

# Sustainable Food and Drink - Looking after the Earth

A discussion document compiled for Climate Friendly Bradford on Avon by  
the CFB Sustainable Food and Drink Group

*“So that’s the rule to remember, the whole quilt is more important than any single square.”*  
(A Fine Balance by Rohinton Mistry)

## Our day to day choices can help:

- ensure that we have a nutritionally balanced and varied dietary intake to promote our health, enjoyment and well being
- safeguard the environment and wildlife
- ensure fair trading for farmers and producers in the UK and elsewhere, including in the world’s poorest countries, in order to keep farmers farming, people fed and to ensure that we do not lose the skills needed to keep our food supply secure
- keep soils, and marine and fresh water, healthy and able to produce food for us and future generations
- reduce waste
- reduce demand for energy, including transport fuel
- reduce emissions that contribute to climate change
- help mitigate climate change

## Sections:

## Page

1. Introduction.....	2
2. Away from Ideology.....	3
3. The Answer Lies in the Soil.....	3
4. Eating the Food that Grows Well Around Us.....	4
fruit and vegetables (p. 4); arable crop production and keeping the soil healthy (p. 6); meat and dairy (p. 7); game (p. 10); nuts (p. 10); fats and oils (p. 11); honey (p. 13); fish (p. 13)	
5. Drink and the Environment.....	14
6. Food, Ethics and the Environment.....	14
7. The debate around self-sufficiency and food security issues.....	17
8. Feeding the World Population.....	17
9. Distribution of Wealth.....	18
10. Tax Injustice and its Effects.....	19
11. Fairtrade.....	20
12. Competition for land - here and abroad.....	22
13. Land Grabs.....	23
14. The Elephant in the Room.....	25
15. The Global Health Crisis and Land Use.....	25
16. Some of the World’s Largest Crops.....	27
Some of these crops are also the world’s 'thirstiest crops' (p. 27); sugar (p. 28); corn (p. 29); paddy rice (p. 29); wheat (p. 30); potatoes (p. 30) palm oil and soy (p. 30)	
17. Africa.....	32
18. Behind the Brands.....	34
19. The UN Food and Agriculture (FAO).....	34

20. More on Greenhouse Gas (GHG) Emissions.....	35
carbon dioxide (p. 37); methane (p. 37); nitrous oxide (p. 39)	
21. How GHG Emissions are measured - productivity, efficiency, intensification.....	40
Does this necessarily indicate the best way forward?	
22. Sustainable Intensification (SI).....	43
23. Genetically Modified Organisms (GMOs).....	45
24. International Trade.....	49
25. La Via Campesina - the International Peasants Movement.....	51
26. <b>The Heart of the Matter:</b> IAASTD (International Assessment of Agricultural Knowledge, Science and Technology) and Recommendation for Agroecology.....	52
27. Economic Sustainability.....	54
28. Not All of the Answer Lies in the Soil.....	54
More on waste (p. 54); Transport emissions: now you see them, now you don't (p. 55); Energy, including biofuels (p. 57).	
29. The Literature Search.....	59
30. Conclusions of the Literature Search.....	59
31. Earth, Water, Air and Climate Change.....	64
32. Decisive Action Needed Now.....	64
33. Can we achieve the Bradford on Avon Goal to be Carbon Neutral by 2050?.....	64
34. Dietary Recommendations for low environmental impact.....	66
35. One Size Does Not Fit All.....	67
36. Afterword.....	67
Acknowledgements.....	68
Bibliography/reference list.....	69
Appendix: Alternatives to Plastic when Refrigerating and Freezing, or: Frugal Use of Resources..	89

**GHG:** Greenhouse gases - mainly carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O)  
(ref 418)

**CO<sub>2</sub>e:** "Carbon dioxide equivalent" is a term for describing different GHGs in a common unit. For any quantity and type of GHG, CO<sub>2</sub>e signifies the amount of CO<sub>2</sub> which would have the equivalent global warming impact.

**Agroecology:** "The adaptation of agriculture to natural conditions and cycles, as well as to local needs." (IAASTD, ref 352)

**1 hectare (ha) = 2.471 acres**

## 1) Introduction

The food that we eat should be enjoyable and provide us with the essential nutrients that we need for optimal health. People have a wide variety of preferences and values, and sometimes health reasons, affecting what they choose to eat. It is probable that most foodstuffs can be produced in an environmentally friendly way, however at the present time about 30% of UK greenhouse gas emissions (GHG) is related to the food chain and additionally serious environmental damage is occurring globally, for example: impoverishment and erosion of soils, loss of biodiversity, damage to marine and freshwater ecosystems, destruction of rainforests and many other important habitats. About 10% of these UK emissions relates to global land use change (including forest) counted proportionally for the UK.

The food chain is by far the biggest business in the world and the UN Food and Agriculture Organisation (FAO) states that "Taken together agriculture, forestry and land use change account for about one fifth of.....