

BOOK REVIEW

Sahelian Droughts: A Partial Agronomic Solution

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I strongly recommend this delightful short book which is about more good things than its title suggests. For the author, Professor Anthony Hall, this is a memoir. It recounts his career in agricultural science, unfolding both in the developed and developing worlds, for the latter involving sub Saharan Africa and especially the Sahel (in this the title does not err). It is about cowpea, a rain-fed crop unknown to many but a vital source of protein in West Africa especially the drier Sahel region, and regularly grown under irrigation as speciality food crop in southern California, where it is known as “black eye pea”. It is also about the wisdom garnered in a lifetime working in these places. This begins with district officer in the colonial service in Tanganyika (now Tanzania) in the early 1960s, and is followed by many years as scientist and professor at the University of California (Riverside) and researcher in the Californian Agricultural Experiment Station. Since 1976 Professor Hall combined his Californian responsibilities with numerous visits to the Sahel to participate in agricultural development projects, in particular ones involving breeding better cowpeas. And the breeding was successful, both in California and in the Sahel, a story which is not well known, for cowpea (at about 6 million tonnes p.a. globally) is a minor African crop compared to the world staples, like rice, wheat, corn and soybean. This book puts cowpea on the map, and hopefully sets the scene for further progress in productivity of this crop, one of growing importance in feeding very poor people, at least in West Africa.

The story is eminently readable and sensibly ordered, proceeding more or less chronologically, but allowing engaging digressions from time to time, often into earlier experiences in Tanganyika to reinforce key points about working successfully amongst poor smallholder African farmers. Chapter and section headings provide a sensible framework and the text, even when discussing the physiology of flowering in cowpea, is never too complex for the interested non-expert, while an extensive index provides quick access to the many issues raised. A special feature is the acknowledgement of the graduate students and colleagues who contributed to the various cowpea achievements, accompanied always by a reference to their later careers, often vital to the progress achieved with cowpea. Another is the breadth of the agricultural issues encountered, including those views with which the author does not completely agree. These inevitably appear as questions “people ask me”, obviously people from the developed world, and are dealt with in a clear dispassionate and balanced prose typical of the experienced evidence-based agricultural scientist that Hall has become.

Many important lessons for those seriously interested in agricultural development in poor African nations are revealed, and there are also some sound lessons for US agricultural universities and agricultural aid projects. Progress requires persistence, enabling policies, broad engagement of local scientists, farmers and NGOs, while lifting yields needs both improved crop management as well as the breeding of better cultivars. In the northern hemisphere at least, these dual research activities are embraced by the title word “agronomic”, but as is evident in the book, breeding is the special activity demanding dedicated scientists and long term support. Nor is producing the improved variety

enough, much attention to seed systems is essential for success as the book describes. The major role played by US universities in training African scientists is very evident throughout, as is the importance for these scientists of follow up when they return home. The USAID system of funding projects which link US universities with appropriate skills to developing country agricultural problems (as in the Bean/Cowpea CRSP (Collaborative Research Support Program) in which Hall participated) has been a generally very successful model, especially when the crop of interest is common to the University and the development target. But Hall argues that it needs agricultural scientists who can be rewarded in the system as generalists, skilled in building the multidisciplinary teams needed to usefully apply the basic research tools with which University science tends to be preoccupied these days.

A book with so much wisdom about agricultural development should attract a wide audience, “people who are interested in agriculture, rural development in poor countries, Africa and science” as the author states. I concur, but would add that young people from both developed and developing worlds, seeking to work in the important area of world food security, should get inspiration and guidance from this book, for although many of the tools of the twenty first century may be different, the underlying issues have not changed much, especially in the Sahel.

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