



Healthy diets

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Food Systems across Multiple

Scales

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Research question:

Defining healthy / zero hunger diets and consequences for food supply changes at a national level

Development of a quick-scan methodology with **Ethiopia** as case study.

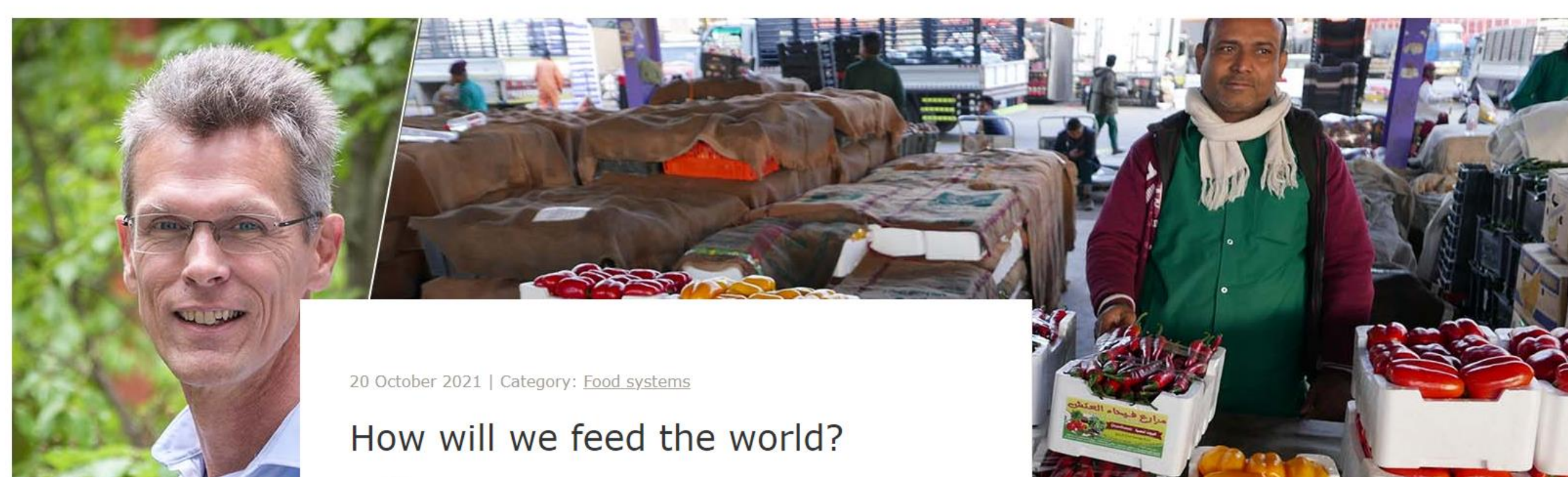
(1) Defining national-specific healthy / zero hunger diets (~ energy requirement, nutrient adequacy, diet diversity, costs and differences)

Table 1. Nutrient adequacy for a number of essential (micro-)nutrients, vitamins and other diet components, expressed as difference relative to recommendations (%).

Nutrient	Recommended	Unit	Dcur	Healthy Diets (ADER)					Zero Hunger (DEC)		
				HDRref	HDAdj	HDDif	HDCst	ZHAdi	ZHDif	ZHCst	
Protein	52	gm	45	74	60	68	77	97	115	117	
AOAC fiber	29	gm	67	48	37	50	60	68	84	84	
Calcium	520	mg	-43	38	27	19	0	57	25	1	
Iron	17	mg	2	20	11	0	21	36	37	57	
Magnesium	205	mg	258	257	230	260	297	305	307	378	
Phosphorous	757	mg	152	149	130	166	180	182	202	228	
Potassium	3247	mg	2	26	16	4	12	43	31	25	
Zinc	6	mg	129	125	107	136	138	155	185	182	
Vitamin C	42	mg	75	206	182	117	118	247	123	80	
Thiamine	1	mg	132	109	93	131	137	137	188	196	
Riboflavin	1	mg	-42	18	9	1	0	34	13	0	
Niacin	14	mg	113	85	71	122	132	110	143	179	
Pyridoxine	1	mg	187	117	100	148	153	146	171	162	
Total Folate, SR12	364	mcg	18	104	88	25	51	131	131	97	
Vitamin B12	2	mcg	-78	5	-4	0	0	19	0	0	
Retinol Activity Equivalents	544	mcg	-73	96	81	44	31	123	40	19	
Total Polyunsaturated fat	14	gm	-39	121	104	12	45	150	106	155	
Total calories	2306	kcal	-5	8	0	0	0	23	23	23	
Carbohydrates	391	gm	9	-19	-25	-7	-7	-8	0	0	
Total saturated fat	23	gm	-72	-1	-9	-25	-45	12	0	-24	

<https://weblog.wur.eu/fnh-ri/how-will-we-feed-the-world/>

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(2) Changes in average intake levels of healthy / zero hunger diets relative to the current situation.

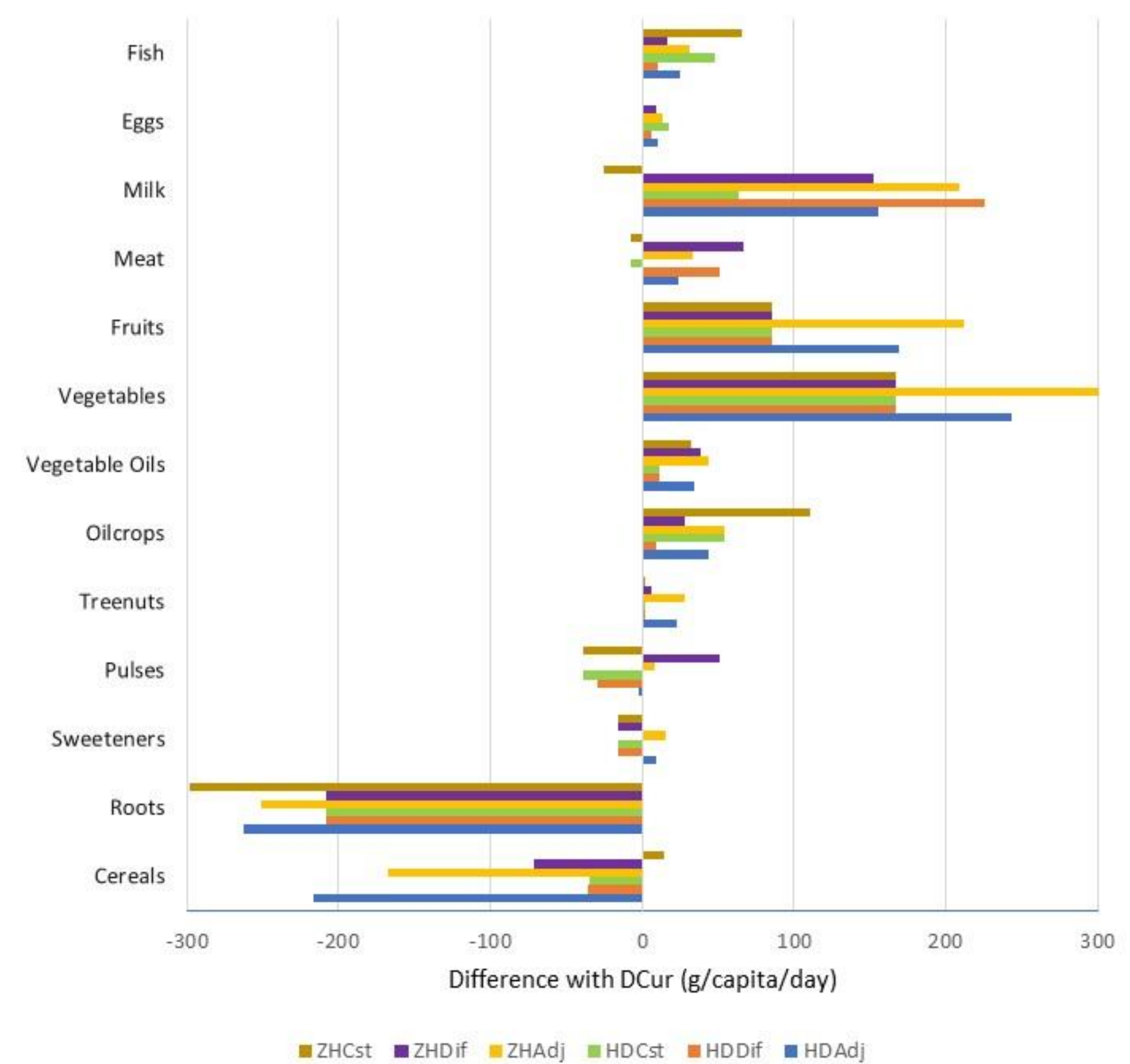


Figure 1. Absolute differences (g/capita/day) in food intake values between the healthy and zero hunger diet options and the current diet (DCur).

(3) Illustration of (de)investment targets per food group for attaining healthy / zero hunger diets in 2030 (SDG2).

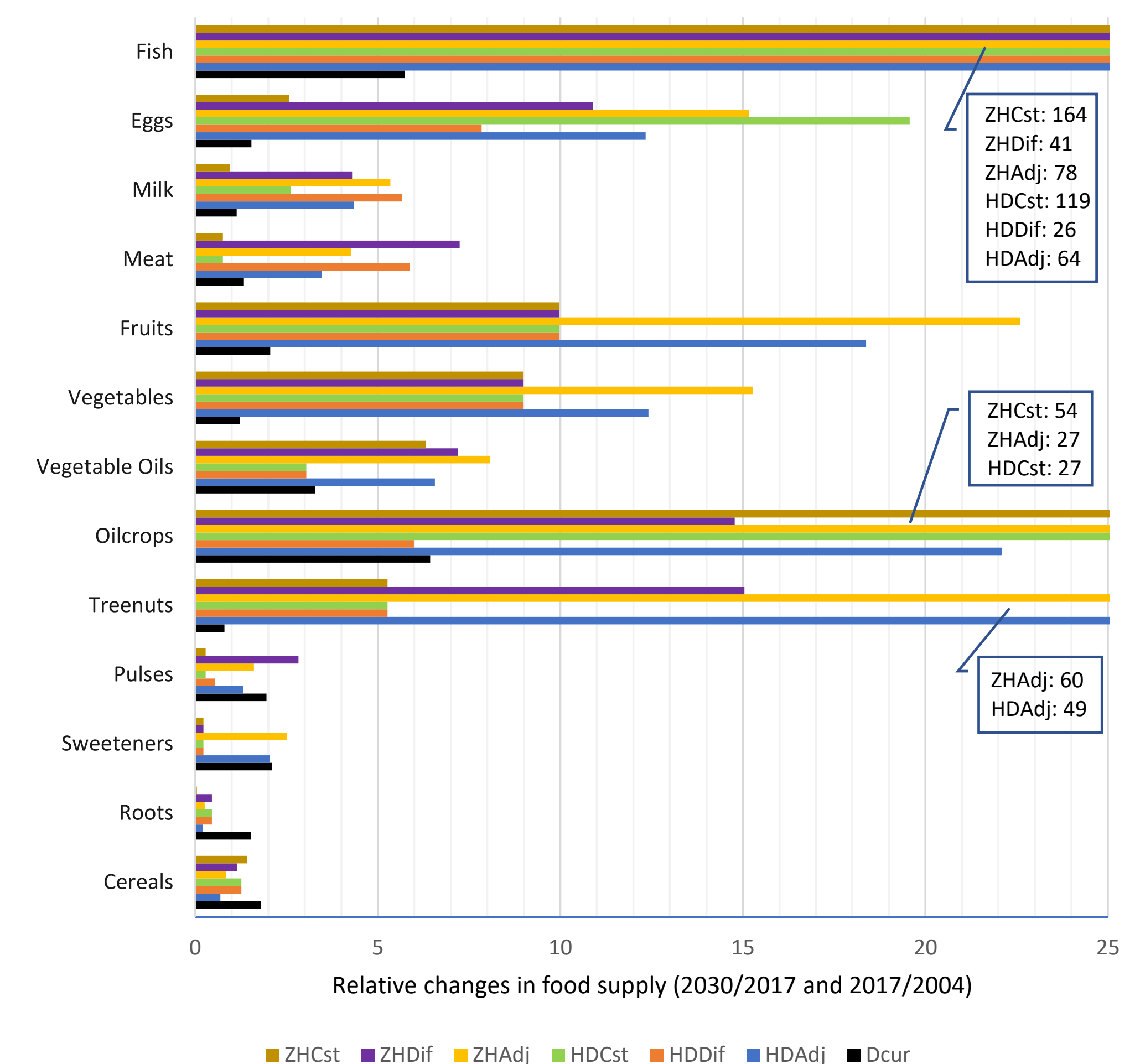


Figure 2. Relative changes of food supply needed for the healthy and zero hunger diets in 2030 compared to 2017 and realized in 2017 compared to the food supply in 2004 (Dcur).

- How can we help you quantify agricultural transitions based on healthy diets?
- Further read: *Targets of Zero Hunger and Improved Nutrition require large changes in food supply rates in Ethiopia.* (Conijn, J.G. et al., in prep.)