



WATER FOR FOOD GROUP

THE CASE FOR PRIORITISING WATER FOR FOOD
PRODUCTION AS AN 'ESSENTIAL WATER NEED'





Our key points:

- Water is essential to grow and process high quality food and to sustain the UK's largest manufacturing sector
- Increasing water demands from other sectors, and greater water scarcity caused by droughts and climate change, already threaten the industry's ability to sustain and increase efficient, high quality food production at affordable prices
- Relying on food imports to replace home production brings risks, not least in terms of our own national food security. Food imports may also be sourced from countries similarly or more affected by water scarcity, thereby leading to irreversible environmental and social consequences
- Government must acknowledge that water for food production is an 'essential water need', worthy of the same status as that proposed for energy and public water supply
- Failure to accept this may have broad economic and commercial implications for the UK's food and drink industry. This not only puts at risk the Government's wider ambitions for increasing food and drink production and exports, particularly in the light of Brexit, but would also have wider negative consequences for the nation's economy, environment and society.

'Essential water need' is a concept that Government has introduced, as part of its abstraction reform proposals, to describe situations where legal provisions that restrict access to water during low flows can be over-ridden.

Government implies that any exemption or derogation to meet 'essential water need' would only apply when restricting access to water would have public health and/or social impacts, such as limiting household water supplies and disrupting electricity supplies.

Although we are expecting further consultation to help Defra develop the meaning of 'essential water need', our current understanding is that it is designed to influence how water should be allocated between different users in a catchment when it is not possible to meet all needs.

In this paper we present the case for designating water used in the agri-food industry as an 'essential water need'.

Supporting business growth is a fundamental objective of the Government's Industrial Strategy Green Paper, published in January 2017. The Government's own ambition is to see the food and farming sector produce more, sell more, and export more. This is particularly relevant as we prepare to leave the EU and for our national food security.

Government policy must recognise the vital contribution that water makes to the economic performance of the agri-food sector from 'field to fork', particularly in its proposals to reform water abstraction.

Restricted access to reliable and adequate water supplies will have immediate and lasting impacts on agri-food businesses, the national economy and future plans for expansion. Recognising food and farming as an 'essential water need' is the first step towards securing the water resources that the industry needs.

Recommendation – Ask of Government

Water for food production should be designated as an 'essential water need' alongside water for people and for energy. Our nation's food security depends on water. Water restrictions on food production may have a significant impact on our nation's future economic and social development and should be prioritised accordingly

Why water is essential for food and drink production

Water supports a vital economic sector

Water for food production is essential for sustaining the UK's agri-food industry – the UK's largest manufacturing sector. The agri-food industry needs reliable and sufficient water supplies to grow crops and process them into food and drink products. The sector as a whole:

- Is worth £110 billion to the economy (7% of the total)
- Employs 3.8 million people (14% of the total)
- Accounts for 19% of the UK's total manufacturing turnover and buys two-thirds of the UK's agricultural and horticultural produce
- Adds £4 in food processing, wholesale, and logistics; and a further £5 in food and retail catering for every £1 of Gross Value Added (GVA) of primary production.

These are strong economic arguments for securing water supplies. But there are other factors which support the case for designating water for food production as an 'essential water need'.

Water underpins government policy to sell and export more food

The Government's own ambition is to see the food and farming sector produce more, sell more, and export more. Currently only 54% of the food consumed in the UK is produced at home, which suggests there is significant potential for growth.

The Food and Drink Federation's (FDF) ambition is for a 33% increase in branded food and non-alcoholic exports, from a 2014 baseline, reaching £6bn by 2020. This growth will depend on more water becoming available for the sector, even after allowing for efficiency gains. Uncertainty over future water supplies, both in quantity and quality, will undoubtedly lead to greater uncertainty among agri-food businesses and may act as a disincentive for future growth and investment.

Water is vital for the agri-food industry

The UK is one of the most efficient and sophisticated food supply chains in the world. Water is an essential input for agriculture, from dairy and livestock to arable and horticultural production. For example, high-value fruit and vegetable crops need water to meet demands for yield, quality and appearance and to meet performance standards that satisfy retailer and customer specifications.

Over 6,600 UK food and drink businesses rely on crops sourced from UK farmers and growers.

Most agri-businesses require access to a reliable supply of water all year round for a wider range of activities, including livestock drinking, supplementary irrigation, vegetable washing, food preparation, production, and cleaning. Protected crops, crops grown in containers and newly-planted landscape plants need a continual water supply. Some crops can die within 24 hours without access to water.

Water influences the yield, size, shape, eating quality, skin appearance, processing quality, and ultimately the financial return of a crop. Water also aids harvesting and handling systems to ensure good crop quality and increase retail and consumer shelf-life.

Restricted access to reliable and adequate water supplies can have immediate operational consequences for farmers and growers. It affects crop growth and development, which may breach growers' commercial contracts to supply supermarkets or other customers.

The agri-food industry is an efficient water user

The UK farming sector is an efficient user of water, particularly when compared to other countries which supply the UK with food.

- Water abstraction for agriculture is highly regulated and monitored.
- The UK water footprint for fresh fruit and vegetables is much smaller when compared to countries we import from, such as Spain, Morocco, and Egypt.
- Our mild, humid climate means that water used by crops (evapotranspiration) per tonne of produce is much lower than in more arid countries.
- Farmers tend to under-irrigate their crops. This is the nature of irrigation in UK, which supplements natural rainfall.
- The increasing use of targeted irrigation and rainwater harvesting in horticulture optimises abstraction and mains water demand.
- Energy costs for irrigation are high and this drives water use efficiency.
- Farms increasingly use specialist scheduling tools to optimise water use. For example, protected crops use computerised systems to determine and schedule crop water needs.
- Many farms store winter water for use in the summer, rather than abstract direct from rivers in the summer months.

The processing sector also uses water efficiently. Among FDF members, the amount of water used during processing between 2007 and 2013 fell by 15% in absolute terms and by 23% in terms of water used per tonne of product. The latest results from FDF's Sustainability Ambition show that, in 2016, members reduced water use by 35.8% in absolute terms, compared to the 2007 baseline.

Reliance on imports at the expense of bolstering domestic production represents a threat to our national food security and also brings wider social impacts

The UK is not alone in facing water shortages. Other countries suffer much more and food imports may not be readily available. This, together with the attendant impact on domestic food production, will serve to increase UK food security risks.

When water for home grown produce is in short supply, supermarkets are likely to switch to sourcing produce from other countries, such as tomatoes from Morocco, strawberries from Spain, and potatoes from Egypt. There are inherent risks in this:

- We are, in effect, 'exporting' the environmental and social risk to water-stressed countries, which are less able to manage their water and climate-related risks.
- Importing more food would add costs both to businesses and consumers, with knock-on social impacts, particularly for low-income households.
- Domestic food production, once lost due to water restrictions, may not return in a timescale to match the continued viability of UK food-manufacturing businesses.
- Importing food increases the risk of bringing new pests and diseases into the UK, which could have a devastating impact on domestic food production.

What Government policy must do

Government policy to reform the water abstraction system in England must recognise the vital contribution that water makes to the economic success of the agri-food industry from 'field to fork' and must not put our national food security at risk.

Designating water for food production as an 'essential water need', alongside water for people and for energy, is the first step towards securing the water resources that the industry needs and should be prioritised accordingly.