CHINA

Authors: Hao Zhao (Zhejiang University), Haotian Zhang (Zhejiang University) and Jinfeng Chang (Zhejiang University).

Pathway Assumptions

		A) CURRENT TRENDS	B) GLOBAL SUSTAINABILITY	JUSTIFICATION
1. Macroeconomics	**1.1)** GDP per capita	Remain unchanged between 2020 and 2050 (SSP2)	Remain unchanged between 2020 and 2050 (SSP2)	GLOBIOM-China
	1.2) Population	From 1379.23 million inhabitants in 2020 to 1263.14 million inhabitants in 2050 (SSP2)	From 1379.23 million inhabitants in 2020 to 1263.14 million inhabitants in 2050 (SSP2)	GLOBIOM-China
	1.3) Inflation	Increase by 592.7% between 1978 and 2021	Increase by 592.7% between 1978 and 2021	National Bureau of Statistics of China
	1.4) Inequalities	0.466, Gini coefficient, 2021	0.466, Gini coefficient, 2021	National Bureau of Statistics of China
2. Land	**2.1)** Constraints on agricultural expansion/deforestation	1. No constraint on the expansion of the agricultural land beyond protected areas 2. The total amount of occupied forest land is monitored to ensure that it is not reduced.	1. No constraint on the expansion of the agricultural land beyond protected areas 2. The total amount of occupied forest land is monitored to ensure that it is not reduced.	Forest Law of the People's Republic of China
	2.2) Afforestation, and forest plantations targets	China plans to afforestation 18 Mha from 2021 to 2025. By 2050 forest area can reach 250 Mha	China plans to afforestation 18 Mha from 2021 to 2025. By 2050 forest area can reach 250 Mha	Outline of the "14th Five-Year Plan" Forestry and Grassland Protection and Development Plan
	2.3) Urban and settlements area	From 17.81 Mha in 2008 to 18.83 Mha in 2021	From 17.81 Mha in 2008 to 18.83 Mha in 2021	National Bureau of Statistics of China
	2.4) Protected areas	7.98% (74.40 Mha) of total area by 2030	7.98% (74.40 Mha) of total area by 2030	GLOBIOM-China

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3. Productivity and management	**3.1)** Crop productivity for the key crops	Between 2020 and 2050, crop productivity increases: -from 4.11 t/ha to 4.81 t/ha for barley -from 1.74 t/ha to 2.06 t/ha for Beans -from 17.16 t/ha to 17.95 t/ha for cassava -from 6.43 t/ha to 7.46 t/ha for corn -from 3.56 t/ha to 6.12 t/ha for cotton -from 3.89 t/ha to 4.35 t/ha for groundnut -from 2.46 t/ha to 2.81 t/ha for mill -from 13.23 t/ha to 13.52 t/ha for Oil Palm -from 18.15 t/ha to 19.90 t/ha for potato -from 2.11 t/ha to 2.35 t/ha for rapeseed -from 7.24 t/ha to 8.23 t/ha for rice -from 1.96 t/ha to 2.39 t/ha for soybean -from 5.05 t/ha to 5.38 t/ha for sorghum -from 76.39 t/ha to 82.22 t/ha for sugar crops -from 2.76 t/ha to 3.26 t/ha for Sunflower -from 21.99 t/ha to 24.92 t/ha for sweet potato -from 5.45 t/ha to 6.25 t/ha for wheat	Between 2020 and 2050, crop productivity increases: -from 4.11 t/ha to 5.04 t/ha for barley -from 1.74 t/ha to 2.15 t/ha for Beans -from 17.16 t/ha to 17.92 t/ha for cassava -from 6.43 t/ha to 7.53 t/ha for corn -from 3.56 t/ha to 6.41 t/ha for cotton -from 3.89 t/ha to 4.44 t/ha for groundnut -from 2.46 t/ha to 2.86 t/ha for mill -from 13.23 t/ha to 13.61 t/ha for Oil Palm -from 18.15 t/ha to 20.66 t/ha for potato -from 2.11 t/ha to 2.39 t/ha for rapeseed -from 7.24 t/ha to 8.66 t/ha for rice -from 1.96 t/ha to 2.50 t/ha for soybean -from 5.05 t/ha to 5.58 t/ha for sorghum -from 76.39 t/ha to 83.69 t/ha for sugar crops -from 2.76 t/ha to 3.55 t/ha for Sunflower -from 21.99 t/ha to 26.94 t/ha for sweet potato -from 5.45 t/ha to 6.18 t/ha for wheat	GLOBIOM-China
	3.2) Cropland under agroecological practices	4% (5 Mha) of cropland in 2020 and no planning for the future development	4% (5 Mha) of cropland in 2020 and no planning for the future development	
	3.3) Livestock productivity for the key livestock products	Between 2020 and 2050, the productivity per head changes: -from 1.57 kg/head to 1.82 kg/head for chicken -from 89.63 kg/head to 99.10 kg/head for pig -from 15.15 kg/head to 15.94 kg/head for goat -from 144.54 kg/head to 133.32 kg/head for cow -from 1.70 L/day by dairy cow to 1.54 L/day	Between 2020 and 2050, the productivity per head changes: -from 1.57 kg/head to 1.70 kg/head for chicken -from 89.63 kg/head to 99.40 kg/head for pig -from 15.15 kg/head to 16.19 kg/head for goat -from 144.54 kg/head to 129.30 kg/head for cow -from 1.70 L/day by dairy cow to 1.63 L/day	GLOBIOM-China
	3.4) Pasture stocking rate	Increase from 1.20 animal units per ha to 1.28 animal units per ha pasture between 2020 and 2050	Increase from 1.20 animal units per ha to 1.31 animal units per ha pasture between 2020 and 2050	GLOBIOM-China

	3.5) Forest management	Its area increases from 77.83 Mha in 2020 to 89.61 Mha in 2050	Its area increases from 77.83 Mha in 2020 to 87.10 Mha in 2050	GLOBIOM-China
4. Trade	**4.1)** Share of consumption which is imported for key imported products (%)	The share of total consumption that is imported is: -from 97.92% in 2020 to 98.03% in 2050 for palm oil -from 88.29% in 2020 to 88.33% in 2050 for soybean -from 74.25% in 2020 to 92.18% in 2050 for barley -from 48.94% in 2020 to 46.74% in 2050 for cassava -from 21.06% in 2020 to 27.80% in 2050 for rapeseed -from 20.53% in 2020 to 21.54% in 2050 for sugarcane -from 15.84% in 2020 to 21.40% in 2050 for cotton -from 3.25% in 2020 to 7.00% in 2050 for Sunflower -from 0.78% in 2020 to 5.69% in 2050 for sorghum -from 11.62% in 2020 to 18.51% in 2050 for Beef -from 5.49% in 2020 to 10.22% in 2050 for S&G meat -stays constant for the other products	The share of total consumption that is imported is: -from 97.92% in 2020 to 98.09% in 2050 for palm oil -from 88.29% in 2020 to 86.84% in 2050 for soybean -from 74.25% in 2020 to 92.34% in 2050 for barley -from 48.94% in 2020 to 40.25% in 2050 for cassava -from 21.06% in 2020 to 18.90% in 2050 for rapeseed -from 20.53% in 2020 to 13.44% in 2050 for sugarcane -from 15.84% in 2020 to 11.98% in 2050 for cotton -from 3.25% in 2020 to 4.42% in 2050 for Sunflower -from 0.78% in 2020 to 5.60% in 2050 for sorghum -from 11.62% in 2020 to 24.31% in 2050 for Beef -from 5.49% in 2020 to 9.40% in 2050 for S&G meat -stays constant for the other products	GLOBIOM-China
	4.2) Evolution of exports for key exported products (1000 tons)	The exported quantity: -increases from 5563.08 in 2020 to 7784.40 in 2050 for sugar crops -increases from 738.72 in 2020 to 959.11 in 2050 for Beans -increases from 445.58 in 2020 to 751.56 in 2050 for groundnut	The exported quantity: -increases from 5563.08 in 2020 to 7502.39 in 2050 for sugar crops -increases from 738.72 in 2020 to 957.52 in 2050 for Beans -increases from 445.58 in 2030 to 847.63 in 2050 for groundnut	GLOBIOM-China

		-increases from 678.79 in 2020 to 1221.95 in 2050 for wheat	-increases from 678.79 in 2020 to 1217.16 in 2050 for wheat	
5. Food	**5.1)** Average dietary composition	By 2050, the average daily calorie consumption per capita is 3218.64 kcal and composed of: 46.02% cereals, 2.54% dairy, 1.88% ruminant meat, 11.00% pig meat, 2.42% poultry meat, 2.62% Eggs, 9.77% oil and fat, 3.33% sugar, 8.12% fruits and vegetables, 3.17% pulses, 3.99% roots and tubers, 2.08% nuts, 2.33% aquatic food, 0.75% others	By 2050, the average daily calorie consumption per capita is 3194.97 kcal and composed of: 47.64% cereals, 2.01% dairy, 1.84% ruminant meat, 9.16% pig meat, 1.98% poultry meat, 2.49% Eggs, 10.76% oil and fat, 3.78% sugar, 8.10% fruits and vegetables, 3.42% pulses, 3.50% roots and tubers, 2.25% nuts, 2.32% aquatic food, 0.77% others	GLOBIOM-China
	5.2) Share of food consumption which is wasted at household level	It remains unchanged compared to the 2020 level	Reduces by 50% compared to 2020 level	GLOBIOM-China
6. Biofuels	**6.1)** Targets on biofuel and/or other bioenergy use	Biofuel demand accounts for 0.01% of total corn production by 2030 and 0.07% of total sugarcane production by 2020	Biofuel demand accounts for 0.01% of total corn production by 2030 and 0.09% of total wheat production by 2020	GLOBIOM-China
	6.2) Targets on other non-food use	The demand for cotton that is for other non-food use is multiplied by 1.10 between 2020 and 2050	The demand for cotton that is for other non-food use is multiplied by 1.04 between 2020 and 2050	GLOBIOM-China
7. Water	**7.1)** Irrigated crop area	Decrease by 7.38% between 2020 and 2050	Decrease by 12.07% between 2020 and 2050	GLOBIOM-China