

# CLEAN MILK PRODUCTION THROUGH IMPROVED MASTITIS PREVENTIVE PRACTICES

## TRANSFORMING LIVELIHOODS: THE SUCCESS STORY OF A DAIRY FARMER

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### PROBLEMS/CONSTRAINTS

Mr. Shankar Shantaram Naik, a 52-year-old dairy farmer from Mayem village in Bicholim taluka, North Goa, maintains 12 crossbred Holstein-Friesian and Jersey cows within a semi-intensive rearing system. Despite his herd producing substantial milk yields, he encountered persistent mastitis, with an incidence rate of approximately 15-20% each year. This led to frequent milk loss, decreased animal productivity, higher treatment costs, and a decline in the affected cows' market value. He approached ICAR-KVK, CCARI, North Goa, and KVK experts, who visited his farm and found issues including a lack of knowledge of scientific udder health management, poor post-milking hygiene, and the absence of preventive measures, all of which exacerbated the problem.

### INTERVENTIONS

Mastitis is one of the biggest issues in Goa's dairy sector. In recognition of this, ICAR-KVK, CCARI, North Goa, and the TDC-NICRA project promoted scientific mastitis disease management among dairy farmers. Mr. Naik was chosen for hands-on training, demonstrations, and technical support. KVK officials motivated and educated participants about mastitis' economic costs and the benefits of clean milk production. During the intervention, Mr. Naik used two key mastitis control techniques on two cows: Dry Cow Therapy (DCT) and post-milking teat dipping, and compared the results to untreated animals. KVK experts demonstrated Dry Cow Therapy, which involved administering intramammary antibiotic tubes 60 days before drying off. This method eliminated infections and prevented new ones during the dry season. Furthermore, post-milking teat dipping with Lactifence solution was consistently implemented after each milking to mitigate the risk of pathogen entry through the teat canal, a vital point of vulnerability. Experts also recommended a practical management strategy of administering dry or green fodder immediately after milking. This ensured that the cows remained standing for 30 to 60 minutes, permitting the teat sphincter to close and substantially decreasing the likelihood of environmental infections. Experts and scientists provided regular monitoring, guidance, and follow-up visits, thereby strengthening implementation. Collectively, these measures resulted in enhanced udder hygiene, reduced pathogen burden, and a noticeable improvement in the overall quality of the milk produced. The initiative exemplified the importance of prompt scientific interventions and farmer capacity development, underscoring the vital role of KVK in fostering sustainable dairy management practices in North Goa.

### IMPACT

Mastitis control measures implemented by ICAR-KVK, CCARI, North Goa under the TDC-NICRA project improved animal health and productivity. Dry Cow Therapy (DCT) and post-milking teat dipping eliminated mastitis in dairy cattle, although 20% of the control group had it. Enhanced udder health directly contributed to increased productivity. Each treated cow yielded an additional 142 litres of milk per year, generating an extra income of Rs. 5,401 per animal which augmented the overall profitability of the dairy operation. The favorable outcomes inspired six additional farmers in the village to embrace the technology, signifying significant potential for broader community impact.



Practice of post milking teat dipping

