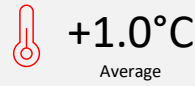


UKCP Data



UK



Greater chance of extreme weather events



UK Climate Prediction



Summer



7% **less** rain



Winter



4% **more** rain



All Prisons

approx.
100 000 people

Resources

Polytunnels
Vertical growing
Aeroponics

Sites

1 dairy farm
Farm sites
'Urban' farms

Type of produce

Foods
Ornamentals
Nurseries

Benefits

Wellbeing
Sustainability
Education
Skills



30-40%
Tunnels &
glasshouses



60-70%
Field growing



West Midlands, Hewell



LettUs Grow

Drop & Grow system

24m² vertical growing space

Consumption

⚡ 5454 kWh/month

💧 1218 L/month



Produce

Leafy greens
Root vegetables



Summer



8% **less** rain

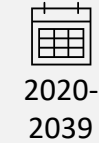
88.1 to 101.5 mm
5 day total



Winter



4% **more** rain



LettUs Grow

Containerised
system partially
immune to climatic
changes & pest risks



Produce

Soft fruits
Tomatoes
Mediterranean

Who can do what?

The MoJ needs to pull together a rich picture from a number of different disciplines and sources

Met Office
Climate predictions
Weather data

Universities
Applying science to provide advice

Business
Products to meet advice

MoJ

Data on their practices
Data on their immediate environment
Data on their projects



Food for thought



Introduce more
pollinator plants



More variety of food
crops



Replacement of
ornamental to edible
plants



Herb gardens



Water tolerant and
drought resistant
plants



Intercropping and
interplanting
techniques



Different irrigation
techniques

Resources for MoJ



Bigger picture

University of Reading

Research Faculty

Professor Giacomo Zanello | g.zanello@reading.ac.uk | 0118 378 8971

Further reading

[Department of Sustainable Land Management - University of Reading](#)

[Department of Crop Science - University of Reading](#)

[Crop and Environment Laboratory - University of Reading](#)

[Farm Management Unit - University of Reading](#)

[Knowledge Transfer Partnerships](#)



Controlled growing environments

Controlled Environment Users' Group

May have some advice about poly tunnels, glass houses, vertical farming units, etc

Stephen Andrews | enquiries@ceug.ac.uk | 01223 761102

Further reading

CEUG.ac.uk



Urban farming

The University of Nottingham

Faculty specialising in Urban Agriculture

Chungui Lu | Chungui.Lu@nottingham.ac.uk | 0115 951 6293

Further reading

[Urban Agriculture - The University of Nottingham](#)

Key strategic targets of the Centre are

1. To increase partnership and collaborative research with both UK and international partners
2. To promote and integrate urban agriculture in city planning, building standards and project design
3. To support food security in urban and peri-urban agriculture
4. To deliver an international conference or workshop every two years
5. To develop learning and training opportunities on "Urban Agriculture"
6. To produce regular publications that give an indication of their current activities and future plans in Urban Agriculture.

Other

[Climate Central | Land projected to be below tideline in 2100](#)

[Cities of the future: visualizing climate change to inspire action](#) | Paper: [Understanding climate change from a global analysis of city analogues](#)

Who can do what?

The MoJ needs to pull together a rich picture from a number of different disciplines and sources

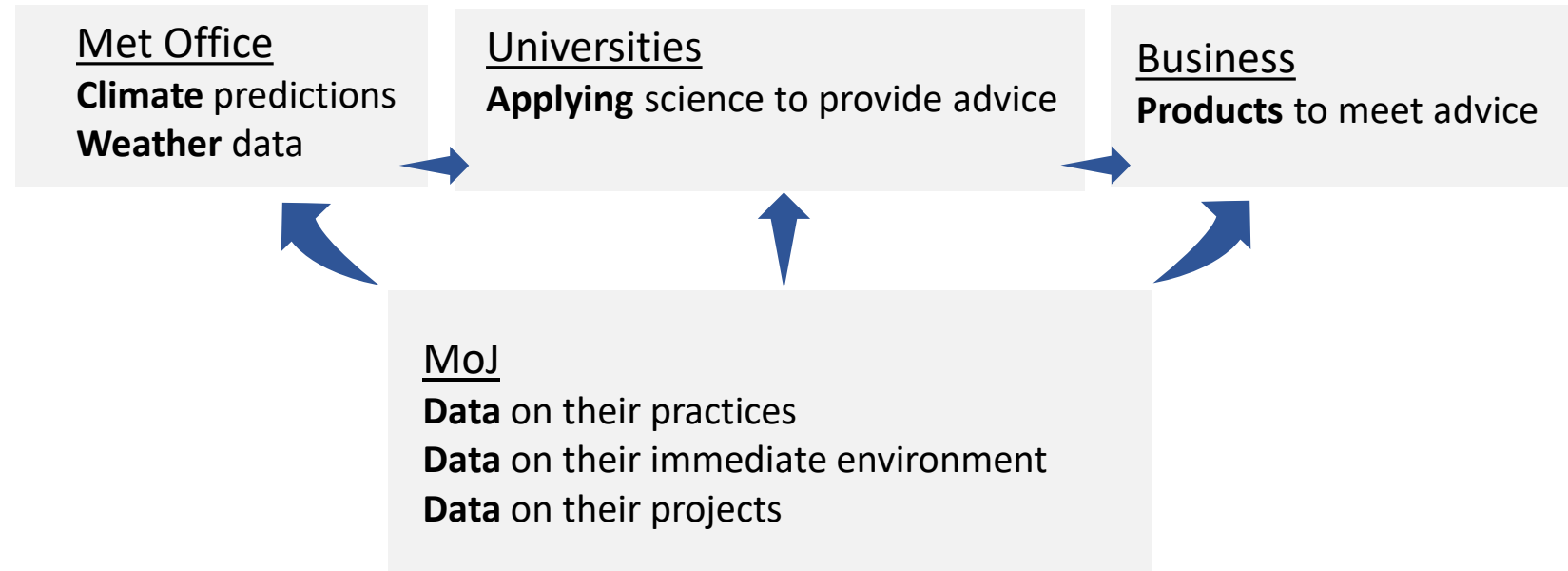
MoJ

Example questions

What is the climate going to be like in X many years time in Y location? Ask the Met Office.

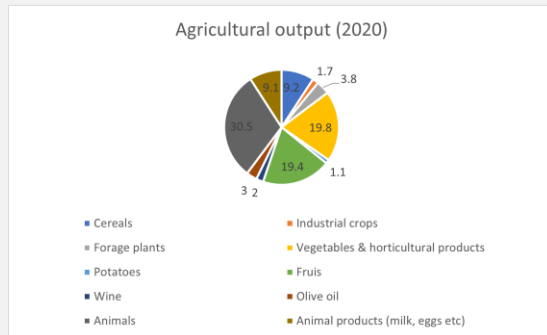
How will this affect what we can and cannot grow? Ask Universities.

What is available to meet those challenges? Ask Business.



Madrid currently has a similar climate to what London is predicted to be like in 2050

Spain



Source: [Factsheet](#)

Challenges

💧 [Water](#) – sourcing, sustainable use, drought and pollution

🌱 [Soil](#) – fertility, erosion, unsustainable practices

Responses

[Restorative farming](#)

[Irrigation, technology, collaboration](#)

Paris currently has a similar climate to what Birmingham is predicted to be like in 2050

Paris

Further reading

[Nature Urbaine](#) |

Europe's biggest rooftop urban farm

Note: needs translating from French

[The Guardian](#) | [Article about Nature Urbaine](#)

[Agripolis](#) | Business solution

Note: needs translating from French