Polyherbal medication to combat tick infestation among cattle

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In news– A formulation consisting of herbal ingredients like Neem (*Azadirachta indica*) and Nagod (*Vitex negundo*) has been found to be effective in combating tick infestation among dairy animals.

About the new technology-

- Farmers who depend on dairy animal production are compounded by **livestock ailments like tick infestation**.
- **These external parasites are found widely in cattle sheds** across all geographical regions and proliferate rapidly.
- This causes tick worry, **loss of appetite among animals causing reduction in milk production, thereby lessening farmers' income.**
- **These parasites are vectors of systemic protozoan infection**, threat to dairy animal health & productivity.
- **Presently, farmers rely on chemical acaricides that are costly**, have to be used recurrently due to the nature of parasites.
- This raises input costs, and seldom farmers, particularly small, marginal farmers, get rid of this vicious cycle of seeking chemical acaricide.
- Hence, the **National Innovation Foundation (NIF)** -India, an autonomous body of the Department of Science & Technology, **has developed, standardized a formulation comprising common herbal ingredients like Neem** (Azadirachta indica) and Nagod (Vitex negundo) (mixed in the ratio of 3:1).
- These medicinal trees are widely known among indigenous

communities, a common part of the medicinal system in treatment of various ailments.

- The formulation is easy to prepare and **effective against hard tick infestation** and **Rhipicephalus (Boophilus) Sp. the etiological parasite in cattle.**
- The interface with Pune Zilha Sahakari Dudh Utpadak Sangh Maryadit, popularly called **Katraj Dairy, Pune helped to undertake front line demonstration of farmer-friendly technology** at Daund, Shirur, and Purandar taluka of Pune district, and capacity-building activities were undertaken.
- **Farmers themselves can develop the formulation at the farm field.**
- Maharashtra Animal and Fishery Sciences University, College of Veterinary Science, Palampur, Himachal Pradesh, College of Veterinary Science, Hassan, Karnataka has also recommended this in-situ model of alternative technology for scaling up in the respective states.