

## University of Kentucky UKnowledge

International Grassland Congress Proceedings

XX International Grassland Congress

## Modelling the Encroachment of Farmhouse Culture on Private Village Pastures and Its Environmental Fall-Out in Northern Western Ghats, India

S. B. Nalavade *RANWA. India* 

K. R. Sahasrabuddhe *RANWA, India* 

A. A. Patwardhan *RANWA, India* 

Follow this and additional works at: https://uknowledge.uky.edu/igc

Part of the Agricultural Science Commons, Agronomy and Crop Sciences Commons, Plant Biology Commons, Plant Pathology Commons, Soil Science Commons, and the Weed Science Commons

This document is available at https://uknowledge.uky.edu/igc/20/satellitesymposium3/69
The XX International Grassland Congress took place in Ireland and the UK in June-July 2005.
The main congress took place in Dublin from 26 June to 1 July and was followed by post congress satellite workshops in Aberystwyth, Belfast, Cork, Glasgow and Oxford. The meeting was hosted by the Irish Grassland Association and the British Grassland Society.

Proceedings Editor: D. A. McGilloway

Publisher: Wageningen Academic Publishers, The Netherlands

© Wageningen Academic Publishers, The Netherlands, 2005

The copyright holder has granted the permission for posting the proceedings here.

This Event is brought to you for free and open access by the Plant and Soil Sciences at UKnowledge. It has been accepted for inclusion in International Grassland Congress Proceedings by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

## Modelling the encroachment of farmhouse culture on private village pastures and its environmental fall- out in Northern Western Ghats, India

S.B. Nalavade, K.R. Sahasrabuddhe and A.A. Patwardhan

RANWA, C-26/1, Ketan Heights, Kothrud, Pune-411038. Maharashtra, India, Email: sbnalavade@vsnl.net

Keywords: private village pastures, urbanization, farmhouses, rural economy, access corridors

**Introduction** Tropical India harbours numerous pasturelands across small landholdings ranging up to few hectares which are covered with grass that is suitable as fodder. These grazing lands are commonly known as 'Gairan' in urbanised northern Western Ghats mountain tract in Western India). Such grasslands comprise about 20% of the total area of a village (Jodha, 1986), support livestock and supplement the agro-economy of the village. These pasturelands are being replaced by fenced 'farmhouses' of the urban elite, resulting in land use changes that caused drastic qualitative and quantitative changes in terms of area, fodder species composition and livestock they support (Patwardhan *et al.*, 2003). The study area has faced large changes in the last few decades with increases in the area under settlement by 240%s as well as a decrease in the area of agriculture land and grasslands-scrub vegetation by 31 % and 39 % respectively (Nalavade, 2003). The present paper documents socio-cultural, economic and environmental changes in private village pastures across the Mumbai-Pune urban belt.

**Materials and methods** A dozen villages from the study area were selected. Revenue maps were used to map the land use. Present land use was mapped by conducting field visits and by using government records. Semi-istructured interviews with villagers revealed the past land use. A concentric circle model was developed, and found to be effective tool for comparing changes in land use and to generate response options (Nalavade, 2003).

**Results** The traditional set-up of a village shows a typical land use pattern with agriculture, private pastures, public pastures and forest land surrounding the settlement. Current land use involves traditional pasturelands being replaced by fenced 'farmhouses' of the urban elite, restricting movement of wildlife besides blocking the approach of local grazers and fuel wood collectors towards the public pastures and state forest lands. A decrease in the grazing area has both changed the composition of livestock by forcing farmers with small landholdings to keep fewer cattle than previously and through a shift to hybrid cattle. Shifting pressure from private pastures to public pastures and forest lands has led to degradation of these habitats. This has also resulted in change in employment options leaving landowners to work as caretakers, gardeners or security persons in farmhouses.

**Conclusions** To restrain the situation, there is need for access corridors between settlement and public pastures and forest land. Local specific communication, education and public awareness strategies and action plans need to be developed to overcome the situation. Otherwise in the future, present pastoral ecology may be gradually replaced by urban culture thereby hampering village ecosystem.

## References

Jodha, N.S. (1986). CPR and rural poor in dry regions of India. Economic and Political Weekly, 21 (27).
 Patwardhan, A., Kanade, R., Sahasrabuddhe, K., Nalavade, S., Ghotge, N., and U. Ghate. (2003). Social review of pastoral ecosystem services in Western India. African Journal of Range and Forage Science, 20, 194-197.