UNEP Global Environment Outlook, 7th edition (GEO-7, link)

The product of 287 multi-disciplinary scientists from 82 countries, the Global Environment Outlook, Seventh Edition: A Future We Choose (GEO-7) is the most comprehensive scientific assessment of the global environment ever carried out.

GEO-7 highlights the importance of alternative proteins for environmental goals

The report identifies alternative proteins, defined in the report as "plant-based products, fermentation-derived products, and cultivated meat" that can act as substitutes for animal-source foods, as a critical component of food system transformation.

Across all food systems interventions, decreased conventional meat consumption will pay the greatest dividends for our environment

"Driven by the need to feed livestock and satisfy booming demands for meat, croplands are now expanding 58 times faster than 20 years ago."

"Curtailing the consumption of [conventional] meat has the greatest effect, vastly reducing the use of land for pasture and feed, improving biodiversity, reducing surplus manure and associated pollution, and providing significant health benefits."

Alternative proteins could benefit the environment and global health by enabling decreased meat consumption

"These products could potentially provide nutritious foods with lower GHG emissions, land and water use, and biodiversity loss, compared to conventional animal-sourced food production, and also reduce the risk of zoonotic diseases and antimicrobial resistance, and animal welfare concerns."

Environmental goals are at risk without more support

GEO-7 is clear that more investment in alternative proteins is needed: "Realizing the potential of alternative proteins to meet both health and sustainability goals requires greater public and private investment, along with a coordinated international research effort and regulatory adjustments. Research… is needed to enhance the taste and texture, reduce costs, and assess the nutritional and social effects to increase consumer acceptance."

- **Research and development funding:** "To realize the potential of these technologies, greater investment in research and development is needed from national and international governments and the private sector."
- **Commercialization funding:** The report emphasizes the need for "financial support to scale up production facilities, establish supply chains, and facilitate commercialization."
- **Regulatory adjustments:** "Efficient regulatory pathways are needed to enable the market entry of novel alternative proteins while upholding safety standards. Regulatory clarity around labelling and terminology would build consumer understanding and acceptance. Harmonizing international standards would facilitate global distribution of novel foods, helping producers create larger markets and attain economies of scale."
- **Public-private partnerships:** The report recommends "foster[ing] collaboration between governments and businesses to support innovation."
- **Transition support:** "Socio-economic impacts should be considered to ensure equitable and inclusive benefits from novel alternative proteins, including supporting sectors that may be negatively affected by the shift from conventional ASFs [animal source foods]."

Note: References embedded in the report text have been removed here for succinctness