

Discussion: Historical paper: 'The tragedy of the commons'

Nicholas Corker MSc, PgCert EIA, CertEd, Prof grad IMMM, AIEMA
Principal Consultant, Sustainable Development, BRE, Watford, UK

E. T. Richard Dean MA, MPhil, PhD, MBA
Caribbean Geotechnical Design Limited, Capel Hendre, UK

Contribution by E. T. Richard Dean

The historical paper by Corker (2011) explores Garret Hardin's 'The tragedy of the commons' (Hardin, 1968). Hardin's paper contains many errors. The real tragedy is that it has been regarded as a scientific text, rather than a confused rant about rights and regulation. The danger is that this will not be recognised.

A first error is in the evaluation of benefits. A commons will have some limiting number L of cattle it can support. Once that limit is reached, and if cattle society is egalitarian, one additional beast means that all cows eat less than their maintenance calories, and so die. Therefore, if the herdsman has M beasts, the benefit of one more is $-(M+1)$, not $+1$ as Hardin assumes. Furthermore, work calories are what create profit. If there are $L-1$ beasts, then one more means that no beast produces a profit. So no herdsman gains. Any rational economic analysis will show that Adam Smith's invisible hand does operate, contrary to what Hardin assumes. Do we really believe that herdsmen cannot learn that their actions end up affecting their returns?

Another error is the assumption that herdsmen do not see benefit to community. In contrast, many cities contain areas where particular trades are carried on. Hatton Garden is famous for jewellers. Why? Because each retailer sees a value in being close to others. The relationship between one herdsman and another is not as simple as Hardin assumes.

Almost everyone knows that short and long-term interests can have different implications for action, so rationality is not the same as acting for immediate self-interest. Universal and free education, participatory democracy and information availability,

can help people achieve a balance. There is no reason to assume that families cannot voluntarily limit the number of their children in ways that benefit society as a whole. Hardin starts by assuming they cannot ('it is to be expected that each herdsman will try to keep as many cattle as possible on the commons'). Not surprisingly, his circular argument ends by 'deducing' they cannot.

Hardin uses a deception that is also seen in other parts of social science – the claim that terminology is being used in a rational, scientific way when in fact it is emotive and prejudiced. Hardin claims to use 'tragedy' to mean 'inevitable' but readers certainly get a sense of sadness and loss. There is contempt and prejudgement in 'overbreeding'. We see our own self-interest threatened in 'as a policy ... to secure ... aggrandizement'.

Hardin's paper contains little actual science. As civil engineers, we provide technical solutions to issues that have non-technical contexts. We must guard against the cynical attitudes that Hardin proposes. We must provide information, not hide it and then claim that ordinary people cannot make decisions because they do not have enough information! Public enquiries are real, valuable and multiway communications. Our solutions have no value if people do not want them.

REFERENCES

- Corker N (2011) Historical paper: 'The tragedy of the commons'. *Proceedings of the Institution of Civil Engineers – Engineering Sustainability* **164**(2): 105–117.
- Hardin G (1968) The tragedy of the commons. *Science* **162**(3859): 1243–1248.