The IFSTAL Project A model for Entrepreneurship training?

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Food System Challenges

To achieve food security for a growing, wealthier, urbanising population while minimising further environmental degradation

against a background of stresses and shocks

- natural resource depletion
 - and
- many stagnating rural economies
 - and
- changing climate
 - and
- social and socio-cultural changes

Food System Dynamics: Where, When and How to Intervene

Drivers & Feedbacks; Tradeoffs & Synergies

Aims & Challenges; Policy & Practice



Why is it so hard to make progress?

- Complex adaptive system, many interactive 'drivers' and feedbacks
- Set of dynamic actors and activities
- Interactive socioeconomic and environmental drivers
- Wide range of power and vested interests; fragmented governance
- > Traditional silo approaches; poor ability to deal with complexity

However...

- > Many policy, fiscal, social and technical options for change
- Many options for enhanced cooperation among actors
- Many plausible futures
- Many great career opportunities for food system 'change-makers'

The food sector needs to be better equipped to tackle challenges of today and tomorrow.

We need better outcomes for **food security** and **health**, **environment** and **enterprise**

Needs a workforce

- trained in concepts and tools able to devise and implement food system interventions
- ✓ better skilled in 'food systems thinking'





Interdisciplinary Food Systems Teaching and Learning

A multi-institution programme for under- and post-graduate students



IFSTAL Rationale



- 1. Individual institutions may be broad but none covers all the necessary disciplines.
- 2. Employers seek graduates who are both knowledgeable in their given specialty (hard skills) but also capable in contributing most effectively to the organization (soft skills).
- 3. Inter-institution interaction broadens student visions.

IFSTAL Vision



A cohort of professionals from a wide range of graduate backgrounds employed in diverse work environments to apply critical interdisciplinary systems thinking to issues of sustainable, equitable and healthy food systems.

So what is IFSTAL?



- A collaborative, cross-university food systems training programme
- Gives context to specialist studies
- Provides students with enhanced skills to address food system challenges
- Interactive learning supported by an shared, on-line resource





- Is voluntary, and does not impinge on contact time
- Is not assessed but sits alongside and supports postgraduate learning and research
- Certificate of Participation & Learning Journey document

Includes 'soft skills' training



Tools, eg:

- Rich pictures
- BATWOVE framework
- Multi-Stakeholder Partnerships





Skills, eg:

- Effective communication
- Theoretical/methodological pluralism
- Recognise and understand complexity
- Facilitation

Student Skills Framework



https://www.ifstal.ac.uk/for-students/



- Blended learning:
- FtoF: workshops, awaydays, symposium, summer school

Supported by

 Online: VLE forums, webinars, chatrooms, resources + livestreamed and recorded lectures

How does IFSTAL work?

1. Student-Student interaction



underpinned by an on-line resource

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- 4 "Units" over the autumn and spring terms
 - 1. Introduction to the Food System
 - 2. Introduction to Systems Thinking
 - 3. Methods for Analysing Food Systems
 - 4. Engendering Food System Change

Networking, participation and access to content via a Virtual
Learning Environment (Portal) and face-to-face follow-up
workshops

How does IFSTAL work? 2. *Student-Workplace interaction*



Throughout the year:

- ✓ Away-days
- ✓ Symposia
- ✓ Placements
- ✓ Careers workshops
- ✓ Summer School
 - Workplace challenge
 - Soft skills
- => Internships
- => Job opportunities

What's in it for students?



Interdisciplinary learning

- ✓ Exposure to cutting edge 'food systems' thinking
- Network of faculty and fellow students across institutions
- ✓ Contact with a range of experts from the workplace

Increased job prospects

- Engagement with food sector practitioners
- ✓ Opportunities for
 - dissertation placements
 - work-related summer school
 - post-graduation internships
- Membership of a graduate food systems network



What's in it for employers?



- ✓ Well-rounded, interdisciplinary post-graduates skilled in food systems thinking
- People able to work effectively on 'systemic' issues and risks
- Enhanced professional capability based on soft skills development
- Access to an alumnus of 'food systems thinkers' engaged across the workplace
- Opportunities to network with peers and academics



What's in it for universities?



- ✓ Student enrolment: an attractive 'free' option
- Student satisfaction: getting more out of their degree
- Employability: links to workplace and increased university visibility
- Innovative interdisciplinary blended and digital teaching: latest pedagogy
- Global engagement: wide networking leading to both teaching and research collaborations



Progress since launch in 2015 IFSTAL

- >1500 masters and PhD students have engaged across the partner institutions
- Students coming from >45 different departments (100 different MSc and PhD programmes in Yr 3)
- Active participation by >20 different workplace partners (govmt, business, NGO, academia)
- 90 students attended intensive Summer Schools
- Active alumnus being developed
- >130 graduates from years 1 and 2 known to be applying enhanced skills and capability in food system-related work

Yrs 1 & 2 'graduates' stats



(Yr 3 being compiled)





Plans for Phase 2 5 years wef Oct 2018



Offering to undergraduates

 \Rightarrow broadens reach; informs choice for further study

Securing professional accreditation ⇒ rewards students; helps launch career

Delivering 'Continuing Professional Development' (CPD) ⇒ builds a 'thought leadership' community of practice

Furthering interdisciplinarity

⇒ raises awareness about multiple interactions, including animal and human health outcomes

Enhancing innovative teaching and learning
 advances practical and academic aspects of pedagogy

Plans for Phase 2 5 years wef Oct 2018



Extending IFSTAL reach

- Developing world
 - ✓ 1-week intensive course delivered in Ghana, July 2018 (OSF)
 - ✓ 1-week intensive course delivered in Indonesia, Feb 2019 (APN)
 - ✓ 1-week intensive courses funded in Solomon Islands/Vanuatu and Fiji/Samoa, Feb 2020 (Asia-Pacific Network for Global Change Research)
- Helping establish IFSTAL 'analogue' in Australia

Europe

✓ EU-KIC European Network funded

EIT Food



European Institute of Innovation and Technology (EIT) is an independent EU body

Mission statement

"EIT Food is a European 'Knowledge and Innovation Community' (KIC), part of the EIT, which was set up to transform our food ecosystem. By connecting consumers with businesses, start-ups, researchers and students from around Europe, EIT Food supports innovative and economically sustainable initiatives which improve our health, our access to quality food, and our environment."

Six strategic objectives

- 1. Overcome low consumer trust
- 2. Create consumer valued food for healthier nutrition
- 3. Build consumer-centric connected food system
- 4. Enhance sustainability through resource stewardship
- 5. Educate to engage, innovate, and advance
- 6. Catalyse food entrepreneurship and innovation

EIT Food and IFSTAL Europe





EIT Food and IFSTAL Europe



All partners will work together to better understand and communicate food system challenges to broad audiences, and mutually benefit from co-creating teaching material and interacting with each other.

Partners 2019/20

- ✓ Universities of Reading, Hohenheim, Turin
- ✓ Industry partners: PepsiCo, John Deere, TBD

Partners 2020/21

- ✓ Universities of Reading, Hohenheim, Turin, Madrid/IMDEA Food Institute
- ✓ Industry partners: John Deere, PepsiCo, Grupo AN, Agricolus





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