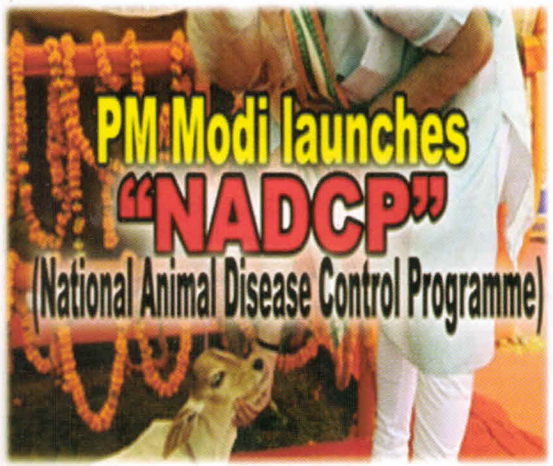
National Animal Disease Control Programme (NADCP) on FMD

National Animal Disease Control Programme (NADCP) is a flagship scheme launched by Hon'ble Prime Minister on 11th September, 2019 for control of Foot & Mouth Disease (FMD) and Brucellosis. The programme envisaged vaccination of 100% cattle, buffalo, sheep, goat and pig population for FMD and 100% bovine female calves of 4-8 months of age for brucellosis. The total estimate of the programme is Rs.13, 343/- crore for five years (2019-20 to 2023-24).



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Background

India's livestock wealth (535.8 million) includes 192.5 million cattle, 110 million buffaloes, 149 million goats, 74 million sheep and 9 million pigs. Even though, India is the largest producer of milk globally with annual production of 198.4 million Metric Ton. Prevalence of animal diseases is serious impediment to the growth to its full potential in the Livestock Sector. Losses due to some of these diseases e.g. FMD, Brucellosis, etc. are huge and often beyond estimation. In case of FMD, there is not only reduction in the milk production and restriction in trade of livestock products but also there is infertility, reduction in the quality of hides and skins of the animals, including their draught power.

Foot and Mouth Disease is a highly contagious viral vesicular disease of cloven hoofed animals such as cattle, buffaloes, sheep, goats and pigs etc. The clinical signs include high fever (104-106°C), loss of appetite and dullness, excessive salivation, vesicles in the mouth especially on the gums and tongue that result in ulcers and wounds in the hoof in the inter-digital space, blisters on teats, etc. FMD leads to reduction in milk yield, decreased growth rate, infertility, reduced working capacity in bullocks and trade embargo in the international market.

It is one of the most serious diseases of animals in terms of economic impact and is globally recognized as a priority disease for control and eradication. The economic losses due to this disease are enormous and continue during the life cycle of the animal. FMD also leads to lack of access to export markets in the disease free countries causing estimated direct loss to the tune of Rs.20,000 crore per annum. It is therefore imperative to control FMD by vaccination of all susceptible livestock population in the country. This will not only reduce the disease burden but will also result in better productivity and acceptability of our animal products world over.

FMD spreads through contact with infected animal/(s), contaminated feed and water, animal movement, aerosol and contaminated objects. There is no immediate treatment once the animal is infected. Infected animal has to be isolated and given symptomatic treatment and the animal shed should be cleaned with suitable disinfectants. Control of FMD in endemic countries can be achieved by mass vaccination of susceptible livestock repeatedly at regular intervals till the incidence of the disease comes down with buildup of herd immunity. This will pave way to gradual eradication of the disease from the country.

Objectives of the Programme:

The overall aim of the National Animal Disease Control Programme (NADCP) for FMD is to control FMD by 2025 with vaccination and its eventual eradication by 2030.

Expected output:

Control of FMD will result in increased domestic production and ultimately in increased exports of livestock and livestock products.

Funding:

National Animal Disease Control Programme for FMD and Brucellosis (NADCP) is a Central Sector Scheme where 100% of funds shall be provided by the Central Government to the States / UTs towards costs for procurement of vaccine and other logistics to carry out vaccination programme.

Major activities under NADCP

- Mass vaccination of the entire eligible susceptible population of bovines, small ruminants (sheep and goats) and pigs at six-monthly interval
- De-worming one month prior to vaccination
- Primary vaccination of bovine calves (4-5 months of age)
- Publicity and mass awareness campaigns at national, state, block and village level including orientation of the state functionaries for implementation of the programme
- Identification of target animals by ear-tagging, registration and uploading the data in the animal health module of Information Network for Animal Productivity and Health (INAPH)

Types of vaccine available in the country

Manufacturer	Product name	Type	Strain/ subtype	Adjuvant
Biovet Private Ltd.	BioFMD-Oil Vaccine	Killed	O, A, Asia-1	Oil
Brilliant Bio Pharma Ltd.	FUTVAC	Killed	O, A, Asia-1	Oil
Indian Immunologicals Ltd.	Raksha Triovac (FMD, HS, BQ)	Killed	O, A, Asia-1	Oil
	Raksha Biovac (FMD, HS)	Killed	O, A, Asia-1	Oil
	Raksha Ovac	Killed	O, A, Asia-1	Oil

- Animal Health cards and keeping record of vaccination
- Disease investigation, virus isolation and typing in case of outbreak
- Recording/ regulation of animal movement by establishment/ strengthening of check posts
- Testing of pre-vaccination and post-vaccination serum samples for sero-monitoring, sero-surveillance, vaccine Quality control and vaccine matching
- Generation of data and regular monitoring including evaluation of impact of the programme
- Capacity building of network laboratories for Training of Master Trainers, Trainers,vaccinators, personnel involved with ear tagging and registration as well as entry of vaccination data

Control of FMD can be achieved by mass vaccination of all susceptible livestock repeatedly at regular intervals. The mission of the project is to carry out 100% vaccination of cloven-hoofed domestic animals viz., cattle, buffalo, sheep, goat and pig. After the primary vaccination of cattle and buffalo calves at 4 to 5 months age, booster vaccination shall be carried out one month post primary vaccination followed by biannual (six-monthly interval) vaccination. The duration of each mass vaccination campaign shall be a maximum of 30 days. It will be preferable to complete vaccination in a single time-frame all over the country but the State/UT may provide their individual vaccination schedule at the beginning of each financial year till synchronized vaccination throughout the country is achieved.

Active involvement of all stakeholders from livestock farmers to policy makers is key to successful implementation of the programme on a mission mode.

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