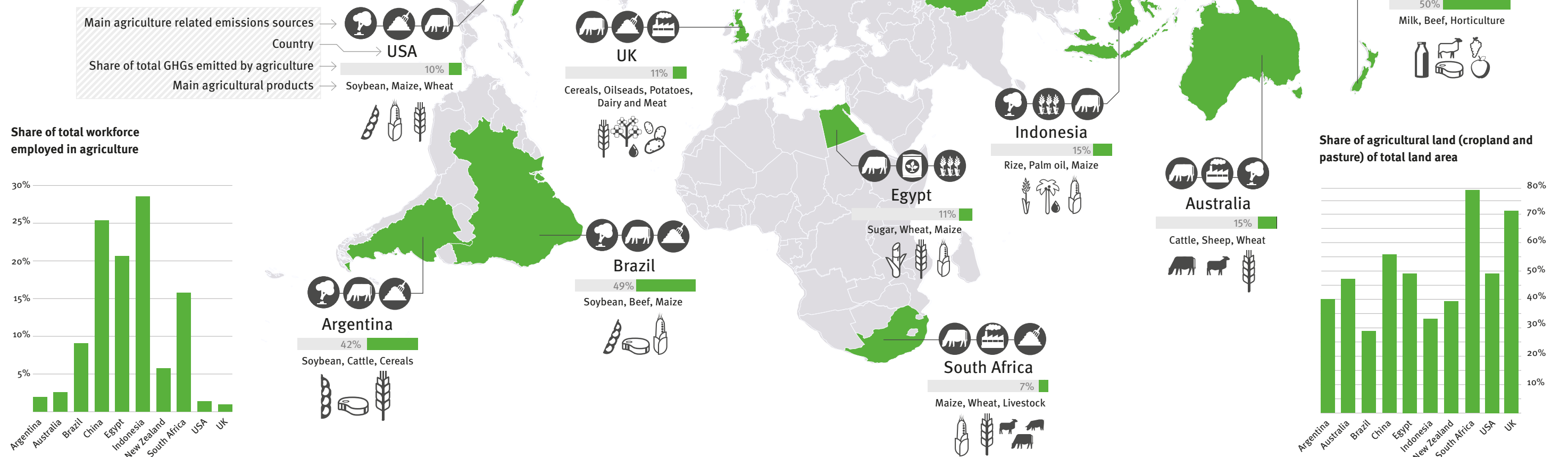
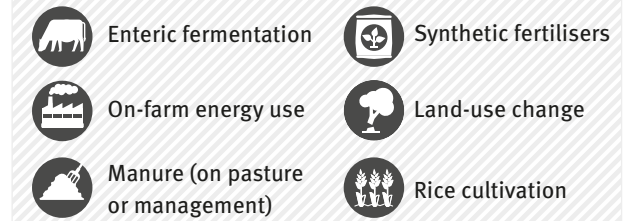


VISUAL SUMMARY

Ambitious GHG mitigation opportunities and challenges in the agricultural sector

What are the biggest obstacles and challenges to reducing emissions from agriculture? Ten countries were analysed in this research project. The most important results are visualised in this infographic. Further information and results can be found on the [project website](#).

Legend of main agriculture related emissions sources



Mitigation measures

N₂O Improving **nutrient management** has benefits across the board, including lower fertilizer production emissions, better yields, and reductions of other environmental impacts.

CO₂ CH₄ N₂O **Shifting diets** toward more plant-based food and less animal products is essential for reducing agricultural emissions; particularly where consumption of these products is high.

CO₂ Agricultural expansion leads to land use change and often high emissions from deforestation. **Reducing pressure on forests** requires both a reduction in demand for expansive agricultural products (e.g. cattle, feed crops) and productivity improvements on existing agricultural land in line with planetary boundaries.

Challenges

⚠️ On farm challenges are key – the final decision maker is often the farmer who is making decisions under economic and financial constraints. Adequate **incentives and support for farmers** are needed to overcome these constraints, which can be supported by national policies and finance.

⚠️ Many countries experience **cultural challenges and dissemination issues**. The farming system of a country determines the effort needed to implement change at scale.

⚠️ **Food loss and waste** is a challenge everywhere but at different production stages depending on the country (e.g. refrigeration, consumption behaviour).

⚠️ In many countries, **climate mitigation is not a high priority in agricultural policy**. Agricultural subsidies that make transformation more difficult continue to exist.

Solutions / ways forward

✅ Although the quantification of agricultural emissions carries uncertainties, there is **consensus on the measures available to reduce emissions in the sector**.

✅ Examining the mitigation potential and implementation challenges for agricultural mitigation measures across a diverse set of countries underscores the need for **tailored solutions** to account for unique cultural, geographical, and climatic contexts within the agricultural sector.

✅ Reducing agricultural emissions and shifting to more sustainable practices can also help to **address other sustainability challenges**, including biodiversity, food security and adaptation.

✅ A collaborative, global effort is required to achieve a shift towards **sustainable food systems** in the face of growing climate change impacts.

Umwelt Bundesamt