

Can success be the cause of failure?

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Almost forty years ago, a prominent educator of the day¹ gave warning of a systematic 'failure' of education and training systems which he foreshadowed would produce graduates who would be largely unable to grasp the likely sociological and environmental implications of their 'successes' in science and technology. That prediction is now a reality. Though individual successes have indeed been spectacular and the business-world continues to enthusiastically urge and support new technological landmarks, no longer is it business as usual.

The popularisation of 'sustainable development' as a future national if not global imperative, grew from the underlying theme of *Our Common Future*, the 1987 Brundtland Report. It went on to become a major theme of UNCED *Agenda 21* in 1992 and has since gained almost mandatory inclusion in the formulation of management strategies by regulatory and development agencies alike. Here, 'success' is customarily understood to be '*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*'. Nowadays, most research planners are cynically aware that information gained through science and technology programmes remains of limited value unless it essentially leads to commercially useful applications.

The almost daily positioning of disparate pieces of the global jig-saw is taking place. The fragmented picture that is appearing is clearly recognisable and is causing justifiable concern. Global climate-control systems are in obvious disarray! Artic ice is surely melting away! There may not be sufficient reserves of water to serve ever-expanding agricultural pursuits, and coastal communities and their life-support systems may be in jeopardy from flooding due to rising sea levels! In the present time-frame, the extinction rate of existing biological species exceeds by at least a factor of a hundred the rate of any new species appearing! Humankind in its present economic and sociological formats is living beyond its ecological means!

Recently, global ecosystem services, given by some a value of \$ 30 *trillion* and integral to the stability and dynamics of current global processes, are believed to be in a diminishing state. In terms of food production, food-providers for big-business continue to neglect the benefits of food quality in preference to inferior food in quantity and low cost. In many parts of the world, adequate food and clean water are simply not available for any cost! A 2006 UNEP report on water resources and its management claims that it takes on average 5 thousand litres of water to produce just one kilogram of rice, while to produce a 250 gram hamburger it requires around a 11 thousand litres of water². What on earth can national and global management have been thinking?

So where is organics today? Meeting the 'needs of the present' seems to be pretty much as far as any progress has been made. Curiously, and in the light of authentic predictions about the severity of global warming, has the international organic community been focussing enough of its collective energy to determine and promote methods of sustainable development and stewardship? Has it also remained too reactionary to existing conventional farming modes? And if so, has this possibly been at the expense of working out really innovative organic land-use methodologies for the future? An inherent unity is essential for 'sustainable development'. Though the organic community occupies a minor place in the global marketing stakes, it is in a strategic position to validly claim a global leadership role in food, health, conservation, and community planning of sustainable development.

Conference goes to the first IFOAM International Conference on Animals in Organic Livestock Production (August 23 to 25, 2006) at the University of Minnesota concluded that organic livestock systems improve both animal and human health while protecting the environment³. In a presentation with striking implications for human health a comparative study concluded that conventionally raised chickens and turkeys were significantly more

likely, compared with their organic counterpart, to carry potentially pathogenic strains of *Campylobacter* resistant to the clinically important antibiotic fluoroquinolone. In the same study, conventionally raised poultry were astonishingly shown to host many diverse multiple drug resistant strains of this potentially pathogenic microorganism frequently involved in outbreaks of food poisoning⁴. The scientific evidence in this instance is compelling. Can consumers and community healthcare services now expect to see a redesign of conventional poultry-rearing methods to improve microbiological and health standards in public health? Now, wouldn't *that* be a success!

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¹ Lee DuBridge, 1968. *Science*, 162: 1225 (December 13).

² John Vidal, 2006. "Running on empty" in "Every last drop", *The Guardian Weekly*, September 29 – October 5, Vol. 175/No.15, page 1.

³ The St.Paul Declaration < http://www.ifoam.org/press/positions/St.Paul_Declaration >

⁴ Luangtongkum, T. et al. 2006. "Effect of Conventional and Organic Production Practices on the Prevalence and Antimicrobial resistance of *Campylobacter* spp. in Poultry", in *Proceedings of the 1st IFOAM International Conference on Animals in Organic Production*, p 113. ISBN-3-934055-70-2