Brucellosis OIE Laboratory Twinning Programme
France/Thailand

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Background: The OIE Laboratory Twinning Project aims 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-APHIA / OIE Regional Workshops on Brucellosis Diagnosis and Control in 2008 and 2009 (directed by Dr. B. Garin-Bastuji and collaboration with DLD-NIAH). A series of objectives were developed for the twinning process.

Methods: The objectives of the laboratory project have been endorsed by the directors of both laboratories and respective national CVOs. Main objectives are 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 includes 3 annual training sessions of NIAH staff at ANSES and 3 visits of ANSES experts to NIAH.

Results: The project was approved in June 2010 for a 3 year-duration (2010–2013). The first year programme was fully achieved with:— ANSES standard operating procedures (SOP) (serological and bacteriological diagnosis, Brucella bichyping and control of antigens and ELISA kits) were translated in English and sent to NIAH— A 1st training session at ANSES for 3 NIAH scientific and technical staff on serological diagnosis and control of diagnostic antigens and ELISA kits and first discussions regarding the organisation of the bacteriological diagnosis in adequate quality and biosafety conditions. — The transfer of secondary reference standard sera (ELISA) as well as a freeze-dried control serum panel from ANSES to NIAH; — NIAH has also started the quality control of RBT antigen pilot batches, as well as of National positive control standard sera, some of same giving adequate results according to ANSES checks; — NIAH started the collection of sera from infected cattle, buffaloes, sheep and goats in order to prepare a future common serum collection for further standardisation and latest evaluation studies. — The first visit of ANSES to NIAH (1 week – 2 experts) took place on April 9–15, 2011 for a first audit of the organisation and work activities in place with exchanges (i) on the RBT antigen local production, (ii) laboratory management for serological testing, bacterial culture and molecular biology, (iii) the preparation and standardisation of national standard sera and positive control sera and (iv) on investigation of brucellosis infected herds in the field.

Finally, a common poster regarding brucellosis field surveys performed in Thailand was presented at the last Brucellosis International Conference in Buenos Aires, Argentina in September 2011.

Summary/conclusions: 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, by stimulating an active network of regional diagnostic expertise for the surveillance and control of brucellosis.

Keywords: OIE, laboratory twinning, brucellosis