

Supplementary materials

Table S1. Breakdown of impact by impact categories for Swiss agriculture following the method of ecological scarcity.

Impact category	Impact in 10 ⁶ eco-points
Water consumption	54'777
Energy resources	1'014'224
Minerals	86'419
Land use	6'997'502
Climate change	8'253'094
Ozone layer depletion	7'303
Air pollutants and dust	2'581'118
Carcinogenic air pollutants	29'158
Heavy metals in air	247'813
Water pollutants	3'838'530
POP into the water	37'993
Heavy metals in water	71'383
Plant protection products	4'119'088
Heavy metals in soil	-95'154 ^b
Radioactive substances in air	24
Radioactive substances in seas	31'649
Noise	53'791
Landfilled non-radioactive waste	102'088
Landfilled radioactive waste	664'221
Marine fish resources	32'538
Total	28'127'559

^a Frischknecht et al. (2021).

^b The negative value arises from the feeding of grass, hay or silage in the production of dairy products. Heavy metals are removed from the soil during the growth cultivation of grass.

Source: ESU Services, data 2020.

Table S2. Breakdown of impact (in eco-points) by impact categories for the dietary styles following the method of ecological scarcity ^a.

Impact category	Average	Environmentally optimized	vegan	Ovo-lacto-vegetarian	Ovo-lacto-Pescetarian	Flexitarian	Protein-focused	Meat-focused
Water consumption	25'426.7	19'493.2	25'792.4	27'155.5	26'219.3	25'547.0	25'257.8	21'687.8
Energy resources	190'626.9	96'855.7	94'318.3	116'018.7	140'732.9	139'282.5	278'952.9	270'858.5
Minerals	14'109.5	7'318.0	5'417.5	8'221.0	8'614.8	9'943.9	21'883.0	21'432.7
Land use	1'282'437.9	633'070.5	544'161.1	731'599.7	742'117.1	894'234.0	1'890'991.1	1'975'307.5
Climate change	1'519'829.8	820'485.0	723'470.0	933'269.8	1'135'727.4	1'115'880.6	2'241'625.8	2'148'096.5
Ozone layer depletion	1'573.8	785.9	946.3	1'144.0	1'278.6	1'269.5	2'271.5	2'016.9
Air pollutants and dust	499'858.1	256'355.9	186'230.4	266'059.3	359'948.5	340'246.8	734'144.4	741'405.9
Carcinogenic air pollutants	6'680.1	3'452.6	4'690.6	4'745.4	5'506.5	5'303.1	9'013.6	8'791.1
Heavy metals in air	45'803.5	24'446.1	23'191.1	29'125.9	32'351.8	34'016.6	67'916.7	65'366.8
Water pollutants	771'658.7	433'624.4	420'154.3	539'239.2	570'581.1	591'005.2	1'131'816.7	1'086'972.5
POP into the water	11'796.9	5'646.7	8'319.9	8'406.9	12'528.0	9'634.4	13'958.5	13'576.2
Heavy metals in water	13'104.3	7'059.2	6'729.5	8'351.2	9'171.6	9'750.4	19'083.3	18'611.2
Plant protection products	1'365'566.0	899'023.0	1'317'636.9	1'330'470.7	1'356'226.7	1'311'062.2	1'339'698.7	1'330'125.0
Heavy metals in soil	40'776.8	22'719.4	69'709.6	63'927.0	67'734.0	54'395.8	21'841.1	13'865.8
Radioactive substances in air	4.1	2.1	2.0	2.5	2.6	2.9	6.4	6.2
Radioactive substances in seas	5'643.4	2'831.1	3'047.5	3'500.1	3'764.6	4'111.3	8'593.9	8'345.7
Noise	12'506.8	6'909.8	8'484.2	10'043.5	10'469.6	10'431.8	17'088.3	16'591.4
Landfilled non-radioactive waste	32'034.8	13'993.3	25'742.5	26'416.1	27'670.4	27'698.1	40'727.5	38'895.8
Landfilled radioactive waste	118'353.1	59'249.1	60'027.9	71'810.6	78'541.1	85'363.2	180'555.3	175'593.5
Marine fish resources	14'152.9	9'108.2	368.7	1'725.9	18'470.1	6'969.5	18'004.1	19'034.8
Total, production and processing	5'971'944.2	3'322'429.1	3'528'440.6	4'181'233.0	4'607'656.6	4'676'148.9	8'063'430.5	7'976'581.9

^a Frischknecht et al. (2021).

Source: ESU Services, data 2020.

Table S3. Federal subsidies for food production by product groups
(in 1000 CHF).

Product group	Federal subsidies for food production (1000 CHF)
Milk	90'769
Butter	74'926
Cream	74'850
Cheese	550'980
Other dairy products	319'509
Beef	894'301
Pork	158'476
Poultry	48'016
Other meat	139'755
Eggs	38'602
Cereals	152'522
Potatoes	13'203
Vegetable fat, oil	55'226
Sugar	51'612
Vegetables	22'619
Fruit	10'182
Apple juice, cider	6'836
Wine	39'958
Total	2'742'340

Source: Schläpfer (2020b), updated figures, data 2020.