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Introducing the social pillar into prototypes of the New Zealand Sustainability Dashboard

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Executive Summary

This report has been written to provide help on adding the social component of sustainability into a sustainability assessment, with particular emphasis on the New Zealand Sustainability Dashboard (NZSD), and Sustainable Winegrowers New Zealand's scorecard specifically.

The importance of sustainability was internationally recognised by the World Commission on the Environment and Development in 1987 and was first dominated by the developing interest in the environment in the 1960s and then by economics with the growth of neo-liberalism throughout the Western world in the 1970s and 1980s. Debate about social sustainability and what it might mean has been ongoing, particularly in academic circles, with no universal acceptance of particular definitions or measurements, or for that matter, whether it should be measured at all. The result of this inconclusiveness has been that the social component of sustainability is usually the last to be incorporated into a sustainability assessment. However, in spite of this, many organisations have developed their own sustainability frameworks and standards with indicators and measurements of social sustainability.

From these frameworks a core set of concepts can be determined as a base on which to build an assessment. The outcomes and objectives of this are shown in the table below. Possible indicators can be found in the body of the report. Outcomes covered are:

- Good health and wellbeing are achieved.
- Equity is supported.
- Principles of good governance and human rights are followed.
- Labour rights are observed.
- Employment practices are acceptable.
- Community resilience is enhanced.

Some outcomes are not entirely the responsibility of an employing organisation and would also apply to individuals, communities and government. All are inter-related and not mutually exclusive. In a sustainability framework some overlap with the other pillars of sustainability and so could be covered all or in part by the governance, economic or environmental pillars. Whatever system is used, in the end ways of measuring the indicators would need to be decided on a case by case basis. At this point these things need to be taken account of:

- Type of measure
    - Can the indicator be operationalized (i.e., expressed in such a way that can be measured)?
- Classification
    - Is it 'easy' or 'difficult' to measure?
- Which organisation will be using which measures?
    - Government/local government
    - Company/business
    - Organisation responsible for compliance (e.g., SWNZ)
    - Sector organisation
    - Research organisation.
- Is the measure relevant to all who will be using it? Does it make sense?

Table: Basic outcomes and objectives in a social sustainability framework

Proposed overarching concept - outcome	Includes objectives:
Good health and wellbeing are achieved	Lifestyle/way of life/quality of life Decent livelihood
Equity is supported	Equality of opportunity, equity of access to resources
	Equity of generations
	Decent livelihood
Principles of good governance and human rights are followed	Governance/political system
	Human rights
	Principles of Social Responsibility
	Free from corruption Grievance mechanisms
	Consumer issues and product responsibility
	Fair trading and operating practices
Labour rights are observed	Compliance with Work and Labour rights/ ILO 8 Core conventions
Employment practices are acceptable	Employment practices Decent work
	Health and Safety at work
Community resilience is enhanced	Community involvement and development
	Support of culture and identity
	Cultural diversity
	Social capital, social cohesion

On the other hand, an organisation could start from scratch and develop their own sense of what social sustainability might mean and if and how it could be measured. All of these things need to be decided by the organisation setting up their own sustainability assessment system.

If adoption of the sustainability assessment system is to be successful, one way or another it will need to be owned by all stakeholders who will be participating in it, from those who will be doing the measuring and entering data, to those who will be interpreting it and applying it to their organisational policies and actions, and to the market to which it is to be promoted as a worthy attribute of a product. If along the way, people are able to take pride in it because it contributes as one of the things that makes their own lives meaningful, then the chance of success will be increased and the support for its further development will be more likely.

It is important that the 'social' is part of any sustainability assessment system, even if it ends up not being measured quantitatively because otherwise it could be forgotten about, when it is an essential part of progressing towards sustainability. It would not be possible to move towards environmental and economic sustainability if the people achieving it were not treated well, and did not have the freedom to achieve and be responsible for their own destinies.

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1 Introduction

Agribusiness and food enterprises, and nations are required to remain consistently attentive to new developments in the demands for institutional, economic, environmental and social accountability. The compliance with such demands within the policy and practice frameworks of an organisation may be crucial to its success - by presenting a transparent, responsible, accountable and inclusive organisation to clients, suppliers, stakeholders and the general public. Similarly, governments like to report how they measure up to other countries in terms of their sustainability. Most recently, the inclusion of sustainability criteria within policy and practice frameworks has grown in significance, particularly with the inception of sustainable development. This concept has come to incorporate four key elements or pillars: governance, economic sustainability, environmental sustainability, and *social sustainability*.

The latter, *social sustainability*, has often been neglected in academic and policy circles. This may be due to two key factors – historical bias regarding environmental and economic concerns, and conceptual and definition-based problems (as presented in the academic literature). This neglect means that the social side of sustainability could become invisible, therefore it is important to bring it to the fore as without it actions that maintain or enhance the pathways to the other pillars of sustainability are unlikely to be achieved. Incorporating social sustainability reminds an organisation and a government of the importance of caring for and nurturing the people who enable their work to happen, and the society in which it happens. However, if social sustainability is to be incorporated well into any sustainability scheme it will need to be relevant and accessible to those both using the scheme and those to whom it is applied – stakeholders and the general public.

Organisations are increasingly looking to improve social conditions across all aspects of their operations. The most common form of adherence to a best code for social practices lies within an organisation's Corporate Social Responsibility (CSR) policy. While there is no universal definition of this concept, it loosely relates to policies which encourage the good stewardship of social mechanisms within the internal structure and supply chain of a corporate organisation (Dahlsrud, 2008). However, there is now a wide range of organisations seeking to enhance their organisational policies beyond CSR.

In order to effectively integrate social sustainability concepts within current policy and practice frameworks, a comprehensive and sound methodology must be available, one which adheres to the concept's definition and potential operationalisation. Several frameworks, methods and standards for the assessment of sustainability do exist that have incorporated social sustainability measuring policies, including Corporate Social Responsibility (CSR) tools such as ISO 26000, Triple Bottom Line assessment, the FAO's Sustainability Assessment of Food and Agriculture Systems guidelines, and the Global Reporting Initiative (GRI). While these may already be in use, issues arise about that use, even to the extent of debate about the meaning of social sustainability and whether it should be measured at all. Many scholars have attempted to clarify the definition and appropriate measurement of social sustainability, including its integration with the other pillars of sustainable development. Other issues are to do with the willingness of interested parties to adopt these methods, and the scale and application of the information collected.

This report attempts to briefly introduce a broad history of the development of social sustainability, with particular reference to its methodological and theoretical underpinnings, and recommends tools and methods for the introduction and implementation of its assessment within an organisation, but particularly into prototypes of the New Zealand Sustainability Dashboard (NZSD). The usefulness of this report could extend to government bodies,

commercial operations, compliance bodies, sector organisations and research organisations. Chapter 2 outlines the historical context of social sustainability, the search for its definition and the risks seen of having such a definition, especially within academic circles. Chapter 3 presents some approaches to and frameworks representing social sustainability, finally developing a framework of elements they have in common. Chapter 4 examines some of the ARGOS research which explored what indicators and measurements farmers and orchardists used for their own of social wellbeing and how those were responded to when incorporated into national surveys. It also suggests some other concepts of social sustainability that came out of ARGOS. Chapter 5 proposes a generic framework for social sustainability and makes some recommendations on how to develop and implement an assessment tool using this framework. The final chapter, Chapter 6, concludes this report.

2 The development of the social sustainability concept

2.1 The emergence of interest in sustainability

Emerging interest in sustainability culminated in the report of the outcome of the 1987 meeting of the World Commission on the Environment and Development (WCED) (Colantonio, 2011). In this document, titled 'Our Common Future', often referred to as the Brundtland Report, the idea of sustainable development was first introduced in the now famous and oft quoted words as "development meeting the needs of the present without compromising the ability of future generations to meet their needs" (WCED, 1987). Though the original document never made the divisions, the Rio Declaration on Environment and Development established what is referred to as a tripartite definition, understood as a combination of three 'sustainabilities'; the environmental/ecological, the economic, and the social (UNCED, 1992; Lehtonen, 2004; Hutchins & Sutherland, 2008). The environmental movement of the 1960s and economic discussions of the 1970s has led to these concepts dominating the sustainability discourse, with social sustainability more prominently entering into the discourse during the 1990s (Drakakis-Smith, 1995).

2.2 The enigma of social sustainability

It is generally agreed that there is currently no universally accepted methodology for the measurement of social sustainability and/or its elements/indicators. Many authors have asserted that a more robust and inclusive set of indicators is required to accurately illustrate the wider dimensions of sustainable development, particularly within the dimension of social sustainability (Moran et al., 2007; Hutchins & Sutherland, 2008; Spangenberg & Bonniot, 1998). Others argue that there is currently no scientific basis for the measurement of social sustainability, and that the concept is currently described in ways that are subjective and/or ideological in nature (Boström, 2012; Landorf, 2011; Lehtonen, 2004; Koning, 2002; Littig & Griessler, 2005). In addition, it is pointed out that there is an inherent ambiguity in the scope and extent of its conceptual dimensions - Lehtonen (2004) comments that 'social' is a broad term that may refer to both individual and collective elements of a society.

Less attention may have been paid to social sustainability for a multitude of prioritisation and methodological reasons. Colantonio (2009) asserts that much of the initial work undertaken to clarify social sustainability is rooted in the synthesis of the environmental awareness movements of the 1960s and the needs-based economic development of the 1970s. McKenzie (2004) claims that the definitions of sustainability that arose in the environmental and economic realms viewed the social sciences primarily as useful disciplinary tools with which to promote the message of environmental or economic sustainability. Landorf (2011) states that while economic and environmental parameters of sustainability have established methods and indicators which have been used as definitive measurement standards over a long period of time, the same does not currently exist for the social dimensions.

This lower level of attention was demonstrated in 2013 by the Agriculture Research Group on Sustainability (ARGOS), in its New Zealand Sustainability Dashboard project, when a database (the KPI Identification Database – see Saunders et al. (2013) for a full description) was developed to report on specific indicators used to measure sustainability in Triple Bottom Line accounting frameworks and schemes internationally, including key market assurance and good practice schemes, and regulatory frameworks. Organisations included in the database were those like FairTrade, GlobalGAP, the Food and Agriculture Organization of the United Nations (FAO) through its Sustainability Assessment of Food and Agriculture Systems (SAFA)

and the International Organization for Standardization (ISO). The KPI Identification Database categorised specific measures applied to food production and forestry, into four broad categories: Environmental Integrity, Economic Resilience, Good Governance and Social Wellbeing. The Social Wellbeing category was significantly under-represented (comprising 4 per cent of total measure entries), closely followed by Good Governance (11 per cent of total measure entries) (ARGOS, 2013). The total number of individual measures within each category is documented in Table 2.1.

Table 2.1: **Number of measures within categories of the KPI Identification Database**

Category	No. of Measures	Total % of Measures
Environmental Integrity	1,487	35
Economic Resilience	2,101	50
Good Governance	444	11
Social Wellbeing	149	4
Total	**4,181**	

Source: ARGOS, 2013

2.3 Searching for a definition of social sustainability

As described above, historically, social sustainability has received little research attention. Comprehensive studies are sparse, contributing to an absence of recognition of the concept by scientists and decision makers, which has meant that there is a lack of consensus on what constitutes the essential elements of social sustainability (Omann & Spangenberg, 2002; Koning, 2002). In response to such a fundamental issue, many scholars have since attempted to clarify the definition of sustainable development, and its essential concepts.

For a start, social sustainability comes with many names. Statistics NZ call the social dimension 'social cohesion', SAFA call it 'social well-being', GRI G4 calls it 'society', some say the concept of 'social capital' covers it (Bridger & Luloff, 2001; O'Boyle, 2010), and so on. While Boström (2012) agrees that there is a lack of a "universal consensus" on the definition of sustainable development, he believes that the vagueness of the concept actually enhances its broad appeal amongst academics and policymakers alike. Its very nebulousness can be regarded as its strength on multiple levels. Some scholars would say that the conceptual open-endedness of the social sustainability concept is essential to its correct usage as it allows actors to decide, on their own terms, what social sustainability is, and how it should be applied to a particular situation. "Openness" also avoids problems of marginalising discourses (Weingaertner & Moberg, 2011; Vallance et al., 2011; Boström, 2012, McKenzie, 2004), ontological complications (Vallance et al., 2011; Lehtonen, 2004; Psarikidou & Szerszynski, 2012), and politicisation (Lélé, 1991).

The risk of marginalisation

McKenzie (2004: 20) states that, in trying to create a definition of social sustainability, elements which are not included within the parameters will become excluded from the discourse. If a definition is created, it presents a risk of rendering social sustainability a "monolithic project", becoming reduced to only what it is defined as and becoming a "closed system" from there on. Vallance et al. (2011: 346) also comment on the potential dilution of the concept via definitive parameters, recognizing that establishing a singular definition has

its practical uses, but at the same time “denies much of the concept’s complexity”, potentially leading to further complications.

The risk of ontological misconceptions

Another potential problem of creating a definition of social sustainability is the risk of encouraging ontological misconceptions. Creating a definition of the social pillar of sustainability establishes it as “separate” from the environmental and economic pillars of the sustainability discourse, which would create difficulty in the conceptual interpretation of the linkages between all three pillars (see Figure 2.1). Many share this sentiment. Vallance et al. (2011: 344) present their concern that emphasis on a universal, concrete definition encourages the “illusory dualism between society and environment”. Lehtonen (2004: 201) asserts that encouraging a description of the three pillars as independent from each other will cause actors to respond by treating them, “at least analytically, separately from each other”. These ontological divisions could also influence policy decisions. Psarikidou and Szerszynski (2012: 32) illustrate this, stating that the “very conception of the social is problematic, and leads to narrow, desocialized conceptions of nature and the economy. For example, treating environmental issues as belonging to separate ontological realm from the social … leads to neglect of the crucial, yet often hidden, political work in defining what belongs to our common world”. Lehtonen (2004: 201) elaborates on this, stating that “by continuing to distinguish the ‘social’ from the ‘economic’, the three-pillar model contributes to strengthening the idea that the economy can be treated as a separate sphere, detached from the social context within which all human activities are embedded”.

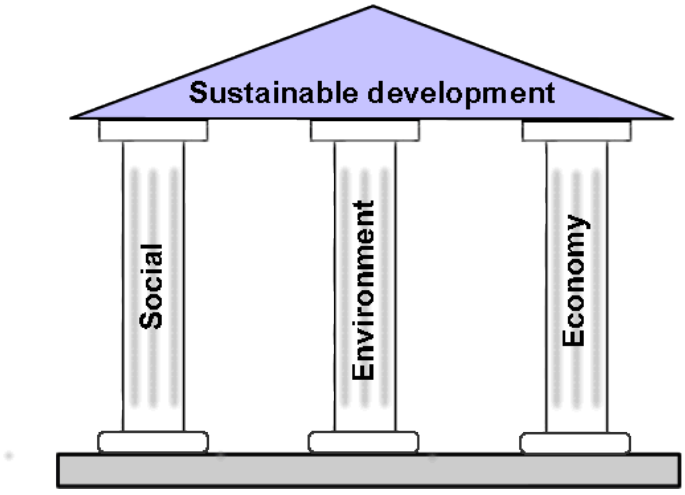

Figure 2.1: The three pillars of sustainable development

The risk of and importance of politicisation

Another concern with creating a universal definition for social sustainability is that politicisation would dilute the term’s potency and potential. Due to the concept’s basis in the discourses of environmental and economic sustainability, social sustainability would be open to influence by the same historical movements that shaped them. While many academics agree that the unbalanced definition of social sustainability (when compared with the other pillars of sustainable development) was a result of historical neglect, many also feel that, possibly a

more appropriate, radical approach to redefining social sustainability would enter the realm of the political. Lélé (1991: 618) expresses this concern, stating that there is, like any programme of social change, a "dilemma between the urge to take strong stands on fundamental concerns and the need to gain wide political acceptance and support".

The concept of social sustainability as the basis for an ideal society is particularly congruent with the political environment. A lack of clarification of social sustainability principles could present a great obstruction to policy implementation and decision making at all levels (Wilson et al., 2007; Bolström, 2012). The risk, as Lehtonen (2004) asserts, is that the ambiguities associated with social sustainability measurement could be used politically to legitimise current practices, which could see an increase in rates of environmental degradation and social inequality in lieu of economic growth. Davidson (2009) indicates that the use of the term social sustainability in describing a particular set of socio-political circumstances can also be used to represent social elements 'as they currently are' giving rise to the development of policies to change the current state, which means that "ill-conceived assumptions and theories concerning the elements conducive to social sustainability can potentially lead to the implementation of inadequate social policies" (Colantonio, 2011: 43)

However, inevitably politics will be involved and therefore it is important to understand the roles of relevant stakeholders within the sustainable development discourse, with particular reference to the social elements, as the delivery of social sustainability information may be most useful to policy-makers, particularly within a governmental or business framework. The creation of an effectively sustainable organisation may rely upon the degree of success it has in integrating concepts of sustainable development within already existing policy contexts, particularly with regard to the inclusion of social sustainability concepts. Murphy (2012) outlines several policy objectives for government and/or business, based on four dominant concepts within the social sustainability literature – equity, awareness for sustainability, participation and social cohesion. Within a political context, Murphy asserts that "existing social pillars focus on promoting welfare at national levels…" (Murphy, 2012: 26), highlighting the importance of the social pillar in informing policy-makers.

Similarly, the provision of information regarding the most appropriate methods for the measurement of social sustainability may be particularly relevant for industry bodies. Auger et al. (2003) state that the purchasing behaviour of consumers within particular segments may be significantly altered if an organisation is ignorant of such transgressive actions as animal abuse or child labour at some point in the supply chain. Similarly, Creyer (1997) indicates that consumers who state that they are concerned about a producer/industry body's ethical approach to production or procurement will generally change their purchasing behaviours in relation to this. Robin & Reindenbach (1987) suggest that marketers of products should include provisions for ethical sourcing and distribution into their core marketing strategy, in order to protect their brand's ethical identity. In this sense, clear results gained from indicators and measures of social sustainability may have significant relevance to the producer or industry body, with particular reference to their CSR or other socially-focused policies.

There is no lack of potential metrics for the implementation of social sustainability principles in political structures. In fact, according to Herzi & Nordin Hasan (2004) there are so many that they can be considered part of an 'indicator industry', in which their competing attempts at categorising what indicates sustainable development complicates efforts to make progress towards sustainability. Each system of metrics is based on its own idea of what constitutes sustainability, further frustrating efforts to reach a consensus on what sustainability is. According to Bell & Morse (2008), the quality of an indicator can be measured along five methodological dimensions: 1) purpose and appropriateness in scale and accuracy; 2)

measurability; 3) representation of the phenomenon concerned; 4) reliability and feasibility of indicator; and 5) ability to be communicated to the target audience. Because each situation includes incommensurable differences, there is not likely to be one perfect indicator, and trade-offs between societal usability, technical feasibility, and systemic consistency are likely. However, the lack of theoretical debate regarding the succinct definition of social sustainability was described by Dempsey et al. (2011) as "the policy agenda overtaking the research agenda", suggesting that the political integration of social sustainability metrics has been faster than expected or recommended by academic sources. This section has highlighted the need for a proper understanding of social sustainability concepts within policy-making circles.

The risks of not establishing a definition

Though establishing a universal definition could be limiting and challenging, as explained above, the lack of parameters creates problems at the institutional level, with the term's vagueness and conceptual uncertainty making it difficult to legitimise scientifically, and largely impractical in terms of enacting policy (Boström, 2012; Vallance et al, 2011). According to Vallance et al. (2011: 342), the chaotic nature of social sustainability "severely compromises its importance and utility". Some claim that the lack of parameters has led to definitions of social sustainability that are "fragmented", "chaotic", and "difficult to legitimize" (Weingaertner & Moberg, 2011: 1; Vallance et al., 2011: 345; Boström, 2012: 8). Hence, there appears to be a general consensus that it is more beneficial to develop an incomplete, working definition of social sustainability than to have none at all. It, therefore, seems feasible that a working definition of social sustainability could be described as a non-static, process-based discourse rather than having a fixed state definition. According to Colantonio (2009), this type of examination of the concept is far more practical, as it mirrors the discursive form of socio-economic development in itself. This would allow social sustainability to be viewed as equally open to transformation across time and place - 'neither an absolute nor constant' - as our current understanding of the concept may be based on past experience. Dempsey et al. (2011: 292) offer advice on creating such a definition – make sure that it reflects social sustainability as "a dynamic concept, which will change over time (from year to year/decade to decade) in a place". As stated, a workable definition should also be localised, because those with knowledge of local circumstances would be the best to define what constitutes as "socially sustainable" in their communities, and would be the most suitable contenders to monitor its presence throughout time. The recognition of local knowledge in determining social outcomes has been perceived as crucial for environmental development and decision-making processes (Blaikie et al., 1997; Failing et al., 2007; Raymond et al., 2010). For example, the application of social sustainability assessment could vary according to geographical region, scale of application, level of understanding of the recipients of information, and similar elements. Hanley et al. (1999) suggest that indicators may change over time, as operators within a specific geographical area may require different processes as regions progress towards the uptake of sustainable practices. It is therefore argued that a definition should be developed in a participatory fashion, allowing community members to "provide feedback, communicate their findings, and fine-tune the recommended approaches" (Nordström Källström & Ljung, 2005: 376).

2.4 The place of social sustainability in sustainability models

The way in which social sustainability has been portrayed has also varied depending on how it has been perceived. With the initial emphasis on the environment as being of overarching importance to sustainability, it was envisaged as in Figure 2.2, with the social being nested within and dependent on the environment.

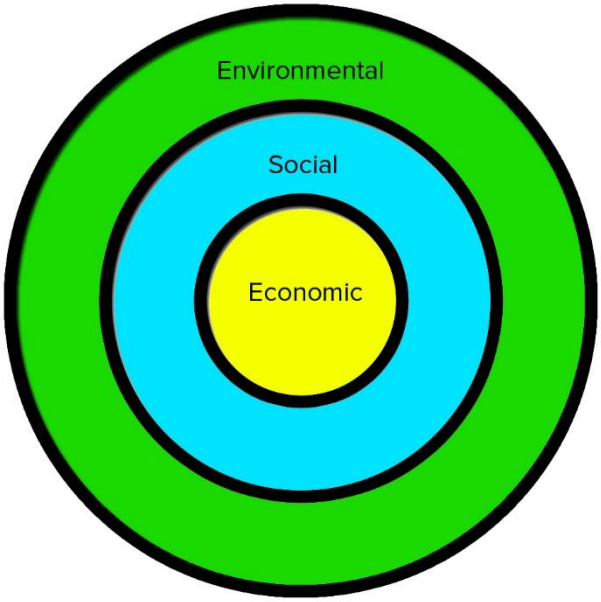

Figure 2.2: Linking the three spheres of sustainability 1: the bioeconomic model for sustainable development

Source: Lehtonen, 2004.

When the three dimensions of sustainability were named 'pillars', social sustainability was represented as one of three equal pillars supporting the roof of sustainable development (see Figure 2.1 earlier). (With the inclusion of governance as pillar of sustainability, in some diagrams the roofing structure has been replaced by that of governance.) However, as the awareness of the interlinked nature of the dimensions of sustainable development grew, it has been represented in a Venn diagram as one of three equal circles sharing areas of commonality, as illustrated in Figure 2.3 and Figure 2.4. In Figure 2.3 and Figure 2.4 the intersections of the pillars are identified, with Figure 2.3 emphasising a national level perspective while Figure 2.4 is more generic.

A different and more holistic approach is taken by New Zealand's Māori communities. Reid et al. (2013) emphasise how Māori see sustainability as relationship based. It is to do with relationships between the past, present and future, and between people and their 'place'. This is illustrated by Reid et al. (2013) using the examples of Ngāi Tahu-owned businesses. The next sections examine the links between the dimensions of sustainability as illustrated in Figure 2.3 and Figure 2.4.

2.5 The interlinked nature of social sustainability to the other pillars

Linking the economic and social pillars of sustainability

The core elements of social sustainability correlate positively with the goals of economic sustainability. Traditionally, economic sustainability is broadly referred to as the ongoing ability of economic structures to maintain growth and progress within an established societal framework, while continually providing goods and services to economic operators as required (Assefa & Frostell, 2007). It has been observed that some of the earliest models for the assessment of social sustainability adhered to basic economic concepts of human rights. Such examples include an individual or group's ability to access basic needs (such as shelter, access to necessary amenities), as well as access to education and health services, and the

ability to improve individual situations in terms of comfort and personal wellbeing (Assefa & Frostell, 2007). Woolcock (2001) in a report for the World Bank, suggests that sustainable economic development depends largely on the effective management of social elements, particularly unexpected events. Economic sustainability goals which correlate positively with social sustainability include, on a micro level, access to fair wages for work, and on a macro level, the wealth status of a country (i.e., GDP per capita) (FAO, 2013; Woolcock, 2001).

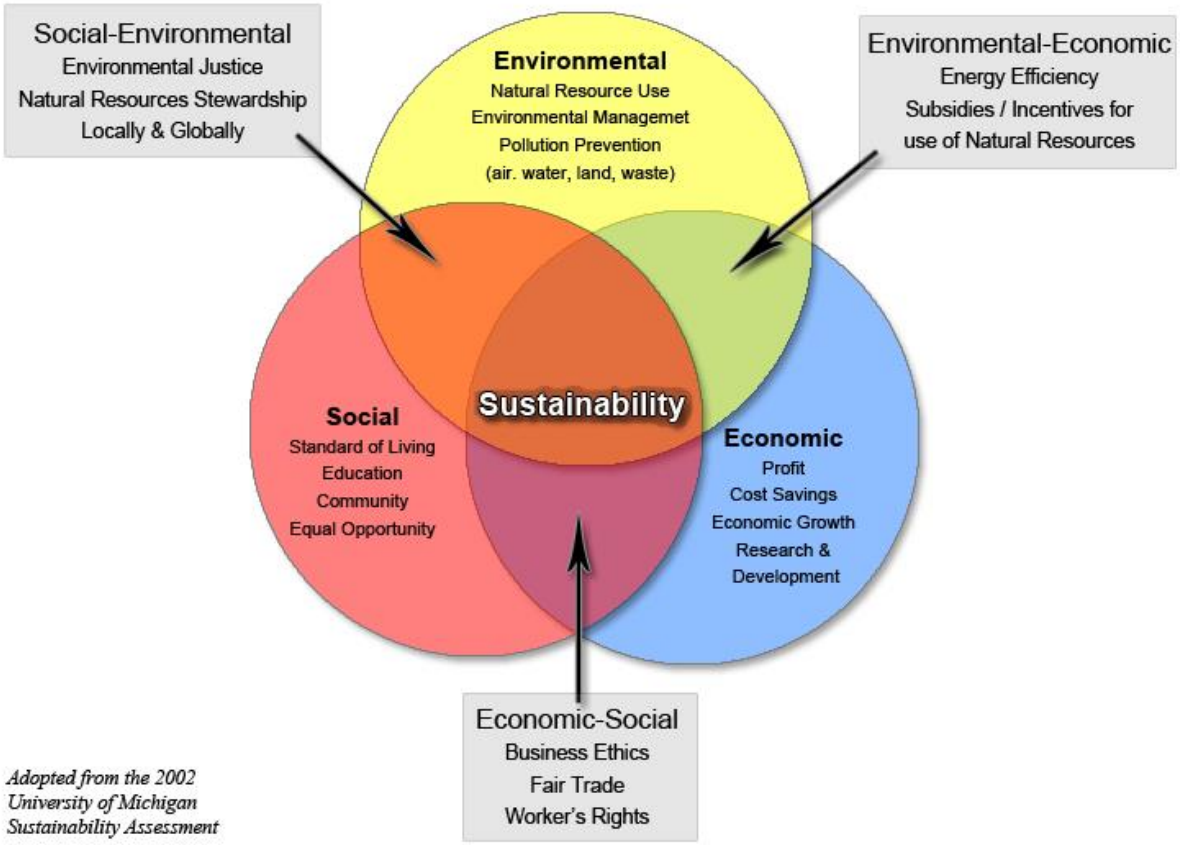

Figure 2.3: Linking the three spheres of sustainability 2

Source: Oppy – Canadian procurers, suppliers and marketers of fresh produce sourced from all around the world

Linking the social and environmental pillars of sustainability

Principles of social sustainability could potentially correlate with those of environmental sustainability. Lehtonen (2004) describes a bio-economic model for sustainable development in which the three pillars of sustainability are replaced with "three concentric circles, the environment circumscribing the social dimension, and the economic sphere constituting the innermost circle" (see Figure 2.2). In this sense, three distinct hierarchal levels are presented, in which environmental sustainability gives rise to the maintenance of social sustainability, with economic elements controlled by social elements (as implied above). This suggests, according to Lehtonen, that "economic activities should be in the service of all human beings while at the same time safeguarding the biophysical systems necessary for human existence" (Lehtonen, 2004: 201).

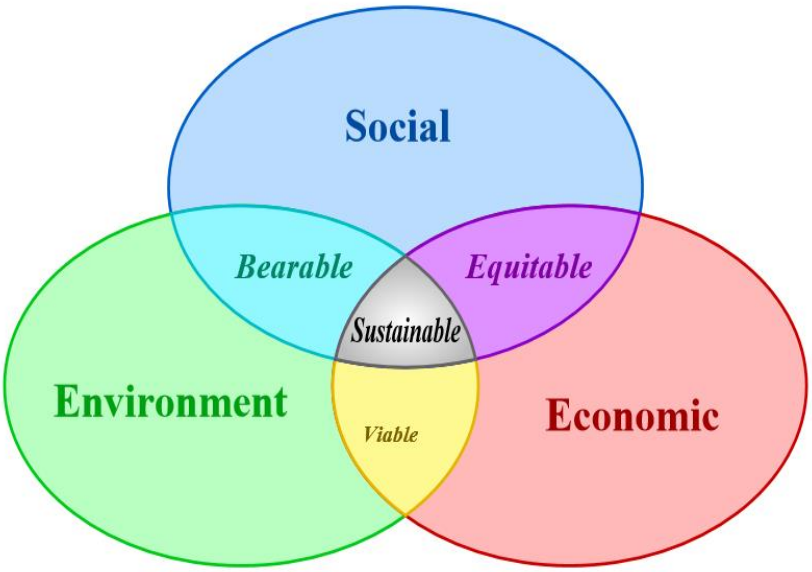

Figure 2.4: Linking the three spheres of sustainability 3

Source: Adams, 2006b

Murphy (2012) suggests that the integration of indicators which have high applicability to both environmental and social concepts may be of value in developing an integrated framework for the measurement of sustainable development (see

Table 2.2). As stated earlier, he identifies four key ‘dimensions’: equity, awareness for sustainability, participation and social cohesion. Each dimension presents dual policy goals which attempt to improve and sustain environmental integrity and social wellbeing simultaneously. An example is presented within the dimension of equity, in which the policy area of the protection of future generations by means of reducing consumption levels presents a dual policy goal of a “commitment to protect future generations by reducing consumption rather than relying solely on market/technological solutions” (

Table 2.2).

Table 2.2: Social and environmental sustainability dimensions: policy goals

Organising Dimension	Policy Area	Policy may be analysed for:
Equity	The "export of pollution"	Commitment to curb the "export of pollution"
	Climate change and the development needs of global southern countries	Commitment to economic transfers to global southern countries rather than relying solely on carbon-trading mechanisms
	Vulnerable groups and the effects of climate change	Commitment to assist vulnerable groups in adapting to the effects of climate change
	Welfare provision to current generations and carbon emissions	Commitment to protect vulnerable groups from fiscal measures designed to mitigate climate change
	Protecting future generations by reducing consumption levels	Commitment to protect future generations by reducing consumption rather than relying solely on market/technological solutions
Awareness for Sustainability	ESD and environmental awareness programs and campaigns	Commitment to designing and implementing educational programs for SD through the formal and informal education sectors
	Content of ESD programs and campaigns	The level to which these programs embrace a challenge to the traditional growth paradigm including nonmaterial conceptions of happiness
Participation	Broadening the participative base of environmental planning processes	The level to which the views and preferences of weaker groups including future generations are reflected in environmental planning processes
Social Cohesion	Promoting social cohesion and environmental objectives simultaneously	Commitment to infrastructural planning which promotes social integration and environmental sustainability simultaneously
		Commitment to promoting social activities aimed at environmental goals
		Commitment to developing "transition towns" or initiatives of that type
		Commitment to combating the kinds of environmental conditions which cause civil strife

Source: Murphy, 2012.

This chapter has described the historical development of the concept of sustainability, the difficulties that have been experienced in creating a definition of social sustainability that is acceptable to all interested parties and how the pillars of sustainability overlap. Appropriately, the next chapter explores the ways different institutions have framed social sustainability.

3 Frameworks for measuring social sustainability

Due to the aforementioned lack of consensus on a concise definition of social sustainability, there is no consensus on how to best measure it. However, a common theme evident across the literature is the notion that there is not likely to be one 'best measure' for assessing it, because of the complexities in local social relationships and the lack of applicability in standardized evaluation methodologies (Wilson et al., 2007; Omann & Spangenberg, 2002; Bansal, 2004; Norriss, 2006). Due to this complex nature, a multi-criteria evaluation is considered to be much more appropriate than a reductionist, single level metric (Omann & Spangenberg, 2002; Benoit & Vickery-Niederman, 2010; Colantonio, 2009).

If social sustainability is to be effectively measured, there must be a robust and consistent basis for its measurement. Some definitions for social sustainability may provide insight into the potential development of social sustainability beyond its conceptual stages. Looking at multiple definitions of the social sustainability concept may be warranted, for it is near impossible for any single definition to capture all proposed components of social sustainability, and some definitions may be more useful in some situations than in others (Assefa & Frostell, 2007).

There is also a need to understand that some sustainability assessment frameworks are based on certain conceptual underpinnings. Two are described in this chapter – the notion of social capital and the focus by accountancy on triple bottom line reporting. Then examples of two assessment frameworks that are in use are described and the components of many other frameworks and standards are summarised, followed by an attempt to gather together the dimensions of social sustainability implied within these definitions and frameworks. Finally, more open-ended methods for carrying out sustainability assessments are described.

3.1 Definitions of social sustainability

Definitions of social sustainability tend to emphasise a particular scale. For example, Pomeroy (1997) emphasises the individual aspect with social sustainability being about 'quality of life' or social wellbeing. McKenzie (2004: 12) emphasises the community level when he suggests that "social sustainability is: a life enhancing condition within communities, and a process within communities that can achieve that condition." Another definition outlines social sustainability as a 'quality' of societies, which exists when "work within a society and the related institutional arrangements satisfy an extended set of human needs [and] are shaped in a way that nature and its reproductive capabilities are preserved over a long period of time and the normative claims of social justice, human dignity, and participation are fulfilled" (Littig & Griessler, 2005: 72). Statistics New Zealand (2009), as befits a government agency, takes a national-level emphasis, using a capitals-based approach to focus on 'social cohesion' with associated principles: objective and subjective living conditions, equality of opportunity, access to resources, knowledge and skills, governance, culture and identity, and social connectedness.

The next sections describe three of the common positions or conceptual frameworks of where social sustainability fits. The first two describe perspectives of the social sciences (particularly economics) - social capital and 'individual capabilities', and the third relates to a practice of financial accounting - triple bottom line assessment.

Social Capital

Social capital is sometimes used as one dimension of social sustainability (e.g., NZSD – see Hunt et al., 2013b). It has also been seen as equivalent to social sustainability - Koning (2002)

claims that the concepts of social and cultural capital are closely related to those of social sustainability. While there is no strict universal definition of social capital, Woolcock (2001: 9) asserts that there is an emerging consensus: "social capital refers to the norms and networks that facilitate collective action". Social capital is also described as those relationships which are the most useful in society, "serve as a form of social insurance" and "provide communication and information networks" (Whittaker & Banwell, 2002: 252). However, some academics have stated that social capital has an inherent imprecision (Stone & Hughes, 2002).

Despite this, one of the main attractions of social capital is its measurability. Properties of social capital have been suggested as a means of quantifying aspects of social sustainability (Bridger & Luloff, 2001; O'Boyle, 2010). Landorf (2011: 466) comments that "an underlying premise of the social capital concept is that socially sustainable communities require individuals to work together in social networks". So social capital implies that individuals have vested interests in the establishment and maintenance of a society which encourages an equal distribution of social benefits and responsibilities, as well as cultural, familial and institutional identity and stability. Indicators have been commonly identified and defined within a range of academic literature, are: trust, participation/inclusion, individual identity, collective identity, social cohesion, safety, co-operation and common beliefs/values (Bridger & Luloff, 2001; Forrest & Kearns, 2001; Stone & Hughes, 2002; van Beuningen & Schmeets, 2012; Woolcock, 2001).

Van Beuningen & Schmeets (2012) present an index for the measurement and monitoring of social capital within the national context of the Netherlands. This model includes two key dimensions – trust and participation – which are then ordered by categorical levels of the social, organisational and political. A structural model of this index is presented in Figure 3.1, providing an exemplary means of measuring social capital, and potentially aspects of social sustainability.

Individual capabilities

The quantification of individual capabilities may also represent a means to measure elements of social sustainability. Sen (2013) asserts that individual capabilities, defined as the various abilities and functions of an individual that allow the said individual to achieve, may lead to a sense of value, a feeling of inclusivity or belonging, and the potential to achieve the outcomes which they desire. Similarly, the recognition of an individual as an equal member of society (or within a particular group) with defined skills as applicable to their environment has been seen as a key measure of social identity and cohesion (Nordström Källström & Ljung, 2005). Max-Neef et al. (1989) define these qualities as "individual satisfaction with work tasks; the potential to discuss and share responsibility with other people; and confidence in the future and the experience of recognition from family, friends, and society" (Nordström Källström & Ljung, 2005: 377). The authors also comment that these qualities may also extend to "more universal social-psychological concepts (i.e., fulfilment of basic human needs; for instance, protection, freedom, understanding, participation, creativity, affection, etc.)" (Nordström Källström & Ljung, 2005: 377).

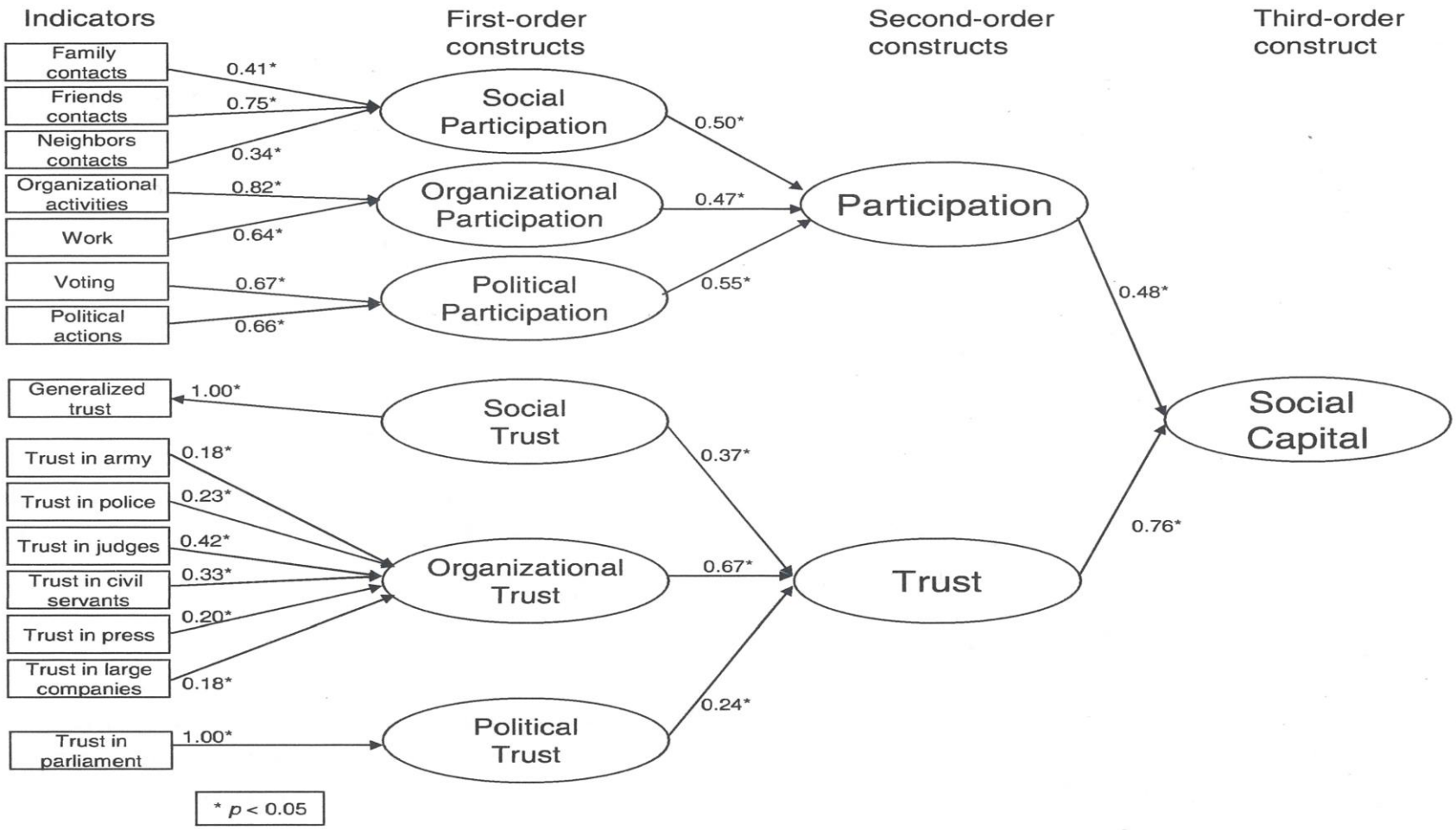

Figure 3.1: Structural model of a social capital index for the Netherlands

Source: van Beuningen & Schmeets, 2012
Note: The numbers attached to the adjoining lines indicate the significant correlations of the two joined components.

Triple Bottom Line reporting

John Elkington, a leading author in the field of sustainability accounting, first coined the term "triple bottom line" in a 1994 article, 'Towards the sustainable corporation: win-win-win business strategies for sustainable development'. The 'Triple Bottom Line' refers to methods which attempt to quantify an organisation's sustainability credentials across the three pillars of sustainable development (Elkington, 1994).

The social dimension of Triple Bottom Line assessment, particularly within a corporate context, is commonly referred to as Corporate Social Responsibility (CSR). Accounting for social responsibility and social sustainability within a corporate context can be nominally achieved through the use of verification and auditing schemes. Such schemes include the Global Reporting Initiative (GRI), as well as other popular schemes (particularly within the food industry) such as FairTrade, GlobalGAP, IFOAM Organic Standard, and ISO 26000. These schemes usually require third-party auditing of a corporate body (SMEs and large-scale enterprises included) to determine their application of social principles in business.

3.2 Existing frameworks for social sustainability assessment

This section examines as examples, two sustainability frameworks with well-developed social sustainability dimensions which are currently in use with organisations – SAFA and ISO 26000 – and a summary of other standards.

Sustainability Assessment of Food and Agriculture Systems (SAFA)

One framework which appears promising as a means of both measuring social sustainability and its integration with the other pillars of sustainable development is the FAO's Sustainability Assessment of Food and Agriculture Systems (SAFA) guidelines.[1] According to SAFA (FAO, 2013a: 178), "social sustainability is about the satisfaction of basic human needs and the provision of the right and the freedom to satisfy one's aspirations for a better life" with basic human rights and needs defined as those in the International Bill of Human Rights. Under the social dimension, the following themes are presented: Decent Livelihood; Fair Trading Practices; Labour Rights; Equity; Human Safety and Health; and Cultural Diversity. The full framework (themes, sub-themes and indicators) is presented in Table 3.1 to describe more fully what is meant by these themes.

The appeal of SAFA as a framework to assess sustainability is particularly applicable to industry, as it refers specifically to organisations within agribusiness and food systems. However, the social principles presented within the SAFA guidelines may apply to a multitude of different kinds of organisations.

Within the framework of the SAFA guidelines, Decent Livelihood refers to the capacity of an individual, via resources, networks and actions, to maintain a good, risk-free standard of living which does not deny them basic needs, and allows for a further building of this capacity into the future. Fair Trading Practices are those which ensure that human and legal rights of those involved in the organisation are met with regards to market access, fair prices, long-term agreements, and means of dispute resolution in relation to organisational operations. Labour Rights standards relate to the legal and human rights of hired labour within an organisation, with particular reference to labour and employment law, as well as the maintenance of good relationships between employer and worker. Equity is described as relating to the equal, fair and unbiased distribution of opportunities, resources and decisions made, as well as the degree of inclusiveness given to employees. Human Health and Safety is about practices

[1] A full description of SAFA and how it relates to the NZSD can be found in the synthesis report of the NZSD, Hunt et al. (2014a).

which aim to maintain the highest levels of physical and mental health of all employees within the organisation, including that of social well-being. The final theme, Cultural Identity, is about the maintenance of cultural identity of individuals within the organisation, including such elements as ethnicity, language, religion or spiritual belief, political views and affiliation, age, sexual orientation, economic status, as well as many other forms of identity.

As identified above, many of the standards housed within SAFA's Social Well-Being category correlate strongly with national and international law regarding desired social outcomes. However, the inherent structure and application of themes and sub-themes, as well as the identification of specific indicators and means of measurement, classify this scheme as an appropriate for policy application within an organisation seeking to implement socially sustainable practices and policies.

Table 3.1: SAFA: Social Well-Being framework

Theme(s)	Sub-Theme(s)	Default Indicator(s)
S.1 Decent Livelihood	**S 1.1** Quality of Life	S 1.1.1 Right to Quality of Life
		S 1.1.2 Wage Level
	S 1.2 Capacity Development	S 1.2.1 Capacity Development
	S 1.3 Fair Access to Means of Production	S 1.3.1 Fair Access to Means of Production
S.2 Fair Trading Practices	**S 2.1** Responsible Buyers	S 2.1.1 Fair Pricing and Transparent Contracts
	S 2.2 Rights of Suppliers	S 2.2.1 Rights of Suppliers
S.3 Labour Rights	**S 3.1** Employment Relations	S 3.1.1 Employment Relations
	S 3.2 Forced Labour	S 3.2.1 Forced Labour
	S 3.3 Child Labour	S 3.3.1 Child Labour
	S 3.4 Freedom of Association and Right to Bargaining	S 3.4.1 Freedom of Association and Right to Bargaining
S.4 Equity	**S 4.1** Non Discrimination	S 4.1.1 Non Discrimination
	S 4.2 Gender Equality	S 4.2.1 Gender Equality
	S 4.3 Support to Vulnerable People	S 4.3.1 Support to Vulnerable People
S.5 Human Safety and Health	**S 5.1** Workplace Safety and Health Provisions	S 5.1.1 Safety and Health Trainings
		S 5.1.2 Safety of Workplace, Operations and Facilities
		S 5.1.3 Health Coverage and Access to Medical Care
	S 5.2 Public Health	S 5.2.1 Public Health
S.6 Cultural Diversity	**S 6.1** Indigenous Knowledge	S 6.1.1 Indigenous Knowledge
	S 6.2 Food Sovereignty	S 6.2.1 Food Sovereignty

Source: FAO, 2013a.

ISO 26000 Social responsibility

Like social sustainability, a universally acceptable definition of corporate social responsibility has not been promulgated, however, Dahlsrud (2006) thinks this is because it was socially constructed to fit a particular context. It appears to mean that any business is obliged to act responsibly with regard to how it affects the environment, the economy and society. In 2010

ISO produced its international standards ISO 26000 to give guidance to organisations on their social responsibility (SR) with the objective of contributing to sustainable development.[2,3] It acknowledges that all an organisation's activities depend on the health of the world's ecosystems and organisations will benefit if they provide evidence of their performance through a standard like ISO 26000 to ensure healthy ecosystems, social equity and good organisational governance. The benefits seen to accrue to this organisational behaviour are a competitive advantage; an enhanced reputation; attracting and retaining workers or members, customers, clients or users; maintenance of employees' morale, commitment and productivity; a positive view of the organisation by investors, owners, donors, sponsors and the financial community; enhanced relationships with companies, government, the media, suppliers, peers, customers and the community in which the organisation operates.[4]

Figure 3.2 illustrates the seven core subjects of ISO 26000 from which it can be seen that for ISO social responsibility covers governance and environmental sustainability as well as social. For the New Zealand Sustainability Dashboard (NZSD), most of the ISO 26000 core subjects are associated with the Good Governance pillar – human rights, fair operating practices, consumer issues and some to do with community involvement and development – because for the NZSD Good Governance also covers issues outside the organisation beyond how the organisation is run, such as compliance with the law (Hunt et al., 2014a).

[2] There is no definition of what social responsibility means given in the free downloadable ISO material.
[3] ISO does not follow its past practice of providing standards for ISO 26000 but suggests that if this guidance is used in conjunction with GRI, together they will provide indicators and measurements (GRI-ISO, 2014).
[4] Taken from: http://www.iso.org/iso/discovering_iso_26000.pdf

Table 3.2 shows the issues associated with the subjects from ISO 26000 in which the link to organisational governance becomes more apparent (Hunt, 2014a).

Figure 3.2: The seven core subjects of ISO 26000 Social responsibility

Source: http://www.iso.org/iso/sr_7_core_subjects.pdf

Table 3.2: The issues addressed by the seven core subjects of ISO 26000

Core subject	Issue No.	Issue
Organizational governance		
Human rights	1	Due diligence
	2	Human rights risk situations
	3	Avoidance of complicity
	4	Resolving grievances
	5	Discrimination and vulnerable groups
	6	Civil and political rights
	7	Economic, social and cultural rights
	8	Fundamental principles and rights at work
Labour practices	1	Employment and employment relationships
	2	Conditions of work and social protection
	3	Social dialogue
	4	Health and safety at work
	5	Human development and training in the workplace
The environment	1	Prevention of pollution
	2	Sustainable resource use
	3	Climate change mitigation and adaptation
	4	Protection of the environment, biodiversity and restoration of natural habitats
Fair operating practices	1	Anti-corruption
	2	Responsible political involvement
	3	Fair competition
	4	Promoting social responsibility in the value chain
	5	Respect for property rights
Consumer issues	1	Fair marketing, factual and unbiased information and fair contractual practices
	2	Protecting consumers' health and safety
	3	Sustainable consumption
	4	Consumer service, support, and complaint and dispute resolution
	5	Consumer data protection and privacy
	6	Access to essential services
	7	Education and awareness
Community involvement and development	1	Community involvement
	2	Education and culture
	3	Employment creation and skills development
	4	Technology development and access
	5	Wealth and income creation
	6	Health
	7	Social investment

Source: http://www.iso.org/iso/discovering_iso_26000.pdf

Figure 3.3 provides an overview of ISO 26000 which shows how the practices related to social responsibility need to be disseminated and practiced throughout the organisation, not only reported on.

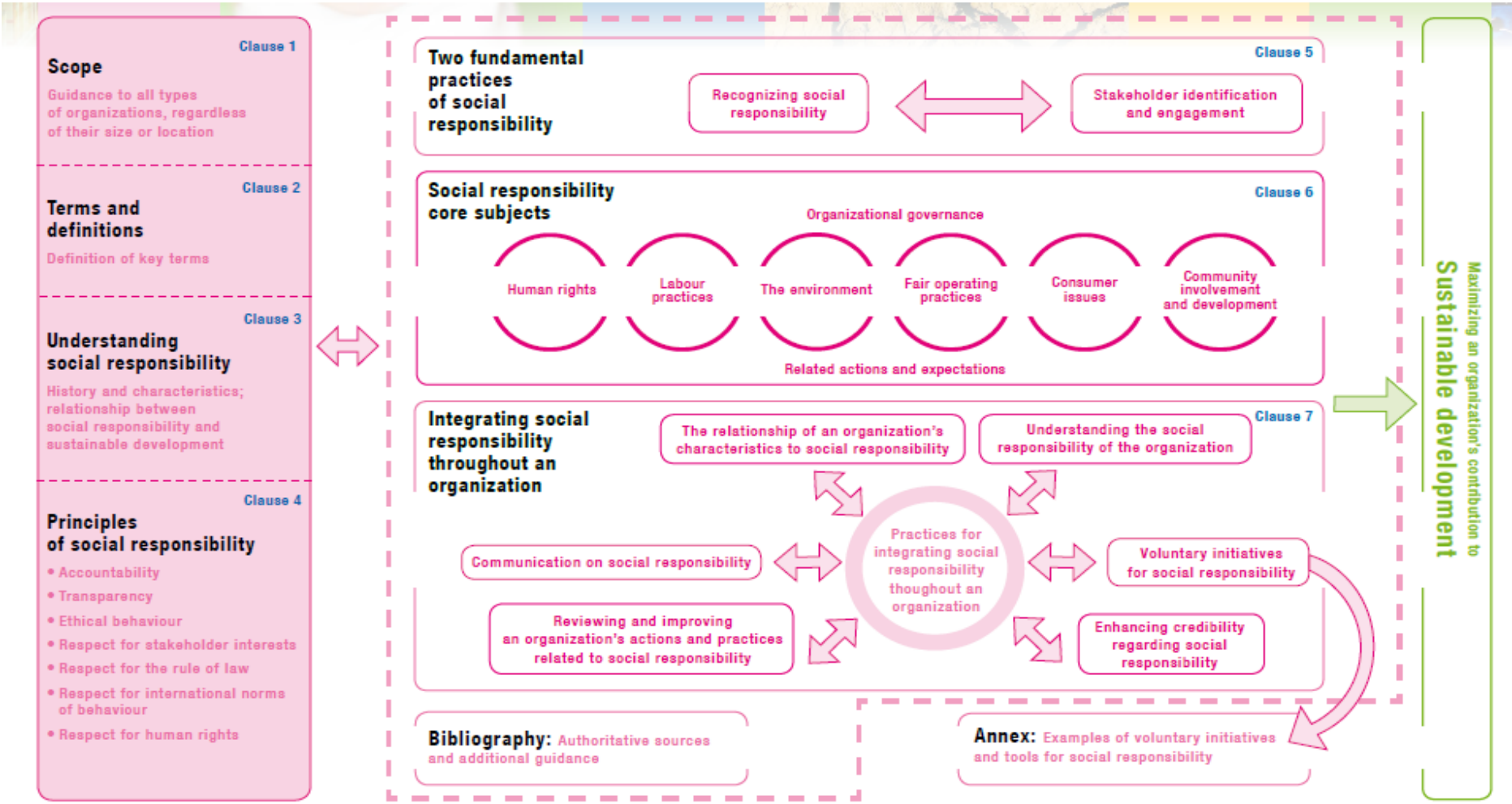

Figure 3.3: A schematic overview of ISO 26000

Source: http://www.iso.org/iso/sr_schematic-overview.pd

Voluntary Standards Frameworks

Other frameworks which are currently in use within organisations include those relating to agriculture, forestry and similar operations, and include specific frameworks relating to social accountability. These frameworks, as identified by the KPI Identification Database (ARGOS, 2013), include: Australian Certified Organic; Sustainable Forestry Initiative; The Montreal Process; Sustainable Agriculture Standard; Red Tractor; Social Accountability 8000 Standard; GlobalGAP; IFOAM Standard for Organic Product; Ethical Trading Initiative; Leaf Marque; LocalGAP; Forest Stewardship Council Standards; and Design for The Environment: Safer Ingredients.

Many of the social standards listed relate to issues of human, social and work rights, such as the right to be free from forced or child labour, to have good health, and similar issues. As these rights are already guaranteed in a company's compliance with New Zealand Acts and Regulations to do with employment, these will not be covered in depth in the following analysis.

However, there are exceptions to these rights as many standards state minimum ages of labour, ranging between 15 and 18 years old (e.g., Australian Certified Organic, Ethical Trading Initiative, Sustainable Agriculture Standard) and contain additional stipulations for the inclusion of minors in the labour force of an organisation. These include the limitation of work hours for children and minors (e.g., Sustainable Agriculture Standard), and consistent provision of access to education (e.g., Sustainable Agriculture Standards, IFOAM Standard for Organic Product, Social Accountability 8000 Standard, Ethical Trading Initiative).

Some standards, particularly those in relation to forestry, contain criteria to do with indigenous peoples in relation to the organisation. These criteria include the maintenance of cultural values, quality of life and rights of indigenous peoples (particularly those whose communities are physically based within or proximal to the forestry operation) (e.g., The Montreal Process) and the maintenance of the traditional forest stewardship practices of indigenous peoples (e.g., Forestry Stewardship Council).

Many of the above standards include social criteria that may relate to a wide range of human and social issues. The Sustainable Forestry Initiative states that organisations participating in the standard should avoid the use of controversial sources of materials and labour while encouraging "socially sound practices". The IFOAM Standard for Organic Product requires that the organisation develops and engages with a social justice policy which maintains all human and social rights as required by law. The Forest Stewardship Council standards specify that the organisation should "maintain or enhance the long-term social and economic wellbeing of forest workers and local communities". Additionally, all planned operations should be subject to a social impact assessment (SIA), including consultation with all peoples/groups affected by the proposed plans.

Other standards are to do with the quality of worker housing, if provided by the organisation, with criteria stating that all housing must be well-designed, clean (hygienic), safe and adhere to a strict set of building criteria (e.g., Sustainable Agriculture Standard, Social Accountability 8000 Standard, Ethical Trading Initiative). Similarly, many standards outline the need for the provision of, or access to, clean (potable) water (e.g., LocalGAP, Ethical Trading Initiative, Red Tractor, Sustainable Agriculture Standard, IFOAM Standard for Organic Product).

Health and safety provisions are among the themes with the highest prevalence in the standards, with many outlining extensive criteria relating to health and safety practices in the workplace (e.g., Sustainable Agriculture Standard, Red Tractor Meat Processing, Ethical Trading Initiative, Design for the Environment: Safer Ingredients). Many of these standards

communicate the need for the organisation to implement practices which seek to mitigate negative worker health and safety (i.e., injury and illness) caused by their involvement in work tasks and to train workers to identify risks and hazards within their own positions. Health and safety standards also are about the provision and maintenance of safety equipment (e.g., Ethical Trading Initiative, Sustainable Agriculture Standard) and the use of agrochemicals (e.g., Design for The Environment, Sustainable Agriculture Standard), and guidelines for the management of incidence of illness in the workplace (e.g., Red Tractor).

Most of the above standards include some criteria relating to the provision of job-specific education for workers, in the forms of training seminar/workshop attendance or educational materials (e.g., Sustainable Forestry Initiative, Sustainable Agriculture Standard). Some standards also encourage public education in relation to the organisation, particularly in relation to the ways in which the organisational operation may affect the public (e.g., Sustainable Forestry Initiative, Forest Stewardship Council).

Other work rights are also included in the social criteria of the above standards, including the open-mindedness of the organisation towards trade unions and organisational activities (e.g., Ethical Trading Initiative), and the ability to address all concerns raised by employees and the general public when work practices appear to be inconsistent with the criteria outlined within this standard (e.g., Sustainable Forestry Initiative).

While the above standards (as identified by the KPI Identification Database) relate to the application of social sustainability guidelines within an organisation, many of the standards contained are not quantitative, or employ qualitative means of assessment. This means that in order to achieve compliance with such schemes, the use of a third-party assessor is often warranted.

3.3 Open–ended participatory methods for developing frameworks and assessing social sustainability

This section describes two methods which emphasise the participatory development of a social assessment framework for a particular situation rather than imposing an already developed framework. The first, Social Impact Assessment is a flexible process commonly used around the world, including New Zealand, to assess the impact of a proposed project on a community. The second, developed by Chan et al. (2012), is a response from a group including scientists who were trying to assess the benefits of ecosystem services.

Social Impact Assessment (SIA) or Social Assessment

A type of assessment method which may provide relevant tools in the measurement of social sustainability is that of social impact assessment (SIA). This is usually conducted by a government or corporate body prior to the development of an infrastructure project or the implementation of a policy or action which may affect social quality in its locality. SIA is also used by non-profit or philanthropic organisations to assess the efficacy of their programmes on those receiving their intended benefits (McKinsey & Company, 2014; Taylor et al., 1995).

The definition of SIA varies, depending on the sector or organisation undertaking the assessment. One definition, offered by the International Association of Impact Assessment, states that “Social Impact Assessment includes the processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment” (IAIA, 2010). As this definition suggests, the

process of SIA is usually applied to a particular action, and is not commonly used as a method to assess the social sustainability of a population, sector or organisation. However, select processes and elements of SIA may still be useful in determining the measurement of aspects of social sustainability. Another description of SIA, as developed by Vanclay (2003), indicates that social impact assessment must take the following categorical considerations into account; way of life, culture, community, political systems, environment, health and wellbeing, personal and property rights, and fears and aspirations.

New Zealanders Taylor and Goodrich (Taylor et al., 1995: vii) prefer to use the expression Social Assessment because they wish to emphasise their wish to overcome the negative connotation of the word 'impact' because in their experience "social impact assessment is seen as an activity that highlights the worst effects of social change, and therefore, by implication, hinders constructive as well as desirable change".

Some authors assert that impact assessment practices may be integrated with sustainability accounting processes as a means to assess sustainable development targets and ideals. Assefa & Frostell (2007) describe a tool to integrate SIA with social sustainability assessment in an attempt to develop indicators for social sustainability of new energy technologies. The tool examines ecological, environmental and social dimensions of public technology acceptance, using the selected social indicators of knowledge (individual knowledge regarding energy issues), perception (individual level of spectral perception regarding energy technology) and fear (individual spectral level of fear regarding potential dangers of energy technology). While the associated case study in which this tool was used particularly related to public involvement in energy technology processes, the underlying methodology may apply to other scenarios for social sustainability assessment. The selected indicators used within the ecological, environmental and social dimensions of this tool are displayed in Figure 3.4. However, Colantonio (2011: 53) asserts that "these early forms of impact assessment were not designed to address the complexity inherent to the measurement of sustainability … there is widespread uncertainty concerning for example how different typologies of impact and assessment techniques should be integrated together".

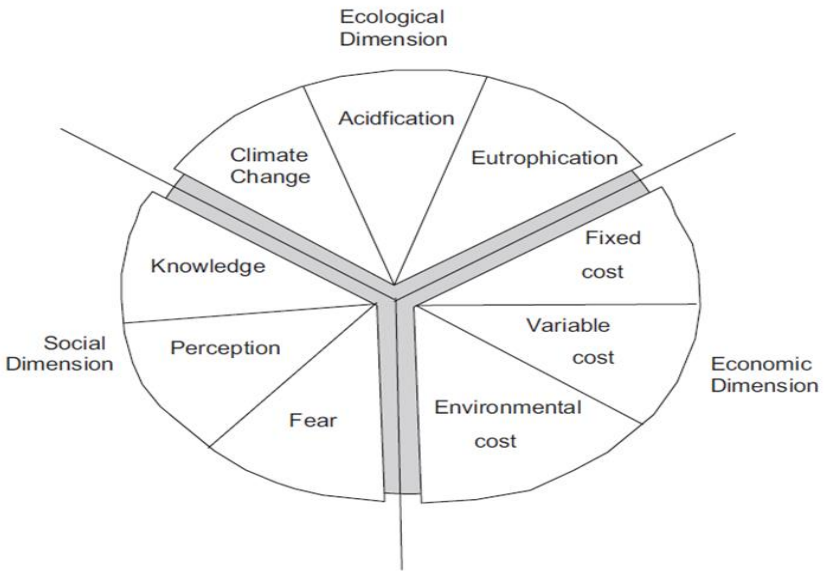

Figure 3.4: Ecological, environmental and social dimensions of assessment

Source: Assefa & Frostell, 2007

Method for social assessment devised by Chan et al.

Chan et al. (2012) propose using a method which is very similar to that often used in Social Impact Assessments. They were concerned about the lack of cultural and social assessment of ecosystems services (ES) so developed a 'framework for constructive engagement' on the premise that a participatory approach would be more constructive and more socially acceptable. They saw that ecosystem services were only one of the things that benefited society in cultural and social ways, and therefore the setting up of a scientific method of measuring these intangible benefits was not feasible or necessarily sensible. The framework they suggest involves constant consultation, participation and collaboration of researchers, practitioners and indigenous groups, governments, local government and key stakeholder groups, acknowledging that issues of social sustainability are going to be closely linked to a certain context – time, place and culture. They see particular advantages in the use of qualitative research methods.

Their suggested process to making good decisions consists of the following steps:

1. Obtain consent. This is not just a single process but an ongoing one and is important for the development of a relationship which co-produces knowledge.
2. Determine the decision context.
3. Determine the socioecological context. Characterise the biophysical and social dimensions and interactions between them.
4. Determine the ES benefits and values.
5. Influence diagrams and scenarios. Use the results of step 4 to highlight diagrammatically the connections and the key components.
6. Iterate the previous steps. (Chan et al., 748-754).

This process would provide a useful model for establishing a social framework with indicators and measures that would meet the needs of all parties for the social dimension of a sustainability dashboard.

3.4 Dimensions of social sustainability

Having considered some of the different frameworks for social sustainability this section examines what they might have in common. Landorf (2011: 474) states that, based on a review of international literature on social sustainability, three dimensions of the concept have emerged – "social equity, social cohesion and the satisfaction of basic needs". As cited above, McKenzie (2004: 12-13), in a discussion paper prepared for the University of South Australia, suggests a definition of social sustainability as:

"Social sustainability is: a life enhancing condition within communities, and a process within communities that can achieve that condition."

He sees the following features (incomplete) as indicators of the condition and that steps towards their establishment and implementation are aspects of the process.

- Equity of access to key services (including health, education, transport, housing and recreation).
- Equity between generations, meaning future generations will not be disadvantaged by the activities of the current generation.
- A system of cultural relations in which the positive aspects of disparate cultures are valued and protected, and in which cultural integration is supported and promoted when it is desired by individuals and groups.

- The widespread political participation of citizens not only in electoral procedures but also in other areas of political activity, particularly at a local level.
- A system for transmitting awareness of social sustainability from one generation to the next.
- A sense of community responsibility for maintaining that system of transmission.
- Mechanisms for a community to collectively identify its strengths and needs.
- Mechanisms for a community to fulfil its own needs where possible through community action.
- Mechanisms for political advocacy to meet needs that cannot be met by community action.

In addition to the definitions already referred to at the beginning of this chapter there are others which might be useful. McKenzie (2004: 18) also refers to a model of social sustainability developed by the Western Australian Council of Social Services. It consists of four parts – 1) definition of social sustainability; 2) principles of social sustainability; 3) characteristics of socially sustainable communities; and 4) statements addressing the characteristics of socially sustainable communities.

This definition is:

"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 liveable communities. Socially sustainable communities are equitable, diverse, connected and democratic and provide a good quality of life."

The principles are to do with equity, diversity, interconnectedness, quality of life and democracy and governance and there several characteristics associated with each of these, then statements of the actions taken to establish and maintain these characteristics.

Many definitions, as already outlined, include a focus on the satisfaction of basic needs, the presence of equity, cohesion across society, and the idea of preserving both the community's ability to survive and thrive over the long term as well as that of the physical environment of which the community is a part. However, these concepts do not make specific reference to human rights or work. Within the international framework literature, particularly in relation to the social elements of Triple Bottom Line accounting, there currently exist measures which encourage both regulatory and best practice approaches to social stewardship, but these often refer to issues of human rights and social justice rather than being of holistic relevance to social sustainability. Such measures included in these schemes included the prohibition of involuntary or child labour, the provision of basic human rights (such as access to clean drinking water and shelter) as well as the maintenance of human capital (such as the provision of appropriate education/training). Cultural considerations within particular industries, such as forestry, have culminated as framework measures which include the preservation of indigenous rights (Forest Stewardship Council). Some frameworks also include measures which are aligned with two or more pillars simultaneously, such as the fair and equal distribution of salaries to workers, which provides an intersection between the economic and social pillars of sustainable development (ARGOS, 2013). However, there is an overall paucity of social objectives and measures within international sustainability assessment frameworks, as observed earlier (Table 2.1).

The International Trade Centre (ITC) has developed the ITC Standards Mapping facility which compares different sustainability standards and assessment schemes.[5] This has been used

[5] See Appendix 1 for a full description of this tool.

to develop Table 3.3 which shows the range of social issues included in 12 schemes for agricultural enterprises. ITC Standards has decided that the core issues that matter for social sustainability are child labour, employment practices, gender issues, health and safety at work, ILO 8 core conventions, local communities and work and labour rights. (ISO 26000 and SAFA are not included in ITC mapping.)

Proposing the dimensions of a social sustainability framework

In an effort to try to form a comprehensive and all-encompassing framework, all aspects of social sustainability from this report have been gathered together in particular themes or dimensions to make a table (Table 3.4). The left-hand column presents one attempt to do this. This table also illustrates the difficulties of trying to develop some discrete concepts that together make up social sustainability as they can all be seen to be overlapping.

Satisfaction of basic needs

The first clear dimension is the 'satisfaction of basic needs', however, it immediately raises the question about which needs are basic (see Figure 3.5, Maslow's hierarchy of human needs) and is related to the context – is this relevant, who wishes to measure these and for what purpose? For most organisations it will be irrelevant as they are not responsible for meeting the basic needs of their employees except in terms of paying them a 'fair and decent wage', but some agricultural sectors do employ immigrant labour and low wage labour so it is relevant to them.

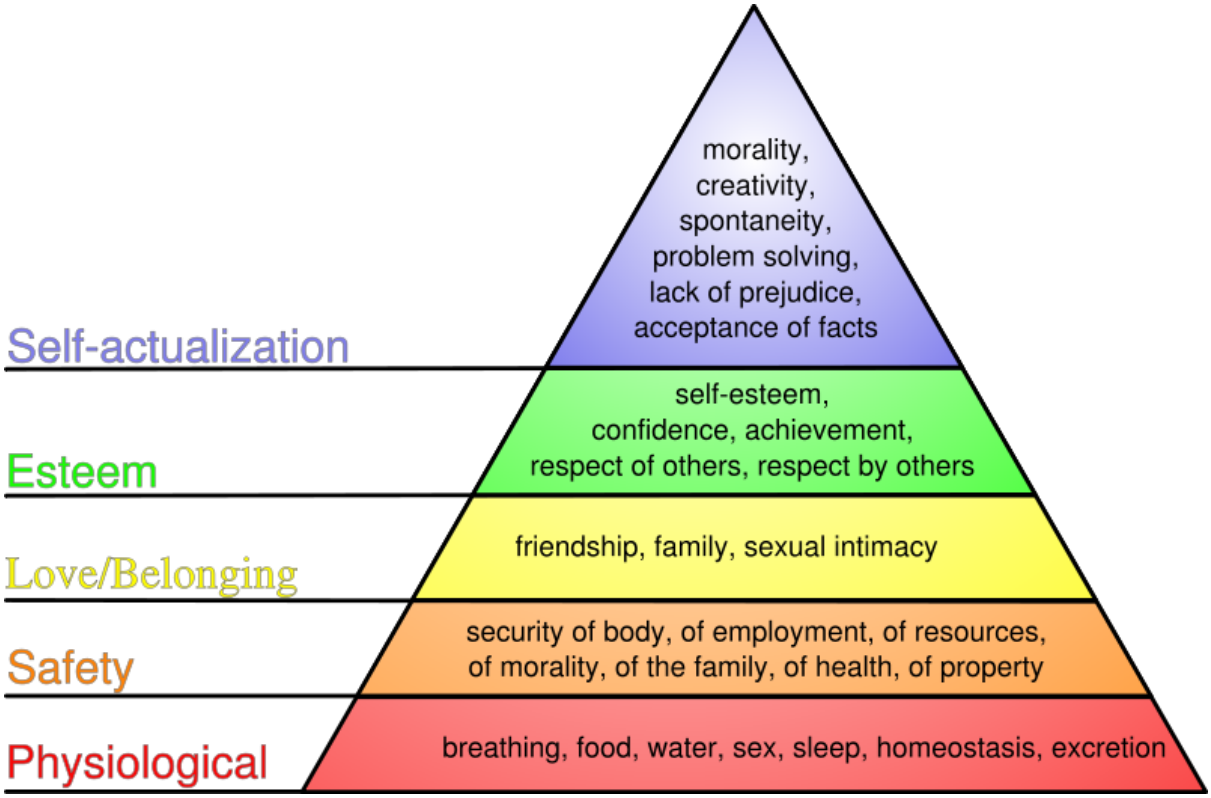

Figure 3.5: Maslow's hierarchy of human needs

Source: Wikipedia

Table 3.3: Social issues covered by relevant agriculturally oriented sustainability schemes: Comparison using ITC mapping facility

Standard	Forest Steward-ship Council (FSC)	SAI Platform Farm Sustaina-bility Assess-ment	LEAF Marque	IFOAM Stan-dard	GRI	ILO Labour Stan-dards	OECD Guidelines for Multi-national Enter-prises	Fair Trade Inter-national	Food Alliance	Friend of the Sea – Aqua-culture Farms or Wild Catch Fisheries	Global GAP – Crops or Live-stock	UN Global Com-pact
Child labour	x	x		x	x	x	x	x		x		x
Employment practices	x	x		x	x	x	x	x	x	x		x
Gender issues		x			x	x		x				x
Health and Safety at work	x	x		x	x	x	x	x	x	x	x	x
ILO 8 core conventions	x	x		x	x	x		x	x	x		x
Local communities	x		x		x	x				x		x
Work and labour rights	x	x		x	x	x	x	x	x			x

Source: http://www.standardsmap.org/

Table 3.4: Dimensions of social sustainability found in assessments and standards

Proposed overarching concept	Dimension in assessment scheme or standard	Found in:	Includes:
Satisfaction of basic needs	Living conditions	Stats NZ (2009)	
	Basic needs	UN Compact	
	Satisfaction of basic needs	Landorf (2011)	
	Shelter	Assefu & Frostell (2007)	
Health and wellbeing	Lifestyle	Saunders et al. (2006b)	Wellbeing of those in business Personal health Happiness Security Stress levels Succession plans
	Way of life	Vanclay (2003) SIA	
	Decent livelihood	SAFA (2013)	Quality of life
	Health and wellbeing	Vanclay (2003), SIA	
	Fears and aspirations	Vanclay (2003), SIA	
	Human safety and health	SAFA	Public health
	Wealth status of a country	FAO (2013) Woolcock (2000)	i.e., GDP/capita
Equity	Equality of opportunity (access to resources)	Stats NZ (2009)	
	Equity of access Equity of generations	McKenzie (2004)	
	Access to necessary amenities Access to education Access to health services Ability to improve personal situation in terms of comfort and personal well-being	Assefu & Frostell (2007)	
	Learning and growth	Balanced Scorecard Model (Dunn et al., 2006)	
	Gender issues	ITC Standards Map	
	Social equity	Landorf (2011)	
	Equity	Murphy (2012)	
	Knowledge and skills	Stats NZ (2009)	
	Social equity	Landorf (2011)	
	Equity	Murphy (2012)	
	Equity	SAFA	Non discrimination

Proposed overarching concept	Dimension in assessment scheme or standard	Found in:	Includes:
Equity (follow up)			Gender equality Support to vulnerable people
	Decent livelihood	SAFA (2013)	Fair access to means of production Capacity development
Governance and human rights	Governance	Stats NZ (2009)	
	Transmitting awareness of social sustainability Sense of community responsibility Mechanism for community identification of strengths and needs Mechanism for community to fulfil own needs Mechanism for political advocacy to meet other needs.	McKenzie (2004)	
	Political systems	Vanclay (2003), SIA	
	Personal and property rights	Vanclay (2003), SIA	
	Awareness of sustainability	Murphy (2012)	
	Participation	Murphy (2012)	
	International assistance	Stats NZ (2009)	
	Human rights	ITC Standards Map	
	Human rights	GRI G4	Investment Indigenous rights Assessment Suppliers Grievance mechanisms
	Human rights	ISO 26000	
	Principles of Social Responsibility	ISO 26000	Accountability Transparency Ethical behaviour Respect for stakeholder interests Respect for the rule of law Respect for international norms of behaviour Respect for human rights
	Corruption Public policy Anti-competitive	GRI G4	

Proposed overarching concept	Dimension in assessment scheme or standard	Found in:	Includes:
Governance and human rights (follow up)	Compliance Supplier Grievance mechanisms		
	Consumer issues?	ISO 26000	
	Product responsibility	ISO 26000	
	Fair operating practices	ISO 26000	
	Fair trading practices	SAFA	Responsible buyers Rights of suppliers
Support of culture and identity	Cultural diversity	SAFA	
	System of cultural relations	McKenzie (2004)	
	Culture and identity	Stats NZ (2009)	
	Culture	Vanclay (2003), SIA	
	Cultural diversity	SAFA	Indigenous knowledge Food sovereignty
Social capital	Social connectedness	Stats NZ	
	Social cohesion	Murphy (2012), Landorf (2011)	
	Social capital	Van Beuningen & Schmeets (2012)	Participation Trust
Labour rights	Work and Labour rights	ITC Standards Map	
	Labour rights	SAFA	Employment relations Forced labour Child labour Freedom of association and right to bargaining
	Human rights	GRI G4	Employee training Non-discrimination Freedom of association Child labour Forced compliance Grievance mechanisms
	Child labour	ITC Standards Map	
	ILO 8 Core conventions	ITC Standards Map, ILO (2002)	Freedom of association and protection of the right to organize Right to organize and collective bargaining

Proposed overarching concept	Dimension in assessment scheme or standard	Found in:	Includes:
			Forced labour Abolition of forced labour Minimum age Worst forms of child labour Equal remuneration Discrimination (employment and occupation)
Employment practices or labour practices and decent work	Employment practices	ITC Standards Map	
	Labour practices and decent work	GRI G4	Employment Labour management relations OSH Training and education Diversity and equal opportunity Gender Remuneration Supplier assessment Grievance mechanisms
	Labour practices	ISO 26000	
	Health and Safety at work	ITC Standards Map	
	Decent livelihood	SAFA	Capacity development
	Human safety and health	SAFA	Workplace safety and health provisions
	Access to fair wages at work	FAO (2013) Woolcock (2000)	
Enabling local communities	Local communities	ITC Standards Map	
	Community involvement and development	ISO 26000	
	Community	Vanclay (2003), SIA	
	Local community	GRI G4	

Health and wellbeing

A second dimension could be health and wellbeing, but wellbeing is very broad and is related to all the other dimensions, so could perhaps be omitted because if the other dimensions are met then wellbeing will be assured. It could be called 'lifestyle' but this implies that people have the choices available that enable them to aspire to the lifestyle they want and that would also be covered by the other dimensions.

Equity

Equity is a major dimension as it relates to the experience of every individual in terms of how they are treated within a society, whether at work or not. Hence all the aspects of this dimension could be applied to society in general or to the workplace. Such aspects are: access to and freedom to participate in education, health services, and social amenities. But not only access is required. There is a need for equal opportunity within the institutions providing these services. Equity, therefore, includes access to the means by which a person can improve their personal situation in terms of comfort and wellbeing, and therefore, the more indeterminate and fuzzy words – provide the opportunity for 'personal growth'. Equity also implies that there is no discrimination against gender, race, religion, colour etc., and that a person is free to participate in political decision making at any level within society, be it the workplace or civil society.

Governance and human rights

Many things associated with equity can be covered by legislation or regulation, therefore equity can be considered by some to come within governance, and governance can include human rights protection. Governance has been developed as a separate pillar of sustainability but it can overlap considerably with the other pillars – the social pillar in particular. If governance was considered a dimension of the social, then it could encompass mechanisms for teaching and encouraging an understanding of what is needed for sustainability (governance, environmental, economic and social), for participation in communities (local and national), and for developing a sense of community responsibility for filling its own needs and gaining advocacy for those needs not able to be met by the community. Governance would cover any social legislation and compliance with the Rule of Law, and human rights in general. In terms of New Zealand history it enshrines in law the principles of the treaty of Waitangi and the place of Māori as tangata whenua. For a business, governance would also include the principles of social responsibility as espoused by ISO 26000, for example - accountability, transparency, ethical behaviour, respect for stakeholder interests, grievance mechanisms (for employees, consumers and suppliers), as well as other aspects already stated. For a nation, governance would cover laws about anti-corruption, anti-competitive behaviour, fair operating and trading practices. It could also cover product responsibility as a social issue in terms of providing safe food.

Support of culture and identity

For a rich and resilient society different cultures and cultural identities need to be supported. This can also be encouraged by the development of sense of place and the valuing of place through the sharing of histories and environments.

Social capital

Encouraging the development of facilities and infrastructure such as public transport and communication, supports people's maintenance and development of connectedness and increases social cohesion.

Labour rights

Labour rights could be covered within a governance dimension or be a dimension on its own. It covers employment relations; prohibitions against forced labour and child labour; freedom

of association, bargaining, and the right to organise; anti-discrimination rules (including equal remuneration); grievance mechanisms; and minimum age for workers.

Employment practices
Labour rights could also contain aspects related to employment practices but the latter is often kept separate. Employment practices are to do with employment conditions, labour management relations, occupational health and safety provisions, training and education (capacity development), protection of diversity and equal opportunity (across genders etc.), remuneration (access to fair wages), and grievance mechanisms for workers. It is notable that many of these are already covered by the 'equity' dimension.

Only a few of the schemes outlined in ITC mapping also cover issues to do ethics and integrity as shown in Table 3.5. The boundary between these issues and social issues is rather blurred but these would usually be covered in the governance pillar of a sustainability scheme (e.g., FAO, 2013a).

Table 3.5: Ethics and integrity issues by relevant agriculturally oriented sustainability schemes: Comparison using ITC mapping facility

Standard	Forest Stewardship Council (FSC)	GRI	Fair Trade International	UN Global Compact
Ethics and business integrity			x	x
Anti-corruption	x	x		x
Anti-bribery		x		x
Political contribution		x		x
Charitable contributions		x		x
Sponsorship		x		x
Gifts				x
Hospitality				x
Business relationships		x		x
Due-diligence assessments				x

Source: http://www.standardsmap.org/

With the important dimensions of sustainability covered, the next chapter takes a very different approach to those of standards and assessment schemes by examining what participant farmers and kiwifruit orchardists in the ARGOS programme indicated could be aspects and indicators of sustainability.

4 Working examples from ARGOS

4.1 Introduction

The NZSD project developed out of the ARGOS programme which studied the sustainability of New Zealand farming over a period of nine years. This project now provides a rich resource for informing the development and use of social sustainability indicators as it provides a comparison between indicators found through qualitative interviewing, and the measurement of some of those indicators through a quantitative national farming survey. It also provides a comparison between two sectors within the agricultural domain – sheep/beef farmers and kiwifruit orchardists, and comparisons within each sector between organic, integrated and conventional management for sheep/beef and integrated management for green and gold kiwifruit, and organic green kiwifruit. Hence it is an excellent example for contributing to the debate about measuring social sustainability.

In this chapter, the first two sections are summaries of the ARGOS reports on the first qualitative interviews with kiwifruit orchardists (Hunt et al., 2005) and sheep/beef farmers (Hunt et al., 2006) who were participants in the ARGOS programme. In order to provide some indicators of social wellbeing all participants were asked:

- *How does your farm/orchard contribute to your own wellbeing?*
- *What is it about orcharding/farming that makes you happy?*[6]
- *How does your orchard/farm contribute to the wellbeing of your family?*
- *How does your orchard/farm contribute to the wellbeing of your community?*

These results then fed into a national survey of farmers' and orchardists' attitudes and opinions which measured what importance they placed on some indicators of social wellbeing and compared the results across the same groupings as mentioned above (Fairweather et al., 2009) to give the ARGOS team some idea of the utility and relevance of such indicators. The third section provides these results. The fourth section considers some social sustainability concepts that emerged from the interviews and summarises the attempts to quantitatively measure and write about them. The final section brings together some thoughts about measuring social sustainability.

4.2 Exploring the social wellbeing of kiwifruit orchardists through interviews

As described above, the kiwifruit orchardists in ARGOS were asked what it was about their orcharding that made them happy (Hunt et al., 2005). Common responses were:

"I feel good about what I do."

"It always give me a buzz".

"I love it".

"I enjoy the whole lot."

Generally wellbeing was associated with the interlinked notions of 'place', 'work' and/or 'lifestyle'. The 'place' where the work took place was important, for kiwifruit orchardists (and sheep/beef farmers). Of course, the 'place' is often where participants also lived and it lent itself to a particular lifestyle. For some it was about the environment on the orchard, for others

[6] Wellbeing was regarded as a very 'academic' type word which is why the alternative question above about what makes people happy was reworded.

it was the locality where the orchard was situated. For some it was also the place they could retire to.

Wellbeing associated with work was about working in the orchard – for some this involved physical work, which even though it had resulted in some health problems (damaged backs, shoulders etc.) it was still viewed positively; working outside; enjoying the environment of the orchard, particularly the birds; the balance between being social and being solitary - as orchards have many visitors; and the seasonal flow of the intensity of the work.

Satisfaction came from financial returns; high productivity; hard work; the pleasure of 'growing' something and the harvest result; being able to employ people; and caring for your family and the environment. Orchardists enjoyed the comments of others about their orchard and what it produced. Work also provided a challenge which was an important motivating factor for some, and opportunities to do something they would not have done otherwise, such as be involved in industry politics. Orchard work was also important to them because it gave them autonomy and flexibility – they were in charge of what they did each day. For some it was an important interest in retirement.

Lifestyle was the other area that contributed to wellbeing and can be seen to have been already covered above. It was particularly associated with the location of orchards – most were in the Bay of Plenty near beaches and with the pleasant climate suited to kiwifruit growing. For organic orchardists part of being organic was how this was associated with caring for their own health and that of their family, and for some that of their neighbours and anyone around the world who bought their fruit. It was regarded as having lower stress than an urban lifestyle.

Orchards were also seen as contributing to the wellbeing of families in many ways. Orchards enabled provision for a family – both in terms of income and in terms of lifestyle, and for succession – either through passing the land down or the wealth associated with its ownership.

Finally orchards were seen as having an impact on community wellbeing, and the community was also seen as impacting on orchards, so that it was a mutual relationship. It was noticeable that the comments to do with community had both positive and negative connotations. The first thing that was associated with community was neighbours and the changes associated with that. Land-based activities in kiwifruit growing areas tend to be of a horticultural nature and this means that the land is of high value and usually in smaller blocks meaning that people tend to have more neighbours and there is a greater change in neighbours, with a lot of urban people moving in for lifestyle reasons with the perception of those who already live there that these incomers do not understand horticultural practices and have unreasonable expectations of country life. As one orchardist said: "… the countryside is not a quiet environment. It is a working environment". There was a concern that this misunderstanding could threaten the livelihoods of those producing horticultural products or that eventually they would be re-zoned out of existence. Therefore, the main impact the community had on orchard life was perceived as one of constraint. Neighbours were also associated with competition and learning, especially if they were kiwifruit growers. They were always comparing themselves with their neighbours and this was particularly evident in areas where they had access to the orchards of neighbours and could walk through them, and did so. The orchard practices of neighbours were also a concern because they could threaten the controls kiwifruit growers exercised to meet GlobalGAP and integrated management practices. This was particularly true for organic practitioners.

Another thing about living in the countryside was to do with the unwelcome visits from those with a nefarious intent – burglars targeting fruit, orchard sheds and households, marijuana

growers, and searchers for magic mushrooms, or slightly less nefarious activities such as couples seeking a place to be intimate!

Some orchardists felt they had a responsibility to the community, while others felt that the community was dependent on them, and others, that they supported the community. They were aware that the money they earned exporting kiwifruit was then dispersed around their community through employment and support of local businesses. They also saw themselves as providing the 'green spaces' missing in towns and cities, however, there was an awareness of the risks posed within this green space by some orchard practices such as spraying.

From these interviews it is very apparent that very many responses were dependent on context:

- Location - mainly they lived in the Bay of Plenty and there were many positive aspects associated with this location.
- Industry - working in the kiwifruit industry and the context of the practices associated with growing kiwifruit.
- Workplace – type of work, indoor/outdoor, physical, solitary/social interaction, living on the orchard.

Their enjoyment (or lack of enjoyment) of work came out of some of the above indicators and also:

- The nature of the returns – financial, autonomy, flexibility, challenge and interest, providing for family, environment work in, family lifestyle, satisfaction, stress, interaction with and impact of neighbours/community, provision of employment, succession.

Indicators of family wellbeing were closely associated with many of the indicators above:

- Providing for family.
- Environment live in.
- Family lifestyle.
- Interaction with and impact of neighbours/community.
- Provision of employment for family.
- Succession.

Indicators of community wellbeing were:

- Relationships between neighbours.
- Impact of activities of 'outsiders'.
- Provision of work.
- Shopping locally.

4.3 Exploring the social wellbeing of sheep/beef farmers through interviews

"Well, when things are going well it's good. If they're not it's obviously not too bloody good (laughing) but farming is like that. It has its ups and downs. Some days everything goes well, some days everything turns to custard and you wonder why the hell you do it, but when you get a day like this …"

"I think that's why you're in farming 'cause no day is ever the same."

As illustrated by the quotes from farmers that start this section, 'wellbeing' was viewed by sheep/beef farmer participants as having both positive and negative connotations (Hunt et al.,

2006). At an individual wellbeing level, farmers considered their occupation of farming as having its ups and downs with some inclined to emphasise more one way than the other. All seemed to feel that the farm could easily dominate their lives and were trying to resist that. Many took a balanced view, that overall life was good and to plan for the downside.

The positive aspects of participants' wellbeing were associated with their work in general as well as work connected to the farm in particular (autonomy and flexibility, good hard work, physical, outdoor activity, challenge, recognition and feedback). For some their wellbeing was closely allied with how well things were going on the farm, and to their identity as a farmer. Attitudes to money played a role in wellbeing. Most participants said there were actually other things that made their lives satisfying apart from financial returns, though it was important for their livelihoods to make a reasonable amount of money. Few participants were solely dependent on financial success for their wellbeing.[7] Attachment to the farm as a place and to the environment in which it was located was very important for the wellbeing of many of those interviewed. This attachment often had a spiritual dimension linked to the way in which the beauty of the farm and its environment relieved tension and stress. For other participants the lifestyle that living on a farm provided - its rural and family oriented nature – was highly valued. Many women mentioned the role of the house as a home, its importance to family and its centrality to farm life. Leisure activities – both on and off-farm – were mentioned as important for a few.

For many, farming was a very stressful way of life. This stress had many different, and not necessarily mutually exclusive, origins and could be related quite simply to what many saw as part of the nature of farming - the inherent risk posed by extreme weather conditions, and the consequences of living on the job which meant that there was a pressure on farmers to work all the time. The greatest source of stress was the use of time, in particular the conflict between time devoted to farm work, mainly by the male farmer, and the ability to get off the farm for holidays or short periods. The weather and its impact on animal and farm life was the other main source of stress. Stress was also be created by the fact that farming demanded that farmers made choices about how money and time was to be spent. This had an impact on wives and families who may have felt that they took second place to the farm. There were additional tensions between husband and wife: financial stresses through carrying large mortgages and getting through difficult times; succession issues; and isolation. Succession and how it was managed also produced stress between parents, their grown up children, siblings and spouses.

Some farmers had taken steps to resist the domination of the farm by reorganising their farming life, and changing their own attitudes. Farmers were also very prone to making comparisons with others, the past, other kinds of work and practices, and rural and urban lifestyles, which indicated an insecurity about their identities as farmers. But parts of this identity helped them feel good about themselves – their care of the environment and the privilege of having that opportunity, their attitude to change and their persistence, perseverance and resilience.

Family wellbeing was of much greater interest to sheep/beef farmers than to many kiwifruit growers, probably indicating that many people took up kiwifruit growing later in life, often as a step towards a productive/working retirement. Farming was seen as a great context in which to bring up children, particularly when compared with towns and cities. However, there was also the tension of the time taken to be involved with your children and the cost of them.

[7] It's important to remember that wellbeing is about how much or what part these things play in the level of a person's wellbeing which is rather different, for example, from how much they earn. In other words it's not the level of income but the contentedness with it.

Succession was also of major interest with questions around what is a 'family' farm, the positive and negative legacies of having a 'family' farm, experiences of succession and managing the present situation with succession in mind.

In terms of the association between the farm and community wellbeing, there were differing descriptions of changing communities, the main one being centred on the primary school and sports activities. There was a strong sense of public service and an awareness of how much their expenditure benefitted the local community.

From these interviews it is apparent that sheep/beef farmers share some of the issues that affect kiwifruit orchardists. Wellbeing was similarly related to context:

- Location.
- Industry/sector - working in the sheep/beef industry and the context of the practices associated with growing meat and wool.
- Workplace – type of work, indoor/outdoor, physical, solitary/social interaction, living on the farm.

Their enjoyment (or lack of enjoyment) of work came out of some of the above indicators and also:

- The nature of the returns – financial, autonomy, flexibility, challenge and interest, providing for family, environment work in, family lifestyle, satisfaction, stress, succession, demands on time, claims of farm.

Indicators of family wellbeing were closely associated with many of the indicators above:

- Providing for family.
- Demands of farm clashing with those of family.
- Environment live in.
- Family lifestyle.
- Succession.

Indicators of community wellbeing were:

- Participation in community – particularly sports clubs and primary school committees.
- Support of local businesses

4.4 Identifying social wellbeing indicators for farmers and orchardists through a national survey

In 2008 the social researchers in ARGOS carried out a national farm survey which sought to explore farmers' and orchardists' attitudes and opinions about aspects of their production which could help understand attitudes to change (see Fairweather et al., 2009). In a sense, as the survey measured attitudes and opinions, nearly all questions could be considered to be about aspects of the social life of farmers and orchardists. The survey incorporated statements designed to explore which indicators of financial, productive, environmental and social performance would be useful and relevant to measurements of sustainability. Participants were asked to rate the statements shown in Table 4.1 from 1 (very unimportant) to 7 (very important). The variability as shown by the standard deviation demonstrates the degree to which the participants agreed in their rankings. (It is important to remember that the results are about the importance of the statements to the participants, not whether they were able to 'do' the things suggested in the statements.)

Table 4.1: Rating of social indicators from 2008 ARGOS National Farm Survey

Rating from 1 (very unimportant) through 4 (neutral) to 7 (very important)

Survey statement	Rating: sector			Rating: management system			SD
The importance of:	S/B	Hort	Dairy	Con	IM	Org	
The children are involved in the farm or orchard.	5.2	4.4	5.4	5.1	5.1	5.0	1.1 – 2.0
I have enough time to participate in community activities.	5.0	4.3	5.1	4.9	5.1	5.0	1.2 – 1.6
I have enough time to devote to family and friends.	6.0	6.0	6.0	5.9	6.1	6.0	0.9 – 1.1
I have enough time to participate in activities and recreation off-farm.	5.6	5.6	5.7	5.5	5.6	5.7	1.1 – 1.4
My farming/orcharding helps me to develop a connection to the places where it is located.	5.2	5.0	5.3	4.9	5.2	5.4	1.2 – 1.9
Members of my farm/orchard family will be able to find employment in this area.	4.4	4.2	4.4	4.3	4.6	4.2	1.3 – 2.0
My farming/orcharding is able to contribute to local traditions, festivals or customs.	3.9	3.6	3.9	3.7	4.0	3.9	1.5 – 2.2
My farm or orchard is contributing to the local community.	4.6	4.6	4.8	4.5	5.0	4.7	1.0 – 2.0
My neighbours approve of my farming/orcharding practices.	4.2	5.0	4.7	4.9	4.5	4.4	1.2 - 2.1
My farming/orcharding helps to create an attractive place to live	5.9	5.8	5.8	5.7	5.9	6.0	1.0 – 1.5
My neighbours consider me to be a good farmer/orchardist.	4.5	5.2	5.2	5.1	5.0	4.8	1.3 – 2.0
My family has a good reputation in the local community.	5.4	5.7	5.7	5.7	5.6	5.4	0.9 – 1.9
Farm/orchard workers are treated well	6.2	6.3	6.4	6.2	6.4	6.4	1.2 – 0.6
There is scope for farm succession	5.4	4.7	5.5	5.1	5.3	5.3	1.4 - 2.0

Source: Fairweather et al. (2009).

Notes:

1. S/B – sheep/beef farmers, Hort – Horticulturalists, Dairy – Dairy farmers.
2. Con – conventional management, IM – Integrated management, Org – organic management
3. SD – standard deviation
4. Overall averages have not been calculated because the sample is not representative over the farming sector as the organic sector was over-sampled to get a large enough sample size to make some statistically valid comparisons.

From Table 4.1 it can be seen that indicators about time to spend with family and friends and time for recreation off-farm, creating an attractive place to live, having a good reputation in the local community and treating farm/orchard workers well were the most important social-wellbeing indicators to the participants. Participants were more neutral about employment for family and being able to contribute to local traditions. However, they valued most other indicators as important also (5 and above).

4.5 Some emergent social sustainability concepts from the interviews and literature

The members of the ARGOS social team have produced an article (Campbell et al., 2012) and a synthesis report (Rosin et al., 2010) documenting the ways in which ARGOS farmers and orchardists were able to be differentiated through the research in the ARGOS programme. Some of these are original conceptual framings developed as the programme progressed so that what was often thought of during the first interviews then became incorporated in one of the two farm surveys in which the concept was operationalised in order to be measured. Two examples of this are 'breadth of view' and 'environmental positioning'. Further concepts were taken from the literature and also operationalised. Examples are orientations to 'good farming' and risk, and the resilience shown by particular practices and approaches to management.

Breadth of view

Because qualitative analysis allows researchers to take an undirected or inductive approach there is a freedom for the emergence of unsought or new conceptual ideas. One such concept that emerged during the interviews was that of social, environmental and economic breadth of view which Chris Rosin and Lesley Hunt have come to describe as an aspect of an individual's cultural capital which enables them to have an awareness of the impact of their practices on social wellbeing, the environment and the economy, at different levels (Rosin et al., 2010; Hunt et al., 2009, 2011, 2014b). In other words, social breadth of view describes the impact of what they do on their farm or orchard – on themselves and their family, the local community, the nation and the world. Similarly, environmental breadth of view describes the awareness they have of their impact on the environment within the boundaries of their property, in their region, of the nation, and on a global scale (Hunt et al., 2011). The position of an individual on a breadth of view continuum would indicate "the relative willingness to acknowledge the potential scope of interactions between farm management and society, economy and environment and to allow the impact of these interactions to influence management" (Rosin et al., 2010: iv). It is presumed that breadth of view may be an inherent quality of curiosity that a person has, but that it can be also learned and enhanced through social interaction, information sources and education. It is hypothesised that such an awareness will enable people to act more sustainably.

In the national survey farmers and orchardists were asked to indicate their level of agreement with the breadth of view statements (shown in full in Table 4.2) on a seven point Likert scale from 1 (very strongly disagree) to 7 (very strongly agree).

The 'breadth of view' measures are somewhat different from the social wellbeing indicators because for this report the aim is to not to see what was important to the participants but to see if these social variables could be used as indicators of overall sustainability, particularly resilience. It can be seen from the circled numbers in Table 4.2 that here is a decreasing level of agreement with the environmental breadth of view indicator as the level increases from immediate (farm/orchard) to global. In fact, there is an overall disagreement about the farm/orchard impacting on the environment a global level. But for social breadth of view there is only a change in the level of agreement of the impact of the farm on wellbeing from the family to the outside of family level. This is one indication that measuring breadth of view does provide a range of responses that make some common sense. People do not think of their actions as having a wide-ranging impact unless they think about what they do in a more in-depth and challenging way. For these variables to be used as indicators of resilience they

would need to be related to other variables that we know measure resilience.[8] One of the many problems with this is that even measuring resilience is complicated, complex and under debate, and is what the Dashboard is about!

Table 4.2: Measuring 'breadth of view': results from the national survey

Scale: 1 (very strongly disagree) through 4 (neutral) to 7 (very strongly agree)

Breadth of view	Survey statement	Rating: Sector			Rating: management system			SD
	Agreement with:	S/B	Hort	Dairy	Con	IM	Org	
Social	My farm/orchard and my management of it are closely related to the wellbeing of myself and my family.	6.1	6.0	6.1	5.8	6.1	6.4	0.6 – 1.4
	My farm/orchard and my management of it are closely related to the wellbeing of the local community.	4.4	4.7	4.7	4.3	4.7	5.1	1.3 – 1.6
	My farm/orchard and my management of it are closely related to the wellbeing of the nation and the world.	4.5	4.7	4.9	4.3	4.7	5.4	1.3 – 1.9
Environmental	My farm/orchard management affects the environment primarily within the productive areas of the property.	5.2	5.4	5.1	5.1	5.2	5.6	1.6 – 2.1
	My farm/orchard management affects the environment in the region where my property is located.	4.6	4.6	4.9	4.4	4.7	5.3	1.4 – 2.0
	My farm/orchard management affects the environment on a global scale.	3.5	3.4	3.6	2.9	3.5	4.4	1.7 – 2.2

Source: Fairweather et al., 2009

Resilience

Pretty (2008) calls resilience a component of sustainability. The conceptual framework of socio-ecological systems emphasises resilience. Darnhofer et al. (2011) suggest that framing a farming system as a complex adaptive system would contribute to understanding its sustainability in the ecological, economic and social domains. Resilience in this framework has been defined as: "The capacity of a system to absorb disturbance and reorganise while undergoing change so as to still retain essentially the same functions, structure, identity and feedbacks" (Walker et al., 2004). Darnhofer (2011) asserts that the four factors suggested by Folke et al. (2003) and Berkes (2007) as building resilience in socio-ecological systems are transferable to farming. The factors are learning to live with change and uncertainty, nurturing diversity in its various forms, combining different types of knowledge and learning, and

[8] They would need to have construct validity – that is, do they measure what they are supposed to measure?

creating opportunity for self-organisation and cross-scale linkages. In a review by four authors from different European countries (Darnhofer et al. 2010) these factors have been developed into three strategies that strengthen the adaptive capacity of farming systems: learning through experimenting and monitoring its outcomes; ensuring a flexible farm organisation to increase the options for new activities by the farm family; and diversifying to spread risks and creating buffers (or redundancy) to cope with variability.

Informed by this literature some statements in the survey were constructed to measure resilience. Participants were asked about their approaches to management. Table 4.3 shows the questions asked and the level of agreement given to them on a seven point scale from 1 (never) to 7 (always).

Table 4.3: Measuring resilience: results from the national survey

Survey statement	Rating: sector			Rating: mgt system			SD
The likelihood of the implementation of:	S/B	Hort	Dairy	Con	IM	Org	
I adopt proven practices rather than do my own experiments.	4.4	4.8	4.9	5.1	4.8	4.0	1.0 – 1.3
I pay close attention to changes in plants/animals/insects on my farm.	5.8	6.1	5.7	5.7	6.0	6.0	0.7 – 1.3
I pay close attention to money in the bank and good financial returns from each part of my business.	5.5	5.8	5.8	5.7	5.8	5.4	0.9 – 1.6
I pay close attention to what is going on in NZ and in the world.	5.7	5.9	5.9	5.7	6.0	5.8	0.9 – 1.2
I focus on a limited number of income sources.	5.1	5.0	5.2	5.2	5.2	4.9	1.1 – 1.7
I keep unused resources (e.g., buildings, machines) in case they are needed in the future.	4.6	4.5	4.5	4.5	4.7	4.4	1.5 – 1.9
I seldom deviate from established farm plans	4.0	4.4	4.2	4.6	3.9	3.9	1.2 – 1.6
I learn new things by talking to a variety of people	5.5	5.7	5.8	5.4	6.1	5.7	0.9 – 1.4

Source: Fairweather et al., 2009

In an unpublished ARGOS study that checked out different groupings of attitudes to breadth of view with other attitudes measured in the survey it was found that the greater the breadth of view the more observant and oriented to learning the farmer/orchardist.

Problems of measurement of breadth of view

However, in trying to operationalise breadth of view in order to measure it, the difficulty of finding some overall index of breadth of view is demonstrated. It could be that someone scored highly for all the environmental or social breadth of view questions in which case adding up their scores to get a total would make some sense, indicating a person with a high breadth of view at whatever level it is measured. However, for example, a person who is mainly interested in things at a global level and not a farm/orchard level could get the same score as someone who is only interested in the farm level, the latter of which does not really imply a broad breadth of view.

In a study using an analysis of the data from this survey and actual farm data from the ARGOS farms, Hunt et al. (2009, 2011, 2014b) were able to demonstrate that farmers with the highest adaptive propensity and the highest social and environmental breadth of view achieved some

higher environmental and economic outcomes on their farms. In this study the breadth of view indices were obtained by doing a Principal Components Analysis of the three breadth of view responses (social or environmental) and using the first principal component as the index or measure of breadth of view.

It was also found that breadth of view may have different effects, that is, it can be either a source of new ideas or a driver of conformity. What this told us was that while farmers and orchardists may say that they 'learn new things by talking to a variety of people' what they are actually doing is learning how to conform and be 'good farmers' and 'good orchardists' (see Hunt et al., 2009, 2011, 2014b). This is one of the concepts which may be more difficult to measure because sheep/beef farmers, especially, place a great value on their autonomy (Hunt et al., 2006). It is very much a major part of their wellbeing, yet in fact, it is difficult to be autonomous in today's working world with so many rules and regulations and other external pressures over which farmers have little control – such as the foreign exchange rate and the weather. So asking a question about autonomy would require an exploration of what is meant by 'autonomy' to the person being questioned. From the ARGOS interviews it would appear to be related to the day-today freedom of choice and flexibility farmers have over what they do.

The 'good' farmer and the 'good' orchardist

The ARGOS social scientists also became interested in the conceptual framework of 'the good farmer', mainly through the articles of Burton (2004; Burton et al., 2008), and Silvasti (2003). This approach suggests that farmers seek to conform to practices that are socially acceptable as exemplifying 'good farming' in their locality and that farmers acquire the cultural capital that enables them to read the signifiers of this in the landscape of other farms hence being able to discern whether other farmers are 'good farmers'. From the interviews described above, this concept has been applied to 'the good orchardists' (Hunt, 2010) in an article which describes several 'good orchardist' models prevalent in the kiwifruit industry in New Zealand, and to the observed change in farmer identity to now include the farmer as businessman as an acceptable identity formation (Hunt et al., 2012; Hunt et al., 2013). It is notable that this perspective is studied using observation and interviewing techniques as stated earlier; the conformity to a good farmer model is not something farmers acknowledge with their strong emphasis on autonomy. Some measures which were used in the ARGOS National Survey of 2008 (Fairweather et al., 2009) could be used for this concept. Respondents were asked for the level of importance (1 = very unimportant, 7 = very important) they placed on the following statements:

- *My neighbours approve of my farming/orcharding practices.*
- *My neighbours consider me to be a good farmer/orchardist*
- *My family has a good reputation in the local community.*

They were also asked how often they considered or implemented the following strategies from 1 (never) to 7 (always):

- *I adopt proven practices rather than do my own experiments.*
- *I seldom deviate from farm plans.*
- *I learn new things by talking to a wide variety of people.*

The latter statement is not intuitively obvious as a measure of good farming but as stated earlier, it was found that in fact by talking to others many people learn about how to conform rather than be different (Hunt et al., 2009, 2011, 2014b).

If able to be measured it would indicate a farmer's "relative willingness to consider the potential viability of practices that do not fit shared, socially accepted standards of appropriate management" (Rosin et al., 2010: iv).

Environmental positioning

A commonly recognised way in the social sciences of differentiating between individuals or social groups is by how they position themselves with regard to 'nature' or the environment. Some see themselves as 'working with nature' while others see themselves as having to 'control nature' in order to produce their agricultural products. The first group accept that there are natural limits on what they produce and that they need to adapt their practices to fit that assumption. This group would not favour the introduction of genetically modified plants or organisms (GMOs), would try to use less external and chemical inputs and would be more favourable to improving biodiversity and environmental health. The second group would be more likely to think that most problems will have technological solutions. Those in this group would be more likely to want to have tidy vineyards, orchards and farms emphasising control of weeds and pests (Rosin et al., 2010).

A measure of this would indicate "the relative extent to which the state of the environment is an objective management practice as well as the proactive nature of engagement with the environment" (Rosin et al., 2010; iv). Such a measure could be of environmental activity – from passive, to active to proactive, proactivity being the "pursuit of environmentally beneficial actions that extend beyond the boundaries of the … property" (Rosin et al., 2010: 18). Another way in which individuals could be differentiated is in their perception of the potential consequences of their management practices on the environment (Rosin et al., 2010). Such questions as those in the ARGOS 2005 national survey could be used as measurements here (Fairweather et al., 2007a, b). They measured the level of agreement from 1 (strongly disagree) to 5 (strongly agree) with the following statements:

- *When humans interfere with nature it often produces disastrous consequences*
- *Human ingenuity will ensure that we do not make the earth unliveable.*
- *Human beings are part of nature.*
- *My farm or orchard is more an extension of natural systems as opposed to a human-made system.*
- *My farm or orchard is mainly natural.*
- *My farm or orchard is mainly human-made.*

Positioning on innovation and risk

The willingness to engage in innovative or alternative practices has been referred to frequently above. Many of the measures used for 'good farming' and resilience can be re-framed though the perspective of 'risk'. Hence, risk may not only be to do with financial wellbeing but also can refer to a potential decline in social status or environmental wellbeing which may occur through adopting particular practices (Rosin et al., 2010). Therefore measures such as those listed below may be relevant.

- *I adopt proven practices rather than do my own experiments.*
- *I keep unused resources (e.g., buildings, machines) in case they are needed in the future.*
- *I seldom deviate from farm plans.*
- *I learn new things by talking to a wide variety of people.*
- *My neighbours approve of my farming/orcharding practices.*
- *My neighbours consider me to be a good farmer/orchardist*
- *My family has a good reputation in the local community.*

Many other measures could be used to consider the likelihood of introducing diversity of crop and animals and of storing animal food supplies in case of future extreme weather events.

It is worth noting that there are many questionnaires out there that measure risk tolerance as it is frequently used by financial advisors in working out how to advise investors (see Rohrmann, 2005).[9]

4.6 Comparing the measurement of indicators using qualitative and quantitative methods

This comparison between two very different methods of data collection is used to illustrate the debate that has been discussed in this report. Interviewing brings the data alive as this quote illustrates:

> I remember we were TB testing out in the yards one day and it was cold. It was wet. It was muddy. And I really didn't want to be there and I certainly didn't want to be there with a kid on my back but what else could I do? The kid on my back was safer than having him running round. And the TB tester said to me, "Don't suppose you've got any childcare centres around here?" and I thought, "Boy this one's a (?) one and I said, "No, we haven't" … we did this TB testing and he was a bit of a yapper, as they can tend to be … and at the end of it he goes, "Oh well, it's a good life though isn't it?" And you know, we'd been in mud - I was splattered with mud, everybody was hungry, everybody was cold and wet, and I thought "lifestyle" and I'd say he got it from me, both barrels. And he turned and walked off and hopped in his vehicle and drove out and I said to [husband], I think I just killed the conversation (laughs). (Hunt et al., 2006).

But it makes analysis complicated: How could this woman's experience be measured in terms of social indicators in the Dashboard? What does it tell us about sustainability – resilience, perseverance, lifestyle, family life? How can we indicate that they are all intertwined? It makes it very clear how important context is. She paints a picture of a specific day and her thoughts about 'lifestyle' relate very much to what is was like on that day. She also has a small child. She is a woman helping her husband on a task for which she was completely necessary. What does this tell us about social wellbeing? Is it necessary to have such a picture or narrative for it to be 'measured'?

When compared with the richness of interview data, it is difficult to see how to obtain some really useful quantitative assessment of wellbeing. Even self-assessments such as using Likert scales to gain a response of levels of agreement with the statements below seem very inadequate:

The physical location of where I work contributes to my wellbeing.

Or,

I really enjoy the physical location where I work.

These statements are very limited and unsatisfactory for purposes of measurement required for something like a sustainability dashboard, because the obvious next question is "how come?" or "why?"

This comparison between two very different methods of data collection raises the question of whether there could be some interviewing as part of a sustainability assessment.

[9] For example http://njaes.rutgers.edu:8080/money/riskquiz/

It may come down to, what is it that is wanted from the assessment? A suggestion is that exploring the governance, economic and environmental pillars of sustainability using different methods would also bring up contrasting evidence. However, within the latter two pillars, the use of quantitative measures has become the accepted way of doing things, associated with the dominance of the scientific and so-called rational way of seeing the world. This should not become a debate between different epistemologies and ontologies – that subject has been well debated and is ongoing – but attention is drawn to it here – as it is more apparent in the social domain and is one of the major reasons there has not been able to be an accommodation to one particular viewpoint.

In spite of drawing attention to the inadequacies of quantitative measurement, the next chapter sets up a framework which could be used for the measurement of social sustainability.

5 Assessing and measuring social sustainability

5.1 Issues in measuring social sustainability

Underlying any debate about the measurement of social sustainability is the degree to which people believe that it can be measured. There are those at the extreme ends of the spectrum - those who believe that social sustainability should not be measured at all – as Bell & Morse (2008) ask, in the title of their book, 'Sustainability Indicators: Measuring the Immeasurable?', and those who say that without measurement it does not exist and cannot be examined[10] (Blaikie, 1993). However, it is being measured already, whether opponents like it or not, and therefore they tend to succumb because they need to be part of the action, just as Bell and Morse themselves participate. he fear, as Bell & Morse (2008) warn, is that there is a risk that sustainability (and in this regard, social sustainability) will come to be defined by what is "measurable" rather than the other way around.

Therefore, in attempting to define and measure social sustainability, several key issues arise. Opponents of measurement would wish to investigate sustainability by doing in depth, qualitative research, through observation and listening, as was illustrated earlier in the discussion of the ARGOS results. The analysis of qualitative data relies more heavily on the interpretation the analysts make of descriptive information, which makes it difficult to compare at different times or from one analyst to another. On the other hand, with quantitative research there is an assumption that all respondents are interpreting a question and the way of measuring it in the same way. This is not subject to the same scrutiny as qualitative research because the numbers gained are regarded as objective. Also, many so-called quantitative measures used in the social sciences are not really quantitative in the strictest physical/scientific sense because they assign 'numbers' (ordinal measures as in Likert scales) or their equivalent (nominal measures such as in tick the box, or yes/no responses) to certain concepts which cannot be measured on a rational number scale (Babbie, 2010). Some questions can be worded to produce a descriptive response as in the social sustainability part of the SAFA assessment (FAO, 2013b). The use of qualitative data presents an issue for an accreditor, as it is more difficult to successfully align qualitative measures with quantitative measures, and therefore to measure progress towards sustainability.

Similarly, the willingness of end users to accept the inherent measures of social sustainability is a potential issue in presenting social sustainability information. As previously discussed, social sustainability has not been afforded the same degree of historical research engagement as the other pillars of sustainability, and is thus under-theorised by comparison. This has led to a potential lack of academic and theoretical work being undertaken to understand its deeper dimensions, and thus its definition and measurement(s). Therefore, a lack of willingness of end users and other associated parties to accept definitions and measures of social sustainability as prescribed by theorists may present an issue in the successful uptake and integration of social sustainability principles within sustainability frameworks.

Another issue in the accurate presentation of social sustainability measures applies to the scale and applicability of the information presented. Sustainability can be measured on a global scale (Vanclay, 2003), but also on smaller geographical scales, such as those relating to a country, region or locality. Herzi & Nordin Hasan (2004) propose an agenda for the integration of sustainable development within management frameworks for use in Selangor, Malaysia, which, while it contains a similar set of social sustainability indicators as other

[10] It is not appropriate here to enter into the debate about how we 'know' something, an ongoing source of work for those in philosophy of science circles. Even the 'positivists' within the scientific community take differing positions.

proposed frameworks, contains specific measures as only applicable to Malaysia. Husted (2005) has demonstrated that cultural conditions and assertions are key determinants of a country's approach to environmental sustainability practices. In this sense, scale, location and cultural elements are all potential issues in the development of a universal definition of social sustainability, and its definition may require alteration depending on these parameters.

Additionally, the issue of applicability of information presents difficulty in communicating social sustainability measures. It may vary depending on several factors, one being the level of current understanding of social sustainability that an end user or recipient of this information already has. Within the context of a commercial organisation, the area of application of social sustainability measures may be of the highest importance. Two possible scenarios are presented to illustrate this: 1) an organisation may employ a "top down" approach, meaning that those in higher positions of authority may prescribe and enact policies which attempt to enhance the social sustainability of the organisation, or; 2) an organisation may employ a "bottom up" approach, wherein concepts of social sustainability are integrated into worker training, and it is the responsibility of those in lower positions of authority to uphold social sustainability concepts within the organisation. While both options may be relevant, the selection process may vary greatly, depending on the level of understanding currently held by those receiving the information. This may present a potential issue to those wishing to integrate social sustainability concepts into their own organisation(s) and/or supply chain(s).

5.2 A proposed generic framework

Using all of the resources found in this report a generic framework for understanding and reporting on social sustainability has been produced (see Appendix 2: Table A.1). It has been developed to be as comprehensive as possible but there will no doubt be aspects missing and others that are open to debate. This full version of the framework, also provides the sources for the concepts in the table and how they overlap with other pillars of sustainability. Table 5.1 shows the sources used for the production of this framework and their origins, scope, drivers and scale.

As the focus of this framework is across many levels – individual, organisation, sector, national, international – it has many features that are not appropriate for the NZSD at this point with its focus on sector organisations and individual farming and grower businesses. Therefore, it has been reduced to a more concise, but still generic version (Table 5.2), in order for it to serve as a starting point for those wishing to develop a social sustainability assessment framework. It provides a basis for decisions on what social sustainability dimensions could be included in a sustainability dashboard. To match the New Zealand Sustainability Dashboard (NZSD) (see Hunt et al., 2014a) the first column has been called an 'outcome', the second includes the objectives associated with the outcomes, and the third the indicators associated with the objectives. There has not been a strong effort to produce objectives and indicators that are discrete, mutually exclusive and do not double up because this overlapping and fuzziness is part and parcel of the nature of social sustainability and the debate over its meaning.

Table 5.1: Sources of social frameworks and indicators, their origin, scope, drivers and spatial scales

Code	Initiative	Origin	Scope	Key driver			Spatial scale					Source
				Policy	Market assurance	Business improvement	Farm	Industry	Regional	National	International	
SAFA /FAO	Sustainability Assessment of Food and Agriculture	International (FAO)	Agricultural Sustainability		x	x	x	x	x	x	x	http://www.fao.org/nr/sustainability/sustainability-assessments-safa/en/
StatsNZ	Statistics NZ framework for measuring sustainability	NZ	Sustainability	x						x	x	www.stats.govt.nz/
ISO 26000	Social Responsibility	International	Sustainability		x	x	x					www.iso.org/
GRI G4	Global Reporting Initiative	International	Sustainability		x	x	x					www.globalreporting.org/reporting/g4/Pages/default.aspx
ARGOS	Agriculture Research Group on Sustainability	NZ	Sustainability	x			x	x				Hunt et al. (2005, 2006); Fairweather et al. (2007a, b); Rosin et al. (2010); Campbell et al. (2012)
IFOAM	International Federation of Organic Agriculture Movements Standard	International	Organic	x	x	x	x	x	x	x	x	http://www.ifoam.org/pt/ifoam-standard
SAN RA	SAN RA Chain of Custody – Rain Forest Alliance	International	Sustainability		x	x	x	x			x	www.rainforest-alliance.org/.../san-ra-chain-of-custody-standard.pdf
SAI	Sustainable Agriculture Standard (SAI) Global Farm Sustainability Assessment	Australia/ International	Sustainability		x	x	x	x				www.saiglobal.com/
GlobalGAP	GlobalGAP	International	Sustainability		x	x	x	x			x	www.globalgap.org
localg.a.p.	GlobalGAP product for emerging local markets	International	Sustainability		x	x	x	x				www.globalgap.org
ETI	Ethical Trading Initiative Base Code	International	Social –		x	x	x	x				www.ethicaltrade.org/eti-base-code
UNEP	Social—Life Cycle Analysis	International	Sustainability	x			x		x	x	x	www.lifecycleinitiative.org
DEFRA	Sustainable Development Indicators	UK	Sustainability	x					x	x		DEFRA 2012
MOST	Management of Social Transformations	International	Social	x					x	x	x	www.unesco.org
CCB	Climate, Community and Biodiversity Standards	International	Sustainability		x		x	x	x	x		www.climate-standards.org/ccb-standards/
WEF	World Economic Forum – New Vision for Agriculture	International	Sustainability	x					x	x	x	www.weforum.org/reports/realizing-new-vision-agriculture-roadmap-stakeholders
GSCP	Global Social Compliance Programme	International	Sustainability	x	x	x		x		x	x	www.gscpnet.com
SA8000S	Social Accountability 8000 Standard	International	Social		x	x	x	x				www.sa-intl.org/sa8000

Code	Initiative	Origin	Scope	Key driver			Spatial scale					Source
				Policy	Market assurance	Business improvement	Farm	Industry	Regional	National	International	
IIRC	International Integrated Reporting Council	International	Sustainability	x	x	x	x	x		x	x	www.theiirc.org/international-ir-framework/
FSC	Forest Stewardship Council Standards	Canada/ International	Sustainability		x	x	x	x		x		https:\\ic.fsc.org/certification.4.htm
SFI	Sustainable Forestry Initiative Standard											www.sfiprogram.org/sfi-standard/
Montreal Process	Montreal Process Criteria and Indicators	International	Sustainability	x	x	x	x	x				www.fao.org/docrep/004/ac135e/ac135e08.htm
ILO	ILO Labour Standards	International	Labour	x	x	x	x	x		x	x	www.ilo.org/global/standards/lang--en/index.htm
OECD	OECD Guidelines for Multinational Enterprises	International	Sustainability	x	x	x		x		x	x	http://mneguidelines.oecd.org/
FT	Fair Trade International	International	Fair trade	x	x	x		x		x	x	www.fairtrade.net/standards.html
FA	Food Alliance	International	Sustainability	x	x	x	x	x				http://foodalliance.org/certification
LEAF	LEAF Marque	UK/ International	Sustainability		x		x					www.leafuk.org/leaf/farmers/LEAFmarquecertification/standard.eb
FoS	Friend of the Sea – Aquaculture Farms or Wild Catch Fisheries	Italy /International	Sustainability	x	x	x	x	x		x	x	www.friendofthesea.org/
UN	UN Global Compact	International	Human Rights	x	x	x	x	x		x	x	https://www.unglobalcompact.org/aboutthegc/TheTenprinciples/index.html
DfE	Design for the Environment: Safer Product Labeling Program	U.S.A. (EPA)	Product assurance		x	x	x	x				http://www.epa.gov/dfe/
Red Tractor	Red Tractor Standards	U.K.	Food assurance		x	x	x	x				www.redtractor.org.uk/home
SWI	Sovereign Wellbeing Index	NZ/Europe	Wellbeing							x	x	http://www.mywellbeing.co.nz/mw/sovereign-wellbeing-index.html

Table 5.2: Generic framework for a social sustainability assessment for agribusiness

Proposed overarching concept - outcome	Includes objectives:	Indicators	Examples of measures
Good health and wellbeing are achieved	Lifestyle/way of life/quality of life Decent livelihood	Personal health Happiness Security Decent livelihood Stress levels Social participation Co-operation Satisfaction A sense of belonging Sense of responsibility Confidence in the future Trust in others Optimism/hopefulness Autonomy Values Meaning and purpose in life	I lead a purposeful and meaningful life (Agree scale) I actively contribute to the wellbeing of others (agree) Income - wage level
Equity is supported	Equality of opportunity, equity of access to resources	Ability to improve personal situation in terms of comfort and personal well-being Non-discrimination – gender, race, creed Support to vulnerable people	
	Equity of generations	Access and equity independent of age Future taken into account	
	Decent livelihood	Fair access to means of production Capacity development	

Proposed overarching concept - outcome	Includes objectives:	Indicators	Examples of measures
Principles of good governance and human rights are followed	Governance/political system	Participation Political trust Due diligence Transmitting awareness of social sustainability Sense of community responsibility Mechanism for community identification of strengths and needs Mechanism for community to fulfil own needs Mechanism for political advocacy to meet other needs. Free from corruption Grievance mechanisms	
	Human rights	Investment Indigenous rights Assessment Suppliers Grievance mechanisms Personal and property rights Human Rights Risk situations Avoidance of complicity Civil and political rights Economic, social and cultural rights	
	Principles of Social Responsibility	Accountability Transparency Ethical behaviour Respect for stakeholder interests Respect for the rule of law Respect for human rights	

Proposed overarching concept - outcome	Includes objectives:	Indicators	Examples of measures
Principles of good governance and human rights are followed (follow-up)	Consumer issues and product responsibility	Fair marketing Factual and unbiased information Fair contractual practices Protecting consumers' health and safety Sustainable consumption Consumer service, support, and complaint and dispute resolution Consumer data protection and privacy Access to essential services Education and awareness	
	Fair trading and operating practices	Responsible buyers Rights of suppliers Anti-corruption Responsible political involvement Fair competition Promoting social responsibility in the value chain Respect for property rights	Fair pricing and transparent contracts
Labour rights are observed	Compliance with Work and Labour rights/ ILO 8 Core conventions	Employment relations Forced labour Worst forms of child labour Freedom of association and right to bargaining Employee training Non-discrimination Forced compliance Grievance mechanisms Freedom of association and protection of the right to organize Right to organize and collective bargaining Minimum age Equal remuneration	Limitation of work hours especially for children and minors
Employment practices are acceptable	Employment practices Decent work	Employment and employment relationships/labour management relations Working conditions Social protection	Participation in organisational activities Provision and maintenance of safety equipment

Proposed overarching concept - outcome	Includes objectives:	Indicators	Examples of measures
Employment practices are acceptable (follow up)		OSH Training and education/capacity development Diversity and equal opportunity Gender Remuneration Supplier assessment Grievance mechanisms Access to fair wages at work Participation at work/social dialogue	Implementation of OSH practices
	Health and Safety at work	Workplace safety and health provisions Health and Safety training Safety of workplace Health coverage and access to medical care	ACC rating Compliance Implementation of OSH practices Have a health and safety policy Growsafe certification Time off for doctor's visits
Community resilience is enhanced	Community involvement and development	Community involvement by business Contribution to local community Employment creation and skills development Technology development and access Wealth and income creation Social investment Human capital	% Turnover used in community % jobs filled by locals
	Support of culture and identity	Culture and identity/ System of cultural relations Commitment to bi-culturalism Identity Sense of place	
	Cultural diversity	Respect for indigenous knowledge Food sovereignty	Maintenance of the traditional forest stewardship practices
	Social capital, social cohesion	Participation – socially, at work Social connectedness Trust	

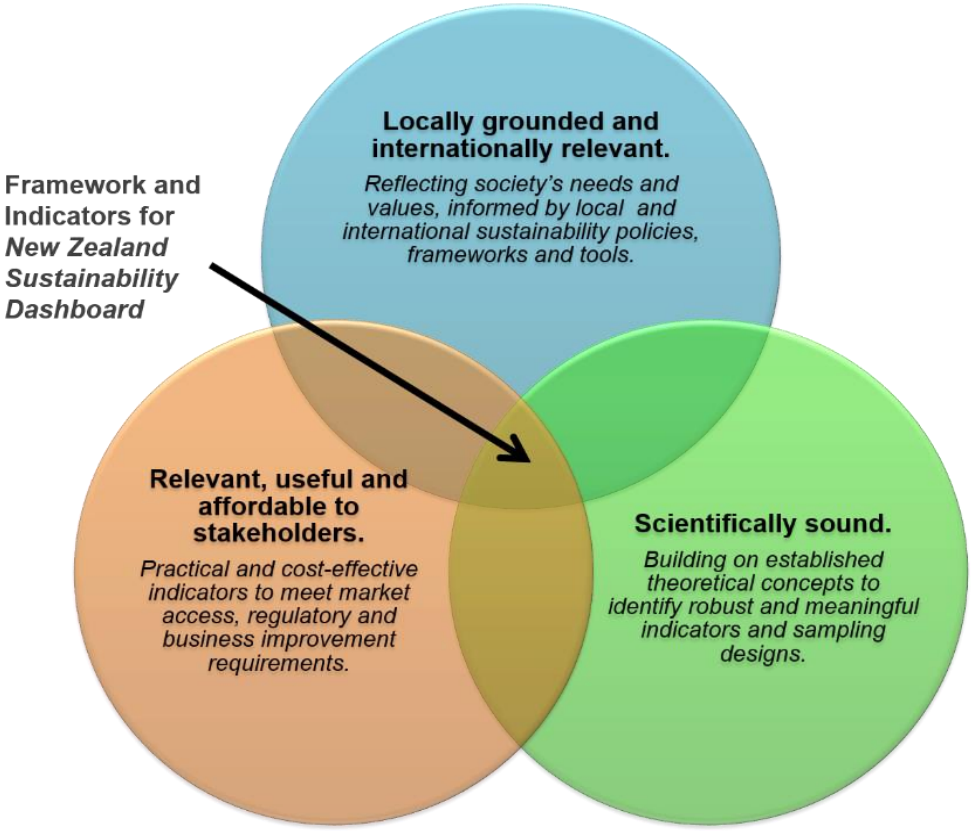

Figure 5.1: **Criteria used to select framework and indicators for New Zealand Sustainability Dashboard**

Source: Hunt et al., 2014a

The proposed framework includes these outcomes:

- Good health and wellbeing are achieved. In as much as an organisation can be responsible for the wellbeing of those employed, this outcome expects that employees (and the employer) are able be rewarded well enough in their work for them to achieve a good quality of life outside of work and within the workplace.
- Equity is supported. Within the organisation there is equality of opportunity and remuneration that provides a decent livelihood.
- Principles of good governance and human rights are followed. This may already be included under the governance pillar of a sustainability assessment. It means that an organisation practices good governance – it has a system of governance that is transparent, encourages participation of all stakeholders including employees etc. It supports the rule of law and subscribes to the protection of human rights and follows the principles of social responsibility. It takes responsibility for the products it products or the services it provides. It follows fair trading and operating practices.
- Labour rights are observed. This outcome could be included under governance because labour rights may be about compliance with the rule of law, for such things as no forced or child labour, the way in which employment relations are conducted, access to training, no discriminatory practices etc.

- Employment practices are acceptable. This outcome could include labour rights, but it usually includes greater detail on working conditions, details about remuneration and contracts, mechanisms for dealing with grievances, health and safety in the workplace etc.
- Community resilience is enhanced. The direct role of an organisation in community resilience may be limited, but indirectly it can be very important because it provides part of the means for people to participate in their communities. Directly an organisation can contribute through providing employment and training and supporting community activities in different ways. It also can provide support of and respect for differing cultures and encouragement of a sense of identity. The workplace is also a place where people can participate in different ways and develop social connectedness and trust of others and institutions.

To develop their own social sustainability framework, an organisation will need to decide how it would like to measure the indicators it wishes to use and choose measurements that it knows can be easily gathered within its organisation. It is important that they fit the criteria for relevance (local, organisational, practically but rigorously grounded) developed for the NZSD as demonstrated in Figure 5.1. Alternatively, the framework could be used in a qualitative way, as a provider of issues which could be a focus of discussion in order to carry out an assessment in a different way, such as using open-ended questions.

5.3 Achieving organisational compliance of social sustainability

While the literature may make reference to compliance generally (usually referring to environmental law compliance practices), there is less information about compliance with socially-based assessments and voluntary standards, particularly in a sustainability setting. The methods and procedures by which an organisation is able to achieve compliance with such laws and standards across their entire organisation may warrant further research to determine the most appropriate courses of action for the fulfilment of sustainability assessment in organisations. However, some implications can be drawn from the literature on compliance in general.

Some thoughts about compliance from the good farming literature

There is ample evidence from many countries that farmers do not change their practices in the way environmentalists and government agencies would wish even when offered schemes which reward them for doing so (e.g., U.K. – McEachern, 1992; Finland – Silvasti, 2003; Norway – Setten, 2004; Austria - Schmitzberger et al., 2005; Australia - Lockie & Higgins, 2007). This lack of change has often been linked to farmers' attitudes or orientations (Morris et al., 1995) and has tended to be disconnected from what farmers actually 'do' (Burton & Wilson, 2006). Self-concepts are also influenced by "institutional and structural factors". In other words, this perspective does not place farmers in a social and political context (Burton, 2004a; Burton et al., 2008; White & Selfa, 2013), farmers themselves do not recognise the categories into which they are placed (Vanclay et al., 2006) and farmer's local knowledge is not valued (Chambers et al., 1989; Gladwin, 1989; Van der Ploeg, 1993, 1994; Wynne, 1992, 1996; Buhler, 2002). Also attitudes have not been shown to be predictors of action (Azjen & Fishbein, 1980; Ajzen & Madden, 1986; Burton, 2004a). More recently an understanding of 'the good farmer' which included behaviours and actions, with an interest in identity and context (e.g., Burton, 2004b; McGuire et al., 2013) has come into prominence. This approach explores what it means to be a 'good' farmer in a farming community, and uses qualitative research to study farmers to understand why farmers do what they do (Burton, 2004a). The

concept of the 'good' farmer has arisen as "production-oriented roles came to symbolise, both to farmers and the country, the notion of good farming practice that enabled farmers to claim a high social position as caretakers of the nation's food supply" (Burton, 2004b: 1).

To explain farmers' proclivities to certain actions some researchers have used Bourdieu's theory of practice (Bourdieu, 1990, 1998) to inform the 'good farmer' approach. How do people come to see the unthinkable not only as thinkable, but do-able and transformed into action? Bourdieu's theory is based on three elements – habitus, field and capital – of which habitus is of the most relevance to this paper. Habitus, described as a 'disposition to act', is not necessarily conscious or articulated but has become embodied in people through practice (Adams, 2006a: 514-516). These dispositions have been influenced by family practices over the generations, community and national cultures, and educational systems and continue to grow and change over a person's lifetime. Habitus describes the taken-for-granted world, like a 'fish in water' (Bourdieu & Wacquant, 1992: 127), enabling a 'feel for the game' (Bourdieu, 1990: 66-68), and knowledge of what is the 'right thing to do' (Bourdieu, 1998: 8). As a result, some actions become unthinkable (Bourdieu, 1990: 59; Shucksmith, 1993: 468).

So applying these perspectives more broadly to organisations as well as farmers, it could be suggested that to incorporate a sustainability assessment into practice a farmer, grower or orchardist or those in an organisation must see it as 'thinkable' – that is such practices need to be able to be easily incorporated into what a person does, and they need to be visible in some way and recognised by the community of which the person is part, as practices which contribute to the symbolic status of the person or organisation – that is they are symbols which represent a good person or a good organisation. The implication is to first of all choose items for social assessment that a farmer or organisation already does and is proud of and make them even more visible by recognising them in the assessment, and then slowly introduce more challenging items as the assessment itself becomes more valued. Secondly, it is important that there is participation of all stakeholders in the selection of outcomes, objectives, indicators and measures of those indicators. This is more likely to create participation and ownership of the assessment and pride in its achievement and therefore the enthusiasm to advocate for it to others.

Some thoughts about compliance from the sociology of work literature

The perspective taken in the sociology of work literature makes an important contribution to the debate about achieving compliance with social sustainability goals. Some of the literature, as in the 'good farmer' approach, also emphasises the importance of taking account of identity (Ashforth & Mael, 1998). If sustainability policies are implemented in such a way that is not accepted by those in the workplace who have to carry out the work 'practices' to achieve those goals and meet the requirements of the assessments then there will be problems within the work organisation as employees resist because they see themselves as not belonging and not having control over the work they do (Hunt, 2003, 2009). It has been found that if the required practices fit into the identity of those who do them then they are more likely to be successful (Hodson, 2001). For example, those who work to support New Zealand farmers will be happier implementing policies that they see as doing that. If people do not support the system in which they are employed then they are more likely to 'play the game' of compliance while trying to achieve their own, not necessarily selfish, ends, which can be very stressful as at heart they see themselves as lacking in integrity (Wilmott, 1993; Hunt, 2009). In other words, people work in ways that make their lives meaningful and this drive is very powerful. They believe they are making a contribution in some way or other, not necessarily just in the amount that they earn, though that too can bring them status apart from the monetary reward (Hunt, 2003, 2009).

Hence, this research also emphasises the need to have the support of those who are going to be actually 'practicing', carrying out or implementing the social sustainability policy and to do this by taking seriously their involvement in the policy and how it is to be implemented. Such implementation can actually help participants to live meaningful lives and as such incorporate into it aspects that already form part of such meaning. It also implies that need for education about what matters to an organisation and how everyone, including the chief executive and the management team, are going to 'walk the talk'.

Compliance with standards

While this report is about incorporating the assessment of social sustainability through its incorporation into an assessment tool, there is some literature about compliance with standards that is applicable. There is an acknowledgement in the literature that some organisations seek the seal of approval of a standard not necessarily for technical or regulatory reasons but as a sign of legitimacy (Westphal et al., 1997; Zbaracki, 1998), and that once a standard is awarded compliance becomes a ceremonial act (Fiss & Zajac, 2006). Though the NZSD is not a standard, it could be that an assessment by it could be considered as a license to farm. However, Sandholtz (2012) found this behaviour only to be true for one part of the two parts of the same manufacturing organisation he studied when examining the implementation of an ISO standard, and so he was able to study what made one part different from the other. The literature takes several positions. One is that wherever there is a drive for homogeneity, somehow heterogeneity persists (Feldman & Pentland, 2003). Another is that standards are abstract and need to be adapted to the local context (Seidl, 2007; Timmermans & Epstein, 2010). Empirical evidence supports Thévenot's (2009) claim that it is virtually impossible to achieve uniformity across time and in different places (e.g., Beck & Walgenbach, 2005, Storz, 2007). What Sandholtz (2012: 656) found was that "three common types of rules – standards, directives and norms – are interconnected when an organization adopts and implements a standard". According to Brunsson & Jacobsson (2000) "norms are the least obtrusive and the most powerful. Directives are the least adaptable, requiring an authority structure in which to operate. Standards are more subtle that directives, able to insinuate themselves into an actor's voluntary exercise of agency and catalyse the creation of directives or the evolution of norms" (Sandholtz, 2012: 676). In other words, standards may be able to actually be incorporated into a person's habitus, to use Bourdieuian language, and become part of what helps a person to live a meaningful life. Then this may also lead to the construction of directives as people seek to impose what they have found to be important on others. What Sandholtz (2012: 676) found was that there was a risk that the voluntary nature of compliance with standards could be lost as they were converted into directives, but if "the standards originate within the group and incorporate its norms and practices, then the resulting directive will encounter less resistance. Tightly coupled compliance with the external standard is thus rendered possible". If this does not happen then a history of failed attempts at implementation of standards could make it impossible to implement any more standards into an organisation because such a strong culture of resistance would have developed.

Differing national and organisational contexts

Some research about the effective installation of compliance with voluntary and other standards within organisations has been undertaken. Trienekens & Zuurbier (2008) suggest the successful application of food safety and quality standards across three geographical regions, including the European Union, Mercosur (South American) and African, Caribbean and Pacific Group of States (ACP) is related to whether the institutional and infrastructural environment is conducive to enabling standards implementation. Henson & Caswell (1999) found that responses from organisations towards the implementation of food safety regulatory processes may vary depending on the perceived benefits of implementation. Similarly, Sindhi

& Kumar (2012) in their discussion of barriers to the development and implementation of Corporate Environmental Responsibility, thought that the short-term need for economic gain may override long-term ecological goals, and institutional incentive systems may reward immediate action over long-term planning for environmental sustainability.

5.4 Implementing social sustainability assessment

This section outlines recommendations for commercial entities seeking to incorporate social sustainability principles into their current policy and practice frameworks. All recommendations included are based upon the academic and standards literature reviewed above.

As previously discussed, there is currently a high demand from organisations and end-users alike for the inclusion of a more comprehensive and robust set of standards about the maintenance of sustainability principles in organisational practices. This is particularly true of the development of policies that incorporate the four essential pillars of sustainable development (governance, environmental, economic and social). While methodological issues about the accurate measurement of the social dimension of sustainability have become evident, there are several current frameworks already introduced in this report that present clear methodologies for the potential measurement and improvement of social conditions within the commercial organisation. The most refined of these at present is the FAO's Sustainable Assessment of Food and Agriculture Systems (SAFA) framework. The NZ Sustainability Dashboard team has also produced a synthesis report presenting and justifying the Dashboard framework and indicators, which contains a chapter on the social sustainability framework (see Hunt et al., 2014a).

An example of the documentation that goes with an assessment tool

The following describes all the material provided by the FAO for SAFA to institute their own framework. The extent of this material would not necessarily need to be replicated by any organisation instituting its own framework because the SAFA one is intended as a resource, for organisations to build their own framework. Hence, the Dashboard, for example, refers to the SAFA framework to justify its choices (Hunt et al., 2014a). At present, the most up-to-date version of the SAFA framework (December 2013) comprises three key documents: SAFA Guidelines (FAO, 2013a), SAFA Indicators (FAO, 2013b), and SAFA Tool (FAO, 2013c) User Manual. The first, SAFA Guidelines, outlines the rationale, purpose and intention of the SAFA framework, explaining the hierarchal structure of the themes, sub-themes and indicators within the framework. It also outlines potential tools and indicator selection processes that could be potentially used alongside the SAFA framework (FAO, 2013a). The second document, SAFA Indicators, provides a comprehensive catalogue of the SAFA themes, sub-themes and indicators of the framework. Each indicator is described, and its relevance to organisation type and supply chain levels, unit(s) and method(s) of measurement, rating options, limitations, and additional external sources of information is provided (FAO, 2013b). The third document, SAFA Tool User Manual, describes the processes and technical details of a downloadable computer programme designed for use with the SAFA framework. This tool is currently in its beta testing stages, and public invitations have been made via the SAFA website for individuals interested in testing the tool. It allows users to assess the sustainability of a commercial food production entity with four key stages – Mapping, Contextualization, Indicators and Reporting. The Mapping aspect of the SAFA Tool is used to "map" the supply chain of the organisation, in order to specify which elements are to be measured, which points of the supply chain at which direct company influence ceases, where all organisational boundaries exist, and at which points in the supply chain interactions between parties occur.

Contextualization then places the organization within a specific set of circumstances, including elements of their socio-political, geographic or regional circumstances. The Indicators portion of the SAFA Tool allows users to input data about the indicators, providing information on specific data types (primary/secondary), possible sources of information, methodological protocol and other background information. The final stage, Reporting, renders a singular, transparent assessment result to the user, based on the information provided, including all elements of the previous three stages (FAO, 2013c).

A tool for comparison with other frameworks

The International Trade Centre's (ITC) Standards Map may be useful as an alternative way of developing a measurement/assessment tool, or as a means of measuring an organisation's current policy setting against a wealth of international voluntary standards (see Appendix 1). This tool allows for a high degree of customisation (i.e. geographical regions, type of organisation, etc.), and selects the most appropriate standards as relevant to these specifications from across 132 international voluntary standards.

The final section of this chapter makes recommendations drawn from this report, on how an agribusiness organisation could implement a social sustainability assessment tool or integrate it within an already existing sustainability assessment.

5.5 Recommendations

Recommendation 1: Develop your own definition of social sustainability.

Recommendation 2: Use the proposed framework as a basis for selecting outcomes and objectives that stakeholders agree are of relevance to them and their industry in the future and choose indicators that are relatively easily measured or the measures are already available.

Recommendation 3: Use a fair and transparent consultative process to make this selection and to agree on how the implementation of your industry social sustainability assessment/Dashboard is to be carried out.

Recommendation 4: Add something more to the assessment/Dashboard as it is realised what other things are important. Delete things that are not proving to be useful or are not working.

Recommendation 5: Choose outcomes that are an important part of the identities and a source of pride for those involved in the industry, from the wine growers, winemakers, growers/orchardists, packhouse employees, farmers and employees from other industry organisations and businesses.

Recommendation 6: Do not be scared to add in more qualitative, voluntary and exploratory 'add-ons' that measure more subjective concepts and individualistic measures of such things as wellbeing. Develop an index of wellbeing (or whatever) that makes sense to those who will be participants in the assessment/Dashboard.

Recommendation 7: Every three or four years carry out open-ended interviews of a random selection of assessment/Dashboard users to explore how it is going and what recommendations they would make to improve it. Report on how these suggestions have been incorporated into the Dashboard and the way it is used by the organisation.

6 Conclusion

The importance of sustainability was internationally recognised by the World Commission on the Environment and Development in 1987 and was first dominated by the developing interest in the environment in the 1960s and then by economics with the growth of neo-liberalism throughout the Western world in the 1970s and 1980s (Colantonio, 2009). Debate about social sustainability and what it might mean has been ongoing, particularly in academic circles (e.g. Lehtonen, 2004; Vallance et al., 2011; Landorf, 2011; Boström, 2012), with no universal acceptance of particular definitions or measurements (Omann & Spangenberg, 2002; Koning, 2002), or, for that matter, whether it should be measured at all (Bell & Morse, 2008; Boström, 2012). In the meantime, in spite of this debate, many organisations have developed their own sustainability frameworks and standards with indicators and measurements of social sustainability.

From these frameworks a core set of concepts can be determined as a base on which to build a sustainability assessment. The outcomes and objectives of this are shown in Table 6.1. The outcomes covered are:

- Good health and wellbeing are achieved.
- Equity is supported.
- Principles of good governance and human rights are followed.
- Labour rights are observed.
- Employment practices are acceptable.
- Community resilience is enhanced.

Some of the outcomes are not entirely the responsibility of an employing organisation and would also apply to individuals, communities and government. All are inter-related and not mutually exclusive. In a sustainability framework some overlap with the other pillars of sustainability and so could be covered all or in part by the governance, economic or environmental pillars. Within these outcomes, possible objectives and indicators are provided in Table 5.2 for an agribusiness organisation, while Table A.1 in the Appendix provides a fuller version which could be useful at an individual, or government level. Whatever system is used, in the end ways of measuring the indicators would need to be decided on a case by case basis. At the point these things need to be taken account of:

- Type of measure
    - Can the indicator be operationalized (i.e., expressed in such a way that can be measured)?
- Classification
    - Is it ‘easy’ or ‘difficult’ to measure?
- Which organisation will be using which measures?
    - Government/local government
    - Company/business
    - Organisation responsible for compliance (e.g., SWNZ)
    - Sector organisation
    - Research organisation.
- Is the measure relevant to all who will be using it? Does it make sense?

Table 6.1: Basic outcomes and objectives in a social sustainability framework

Proposed overarching concept - outcome	Includes objectives:
Good health and wellbeing are achieved	Lifestyle/way of life/quality of life Decent livelihood
Equity is supported	Equality of opportunity, equity of access to resources
	Equity of generations
	Decent livelihood
Principles of good governance and human rights are followed	Governance/political system
	Human rights
	Principles of Social Responsibility
	Free from corruption Grievance mechanisms
	Consumer issues and product responsibility
	Fair trading and operating practices
Labour rights are observed	Compliance with Work and Labour rights/ ILO 8 Core conventions
Employment practices are acceptable	Employment practices Decent work
	Health and Safety at work
Community resilience is enhanced	Community involvement and development
	Support of culture and identity
	Cultural diversity
	Social capital, social cohesion

On the other hand, an organisation could start from scratch, as in the ARGOS programme, and develop their own sense of what social sustainability might mean and if and how it could be measured. All of these things are to be decided by the organisation setting up their own sustainability assessment system.

If adoption of the sustainability assessment system is to be successful, one way or another it will need to be owned by all stakeholders who will be participating in it, from those who will be doing the measuring and entering data, to those who will be interpreting it and applying it to their organisational policies and actions, and to the market to which it is to be promoted as a worthy attribute of a product. If along the way, people are able to take pride in it because it contributes as one of the things that makes their own lives meaningful, then the chance of success will be increased and the support for its further development will be more likely.

It is important that the 'social' is part of any sustainability assessment system, even if it ends up not being measured quantitatively because otherwise it could be forgotten about, when it is an essential part of progressing towards sustainability. What use would it be to move towards environmental and economic sustainability if the people achieving it were not treated well, and did not have the freedom to achieve and be responsible for their own destinies?

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Appendix 1: The International Trade Centre (ITC) Standards Map tool

An alternative tool for assessing the appropriate use of international voluntary standards within an organisation is the International Trade Centre (ITC) Standards Map. These standards (as discussed above) allow organisations to assess their own sustainability, with specific relation to the three pillars of sustainable development (environmental, social and economic). The ITC Standards Map provides information regarding 132 international voluntary standards, which are included within four key online tools for organisational use: Identify, Quick-Scan, Compare and Self-Assess.

The first tool, Identify, assists interested parties in providing information about the appropriate standards for a particular organisation based the provision of information regarding the type, locality and destination market of the organisation. This tool also allows for further specification by the user, allowing them to define the focus (private/public), main environmental, economic and/or social concern(s), as well as quality and integrity issues. When all applicable fields are filled in, the tools provides the user with a list of applicable standards, including a brief summary of the standard and external links to the website of the standard. This tool is available free of charge to any interested users.

The second tool, Quick-Scan, is used to quickly examine a selected number of standards, providing a more detailed analysis of their parameters within categories of Environment, Social, Economic, Quality and Ethics. Information is presented to the user after they have selected a series of applicable standards to analyse in more depth via the Identify tool, and is provided in the form of charts that are displayed on-screen with the inclusion of hover-over statistics and further detail. This tool is also available free of charge to any interested users.

The third tool, Compare, (closely resembling Quick-Scan) allows the user to compare and contrast selected standards on the basis of their adherence to the provision of criteria relating to Environment, Social, Economic, Quality and Ethics categories. Information is presented in chart forms, and provides information relating to the number of requirements per standard, and the number and intensity of requirements per category. In order to use this tool, users must sign up for an ITC Standards Map account, but this information is provided free-of-charge upon completing registration.

The fourth tool, Self-Assess, allows the user to complete a self-assessment of their compliance with previously selected standards. The tool initially prompts the user to complete a questionnaire based on their self-stated performance in Environmental, Social, Economic and Management, Quality Management System and Ethics and Integrity categories. These categories are further broken down by sub-themes, depending on the standards selected. The user's organisation is analysed by comparison with their self-stated answers to these questions and the criteria of the selected voluntary standards themselves. This tool is also provided free-of-charge, but registration is required prior to use.

Within the ITC Standards Map, all of the 132 included standards contain some reference to social criteria. However, as previously discussed, these requirements change depending on several key factors, including the geographical region that the organisation is based in, the destination market of the organisation's product(s)/service(s), and the particular type of product(s)/service(s) produced by the organisation. Furthermore, the Identify tool allows the user to immediately see which of the included voluntary standards contains criteria relating to 7 key social issues: Child labour; Employment practices; Fundamental conventions of the International Labour Organization ; Gender issues; Health and safety at work; Local communities, and; Work and labour rights. This may be very useful in providing information relating to specific social issues as identified within international voluntary standards.

Appendix 2: Table: Full Social Sustainability Framework

Table A.1 A social sustainability framework with sources

Proposed overarching concept - outcome	Includes objectives	Indicators	Found in:	Examples of measures	Overlaps with:
Satisfaction of basic needs	Living conditions	Quality of shelter	Stats NZ (2009), Assefu & Frostell (2007), SAI, Social Accountability 8000 Standard, ETI	% families in own homes.	Governance – human rights
	Basic needs	Food, clean air to breathe, potable water	UN Compact, Landorf (2011), Maslow's Hierarchy of Needs, LocalGAP, ETI, Red Tractor, SAI, IFOAM		Governance – human rights
Good health and wellbeing are achieved	Lifestyle/way of life/quality of life	Personal health Happiness Security Decent livelihood Stress levels Succession plans Social participation Social and community trust Common beliefs and values Co-operation Satisfaction A sense of belonging Sense of responsibility Confidence in the future Trust in others Recognition from friends, family and society Life satisfaction Optimism/hopefulness Autonomy Values Meaning and purpose in life Social relationships Social support	Saunders et al. (2006b), Vanclay (2003), SIA, SAFA (2013), Forestry Stewardship Council, van Beuningen and Schmeets (2012), Max-Neef et al. (1989), Sen (2013), Nordstrom Kallstrom and Ljung (2005), Sovereign Wellbeing Index/European Social Survey (AUT)	Contacts with family, friends and neighbours Trust in army, police, judges, civil servants, press, large companies I lead a purposeful and meaningful life (Agree scale) My social relationships are supportive and rewarding (Agree) I actively contribute to	

Proposed overarching concept - outcome	Includes objectives	Indicators	Found in:	Examples of measures	Overlaps with:
		Physical activity Nutrition Time use Fear and aspirations		the wellbeing of others (agree)	
	Access and equity of access (see equity below)				Governance
	Decent livelihood	Income	SAFA (2013)	Wage level	Economic
	Human safety and health		SAFA	Public health	Governance
	Wealth status of a country		FAO (2013) Woolcock (2000)	i.e., GDP/capita	Economics
Equity is supported	Equality of opportunity, equity of access to resources	Access to necessary amenities Access to education, learning and growth, knowledge and skills Access to health services Ability to improve personal situation in terms of comfort and personal well-being Non-discrimination – gender, race, creed Support to vulnerable people	Stats NZ (2009), McKenzie (2004), Assefu & Frostell (2007), ITC Standards Map, Landorf (2011), Murphy (2012), SAFA, Balanced Scorecard Model (Dunn et al., 2006)		Governance
	Equity of generations	Access and equity independent of age Future taken into account	McKenzie (2004)		
	Decent livelihood	Fair access to means of production Capacity development	SAFA (2013)		

Proposed overarching concept - outcome	Includes objectives	Indicators	Found in:	Examples of measures	Overlaps with:
Good governance and human rights are followed	Governance/political system	Participation – political participation Political trust Due diligence Transmitting awareness of social sustainability Sense of community responsibility Mechanism for community identification of strengths and needs Mechanism for community to fulfil own needs Mechanism for political advocacy to meet other needs.	Stats NZ (2009), Vanclay (2003), SIA, van Beuningen and Schmeets (2012), ISO 26000, McKenzie (2004), Murphy (2012)	Voting Political actions Trust in parliament	Governance
	International assistance	Amount donated, time given, or other assistance to an international cause.	Stats NZ (2009)		Governance
	Human rights	Investment Indigenous rights Assessment Suppliers Grievance mechanisms Personal and property rights Human Rights Risk situations Avoidance of complicity Civil and political rights Economic, social and cultural rights	ITC Standards Map, GRI G4, ISO 26000, IFOAM, Vanclay (2003), SIA		Governance
	Principles of Social Responsibility	Accountability Transparency Ethical behaviour Respect for stakeholder interests Respect for the rule of law Respect for international norms of behaviour Respect for human rights	ISO 26000		Governance
	Corruption Public policy		GRI G4		Governance

Proposed overarching concept - outcome	Includes objectives	Indicators	Found in:	Examples of measures	Overlaps with:
	Anti-competitive Compliance Supplier Grievance mechanisms				
	Consumer issues and product responsibility	Fair marketing Factual and unbiased information Fair contractual practices Protecting consumers' health and safety Sustainable consumption Consumer service, support, and complaint and dispute resolution Consumer data protection and privacy Access to essential services Education and awareness	ISO 26000		Governance Economic
	Fair trading and operating practices	Responsible buyers Rights of suppliers Anti-corruption Responsible political involvement Fair competition Promoting social responsibility in the value chain Respect for property rights	ISO 26000, SAFA	Fair pricing and transparent contracts	Governance

Proposed overarching concept - outcome	Includes objectives	Indicators	Found in:	Examples of measures	Overlaps with:
Labour rights are observed	Work and Labour rights/ ILO 8 Core conventions	Employment relations Forced labour Worst forms of child labour Freedom of association and right to bargaining Employee training Non-discrimination Forced compliance Grievance mechanisms Freedom of association and protection of the right to organize Right to organize and collective bargaining Minimum age Equal remuneration	ITC Standards Map, SAFA, GRI G4, ILO (2002), Australian Certified Organic, Ethical Trading Initiative, Sustainable Agriculture Standard (SAI), IFOAM	Limitation of work hours especially for children and minors	
Employment practices are acceptable	Employment practices Decent work	Employment and employment relationships/labour management relations Working conditions Social protection OSH Training and education/capacity development Diversity and equal opportunity Gender Remuneration Supplier assessment Grievance mechanisms Access to fair wages at work Participation at work/social dialogue	ITC Standards Map, GRI G4, ISO 26000, SAFA, FAO (2013), SAI, IFOAM, ETI, Social Accountability 800, Woolcock (2000), van Beuningen and Schmeets (2012), SAI, Red Tractor, ETI, Design for the Environment	Particpation in organisational activies Provision and maintenance of safety equipment Implementation of OSH practices	
	Health and Safety at work	Workplace safety and health provisions Health and Safety training Safety of workplace Health coverage and access to medical care	ITC Standards Map, SAFA	ACC rating Compliance	

Proposed overarching concept - outcome	Includes objectives	Indicators	Found in:	Examples of measures	Overlaps with:
Community resilience is enhanced	Community involvement and development	Community involvement by business Education and culture Employment creation and skills development Technology development and access Wealth and income creation Health Social investment	ITC Standards Map, ISO 26000, Vanclay (2003), SIA, GRI G4, Magis (2010)	% Turnover used in community	
	Support of culture and identity	Culture and identity/ System of cultural relations	Stats NZ (2009), Vanclay (2003), SIA, McKenzie (2004), The Montreal Process, Magis (2010)		
	Cultural diversity	Respect for indigenous knowledge Food sovereignty	SAFA, Forestry Stewardship Council	Maintenance of the traditional forest stewardship practices	
	Social capital, social cohesion	Participation – socially, at work, politically Social connectedness Trust	Stats NZ, Van Beuningen and Schmeets (2012), Murphy (2012), Landorf (2011)	Contacts with family, friends and neighbours	