

species) then its *h*-index would have been the same.

In conclusion, we would like to point out that these indicators cannot only be applied in ecology, but also in the social sciences, in management, in demography, in research evaluation (where they originated) and in related fields, when replacing the term 'species' by the appropriate relevant term.

1. Raghukumar, S. and Anil, A. C., *Curr. Sci.*, 2003, **84**, 884–892.

2. Rousseau, R. and Van Hecke, P., *Acta Biotheoretica*, 1999, **47**, 1–5.
3. Patil, G. P. and Taillie, C., In *Ecological Diversity in Theory and Practice* (eds Grassle, J. F. et al.), International Co-operative Publishing House, Fairland, 1979, pp. 3–27.
4. Rousseau, R., Van Hecke, P., Nijssen, D. and Bogaert, J., *Environ. Ecol. Stat.*, 1999, **6**, 211–223.
5. Hirsch, J. E., *Proc. Nat. Acad. Sci. USA*, 2005, **102**, 16569–16572.
6. Jin, B. H., Liang, L. M., Rousseau, R. and Egghe, L., *Chin. Sci. Bull.*, 2007, **52**, 855–863.
7. Pielou, E. C., *Ecological Diversity*, New York, Wiley, 1975.

8. Magurran, A. E., *Ecological Diversity and its Measurement*, Chapman & Hall, London, p. 128.

ACKNOWLEDGEMENT. We thank two anonymous referees for interesting suggestions.

R. ROUSSEAU

Department of Mathematics,
Celestijnenlaan 200B,
3001 Leuven (Heverlee),
Belgium
e-mail: ronald.rousseau@khbo.be

Community forestry – linking conventional and nonconventional forest areas for sustainable development

Community forestry has been defined as 'any situation which intimately involves local people in a forestry activity'¹. Though this concept does not give a clear picture of ownership of land resource², equity share, participation in decision making, etc., it clearly emphasizes the need for active participation of the community in regeneration and protection of the forest resources at all times. This aspect of forestry not only benefits local people but also provides great benefits to the landless people, viz. fodder, fuel wood, small timber and other non-timber forest products (NTFPs)³. Community forestry is not a new concept in India. It was developed prior to the pre-colonial period by people in community-owned forests. Most forest lands during the colonial period were brought under the control of the forest department by the forest acts in 1865 and 1878. Notwithstanding, community forestry was started in Kumaon hills, a conventional forest area through active participation of the Panchayat and was popularly known as *Van Panchayat*².

During the post-colonial period, community forestry programme was adopted by the forest department to meet the basic requirements of communities through raising trees in nonconventional forest areas, viz. community land and public land through active participation of the community. For instance, in Tamil Nadu, *Acacia nilotica* trees were planted in community lands like foreshores of water

reservoirs through active community participation³.

Similarly, community forestry in Gujarat was started both in public as well as community lands such as roadside plantations, supervised woodlots and village self-help schemes³. Now, the community forestry programme has gone beyond the boundaries of nonconventional forest areas. Presently, it is followed in both reserved forests⁴ and unclassified state forests (USF) through Joint Forest Management. Thus, the community forestry is a dynamic concept which implies 'forestry of the people, by the people and for the people' that is practised in various types of lands, viz. panchayat land/community land, public land and forest land (Figure 1).

In the recent times, community forestry can be considered as one of the modes to interlink conventional and nonconventional forest areas that can ensure sus-

tainable development through forestry practices in resource rich areas such as northeast India. Possible legal instruments need to be strengthened in order to encourage community participation and benefit sharing under the prevailing acts such as the National Biodiversity Act, 2002.

1. FAO, *Forestry for Local Country Development*, Food and Agricultural Organization of United Nations, Rome, FAO Forestry Paper 7, 1978.
2. Vyas, G. P. D., *Community Forestry*, Agrobios (India) Publisher, Jodhpur, 2006, pp. 20–30.
3. Foley, G. and Barnard, G., *Farm and Community Forestry*, Natraj Publishers, Dehradun, 1984, pp. 107–121.
4. Shrestha, M. L., Joshi, S. P., Bhujju, U. R., Joshi, D. B. and Gautam, M., *Community Forestry Manual*, Community and Private Forest Division, Department of Forests, Kathmandu, 1995, pp. 2–3.

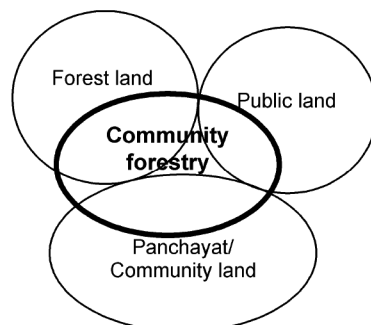


Figure 1. Community forestry interlinks conventional forest area, community land and public land.

G. PANGGING¹
A. ARUNACHALAM^{1,2*}
P. R. GAJUREL¹

¹Department of Forestry,
North Eastern Regional Institute of
Science and Technology,
Nirjuli 791 109, India

²Present address:
Division of Agroforestry,
Indian Council of Agricultural Research
(NEH Region),
Barpani 793 103, India
*e-mail: arun70@gmail.com