Brucellosis OIE Laboratory Twinning Programme France/Thailand (2010-2013)

GARIN-BASTUJI Bruno[1], EKGATAT Monaya[2], KANITPUN Reka[2], JAŸ Maryne[1], DRAPEAU Antoine[1], CORDE Yannick[1], KUNCHIT Pittaya[2], LE CARROU Gilles[1], CHERFA Moulay-Ali[1], VECCHIO Gabriela[1], WONGKASEMJIT Surapong[2], WONGWICHARN Preecha[2], JIRATHANAWAT Vimol[2]

[1] Paris-Est University/Anses, Animal Health Laboratory, EU/OIE/FAO Reference Laboratory for Brucellosis, Maisons-Alfort, France; [2] National Institute of Animal Health (NIAH) Department of Livestock Development (DLD), Bangkok, Thailand

Introduction

The OIE Laboratory Twinning Projects aim at improving global capacity for disease prevention, detection, and control through better veterinary governance. The discussion and preparation of the twinning project on brucellosis started during the 1st and 2nd FAO-APHCA / OIE Regional Workshops on Brucellosis Diagnosis and Control in 2008 and 2009.

Project approval and activities

The objectives of the NIAH-Anses twinning project were endorsed by the directors of both laboratories and respective national CVOs. Main objectives were to strengthen the level of expertise in brucellosis (serological diagnosis/screening and bacteriological isolation of *Brucella* by culture) and 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. The work programme included 3 annual training sessions of NIAH staff at Anses and 3 visits of Anses experts to NIAH.

The project was approved in June 2010 for a 3-year duration (2010-2013).

Results

The programme was fully successful in strengthening brucellosis diagnosis and implementing reference activities including 3 training sessions and 3 visits of Anses experts.

The main results were

- *(i)* a regional secondary standard bovine serum established in NIAH;
- *(ii)* the implementation of quality control of locally-produced RBT antigens by NIAH;
- *(iii)* the joint organisation (ANSES and DLD-NIAH) of the first "2013 Asia-Pacific Bovine Brucellosis Proficiency Test", the results of which were presented and discussed in "The 4th FAO-APHCA/ OIE/DLD Regional Workshop on Brucellosis Diagnosis and Control in Asia-Pacific Region – Proficiency Test and Ways Forward", Chiang-Mai, Thailand, March 2014;

- *(iv)* the participation of NIAH to the EU/OIE interlaboratory proficiency tests 2012 and 2014;
- *(v)* the provision of NIAH with all the Brucella reference strains, Brucella-phages and monospecific sera needed for a rapid implementation of Brucella biotyping in standard conditions;
- *(vi)* the validation by Anses of the identification of Brucella strains stored in the NIAH Brucella collection;
- *(vii)* Anses assistance in completion of the quality assurance system (ISO/IEC 17025:2005) in place in NIAH;
- *(viii)* Anses support in designing research activities and a project of PhD thesis.

Conclusion

All activities in the programme were achieved and completed on December 31, 2013. The achievement of all project objectives is expected to strengthen the Asia Pacific regional impact of the NIAH brucellosis laboratory and to ensure the capability for the already ongoing implementation of those regional activities that are expected from an OIE Reference Laboratory. The benefit of this programme will be a guide for stimulating and enhancing an active network of regional diagnostic expertise for the surveillance and control of brucellosis for the benefit of the Regional Animal Health and Public Health.

E-Mail of presenting author: monayae@dld.go.th and bruno.garin-bastuji@anses.fr