

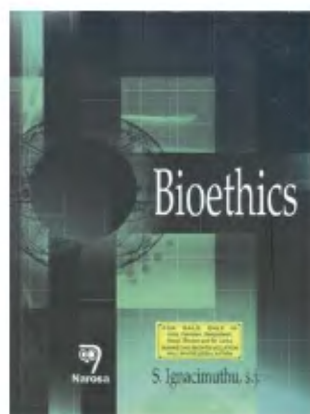
The *Bhoomi* project has also streamlined mutation of land records when ownership changes. Initially records were issued in 203 taluk offices on payment of a fee of Rs 15. Currently RTCs are available at Internet Kiosks being set up in rural areas. This is one of the success stories of C2G project. Other success stories are registration of urban properties in Karnataka, Maharashtra and Andhra Pradesh, providing services such as bill payment of utility bills, property taxes, traffic fines, obtaining birth and death certificates, etc. through projects such as e-seva of Andhra Pradesh and Bangalore-One in Karnataka. The spread of e-government projects has not been uniform in all the states of India. The projects which have been successful are the ones where there was political will at the highest level in the state for reform and some young and energetic administrative service officers who took up ownership of the projects and implemented them successfully. An interesting point brought out by the author who has meticulously studied several e-government projects is the fact that the level of corruption has not significantly reduced in many of them. In fact, if reduction of corruption is stated as an objective of an e-government project, it has little chance of success due to vested interests. Successful e-government projects have reduced the time spent by citizens to get the service and citizens obtaining clearer and correct documents. Further, the benefits which accrued in several projects far outweighed their cost.

The author of the book, Subhash Bhatnagar, has several years of experience in IT as a Professor at the Indian Institute of Management, Ahmedabad where he coordinated the activities of a Centre for Electronic Governance which carried out research in this area and trained a large number of state government officers. He was also associated with the World Bank and studied several e-governance projects in developing countries. A valuable aspect of the book is the deep insight he provides on the need to re-engineer existing government procedures and often change some current laws for successfully implementing e-government projects. The book also brings out the advantages and disadvantages of public-private partnership in implementing e-government projects. Of special value are the detailed case studies of 10 e-government projects in several states

of India and the lessons learnt from them. This book is a valuable addition to the literature and will be extremely useful to IT professionals and administrators planning new e-government projects.

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Bioethics. S. Ignacimuthu. Narosa Publishing House Pvt Ltd, 22, Delhi Medical Association Road, Daryaganj, New Delhi 110 002. 2009. 208 pp. Price not mentioned.

'There is more religion in men's science than there is science in their religion.'

— Henry Thoreau in *A Week on the Concord and Merrimack Rivers* (1921)

Time and again the applications of science and technology are questioned by society on ethical grounds and have been at the receiving end. Ethics are standards that frame our society. Bioethics deals with the ethical concerns arising from biology and medical sciences. There are four basic principles underlying bioethics – beneficence, justice, autonomy and non-maleficence. While the principle of beneficence indebts one to benefit others, the principle of non-maleficence asserts one not to harm others intentionally; autonomy implies the right to govern one's own life and justice means equitable rights for all.

This book of 208 pages is written in a simple manner and covers various aspects of ethics that concern biological

sciences. It is organized into five chapters, each highlighting a separate set of issues. All the four principles of bioethics are well defined in chapter 1 (History and principles). However, there is a contradiction to those mentioned in the Introduction, where the author states one of the principles as 'confidentiality' in place of 'non-maleficence'. The principle of confidentiality, which lays down that matters revealed in confidence must be kept confidential, is different from the principle of non-maleficence. This chapter outlines the parallel existence of ethics with medical sciences. However, the author makes statements without offering justification and reasoning. Some examples: 'Until 1960 the nurses were more concerned about doctors than patients' (chapter 1); 'Many journals are published on bioethics' (chapter 1; not one has been named by the author). The sentence 'Artificial insemination is a response to complete or incomplete male fertility [sic] due to impotence or defective formation of spermatozoa' (chapter 2), would rather be written as 'a treatment to partial or complete male infertility'. 'Artificial insemination involves injecting semen from wife's husband or from a donor' (chapter 2), the phrase 'the husband' instead of 'wife's husband' would have sufficed.

While highlighting the ethics concerning abortion (chapter 2 – Issues concerning reproduction, birth, life and death), there is no mention of pregnancy duration after which abortion is banned in India, i.e. 20 weeks. The author could have included a brief note on the Medical Termination of Pregnancy (MTP) Act¹, 1972 to give a brief account on the Indian abortion law. It would have been more appropriate if a case study had been discussed instead of elaborating upon the development of the human embryo; for instance, the recent Niketa-Harsh Mehta case where Niketa was denied termination of pregnancy. Her foetus was detected with heart blockage. Eventually Niketa had a miscarriage in the 27th week². The couple sought an amendment to the MTP Act that would permit abortion of a foetus more than 20 weeks into development (under special circumstances where doctors confirm the child to suffer handicap after birth)³. Burning issues like sex ratio and sex-selective abortions have been discussed. While mentioning the Indian scenario of sex selection, the sex ratio has been referred

to as the ratio of the number of males to females ('sex selection will lead to much higher sex ratios') but the official Indian definition of 'sex ratio' is the number of females per thousand males⁴, that makes it a 'falling sex ratio'. The author could have researched and highlighted the specific regions (states or districts) within India where this situation exists; it does not prevail throughout India. There is repeated usage of terms and the text is verbose.

It was interesting to learn about the historical perspective to ethics. This has been, no doubt, dealt in detail throughout the book. Furthermore, medical interventions like genetic counselling and testing, and euthanasia are rightly taken into account. Chapter 3 'Issues concerning health and biomedical innovations' presents ethics arising from techniques and therapies such as organ transplantation, stem cell therapy, cloning, patenting of genes, DNA fingerprinting and gene therapy. Before highlighting their ethical implications, the author has detailed the principle behind the techniques and therapies. Various organizations, working throughout the world, that deal with such debatable issues are named. Two terms whose usage I am uncomfortable with are 'baby hatcheries' and 'body selling' in the context of surrogate motherhood. The author has succeeded in explaining cloning, but its ethical implications are discussed only minimally. While stating ethical concerns arising from the Human Genome Project, it would have been better if the author had included a sentence or two on the budget involved in studying the ethical, legal and social issues (ELSI) arising from the availability of genetic information ('The Department of Energy and the National Institutes of Health devoted 3–5% of their annual Human Genome Project budgets. . . This represents the world's largest bioethics program. . . a model for ELSI programs around the world'⁵).

The chapter 'Genetic engineering, biosafety and experimentation' provides an overview of how ethics have given rise to controversies over the use of genetic manipulation. Few examples have been cited in this context. However, the need for addressing the controversy surrounding genetically modified crops remains. There is no mention of the recent furore over *Bt* Brinjal in India that would interest the readers. Overall, this chapter is informative and lists the approval com-

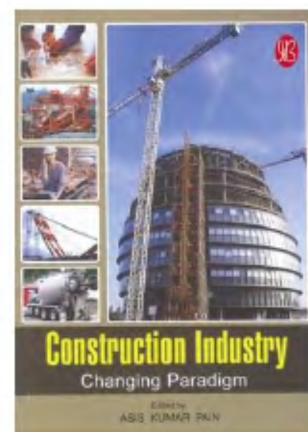
mittees and guidelines for genetic manipulation. Again, the author has not included examples of microorganisms along with their risk group classification. The section entitled 'Experimentation in Humans' demands a mention of some incidences that occurred in the past (for e.g. the death of 49 children⁶ in six clinical trials at the All India Institute of Medical Sciences). Ethical issues in biodiversity (chapter 5 – Biodiversity, intellectual property rights and environment) are minimally described. The chapter also lists legislative measures pertaining to protection of environment. The author has cautioned against the use of plastic: 'A plastic may be useful just for five minutes but it will remain in nature for five hundred years'. He also highlights the Gandhian approach to solve problems of the utilization of resources.

The book under review has rightly focused on ethics in light of religion, as ethics are born from religion. There are certain repetitions, omissions and typographical errors that can perhaps be taken care of in a second edition. Overall observation is that Indian or Asian context is rarely exemplified (book under review is targeted to Indian-subcontinent readers, according to the marketing rights notification stated on a sticker over the cover page). Majority of the examples cited are from the Western countries. Notwithstanding the drawbacks and inadequacies stated here, the book is useful for beginners and simple for a layman to grasp. The bibliography provided at the end of the book adds value.

1. <http://www.mp.gov.in/health/mtp%20Act.pdf>
2. Mumbai abortion case: Niketa Mehta suffers miscarriage. *Times of India*, 14 August 2008.
3. <http://us.rediff.com/news/2008/aug/04abortion.htm>
4. http://censusindia.gov.in/Census_Data_2001/India_at_glance/fsex.aspx
5. http://www.ornl.gov/sci/techresources/Human_Genome/elsi/elsi.shtml
6. Sengupta, A., *Indian J. Med. Ethics*, 2009, 6, 118.

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Construction Industry: Changing Paradigm. Asis Kumar Pain. The Icfai University Press, 52 Nagarjuna Hills, Punjagutta, Hyderabad 500 082. 2009. xi + 243 pp. Price: US\$ 17.

The book under review addresses issues concerning construction industry and sets newer targets to be achieved in the coming years. Construction industry comprises essentially civil engineering construction. The book edited by Asis Kumar Pain contains two sections, one having eight articles dealing with current scenario and the other having five articles dealing with initiatives and experiences. The articles are written by different authors. Interestingly, the book starts with a mention on the importance of construction industry and how it markedly contributes significantly to the world economy. It is true that the construction industry is at its peak particularly in our country and many other developing countries due to increasing demand on infrastructure including housing. The challenges facing the industry are enumerated. It is well said that the construction work force is getting demoralized due to increased automation. Nevertheless, work force will be in greater demand although supply may decline in the years to come. Therefore, strategies have to be adopted to sustain the work force which in turn will sustain the industry.

It is only quite recently we have heard of terms like Build-own-transfer (BOT) and Build-own-operate and transfer (BOOT). They have come into vogue because of increased interest in private entrepreneurs to fund major projects. Lack of funds from the government for such projects also is one of the reasons. In fact, schemes such as BOT and BOOT