



# **INDIA**

# **Foot and Mouth Disease**

# **Control Initiatives**

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# FMD Control

- *Why to Control of FMD?*
- *Major Transboundary Disease*
- Economic Consequences is the primary driver of FMD control globally
- Ranked as No.1 Priority for Control
- Benefits are immense to the developing world with large resources in Livestock sector

# India: Value of Output

- **Agriculture & allied Sector 2009-10**
  - Rs.13,76,561 Crores = USD 286.8 Billion
  - Livestock Sector : Rs.3,40,473 Crores  
**(USD 85 Billion)**
  - Milk alone Rs.2,28,809 Crores  
**(USD 47.7 Billion)**
  - Value of output from Paddy, Wheat & Sugar  
Rs.2,76,299 Crores = **USD 57.56 Billion**
  - Livestock Sector contributes 29.7% of the  
total from Agriculture in India

*( DADF Annual Report 2010-11)*

# Value of Output

- **Milk Production**

- 1990-91      53.9 Million tons

- 2006-07      100.9 Million tons

- 2010-11      115.0 million tons

- **India is the largest producer of milk in the world**

# AH practices and institutions

- Livestock is kept as small holdings by farmers for sustenance
- Veterinary services are primarily in the govt sector and State-funded through
- 8,732 Veterinary Hospitals/Polyclinics and 18,830 Veterinary Dispensaries/25195 others including mobile dispensaries.
- More than 45,000 veterinarians
- Dairy sector well developed through the co-operatives White revolution

# Foot and Mouth Disease in India

## Present Status

- ***Susceptible population***

**Cattle** 199 millions

**Buffaloes** 105 millions

**Sheep** 72 millions

**Goats** 140 millions

**Pigs** 11 millions

**Total Domestic animals 527 millions**

**Plus all wild ungulates**

*(DADF Annual report 2010-11)*

# Foot and Mouth Disease in India

## Present Status

- *Endemic*
- *Serotypes O,A and Asia1 are prevalent*
- *Direct annual losses*
  - > Rs.20,000 Crores (4.45 Billion USD)
- *Indirect losses (work capacity, growth etc.) much more*
- *Embargo on trade in animals and animal products*

# FMD Control in India

- Earlier programme in 1980s in selected districts in Southern India could not be sustained
- Though vaccination was undertaken during the last nearly 25 years it was not focused till the beginning of 10<sup>th</sup> Plan (2002-2007)
- Clear policy now to control the disease progressively by the year 2020 to attain well defined zones of **Control with Vaccination Status**



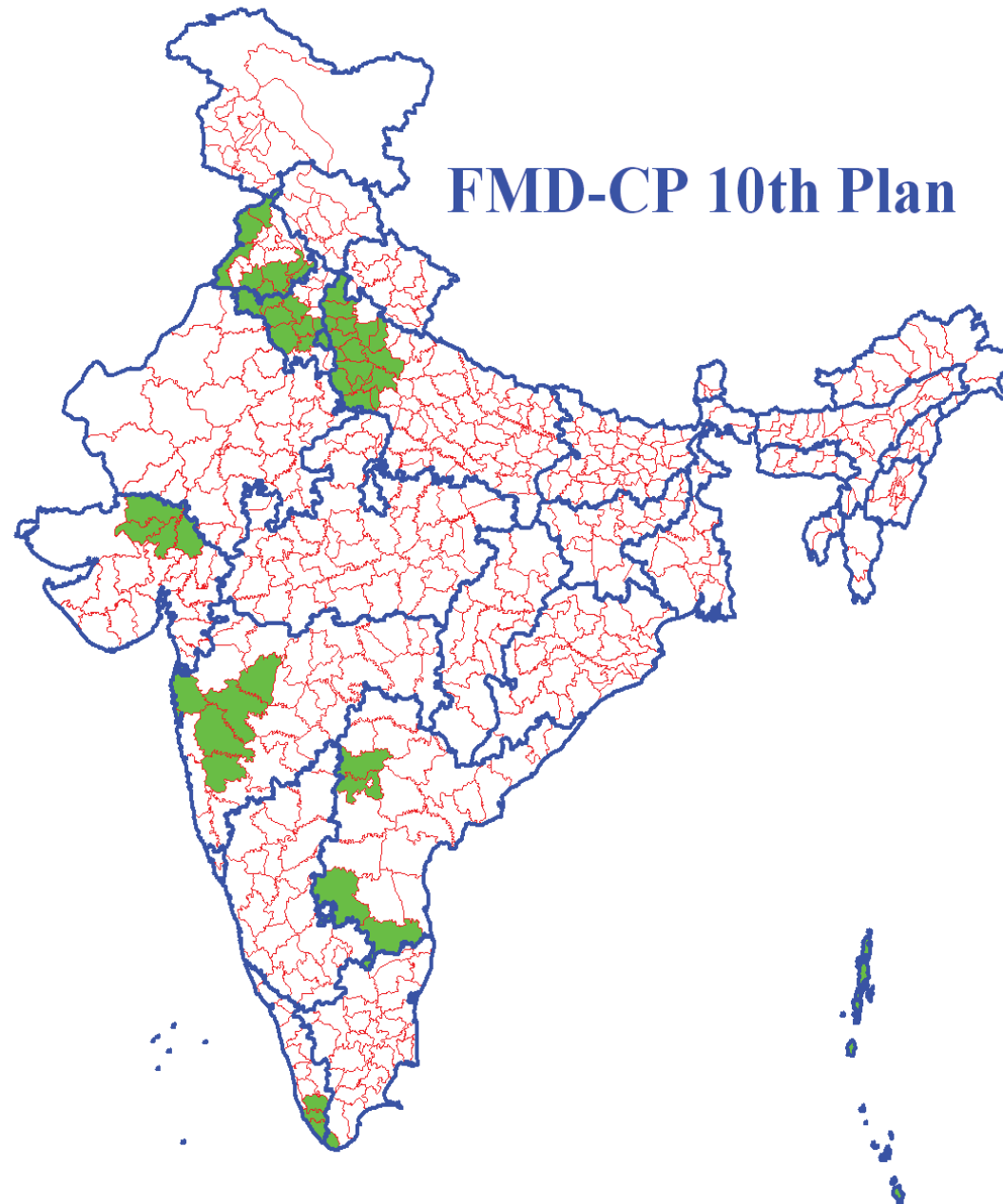
# **FMD Control in India-Present Status**

- **Two Programs presently operational in the country**
- **1.FMD CP – 100% Govt of India funded**
- **2.ASCAD Programme of GOI & State Govts Implemented in Non FMD states**
  - **About 80-85 million animals covered**
  - **Some funds from RKVY also used by states**
  - **Lack of uniformity in implementation and poor coverage**

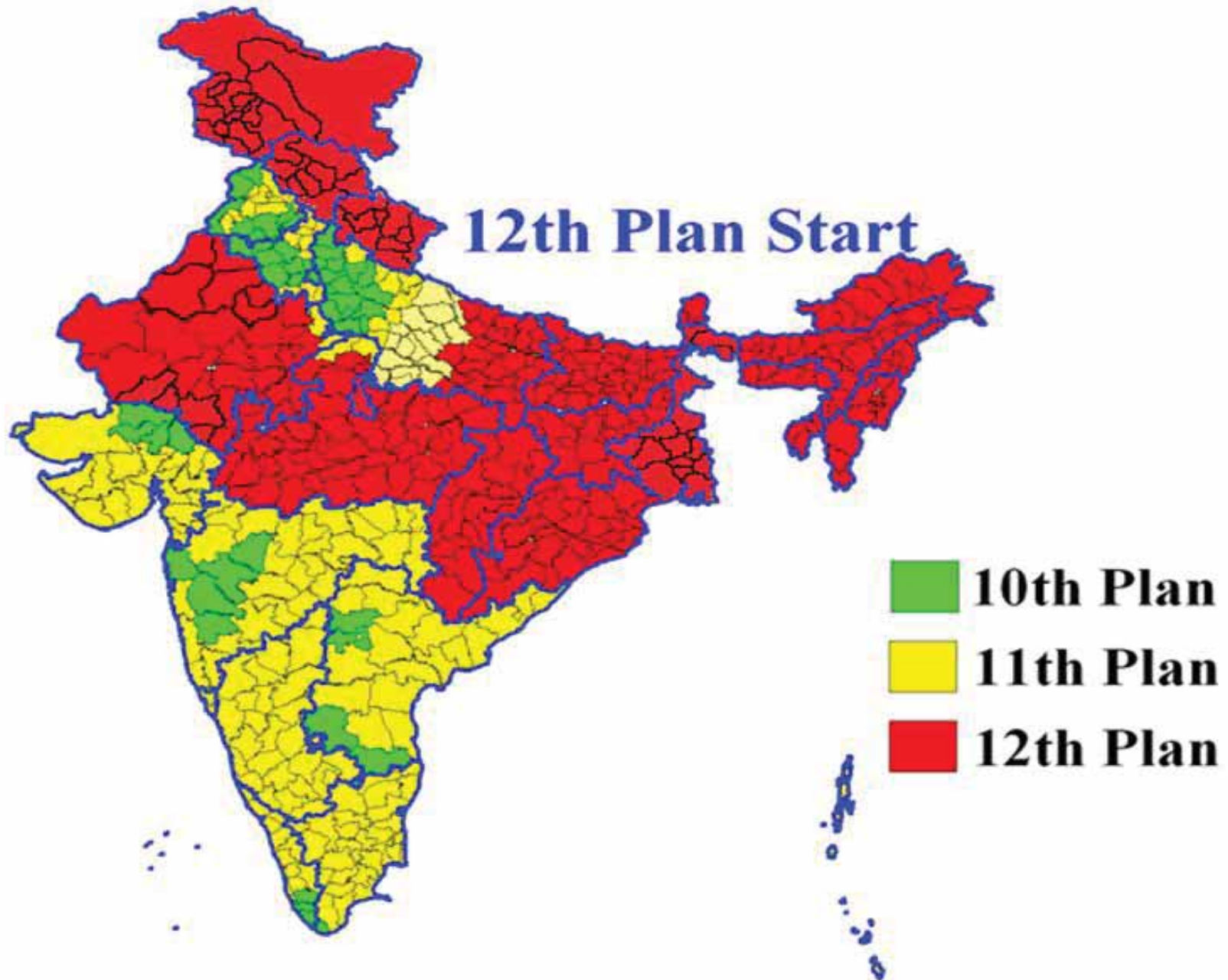
# FMDCP – DADF,GOI

- ❑ Started in 10<sup>th</sup> Plan -Implemented in 54 Districts all Cattle & Buffaloes in the target districts - 30 Million animals plus all pigs
- ❑ Already 12 rounds of vaccination completed
- ❑ Expanded with addition of 167 districts 11<sup>th</sup> plan. Now operational in 221 Districts target population- 120.85 Million Cattle, Buffaloes & Pigs
- ❑ 38.36% of the C,B& P under the FMDCP now
- ❑ Funds till now: Rs.400 Crores (~ USD 83 Million)
- ❑ Further expansion to cover all 640 districts /316 Million animals during 12<sup>th</sup> plan.
- ❑ Vaccination schedule followed –twice a year

# FMD Control Programme 10<sup>th</sup> Plan



# Roadmap for FMD control in India



# Expansion of the FMDCP

- The experience of the FMDCP has given valuable results so far
- Implementation as per FAO-PCP
- It is expected that the programme will be expanded further to cover the entire country during the 12<sup>th</sup> Plan
- Repeated mass vaccination of all Cattle, Buffalos & Pigs – 316 Million animals
- Establishment of one or more clearly defined Zones to attain **Freedom with vaccination Status** by 2020

# **FMD Vaccine Production**

- **Four large scale manufacturers**
- **Present capacity about 350 million trivalent doses/year**
- **The demand for vaccine is increasing expected to go up to about 625 million doses/year by 2015**
- **Regional requirement approx 800 million doses/year**
- **Capacity expansion in vaccine production required to meet the demand**

# **FMD Vaccine quality Control**

- **About 300 Million Trivalent Doses / year**
- **At present done by the manufacturers as per the DCGI regulations**
- **National Institute of Animal Health- DADF,GOI central agency in Govt sector is mandated to undertake the testing (work initiated from this year)**
- **Same model as in South America - PANAFTOSA for success of the control programme**

# FMDCP- SWOT Analysis

## Strength

- Adequate funds from GOI
- Infrastructure & manpower availability
- Vaccine production facilities
- Diagnostics self sufficient
- Support to SAARC region

## Weaknesses

- Animal movement
- Disease Reporting
- Vaccination coverage
- Vaccine availability & QC
- Extension activity
- Stakeholders involvement

## Opportunities

- Increased production
- Food security & safety
- Market accessibility
- Poverty alleviation

## Threats

- Incursions in CP areas
- Illegal trade
- Vaccine safety
- vaccination coverage



# Regional Initiative

- Control of FMD is best done on a regional basis as is followed in South America
- The success in South America is inspiration for the developing countries in South Asia
- South Asia is home to large population of Cattle & Buffaloes 385 Million
- FMD control in South Asia will benefit the livestock farmers in the region as a whole

***Thank you***