# 4. Social Sustainability

### Frank Vanclay

## Learning objectives

On completion of this topic you should have:

- An understanding of the concept of social sustainability and what it might mean in Australian agriculture
- A comprehension of the concept of the Triple Bottom Line
- A realisation of the importance of social issues in agriculture

## Key terms and concepts

Social sustainability, social capital, triple bottom line, social indicators, capacity building.

## Introduction to the topic

Sustainability and sustainable development are regarded as being synonymous. They are also regarded as being a process or a journey, rather than an end point. Thus they are elusive goals. Sustainability is generally considered as being 'development that meets the needs of the present generation without compromising the abilities of future generations to meet their needs'. Sustainability is viewed as having a triple bottom line quality, that is, it has social, economic as well as environmental dimensions. While maintenance of natural capital is the general requirement for ecological sustainability, and economic growth (and profitability) is the requirement for economic sustainability, the characteristics of social sustainability have been less clear.

Sociologists were slow to accept the concept and actively resisted it, and it has been only relatively recently that there has been large-scale engagement with the concept of social sustainability. Some have seen social sustainability as being any process that increased social and institutional capital, while others have viewed social sustainability as a manifesto for human rights and improvement in the human condition. Social sustainability, therefore, is a vague concept and can be applied at different levels. The context of the discussion is therefore important. The discussion in these notes will focus on the meaning of social sustainability in Australian agriculture. Thinking about the social meaning of sustainability is important because it changes various outcomes that might be sought. From a macro (e.g. government) perspective, environmental and economic sustainability outcomes might be achieved through massive structural adjustment, with the exit out of agriculture of many family farmers and a move towards a smaller number of larger, corporate farms. But in no sense could this be regarded as socially acceptable, or as social sustainability. For Australian farm families, sustainability means something to the effect of: *We, as a family, staying on our farm into the future and continuing to earn an adequate living, for a reasonable amount of work, without destroying the asset value or natural resource base of the farm.* 

## 4.1 Putting the social into sustainability

While the concept of sustainability was implicit during the 1972 Stockholm Conference, it gained international recognition and legitimacy with the 1987 report of the World Commission on Environment and Development (WCED 1987), the so-called Brundtland Report, *Our Common Future*. The concept gained universal endorsement at the United Nations Conference on Environment and Development, or Earth Summit, held in Rio de Janeiro, Brazil in 1992. There were several major outcomes of the Rio conference, including the Rio Declaration (Anon. 1992a) and Agenda 21 (Anon. 1992b). In addition, the Framework Convention on Climate Change and the Convention on Biological Diversity were finalised.

The Rio Declaration on Environment and Development (Anon. 1992a) contained 27 Principles that expressed the rights and responsibilities of nations. It built on and reinforced the Stockholm Declaration of some 20 years earlier. The problem since Stockholm, and especially since the Club of Rome Report, *The Limits to Growth* (Meadows et al. 1972), was how to balance environment with development. The conventional view was that there would always be a trade-off – development came at a cost to the environment. The mastery of the Brundtland Report (WCED 1987) was that it developed the concept of sustainable development which did not require a trade-off. Development and the environment were compatible. Sustainability was reinterpreted as ecologically sustainable development (ESD), and defined as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. (See Box 4.1 for the full text of the Rio Declaration.)

Agenda 21 (Anon. 1992b) was a guide for individuals, businesses and governments in making choices for developments that help society and the environment. It went further than just looking at the environment – social factors were seen as very important as well. Agenda 21 is a huge document, with 40 chapters in four sections (Anon. 1992b):

- 1. **Social and economic dimensions:** developing countries; poverty; consumption patterns; population; health; human settlements; integrating environment and development
- 2. **Conservation and management of resources:** atmosphere; land; forests; deserts; mountains; agriculture; biodiversity; biotechnology; oceans; fresh water; toxic chemicals; hazardous radioactive and solid waste and sewage
- 3. **Strengthening the role of major groups:** women; children and youth; indigenous peoples; non-governmental organisations; local authorities; workers; business and industry; farmers; scientists and technologists
- 4. **Means of implementation:** finance; technology transfer; science; education; capacity-building; international institutions; legal measures; information.

Agenda 21 (Anon. 1992b) and the Rio Declaration (Anon. 1992a) provided an international framework for signatory countries to develop their own ESD policies. The international agreements signed in Rio in 1992 were several years in development, and most countries that signed the agreements in Rio had participated in the discussion process in drafting the Rio documents well in advance of the Earth Summit. Many countries, too, started developing their own national processes for including sustainability thinking into national policy. Australia was no exception, and was quite active in developing a national response to the Brundtland Report (WCED 1987) well before the Rio Earth Summit.

### Box 4.1 Rio Declaration on Environment and Development. Source: Anon. (1992a).

#### The United Nations Conference on Environment and Development,

Having met at Rio de Janeiro from 3 to 14 June 1992,

**Reaffirming** the Declaration of the United Nations Conference on the Human Environment, adopted at Stockholm on 16 June 1972 and seeking to build upon it.

With the goal of establishing a new and equitable global partnership through the creation of new levels of cooperation among States, key sectors of societies and people,

**Working towards** international agreements which respect the interests of all and protect the integrity of the global environmental and developmental system,

Recognising the integral and interdependent nature of the Earth, our home,

#### **Proclaims that:**

**Principle 1:** Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.

**Principle 2:** States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

**Principle 3:** The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.

**Principle 4:** In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.

**Principle 5:** All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.

**Principle 6:** The special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority. International actions in the field of environment and development should also address the interests and needs of all countries.

**Principle 7:** States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.

**Principle 8:** To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.

**Principle 9**: States should cooperate to strengthen endogenous capacity-building for sustainable development by improving scientific understanding through exchanges of scientific and technological knowledge, and by enhancing the development, adaptation, diffusion and transfer of technologies, including new and innovative technologies.

**Principle 10:** Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.

**Principle 11:** States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries.

**Principle 12:** States should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus.

**Principle 13:** States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage. States shall also cooperate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.

**Principle 14:** States should effectively cooperate to discourage or prevent the relocation and transfer to other States of any activities and substances that cause severe environmental degradation or are found to be harmful to human health.

**Principle 15:** In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

**Principle 16:** National authorities should endeavour to promote the internalisation of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.

**Principle 17:** Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.

**Principle 18:** States shall immediately notify other States of any natural disasters or other emergencies that are likely to produce sudden harmful effects on the environment of those States. Every effort shall be made by the international community to help States so afflicted.

**Principle 19:** States shall provide prior and timely notification and relevant information to potentially affected States on activities that may have a significant adverse transboundary environmental effect and shall consult with those States at an early stage and in good faith.

**Principle 20:** Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development.

**Principle 21:** The creativity, ideals and courage of the youth of the world should be mobilised to forge a global partnership in order to achieve sustainable development and ensure a better future for all.

**Principle 22:** Indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognise and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.

**Principle 23:** The environment and natural resources of people under oppression, domination and occupation shall be protected.

**Principle 24:** Warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary.

Principle 25: Peace, development and environmental protection are interdependent and indivisible.

**Principle 26:** States shall resolve all their environmental disputes peacefully and by appropriate means in accordance with the Charter of the United Nations.

**Principle 27:** States and people shall cooperate in good faith and in a spirit of partnership in the fulfilment of the principles embodied in this Declaration and in the further development of international law in the field of sustainable development.

The key plank of Australia's response to the WCED (1987) report and its preparations for the Earth Summit, was in the development of a National Strategy for Ecologically Sustainable Development (NSESD), a process which started in 1989 and was not completed until the end of 1992 (ESD Steering Committee 1992). While the precise wording of the final Rio documents was not known in advance of the Earth Summit, the general content was known, and many of the concepts that were ultimately included in the Rio documents were also embedded in the NSESD (ESD Steering Committee 1992). This also accounts for why there are some differences between the Australian terminology and the Rio terminology.

The Rio Declaration included 27 principles – too many for most governments to deal with. In any case, the principles have varying notional weightings, and potentially they might not apply to all nations (at least the notional weighting applied to each principle might vary from country to country). Australia has identified some of these principles as being more significant than others, and has included a limited set of principles in its own strategy (see Box 4.2 below).

To implement the NSESD (ESD Steering Committee 1992), and to overcome problems relating to role confusion between the States and the Commonwealth, the Intergovernmental Agreement on the Environment (IGAE) was developed and implemented in May 1992 (Anon. 1992c).

# Box 4.2 Australia's goal, core objectives and guiding principles for the Strategy. Source: ESD Steering Committee (1992).

The Goal is:

Development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.

The Core Objectives are:

- To enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations.
- To provide for equity within and between generations.
- To protect biological diversity and maintain essential ecological processes and life-support systems.

The Guiding Principles are:

- Decision making processes should effectively integrate both long and short term economic, environmental, social and equity considerations.
- Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
- The global dimension of environmental impacts of actions and policies should be recognised and considered.
- The need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection should be recognised.
- The need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised.
- Cost effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms.
- Decisions and actions should provide for broad community involvement on issues which affect them.

These guiding principles and core objectives need to be considered as a package. No objective or principle should predominate over the others. A balanced approach is required that takes into account all these objectives and principles to pursue the goal of ESD.

Some 27 principles were endorsed as part of the Rio Declaration (Anon. 1992a). The Australian NSESD highlighted seven guiding principles (ESD Steering Committee 1992). Internationally, five principles are regarded as being most important. These five principles are reflected in the seven guiding principles of the NSESD, but are expressed differently. Put simply, these five key principles are (ESD Steering Committee 1992):

- Intergenerational Equity
- Intragenerational Equity
- The Precautionary Principle
- Conservation of Biological Diversity (sometime called Preservation of Natural Capital)
- Internalisation of Environmental Costs.

Intergenerational Equity requires that the interests of future generations be considered. Intragenerational Equity means that consideration must be given to equity issues in the current generation, both within a society and across societies.

In the IGAE (Anon. 1992c), the Precautionary Principle is defined as: 'Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation'. Another way of expressing the Precautionary Principle is in terms of an adage used in 1980s environmental activism, especially in relation to global warming – 'If we act as if it matters, and it doesn't matter, it doesn't matter. If we act as if it does not matter, and it does matter, then that matters.'

There are problems with such a principle. While meritorious in concept, it lacks practical applicability. How much caution is appropriate caution? Would such a principle be a major barrier to all development, or would it be meaningless rhetoric?

Whereas in the past, a decision not to proceed with development was only made when there was ample evidence that to go ahead with the development would cause environmental (and/or social) impacts, application of the Precautionary Principle requires that the onus of proof is not with the no-development side, but with the pro-development side – that is the development

should only proceed if it can be established that the development will not cause harm. Thus, for example, a \$1.2 billion gold mine at Lake Cowal in central NSW was rejected because of unknown risks to a significant National Estate listed wetland – a decision later overturned. Since application of the Precautionary Principle is only required when there are threats of serious or irreversible environmental damage and a lack of scientific certainty about the threats, it is easy to see that application of this principle will be difficult.

With most environmental decisions, there is always some level of scientific uncertainty, and some reasonable probability of serious threat to the environment. What is the difference between scientific uncertainty, and when scientists are divided but equally certain that some development will have/will not have negative impacts?

Another problem is that 'no development' also has impacts. A failure to change technology can result in environmental impacts that would not have occurred if there had been a change in technology. A no development option also can have social impacts, loss of job opportunities, loss of economic opportunities, and in a developing country context, loss of social development opportunities. Simple application of the Precautionary Principle does not address these issues. Conservation of Biological Diversity, and the preservation of natural capital, are important issues which are the subject of separate international treaties, the Convention on Biological Diversity, national legislation and a special unit within Environment Australia.

Internalisation of Environmental Costs means, in economicspeak, that the environmental externalities be fully costed. In economics, externalities are costs (or benefits) that are not included in market transactions. For example, if a company pollutes the environment, the cost of the damage to the environment (or the social impact) is an externality. Internalising the environmental costs means that the cost of that pollution should be calculated and factored into decisions about which projects continue to operate. The Polluter Pays Principle is a concept that has existed in environmental economics for some time. Internalisation of environmental costs goes beyond Polluter Pays in that it allows a range of incentive mechanisms and pollution licence trading, such as Carbon Taxes, and Salt Levies.

## 4.2 What would social sustainability in agriculture be?

As Section 4.1 indicated, all sustainability is directed to social outcomes. The goal of Australia's ESD policy is: 'Development that *improves the total quality of life*, both now and in the future, in a way that maintains the ecological processes on which life depends'. Its core objectives are:

- <u>To enhance individual and community well-being and welfare</u> by following a path of economic development that safeguards the welfare of future generations
- <u>To provide for equity within and between generations</u>
- To protect biological diversity and maintain essential ecological processes and life-support systems.

A recent book on sustainability defined it as being 'the capacity of human systems to provide for the full range of human concerns in the long term. Sustainability, when applied to humans, refers both to long term survival of our species and the quality of our lives' (Goldie et al. 2005).

One dimension of the social aspects of sustainability, therefore, is consideration of the issues of quality of life and community wellbeing. How will it be decided what these are? What would result in an improvement in them? How should they be measured?

In addition to this overall **social** goal of sustainability, because of thinking of sustainability as three separate spheres of influence (or as three bottom lines), theorists have pondered the meaning of a separate social sustainability. This thinking has been approached from the ecological side – *What is it about a healthy society that would assist us to maintain natural capital?* – as well as from the social side – *What is it about the social that we want to sustain or maintain into the future?* Goodland and Daly (1995) provide an example of thinking from the ecological side:

Social Sustainability (SocSus): Socio-cultural stability is the social scaffolding provided through networks of people's organisations that empower self-control and self-policing in peoples' management of natural resources (see Cernea 1993). Resources should be used in ways which increase equity and social justice, while reducing social disruptions.

Human rights, education, employment, women's empowerment, transparency of decision making, fiscal accountability, and participation seem to be integral to SocSus. SocSus will emphasise qualitative improvement of social organisation patterns and community well-being over quantitative growth of physical assets; and cradle-to-grave pricing to cover full costs, especially social. SocSus will be achieved only by systematic community participation. Social cohesion, cultural identity, diversity, sodality, sense of community, tolerance, humility, compassion, patience, forbearance, fellowship, fraternity, institutions, love, pluralism, commonly accepted standards of honesty, laws, discipline, etc., constitute the part of social capital that is least subject to rigorous measurement, but probably most important for SocSus. This 'moral capital', as some have called it, requires maintenance and replenishment by shared values and equal rights, and by community, religious and cultural interactions. Without this care it will depreciate just as surely as will physical capital. Human capital investments in education, health and nutrition of individuals are now accepted as part of economic development, but social capital, as needed for SocSus, is not yet adequately recognised.

The widespread interest in the Triple Bottom Line, and government and community approaches to considering the social component thereof meant that there has been organisational and government interest in the concept. In Western Australia, this led to a definition of social sustainability (WACOSS 2002):

Social sustainability occurs when the formal and informal processes, systems, structures, and relationships actively support the capacity of current and future generations to create healthy and livable communities. Socially sustainable communities are equitable, diverse, connected and democratic and provide a good quality of life.

Except for some applied social scientists (e.g. Vanclay and Mesiti 1997) most social scientists have resisted the concept of social sustainability, and it was not until about 2000 or so that they have engaged with the issue (e.g. Cocklin and Alston 2003; Cocklin and Dibden 2005; McKenzie 2004). Social sustainability is a concept that varies at different levels – it is translated differently when applied to levels such as society, community, family or individual.

At the societal level, social sustainability is building social capital, or simply capacity building, or it might be seen as social capital linked to place. At the community level, 'Social sustainability is: a life-enhancing condition within communities, and a process within communities that can achieve that condition' McKenzie (2004). At the family level: *We, as a family, staying on our farm into the future and continuing to earn an adequate living, for a reasonable amount of work, without destroying the asset value or natural resource base of the farm.* And at the level of an individual it might be regarded as increasing individual resilience – that is, individuals who are optimistic, motivated, have high levels of self-esteem, are good communicators and have a sense of humour (Kelly and Sewell 1988).

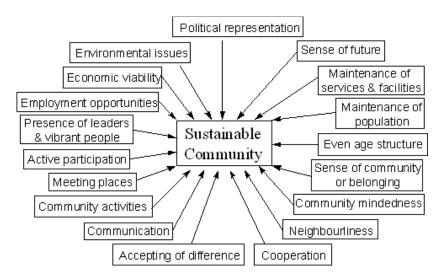
In the field of social impact assessment, there has been a lot of thinking about the meaning of community wellbeing in order to consider the negative social consequences. Drawing on this literature and the sustainability literature, provides a list of issues that are relevant (Becker and Vanclay 2003; Burdge and Vanclay 1995; Pepperdine 2000; Vanclay 1999; 2002a,b; 2003; 2004):

- Healthy liveable communities, where health is a broad concept meaning a state of complete mental, physical and social wellbeing, not merely the absence of disease or infirmity
- Employment options and the capacity to make choices
- Sense of belonging and social networks (social capital), interconnectedness
- · Sense of place, or place attachment and a connection with nature
- Intragenerational equity such as equity of access to services (health, education, transport, housing and recreation) as well as to income security, employment etc.
- Intergenerational equity, that is equity between generations, meaning that future generations will not be disadvantaged by the activities of the current generation
- Justice and fairness, and respect for human rights and human dignity
- Acceptance of diversity and difference, and a system by which the positive aspects of this difference are valued and protected
- Spare time for participation in local community activities, as well as for sharing with family and friends
- Good governance 'the widespread political participation of citizens not only in electoral procedures but also in other areas of political activity, particularly at a local level'
- Corporate social responsibility.

The important thing is that social sustainability is not only a value like quality of life, but it is also the set of social processes that are required for maintaining and enhancing quality of life. Thus, capacity building is at the essence of social sustainability.

At the level of small rural communities, these general issues all more or less apply. Pepperdine (2000) has been undertaking research with people in rural communities examining their views about sustainability. In focus groups, the residents in her regions identified many of the same issues (Figure 4.1).

### Figure 4.1 Main themes identified as important for the social well-being of the Woady Yaloak catchment. Source: Pepperdine (2000).



#### 4 - 8 - RSNR403/503 Sustainable Land Management

©2009 The Australian Wool Education Trust licensee for educational activities University of New England

# Readings

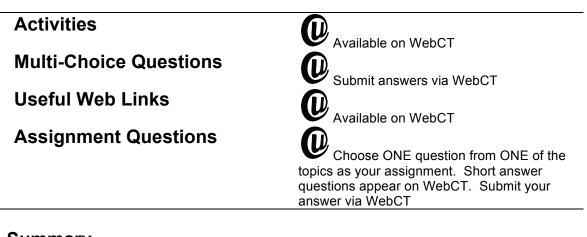
The following readings are available on CD:

1. Black, A. 2004, 'The Quest for Sustainable, Healthy Communities', *Effective Sustainability Education: What Works? Why? Where Next? Linking Research and Practice*. 'Australian Journal of Environmental Education, vol 20, no. 1, 2004, pp 33-44.

2. Vanclay, F. 2003, 'The impacts of deregulation and agricultural restructuring for rural Australia', *Australian Journal of Social Issues*, vol. 38(1), pp. 81-94.

3. Vanclay, F. 2004a, 'The Triple Bottom Line and Impact Assessment: How do TBL, EIA, SIA, SEA and EMS relate to each other?', *Journal of Environmental Assessment Policy and Management*, vol. 6(3), pp. 265-288.

4. Vanclay, F. 2004b, 'Social principles for agricultural extension to assist in the promotion of natural resource management', *Australian Journal of Experimental Agriculture*, vol. 44(3), pp. 213-222.



### Summary

Summary slides are available on CD.

- Sustainability is an elusive goal it is a process or journey rather than an end point
- · Sustainability has social, economic as well as environmental dimensions
- The primary objective of sustainability is to enhance individual and community wellbeing and welfare, and to promote intra- and inter-generational equity
- All of sustainability is about producing a social outcome. Therefore, the concept of sustainability is inherently social
- Social sustainability, however, is not only a value like quality of life, but it is also the set of social processes that are required for maintaining and enhancing quality of life.

### References

Anon 1992a, *Rio Declaration on Environment and Development*, retrieved 30<sup>th</sup> May 2006 from http://habitat.igc.org/agenda21/rio-dec.html.

Anon 1992b, *Agenda 21*, retrieved 30<sup>th</sup> May 2006 from http://habitat.igc.org/agenda21/index.htm.

- Anon 1992c, *Intergovernmental Agreement on the Environment*, retrieved 30<sup>th</sup> May 2006 from http://www.deh.gov.au/esd/national/igae/.
- Becker, H. and Vanclay, F. (eds) 2003, *The International Handbook of Social Impact Assessment*, Edward Elgar, Cheltenham, UK.
- Burdge, R. and Vanclay, F. 1995, 'Social impact assessment', in *Environmental and Social Impact Assessment*, (eds. F. Vanclay and D. Bronstein), John Wiley and Sons Ltd, Chichester, pp. 31-65. Reproduced with permission.
- Cernea, M. 1993, 'The Sociologist's approach to sustainable development', *Finance and Development*, vol. 30(4), pp. 11-13.

- Cocklin, C. and Alston, M. 2003, *Community Sustainability in Rural Australia: A Question of Capital?*, Centre for Rural Social Research, Charles Sturt University, Wagga Wagga.
- Cocklin, C. and Dibden, M. 2005, *Sustainability and Change in Rural Australia*, University of NSW Press, Sydney.
- Ecologically Sustainable Development (ESD) Steering Committee 1992, *National Strategy for ESD*, Department of Environment and Heritage, retrieved 30<sup>th</sup> May 2006 from http://www.deh.gov.au/esd/

national/nsesd/strategy/intro.html#GoalsEtc.

- Goldie, J., Douglas, B. and Furnass, B. 2005, 'An urgent need to change direction', in *In Search Of Sustainability*, (eds. J. Goldie, B. Douglas and B. Furnass), CSIRO Publishing, Collingwood, Vic, pp. 1-15.
- Goodland, R. and Daly, H. 1995, 'Environmental sustainability', in *Environmental and Social Impact Assessment*, (eds. F. Vanclay and D. Bronstein), John Wiley and Sons Ltd, Chichester, pp. 303-322. Reproduced with permission.
- Kelly, A. and Sewell, S. 1988, *With head, heart and hand: Dimensions of community building,* Boolarong Publications, Brisbane.
- Meadows, D.H., Meadows, D., Randers, J. and Behrens, W.W. 1972, *The Limits to Growth: A Report to the Club of Rome's Project on the Predicament of Mankind*, Potomac Associates, Signet.
- McKenzie, S. 2004, Social Sustainability: Towards some definitions, Hawke Research Institute Working Paper 27, University of South Australia, retrieved 30 May 2006 from http://www.unisa.edu.au/hawkeinstitute/ documents/wp27.pdf.
- Pepperdine, S. 2000, 'Social Indicators of Rural Community Sustainability: An Example from the Woady Yaloak Catchment', *1st National Conference on the Future of Australia's Country Towns*, Bendigo 29-30 June 2000, retrieved 30 May 2006 from http://www.regional.org.au/au/countrytowns/ strategies/pepperdine.htm
- Vanclay, F. 2004, 'Assessing the social consequences of planned interventions', in *Controversies in Environmental Sociology*, (ed. R. White), Cambridge University Press, Melbourne, pp. 257-275.
- Vanclay, F. 2003, 'International Principles for Social Impact Assessment', *Impact Assessment and Project Appraisal,* vol. 21(1), pp. 5-11.
- Vanclay, F. 2002a, 'Conceptualising social impacts', *Environmental Impact Assessment Review*, vol. 22(3), pp. 183-211.
- Vanclay, F. 2002b, 'Social impact assessment', in *Responding to Global Environmental Change*,(ed. Tolba, M.), John Wiley and Sons Ltd, Chichester, pp. 387-393. Reproduced with permission.
- Vanclay, F. 1999, 'Social impact assessment', in *Handbook of Environmental Impact Assessment* (Volume 1), (ed. Petts J.), Blackwell Science, Oxford, pp. 301-326.
- Vanclay, F. and Mesiti, L. (eds.) 1997, *Sustainability and Social Research: Proceedings of the 1997 Conference of the Australian Association for Social Research Inc*, Centre for Rural Social Research, Charles Sturt University, Wagga Wagga.
- Western Australia Council of Social Services (WACOSS) Inc 2002, Submission to the State Sustainability Strategy Consultation Paper, *Focus on the Future: Opportunities for Sustainability in Western Australia.*
- World Commission on Environment and Development (WCED) 1987, (Brundtland Report) *Our common future*, Oxford University Press, Melbourne.

## Glossary of Terms

Capacity building	An approach to development that builds independence. Capacity building increases the range of people, organisations and communities who are able to address problems, and in particular, problems that arise out of social inequity and social exclusion
Externality	An effect of either consumption or production which is not taken into account by the consumer or producer because it is not reflected in the prices they pay but which influences the wellbeing or costs of other consumers or producers
Intergenerational	Between generations
Intragenerational	Within generations
Polluter pays principle	Pricing principle where the source directly responsible for pollution bears the cost of resulting damage
Precautionary principle	Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation
Social Capital	Social capital represents the degree of social cohesion which exists in communities. It refers to the processes between people which establish networks, norms, and social trust, and facilitate coordination and cooperation for mutual benefit
Triple bottom line (TBL)	Triple bottom line reporting means expanding the traditional reporting framework to take into account not just financial outcomes but also environmental and social performance

0 2009 The Australian Wool Education Trust licensee for educational activities University of New England