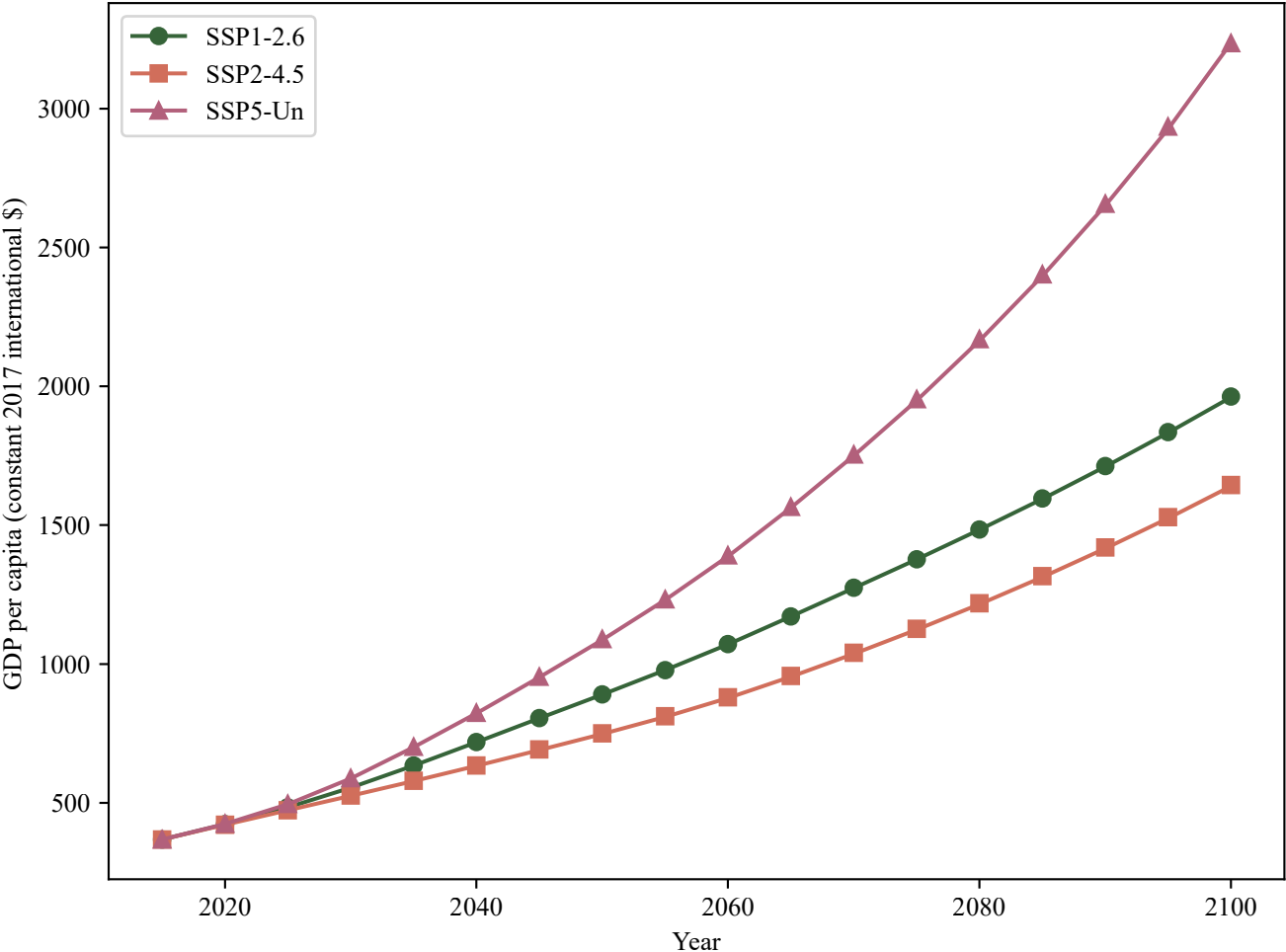
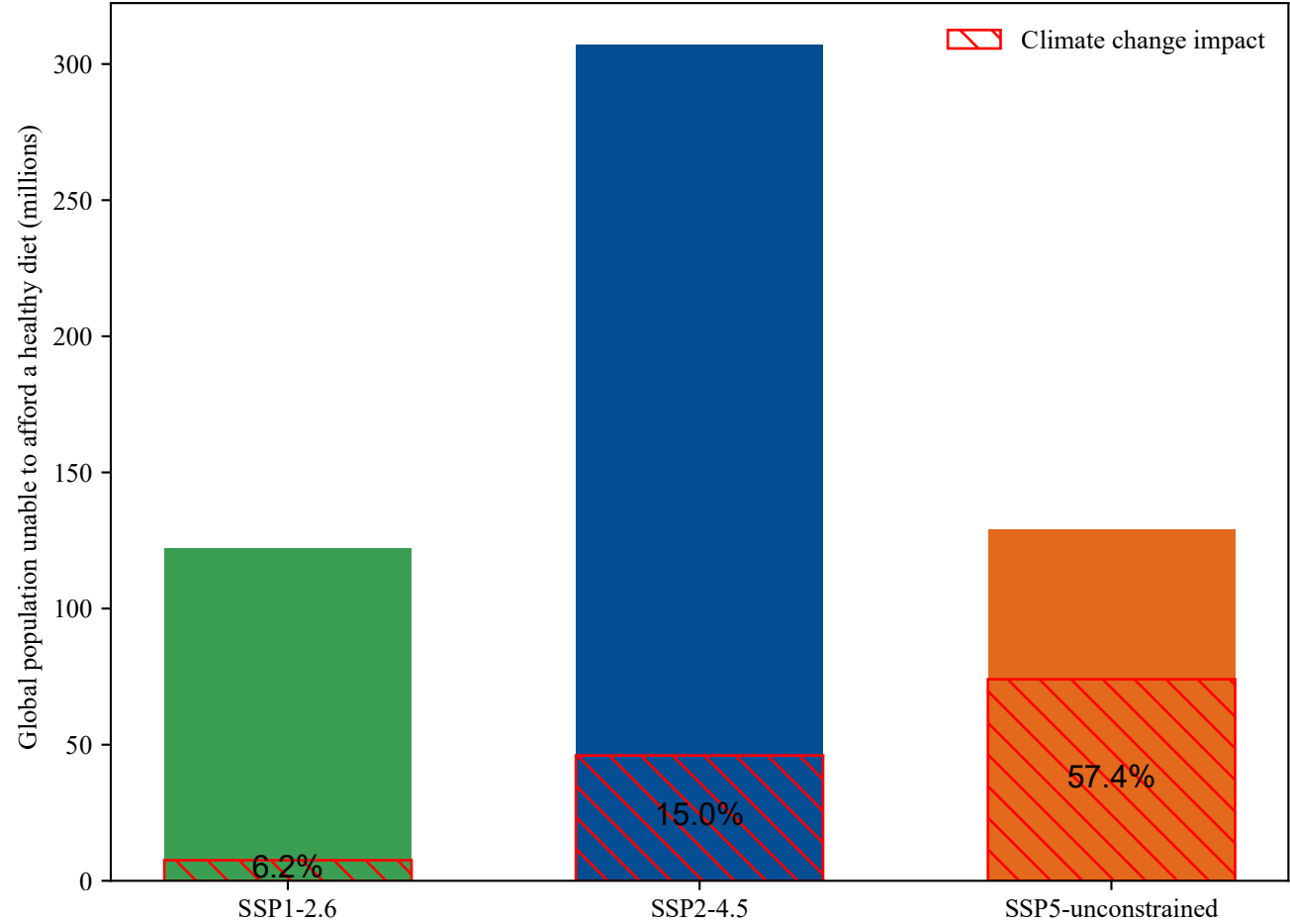


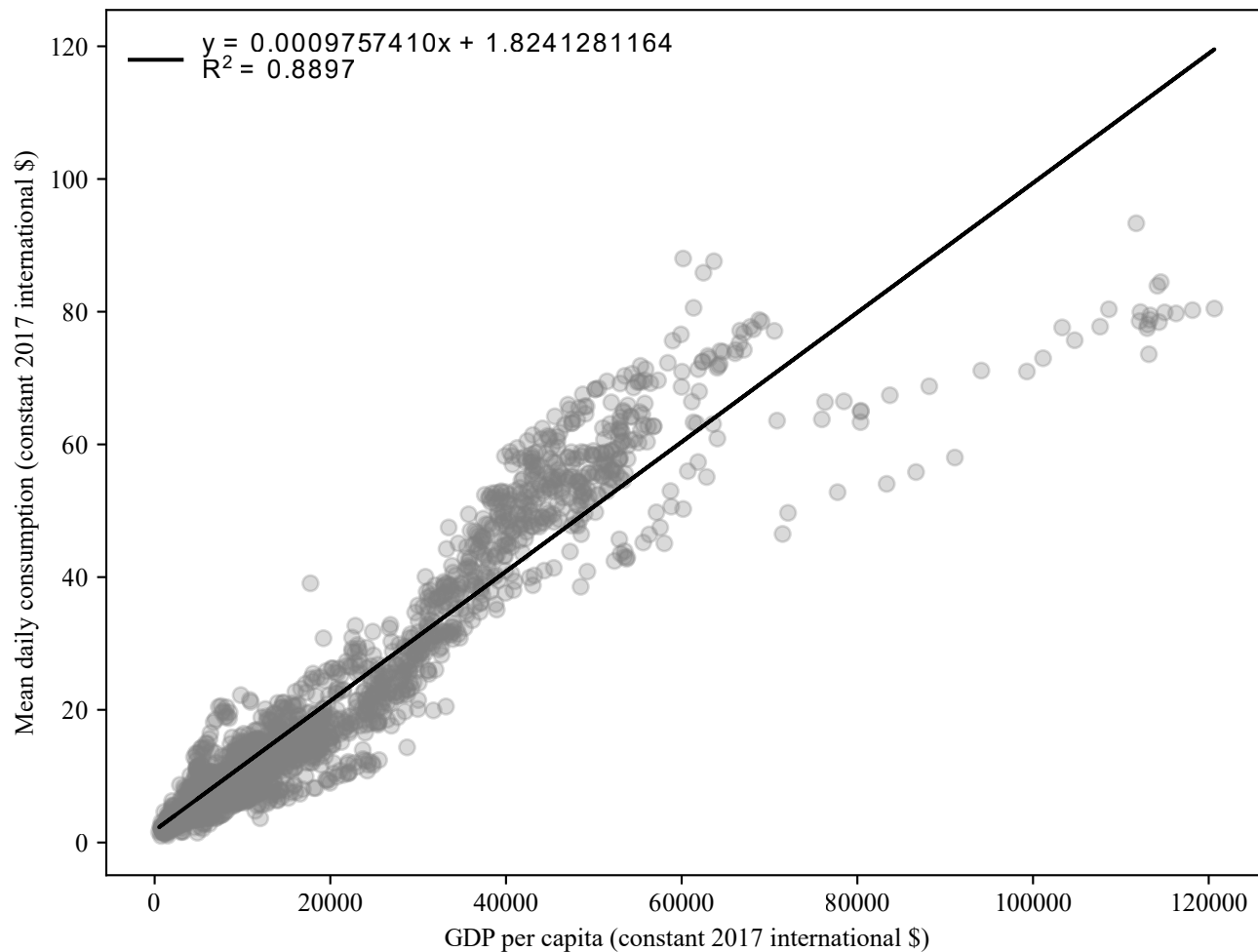
SI. Fig. 1 Global GDP per capita under three SSP scenarios from 2015 to 2100.



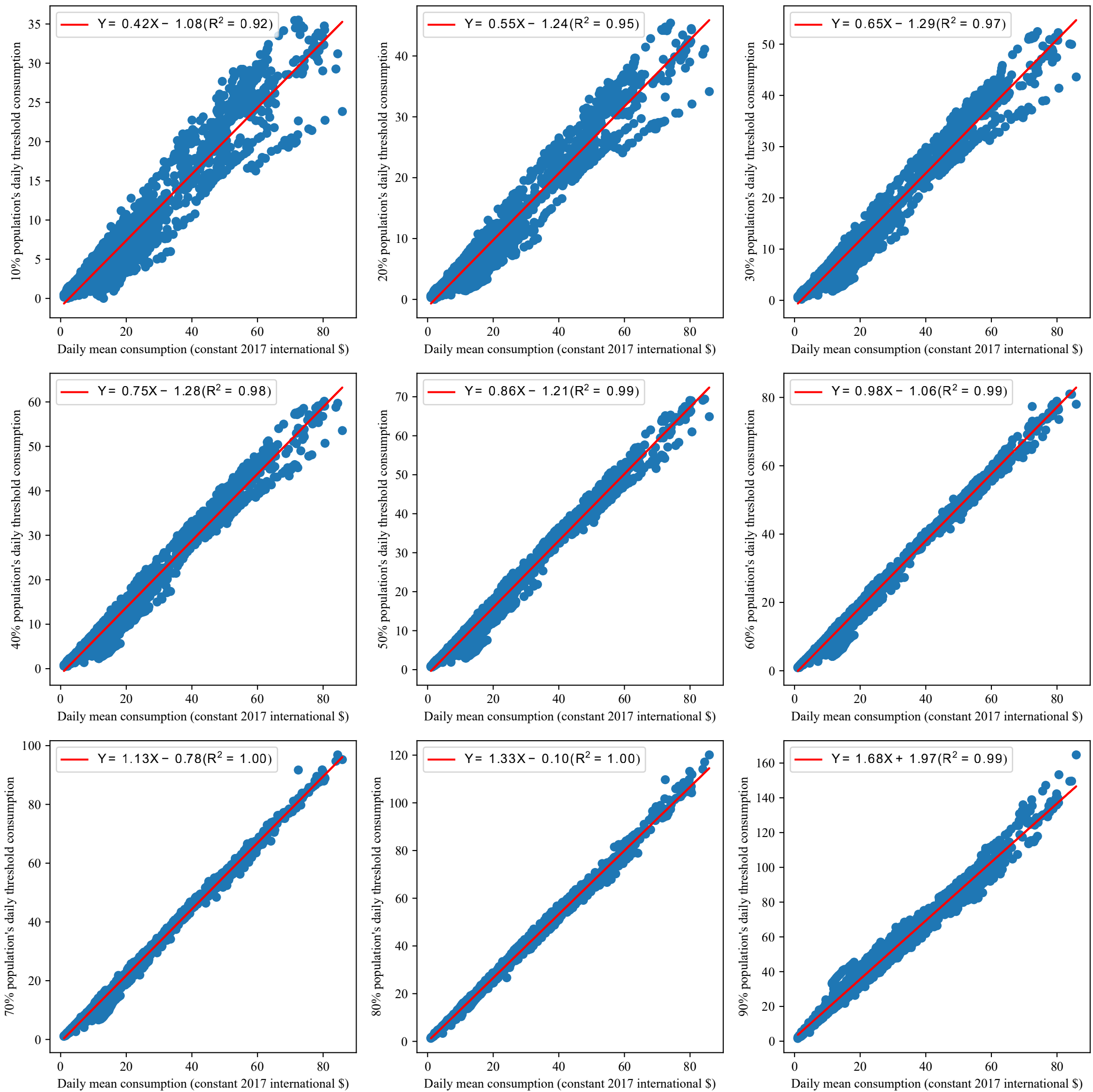
SI. Fig. 2 Global population unable to afford a healthy diet by the end of the century and the proportion attributable to climate change.



SI. Fig. 3 Relationship between GDP per capita and mean daily consumption.



SI. Fig. 4 Threshold consumption for each decile across different regions and time periods.



SI Table 1. GCAM regions and its abbreviation

Region abbreviation	GCAM region
AfrEst	Africa_Eastern
AfrNth	Africa_Northern
AfrStn	Africa_Southern
AfrWst	Africa_Western
ARG	Argentina
AusNZ	Australia_NZ
BRA	Brazil
CAN	Canada
CAC	Central America and Caribbean
CAsia	Central Asia
CHINA	China
COL	Colombia
EU-12	EU-12
EU-15	EU-15
EUEst	Europe_Eastern
EUNon	Europe_Non_EU
EFTA	European Free Trade Association
IND	India
IDN	Indonesia
JPN	Japan
MEX	Mexico
MidEst	Middle East
PAK	Pakistan
RUS	Russia

SAfr
SAmNth
SAmSth
SAsia
KOR
SEAsia
TWN
USA

South Africa
South America_Northern
South America_Southern
South Asia
South Korea
Southeast Asia
Taiwan, PRC
USA

Detailed mapping from GCAM region to country, provided at <https://jgcri.github.io/gcam-doc/overview.html>

SI Table 2. The food categories with prices output by GCAM, along with kcal/kg and kilogram intake requirements specified by FAO used in the calculations.

food categories output by GCAM	kcal/kg	kilogram intake requirements specified by FAO
Corn	961	
Fruits		0.265
Legumes	1391	
MiscCrop		
NutsSeeds	6142	
OilCrop		0.034
Rice	1297	0.322
RootTuber		
Soybean	1720	
Vegetables		0.335
Wheat	3291	
Beef	2342	
Dairy	465	
Pork	2178	
Poultry	2129	
SheepGoat	2714	

When there is no explicit kcal/kg, we use kilogram intake requirements specified by FAO to calculate the Cost of Healthy Diet.