Brucellosis
OIE Twinning Laboratory Programme
France-Thailand

ANSES & NIAH-DLD
The OIE Twinning projects

Why:

- “to assist laboratories in developing or in-transition countries to build their capacity and scientific expertise with the eventual aim that some of them could become OIE Reference Laboratories in their own right”

How:

- “a link between an existing OIE Reference Laboratory or Collaborating Centre and another laboratory in a developing or in-transition country must be established for exchange of scientific expertise and capacity building”
- “the twinning concept could imply a transfer of knowledge, training and expertise”
The Brucellosis OIE Twinning Program France-Thailand

Birth of a collaboration:
FAO-APHCA/OIE Regional Workshops on Brucellosis Diagnosis and Control

- 1st in Chiang Mai and Lampang, 20-23 October 2008
- 2nd in Khon Kaen, 08-11 June 2009

- First visit of Anses team to NIAH
- Recommendations for a twinning project implementation
The Brucellosis OIE Twinning Program France-Thailand

- Three-year project: 2010-2013 (99,000 €)

- Main objectives:
  - to strengthen the level of expertise in brucellosis serological diagnosis/screening & bacteriological isolation of *Brucella* by culture
  - implementing reference activities
    - (i) control and standardisation of diagnostic reagents and vaccines,
    - (ii) organization of Regional serology proficiency ring-trials and,
    - (iii) *Brucella* typing and molecular detection and identification.
Brucellosis OIE Twinning: Work programme

- 3 annual training sessions of NIAH staff at ANSES
- 3 visits of ANSES to NIAH
- Participation of NIAH to the EU/OIE proficiency RT in order to monitor the progress in the quality of serological testing in NIAH;
- Collection of large volumes of serum from positive cattle, buffaloes, sheep and goats in order to establish a common serum collection for:
  - the establishment of regional secondary standard sera (standardised against the OIE international standard sera), validated by ANSES
  - further organisation of regional ring-trials and,
  - quality assurance and test-validation controls
The establishment of a NIAH collection of *Brucella* strains:
- Reference strains already provided by ANSES (type strains and strains for antigen and vaccine production)
- Field strains isolated by NIAH from infected cattle, buffaloes, sheep and goats at the regional level (already sent to ANSES for confirmation)

Assistance in completing the quality assurance system in place (ISO/IEC 17025:2005)

Provision of NIAH with *Brucella*-phages and monospecific sera for a rapid implementation of *Brucella* biotyping at NIAH

Assistance in designing research activities:
- sero-prevalence surveys (during the Twinning Project),
- studies on the distribution, both, geographical and by animal species, of *Brucella* species in the region (Project of PhD thesis)
3rd visit of ANSES
Brucellosis OIE Twinning: activities and other relevant

- All activities under programme were completed on December 31, 2013, but collaboration still goes on...
Brucellosis OIE Twinning: activities and other relevant issues

- Poster presentation at Brucellosis 2011, International Research Conference Including the 64th Brucellosis Research Conference”
Thailand-Japan Joint Conference on Animal Health 2012

- Invitation of Dr. Bruno Garin-Bastuji – 2 presentations
Thailand-Japan Joint Conference on Animal Health 2012

- NIAH and RVRDCs – poster presentations: brucellosis laboratory surveillance and Twinning for 6 posters
Brucellosis OIE Twinning: activities and other relevant

• The participation of NIAH (free of charge) to the European/International proficiency ring-trials in order to monitor the progress in the quality of serological testing in NIAH: satisfactory results

• Rose Bengal antigen: 5 batches controlled

• Conduction of individual training on "Brucellosis and Diagnosis"
  - 2 veterinary officers from Disease Investigation Center in Subang, Indonesia (5-8 June 2012)
  - 1 veterinary officers from the Philippines (brucellosis laboratory) (14-25 January 2013)
  - Lao PDR: expected in July 2014
Brucellosis OIE Twinning: activities and other relevant

• Invitation – presentation on brucellosis both in Thai and in international conferences for veterinary officers, public health officers and farmers (2013-9 times, 2014 – 3 times)

• Participation on document preparation of the guidelines on brucellosis control and surveillance for public health and animal health officers

• Contribution to the One Health Project in Thailand
In conclusion:

The achievement of all project objectives:

- strengthened the Asia-Pacific impact of NIAH
- ensured its capability of implementing regional activities expected from an OIE reference laboratory
- contributed to an active network of regional diagnostic expertise for the surveillance and control of animal and human brucellosis

Application to the designation of NIAH as a Regional OIE Brucellosis Reference Laboratory
The way forward

• Enhancing the Brucellosis laboratory network in Asia-Pacific region for the benefit of the Animal and Public Health in the Region

• This also depends on your active participation and engagement!
Acknowledgements
Thanks for your Attention