Constraints and opportunities for the control of Foot and Mouth Disease in India

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National Scenario

- 4000 - 5000 reported outbreaks every year (may be an under estimate)

- Major incidence in cattle and buffaloes

- Three serotypes (O, A and Asia 1) prevalent currently; the fourth serotype C, last recorded in 1995

- Outbreaks mostly occur in winter months and during pre-monsoon season
- Type O accounts for 80% of the outbreaks
- Unrestricted animal movements disseminate infection rapidly
- No systematic vaccination, restricted to few zones
- DAHF, GOI plans to launch comprehensive FMD control programme in the upcoming plan period
- Current prevention through an inactivated trivalent vaccine
Some Economics

- Contribution of agriculture sector to GDP has gone down
- Contribution of livestock sector to GDP has remained steady

Increased contribution from livestock sector to agriculture sector (up 13.8% in 1981 to 23.8% in 2002-2003)

Losses

- Direct losses alone could be more than 2 billion US dollars/year
Results of the pilot scale control programme involving 54 districts initiated in the 10th plan period (2002-2007) showed a lower incidence of FMD in the areas where it was operational.
Opportunities

Strong network of laboratories

- Central Laboratory
- Regional Research Units
- Coordinating units
Availability of large base line data
Opportunities contd.............

Companion diagnostic kits
Large pool of qualified manpower
One country, one strain
Large peninsular region
Fairly strong political will
Constraints
Lack of public awareness
No central quality assurance agency
Less than the required quantity of vaccine Production
Lack of strong legislation
Large FMD susceptible Livestock Population (in Millions)

<table>
<thead>
<tr>
<th>Animal</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>185.1</td>
</tr>
<tr>
<td>Buffalo</td>
<td>97.9</td>
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<tr>
<td>Sheep</td>
<td>61.4</td>
</tr>
<tr>
<td>Goat</td>
<td>124.3</td>
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<tr>
<td>Pig</td>
<td>13.5</td>
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<tr>
<td>Yak</td>
<td>0.065</td>
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<tr>
<td>Mithun</td>
<td>0.278</td>
</tr>
<tr>
<td>Camel</td>
<td>0.632</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>482.2</strong></td>
</tr>
</tbody>
</table>

Source: DAHD&F, GOI, 2003
Constraints contd........

Ban on cow slaughter
Porous international/interstate borders
Conclusions
Acknowledgements

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