

Appendix 9: Consolidated Farmer-Specified Ideotypes

Rank	Niche	Ideotype	Explanatory notes
1	Fruit trees on home garden, boundaries	Crown: Moderately dense, medium diameter with many angular branches Stem: Straight, round, long Clean bole(the longer the better, for higher timber, yield, quality & price) Rooting habit: Deep lateral roots starting from not less than 1-3ft deep Fruiting habit: On stem and branch for jackfruit; mainly on branch for mango, etc	Spatial efficiency is the key as this is the top priority, growing niche in the home garden area for all plants for both genders, but it is especially important to women of the landless & marginal and small farm categories. The ideotype is geared to increased fruit, reduced shade area, utilization of deep soil nutrients and preservation of under-storey space for movement and intercrops. Fruit trees can be sold as timber when finally felled. Fruiting is expected at the normal locations for the species, but some want fruit only on branches for fear of theft, while others would like mango also on the stem like jackfruit for larger size & less wind damage.
2	Timber trees on cropland interiors, home garden boundaries, & pond banks	Crown: Narrow, relatively open, few less spreading angular branches Stem: Straight, long clean, round cylindrical bole Rooting habit: Deep rooting, with lateral form 2-4ft deep.	This is the agro-forestry timber ideotype for locations in which space is limited or resources must be shared non-competitively with intercrops.
3	Fruit trees in home garden interiors	Crown: Narrow, few branches Stem: Small diameter Rooting habit: Deep lateral roots starting from not less than 1-3ft deep Fruiting habit: On branches	Compatibility with other uses of the space is the key to this ideotype for ease of movement, reduced shade for crop drying and non-interference with children's play areas. Fruiting on high branches is desired for protection from children and other domestic animals.
4	Fruit trees in orchards, pond banks, & croplands destined for conversion	Crown: Dense, many branches, angular or horizontal Stem: Straight, round Rooting habit: Deep, lateral roots from not less than 1-3ft Fruiting habit: On branch and stem	As it turns out, these tree planting niches all require the classic orchard ideotype, appropriate for locations where space is not limited by competition and fruit production is the dominant landuse, with or without shade tolerant intercrops.

Source: John 2001. *A report on past efforts to develop a Participatory Rural Appraisal methodology for community based tree improvement in Asia.*