

A close-up photograph of several ripe, bright red pomegranates hanging from a tree. The pomegranates are in sharp focus, while the green leaves and branches in the background are blurred. The lighting is bright, highlighting the texture of the fruit's skin.

2023 Scenathon results

Pathways for food
and land-use systems
in Türkiye



FABLE
CONSORTIUM



About FABLE

The Food, Agriculture, Biodiversity, Land-Use, and Energy (FABLE) Consortium is a collaborative initiative to support the development of globally consistent mid-century national food and land-use pathways that could inform policies towards greater sustainability. The Consortium brings together teams of researchers from 24 countries and international partners from the UN Sustainable Development Solutions Network (SDSN), the International Institute for Applied Systems Analysis (IIASA), the Alliance of Bioversity International and CIAT, and the Potsdam Institute for Climate Impact Research (PIK). <https://www.fableconsortium.org/>

About the authors

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Contents

1. National context
2. Methods
3. Results
4. Scenarios and assumptions

Our food and land-use systems are critical for staying within our planetary boundaries and the Earth’s system resilience. Among the six Transformations required to achieve the Sustainable Development Goals (SDGs), the fourth Transformation—focusing on food, land, and water—is crucial. This Transformation is key to achieving SDG 2 (Zero Hunger), SDG 6 (Clean Water and Sanitation), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), SDG 14 (Life Below Water), and SDG 15 (Life on Land). Moreover, it significantly supports the remaining SDGs, underscoring its crucial role in fostering a sustainable future.

In this document, we present the results of the 2023 ‘Scenathon’, a modelling exercise by the FABLE Consortium exploring three alternative futures for national and regional food and land-use systems. The term ‘Scenathon’ stands for ‘a marathon of scenarios’ and refers to FABLE’s iterative process for ensuring that national and regional pathways have coherent trade assumptions and align with global sustainability targets (see the 2024 Sustainable Development Report for more information).

Through these long-term pathways, we can identify trade-offs and synergies between different goals and see the impact of various actions, as well as key levers for guiding sustainable development policies through 2030 and 2050. These results, together with our modelling tools and methods, are designed to support decision-making and the development of better policies and targets to drive the transformation of our food and land-use systems.

Figure 1. Historical share of GHG emissions from Agriculture, Forestry, and Other Land Use (AFOLU) to total AFOLU emissions and removals by source in 2020

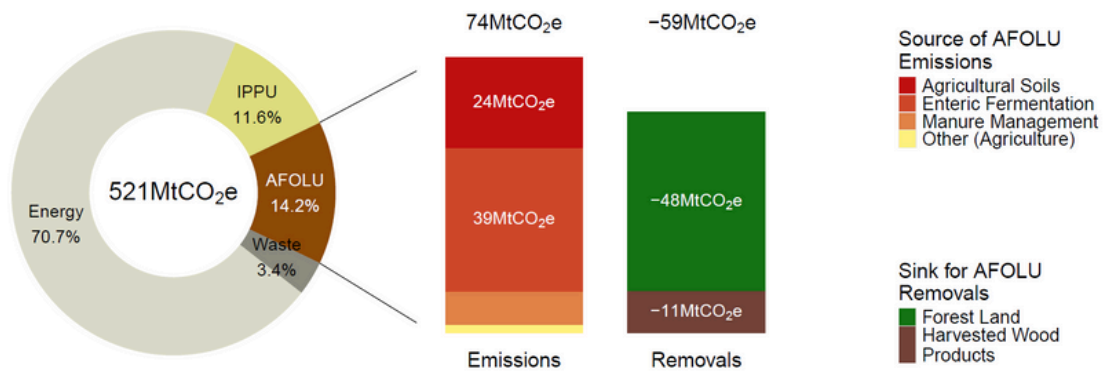
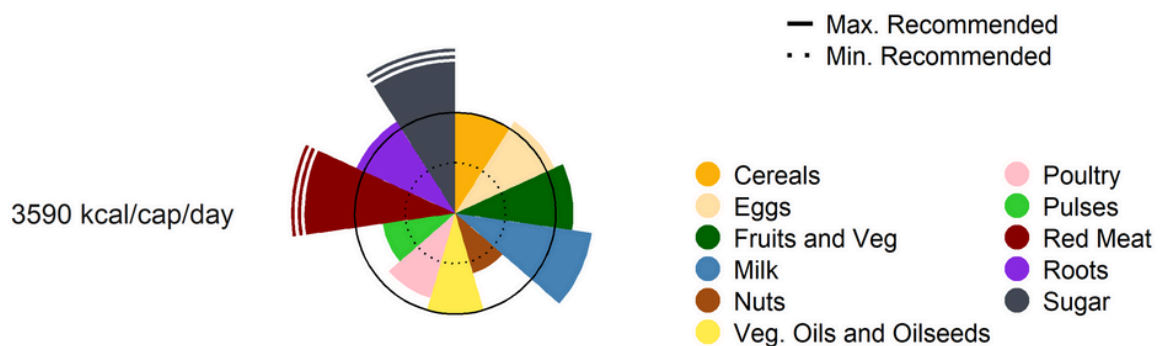


Figure 2. Daily average kilocalorie intake per capital per food category in 2020



This table summarizes national targets for food and land use, derived from national commitments, policies, and strategies. It provides an overview of the country's current ambitions to transform its food and land-use systems. Where countries lacked quantitative national targets, we have estimated targets based on qualitative pledges.

SDG	Indicator	National Target
 2 ZERO HUNGER	Self-sufficiency	Maintain for figs, hazelnuts, grapefruit, apricot, mandarin, orange, lemon, pomegranate, grapes, apples, chestnut, peach, chickpea, cotton, potatoes, rye, sugar beet. Increase for the cereal products from <u>84.3%</u> to <u>97%</u> .
	Undernourishment	Zero hunger by 2030 eliminating malnutrition and ensuring food <u>security</u> .
	Overweight / obesity	Reduction of the obese population aged 19 and over to 25% by <u>2030</u> .
	Diet-related diseases	Reduce the death rate from non-communicable diseases to <u>50%</u> .
 13 CLIMATE ACTION	Total GHG emissions reduction	41% from business-as-usual levels by <u>2030</u> (absolute emissions level in 2030: 765 MtCO _{2e}). Net <u>zero</u> by <u>2053</u>
	Other climate mitigation targets	Achieve an increase of municipal solid waste recycling rate of more than 60 percent by <u>2035</u> .
 15 LIFE ON LAND	Expand protected areas or 'Other effective area-based conservation measures'	From 3.323,24 thousand ha of <u>protected</u> lands in <u>2021</u> to 3.384,96 thousand ha by <u>2025</u> .
	Promote afforestation	2,300,000 hectares by <u>2030</u> . Reach <u>30%</u> of Turkey's area covered by <u>forest</u>
	Expand cropland area under agroecological practices	Increase the land allocated to organic and good agricultural practices to 1,400,000 Ha (<u>6.2%</u> of the total amount of country land) by <u>2025</u> .
	Biodiversity-related targets	Reduce rate of erosion to 130 million tons per year by <u>2030</u>
 8 DECENT WORK AND ECONOMIC GROWTH	Agricultural exports	Increase the share of fresh apricots export 10-fold by 2050. Increase the value of exported plant products to 11.400 million US dollars by <u>2025</u> .
	Employment in the agricultural sector	Increase the declining employment rate in agriculture from <u>16%</u> (<u>2022</u>)
	Timber exports	An average annual growth of 8%
	Farmers' income	Increase farmers' income to 20,000 USD by 2030 and 37,000 USD by <u>2050</u> .
 14 LIFE BELOW WATER	Limit water use	Recycling of wastewater rate - 5% by 2023 and 15% by the end of <u>2030</u> . Development of 10 new wastewater treatment <u>plants</u> .

Model

Using the open-access [FABLE Calculator](#) and the FABLE decentralized modelling infrastructure, we have developed three alternative pathways —Current Trends, National Commitments, and Sustainable Pathway— to explore the impact of various practices and policies on achieving sustainability targets through 2050. We compare our results with targets across food security and nutrition, GHG emissions reduction, forest and biodiversity conservation, and sustainable use of water, nitrogen, and phosphorus.

For each of these pathways, we have established various assumptions regarding the evolution of several model parameters. These parameters include population growth, dietary patterns, food waste, food import and export levels, crop and livestock productivity, agricultural expansion, afforestation, livestock density, protected areas expansion, post-harvest losses, biofuel demand, urban expansion, agricultural practice coverage, and irrigation area expansion. These assumptions detail the extent to which these factors will drive changes in food and land systems from 2020 to 2050.

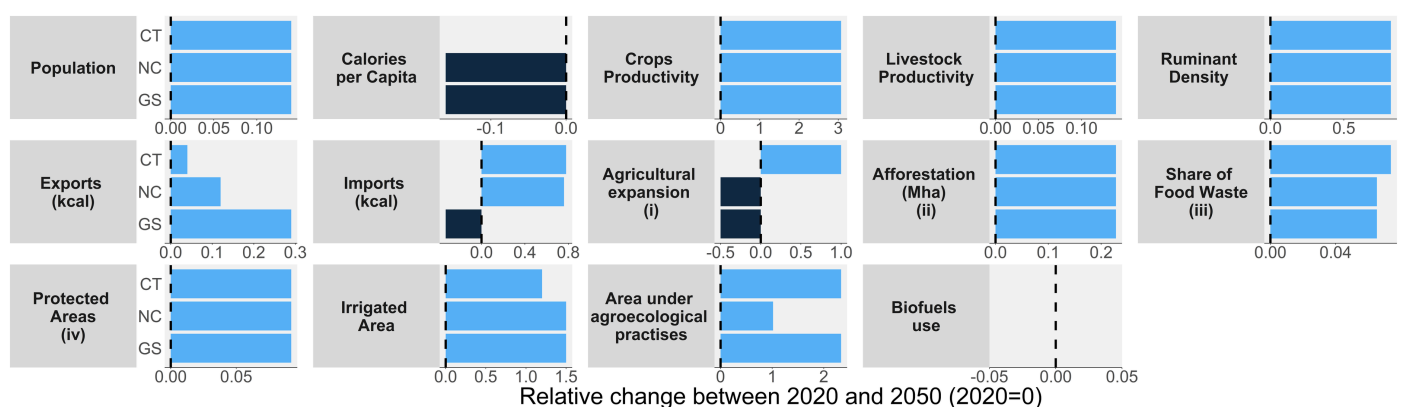
Pathway narratives

Current Trends: The annual percent change in Türkiye's real GDP is expected to be between 3% and 3.5% from 2022 to 2030 (OECD-FAO Outlook). GDP per capita is projected to increase to \$15,000 by 2030. With slight economic growth, Türkiye is emerging as a recognized market and a newly industrialized country. Following the global financial recession and an earthquake, Türkiye implemented stimulus packages, including temporary tax cuts, aiding in economic recovery. However, despite positive progress, income inequality remains pronounced.

National Commitments: Türkiye will undertake several actions and sub-actions by the end of 2023, including establishing a digital value chain from seed to fork, creating and implementing an alternative support model with contracted production, preventing information pollution in food and increasing food literacy, creating infrastructure for food loss and waste, and enacting a water law with a monitoring and evaluation system.

Global Targets: As a signatory to the UNSDGs, Türkiye regularly updates its progress on 83 indicators monitored by TURKSTAT. Sustainable development is referenced in the most recent National Development Plan, and the 2019 document on Türkiye's Green Transition supports global sustainable development goals, aligning with the EU's Green Deal. This alignment will accelerate sustainability efforts in the environment, agriculture, and food sectors, and promote economic change and recovery.

Figure 3. Assumptions on the levers for change in each pathway



Notes: (i) Results are expressed in code, taking the value 1 for 'Free expansion scenario', -0.5 for 'No deforestation' and -1 for 'No Agricultural expansion'.

(ii) Results are expressed in a net increase rather than relative change.

(iii) Results are expressed % of consumption that is wasted.

(iv) Results are expressed in % of total land in 2050.

Figure 4. Computed daily average intake per capita over 2000-2050

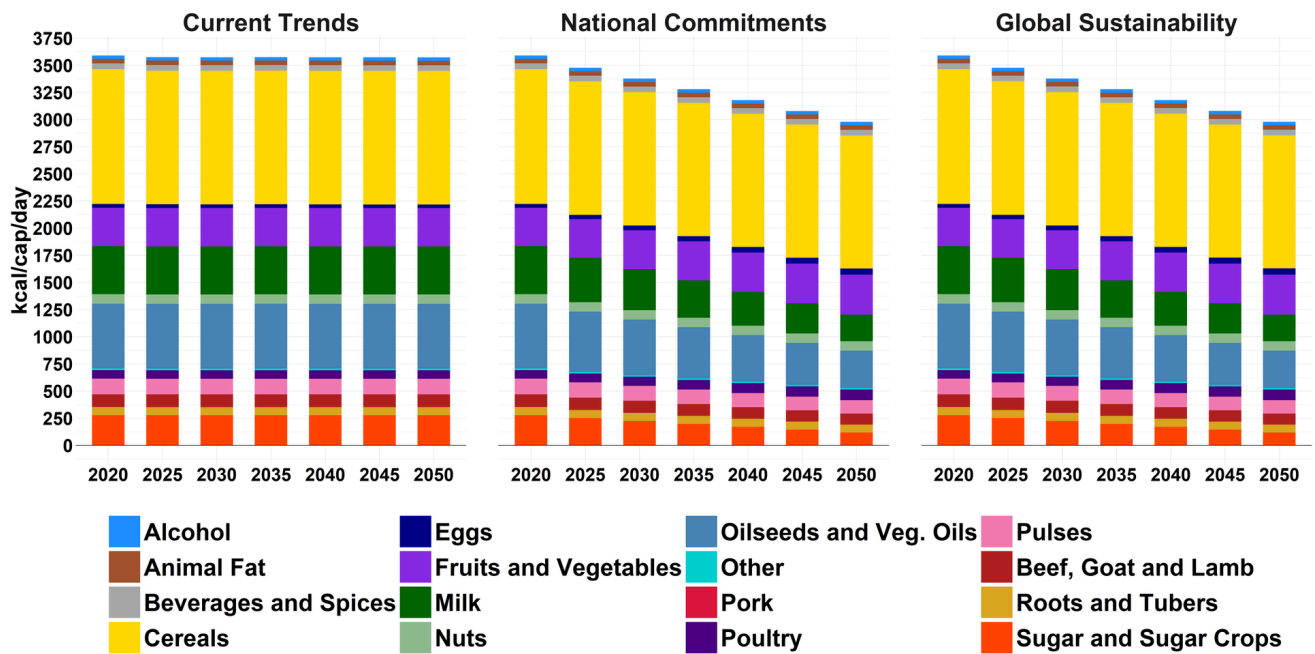


Figure 5. Comparison of the computed daily average kilocalorie intake per capital per food category across the three pathways and the prevalence of undernourishment in 2050

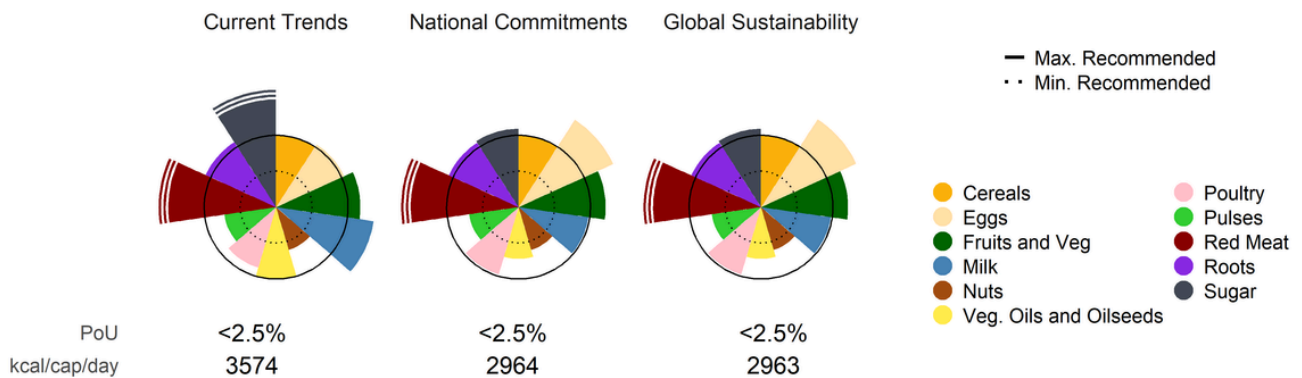


Figure 6. Evolution of land cover 2000-2050

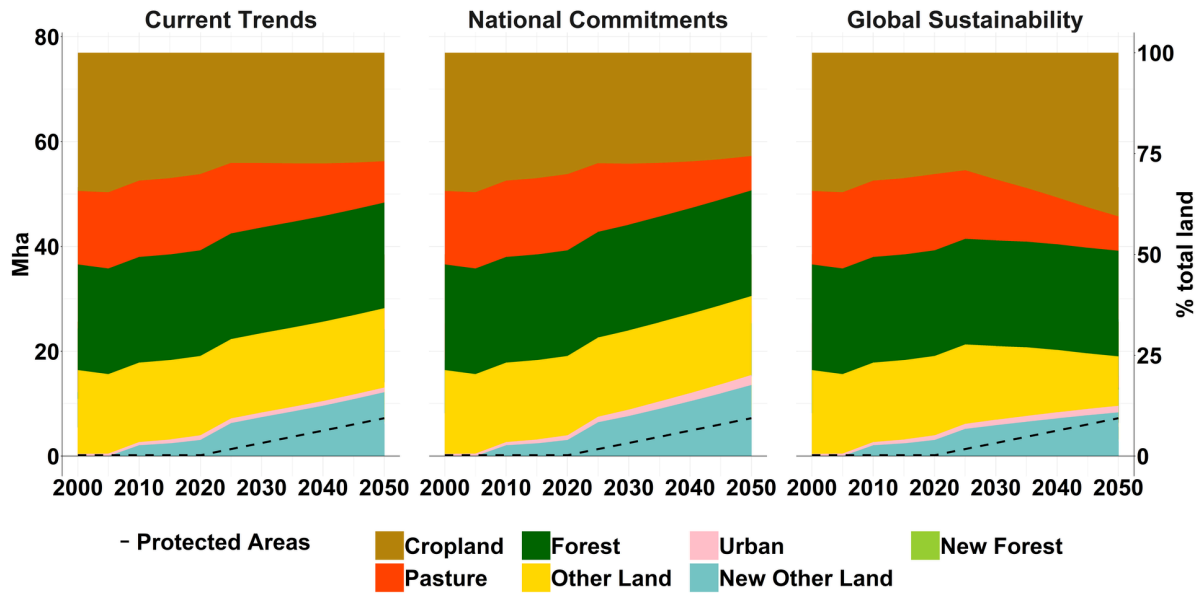


Figure 7. Evolution of the cropland composition 2000-2050

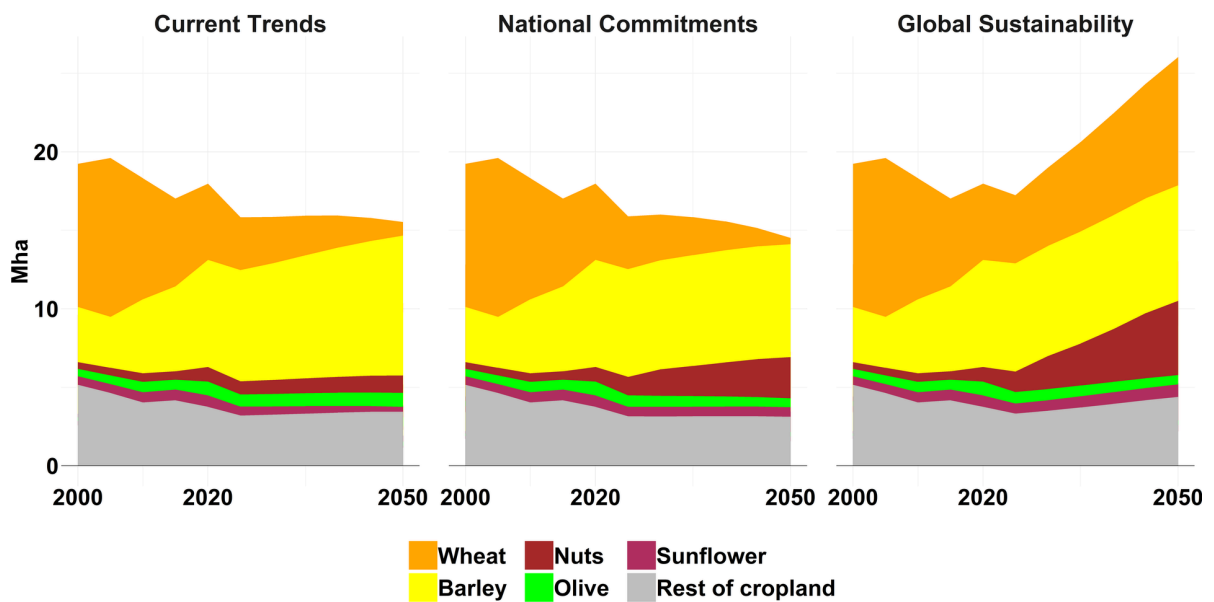


Figure 8. Projected AFOLU emissions and removals between 2020 and 2050 by main sources and sinks across pathways

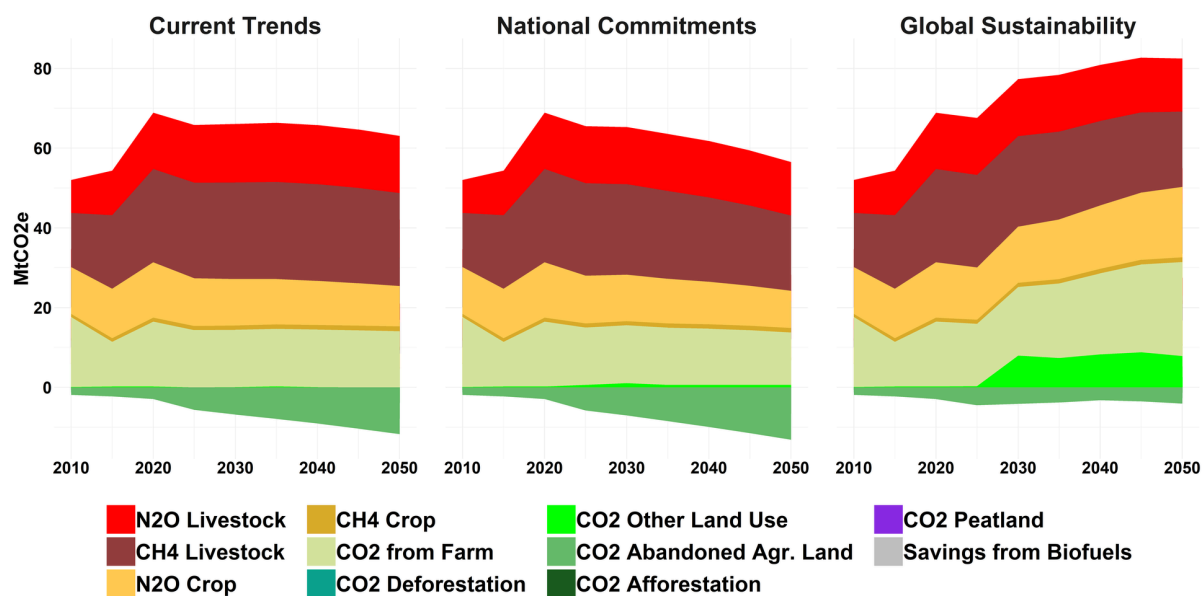
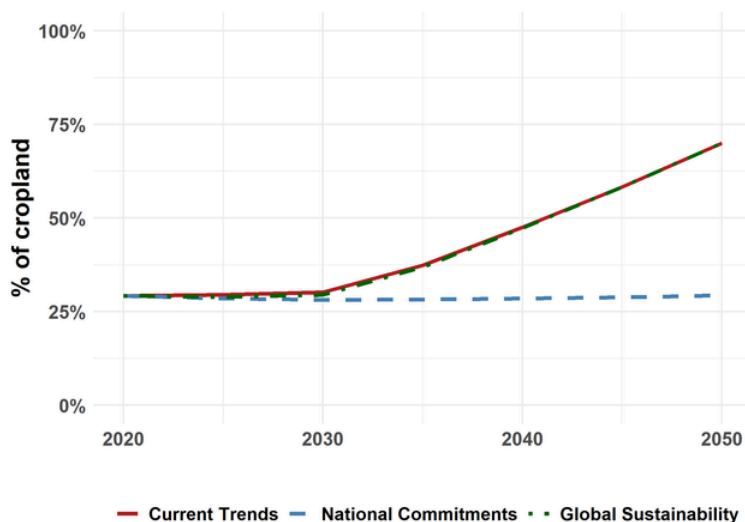


Figure 9. Share of cropland under agroecological practices



Agroecological practices included: Cover crops, cultivar mixtures, diversified farming systems, embedded natural, organic farming, no/minimal tillage

Figure 10. Total area of land where natural processes predominate (LNPP)

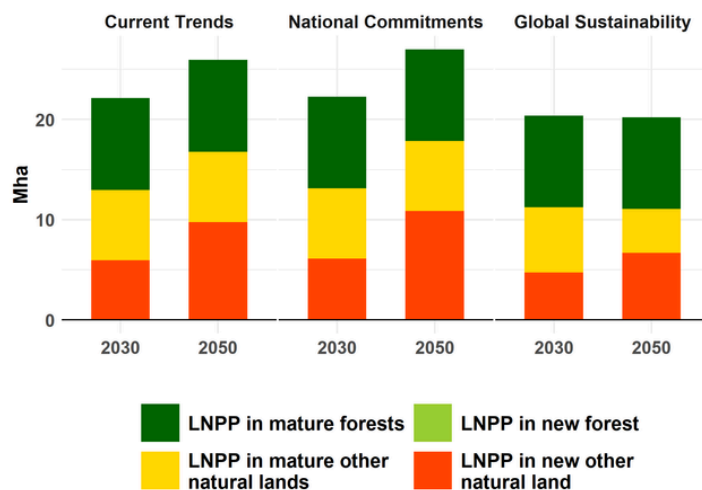


Figure 11. Nitrogen application

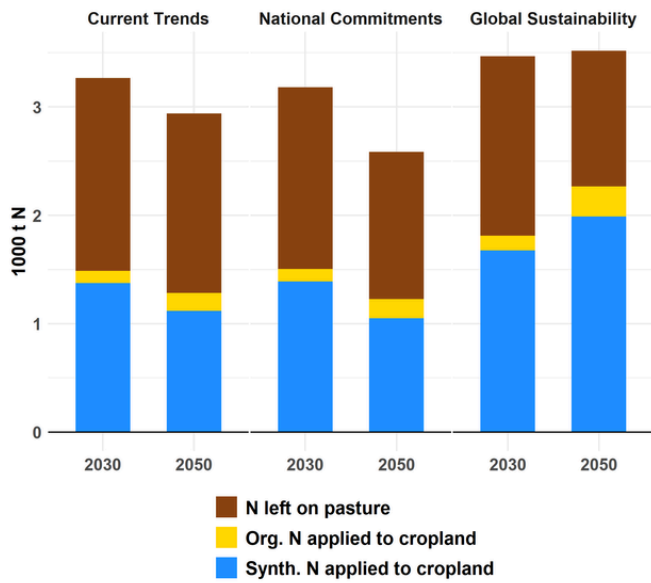
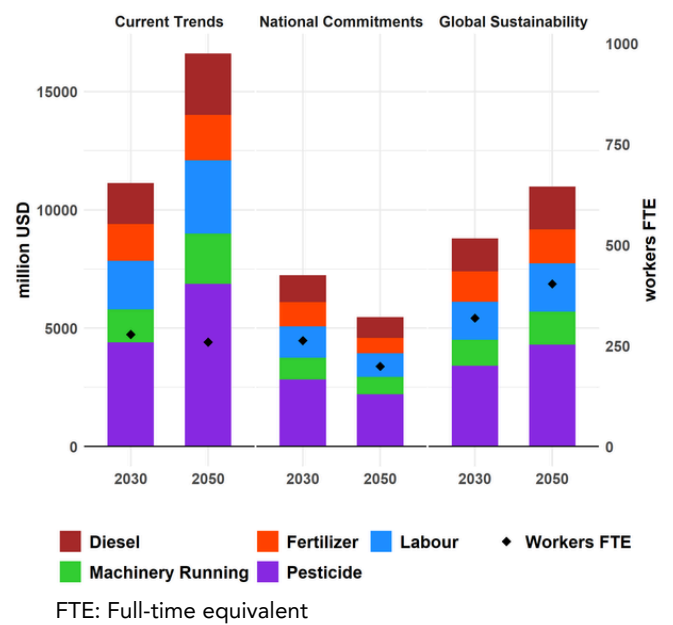


Figure 12. On-farm production costs



For more detailed results and visual data, visit www.scenathon.org

Scenarios and assumptions

		A) CURRENT TRENDS	B) NATIONAL COMMITMENTS	C) GLOBAL SUSTAINABILITY	Justification
1. Macroeconomics	1.1) GDP per capita	Total GDP in 2022 was 905.99 billion US Dollars for Türkiye (World Bank). GDP per capita of Türkiye was announced as 8,599 USD for 2021 and 10,616 USD for 2022 (TURKSTAT and World Bank). 3-4% of economic growth is expected.	The increasing trend in the GDP per capita has been ongoing since 2021, same as CT, with 3-4 % of economic growth	World GDP per capita for 2021 was \$12,235, a 12.43% increase from 2020. The target rate of economic growth changes depending on the current circumstances of the economy and what is achievable. The projected global economic growth of about 2.9 percent annually.	Statista, 2023. Türkiye: Gross domestic product (GDP) per capita in current prices from 1987 to 2028
	1.2) Population	Türkiye's population was 85 million 279 thousand 553 people by the end of 2022. During the 2018-2023 period, the total fertility rate staying constant at 2.10 %, will linearly decline in a natural way and will reach 2.05 % in 2030. According to this trend, the population will reach to approximately 105 million by 2050 (TURKSTAT)	With an assumption for a linear decline in the rate of fertility (to %1.65 in 2050) and lower net international migration, the population will reach around 99.5 million by 2050.	Same as the current trends Türkiye is expected increasing migration coming years. Overall population increase rate is similar to developed countries. Same as the current trends with medium fertility and mortality rate.	TURKSTAT Population Projections, 2018-2080 FAO Report (Global agriculture towards 2050), 2009.
	1.3) Inflation	The inflation rate for 2022 is 60.5% by the World Bank and the current inflation rate for 2023 is announced as 58% by the Central Bank of Türkiye. The devastating earthquake at the beginning of 2023 brought widespread damage in southern Türkiye. However, the boost from reconstruction is expected to largely offset the negative impact from disruption to economic activity (OECD-FAO 2031 Outlook Report).	By the end of 2025, the inflation rate in Türkiye is expected to drop to 15% (Central Bank of Türkiye).	We assume that with the significant support and effort from the government, the positive developments in the labor market, a gradual move towards higher value-added industries, potentially allowing a number of centers of excellence (mainly in food and beverage processing industry, automotive industry, agricultural R&D industry, alternative energy, tourism) (based on the model by PwC Report) can build more prominent drop in inflation rates to below 10% by 2025 and stay stable by 2050.	World Bank, International Monetary Fund 2022, Statista, (OECD-FAO 2031 Outlook Report), Türkiye in 2041-Looking to the Future (PwC, 2012)

Scenarios and assumptions

		A) CURRENT TRENDS	B) NATIONAL COMMITMENTS	C) GLOBAL SUSTAINABILITY	Justification
	1.4) Inequalities	Although there is some positive progress in decreasing poverty in the country, as of 2021, the inequality among the income was distinct where, the highest 20% held 51.8% of the income, while the lowest 20% only held 5.4%. The Gini coefficient which aims to measure the degree of income inequality is around 0.40.	The Gini coefficient is assumed to drop a few points lower than the current level of 0.40 for Türkiye by 2050, through the positive progress in decreasing poverty. In terms of gender inequality, despite the efforts made by Turkish authorities, particularly refugee women and girls might be at risk of facing relatively higher levels of inequality.	UNDP Gender Equality Strategy 2022-2025 defines three priority areas of finance, digitalization, and innovation and sets out development outcomes to be achieved. With this target, public institutions and the private sector contribute to more inclusive, sustainable, and innovative industrial and agricultural development and equal and decent work opportunities for all, in cooperation with social partners.	UNDP Gender Equality Strategy 2022-2025
2. Land	2.1) Constraints on agricultural expansion/deforestation	According to the data of TURKSTAT for 2021, the total agricultural area is 38,063 thousand hectares (this includes meadow and pastureland). The total agricultural area per capita, which was 0.76 ha in 1990, decreased to 0.45 ha in 2021. As of 2021, when the total arable land (23 446 thousand ha) is taken into account, the area per capita is 0.28 ha. It's expected to remain at least the same.	There are no constraints on the expansion of agricultural lands, outside of the protected areas.	As for current trends. There is a planned attempt about controlled production system on plant based agriculture by the Ministry of Agriculture.	Sustainable food systems country report Türkiye - 2021 , TURKSTAT, Turkish Ministry of Forestry and Water Affairs Land Degradation Neutrality Country Report, 2016-2030
	2.2) Afforestation, and forest plantations targets	The afforested land in Türkiye increased to 22.6 million hectares (29% of the total land of the country) in the years 2002-2019 with a percentage of 8.7 and is planned to increase to 23.4 million hectares in 2023. The	Türkiye committed to restoring 2,300,000 hectares of degraded and deforested lands according to the Bonn Challenge. This amount accounts for 2.3% of	The target for 2050 is assumed to reach 35% of the total area as forest (Neutrality Country Report)	Turkish Ministry of Forestry and Water Affairs Land Degradation National Strategy and Action Plan to Combat Desertification 2019-2030 .

Scenarios and assumptions

		A) CURRENT TRENDS	B) NATIONAL COMMITMENTS	C) GLOBAL SUSTAINABILITY	Justification
		increase is expected to continue despite forest fires.	Türkiye's total area. At the end of the year 2018, 8.9 million hectares of afforestation, erosion control, degraded forest rehabilitation of lands, and pasture reclamation works have been done.		Neutrality Country Report, 2016-2030
	2.3) Urban and settlements area	<p>This urban-rural classification has been significantly affected by the changes in the administrative division as a result of legal regulations such as Law No. 6360 enacted in 2012. The urban population in Türkiye is 77% of the total population, according to the data from 2022.</p> <p>In the localities classified as thinly populated and constituted 93.5% of Türkiye's surface area, 17.3% of the total population resided. On the other hand, 14.8% of the population resided in the intermediate-density areas that constituted 4.9% of the country's total surface area.</p>	In parallel with the increase in global urbanization trends and in parallel to the projections by UNDP (World Urbanization Prospects, 2018), the urban population will increase to more than 80% by 2050.		World Bank TUIK - Urban-Rural Population Statistics, 2022 TUIK - Population Projections United Nations - Population
	2.4) Protected areas	Conserved area percentage related to total land is increased up to 12.9% in 2021 (9.0% in 2020). There are 2783 protected areas in Türkiye, including 40 national parks, 204 nature parks, 31 nature protection areas, and 112 natural monuments. The total protected area size is 59,650 km ² and its ratio to the country's	Protected areas represent 23% of the territory by 2030. Türkiye increased its forest wealth with the afforestation, erosion control and rehabilitation works it has done so far, and it aims to increase the ratio of forest assets to the	<p>As for current trends</p> <p>As indicated in the current trends protected areas aim to expand the land covered further.</p>	Minister of Environment, Urbanization and Climate Change - Protected Areas

Scenarios and assumptions

		A) CURRENT TRENDS	B) NATIONAL COMMITMENTS	C) GLOBAL SUSTAINABILITY	Justification
		surface area is 7.65%. It's expected to increase.	country's surface area to 30% by 2030.		
3. Productivity and management	3.1) Crop productivity for the key crops	<p>Türkiye ranks as 8th in agricultural productivity and in agricultural production value</p> <p>Türkiye is self-sufficient in figs, hazelnut, grapefruit, apricot, mandarin, orange, lemon, pomegranate, grapes, apples, chestnut, peach, chickpea, cotton, potatoes, rye, sugar beet (BUGEM, 2020). Türkiye has a leading position for hazelnut, cherry, fig and apricot production and exports in the world. 67 percent of the hazelnut production, 26 percent of the cherry production, 27 percent of fig and 23 percent of apricot production in the world are just produced by Türkiye and it ranks first in world production of these product.</p>	<p>The crop production index, taking 2014-2016 value as 100, is in an increasing trend and reported as 114.5 for 2021 (World Bank). Production of total agricultural crops to 140 million tons is targeted by 2025. Türkiye's wheat production to reach 23,409,000 tons by 2030. We assume that with positive strategies by understanding the importance of product selection suitable for climate and soil and effective input use, in parallel with planting area planning, the agricultural productivity will increase</p>	<p>As for current trends</p> <p>Since Türkiye is expected to increase production quantity in certain crops, it's expected to contribute in a moderate level</p>	<p>OECD/FAO Agricultural Outlook (2021)</p> <p>The World Bank</p> <p>OECD Food and Agricultural Reviews</p> <p>Innovation, Agricultural Productivity and Sustainability in Türkiye</p> <p>Türkiye Bankalar Birliği Tarım Sektörü Raporu</p>
	3.2) Cropland under agroecological practices	<p>The amount of total agricultural land in Türkiye is 37,762,000 hectares, of which 41.4 % consists of the area of cereals and crop products. The rate of area of fruits, beverage and spice crops has increased by 36.4 % in the years of 2001-2020 while sown areas for cereals decreased to 12.8 % in the same years. Primary agriculture accounts for 6,7 % of</p>	<p>Increase the land allocated to organic and good agricultural practices to 1400000 Hectares: (Proportion: 6.2%) by 2025</p>	<p>As for current trends</p> <p>There are various policies for crop production and soil applications i.e.; diversity and decreased soil tilling among others.</p>	<p>(Turkstat, MoAF) The Ministry of Agriculture</p>

Scenarios and assumptions

		A) CURRENT TRENDS	B) NATIONAL COMMITMENTS	C) GLOBAL SUSTAINABILITY	Justification
		GDP and employs 16 % of the workforce.			
	3.3) Livestock productivity for the key livestock products	As of 2022, the number of cattle in Türkiye is 17.023.791 and the number of sheep and goats is 56.265.750 (excluding poultry). Chicken meat production was 210.014 tons, chicken egg production was 1.64 billion units.	The livestock production index, taking 2014-2016 value as 100, is in an increasing trend to reach up to 131.8 % as of 2021 (World Bank). 0.3% increase in the total cattle number by 2025. 1.5% increase in the number of total poultry is projected.	As for current trends	OECD-FAO Agricultural Outlook 2023-2032
	3.4) Pasture stocking rate	According to national official data, the total range of pasture areas in Türkiye is 146,166.87 km ² . Erosion at various levels is observed in approximately 64% of pasture areas. It is planned to increase the area of 5850 km ² to 8500 km ² in 2023.	Until 2030, a total area of 7500 km ² will be the subject of pasture improvement work.	As for current trends	Land Degradation Neutrality National Report, 2016.
	3.5) Forest management	Türkiye is an extremely rich country in terms of flora and fauna. Preserving the ecosystem is one of the major concerns in Türkiye since the country is located in the Mediterranean region and can be affected by climate change first. Country forest presence keeps on increasing from 20.2 Mha to 23.1 Mha (1973-2021) according to the General Directorate of Forestry data.	Türkiye aims to increase its forest assets to 30% by 2030. Country forest presence keeps on increasing from 20.2 Mha to 23.1 Mha (1973-2021) according to the General Directorate of Forestry data. It can be concluded that this increment will continue app. 0.2Mha yearly.	As for current trends	(Türkstat) Land Degradation Neutrality National Report, 2016.

Scenarios and assumptions

		A) CURRENT TRENDS	B) NATIONAL COMMITMENTS	C) GLOBAL SUSTAINABILITY	Justification
4. Trade	4.1) Share of consumption which is imported for key imported products (%)	<p>The wheat production in Türkiye is open to the effects of climate and precipitation regime changes, the lands per farm are small, the limited mechanization and the low efficiency in parallel with this cause imports to meet the domestic demand.</p> <p>Türkiye imports some consumer-oriented products such as rice, dried beans, walnuts, almonds, oilseeds, including soybean and meal, bananas, coffee, cocoa, meat, fish and different kinds of processed/packaged food items. As well as grain products, as animal feed inputs for its meat and rapidly growing poultry sectors. Türkiye also imports inputs for its food processing and bakery sector and additional cotton as an input for its advanced textile industry.</p>	Total amount of imported crops is targeted to decrease from 23.000.000 tons to 21.000.000 tons by 2025.	-	GAIN Report - Food Processing Ingredients, Türkiye
	4.2) Evolution of exports for key exported products (1000 tons)	<p>Primary agriculture accounts for 3.3% of exports. The highest amount of agricultural export belongs to wheat and meslin flour (around 3000 thousand tons). Uncooked pasta and wheat also have high amounts of exports of around 1400 and 1100 thousand tons (FAOSTAT). Türkiye has a leading position for hazelnut, cherry, fig and apricot production and exports in the world. In the first quarter of 2023,</p>	Increase the value of exported plant products to 11.4 billion US dollars by 2025. 10-fold increase in the fresh apricot export in 2050. Increase from 2.5 Mt 2020 to 7Mt in 2050 for maize.	-	Ministry of Agriculture and Forestry Performance Programme for 2023 FAOSTAT

Scenarios and assumptions

		A) CURRENT TRENDS	B) NATIONAL COMMITMENTS	C) GLOBAL SUSTAINABILITY	Justification
		Türkiye's agricultural sector saw a remarkable 4.5 percent increase in exports compared to the same period in the previous year. During this period, the agricultural sector contributed 14 percent to Türkiye's total export sales.			
5. Food	5.1) Average dietary composition	<p>According to FAO statistics, average protein supply in Türkiye increased to 109.3 g/capita/day in the period of 2016-2018 from 103.7 g/capita/day in the period of 2000-2002. Average supply of protein of animal origin significantly increased to 37.7 g/capita/day in 2016-2018 from 24.3 g/capita/day in the period of 2000-2002. OECD/FAO (2021a). The average beef and veal consumption in Türkiye in 2020 is 9.6 kg. Average per capita consumption for poultry meat is 19.2 kg and average mutton consumption is 4.2 kg. (OECD/FAO, 2019). Annual fish and seafood consumption per capital in Türkiye in 2016 was 5.0 kg. According to the projections per capita kg of wheat consumption will increase 1.7% from 211.2 kg in 2018-2020 to 214.8 kg in 2030. Similarly sugar consumption per capita will rise by 0.14 percent to 15.6 kg in 2030.</p>	<p>2718.29 kcal, out of which, 1881.74 kcal of the average kcal intake per day was from macronutrients (54.27 g of protein per day, 71.53 g fat per day and 243.89 g od CHO per day). Dairy products contributed 257.54 kcal, beef 622.22 kcal, lamb 604.86 kcal, fish and seafood 95.61 kcal, poultry 89.32 kcal, eggs 105.53 kcal, legumes 15.23 kcal, nuts 51.27 kcal, vegetables 117.65 kcal, fruits 80.53 kcal, bread, cereals and bakery products 385.25 kcal, oils and fats 69.81 kcal, sugar and sweeteners 3.18 kcal and soft drinks 220.28 kcal.</p>	<p>By 2050, the average daily calorie consumption per capita is 2450 kcal and composed as: 35% cereals, 10% dairy, 5% red meat, 8% other meat, 15% oil and fat, 5% sugar, 15% fruits and vegetables, 5% pulses, 3% roots and tubers.</p>	<p>Bayram, H. M., & Ozturkcan, A. (2023). The greenhouse gas emissions from food consumption in Türkiye: a regional analysis with developmental parameters. Sustainable Food Technology, 1(1), 92-99.)</p>

Scenarios and assumptions

		A) CURRENT TRENDS	B) NATIONAL COMMITMENTS	C) GLOBAL SUSTAINABILITY	Justification
	5.2) Share of food consumption which is wasted at household level	The Waste Report prepared by the Ministry of Trade stated that 5.4% of the consumers throw away leftover food and 23% of the purchased food is thrown away without being consumed. In order to reduce food loss and waste "SAVE YOUR FOOD" campaign under the Ministry of Agriculture and Forestry in cooperation with FAO and other sectors related campaigns were launched.	Türkiye commits the reduction of food loss and waste, as part of the country's ambition to have fair and healthy food for all its population by 2030. Efforts to collect waste separately from the initial source will be accelerated, within the target of zero waste approach, the recycle ratio will be increased to 60% in 2035, and by 2053, wastes that are not subject to pre-treatment will not be accepted into landfill.	-	FAO. 2020. Türkiye's National Strategy Document On Prevention, Reduction And Monitoring Of Food Loss And Waste And Its Action Plan. Ankara.
6. Biofuels	6.1) Targets on biofuel and/or other bioenergy use	Electricity production from renewable sources, excluding hydroelectric, including geothermal, solar, tides, wind, biomass, and biofuels accounted for 6.3% of total energy production in 2015. This amount has increased to 9% by 2020 (Turkstat). Renewable energy consumption is 13.72 % of total final energy consumption, as of 2020 (World Bank)		Energy consumption will rise globally by 1.7% per year	The World Bank TÜRKSTAT
	6.2) Targets on other non-food use	-	-	-	-
7. Water	7.1) Irrigated crop area	In Türkiye, the agricultural lands cover nearly one-third of the total surface area of 78 million ha. The total potential irrigable area in	Increase the irrigated land area to 5.261.728 hectares by 2025.		National Water Plan (2019-2023), Turkish Ministry of Agriculture

Scenarios and assumptions

		A) CURRENT TRENDS	B) NATIONAL COMMITMENTS	C) GLOBAL SUSTAINABILITY	Justification
		Türkiye is 8.5 million hectares. As of 2020, Türkiye aims to reach 6.7 million ha out of this potential by building an irrigation infrastructure.			Ministry of Agriculture and Forestry Performance Programme for 2023