

Book Review

*Indigenous Knowledge on the South African  
Landscape.. Potentials for Agricultural Development*

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# Book Review: *Indigenous Knowledge on the South African Landscape.. Potentials for Agricultural Development\**

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Though traditional knowledge about both nature and craftsmanship are now recognised as important parts of the intangible heritage, most recently in the 2003 UNESCO *Intangible Heritage Convention*, most studies of the intangible heritage still have the traditional 'folk life' focus on aspects such as arts, crafts and performance, while the recent studies and discussion of indigenous knowledge seem to have concentrated on aspects of intellectual property, such as the protection of such knowledge from unfair commercial exploitation. This study of the level, and potential value, of traditional knowledge within African agricultural practice, is therefore particularly welcome, not only on its own merits but also as a model for futures studies of this kind from around the world, and probably in relation to other traditional crafts and practices as well.

The study was carried out under the Urban, Rural and Economic Programme of the South African Human Sciences Research Council (HSRC) where Tim Harte, an agricultural anthropologist, is a senior research manager. Ineke Vorster is a geneticist by training and a researcher in the Agricultural Research Council, who has

been working with smallholder farmers since 1998. The authors discuss the overall context of agricultural development in Africa, with its overwhelming emphasis on introducing and expanding 'western' industrial-style agricultural principles and practice into small-scale units, usually of less than 10 acres, and often less than a tenth that size, and farmed by a single individual or family with few financial resources, rather than by a commercial enterprise.

This model represents the great majority of farmers in Africa, as well as parts of Asia and South America, and is characterised by multi-cropping with a variety of crops within a single field or holding : some, perhaps most, for consumption by the family itself, though often with some produce for cash sale as well. These differ markedly from the 'western' model of 'developed' agriculture, which is characterised by its much larger size of holdings with their monocultures highly dependent on, often costly, external inputs of machinery, buildings, fuels, commercially produced hybrid (and soon GMO) seeds and plants, and of chemical fertilisers and pesticides.

Over the past decade or two there has been great

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interest in traditional knowledge in relation to medicines and other treatments for disease, not least among international pharmaceutical companies, but this study shows that some traditional agricultural knowledge and practice can also be confirmed by modern scientific research, and may even in some cases be superior to the industrial agriculture model. For example, five types of traditional African green vegetables are all nutritionally far superior to the commercial cabbage varieties that are rapidly displacing them in the diet of local people. In a region where vitamin A deficiency is already a serious health problem (it is in fact the most frequent preventable cause of childhood blindness) substituting commercial varieties of cabbage for traditional vegetables containing between 170 and 570 times as much vitamin A (and up to 50 times as much calcium, 20 times as much iron and 3 times as much phosphorus) makes no sense at all.

In another case studied, villagers in Kwazulu-Natal Province were losing many eggs to dogs wandering about the village. Rather than go to the great expense of housing their chickens in pens or buildings, they returned to making traditional nesting boxes for the hens out of the waste roots of sisal plants. With a little straw inside them, these were fixed to trees above the height the dogs could reach. The hens could fly up to these - and the loss of eggs ceased. In the same village, a farmer found that instead of having to buy new sorghum seed each year, he could create his own supply of good seed by returning to a long-abandoned practice of wrapping the emerging seed-heads of the strongest stalks with grass until they were fully developed and ready for harvesting, thus preventing loss of the seed to birds.

The study also found some interesting responses to emerging new technologies by traditional farmers who adapted them to changing circumstances. For example, a village had become dependent on a communal,

commercial-style, heated glasshouse nursery for the production of its maize plants for early planting. When this closed, one farmer devised his own substitute using home-produced compost and an ingenious system of screens to control the temperature of the seed trays in a home-made, lean-to structure, without the expense of using artificial heat or glass. Another, producing some apples for commercial sale as a cash crop, developed his own system of grafting new varieties on to his existing trees when the market demanded changes from his original variety. This not only saved the considerable cost of buying new trees, but also meant that he was producing the new variety for sale in just two years rather than five.

The study concludes that both within South Africa's official Indigenous Knowledge Systems Policy, and more generally, the current indigenous knowledge research focus on medicinal plants needs to be expanded to cover support for peoples' knowledge of their agriculture, environment and plant foodstuffs, including low-external-input food security for those who need it most, not just on expanding further specialist production for export. 🇺🇸