

198. Dadhwal, K.S., Sharma, N.K. and Saroj, P.L. 1995. Diagnosis and possible interventions in designing agroforestry systems in North-Western plains of Uttar Pradesh-A case study. *Indian J. Soil Conserv.*, 22(3):47-53.

Results of a diagnostic survey conducted to have an appraisal of existing landuse systems and agroforestry practices in north-western plains of Uttar Pradesh are analysed and discussed. The major farming constraints were identified and possible agroforestry (AF) interventions suggested. Farmers showed great interest for agri-horti followed by agri-horti-silvi systems of AF alongwith livestock component like dairy, goat rearing (for meat and milk) and vegetables for immediate cash. Some of the remunerative tree species for integration in designing agroforestry systems (AFS) identified are *Mangifera indica*, *Psidium guajava*, *Citrus* spp., *Carica papaya*, *Dalbergia sissoo*, *Sizygium cuminii*, *Eucalyptus* hybrid and *Populus* spp. Integration of livestock component appeared to be most remunerative and therefore, to mitigate fodder requirements, grasses, palatable fodder crops and top feed tree species are needed to be integrated in the system. For improving production potential of different components, the scientific management is essential. Based on the diagnostic survey, possible AF and non-AF interventions are suggested to design a system. For improving the viability of the system further, the future research needs are also suggested.