

## Oestrous Synchronization: A Technical Note for Nepalese Goat Farmers

**Authors :** Pravin Mishra, Ajeet K. Jha, Pankaj K. Jha

**Abstract :** This technical note is aimed at providing a brief information on goat breeds, its breeding seasonality and different methods of oestrous synchronization for Nepalese goat farmers. It was observed that, these goats are seasonal breeder and showed oestrous during mainly two season; December- February and March-May. This leads to an irregular supply of goat to market and a wide variations in market price. Oestrus synchronization is only an alternative reproductive tool to overcome this scarcity by enhancing production and productivity. This technique enables goat producers breed their animals within a short pre-determined period and permits breeding round the year. The principle of oestrus synchronisation is based on controlling of the luteal phase of the oestrous cycle. There are two basic mechanisms; one by shortening the luteal life (premature luteolysis) using prostaglandins or its analogues and the other by prolonging the luteal life (simulating the activity of natural progesterone produced by the corpus luteum) using exogenous progesterone source. The former is easy to apply and only effective during breeding season, whereas the latter is advantageous when the reproductive status of the goat flock is unknown. The common hormonal products easily available in Nepal includes; prostaglandins or its analogues (Oviprost® Dinoprost® Lutalyse® and Estrumate®), exogenous progesterone (Fluorogestone acetate® and Controlled Internal Drug Release®, CIDR) devices). However, before practicing the oestrous synchronization protocol, it needs to be validated for oestrous response rate, time to onset of oestrous, duration of oestrous and pregnancy rates at farmer's field. In conclusion, application of oestrus synchronisation practice enhanced goat production and surplus the goat meat demand in Nepal.

**Keywords :** goat, Nepal, oestrous, synchronization

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