

# Current status of bovine TB/zoonotic TB & Brucellosis PAPUA NEW GUINEA

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## Bovine TB/Zoonotic TB

### CURRENT SITUATION

- ❖ Bovine Tb has never been reported in Papua New Guinea
- ❖ Apart from Fiji, bovine Tb is largely unknown in the rest of Pacific Island countries
- ❖ The five priority zoonotic diseases in PNG include foodborne zoonosis, zoonotic
- ❖ arboviruses, leptospirosis, highly pathogenic avian influenza and **bovine tuberculosis**

- ❖ PNG include foodborne zoonosis, zoonotic arboviruses, leptospirosis, highly pathogenic avian influenza and **bovine tuberculosis**

### DIAGNOSIS, SURVEILLANCE, CONTROL

- ❖ In PNG, dairy cattle herds are subjected to interdermal tuberculin testing regime for bovine Tb monitoring and surveillance
- ❖ so far, no positive test has been recorded

### ONE HEALTH APPROACH

- ❖ A research proposal is been organized in collaboration with public health, medical research institute and animal health to conduct a prevalence study of bovine tuberculosis in cattle in PNG

### CHALLENGES AND WAY FORWARD

- ❖ Importation of infected animals
- ❖ PNG has high rate of human Tb infections and there may be a possibility of human –animal transmission and vise versa
- ❖ PNG adopts very strict import policies for cattle and buffalo to prevent entry of bovine Tb into PNG

## Brucellosis

### CURRENT SITUATION

- ❖ The oldest record of bovine brucellosis in PNG was recorded in 1965. Since then, there has been no further reported cases in PNG
- ❖ Apart from Fiji where there is an eradication program in place, the rest of Pacific Island countries are largely unknown status including PNG.
- ❖ Neglected zoonoses in PNG include leptospirosis, zoonotic arboviruses, anthrax,
- ❖ **brucellosis, bovine tuberculosis**, trichinellosis, Hydatid disease and cysticercosis

### DIAGNOSIS, SURVEILLANCE, CONTROL

- ❖ *Bovine brucellosis serological survey carried out in cattle herds in PNG between 2010 and 2013) showed no seroconversion against B.abortus (indirect ELISA).*
- ❖ *The study showed prevalence estimated between 0.54 % and 1.0 %*

### ONE HEALTH APPROACH

- ❖ OH approach is relatively a new concept and is proactively pursued in PNG and the Pacific region
- ❖ In PNG, plans are underway to establishing a joint/ public health/animal health/environmental health surveillance system for the five priority diseases of zoonosis in bovine brucellosis.
- ❖

### CHALLENGES AND WAY FORWARD

- ❖ *The international trade is so complex such that the potential for entry of TADs including diseases of zoonoses into PNG is quite high.*
- ❖ *importation of contaminated semen is potentially high risk for PNG*
- ❖ *PNG adopts very strict import policies to prevent entry of brucella diseases into PNG*

