

forms of degradation have also been elaborated.

812. **Singh, H.B. and Nambiar, K.T.N. 1994.** Traditional agroforestry systems and recent trends in the middle Gujarat agroclimatic region. In: Agroforestry-Traditions & Innovations (eds.) Pratap Narain, K.S.Dadhwal and R.K.Singh, ICAR-UNDP Advance Centre on Agroforestry, CSWCRTI, Dehradun: 66-69.

In this paper, the authors describe both traditional as well as new agroforestry systems in vogue in Kheda, Vadodara and Panchmahal districts of Gujarat having tropical, semi-arid climate. In the traditional agroforestry systems (AFS), multipurpose grasses, shrubs and tree species are grown in assorted manner with agricultural crops to meet the basic needs of food, fuelwood and fodder. The multi-purpose trees (MPTs) generally found in traditional AFS are *Acacia nilotica*, *Azadirachta indica*, *Pithecellobium dulce*, *Prosopis cineraria*, *Tamarindus indica*, *Holoptelia integrifolia*, *Mangifera indica*, *Zizyphus mauritiana*, *Annona squamosa*, *Moringa oleifera* and *Hardwickia binata*. Under non-arable lands, MPTs and fodder grasses are predominant. Recent trends of AFS envisage perfect planning of compatible MPTs and fodder grasses with crops. *Leucaena leucocephala* with *Dichanthium annulatum* and *Cenchrus ciliaris* in 1:3 ratio is recommended for meeting the fodder and fuel requirements. For management of AFS, side trenching (0.4m x 0.6m) and 50% crown pruning have been found useful in