Securing Syria’s academic knowledge and industrial future: a case study of agricultural engineering education

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Friday, 20 July 2018

Society for Research in Higher Education, 73 Collier St, London N1 9BE
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• Implications for educational-humanitarian interventions
Supporting at-risk academics since 1933
Scholars at Risk UK Universities Network of 117 UK universities
‘Cara’s independence, neutrality and academic mandate, allow it to occupy a unique space in the context of crisis-affected countries, to function independent of political agency whilst maintaining Ministry relations’ (Cara, 2017).
• Launched in 2012, in partnership with the 117 universities that make up the Cara Scholars at Risk UK Universities Network.

• In 2016, Cara sought to extend its UK-based Programme to Syrian academics in exile in the three main receiving countries neighbouring Syria: Jordan, Turkey and Lebanon.

• Working directly with Syrian academics in exile (n=160), across strategic strands:
  ➢ *English for Academic Purposes (EAP)*
  ➢ *Academic Skills Development (ASD)*
  ➢ *Research Incubation visits (RI)* – 4 to 8 week placements at UK/EU universities to explore collaborations
  ➢ *Research (R)*- UK/Syrian collaborations on topics of relevance to Syria.
Cara Syria Programme

- Dedicated online space hosted by Sheffield University
- Weekly one-to-one tuition in English for Academic Purposes (online via Skype)
- Fortnightly webinars targeting themes and issues arising from needs analysis (via Adobe Connect, typically 20 participants)
- Quarterly residential workshops in Istanbul (6 days, typically 50 participants)
- Collaborative research projects
- Informal networking and interaction on WhatsApp, Skype, facebook etc.
- Participation by Kent, Reading, Edinburgh, Sheffield, Queen Mary’s, Middlesex, South Wales, Cardiff and Newcastle Universities
- Resource support from partners inc. Elsevier
Introduction

A humanitarian disaster
Higher Education in Syria Pre-Crisis

- Syria’s education sector was relatively well developed prior to the current crisis (King, 2016).
- 10202 academics working in higher education institutions prior to the crisis (CBS, 2011)
- Around 25% of Syrian young people participated in university
- Around 350,000 students were enrolled in higher education when the war broke out in 2011
- Theoretical rather than practical focus, and lack of practical expertise relating to the needs of communities and industry
‘The impact of conflict in the region can be detected in all the major dimensions of higher education: physical, human, institutional, and social’ (Bakarat and Milton, 2015, p.3).
Higher Education in Syria post-2011
Higher Education as a response to crisis

• Higher education was declared a strategic priority for the first time in the UNHCR’s Education Strategy 2012-2016 (UNHCR, 2012)

• Higher education is uniquely placed to act ‘as a bridge between emergency response and sustainable development’ (Kirk and Sherman, 2016, p.13)

• ‘[in Iraq] over a decade of war and economic blockades cut academia off from international exchanges of knowledge and resources’ (Bakarat and Milton, 2015, p.4).

• Supporting projects led by local academics can help prevent structural dependency
Agricultural Engineering Education

Why the agriculture sector?

- more than 65% of the population work in Agriculture
- Higher education was the primary skills provider for agricultural engineering prior to the crisis
Project background:

- Lack of skilled engineers inside Syria
- Knowledge specific to the Syrian context (climate, soil, diet, impact of war etc) is not being sustained
- There is currently very little knowledge share between scientific (academic) and farming communities
- Urgent need to sustain and secure the future of the sector on which so many Syrians’ livelihoods depend
- Successful pilot distance learning on mushroom production, dairy products etc. has been undertaken
Protein project: Course on mushroom production

- Theoretical and practical knowledge

Further technical assistance for participants (WhatsApp group)
Agricultural Engineering Education – A case study

Protein project: Course on mushroom production

• 4 community centers (80 participants)
• NGOs
Agricultural Engineering Education – A case study

Basma (smile) project: Course on production of dairy products

- Theoretical and practical knowledge
- Rural women’s associations and NGOs
- Start-end assessments

Further technical assistance for participants (WhatsApp group)
Agricultural Engineering Education – A case study

Basma (smile) project: Course on production of dairy products
Research questions

- What are the most effective methods of educational delivery to learner populations inside Syria?
- What are the challenges and barriers to learner engagement?
- What factors characterise learners’ experiences of course delivery?
- What are the technological requirements and existing opportunities for delivering educational content to populations inside Syria?
Agricultural Engineering Education: Pilot Study

- Modest funding of £3000 from Open Society Foundation, plus significant in-kind support
- Identify and recruit academics in the field of agricultural engineering to deliver sessions
- Recruit and enrol participants from the following stakeholder groups:
  - students, farmers, women’s groups, professionals, partner organisations (NGOs, civil society organisations etc)
- Design and deliver a programme of 5 sessions in the pilot period (6 months, till end 2018), via video-linked community centres and WhatsApp
- Trial different delivery approaches across the 5 sessions
- Collect session-level and programme-level evaluative data
- Revise and develop the programme for subsequent iterations and other modules
Challenges

- Limited access to academics with experience of online learning environments
- Severe restrictions to resources and connectivity within Syria
- Scope of the project is dependent on level of funding, in-kind contributions and volunteer labour
- Safety concerns
- Unpredictable political landscape
Project Needs

- Suitably-qualified academic staff - **International and Syrian**

- Voluntary/pro bono contributions across all aspects of delivery: curriculum design, delivery, administrative support, resource provision, technology

- Funding (funding applications submitted to ESRC GCRF, discussions with regional and international NGOs)

- Accessible web platform

- Visibility and marketing
Longer Term Aims

• To establish a workable online platform for distance learning
• To scale up the project to cover different areas of agriculture, and other industries and disciplines
• To design and deliver modular courses
• To longitudinally evaluate all aspects using qualitative and quantitative methods
• To revise and develop the programme within a spiral cycle action research framework
Supporting engagement between academia and industry in the context of war and humanitarian crisis

• Providing opportunities for at-risk academics to continue teaching and maintain the currency of their knowledge

• Providing opportunities for students, graduates and professionals in war-torn regions to refresh and sustain their knowledge and gain new skills

• Developing skills and husbanding knowledge to maintain base levels of industrial and disciplinary activity

• Supporting educated individuals and communities in leading the regeneration of their countries

• Protecting the intellectual heritage of countries besieged by war and humanitarian crisis
Thank you for listening!

All questions, comments and feedback are welcome
References


References (cont.)
