-2.1
	Turkey	-4.7	-2.7	-1.5	-2.1	-2.3	-1.8
	RME	-2.5	-0.5	0.0	-0.4	-0.8	-0.8

Table S25. Percent changes in sectoral outputs under 10% increase in water use efficiency scenarios

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
W2-EOC1-S1	Iran	-2.7	-1.8	-1.5	-0.3	-1.0	-1.1
	Iraq	-0.4	1.7	0.1	0.2	0.3	0.1
	Jordan	-1.4	-0.7	-0.3	-0.4	-0.3	-0.4
	Lebanon	-1.7	-0.4	-0.2	-0.3	-0.3	-0.3
	Saudi Arabia	-4.1	-0.7	-0.7	-0.3	-0.9	-0.6
	Syria	-1.0	0.0	-0.3	0.2	0.2	-0.1
	Turkey	-1.9	-0.4	-0.4	-0.2	-0.2	-0.3
	RME	-2.3	-0.2	-0.7	-0.2	-0.7	-0.8
W2-EOC1-S2	Iran	-8.0	-6.9	-5.3	-0.7	-5.1	-5.6
	Iraq	-9.7	-2.5	-3.0	-0.7	-2.4	-1.9
	Jordan	-1.1	-2.7	-0.3	-0.8	-1.0	-0.9
	Lebanon	-3.6	-1.2	-0.7	-0.9	-1.2	-0.7
	Saudi Arabia	-4.5	-0.9	-1.3	-0.5	-1.5	-0.9
	Syria	-5.0	-1.9	-3.1	0.3	-0.4	-1.3
	Turkey	-17.7	-6.4	-5.2	-3.6	-3.2	-4.0
	RME	-2.4	-0.4	-1.1	-0.2	-1.0	-1.2
W2-EOC2-S1	Iran	-2.7	-2.0	-1.6	-0.4	-1.3	-1.4
	Iraq	-0.3	1.8	0.3	0.3	0.5	0.3
	Jordan	-1.4	-0.7	-0.4	-0.5	-0.5	-0.5
	Lebanon	-1.7	-0.5	-0.3	-0.4	-0.5	-0.4
	Saudi Arabia	-4.1	-1.0	-1.0	-0.5	-1.4	-0.9
	Syria	-1.0	0.0	-0.3	0.2	0.2	-0.1
	Turkey	-1.9	-0.4	-0.4	-0.3	-0.2	-0.3
	RME	-2.3	-0.2	-0.8	-0.3	-1.0	-1.0
W2-EOC2-S2	Iran	-8.0	-9.1	-7.7	-7.2	-6.8	-6.2
	Iraq	-9.7	-4.1	-3.2	-2.8	-3.5	-3.5
	Jordan	-1.1	-1.3	-1.9	-1.2	-1.4	-0.2
	Lebanon	-3.6	-3.2	-1.4	-2.0	-1.6	-1.4
	Saudi Arabia	-4.6	-3.0	-3.7	-1.9	-2.0	-2.9
	Syria	-5.0	-4.3	-3.2	-3.6	-2.8	-3.9
	Turkey	-17.6	-12.3	-8.8	-8.7	-9.2	-7.6
	RME	-2.5	-0.5	-0.2	-0.9	-1.3	-1.2

Table S26. Percent changes in sectoral outputs under 20% increase in water use efficiency scenarios

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
W3-EOC1-E1	Iran	-2.9	-1.9	-1.6	-0.3	-1.1	-1.2
	Iraq	2.3	2.0	1.2	0.7	1.4	0.9
	Jordan	-2.0	-0.3	-0.3	-0.4	-0.3	-0.4
	Lebanon	-1.8	-0.3	-0.2	-0.3	-0.2	-0.3
	Saudi Arabia	-3.8	-0.6	-0.6	-0.3	-0.8	-0.5
	Syria	4.3	2.1	2.5	0.2	0.4	1.5
	Turkey	2.4	1.4	0.7	0.5	0.4	0.5
	RME	-2.3	-0.2	-0.5	-0.1	-0.5	-0.5
W3-EOC1-E2	Iran	-3.3	-2.4	-1.9	-0.4	-1.5	-1.6
	Iraq	0.8	1.9	0.4	0.3	0.6	0.3
	Jordan	-2.1	-0.9	-0.4	-0.6	-0.5	-0.6
	Lebanon	-3.8	-0.8	-0.7	-0.7	-0.7	-0.6
	Saudi Arabia	-4.7	-0.9	-0.9	-0.5	-1.2	-0.8
	Syria	0.4	0.4	0.3	0.1	0.1	0.2
	Turkey	-1.9	-0.4	-0.4	-0.2	-0.1	-0.2
	RME	-2.6	-0.3	-0.8	-0.2	-0.7	-0.8
W3-EOC2-E1	Iran	-2.9	-2.1	-1.8	-0.5	-1.5	-1.6
	Iraq	2.4	1.7	1.6	1.1	2.0	1.3
	Jordan	-1.9	-0.3	-0.4	-0.5	-0.4	-0.5
	Lebanon	-1.7	-0.4	-0.3	-0.4	-0.4	-0.4
	Saudi Arabia	-3.8	-0.8	-0.8	-0.4	-1.2	-0.7
	Syria	4.6	2.5	2.8	0.6	1.1	2.2
	Turkey	2.3	1.5	0.8	0.6	0.6	0.7
	RME	-2.2	-0.2	-0.6	-0.2	-0.7	-0.7
W3-EOC2-E2	Iran	-3.3	-3.7	-2.7	-2.4	-2.4	-2.2
	Iraq	0.8	2.0	1.9	1.5	2.4	2.3
	Jordan	-2.0	-1.7	-0.9	-0.9	-0.8	-0.5
	Lebanon	-3.7	-3.0	-1.2	-1.7	-1.3	-1.2
	Saudi Arabia	-4.7	-3.0	-2.7	-1.5	-1.7	-2.1
	Syria	0.4	-0.4	1.2	0.2	0.1	0.1
	Turkey	-1.9	-0.6	0.2	-0.6	-0.8	-0.6
	RME	-2.6	-0.5	0.0	-0.3	-0.7	-0.8

Table S27. Percent changes in sectoral outputs under 20% increase in water use efficiency scenarios

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
W3-EOC1-S1	Iran	-2.6	-1.6	-1.4	-0.3	-0.9	-1.0
	Iraq	2.3	1.9	1.1	0.7	1.4	0.9
	Jordan	-1.9	-0.4	-0.3	-0.4	-0.3	-0.4
	Lebanon	-1.7	-0.3	-0.2	-0.3	-0.3	-0.3
	Saudi Arabia	-4.1	-0.7	-0.7	-0.3	-0.9	-0.6
	Syria	1.9	1.1	1.2	0.2	0.3	0.7
	Turkey	0.9	0.8	0.3	0.3	0.2	0.3
	RME	-2.4	-0.2	-0.7	-0.1	-0.7	-0.8
W3-EOC1-S2	Iran	-7.9	-6.7	-5.2	-0.8	-5.0	-5.5
	Iraq	-3.4	-0.1	-1.2	-0.2	-0.9	-0.8
	Jordan	-1.4	-2.3	-0.4	-0.8	-0.9	-0.9
	Lebanon	-3.7	-1.1	-0.7	-0.8	-1.1	-0.7
	Saudi Arabia	-4.6	-0.9	-1.2	-0.5	-1.5	-0.9
	Syria	-1.6	-0.7	-1.4	0.1	-0.4	-0.5
	Turkey	-15.5	-5.5	-4.4	-3.0	-2.6	-3.3
	RME	-2.5	-0.4	-1.1	-0.2	-1.0	-1.2
W3-EOC2-S1	Iran	-2.6	-1.8	-1.5	-0.4	-1.2	-1.2
	Iraq	2.4	1.6	1.6	1.1	2.0	1.3
	Jordan	-1.8	-0.4	-0.4	-0.5	-0.4	-0.5
	Lebanon	-1.7	-0.4	-0.3	-0.4	-0.4	-0.4
	Saudi Arabia	-4.1	-1.0	-0.9	-0.5	-1.4	-0.9
	Syria	2.0	1.3	1.4	0.4	0.6	1.0
	Turkey	0.8	0.8	0.4	0.3	0.3	0.4
	RME	-2.4	-0.2	-0.8	-0.3	-1.0	-1.0
W3-EOC2-S2	Iran	-7.9	-8.9	-7.6	-7.0	-6.7	-6.2
	Iraq	-3.5	-0.3	0.1	-0.2	0.5	0.2
	Jordan	-1.4	-1.4	-1.7	-1.1	-1.3	-0.4
	Lebanon	-3.6	-3.1	-1.4	-1.9	-1.5	-1.4
	Saudi Arabia	-4.7	-3.1	-3.6	-1.9	-2.0	-2.8
	Syria	-1.6	-2.1	-0.7	-1.4	-1.0	-1.7
	Turkey	-15.4	-10.6	-7.5	-7.5	-7.9	-6.5
	RME	-2.5	-0.5	-0.2	-0.8	-1.2	-1.2

Table S28. Percent changes in sectoral outputs under agricultural and food tariff removal ensemble scenarios

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
T1-EOC1-E1	Iran	-3.1	-2.5	-1.9	-0.4	-1.3	-1.4
	Iraq	-6.3	-0.7	-1.4	-0.3	-1.0	-0.9
	Jordan	-1.1	-1.0	-0.2	-0.4	-0.4	-0.4
	Lebanon	-1.7	-0.4	-0.3	-0.3	-0.4	-0.3
	Saudi Arabia	-3.7	-0.5	-0.7	-0.3	-0.8	-0.5
	Syria	-1.0	-0.1	-0.7	0.2	0.1	-0.1
	Turkey	-3.3	-1.1	-0.7	-0.5	-0.5	-0.6
	RME	-2.2	-0.2	-0.6	-0.1	-0.5	-0.6
T1-EOC1-E2	Iran	-3.5	-3.1	-2.2	-0.4	-1.7	-1.8
	Iraq	-11.0	-2.5	-2.8	-0.7	-2.2	-1.8
	Jordan	-1.2	-1.8	-0.3	-0.6	-0.7	-0.7
	Lebanon	-3.7	-1.0	-0.7	-0.7	-0.9	-0.7
	Saudi Arabia	-4.5	-0.8	-1.0	-0.5	-1.2	-0.8
	Syria	-6.3	-2.1	-3.4	0.4	0.0	-1.6
	Turkey	-7.5	-2.7	-1.8	-1.3	-1.1	-1.4
	RME	-2.5	-0.3	-0.8	-0.2	-0.7	-0.9
T1-EOC2-E1	Iran	-3.1	-2.7	-2.1	-0.6	-1.8	-1.9
	Iraq	-6.3	-0.8	-1.5	-0.4	-1.3	-1.0
	Jordan	-1.1	-0.9	-0.3	-0.5	-0.6	-0.6
	Lebanon	-1.7	-0.5	-0.4	-0.5	-0.5	-0.4
	Saudi Arabia	-3.7	-0.8	-0.8	-0.4	-1.2	-0.7
	Syria	-1.0	-0.1	-0.6	0.2	0.1	-0.2
	Turkey	-3.3	-1.2	-0.7	-0.6	-0.6	-0.7
	RME	-2.2	-0.2	-0.7	-0.2	-0.7	-0.7
T1-EOC2-E2	Iran	-3.5	-4.1	-3.2	-2.9	-2.8	-2.4
	Iraq	-11.0	-5.0	-4.0	-3.2	-4.7	-4.5
	Jordan	-1.2	-1.4	-1.3	-0.9	-1.0	-0.3
	Lebanon	-3.6	-3.1	-1.2	-1.8	-1.5	-1.3
	Saudi Arabia	-4.6	-2.9	-3.0	-1.6	-1.7	-2.3
	Syria	-6.3	-5.0	-3.9	-4.2	-3.4	-4.6
	Turkey	-7.5	-4.8	-3.2	-3.6	-3.8	-2.9
	RME	-2.5	-0.5	0.1	-0.4	-0.8	-0.8

Table S29. Percent changes in sectoral outputs under agricultural and food tariff removal
selected model scenarios

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
T1-EOC1-S1	Iran	-2.7	-2.2	-1.7	-0.3	-1.1	-1.2
	Iraq	-6.4	-0.8	-1.4	-0.3	-1.1	-0.9
	Jordan	-0.9	-1.1	-0.2	-0.4	-0.5	-0.4
	Lebanon	-1.7	-0.4	-0.3	-0.3	-0.4	-0.3
	Saudi Arabia	-4.0	-0.6	-0.8	-0.3	-0.9	-0.6
	Syria	-4.4	-1.3	-2.3	0.3	0.2	-1.0
	Turkey	-4.8	-1.7	-1.1	-0.8	-0.7	-0.9
	RME	-2.3	-0.2	-0.7	-0.2	-0.7	-0.8
T1-EOC1-S2	Iran	-8.0	-7.3	-5.5	-0.7	-5.3	-5.8
	Iraq	-16.1	-4.3	-5.0	-1.3	-4.0	-3.2
	Jordan	-0.9	-3.2	-0.2	-0.8	-1.2	-0.9
	Lebanon	-3.6	-1.2	-0.7	-0.9	-1.3	-0.8
	Saudi Arabia	-4.4	-0.9	-1.3	-0.5	-1.5	-1.0
	Syria	-8.6	-3.2	-5.1	0.4	-0.5	-2.3
	Turkey	-20.0	-7.5	-5.9	-4.3	-3.9	-4.8
	RME	-2.4	-0.4	-1.1	-0.2	-1.0	-1.2
T1-EOC2-S1	Iran	-2.7	-2.4	-1.8	-0.5	-1.4	-1.5
	Iraq	-6.4	-0.9	-1.6	-0.5	-1.3	-1.1
	Jordan	-0.9	-1.0	-0.3	-0.5	-0.6	-0.6
	Lebanon	-1.6	-0.5	-0.4	-0.5	-0.5	-0.4
	Saudi Arabia	-4.0	-1.0	-1.0	-0.5	-1.4	-0.9
	Syria	-4.4	-1.5	-2.4	0.1	-0.2	-1.4
	Turkey	-4.8	-1.8	-1.2	-0.9	-0.9	-1.1
	RME	-2.3	-0.2	-0.8	-0.3	-1.0	-1.0
T1-EOC2-S2	Iran	-8.0	-9.4	-8.0	-7.5	-7.1	-6.4
	Iraq	-16.2	-8.1	-7.0	-5.7	-7.9	-7.5
	Jordan	-0.9	-1.4	-2.2	-1.2	-1.5	-0.1
	Lebanon	-3.6	-3.2	-1.4	-2.1	-1.7	-1.4
	Saudi Arabia	-4.5	-3.0	-3.8	-1.9	-2.0	-2.9
	Syria	-8.6	-6.7	-5.8	-5.8	-4.6	-6.3
	Turkey	-19.9	-14.1	-10.3	-10.1	-10.5	-8.7
	RME	-2.4	-0.5	-0.2	-0.9	-1.3	-1.1

Table S30. Percent changes in sectoral outputs under agricultural and overall tariff removal ensemble scenarios

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
T2-EOC1-E1	Iran	-3.1	-2.6	-1.9	-0.4	-2.1	-1.3
	Iraq	-6.3	-0.7	-1.4	-0.2	-0.5	-0.9
	Jordan	-1.1	-1.0	-0.2	-0.4	-0.4	-0.4
	Lebanon	-1.7	-0.4	-0.3	-0.3	-0.4	-0.3
	Saudi Arabia	-3.7	-0.5	-0.7	-0.3	-0.8	-0.5
	Syria	-0.9	-0.2	-0.5	0.0	0.3	-0.1
	Turkey	-3.4	-0.8	-0.6	0.2	0.6	-0.3
	RME	-2.2	-0.2	-0.6	-0.1	-0.6	-0.6
T2-EOC1-E2	Iran	-3.0	-2.8	-2.1	-0.6	-2.6	-1.7
	Iraq	-6.3	-0.8	-1.5	-0.4	-0.8	-1.0
	Jordan	-1.1	-0.9	-0.3	-0.5	-0.6	-0.6
	Lebanon	-1.7	-0.5	-0.4	-0.5	-0.5	-0.4
	Saudi Arabia	-3.7	-0.8	-0.8	-0.4	-1.2	-0.7
	Syria	-0.9	-0.2	-0.5	0.0	0.3	-0.1
	Turkey	-3.4	-0.9	-0.6	0.1	0.5	-0.4
	RME	-2.2	-0.2	-0.6	-0.2	-0.8	-0.7
T2-EOC2-E1	Iran	-3.4	-3.2	-2.2	-0.5	-2.5	-1.7
	Iraq	-11.0	-2.5	-2.8	-0.6	-1.7	-1.8
	Jordan	-1.2	-1.8	-0.3	-0.6	-0.7	-0.7
	Lebanon	-3.7	-1.0	-0.7	-0.8	-0.9	-0.7
	Saudi Arabia	-4.5	-0.8	-1.0	-0.5	-1.3	-0.8
	Syria	-6.2	-2.1	-3.3	0.2	0.2	-1.5
	Turkey	-7.6	-2.4	-1.7	-0.6	0.0	-1.2
	RME	-2.5	-0.3	-0.8	-0.1	-0.8	-0.9
T2-EOC2-E2	Iran	-3.4	-4.2	-3.2	-3.1	-2.9	-2.4
	Iraq	-11.0	-4.9	-3.9	-3.2	-4.7	-4.5
	Jordan	-1.2	-1.4	-1.3	-1.0	-1.0	-0.3
	Lebanon	-3.6	-3.1	-1.2	-1.8	-1.5	-1.3
	Saudi Arabia	-4.6	-2.9	-3.0	-1.6	-1.7	-2.3
	Syria	-6.2	-5.0	-3.9	-4.3	-3.4	-4.6
	Turkey	-7.6	-4.7	-3.1	-3.5	-3.7	-2.9
	RME	-2.5	-0.5	0.1	-0.4	-0.8	-0.8

Table S31. Percent changes in sectoral outputs under agricultural and overall tariff removal
selected model scenarios

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
T2-EOC1-S1	Iran	-2.7	-2.4	-1.7	-0.3	-1.9	-1.1
	Iraq	-6.4	-0.8	-1.4	-0.2	-0.6	-0.9
	Jordan	-0.9	-1.1	-0.2	-0.4	-0.5	-0.4
	Lebanon	-1.6	-0.5	-0.3	-0.3	-0.5	-0.3
	Saudi Arabia	-4.0	-0.6	-0.8	-0.3	-1.0	-0.6
	Syria	-4.3	-1.4	-2.2	0.1	0.4	-1.0
	Turkey	-4.9	-1.4	-1.0	-0.1	0.4	-0.6
	RME	-2.3	-0.2	-0.7	-0.1	-0.8	-0.8
T2-EOC1-S2	Iran	-8.0	-7.4	-5.5	-0.9	-6.1	-5.6
	Iraq	-16.1	-4.3	-4.9	-1.2	-3.4	-3.2
	Jordan	-0.9	-3.2	-0.2	-0.8	-1.2	-0.9
	Lebanon	-3.6	-1.3	-0.7	-0.9	-1.3	-0.8
	Saudi Arabia	-4.4	-0.9	-1.3	-0.5	-1.5	-1.0
	Syria	-8.5	-3.2	-5.0	0.3	-0.3	-2.2
	Turkey	-20.0	-7.2	-5.8	-3.6	-2.9	-4.5
	RME	-2.4	-0.4	-1.1	-0.2	-1.1	-1.2
T2-EOC2-S1	Iran	-2.7	-2.5	-1.8	-0.5	-2.3	-1.4
	Iraq	-6.4	-0.9	-1.6	-0.4	-0.8	-1.0
	Jordan	-0.9	-1.1	-0.3	-0.5	-0.6	-0.6
	Lebanon	-1.6	-0.5	-0.4	-0.5	-0.6	-0.4
	Saudi Arabia	-4.0	-1.0	-1.0	-0.5	-1.4	-0.9
	Syria	-4.3	-1.5	-2.3	-0.1	0.0	-1.3
	Turkey	-4.8	-1.5	-1.1	-0.2	0.2	-0.8
	RME	-2.3	-0.2	-0.8	-0.2	-1.1	-1.0
T2-EOC2-S2	Iran	-8.0	-9.4	-8.1	-7.7	-7.2	-6.3
	Iraq	-16.2	-8.1	-6.9	-5.7	-7.9	-7.5
	Jordan	-0.9	-1.5	-2.2	-1.2	-1.5	-0.1
	Lebanon	-3.6	-3.2	-1.5	-2.1	-1.7	-1.4
	Saudi Arabia	-4.5	-3.0	-3.8	-1.9	-2.0	-2.9
	Syria	-8.5	-6.7	-5.8	-5.9	-4.6	-6.3
	Turkey	-19.9	-14.0	-10.1	-10.0	-10.5	-8.7
	RME	-2.4	-0.5	-0.2	-0.9	-1.3	-1.1

Table S32. Percent changes in sectoral outputs under the scenarios of 20% reduction in water flow of upstream

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
R1-EOC1-E1	Iran	-3.2	-2.5	-1.9	-0.4	-1.4	-1.5
	Iraq	-6.3	-0.8	-1.5	-0.3	-1.1	-0.9
	Jordan	-1.0	-1.1	-0.3	-0.4	-0.5	-0.4
	Lebanon	-1.7	-0.5	-0.3	-0.3	-0.4	-0.3
	Saudi Arabia	-3.7	-0.5	-0.7	-0.3	-0.8	-0.5
	Syria	-5.6	-1.7	-2.7	0.3	0.1	-1.4
	Turkey	-3.3	-1.0	-0.8	-0.5	-0.4	-0.6
	RME	-2.1	-0.3	-0.6	-0.1	-0.5	-0.6
R1-EOC1-E2	Iran	-3.6	-3.3	-2.2	-0.5	-1.9	-1.9
	Iraq	-19.4	-4.9	-5.5	-1.4	-4.2	-3.3
	Jordan	-0.8	-2.3	-0.3	-0.6	-0.9	-0.7
	Lebanon	-3.7	-1.0	-0.7	-0.8	-1.0	-0.7
	Saudi Arabia	-4.5	-0.8	-1.1	-0.5	-1.2	-0.8
	Syria	-12.0	-4.1	-6.0	0.6	-0.3	-3.2
	Turkey	-7.5	-2.7	-1.9	-1.4	-1.1	-1.4
	RME	-2.4	-0.3	-0.8	-0.2	-0.7	-0.9
R1-EOC2-E1	Iran	-3.2	-2.8	-2.1	-0.6	-1.9	-2.0
	Iraq	-6.3	-0.9	-1.6	-0.5	-1.3	-1.0
	Jordan	-1.0	-1.1	-0.3	-0.5	-0.6	-0.6
	Lebanon	-1.7	-0.5	-0.3	-0.5	-0.5	-0.4
	Saudi Arabia	-3.7	-0.8	-0.9	-0.4	-1.2	-0.7
	Syria	-5.6	-2.0	-2.8	0.0	-0.4	-1.8
	Turkey	-3.3	-1.1	-0.9	-0.6	-0.5	-0.7
	RME	-2.1	-0.3	-0.7	-0.2	-0.7	-0.7
R1-EOC2-E2	Iran	-3.6	-4.4	-3.3	-3.0	-2.9	-2.5
	Iraq	-19.4	-10.4	-9.1	-7.0	-10.7	-10.0
	Jordan	-0.8	-1.3	-1.6	-0.9	-1.2	-0.1
	Lebanon	-3.6	-3.1	-1.3	-1.9	-1.5	-1.2
	Saudi Arabia	-4.6	-2.9	-3.1	-1.6	-1.7	-2.4
	Syria	-12.0	-8.7	-7.8	-7.8	-6.4	-7.7
	Turkey	-7.5	-4.8	-3.1	-3.6	-3.7	-3.0
	RME	-2.4	-0.5	0.0	-0.4	-0.9	-0.8

Table S33. Percent changes in sectoral outputs under the scenarios of 20% reduction in water flow of upstream

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
R1-EOC1-S1	Iran	-2.8	-2.3	-1.7	-0.3	-1.2	-1.3
	Iraq	-14.0	-3.4	-3.7	-0.9	-2.8	-2.2
	Jordan	-0.6	-1.5	-0.2	-0.4	-0.6	-0.5
	Lebanon	-1.6	-0.5	-0.2	-0.4	-0.5	-0.3
	Saudi Arabia	-4.0	-0.6	-0.8	-0.3	-0.9	-0.6
	Syria	-7.1	-2.3	-3.5	0.4	-0.1	-1.8
	Turkey	-4.8	-1.6	-1.2	-0.8	-0.7	-0.9
	RME	-2.2	-0.3	-0.7	-0.2	-0.7	-0.8
R1-EOC1-S2	Iran	-8.2	-7.5	-5.6	-0.7	-5.5	-5.9
	Iraq	-24.8	-6.9	-8.0	-2.1	-6.3	-5.0
	Jordan	-0.6	-3.7	-0.2	-0.9	-1.3	-1.0
	Lebanon	-3.6	-1.3	-0.7	-0.9	-1.3	-0.8
	Saudi Arabia	-4.3	-0.9	-1.3	-0.5	-1.5	-1.0
	Syria	-15.2	-5.4	-8.1	0.6	-0.9	-4.3
	Turkey	-20.0	-7.5	-6.0	-4.3	-3.9	-4.8
	RME	-2.3	-0.4	-1.2	-0.2	-1.0	-1.2
R1-EOC2-S1	Iran	-2.8	-2.5	-1.8	-0.5	-1.6	-1.6
	Iraq	-14.1	-3.7	-4.2	-1.4	-3.5	-2.7
	Jordan	-0.6	-1.4	-0.3	-0.6	-0.7	-0.6
	Lebanon	-1.6	-0.6	-0.3	-0.5	-0.6	-0.4
	Saudi Arabia	-4.0	-1.0	-1.0	-0.5	-1.4	-0.9
	Syria	-7.1	-2.6	-3.7	0.0	-0.7	-2.4
	Turkey	-4.8	-1.7	-1.3	-1.0	-0.9	-1.1
	RME	-2.2	-0.3	-0.8	-0.3	-1.0	-1.0
R1-EOC2-S2	Iran	-8.1	-9.6	-8.2	-7.7	-7.2	-6.4
	Iraq	-25.0	-13.9	-12.5	-9.9	-14.2	-13.3
	Jordan	-0.6	-1.5	-2.4	-1.2	-1.7	0.2
	Lebanon	-3.5	-3.3	-1.5	-2.1	-1.7	-1.4
	Saudi Arabia	-4.5	-3.0	-3.9	-1.9	-2.0	-3.0
	Syria	-15.1	-11.0	-10.3	-9.9	-8.1	-9.8
	Turkey	-19.9	-14.1	-10.2	-10.0	-10.5	-8.7
	RME	-2.4	-0.5	-0.2	-0.9	-1.4	-1.1

Table S34. Percent changes in sectoral outputs under no collaboration and full collaboration scenarios

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
NOCO-ENSEMBLE	Iran	-3.3	-3.2	-2.2	-0.6	-2.2	-2.2
	Iraq	-21.1	-6.0	-6.8	-2.4	-5.7	-4.4
	Jordan	-0.3	-1.9	-0.2	-0.6	-0.8	-0.6
	Lebanon	-1.6	-0.6	-0.3	-0.5	-0.7	-0.4
	Saudi Arabia	-3.6	-0.8	-0.9	-0.4	-1.2	-0.8
	Syria	-9.2	-3.6	-4.9	-0.1	-1.2	-3.2
	Turkey	-6.3	-2.4	-1.8	-1.4	-1.3	-1.6
	RME	-2.0	-0.3	-0.7	-0.2	-0.7	-0.7
NOCO-SELECTED	Iran	-8.2	-8.9	-6.5	-1.1	-7.5	-8.0
	Iraq	-30.2	-9.9	-11.2	-4.0	-9.7	-7.5
	Jordan	-0.5	-3.8	-0.3	-1.2	-1.7	-1.2
	Lebanon	-3.5	-1.6	-0.9	-1.2	-1.7	-1.1
	Saudi Arabia	-4.4	-1.3	-1.7	-0.8	-2.3	-1.3
	Syria	-18.2	-7.5	-10.1	-0.4	-3.0	-7.1
	Turkey	-22.1	-9.1	-7.7	-5.8	-5.7	-6.8
	RME	-2.3	-0.4	-1.3	-0.4	-1.6	-1.5
FULLCO-ENSEMBLE	ET Countries	1.3	1.7	0.8	0.2	0.9	0.9
	Jordan	-8.0	-0.1	-0.4	-0.2	-0.4	-0.5
	Lebanon	-1.5	-0.3	-0.3	-0.4	-0.3	-0.4
	Saudi Arabia	-3.4	-0.9	-0.8	-0.7	-1.1	-0.7
	RME	-2.7	-0.2	-0.5	-0.1	-0.7	-0.6
FULLCO-SELECTED	ET Countries	-13.0	-5.2	-4.2	-1.5	-2.5	-2.9
	Jordan	-10.9	-2.7	-0.1	-0.4	-1.2	-1.1
	Lebanon	-2.9	-1.4	-1.1	-1.1	-1.8	-1.0
	Saudi Arabia	-5.0	-1.3	-1.8	-1.4	-1.9	-1.4
	RME	-2.6	-0.4	-1.4	-0.3	-1.4	-1.3

S7. Impacts on Labor market

Table S35. %Changes in demand for unskilled labor in agricultural sectors by country under the examined baseline scenarios

Country/Scenario	B-EOC1-E1	B-EOC1-E2	B-EOC1-S1	B-EOC1-S2	B-EOC2-E1	B-EOC2-E2	B-EOC2-S1	B-EOC2-S2
Iran	-1.78	-2.18	-1.46	-6.60	-1.81	-2.20	-1.48	-6.67
Iraq	-3.04	-6.37	-3.12	-10.36	-3.10	-6.48	-3.18	-10.54
Jordan	-0.70	-0.95	-0.68	-1.15	-0.73	-0.99	-0.71	-1.21
Lebanon	-1.32	-2.85	-1.30	-2.88	-1.33	-2.87	-1.30	-2.90
Saudi Arabia	-2.00	-2.67	-2.23	-2.80	-2.15	-2.93	-2.41	-3.12
Syria	-0.77	-5.62	-3.88	-7.68	-0.78	-5.63	-3.89	-7.68
Turkey	-2.11	-5.20	-3.18	-14.65	-2.12	-5.23	-3.20	-14.75
RME	-0.75	-1.12	-0.89	-1.34	-0.77	-1.16	-0.92	-1.39

Table S36. %Changes in demand for unskilled labor in non-agricultural sectors by country under the examined baseline scenarios

Country/Scenario	B-EOC1-E1	B-EOC1-E2	B-EOC1-S1	B-EOC1-S2	B-EOC2-E1	B-EOC2-E2	B-EOC2-S1	B-EOC2-S2
Iran	-2.78	-3.48	-2.46	-9.85	-3.11	-3.89	-2.71	-11.28
Iraq	-1.28	-2.51	-1.37	-4.74	-1.45	-2.54	-1.54	-4.72
Jordan	-0.58	-0.97	-0.62	-1.53	-0.67	-1.10	-0.71	-1.67
Lebanon	-0.36	-0.78	-0.37	-1.02	-0.45	-0.99	-0.46	-1.21
Saudi Arabia	-0.51	-0.80	-0.61	-1.00	-0.69	-1.09	-0.82	-1.30
Syria	-0.90	-3.97	-2.71	-5.99	-0.90	-4.24	-2.90	-6.32
Turkey	-0.87	-2.19	-1.33	-7.45	-0.99	-2.48	-1.51	-8.19
RME	-0.70	-1.07	-0.98	-1.53	-0.81	-1.25	-1.14	-1.75

Table S37. %Changes in demand for skilled labor in agricultural sectors by country under the examined baseline scenarios

Country/Scenario	B-EOC1-E1	B-EOC1-E2	B-EOC1-S1	B-EOC1-S2	B-EOC2-E1	B-EOC2-E2	B-EOC2-S1	B-EOC2-S2
Iran	-1.98	-2.41	-1.67	-6.99	-2.01	-2.44	-1.69	-7.08
Iraq	-1.89	-3.80	-1.97	-6.64	-1.99	-4.03	-2.07	-6.96
Jordan	-0.32	-0.46	-0.32	-0.41	-0.40	-0.57	-0.40	-0.55
Lebanon	-0.75	-1.69	-0.75	-1.89	-0.80	-1.80	-0.80	-2.00
Saudi Arabia	-1.26	-1.87	-1.47	-2.32	-1.43	-2.14	-1.67	-2.62
Syria	-0.85	-5.43	-3.75	-7.55	-0.86	-5.44	-3.77	-7.54
Turkey	-1.09	-2.67	-1.64	-8.34	-1.16	-2.84	-1.75	-8.80
RME	-0.62	-0.97	-0.78	-1.34	-0.66	-1.03	-0.84	-1.41

Table S38. %Changes in demand for skilled labor in non-agricultural sectors by country the examined under baseline scenarios

Country/Scenario	B-EOC1-E1	B-EOC1-E2	B-EOC1-S1	B-EOC1-S2	B-EOC2-E1	B-EOC2-E2	B-EOC2-S1	B-EOC2-S2
Iran	-2.71	-3.41	-2.38	-10.00	-3.11	-3.91	-2.67	-11.79
Iraq	-1.26	-2.46	-1.35	-4.65	-1.41	-2.50	-1.50	-4.66
Jordan	-0.57	-0.95	-0.61	-1.49	-0.66	-1.08	-0.70	-1.64
Lebanon	-0.36	-0.78	-0.37	-1.01	-0.45	-0.99	-0.46	-1.21
Saudi Arabia	-0.50	-0.78	-0.59	-0.97	-0.68	-1.07	-0.81	-1.26
Syria	-0.74	-3.58	-2.44	-5.30	-0.74	-3.94	-2.69	-5.77
Turkey	-0.86	-2.15	-1.30	-7.28	-0.98	-2.47	-1.50	-8.12
RME	-0.65	-1.00	-0.91	-1.43	-0.76	-1.17	-1.07	-1.63

Table S39. %Changes in demand for unskilled labor in agricultural sectors by country under 10% decrease in water use efficiency scenarios

Country/Scenario	W1-EOC1-E1	W1-EOC1-E2	W1-EOC1-S1	W1-EOC1-S2	W1-EOC2-E1	W1-EOC2-E2	W1-EOC2-S1	W1-EOC2-S2
Iran	-1.89	-2.29	-1.57	-6.70	-1.92	-2.31	-1.58	-6.77
Iraq	-8.21	-11.38	-8.30	-14.95	-8.36	-11.62	-8.46	-15.26
Jordan	-0.65	-0.92	-0.63	-1.15	-0.68	-0.97	-0.66	-1.20
Lebanon	-1.32	-2.85	-1.29	-2.89	-1.33	-2.87	-1.30	-2.91
Saudi Arabia	-1.99	-2.64	-2.22	-2.78	-2.14	-2.91	-2.41	-3.10
Syria	-4.30	-9.03	-7.30	-11.02	-4.31	-9.03	-7.31	-11.01
Turkey	-4.36	-7.33	-5.35	-16.45	-4.38	-7.37	-5.38	-16.58
RME	-0.73	-1.10	-0.87	-1.32	-0.75	-1.14	-0.90	-1.37

Table S40. %Changes in demand for unskilled labor in non-agricultural sectors by country under 10% decrease in water use efficiency scenarios

Country/Scenario	W1-EOC1-E1	W1-EOC1-E2	W1-EOC1-S1	W1-EOC1-S2	W1-EOC2-E1	W1-EOC2-E2	W1-EOC2-S1	W1-EOC2-S2
Iran	-3.13	-3.85	-2.80	-10.21	-3.47	-4.27	-3.06	-11.64
Iraq	-3.00	-4.34	-3.10	-6.54	-3.55	-4.41	-3.65	-6.57
Jordan	-0.73	-1.12	-0.77	-1.66	-0.82	-1.25	-0.86	-1.80
Lebanon	-0.42	-0.84	-0.43	-1.07	-0.51	-1.04	-0.52	-1.26
Saudi Arabia	-0.54	-0.83	-0.64	-1.03	-0.72	-1.11	-0.85	-1.32
Syria	-3.16	-6.35	-5.02	-8.38	-3.36	-6.79	-5.39	-8.87
Turkey	-1.89	-3.30	-2.37	-8.80	-2.15	-3.72	-2.69	-9.63
RME	-0.73	-1.10	-1.01	-1.56	-0.84	-1.28	-1.17	-1.78

Table S41. %Changes in demand for skilled labor in agricultural sectors by country under 10% decrease in water use efficiency scenarios

Country/Scenario	W1-EOC1-E1	W1-EOC1-E2	W1-EOC1-S1	W1-EOC1-S2	W1-EOC2-E1	W1-EOC2-E2	W1-EOC2-S1	W1-EOC2-S2
Iran	-2.12	-2.56	-1.81	-7.13	-2.15	-2.58	-1.83	-7.21
Iraq	-4.77	-6.80	-4.87	-9.57	-5.09	-7.25	-5.18	-10.10
Jordan	-0.21	-0.34	-0.21	-0.28	-0.28	-0.45	-0.28	-0.41
Lebanon	-0.79	-1.73	-0.80	-1.94	-0.84	-1.84	-0.84	-2.04
Saudi Arabia	-1.36	-1.95	-1.56	-2.39	-1.52	-2.21	-1.75	-2.68
Syria	-4.20	-8.67	-7.00	-10.72	-4.21	-8.68	-7.01	-10.71
Turkey	-2.27	-3.87	-2.81	-9.65	-2.43	-4.13	-3.01	-10.18
RME	-0.63	-0.98	-0.79	-1.34	-0.67	-1.04	-0.85	-1.41

Table S42. %Changes in demand for skilled labor in non-agricultural sectors by country the examined under 10% decrease in water use efficiency scenarios

Country/Scenario	W1-EOC1-E1	W1-EOC1-E2	W1-EOC1-S1	W1-EOC1-S2	W1-EOC2-E1	W1-EOC2-E2	W1-EOC2-S1	W1-EOC2-S2
Iran	-3.04	-3.76	-2.70	-10.36	-3.45	-4.28	-3.01	-12.15
Iraq	-2.93	-4.23	-3.03	-6.39	-3.41	-4.34	-3.52	-6.47
Jordan	-0.71	-1.09	-0.75	-1.61	-0.80	-1.21	-0.84	-1.76
Lebanon	-0.41	-0.83	-0.43	-1.06	-0.51	-1.04	-0.52	-1.26
Saudi Arabia	-0.53	-0.81	-0.62	-0.99	-0.70	-1.09	-0.83	-1.28
Syria	-2.81	-5.75	-4.56	-7.50	-3.08	-6.34	-5.05	-8.19
Turkey	-1.86	-3.24	-2.33	-8.60	-2.14	-3.70	-2.68	-9.54
RME	-0.68	-1.03	-0.94	-1.46	-0.79	-1.19	-1.10	-1.66

Table S43. %Changes in demand for unskilled labor in agricultural sectors by country under 10% increase in water use efficiency scenarios

Country/Scenario	W2-EOC1-E1	W2-EOC1-E2	W2-EOC1-S1	W2-EOC1-S2	W2-EOC2-E1	W2-EOC2-E2	W2-EOC2-S1	W2-EOC2-S2
Iran	-1.68	-2.07	-1.35	-6.51	-1.70	-2.09	-1.37	-6.58
Iraq	0.94	-1.70	0.94	-5.75	1.06	-1.72	1.06	-5.82
Jordan	-0.77	-0.99	-0.73	-1.16	-0.80	-1.03	-0.77	-1.21
Lebanon	-1.33	-2.85	-1.30	-2.88	-1.33	-2.87	-1.31	-2.90
Saudi Arabia	-2.00	-2.70	-2.24	-2.83	-2.16	-2.94	-2.42	-3.14
Syria	2.18	-2.38	-0.73	-4.43	2.23	-2.39	-0.73	-4.43
Turkey	0.05	-3.10	-1.06	-12.87	0.05	-3.12	-1.07	-12.96
RME	-0.77	-1.14	-0.91	-1.35	-0.79	-1.18	-0.94	-1.40

Table S44. %Changes in demand for unskilled labor in non-agricultural sectors by country under 10% increase in water use efficiency scenarios

Country/Scenario	W2-EOC1-E1	W2-EOC1-E2	W2-EOC1-S1	W2-EOC1-S2	W2-EOC2-E1	W2-EOC2-E2	W2-EOC2-S1	W2-EOC2-S2
Iran	-2.49	-3.16	-2.18	-9.50	-2.81	-3.56	-2.41	-10.93
Iraq	-0.12	-1.02	-0.18	-3.06	0.12	-1.01	0.05	-3.01
Jordan	-0.46	-0.83	-0.50	-1.39	-0.56	-0.97	-0.60	-1.54
Lebanon	-0.30	-0.73	-0.32	-0.96	-0.40	-0.93	-0.41	-1.16
Saudi Arabia	-0.48	-0.77	-0.58	-0.97	-0.67	-1.06	-0.80	-1.28
Syria	0.93	-1.86	-0.71	-3.79	1.15	-1.96	-0.71	-3.96
Turkey	-0.01	-1.23	-0.43	-6.22	0.02	-1.38	-0.47	-6.88
RME	-0.67	-1.04	-0.95	-1.50	-0.79	-1.22	-1.12	-1.73

Table S45. %Changes in demand for skilled labor in agricultural sectors by country under 10% increase in water use efficiency scenarios

Country/Scenario	W2-EOC1-E1	W2-EOC1-E2	W2-EOC1-S1	W2-EOC1-S2	W2-EOC2-E1	W2-EOC2-E2	W2-EOC2-S1	W2-EOC2-S2
Iran	-1.85	-2.28	-1.54	-6.87	-1.88	-2.31	-1.57	-6.96
Iraq	0.13	-1.28	0.10	-3.89	0.28	-1.30	0.24	-4.02
Jordan	-0.40	-0.56	-0.40	-0.53	-0.49	-0.68	-0.48	-0.68
Lebanon	-0.71	-1.65	-0.71	-1.86	-0.76	-1.77	-0.76	-1.96
Saudi Arabia	-1.17	-1.79	-1.38	-2.25	-1.35	-2.06	-1.59	-2.55
Syria	1.94	-2.36	-0.77	-4.48	2.01	-2.37	-0.77	-4.47
Turkey	-0.02	-1.55	-0.56	-7.11	-0.01	-1.65	-0.59	-7.52
RME	-0.61	-0.96	-0.76	-1.33	-0.65	-1.02	-0.83	-1.41

Table S46. %Changes in demand for skilled labor in non-agricultural sectors by country the examined under 10% increase in water use efficiency scenarios

Country/Scenario	W2-EOC1-E1	W2-EOC1-E2	W2-EOC1-S1	W2-EOC1-S2	W2-EOC2-E1	W2-EOC2-E2	W2-EOC2-S1	W2-EOC2-S2
Iran	-2.44	-3.10	-2.11	-9.66	-2.81	-3.59	-2.38	-11.44
Iraq	-0.13	-1.01	-0.19	-3.02	0.08	-1.01	0.01	-2.98
Jordan	-0.46	-0.82	-0.50	-1.36	-0.55	-0.96	-0.59	-1.52
Lebanon	-0.31	-0.73	-0.32	-0.96	-0.40	-0.94	-0.42	-1.16
Saudi Arabia	-0.47	-0.75	-0.56	-0.94	-0.65	-1.04	-0.78	-1.24
Syria	0.95	-1.64	-0.61	-3.30	1.23	-1.78	-0.61	-3.55
Turkey	0.00	-1.20	-0.42	-6.09	0.03	-1.38	-0.47	-6.82
RME	-0.62	-0.97	-0.88	-1.40	-0.73	-1.14	-1.04	-1.61

Table S47. %Changes in demand for unskilled labor in agricultural sectors by country under 20% increase in water use efficiency scenarios

Country/Scenario	W3-EOC1-E1	W3-EOC1-E2	W3-EOC1-S1	W3-EOC1-S2	W3-EOC2-E1	W3-EOC2-E2	W3-EOC2-S1	W3-EOC2-S2
Iran	-1.57	-1.96	-1.25	-6.41	-1.59	-1.99	-1.27	-6.48
Iraq	2.89	1.71	2.88	-1.41	3.05	1.83	3.06	-1.40
Jordan	-0.80	-1.03	-0.78	-1.17	-0.83	-1.08	-0.81	-1.23
Lebanon	-1.33	-2.85	-1.30	-2.88	-1.34	-2.87	-1.31	-2.90
Saudi Arabia	-2.01	-2.71	-2.25	-2.85	-2.16	-2.95	-2.42	-3.16
Syria	4.08	0.53	1.93	-1.32	4.36	0.54	1.99	-1.33
Turkey	2.01	-1.06	0.95	-11.12	2.04	-1.07	0.96	-11.19
RME	-0.79	-1.16	-0.93	-1.37	-0.81	-1.19	-0.96	-1.42

Table S48. %Changes in demand for unskilled labor in non-agricultural sectors by country under 20% increase in water use efficiency scenarios

Country/Scenario	W3-EOC1-E1	W3-EOC1-E2	W3-EOC1-S1	W3-EOC1-S2	W3-EOC2-E1	W3-EOC2-E2	W3-EOC2-S1	W3-EOC2-S2
Iran	-2.27	-2.89	-1.95	-9.18	-2.57	-3.28	-2.17	-10.61
Iraq	0.50	-0.03	0.44	-1.66	1.10	0.04	1.04	-1.58
Jordan	-0.37	-0.72	-0.41	-1.27	-0.48	-0.87	-0.51	-1.43
Lebanon	-0.26	-0.68	-0.28	-0.91	-0.36	-0.89	-0.37	-1.11
Saudi Arabia	-0.46	-0.75	-0.55	-0.95	-0.65	-1.04	-0.78	-1.26
Syria	2.22	-0.06	0.90	-1.82	2.72	0.02	1.11	-1.83
Turkey	0.69	-0.39	0.32	-5.11	0.86	-0.42	0.41	-5.67
RME	-0.65	-1.02	-0.93	-1.48	-0.77	-1.20	-1.10	-1.70

Table S49. %Changes in demand for skilled labor in agricultural sectors by country under 20% increase in water use efficiency scenarios

Country/Scenario	W3-EOC1-E1	W3-EOC1-E2	W3-EOC1-S1	W3-EOC1-S2	W3-EOC2-E1	W3-EOC2-E2	W3-EOC2-S1	W3-EOC2-S2
Iran	-1.73	-2.15	-1.42	-6.74	-1.76	-2.19	-1.45	-6.84
Iraq	1.21	0.42	1.17	-1.53	1.52	0.61	1.49	-1.48
Jordan	-0.44	-0.62	-0.43	-0.63	-0.52	-0.74	-0.51	-0.78
Lebanon	-0.68	-1.62	-0.68	-1.82	-0.73	-1.73	-0.73	-1.93
Saudi Arabia	-1.10	-1.70	-1.30	-2.18	-1.28	-1.98	-1.52	-2.49
Syria	3.77	0.39	1.74	-1.55	4.04	0.41	1.81	-1.54
Turkey	0.91	-0.53	0.40	-5.96	1.02	-0.55	0.46	-6.32
RME	-0.59	-0.94	-0.75	-1.32	-0.64	-1.01	-0.82	-1.40

Table S50. %Changes in demand for skilled labor in non-agricultural sectors by country the examined under 20% increase in water use efficiency scenarios

Country/Scenario	W3-EOC1-E1	W3-EOC1-E2	W3-EOC1-S1	W3-EOC1-S2	W3-EOC2-E1	W3-EOC2-E2	W3-EOC2-S1	W3-EOC2-S2
Iran	-2.22	-2.84	-1.89	-9.34	-2.58	-3.31	-2.15	-11.12
Iraq	0.49	-0.04	0.43	-1.66	1.01	0.03	0.95	-1.58
Jordan	-0.38	-0.71	-0.41	-1.25	-0.48	-0.86	-0.51	-1.41
Lebanon	-0.27	-0.68	-0.28	-0.91	-0.37	-0.89	-0.38	-1.12
Saudi Arabia	-0.45	-0.73	-0.54	-0.92	-0.64	-1.02	-0.77	-1.22
Syria	2.19	0.02	0.90	-1.49	2.78	0.12	1.16	-1.54
Turkey	0.69	-0.38	0.32	-5.00	0.88	-0.41	0.42	-5.63
RME	-0.60	-0.95	-0.86	-1.37	-0.72	-1.12	-1.02	-1.58

Table S51. %Changes in demand for unskilled labor in agricultural sectors by country under the agricultural and food tariff removal scenarios

Country/Scenario	T1-EOC1-E1	T1-EOC1-E2	T1-EOC1-S1	T1-EOC1-S2	T1-EOC2-E1	T1-EOC2-E2	T1-EOC2-S1	T1-EOC2-S2
Iran	-1.78	-2.17	-1.45	-6.60	-1.80	-2.19	-1.47	-6.66
Iraq	-2.90	-6.25	-2.98	-10.26	-2.96	-6.36	-3.04	-10.44
Jordan	-0.70	-0.95	-0.68	-1.15	-0.73	-0.99	-0.71	-1.21
Lebanon	-1.33	-2.85	-1.30	-2.89	-1.34	-2.87	-1.31	-2.91
Saudi Arabia	-2.00	-2.68	-2.24	-2.81	-2.15	-2.93	-2.42	-3.12
Syria	-0.77	-5.62	-3.88	-7.68	-0.78	-5.63	-3.89	-7.68
Turkey	-2.10	-5.19	-3.17	-14.64	-2.11	-5.21	-3.18	-14.75
RME	-0.76	-1.13	-0.90	-1.34	-0.78	-1.16	-0.93	-1.39

Table S52. %Changes in demand for unskilled labor in non-agricultural sectors by country under the agricultural and food tariff removal scenarios

Country/Scenario	T1-EOC1-E1	T1-EOC1-E2	T1-EOC1-S1	T1-EOC1-S2	T1-EOC2-E1	T1-EOC2-E2	T1-EOC2-S1	T1-EOC2-S2
Iran	-2.78	-3.51	-2.48	-9.91	-3.11	-3.92	-2.73	-11.35
Iraq	-1.30	-2.53	-1.39	-4.76	-1.47	-2.56	-1.56	-4.74
Jordan	-0.57	-0.96	-0.62	-1.53	-0.67	-1.10	-0.71	-1.67
Lebanon	-0.36	-0.78	-0.37	-1.01	-0.45	-0.99	-0.46	-1.21
Saudi Arabia	-0.51	-0.80	-0.61	-1.00	-0.69	-1.09	-0.82	-1.30
Syria	-0.74	-3.82	-2.55	-5.87	-0.74	-4.09	-2.74	-6.20
Turkey	-0.89	-2.22	-1.35	-7.48	-1.01	-2.50	-1.53	-8.22
RME	-0.69	-1.07	-0.97	-1.53	-0.81	-1.24	-1.14	-1.75

Table S53. %Changes in demand for skilled labor in agricultural sectors by country under the agricultural and food tariff removal scenarios

Country/Scenario	T1-EOC1-E1	T1-EOC1-E2	T1-EOC1-S1	T1-EOC1-S2	T1-EOC2-E1	T1-EOC2-E2	T1-EOC2-S1	T1-EOC2-S2
Iran	-1.99	-2.42	-1.68	-7.01	-2.01	-2.45	-1.70	-7.09
Iraq	-1.54	-3.49	-1.62	-6.38	-1.64	-3.72	-1.73	-6.70
Jordan	-0.31	-0.45	-0.31	-0.41	-0.39	-0.56	-0.39	-0.55
Lebanon	-0.78	-1.72	-0.79	-1.92	-0.83	-1.84	-0.83	-2.03
Saudi Arabia	-1.26	-1.87	-1.47	-2.32	-1.43	-2.14	-1.67	-2.61
Syria	-0.86	-5.44	-3.76	-7.57	-0.86	-5.45	-3.78	-7.56
Turkey	-1.09	-2.66	-1.63	-8.33	-1.16	-2.83	-1.74	-8.79
RME	-0.60	-0.95	-0.75	-1.32	-0.64	-1.01	-0.82	-1.39

Table S54. %Changes in demand for skilled labor in non-agricultural sectors by country under the agricultural and food tariff removal scenarios

Country/Scenario	T1-EOC1-E1	T1-EOC1-E2	T1-EOC1-S1	T1-EOC1-S2	T1-EOC2-E1	T1-EOC2-E2	T1-EOC2-S1	T1-EOC2-S2
Iran	-2.72	-3.44	-2.40	-10.07	-3.12	-3.94	-2.70	-11.86
Iraq	-1.28	-2.48	-1.37	-4.67	-1.43	-2.52	-1.52	-4.68
Jordan	-0.56	-0.94	-0.61	-1.49	-0.66	-1.08	-0.70	-1.63
Lebanon	-0.36	-0.78	-0.37	-1.01	-0.45	-0.99	-0.46	-1.21
Saudi Arabia	-0.49	-0.78	-0.59	-0.96	-0.68	-1.06	-0.81	-1.26
Syria	-0.61	-3.46	-2.32	-5.21	-0.62	-3.82	-2.56	-5.67
Turkey	-0.87	-2.17	-1.32	-7.31	-1.00	-2.49	-1.52	-8.14
RME	-0.65	-1.00	-0.90	-1.42	-0.75	-1.16	-1.06	-1.63

Table S55. %Changes in demand for unskilled labor in agricultural sectors by country under overall tariff removal scenarios

Country/Scenario	T2-EOC1-E1	T2-EOC1-E2	T2-EOC1-S1	T2-EOC1-S2	T2-EOC2-E1	T2-EOC2-E2	T2-EOC2-S1	T2-EOC2-S2
Iran	-1.74	-2.14	-1.42	-6.57	-1.76	-2.16	-1.43	-6.64
Iraq	-2.89	-6.23	-2.97	-10.25	-2.95	-6.35	-3.03	-10.43
Jordan	-0.70	-0.95	-0.67	-1.15	-0.73	-0.99	-0.71	-1.21
Lebanon	-1.33	-2.85	-1.30	-2.89	-1.34	-2.87	-1.31	-2.91
Saudi Arabia	-2.00	-2.68	-2.24	-2.81	-2.15	-2.93	-2.42	-3.12
Syria	-0.72	-5.60	-3.86	-7.67	-0.73	-5.61	-3.87	-7.67
Turkey	-2.08	-5.17	-3.15	-14.62	-2.09	-5.19	-3.16	-14.72
RME	-0.76	-1.13	-0.90	-1.34	-0.78	-1.16	-0.93	-1.39

Table S56. %Changes in demand for unskilled labor in non-agricultural sectors by country under overall tariff removal scenarios

Country/Scenario	T2-EOC1-E1	T2-EOC1-E2	T2-EOC1-S1	T2-EOC1-S2	T2-EOC2-E1	T2-EOC2-E2	T2-EOC2-S1	T2-EOC2-S2
Iran	-2.56	-3.28	-2.27	-9.65	-2.88	-3.68	-2.51	-11.09
Iraq	-1.28	-2.52	-1.37	-4.75	-0.66	-2.54	-0.75	-4.73
Jordan	-0.58	-0.97	-0.63	-1.53	-0.68	-1.11	-0.72	-1.68
Lebanon	-0.37	-0.79	-0.38	-1.02	-0.46	-0.99	-0.47	-1.22
Saudi Arabia	-0.52	-0.81	-0.62	-1.01	-0.70	-1.10	-0.83	-1.31
Syria	-0.62	-3.69	-2.42	-5.75	-0.62	-3.97	-2.61	-6.08
Turkey	-0.41	-1.75	-0.87	-7.07	-0.52	-2.04	-1.05	-7.81
RME	-0.73	-1.11	-1.01	-1.57	-0.85	-1.28	-1.18	-1.79

Table S57. %Changes in demand for skilled labor in agricultural sectors by country under overall tariff removal scenarios

Country/Scenario	T2-EOC1-E1	T2-EOC1-E2	T2-EOC1-S1	T2-EOC1-S2	T2-EOC2-E1	T2-EOC2-E2	T2-EOC2-S1	T2-EOC2-S2
Iran	-1.89	-2.32	-1.58	-6.91	-1.91	-2.35	-1.60	-7.00
Iraq	-1.51	-3.46	-1.59	-6.36	-1.61	-3.69	-1.70	-6.68
Jordan	-0.30	-0.44	-0.30	-0.40	-0.38	-0.55	-0.38	-0.54
Lebanon	-0.78	-1.73	-0.79	-1.92	-0.83	-1.84	-0.84	-2.03
Saudi Arabia	-1.26	-1.86	-1.47	-2.32	-1.43	-2.13	-1.67	-2.61
Syria	-0.83	-5.43	-3.75	-7.56	-0.84	-5.44	-3.76	-7.56
Turkey	-0.84	-2.43	-1.39	-8.13	-0.91	-2.60	-1.50	-8.59
RME	-0.59	-0.94	-0.75	-1.31	-0.63	-1.00	-0.81	-1.38

Table S58. %Changes in demand for skilled labor in non-agricultural sectors by country under overall tariff removal scenarios

Country/Scenario	T2-EOC1-E1	T2-EOC1-E2	T2-EOC1-S1	T2-EOC1-S2	T2-EOC2-E1	T2-EOC2-E2	T2-EOC2-S1	T2-EOC2-S2
Iran	-2.29	-3.00	-1.98	-9.58	-2.68	-3.49	-2.27	-11.38
Iraq	-1.27	-2.47	-1.36	-4.67	-1.05	-2.52	-1.14	-4.68
Jordan	-0.57	-0.95	-0.61	-1.49	-0.67	-1.08	-0.71	-1.64
Lebanon	-0.36	-0.78	-0.38	-1.02	-0.46	-1.00	-0.47	-1.22
Saudi Arabia	-0.50	-0.79	-0.60	-0.97	-0.68	-1.07	-0.81	-1.27
Syria	-0.62	-3.46	-2.32	-5.21	-0.62	-3.82	-2.56	-5.67
Turkey	-0.47	-1.79	-0.92	-6.97	-0.59	-2.10	-1.12	-7.80
RME	-0.67	-1.02	-0.93	-1.45	-0.78	-1.19	-1.09	-1.65

Table S59. %Changes in demand for unskilled labor in agricultural sectors by country under the scenarios of 20% reduction in water flow of upstream

Country/Scenario	R1-EOC1-E1	R1-EOC1-E2	R1-EOC1-S1	R1-EOC1-S2	R1-EOC2-E1	R1-EOC2-E2	R1-EOC2-S1	R1-EOC2-S2
Iran	-1.88	-2.28	-1.52	-6.74	-1.91	-2.30	-1.54	-6.81
Iraq	-3.08	-12.33	-8.44	-16.70	-3.13	-12.61	-8.61	-17.07
Jordan	-0.69	-0.93	-0.64	-1.15	-0.72	-0.97	-0.67	-1.20
Lebanon	-1.32	-2.85	-1.29	-2.89	-1.33	-2.87	-1.30	-2.91
Saudi Arabia	-2.00	-2.66	-2.23	-2.79	-2.15	-2.92	-2.41	-3.11
Syria	-4.99	-10.88	-6.38	-13.77	-5.00	-10.88	-6.39	-13.77
Turkey	-2.11	-5.19	-3.17	-14.64	-2.12	-5.22	-3.19	-14.75
RME	-0.75	-1.11	-0.88	-1.32	-0.77	-1.14	-0.91	-1.37

Table S60. %Changes in demand for unskilled labor in non-agricultural sectors by country under the scenarios of 20% reduction in water flow of upstream

Country/Scenario	R1-EOC1-E1	R1-EOC1-E2	R1-EOC1-S1	R1-EOC1-S2	R1-EOC2-E1	R1-EOC2-E2	R1-EOC2-S1	R1-EOC2-S2
Iran	-2.92	-3.78	-2.66	-10.25	-3.27	-4.20	-2.91	-11.69
Iraq	-1.34	-4.57	-3.01	-7.10	-1.52	-4.66	-3.59	-7.16
Jordan	-0.62	-1.10	-0.71	-1.67	-0.71	-1.23	-0.80	-1.81
Lebanon	-0.37	-0.81	-0.40	-1.05	-0.46	-1.02	-0.48	-1.25
Saudi Arabia	-0.52	-0.81	-0.61	-1.01	-0.70	-1.09	-0.83	-1.31
Syria	-3.34	-7.52	-4.36	-10.27	-3.59	-8.07	-4.68	-10.91
Turkey	-0.88	-2.23	-1.35	-7.49	-0.99	-2.51	-1.53	-8.23
RME	-0.70	-1.09	-0.99	-1.55	-0.82	-1.26	-1.15	-1.77

Table S61. %Changes in demand for skilled labor in agricultural sectors by country under the scenarios of 20% reduction in water flow of upstream

Country/Scenario	R1-EOC1-E1	R1-EOC1-E2	R1-EOC1-S1	R1-EOC1-S2	R1-EOC2-E1	R1-EOC2-E2	R1-EOC2-S1	R1-EOC2-S2
Iran	-2.09	-2.53	-1.75	-7.16	-2.12	-2.56	-1.76	-7.24
Iraq	-1.97	-7.36	-4.89	-10.70	-2.06	-7.86	-5.22	-11.32
Jordan	-0.34	-0.36	-0.23	-0.27	-0.42	-0.46	-0.29	-0.41
Lebanon	-0.76	-1.71	-0.76	-1.92	-0.81	-1.83	-0.81	-2.03
Saudi Arabia	-1.29	-1.92	-1.50	-2.37	-1.46	-2.18	-1.70	-2.66
Syria	-4.78	-10.38	-6.12	-13.28	-4.80	-10.40	-6.13	-13.29
Turkey	-1.10	-2.67	-1.64	-8.34	-1.17	-2.85	-1.75	-8.80
RME	-0.63	-0.96	-0.76	-1.32	-0.67	-1.01	-0.82	-1.39

Table S62. %Changes in demand for skilled labor in non-agricultural sectors by country the examined under the scenarios of 20% reduction in water flow of upstream

Country/Scenario	R1-EOC1-E1	R1-EOC1-E2	R1-EOC1-S1	R1-EOC1-S2	R1-EOC2-E1	R1-EOC2-E2	R1-EOC2-S1	R1-EOC2-S2
Iran	-2.85	-3.69	-2.57	-10.40	-3.27	-4.21	-2.87	-12.20
Iraq	-1.32	-4.44	-2.93	-6.93	-1.47	-4.57	-3.44	-7.05
Jordan	-0.61	-1.06	-0.69	-1.61	-0.70	-1.19	-0.78	-1.76
Lebanon	-0.37	-0.81	-0.39	-1.05	-0.46	-1.02	-0.48	-1.25
Saudi Arabia	-0.50	-0.79	-0.60	-0.97	-0.68	-1.07	-0.81	-1.27
Syria	-3.04	-6.86	-3.96	-9.28	-3.37	-7.59	-4.38	-10.16
Turkey	-0.86	-2.18	-1.33	-7.32	-0.99	-2.50	-1.53	-8.15
RME	-0.66	-1.01	-0.92	-1.44	-0.76	-1.18	-1.07	-1.64

Table S63. %Changes in demand for unskilled labor in agricultural sectors by country under no collaboration and full collaboration scenarios

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	-2.00	-6.90	ET Countries	1.68	-10.15
Iraq	-13.79	-21.15	Jordan	-0.84	-1.24
Jordan	-0.65	-1.20	Lebanon	-1.34	-2.88
Lebanon	-1.33	-2.92	Saudi Arabia	-2.18	-3.04
Saudi Arabia	-2.14	-3.09	RME	-0.83	-1.39
Syria	-8.35	-16.59			
Turkey	-4.37	-16.57			
RME	-0.74	-1.36			

Table S64. %Changes in demand for unskilled labor in non-agricultural sectors by country under no collaboration and full collaboration scenarios

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	-3.73	-12.02	ET Countries	1.02	-4.53
Iraq	-4.98	-8.89	Jordan	-0.45	-1.64
Jordan	-0.92	-1.92	Lebanon	-0.32	-1.22
Lebanon	-0.53	-1.30	Saudi Arabia	-0.63	-1.36
Saudi Arabia	-0.73	-1.33	RME	-0.73	-1.75
Syria	-6.22	-13.31			
Turkey	-2.1	-9.67			
RME	-0.85	-1.80			

Table S65. %Changes in demand for skilled labor in agricultural sectors by country under no collaboration and full collaboration scenarios

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	-2.24	-7.35	ET Countries	0.65	-6.21
Iraq	-8.54	-14.23	Jordan	-0.49	-0.77
Jordan	-0.17	-0.26	Lebanon	-0.69	-1.96
Lebanon	-0.85	-2.07	Saudi Arabia	-1.25	-2.63
Saudi Arabia	-1.56	-2.71	RME	-0.60	-1.49
Syria	-8.01	-16.00			
Turkey	-2.43	-10.18			
RME	-0.65	-1.39			

Table S66. %Changes in demand for skilled labor in non-agricultural sectors by country under no collaboration and full collaboration scenarios

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	-3.71	-12.53	ET Countries	1.00	-4.48
Iraq	-4.88	-8.76	Jordan	-0.45	-1.61
Jordan	-0.89	-1.86	Lebanon	-0.33	-1.21
Lebanon	-0.53	-1.29	Saudi Arabia	-0.62	-1.34
Saudi Arabia	-0.70	-1.28	RME	-0.68	-1.65
Syria	-5.81	-12.45			
Turkey	-2.17	-9.57			
RME	-0.80	-1.67			

S8. Impacts on crop prices

Table S67. Changes in crops consumer's price index under alternative baseline scenarios

Country/Scenario	B-EOC1-E1	B-EOC1-E2	B-EOC1-S1	B-EOC1-S2	B-EOC2-E1	B-EOC2-E2	B-EOC2-S1	B-EOC2-S2
Iran	6.4	8.0	6.0	18.7	6.1	7.5	5.8	16.7
Iraq	3.8	8.0	4.2	16.7	3.6	7.5	4.0	15.7
Jordan	1.3	2.3	1.5	4.5	1.2	2.1	1.4	4.2
Lebanon	1.3	2.7	1.4	4.3	1.2	2.6	1.4	4.1
Saudi Arabia	1.4	2.1	1.6	3.2	1.4	2.0	1.6	3.1
Syria	2.3	6.7	4.6	11.4	2.2	6.4	4.4	10.7
Turkey	3.8	8.5	5.3	27.2	3.7	8.2	5.2	26.1
RME	0.9	1.4	1.0	2.8	0.8	1.4	0.9	2.6

Table S68. Changes in crops producer's price index under alternative baseline scenarios

Country/Scenario	B-EOC1-E1	B-EOC1-E2	B-EOC1-S1	B-EOC1-S2	B-EOC2-E1	B-EOC2-E2	B-EOC2-S1	B-EOC2-S2
Iran	7.6	9.2	7.1	20.8	7.2	8.7	6.8	18.6
Iraq	6.5	12.3	6.9	22.2	6.3	11.7	6.6	21.1
Jordan	2.1	3.9	2.4	8.4	1.9	3.6	2.2	7.7
Lebanon	1.6	3.5	1.7	5.1	1.5	3.3	1.6	4.8
Saudi Arabia	2.9	4.2	3.3	5.6	2.8	4.0	3.2	5.4
Syria	2.6	7.8	5.3	12.9	2.5	7.4	5.1	12.1
Turkey	4.5	9.5	6.1	30.0	4.3	9.2	5.9	28.8
RME	1.7	2.4	1.9	3.7	1.6	2.3	1.8	3.5

Table S69. Changes in crops consumer's price index under 10% decrease in water use efficiency scenarios

Country/Scenario	W1-EOC1-E1	W1-EOC1-E2	W1-EOC1-S1	W1-EOC1-S2	W1-EOC2-E1	W1-EOC2-E2	W1-EOC2-S1	W1-EOC2-S2
Iran	7.4	9.0	7.0	19.8	7.0	8.4	6.7	17.7
Iraq	9.2	13.7	9.6	22.4	8.7	13.0	9.1	21.1
Jordan	2.0	3.0	2.2	5.3	1.9	2.8	2.1	4.9
Lebanon	1.7	3.1	1.8	4.7	1.6	3.0	1.8	4.4
Saudi Arabia	1.7	2.4	1.9	3.5	1.6	2.3	1.8	3.3
Syria	5.7	10.3	8.1	15.1	5.4	9.8	7.7	14.2
Turkey	7.2	12.1	8.7	31.7	6.9	11.7	8.4	30.4
RME	1.1	1.7	1.3	3.1	1.1	1.6	1.2	2.9

Table S70. Changes in crops producer's price index under 10% decrease in water use efficiency scenarios

Country/Scenario	W1-EOC1-E1	W1-EOC1-E2	W1-EOC1-S1	W1-EOC1-S2	W1-EOC2-E1	W1-EOC2-E2	W1-EOC2-S1	W1-EOC2-S2
Iran	8.6	10.3	8.2	22.0	8.1	9.7	7.8	19.6
Iraq	14.9	21.5	15.3	31.7	14.2	20.5	14.6	30.1
Jordan	3.5	5.5	3.8	10.1	3.2	5.0	3.5	9.2
Lebanon	2.0	3.9	2.1	5.5	1.9	3.7	2.0	5.2
Saudi Arabia	3.3	4.5	3.6	5.9	3.2	4.3	3.5	5.6
Syria	6.5	12.0	9.4	17.2	6.2	11.3	8.9	16.2
Turkey	8.1	13.4	9.7	35.0	7.8	12.9	9.4	33.5
RME	2.0	2.6	2.1	4.0	1.9	2.5	2.0	3.7

Table S71. Changes in crops consumer's price index under 10% increase in water use efficiency scenarios

Country/Scenario	W2-EOC1-E1	W2-EOC1-E2	W2-EOC1-S1	W2-EOC1-S2	W2-EOC2-E1	W2-EOC2-E2	W2-EOC2-S1	W2-EOC2-S2
Iran	5.6	7.0	5.3	17.7	5.3	6.6	5.0	15.8
Iraq	0.2	3.3	0.5	11.3	0.2	3.1	0.5	10.5
Jordan	0.7	1.6	0.9	3.8	0.7	1.5	0.9	3.5
Lebanon	0.9	2.3	1.1	3.9	0.9	2.2	1.0	3.7
Saudi Arabia	1.2	1.9	1.4	3.0	1.1	1.8	1.3	2.9
Syria	-0.3	3.6	1.7	8.0	-0.3	3.4	1.7	7.5
Turkey	0.9	5.3	2.3	23.1	0.9	5.1	2.3	22.2
RME	0.6	1.2	0.8	2.6	0.6	1.1	0.7	2.4

Table S72. Changes in crops producer's price index under 10% increase in water use efficiency scenarios

Country/Scenario	W2-EOC1-E1	W2-EOC1-E2	W2-EOC1-S1	W2-EOC1-S2	W2-EOC2-E1	W2-EOC2-E2	W2-EOC2-S1	W2-EOC2-S2
Iran	6.7	8.2	6.3	19.7	6.4	7.8	6.1	17.6
Iraq	1.2	5.1	1.4	13.8	1.3	5.0	1.4	13.0
Jordan	1.1	2.7	1.4	6.8	1.1	2.5	1.3	6.2
Lebanon	1.2	3.1	1.3	4.7	1.1	3.0	1.3	4.4
Saudi Arabia	2.7	3.9	3.1	5.3	2.6	3.8	3.0	5.1
Syria	-0.4	4.1	2.0	8.9	-0.4	3.9	1.9	8.4
Turkey	1.3	6.0	2.8	25.4	1.3	5.9	2.8	24.4
RME	1.5	2.1	1.6	3.5	1.4	2.0	1.6	3.3

Table S73. Changes in crops consumer's price index under 20% increase in water use efficiency scenarios

Country/Scenario	W3-EOC1-E1	W3-EOC1-E2	W3-EOC1-S1	W3-EOC1-S2	W3-EOC2-E1	W3-EOC2-E2	W3-EOC2-S1	W3-EOC2-S2
Iran	5.0	6.3	4.6	16.7	4.8	5.9	4.5	14.9
Iraq	-1.8	0.0	-1.6	6.7	-1.7	0.0	-1.5	6.2
Jordan	0.3	1.1	0.5	3.1	0.3	1.0	0.5	2.9
Lebanon	0.6	1.9	0.7	3.5	0.6	1.9	0.7	3.4
Saudi Arabia	1.0	1.6	1.2	2.8	0.9	1.6	1.1	2.7
Syria	-1.9	1.0	-0.5	4.9	-1.9	1.0	-0.4	4.6
Turkey	-1.5	2.4	-0.2	19.3	-1.4	2.4	-0.2	18.6
RME	0.4	1.0	0.5	2.4	0.4	0.9	0.5	2.2

Table S74. Changes in crops producer's price index under 20% increase in water use efficiency scenarios

Country/Scenario	W3-EOC1-E1	W3-EOC1-E2	W3-EOC1-S1	W3-EOC1-S2	W3-EOC2-E1	W3-EOC2-E2	W3-EOC2-S1	W3-EOC2-S2
Iran	6.1	7.4	5.7	18.7	5.9	7.0	5.5	16.7
Iraq	-1.1	0.6	-1.0	7.0	-0.9	0.7	-0.7	6.7
Jordan	0.5	1.7	0.8	5.4	0.5	1.6	0.7	5.0
Lebanon	0.9	2.7	1.0	4.3	0.9	2.6	1.0	4.1
Saudi Arabia	2.4	3.6	2.8	5.1	2.4	3.5	2.7	4.9
Syria	-2.3	1.0	-0.6	5.4	-2.2	1.0	-0.5	5.1
Turkey	-1.2	2.9	0.1	21.2	-1.1	2.9	0.1	20.5
RME	1.3	1.9	1.4	3.3	1.3	1.8	1.4	3.1

Table S75. Changes in crops consumer's price index under the agricultural and food tariff removal scenarios

Country/Scenario	T1-EOC1-E1	T1-EOC1-E2	T1-EOC1-S1	T1-EOC1-S2	T1-EOC2-E1	T1-EOC2-E2	T1-EOC2-S1	T1-EOC2-S2
Iran	6.5	8.2	6.2	19.1	6.2	7.7	6.0	17.1
Iraq	4.0	8.2	4.4	16.9	3.8	7.7	4.2	15.9
Jordan	1.2	2.2	1.5	4.5	1.2	2.1	1.4	4.2
Lebanon	1.2	2.7	1.4	4.3	1.2	2.6	1.3	4.0
Saudi Arabia	1.4	2.1	1.6	3.2	1.3	2.0	1.5	3.1
Syria	1.9	6.3	4.2	11.2	1.8	6.0	4.0	10.5
Turkey	4.4	9.1	5.9	27.8	4.3	8.8	5.7	26.7
RME	0.8	1.4	0.9	2.8	0.7	1.3	0.9	2.6

Table S76. Changes in crops producer's price index under the agricultural and food tariff removal scenarios

Country/Scenario	T1-EOC1-E1	T1-EOC1-E2	T1-EOC1-S1	T1-EOC1-S2	T1-EOC2-E1	T1-EOC2-E2	T1-EOC2-S1	T1-EOC2-S2
Iran	8.0	9.7	7.6	21.4	7.6	9.1	7.3	19.2
Iraq	6.7	12.4	7.0	22.4	6.5	11.9	6.8	21.2
Jordan	2.0	3.9	2.4	8.4	1.9	3.6	2.2	7.7
Lebanon	1.5	3.4	1.6	5.0	1.4	3.3	1.6	4.8
Saudi Arabia	2.9	4.2	3.3	5.6	2.8	4.0	3.2	5.4
Syria	2.5	7.7	5.2	12.9	2.4	7.3	5.0	12.1
Turkey	5.1	10.2	6.7	30.8	5.0	9.9	6.6	29.5
RME	1.6	2.2	1.7	3.6	1.5	2.1	1.6	3.4

Table S77. Changes in crops consumer's price index under overall tariff removal scenarios

Country/Scenario	T2-EOC1-E1	T2-EOC1-E2	T2-EOC1-S1	T2-EOC1-S2	T2-EOC2-E1	T2-EOC2-E2	T2-EOC2-S1	T2-EOC2-S2
Iran	6.5	8.1	6.2	19.1	6.2	7.7	5.9	17.1
Iraq	4.0	8.2	4.4	17.0	3.8	7.8	4.2	15.9
Jordan	1.2	2.2	1.5	4.5	1.2	2.1	1.4	4.2
Lebanon	1.2	2.7	1.4	4.3	1.2	2.6	1.3	4.0
Saudi Arabia	1.4	2.1	1.6	3.2	1.3	2.0	1.5	3.1
Syria	2.0	6.4	4.3	11.3	1.9	6.1	4.1	10.6
Turkey	4.6	9.3	6.1	28.1	4.5	9.0	5.9	27.0
RME	0.8	1.4	0.9	2.8	0.7	1.3	0.8	2.6

Table S78. Changes in crops producer's price index under overall tariff removal scenarios

Country/Scenario	T2-EOC1-E1	T2-EOC1-E2	T2-EOC1-S1	T2-EOC1-S2	T2-EOC2-E1	T2-EOC2-E2	T2-EOC2-S1	T2-EOC2-S2
Iran	7.9	9.6	7.5	21.4	7.5	9.1	7.2	19.2
Iraq	6.7	12.5	7.0	22.4	6.5	11.9	6.8	21.3
Jordan	2.0	3.9	2.4	8.4	1.9	3.6	2.2	7.7
Lebanon	1.5	3.4	1.6	5.0	1.4	3.3	1.6	4.8
Saudi Arabia	2.9	4.2	3.3	5.6	2.8	4.0	3.2	5.4
Syria	2.6	7.8	5.4	13.1	2.6	7.4	5.2	12.3
Turkey	5.3	10.5	6.9	31.1	5.2	10.1	6.8	29.8
RME	1.5	2.2	1.7	3.6	1.5	2.1	1.6	3.4

Table S79. Changes in crops consumer's price index under the scenarios of 20% reduction in water flow of upstream

Country/Scenario	R1-EOC1-E1	R1-EOC1-E2	R1-EOC1-S1	R1-EOC1-S2	R1-EOC2-E1	R1-EOC2-E2	R1-EOC2-S1	R1-EOC2-S2
Iran	6.7	8.8	6.6	19.9	6.3	8.2	6.3	17.7
Iraq	4.1	14.2	9.1	24.0	3.9	13.5	8.6	22.6
Jordan	1.5	2.9	1.9	5.3	1.4	2.7	1.8	4.9
Lebanon	1.4	3.0	1.6	4.6	1.3	2.8	1.5	4.4
Saudi Arabia	1.5	2.2	1.7	3.4	1.4	2.1	1.6	3.2
Syria	5.3	11.6	7.0	17.4	5.1	11.0	6.7	16.3
Turkey	3.9	8.8	5.5	27.5	3.8	8.5	5.3	26.4
RME	0.9	1.6	1.1	3.0	0.9	1.5	1.0	2.8

Table S80. Changes in crops producer's price index under the scenarios of 20% reduction in water flow of upstream

Country/Scenario	R1-EOC1-E1	R1-EOC1-E2	R1-EOC1-S1	R1-EOC1-S2	R1-EOC2-E1	R1-EOC2-E2	R1-EOC2-S1	R1-EOC2-S2
Iran	7.9	10.1	7.8	22.1	7.5	9.5	7.4	19.7
Iraq	6.8	23.0	15.1	35.1	6.5	21.9	14.4	33.3
Jordan	2.4	5.4	3.3	10.3	2.2	4.9	3.1	9.3
Lebanon	1.7	3.8	1.9	5.4	1.6	3.6	1.8	5.1
Saudi Arabia	3.0	4.3	3.4	5.8	2.9	4.2	3.3	5.5
Syria	6.2	13.5	8.2	20.0	6.0	12.8	7.8	18.8
Turkey	4.5	9.8	6.2	30.3	4.4	9.5	6.0	29.1
RME	1.7	2.5	1.9	3.9	1.7	2.4	1.8	3.6

Table S81. Changes in crops consumer's price index under no collaboration and full collaboration scenarios

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	7.6	18.6	ET Countries	-1.3	17.8
Iraq	14.0	27.2	Jordan	0.2	4.0
Jordan	2.3	5.5	Lebanon	0.3	4.2
Lebanon	1.8	4.7	Saudi Arabia	0.8	3.1
Saudi Arabia	1.7	3.4	RME	0.1	2.8
Syria	8.9	19.4			
Turkey	7.1	30.6			
RME	1.2	3.0			

Table S82. Changes in crops producer's price index under no collaboration and full collaboration scenarios

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	8.8	20.6	ET Countries	-0.9	19.4
Iraq	23.6	42.1	Jordan	0.2	6.8
Jordan	4.2	10.6	Lebanon	0.6	4.9
Lebanon	2.1	5.4	Saudi Arabia	2.2	5.3
Saudi Arabia	3.3	5.7	RME	1.0	3.6
Syria	10.3	22.4			
Turkey	8.0	33.8			
RME	2.0	3.8			

S9. Impact on trade balance of food products

Table S83. Changes in net imports of food items include crops, livestock, and processed food and feed under alternative scenarios (figures are million USD)

Country/Scenario	B-EOC1-E1	B-EOC1-E2	B-EOC1-S1	B-EOC1-S2	B-EOC2-E1	B-EOC2-E2	B-EOC2-S1	B-EOC2-S2
Iran	642	649	564	1,306	601	600	535	1,094
Iraq	463	788	482	1,298	441	734	459	1,196
Jordan	-13	-34	-18	-87	-17	-39	-21	-89
Lebanon	18	34	17	28	16	28	14	22
Saudi Arabia	98	134	110	200	89	119	98	187
Syria	28	124	95	138	29	115	89	127
Turkey	796	1,879	1,169	5,451	762	1,788	1,113	5,163
RME	193	225	179	287	169	189	145	242
Total	2,224	3,799	2,598	8,621	2,089	3,534	2,432	7,943

Table S84. Changes in net imports of food items include crops, livestock, and processed food and feed under 10% decrease in water use efficiency scenarios (million USD)

Country/Scenario	W1-EOC1-E1	W1-EOC1-E2	W1-EOC1-S1	W1-EOC1-S2	W1-EOC2-E1	W1-EOC2-E2	W1-EOC2-S1	W1-EOC2-S2
Iran	593	595	513	1246	554	547	487	1036
Iraq	924	1240	944	1720	855	1140	874	1570
Jordan	-36	-58	-41	-111	-39	-61	-43	-112
Lebanon	16	31	14	25	13	26	12	20
Saudi Arabia	94	188	159	202	88	172	146	183
Syria	1543	2607	1897	6116	1463	2469	1794	5781
Turkey	206	237	192	296	182	202	158	252
RME	3339	4841	3679	9493	3116	4495	3428	8731
Total	593	595	513	1246	554	547	487	1036

Table S85. Changes in net imports of food items include crops, livestock, and processed food and feed under 10% increase in water use efficiency scenarios (million USD)

Country/Scenario	W2-EOC1-E1	W2-EOC1-E2	W2-EOC1-S1	W2-EOC1-S2	W2-EOC2-E1	W2-EOC2-E2	W2-EOC2-S1	W2-EOC2-S2
Iran	671	691	595	1362	630	640	566	1148
Iraq	118	371	129	878	129	360	139	819
Jordan	4	-14	0	-64	0	-20	-4	-68
Lebanon	21	36	19	30	18	30	17	25
Saudi Arabia	83	120	95	188	73	105	83	175
Syria	-27	63	35	76	-21	60	35	72
Turkey	77	1166	458	4798	86	1117	445	4553
RME	179	213	166	277	155	176	132	232
Total	1126	2645	1497	7546	1070	2468	1412	6956

Table S86. Changes in net imports of food items include crops, livestock, and processed food and feed under 20% increase in water use efficiency scenarios (million USD)

Country/Scenario	W3-EOC1-E1	W3-EOC1-E2	W3-EOC1-S1	W3-EOC1-S2	W3-EOC2-E1	W3-EOC2-E2	W3-EOC2-S1	W3-EOC2-S2
Iran	678	637	716	665	606	576	1407	1191
Iraq	-16	35	76	98	-7	42	484	466
Jordan	14	9	1	-5	11	6	-45	-50
Lebanon	22	19	38	32	21	18	32	27
Saudi Arabia	70	61	106	90	81	69	177	163
Syria	-61	-55	7	9	-17	-13	18	19
Turkey	-572	-530	471	462	-215	-191	4153	3947
RME	168	144	200	164	155	121	267	222
Total	304	320	1616	1514	635	628	6493	5986

Table S87. Changes in net imports of food items include crops, livestock, and processed food and feed under the agricultural and food tariff removal scenarios (figures are million USD)

Country/Scenario	T1-EOC1-E1	T1-EOC1-E2	T1-EOC1-S1	T1-EOC1-S2	T1-EOC2-E1	T1-EOC2-E2	T1-EOC2-S1	T1-EOC2-S2
Iran	680	679	596	1,324	638	629	567	1,108
Iraq	448	775	468	1,289	426	722	445	1,187
Jordan	-13	-34	-17	-87	-16	-39	-21	-90
Lebanon	20	36	19	29	17	30	16	24
Saudi Arabia	33	129	101	142	34	120	95	131
Syria	548	1,641	926	5,241	515	1,551	870	4,956
Turkey	201	233	188	293	177	197	153	248
RME	680	679	596	1,324	638	629	567	1,108
Total	448	775	468	1,289	426	722	445	1,187

Table S88. Changes in net imports of food items include crops, livestock, and processed food and feed under overall tariff removal scenarios (figures are million USD)

Country/Scenario	T2-EOC1-E1	T2-EOC1-E2	T2-EOC1-S1	T2-EOC1-S2	T2-EOC2-E1	T2-EOC2-E2	T2-EOC2-S1	T2-EOC2-S2
Iran	558	560	473	1,218	518	512	445	1,004
Iraq	452	779	471	1,292	429	725	448	1,190
Jordan	-14	-35	-19	-89	-18	-40	-22	-91
Lebanon	19	35	18	28	17	29	15	23
Saudi Arabia	95	131	107	196	85	116	95	183
Syria	34	130	102	142	34	121	95	131
Turkey	795	1,886	1,174	5,478	762	1,796	1,118	5,191
RME	188	220	175	280	164	184	141	235
Total	558	560	473	1,218	518	512	445	1,004

Table S89. Changes in net imports of food items include crops, livestock, and processed food and feed under the scenarios of 20% reduction in water flow of upstream (million USD)

Country/Scenario	R1-EOC1-E1	R1-EOC1-E2	R1-EOC1-S1	R1-EOC1-S2	R1-EOC2-E1	R1-EOC2-E2	R1-EOC2-S1	R1-EOC2-S2
Iran	652	599	525	1246	609	552	500	1037
Iraq	477	1304	932	1858	454	1196	862	1690
Jordan	-17	-57	-35	-114	-21	-61	-38	-115
Lebanon	18	32	15	25	15	26	13	20
Saudi Arabia	101	141	114	208	92	127	103	196
Syria	120	231	142	264	112	210	131	238
Turkey	788	1823	1125	5398	755	1737	1072	5115
RME	195	229	182	291	171	194	148	247
Total	2334	4300	3000	9175	2187	3981	2791	8429

Table S90. Changes in net imports of food items include crops, livestock, and processed food and feed under no collaboration and full collaboration (figures are million USD)

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	513	985	ET Countries	-375	8,339
Iraq	1,260	2,003	Jordan	14	-63
Jordan	-57	-134	Lebanon	19	24
Lebanon	11	18	Saudi Arabia	55	165
Saudi Arabia	111	207	RME	131	239
Syria	159	285			
Turkey	1,417	5,740			
RME	186	257			

S10. No collaboration versus full collaboration

Table S91. %Changes in the real GDP by country under no collaboration and full collaboration scenarios

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	-1.84	-6.58	ET Countries	0.88	-2.88
Iraq	-3.60	-6.18	Jordan	-0.46	-1.13
Jordan	-0.62	-1.23	Lebanon	-0.39	-1.13
Lebanon	-0.50	-1.17	Saudi Arabia	-0.48	-0.90
Saudi Arabia	-0.50	-0.89	RME	-0.51	-1.11
Syria	-3.70	-7.90	Total	0.12	-1.86
Turkey	-1.65	-7.05			
RME	-0.55	-1.11			
Total	-1.18	-3.63			

Table S92. Changes in the real GDP by country under no collaboration and full collaboration scenarios (billion USD)

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	-7.71	-27.55	ET Countries	13.03	-42.70
Iraq	-6.14	-10.53	Jordan	-0.18	-0.44
Jordan	-0.24	-0.48	Lebanon	-0.20	-0.58
Lebanon	-0.26	-0.60	Saudi Arabia	-3.14	-5.91
Saudi Arabia	-3.27	-5.80	RME	-5.49	-11.91
Syria	-1.03	-2.20	Total	4.02	-62.28
Turkey	-14.25	-60.86			
RME	-5.92	-11.99			
Total	-38.82	-120.01			

Table S93. Percent changes in sectoral outputs under no collaboration and full collaboration scenarios

Scenario	Countries	Sectors					
		Crop	Forestry	Food	Energy	Industry	Service
NOCO-ENSEMBLE	Iran	-3.3	-3.2	-2.2	-0.6	-2.2	-2.2
	Iraq	-21.1	-6.0	-6.8	-2.4	-5.7	-4.4
	Jordan	-0.3	-1.9	-0.2	-0.6	-0.8	-0.6
	Lebanon	-1.6	-0.6	-0.3	-0.5	-0.7	-0.4
	Saudi Arabia	-3.6	-0.8	-0.9	-0.4	-1.2	-0.8
	Syria	-9.2	-3.6	-4.9	-0.1	-1.2	-3.2
	Turkey	-6.3	-2.4	-1.8	-1.4	-1.3	-1.6
	RME	-2.0	-0.3	-0.7	-0.2	-0.7	-0.7
NOCO-SELECTED	Iran	-8.2	-8.9	-6.5	-1.1	-7.5	-8.0
	Iraq	-30.2	-9.9	-11.2	-4.0	-9.7	-7.5
	Jordan	-0.5	-3.8	-0.3	-1.2	-1.7	-1.2
	Lebanon	-3.5	-1.6	-0.9	-1.2	-1.7	-1.1
	Saudi Arabia	-4.4	-1.3	-1.7	-0.8	-2.3	-1.3
	Syria	-18.2	-7.5	-10.1	-0.4	-3.0	-7.1
	Turkey	-22.1	-9.1	-7.7	-5.8	-5.7	-6.8
	RME	-2.3	-0.4	-1.3	-0.4	-1.6	-1.5
FULLCO-ENSEMBLE	ET Countries	1.3	1.7	0.8	0.2	0.9	0.9
	Jordan	-8.0	-0.1	-0.4	-0.2	-0.4	-0.5
	Lebanon	-1.5	-0.3	-0.3	-0.4	-0.3	-0.4
	Saudi Arabia	-3.4	-0.9	-0.8	-0.7	-1.1	-0.7
	RME	-2.7	-0.2	-0.5	-0.1	-0.7	-0.6
FULLCO-SELECTED	ET Countries	-13.0	-5.2	-4.2	-1.5	-2.5	-2.9
	Jordan	-10.9	-2.7	-0.1	-0.4	-1.2	-1.1
	Lebanon	-2.9	-1.4	-1.1	-1.1	-1.8	-1.0
	Saudi Arabia	-5.0	-1.3	-1.8	-1.4	-1.9	-1.4
	RME	-2.6	-0.4	-1.4	-0.3	-1.4	-1.3

Table S94. %Changes in demand for unskilled labor in agricultural sectors by country under no collaboration and full collaboration scenarios

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	-2.00	-6.90	ET Countries	1.68	-10.15
Iraq	-13.79	-21.15	Jordan	-0.84	-1.24
Jordan	-0.65	-1.20	Lebanon	-1.34	-2.88
Lebanon	-1.33	-2.92	Saudi Arabia	-2.18	-3.04
Saudi Arabia	-2.14	-3.09	RME	-0.83	-1.39
Syria	-8.35	-16.59			
Turkey	-4.37	-16.57			
RME	-0.74	-1.36			

Table S95. %Changes in demand for unskilled labor in non-agricultural sectors by country under no collaboration and full collaboration scenarios

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	-3.73	-12.02	ET Countries	1.02	-4.53
Iraq	-4.98	-8.89	Jordan	-0.45	-1.64
Jordan	-0.92	-1.92	Lebanon	-0.32	-1.22
Lebanon	-0.53	-1.30	Saudi Arabia	-0.63	-1.36
Saudi Arabia	-0.73	-1.33	RME	-0.73	-1.75
Syria	-6.22	-13.31			
Turkey	-2.1	-9.67			
RME	-0.85	-1.80			

Table S96. %Changes in demand for skilled labor in agricultural sectors by country under no collaboration and full collaboration scenarios

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	-2.24	-7.35	ET Countries	0.65	-6.21
Iraq	-8.54	-14.23	Jordan	-0.49	-0.77
Jordan	-0.17	-0.26	Lebanon	-0.69	-1.96
Lebanon	-0.85	-2.07	Saudi Arabia	-1.25	-2.63
Saudi Arabia	-1.56	-2.71	RME	-0.60	-1.49
Syria	-8.01	-16.00			
Turkey	-2.43	-10.18			
RME	-0.65	-1.39			

Table S97. %Changes in demand for skilled labor in non-agricultural sectors by country under no collaboration and full collaboration scenarios

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	-3.71	-12.53	ET Countries	1.00	-4.48
Iraq	-4.88	-8.76	Jordan	-0.45	-1.61
Jordan	-0.89	-1.86	Lebanon	-0.33	-1.21
Lebanon	-0.53	-1.29	Saudi Arabia	-0.62	-1.34
Saudi Arabia	-0.70	-1.28	RME	-0.68	-1.65
Syria	-5.81	-12.45			
Turkey	-2.17	-9.57			
RME	-0.80	-1.67			

Table S98. Changes in crops consumer's price index under no collaboration and full collaboration scenarios

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	7.6	18.6	ET Countries	-1.3	17.8
Iraq	14.0	27.2	Jordan	0.2	4.0
Jordan	2.3	5.5	Lebanon	0.3	4.2
Lebanon	1.8	4.7	Saudi Arabia	0.8	3.1
Saudi Arabia	1.7	3.4	RME	0.1	2.8
Syria	8.9	19.4			
Turkey	7.1	30.6			
RME	1.2	3.0			

Table S99. Changes in crops producer's price index under no collaboration and full collaboration scenarios

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	8.8	20.6	ET Countries	-0.9	19.4
Iraq	23.6	42.1	Jordan	0.2	6.8
Jordan	4.2	10.6	Lebanon	0.6	4.9
Lebanon	2.1	5.4	Saudi Arabia	2.2	5.3
Saudi Arabia	3.3	5.7	RME	1.0	3.6
Syria	10.3	22.4			
Turkey	8.0	33.8			
RME	2.0	3.8			

Table S100. Changes in net imports of food items include crops, livestock, and processed food and feed under no collaboration and full collaboration (figures are million USD)

Country/Scenario	NOCO-ENSEMBLE	NOCO-SELECTED	Country/Scenario	FULLCO-ENSEMBLE	FULLCO-SELECTED
Iran	513	985	ET Countries	-375	8,339
Iraq	1,260	2,003	Jordan	14	-63
Jordan	-57	-134	Lebanon	19	24
Lebanon	11	18	Saudi Arabia	55	165
Saudi Arabia	111	207	RME	131	239
Syria	159	285			
Turkey	1,417	5,740			
RME	186	257			