Direct costs of meals - Air France current situation and potential savings

Data	Current	Scenario 1	Scenario 2	Scenario 3
Cost of 1 meal for AF (\$)	\$6,00	\$6,00	\$6,00	\$6,00
Number of meals prepared / passenger	2	1,8	1,7	1,6
Numberb of yearly passengers (long haul)	25 000 000	25 000 000	25 000 000	25 000 000
Direct yearly costs of meals (\$)	\$300 000 000,00	\$270 000 000,00	\$255 000 000,00	\$240 000 000,00
Yearly Savings (\$)		\$30 000 000,00	\$45 000 000,00	\$60 000 000,00

Costs of meals in terms of kerozene consumption - Air France current situation and potential savings					
Data	Current	Scenario 1	Scenario 2	Scenario 3	
Number of meals prepared / passenger	2	1,8	1,7	1,6	
Weight of 1 meal (kg)	1	1	1	1	
Number of yearly passengers (long haul)	25 000 000	25 000 000	25 000 000	25 000 000	
Weight of meals (kg)	50 000 000,00	45 000 000,00	42 500 000,00	40 000 000,00	
Cost of kerozene (\$ per gallon)	\$1,60	\$1,60	\$1,60	\$1,60	
Kerozene consumption per flight (6000km) due to 1kg of					
meals on board (gallon)*	0,4	0,4	0,4	0,4	
Cost of meals in terms of kerozene consumption (\$)	\$32 000 000,00	\$28 800 000,00	\$27 200 000,00	\$25 600 000,00	
Yearly Savings (\$)		\$3 200 000,00	\$4 800 000,00	\$6 400 000,00	

Total savings					
Data	Current	Scenario 1	Scenario 2	Scenario 3	
Direct Costs of meals	\$300 000 000,00	\$270 000 000,00	\$255 000 000,00	\$240 000 000,00	
Cost of meals in terms of kerozene consumption (\$)	\$32 000 000,00	\$28 800 000,00	\$27 200 000,00	\$25 600 000,00	
Total Costs of meals	\$332 000 000,00	\$298 800 000,00	\$282 200 000,00	\$265 600 000,00	
Total Savings		\$33 200 000,00	\$49 800 000,00	\$66 400 000,00	

Return on Investment						
Data	Scenario 1	Scenario 2	Scenario 3			
Site development	\$15 000,00	\$15 000,00	\$15 000,00			
Site maintenance per year	\$20 000,00	\$20 000,00	\$20 000,00			
Wage of the person affected to the service per year	\$60 000,00	\$60 000,00	\$60 000,00			
Total Savings per year	\$33 200 000,00	\$49 800 000,00	\$66 400 000,00			
Return on Investment- Year 1	348,5	523,2	697,9			
Return on Investment - Year 2	378,4	568,1	757,9			
Return on Investment- Year 3	389,6	584,9	780,2			
Return on Investment - Year 4	395,4	593,6	791,8			

domestic flight's meal requires RMB50 (US\$7.30)

934-millions-de-passagers-en-2016-5175404.html

company would load twice as much meals in order to estimation

https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMA EPPK PWG NUS DPG&f=M

* found on quora that an 86kg adult represented a fuel consumption of 2-3 liters more per 100km