

UK International Biological Security Programme: animal health sector engagement

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G8 Global Partnership against Weapons and Materials of Mass Destruction (WMD)



- Established in 2002 (Canada, G8 Summit):
 - *“Commitment to preventing terrorists, and States of proliferation concern, from acquiring or developing nuclear, chemical, radiological and biological weapons, missiles and related materials, equipment, and technology”.*
- GP committed ~ \$20 billion over 10 years
- Initial priority – Russia/Former Soviet Union Cold War WMD legacy (but now global)

Why does the UK have an International Biosecurity Programme (IBSP)?

Overseas biological security concerns:

- Lack of biosecurity/biosafety/diagnostics/surveillance
- “Dual-use” science/scientists - potential for radicalisation/coercion
- Lack of non-proliferation awareness/naivety and transparency
- Lack of ethical awareness
- Projection of soft power & influence through cooperative biological threat reduction activities
- Reduce drivers of conflict
- ***Aim: to prevent hostile acquisition/use of human, animal and plant pathogens***



Where does the IBSP operate?

- At the 'dual-benefit' health/security intersection; IBSP focuses on overseas biological security engagement; infectious disease surveillance, detection/diagnostics, outbreak response/control, biosafety/biosecurity.



Why does the security sector engage with the animal (and plant) health sectors?

- Prevention of illegal access to pathogens (for criminal or terrorist purposes):
 - Animal diseases have significant potential to cause economic damage (e.g. FMDv, ASFv)
 - High number of human diseases are of animal origin/zoonotic (i.e. also a threat to human health)
- Efficient surveillance to determine outbreak provenance
- Rapid outbreak response and attribution
- ‘One-health’ approach increases efficiency/effectiveness
- Lack of food security can be a significant driver of civil unrest and conflict

Working with OIE and UN FAO

- Access to networks, programmes and field offices
- Joint disease eradication programmes (RPv and PPRv)
- **OIE:**
 - Twinning programmes for laboratories, veterinary legislation and education.
 - Performance of Veterinary Services (PVS) assessments
 - Focused workshops (with outcomes and recommendations)
 - Activities focused on compliance with internationally agreed standards
- **FAO:**
 - Veterinary infrastructure capacity building
 - Outbreak response/control through AH-Crisis Management Centre
 - Plant pathogen biosecurity, diagnostics and surveillance

CANUKUS funded renovation of regional training facility in Jordan



UK IBSP animal health project with academia (1)

- **3-year OIE Veterinary Education Twinning Project:**
 - UK Royal Veterinary College (RVC) and Jordan University of Science and Technology (JUST)
 - First veterinary twinning project in the Middle East/North Africa (MENA) region
 - Joint funded with US (DTRA)
- **Security/threat reduction justifications**
 - Influence next generation veterinarians; promotion of best-practice
 - Resilience/sustainability – delivered in collaboration with local experts
 - Longer-term strengthening of regional animal health services (e.g. surveillance/diagnostics; outbreak response/control)
 - Leverage of JUST's regional reputation and outreach

UK IBSP animal health project with academia (2)

- **Main activities:**
 - Development of curricula
 - Joint research projects/student exchanges
 - Promotion of international best-practice and ethics
 - Regular exchange visits
 - Focused workshop activities (e.g. equine medicine)
 - General RVC consultancy (e.g. on training for wildlife vets)
- **Desired outcomes:**
 - EAEVE* accreditation
 - Improved standards of veterinary services across MENA
 - Closer links with European/US veterinary communities

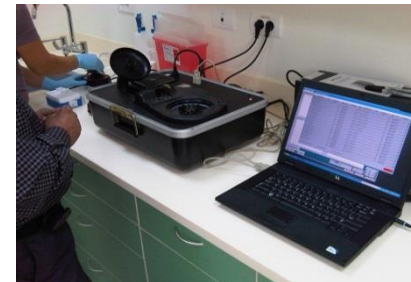
*European Association of Establishments for Veterinary Education (EAEVE)

Future options for support from academia:

- **Training courses** (e.g. biosafety, biosecurity, diagnostics, surveillance, response)
- **Research-based projects with overseas partners** (disease surveillance, diagnostics, genomics etc)
- **Promotion** of the “One-Health” agenda
- **Collaborations with Intergovernmental Organisations** (e.g. through FAO, OIE twinning programmes).
- **Innovation/exploitation of niches** (e.g. low-resource biosafety)
- **Multi-disciplinary academic publications** to support security sector programmes (e.g. on forward-looking biological threat reduction; conflict reduction)

Training example; IBSP in Azerbaijan

- Support to US DTRA programme – 11 BSL-2 diagnostic labs
- A number of UK-funded activities including:
 - BSL-2 basic biosafety training (Public Health England)
 - Basic molecular techniques (Animal and Plant Health Agency)
 - Advanced vet diagnostics Train-the-Trainer courses (APHA)
 - Bespoke diagnostics workshops:
 - *Brucella*
 - Rabies
- Outcome - Lab staff throughout country now trained in basic biosafety/ and modern veterinary diagnostics
- Sustainability remains an issue



QUESTIONS?

[dstl]

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