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Book review

Roger Leakey; July 2012

Living with the Trees of Life: Towards the Transformation of Tropical Agriculture

CABI, 224 pp. ISBN: 978 1 78064 098 3

Agroforestry as a modern science is barely fifty years old. Nevertheless, it has become an integral part of concepts, reports and assessments on the state-of-the-art of rural development.

Against this background, the World Agroforestry Centre (ICRAF) plays a remarkable role. But when precise concepts, practices and technologies are tracked, one ends up recognizing specific research groups and even individuals as founders and promoters of most of them. This is the case, for instance, in *alley cropping* or *push-pull* technologies, developed *ad hoc* to satisfy specific demands and which have been strongly promoted by identifiable institutions and individuals.

In his book 'Living with the Trees of Life: Towards the Transformation of Tropical Agriculture', Roger Leakey renders his personal testimony of agroforestry. He does this from the viewpoint of a student, scientist, scientific leader, and lately as an advocate of agroforestry as a land-use management alternative.

In a narrative style, Leakey interlaces cornerstones of his scientific queries with his contributions on agroforestry as a driver and path for rural development. He describes, for instance, how a high diversity of tree seeds in a Cameroonian market indicates the potential of native trees to provide diverse benefits to small households. Later, as the director general of ICRAF, he introduced the idea of the 'Cinderella' tree, which led to a worldwide program on participative identification and domestication of indigenous tree species.

Through anecdotal causalities, Leakey reveals the manifold character of agroforestry: "(...) is more than just an agronomic practice that restores soil fertility and produces tree products in farmers' fields. It is also applied ecology or, more accurately, applied agroecology – the ecology of farming systems." (Leakey 2012: 51). In the context of the current global challenges, he further develops this premise to the concept of multifunctional-

ity, which he understands as the simultaneous provision of diverse goods, services and functions to strengthen the ecological and social sustainability of livelihoods.

Furthermore, for the operationalization of farming multifunctionality Leakey proposes the use of systemic insights by acknowledging that the "(...) interconnectedness of agriculture's different roles and functions in rural development, is a sine qua non" condition to generate and promote sustainable scientific and technological alternatives. This is possible since multifunctionality, by its intrinsic logic, avoids the hampering factors inherent to other approaches by being affordable, socially accepted, environmentally harmless and naturally capable of supporting rehabilitation of water and soils.

Leakey supports his thesis with several case studies: Participatory domestication of the galip nut in the Solomon Islands and Papua New Guinea, reintroduction of overexploited wild sandalwood species in the Vanuatu archipelago in the South Pacific, and in Australia exploration of bush tucker species together with the aboriginal communities. His flagship experience is the *Food for Progress* project in Cameroon, which by 2009 included almost 500 villages in active production, use and commercialization of tree local species.

However, as is the case with similar technological/paradigmatic proposals, this approach faces inherent constraints. One is the unpredictability resulting from dealing with social-ecological systems and diverse interests that may or may not match the interests and foreseen goals of the stakeholders. This generates diverging and unexpected outcomes. Associated herewith is the tradeoff through optimization of the components' performance, i.e., which outcome should be privileged and which the guiding criteria? Again, the dilemma between producing more with less against more with more becomes apparent.

Strictly speaking, Leakey's book is not a scientific book. As a prolific scientific author with an extensive bibliography, Leakey does not need to provide methodological and technical arguments to make a point. His style, this time, is rather discursive. He says that scientific research can benefit from participation, scientific findings can achieve developmental goals, and mul-

tifunctionality as a production paradigm can facilitate this. But besides scientific training, a sensitive mindset is a fundamental condition to realize these aspects and put them into practice.

In short, Leakey's work is a book that a committed (young) scientist interested in development, but with both feet on the ground, could significantly benefit from.

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