



IFSTAL
Innovative Food Systems Teaching And Learning



“I am really grateful to have had the extra learning opportunities with IFSTAL. It has hugely broadened my interdisciplinary learning and has inspired me in my plans for my career.”

IFSTAL 2016-17 PARTICIPANT

Policy Brief | ECI, University of Oxford | March 2018

Enhancing food sector skills to tackle food system challenges

Food systems have evolved dramatically over recent decades, now feeding billions of people. But systemic problems related to this evolution are becoming more evident across the world. About a billion people still suffer from hunger, billions more still suffer from under-nutrition, and many others now suffer diet-related diseases related to over-consumption. Malnutrition in its varied forms is the ‘new normal’ and is of increasing societal concern. Most worrying is the recent FAO Report indicating hunger is again on the rise. Meanwhile the natural resource base that underpins our food security is being degraded

at an alarming rate; environmental change will hit the most marginalised soonest and hardest.

Fixing systemic problems across the food sector needs systems thinkers and the lack of sufficient skills in its workforce has been clearly recognised. IFSTAL¹ was created in 2015 with HEFCE² funding to address this gap. It offers a training programme to Masters and PhD students in the partnering institutions³ to contextualise their chosen discipline within the broader food system concept. It provides the knowledge, skills and capability for them to recognise the change they can make during and after completing their studies.

IFSTAL is unique because it brings together some of the leading academic minds in food systems thinking with the workplace. IFSTAL has created an interdisciplinary, workplace-orientated model to build the community of future researchers, practitioners, campaigners and advocates for change: ‘food system analysts’.



The food sector needs

- **Imaginative and critical food systems thinkers:** Able to analyse, challenge and address food systems problems, tackle complexity and make connections across disciplines and sectors while following best disciplinary practice.
- **Well-informed and knowledgeable employees:** Having a robust understanding of food systems and possessing a range of hard and soft skills that will allow them to be valuable members of the food system workforce.
- **Creative and active collaborators:** Equipped to work collaboratively and productively with the widest range of people working in the food system and will be welcoming of peer and transdisciplinary learning and change.
- **Engaged and informed professionals able to effect change:** Aware of the wider impacts of food system interventions and the opportunities, dilemmas and conflicts these pose; and thereby empowered to help enhance practice and policy with regard for agri-food, environmental, human health, enterprise and other socio-economic outcomes.
- **Confident and flexible communicators:** Equipped to be effective and influential with a wide range of audiences including different workplace organisations and colleagues from other disciplines.

IFSTAL directly addresses these needs.

¹ Innovative Food Systems Teaching and Learning Programme www.ifstal.ac.uk.

² Higher Education Funding Council for England.

³ University of Oxford, City University-London, University of Reading, University of Warwick and the Leverhulme Centre for Integrative Research on Agriculture and Health (LCIRAH, comprising researchers from the Royal Veterinary College, the London School of Hygiene and Tropical Medicine, and SOAS).



What is IFSTAL?

Led by the ECI's Food System Research Group at the University of Oxford, IFSTAL is an interactive, supplementary training programme designed to improve postgraduate-level knowledge and understanding of the food system. With core funding from the Higher Education Funding Council for England (HEFCE), it brings together expertise and experience of faculty and students from leading higher education institutions with a wide range of workplace representatives.

IFSTAL was created to fill the urgent need to build a cohort of 'food system analysts', i.e. professionals who can address and help resolve the increasing number of failings in the global food system. The solutions to these systemic issues go far beyond the primary production of food, and are embedded within broad political, economic, business, social, cultural and environmental contexts. The challenge of developing efficient, socially acceptable, sustainable and resilient food systems that meet the demands of a growing global population can only be tackled through a transdisciplinary systems approach that integrates social, economic and environmental dimensions.

IFSTAL offers students

A systems approach

Food systems analysts need to have an understanding of the whole food system, irrespective of their roles within the system. This knowledge equips them to identify optimum points of intervention, and understand unintended consequences of their decision making in the workplace.

Interdisciplinary teaching

The food system encompasses a vast range of disciplines and practitioners will benefit from having an understanding the full spectrum. Food systems analysts should receive training from a variety of approaches and from people with differing (and sometimes conflicting) perspectives to that in their own domain.

Collaborative learning

People working in the food system need to be equipped to learn from peers from a wide range of different backgrounds. This can result in complementary action and a broad professional network.

Engaging with a range of universities

Participants get the opportunity to understand the viewpoints of different international research and teaching, and expand their Master's or PhD-level critical thinking skills.

IFSTAL approach

IFSTAL's unique approach is interdisciplinary, cross-institutional and workplace interaction in an engaging, educational setting. This is achieved by delivering innovative methods of teaching across the collaborating institutions. IFSTAL can be completed in one academic year, however many participants are part-time master's, PhDs and distance learners and continue to access material even when considered to be part of the alumni cohort. It is entirely voluntary and students self-select to attend as a supplement to their disciplinary studies.

Teaching methods include ...

- Workshops to support reverse-classroom online teaching
- Away Days to explore soft skills and meet workplace professionals
- Annual Public Lectures with a food 'thought leader'
- Annual Symposia on food systems topics
- Annual Summer Schools for selected cohorts

... all supported by accessible online content and webinars.

Further to the strong workplace connection to create the programme, an essential part of the ongoing improvement and development of the content is the continued consultation with sector representatives.

Value to the workplace

The value that employers place on graduates being in possession of a strong set of ‘soft’ or ‘work ready’ skills has also been prominent, with a large body of evidence pointing towards continued employer dissatisfaction with graduates in this respect.

WAKEHAM REVIEW OF STEM DEGREE PROVISION AND GRADUATE EMPLOYABILITY” (APRIL 2016)

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The Wakeham Review noted Agriculture, Animal Sciences and Food Sciences as one of three degree disciplines where the graduate employment outcomes are of particular concern and recommended additional targeted work. Furthermore, the Review effectively captured the IFSTAL rationale:

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“It is a fact that most STEM graduates enter the private sector of the economy and that, therefore, the voice of employers needs to be heard with respect to the attributes they seek in graduates. At the same time this must be balanced with a longer term vision for education. There is therefore a very clear need, that has often been expressed, that greater collaboration between business and HE is vital to ensuring appropriately educated and skilled graduates.”

IFSTAL is timely regarding the emergence of UKRI. As its inaugural Chief Executive, Professor Sir Mark Walport, noted:

“Our universities are foremost among the ingredients. They bring together the brightest minds, freedom of enquiry and vital resources. They provide education that is inspired by research. They engage with the outside world, with business and industry, with local communities, cities and regions, and the world at large. They exchange a heady mix of staff and ideas, collaboration and competition.”

Finally, the recently published Industrial Strategy⁴ notes several areas that IFSTAL directly targets:

“We are committing to establishing a new partnership between government and the whole food chain, working with industry leaders from agriculture, food and drink manufacturing, retail, hospitality and logistics. This new Food and Drink Sector Council will lead the work to secure the UK’s position as a global leader in sustainable, affordable, safe and high-quality food and drink.”

“By encouraging innovation and a focus on student outcomes, the OfS will drive improvements in productivity and support the wider economic needs of the country. This will increase the number of work-ready graduates, including in STEM, and promote innovative ways of learning ...”

Collectively, these high-level documents underline the need for – and benefit of – ‘food system analysts’. Industry benefits from engaging with university educational programmes. Industry and representative bodies should be encouraged to contribute resources to facilitate collaborations which ensure the supply of work-ready graduates.

IFSTAL needs to continue and should be expanded

IFSTAL is a unique, experimental programme that has been hugely successful in upskilling the food sector workforce and building a food systems community. In its current form it is only available to students in the partner institutions with core funding from HEFCE running to September 2018.

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“There is a need to have systems thinking. We have seen that we are moving away from silos of thinking in different parts of the food system to having a more holistic perspective of the system and in that context to have people who have a sense of their role within the system and how they can collaborate with other actors is probably the most important skill that can be developed.”

IFSTAL WORKPLACE PARTNER

⁴ Industry Strategy: building a Britain fit for the future” White paper. Department for Business, Energy & Industrial Strategy. 27 November 2017.

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“The great advantage of joining the IFSTAL Food Systems Community is to meet students and colleagues from other disciplines because it helps to put your own discipline in the broader context and it helps you to see where your discipline relates to broader societal questions.”

IFSTAL ACADEMIC
COLLABORATOR

Food Systems Community

An ongoing IFSTAL outcome and legacy is the unique Food Systems Community created by the mixture of students, academics and workplace representatives. With over 1000 members (spring 2018) it is a rich network of disciplines from about 45 different university departments and numerous workplace environments. Workplace representatives engage in the Food Systems Community through a number of means: facilitating sessions on their topic of expertise; providing input into the curriculum and strategic direction of the programme; providing skills and careers training to students; taking on interns; online interaction through social media and the IFSTAL Portal.

Successes so far

Since launching in October 2015, IFSTAL has helped over 1000 students gain a better understanding of ‘food systems’ and how to address some of the complexities within the systems. IFSTAL has facilitated inter-institutional, inter-disciplinary and cross-sector working and ideas, supported by the interactive, on-line resource. IFSTAL has worked closely with a wide range of organisations in the food sector to shape and drive the content and approaches and many workplace individuals have interacted with IFSTAL Away Days, Workplace Workshops and Summer Schools. IFSTAL has also helped many graduates move into food systems-related employment within a wide range of public, private and civil society organisations.



Case study: YORICK BRUINS

MSc Food Policy, City, University of London, now working at Agriterra

“The IFSTAL experience has helped me to perform better as a consultant for Agriterra. First, IFSTAL has broadened my view on the complexity of the food system, which has aided in understanding the complex nature of my daily work and the interrelations it has with other fields of study. This has included better mapping of value chains, mapping trade-offs, trying to include different layers of interests etc. Second, I try to use the experience I gained in communicating complexity: a difficult but valuable trait to possess when dealing with a variety of stakeholders.”

NEXT STEPS

Building future partnerships

The second phase of the IFSTAL journey starts in October 2018. This aims to build on the successful core activities of Phase I, supplemented by a range of new activities: establishing a professional accreditation; offering CPD activities; extending to undergraduates; engaging more strongly with the arts and humanities; and reaching to the Global South. These innovative activities will further build the community of food system thinkers able to bring about food system change within their own arenas.

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FOR FURTHER INFORMATION

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