



# South Africa

Kick-Off Meeting GRIPAVI



# South African poultry industry

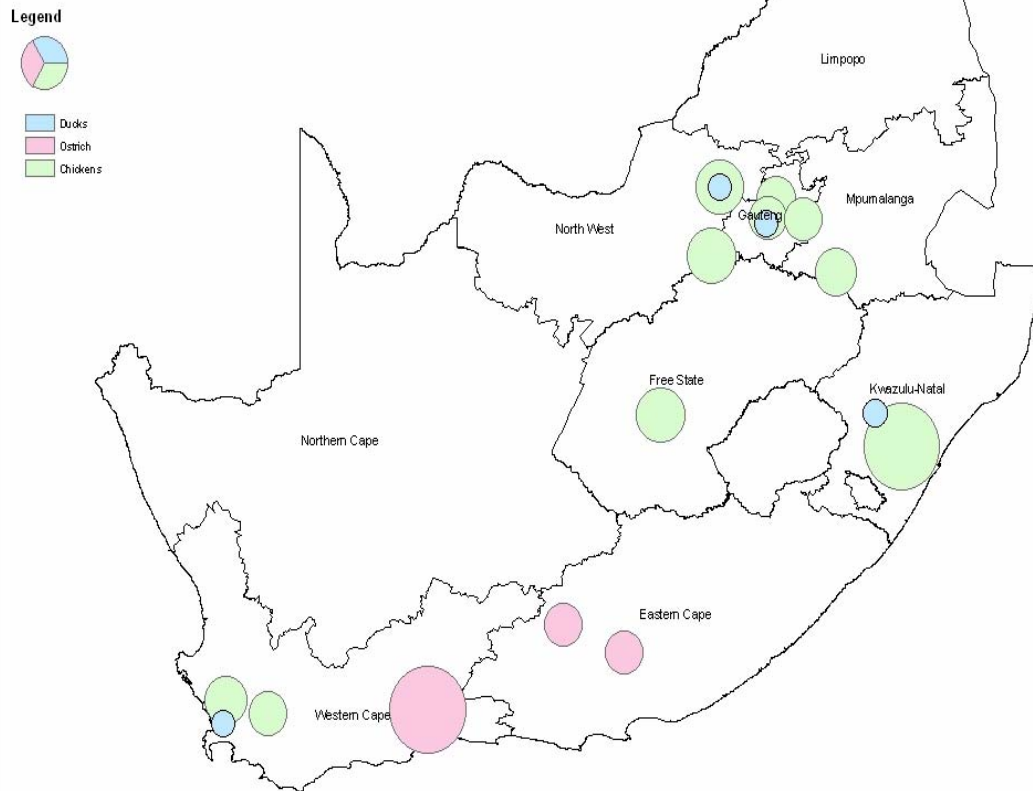
Broadly divided into four parts:

1. Large commercial/industrial sector
2. Widely-distributed small-commercial sector
3. Widely distributed village poultry population, back-yard poultry and pet bird collections
4. Ostrich industry



# South African poultry industry

**Main Areas of Poultry Production in South Africa**



## Broiler production:

- 12.5 million broilers slaughtered per week
- Imports (2006): 300 000 tons from Brazil (72%), Canada (11%), Argentina (7%), Australia (3%), UK (2%), USA (2%)
- Exports (2006): 3800 tons to Saudi Arabia (39%), Mozambique (22%), UA Emirates (10%)

## Egg industry:

- Layer flock = 20.5 million hens
- Egg production: (2006) ~330 000 cases per week

## Ostrich industry

- >67% of world sales in ostrich products (meat, leather, feathers)
- R1.2 billion pa
- 250 000- 300 000 birds slaughtered pa

## Others

- Ducks, turkeys- minor

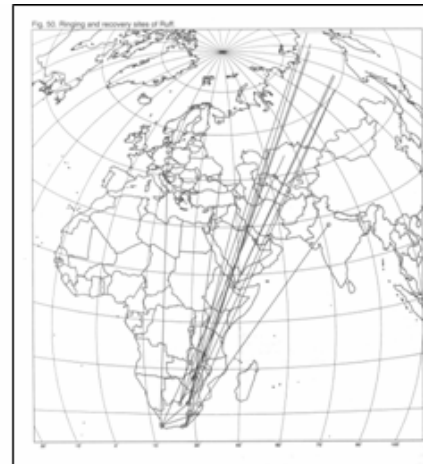
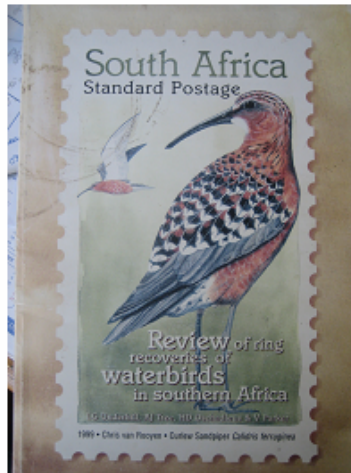
Source: National Department of Agriculture, South African Poultry Association, South African Ostrich Business Chamber (2006/2007)



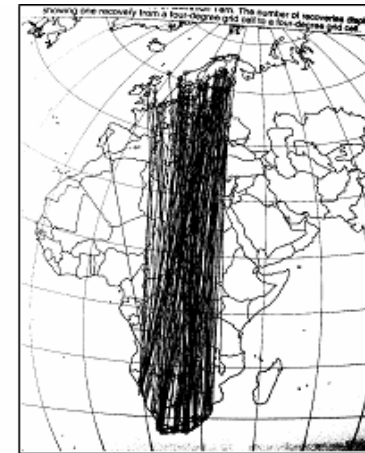
# Wild birds

- >900 species (10% of world population)
- 130 species endemic to region
- Wide range of habitats, agricultural practices, climate change affect distributions
- Resources:
  - University of Cape Town (**UCT**)- **Avian Demography Unit**, University of Cape Town (Department of Statistical Sciences)
    - South African Bird Ringing Unit (SAFRING): network of volunteers
    - Southern African Bird Atlas Project (SABAP).
  - Percy FitzPatrick Institute of African Ornithology (UCT Zoology Department)
  - BirdLife South Africa: Southern African Ornithological Society Nature Conservation
  - Department of Environmental Affairs and Tourism
  - SA Wingshooters' Association

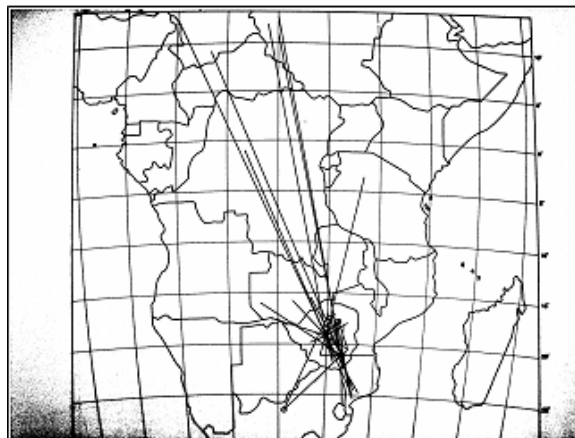




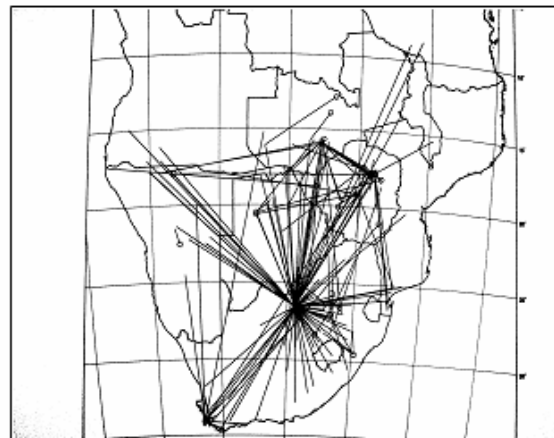
Ruff



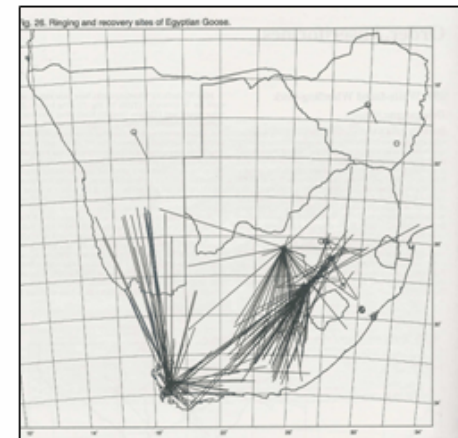
Common tern



Comb duck



Red-billed duck



Egyptian goose



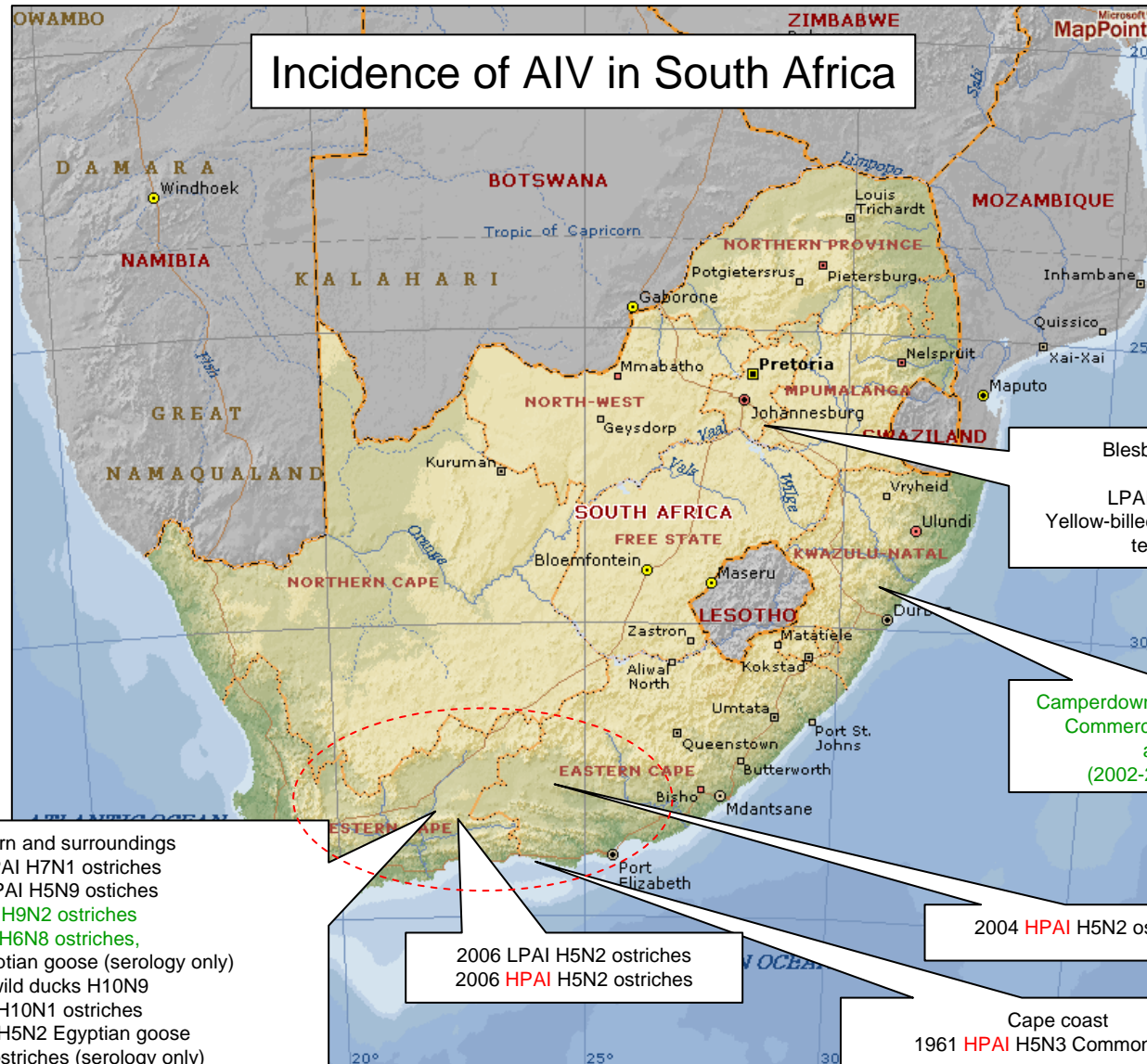
# H5N1 Situation

- Status: Free.
  - EU trade ban lifted November 2006 (HPAI H5N2 outbreak in ostriches 2006)
- Risk analysis and Surveillance
  - Surveillance in poultry: compulsory bi-annual testing of all poultry (domestic and non-domestic chicken and domestic ostrich) flocks (serological: ELISA/HI and rRT-PCR)
  - Surveillance in wild birds (OVI and collaborators)
- Control plan
  - Emergency plan- compiled by department of Agriculture, coordinated with Department of Health
  - Slaughter-out policy
  - Vaccination- not permitted (but considered as a possible control measure under certain specific circumstances)
- Communication strategies
  - Chain of command from state vet to minister, communications officer informs stake holders, trade partners, OIE



## Available data on LPAI:

### Incidence of AIV in South Africa



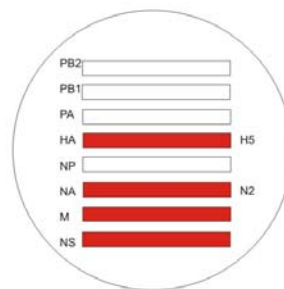




**HPAI H5N2**  
Ostrich  
Eastern Cape  
2004



**LPAI H5N2**  
Egyptian goose  
Western Cape  
2004



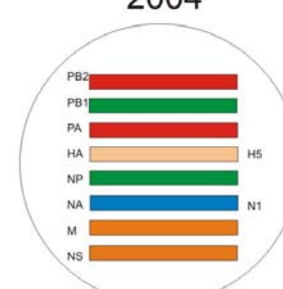
**H4N8**  
Red-billed teal  
Gauteng  
2004



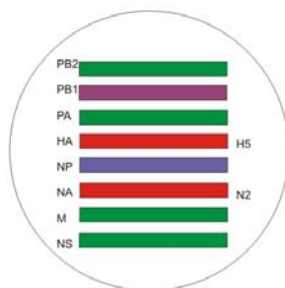
**H3N8**  
Cape teal/shoveller  
Gauteng  
2004



**LPAI H5N1**  
Yellow-billed duck  
Gauteng  
2004



**HPAI H5N2**  
Ostrich  
Western Cape  
2006



**LPAI H5N2**  
Ostrich  
Western Cape  
2006



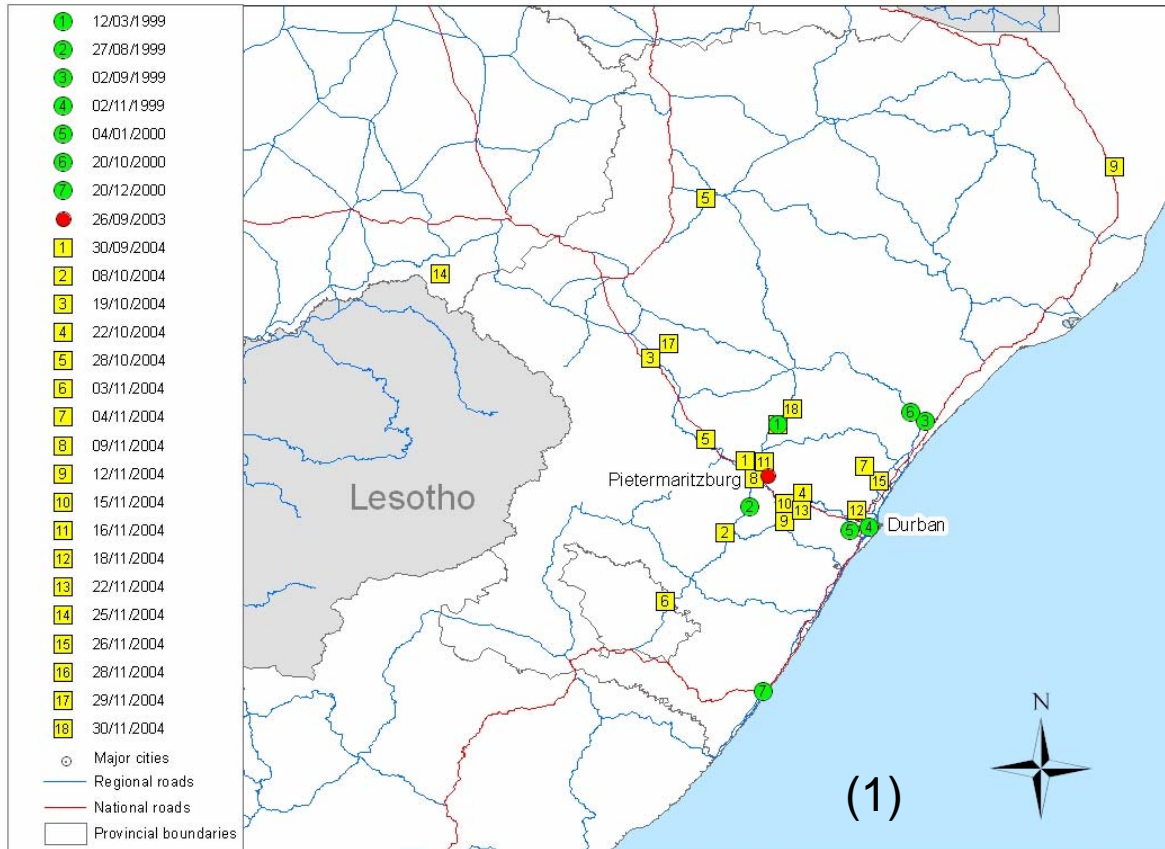




# Newcastle situation

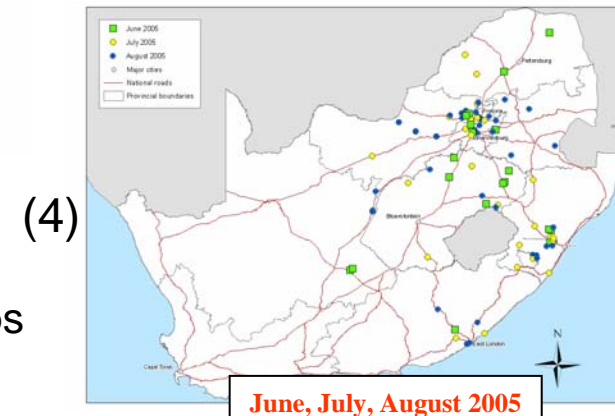
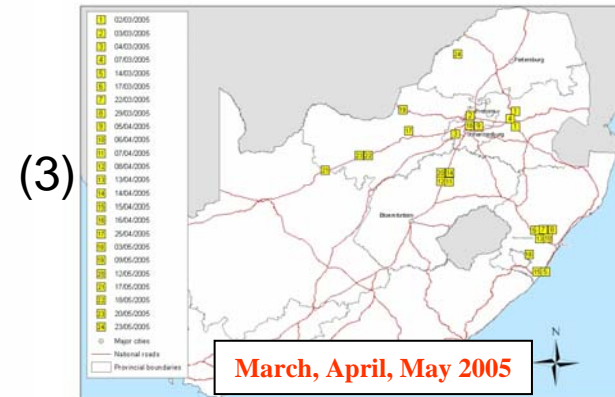
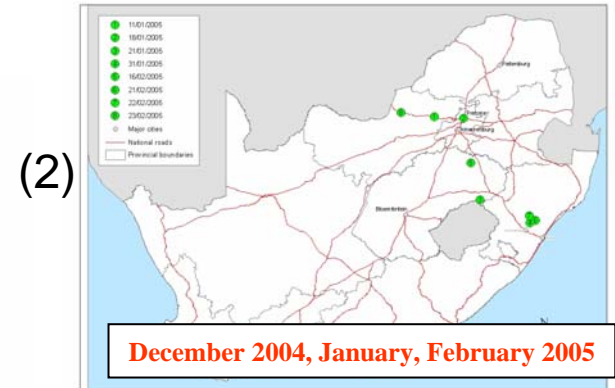
- Occurrence
  - Endemic status
  - Major outbreaks:
    - 1971/1972 (lineage VIII)
    - 1993/1994 (pandemic) (lineage VIIb/5b)
    - 2004 current outbreak (lineage VIId/5d)
    - Pigeon paramyxoviruses
- Surveillance:
  - Routine large-scale RT-PCR surveillance in ostriches for export purposes
- Vaccination
  - Live attenuated, inactivated and mesogenic strains in use:
    - LaSota46
    - Hitchner/B1
    - Avinew
    - Komarov (OP strain, mesogenic)

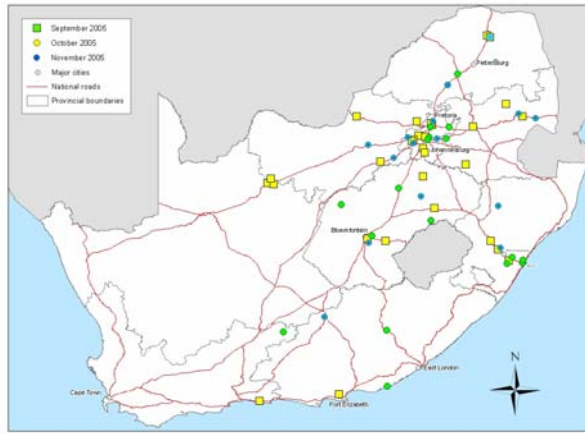
## The current NDV outbreak



● 1999-2000    ● 2003    ■ September-November 2004

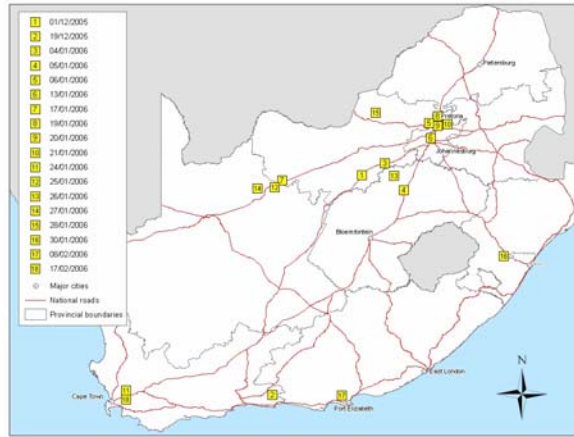
## Possible introduction by contaminated swill off East Asian ships





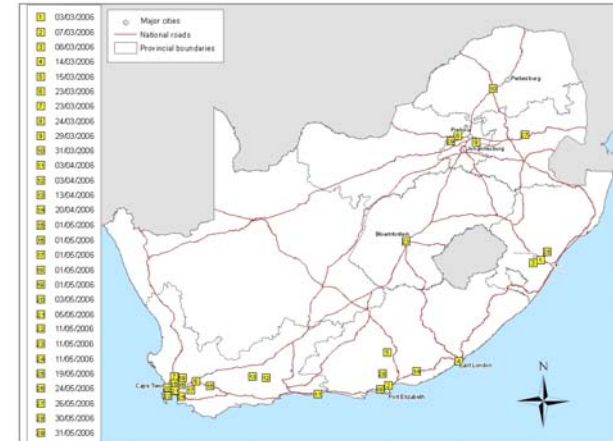
September, October, November 2005

(5)



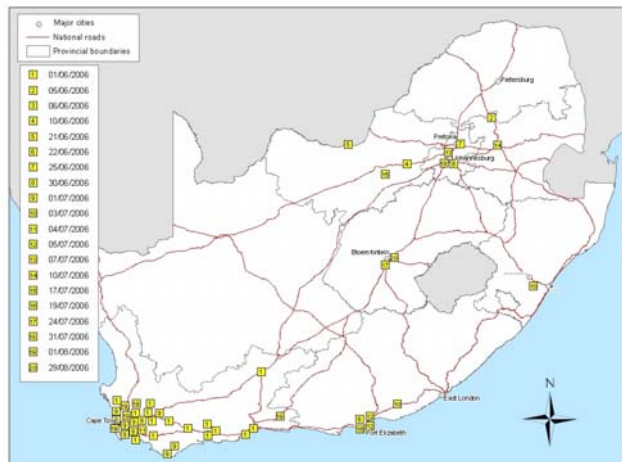
December 2005, January & February 2006

(6)



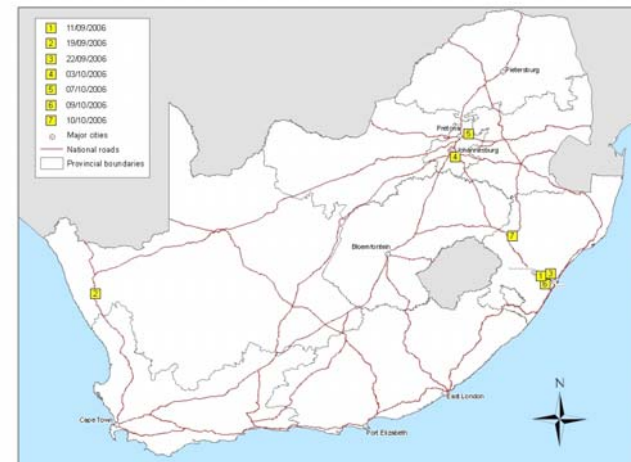
March, April, May 2006

(7)



June, July, August 2006

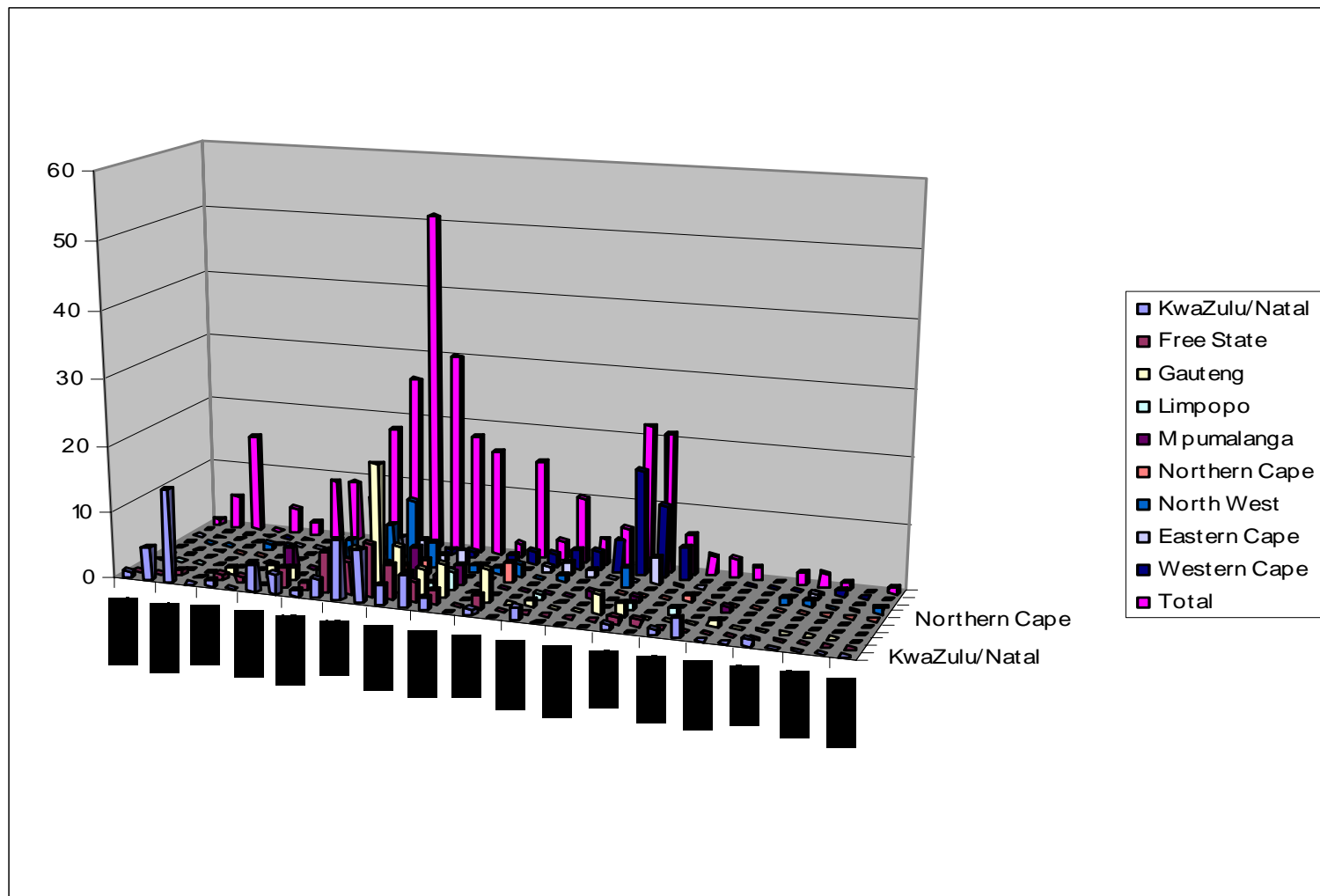
(8)



September, October 2006

(9)









# Role of South Africa in GRIPAVI