

# Pursuing happiness in the 21st century - the KiwiGrow™ well-being model<sup>1</sup>

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## Summary

If ongoing change is to be the constant of the 21<sup>st</sup> century, it will be accompanied by that other constant of mankind, the continuing pursuit of happiness. The pursuit of happiness is arguably the ultimate driving force of virtually everything we do, either as individuals, or collectively as communities and nations. However, we have a poor understanding of both happiness, and its relationship to personal well-being – which is what can manage to achieve happiness. Currently there is no consensus on the nature of personal well-being, and all models that have been proposed have an element of subjectivity or some kind of cultural bias.

Recent ecosystem management research has led to a new universal ecosystem health model, marketed by Creative Decisions Ltd as KiwiGrow™. KiwiGrow also provides a credible model for personal well-being that is consistent with traditional values and current understandings of personal well-being, and provides a basis for personal conduct that addresses the need to meet the century's major cultural and ecological challenges.

KiwiGrow is based on a simple, practical, seven-word health model, that is easily applied to natural and modified ecosystems, as well as human dominated “ecosystems” such as cities, corporations, neighbourhoods, and households. It can also be applied to people as individuals, and follows earlier applications of the ecosystem approach in psychology. To be healthy, ecosystems must be *nurturing, supportive, stable, contributing, responsive, directed,* and *adaptive*. For ecosystems such as households and cities, these criteria must be met across social, economic, environmental, and cultural dimensions. For people as individuals, they must hold across the four main dimensions of human well-being – physical, intellectual, emotional, and spiritual. The resulting matrix of 28 well-being sectors is the Personal KiwiGrow well-being model.

The KiwiGrow model sees people as components of an infinitely interconnected, functionally-related global mosaic of ecosystems. It provides a more objective, less arbitrary perspective on personal well-being than has been available to date, and has much in common with the fundamentals of the great religions. Application of the model to the well-being of individuals and households is described, and the implications discussed. These implications appear to be quite profound and far-reaching. However, in contrast to some scientific perspectives which diminish mankind's status in the world, KiwiGrow could form the basis a reinvigorated global society in which achieving our true potential is not only much more likely, but also closely tied to achievement of global well-being and sustainability.

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## Introduction

The 21<sup>st</sup> century looms as unique in the history of mankind. More than ever before, we are confronted with change – some of our own making, and that we can to some extent control, and some which is beyond our control, and challenges our capacity to adapt. We are faced with technological change, social change, environmental change, economic change, and huge cultural challenges. Within all of this, we, as human beings, continue with our quest for happiness, as we have done for thousands of years. Age-old values have guided us to this present point in history, but our record in achieving happiness raises doubts that we are prepared for this new century of change, and so we are faced with the question - how should we conduct ourselves in this new, 21<sup>st</sup> century?

The fact that we are asking this question does not pre-suppose that the best answers that we have available to us now are deficient. But it is important that we do ask the question, and fundamentally re-examine how we approach our lives in this quest for happiness, in this new “climate of change”. Peoples and nations who persistently look outside of themselves for the answers to major problems that confront them have usually destroyed themselves or suffered calamitous readjustment. All of us live, to some extent, in a cultural bubble, that inhibits our ability to see emerging realities clearly, and new ways of conducting ourselves that are better attuned to these new realities.

In this article we have two main points of departure. The first is the body of scientific knowledge, and wisdom, that has accumulated over the years, that illuminates our thinking about happiness and well-being. Personal well-being and happiness have been the focus of human concerns for millennia, underpinning evolution of the great religions, as well as innumerable local traditions and spiritual “pathways”. To an objective observer, looking at outcomes, there is no apparent pinnacle to this effort. Different formulas have met with successes and failures, in different contexts. Harvard’s Daniel Gilbert (2006), has put this lack of clear, directed and successful progress in methods to achieve happiness down to our poor understanding not only of the nature of happiness and well-being, but to inherent inadequacies that we have in our ability to process information and make the decisions that would lead us towards happier lives. Likening happiness to the colour yellow – easy to recognise, but difficult to explain – he concluded that “There is no simple formula for finding happiness. But if our great big brains do not allow us to go sure-footedly into our futures, they at least allow us to understand what makes us stumble”. So our first point of departure leaves us with a kind of compassionate sadness regarding our ability to deliberately lead lives that bring us the happiness we seek.

The second point of reference arises from new understanding of the nature of what it means to be sustainable, and the nature of ecosystem well-being. Creative Decisions has contributed to this through a new model for sustainable development of ecosystems, that is itself based on the idea of well-being (Luckman 2005; 2006a,b,c,d,e). The new model underpins a holistic new approach to achieving sustainable development and well-being. Marketed under the trademark KiwiGrow™, it provides the basis for a proposed certification and accreditation regime for managed entities. Not only does KiwiGrow help us manage ecosystems sustainably, but it also gives significant insight into how we should manage ourselves. The model has a clarity, simplicity and resonance, that mean it could provide a useful “handrail” for us as we collectively make our way into the 21<sup>st</sup> century. Its simplicity and ease of communication allow it to be taken on board rapidly, to reach a popular self-help audience that demands solutions they can understand and readily apply. After all, it is usually the simple things that bring happiness, even if it is just a glimpse of the deeper happiness and well-being that is our real goal. Despite the wisdom of Daniel Gilbert, the search for the simple solution goes on, as it will always do, and we aim here to examine whether this new, simple KiwiGrow model can help to take us forward.

We approach this task as follows. Firstly we examine the ideas of personal well-being and happiness more closely, and then dissect the concepts to clarify the real object of our investigation. We then look broadly at where research psychologists have got to in understanding, scientifically, how happiness and well-being can be measured and achieved. For some insight into how far religion and spirituality can be ahead of science, in developing faith-based approaches to achieving happiness, we briefly consider how happiness is viewed by Buddhists, who have been seeking scientifically-based evidence for the effectiveness of their spiritual practices. Next we look at how ecological systems approaches have already been brought to bear in the field of psychology, before moving on to introduce the KiwiGrow model, and its extension to the domain of personal well-being. With this general understanding in place, we look at how KiwiGrow can be applied to assess, and manage, the well-being of a household, and of people as individuals, and discover that it not only reflects, and expresses in a very compact and easily communicated form, much of what we know already, but it also leads to some new insights - some of which are in line with emerging thinking. Finally, we conclude with some comments on the practical applications, and return to reassess Daniel Gilbert’s rather pessimistic conclusion, and ask whether we do in fact have not only a simple formula that could help us find happiness in a century of change, but also, perhaps, a fully-fledged, well-structured model that can provide the basis for a new science of well-being.

## **What do we mean by “personal well-being”?**

Most work on personal well-being starts from the idea of happiness. While there seems to be agreement that the desire to achieve happiness is the central driver of human existence, there is no real consensus as to how to define it or measure it. In the broadest sense, it equates to well-being, or quality of life. However, it is useful to differentiate more specific meanings. Veenhoven (2006) differentiated between factors which related to the potential for a good life (“life chances”), and the actual outcomes of life (“life results”), and also between factors that were internal and those that were external. This led to four qualities of life, all of which have been denoted, at various times, as “happiness” (Table 1).

**Table 1:** Four qualities of life (Veenhoven, 2000).

	<i>Outer qualities</i>	<i>Inner qualities</i>
Life-chances	"Livability of environment"	"Life-ability" of the person (well-being, or health)
Life-results	"Utility of life"	"Life satisfaction"

Veenhoven's "Livability of environment" relates to the well-being of the individual's total life-context – the external circumstances that determine opportunities for happiness. "Life-ability of the person", on the other hand, includes factors that determine how well we respond to life's problems and opportunities, and is broadly similar to the concept of personal health or well-being, which tends to be the focus of therapists and educators. In the domain of outcomes, "Utility of life", describes the extent that an individual's life contributes to some higher value, while "Life satisfaction" describes the subjective appreciation of life. Life satisfaction is commonly referred to as subjective well-being, or simply as happiness. In this paper we follow these distinctions, and equate "personal well-being" with "life-ability", and "happiness" with "life satisfaction".

How we should determine this inner, subjective life satisfaction or happiness is not clear, and depends on whether we are considering short or long term satisfaction, satisfaction with life as a whole, or satisfaction with part of life. In common with much other work, Veenhoven (2006) chose to conceptualise "life-satisfaction" as an enduring satisfaction with one's whole life. People approach evaluation in various ways. An affective evaluation is an overall assessment, or weighing up of the "pleasures and pains" of one's life. A cognitive evaluation is a more objective and deliberate assessment of satisfaction with one's condition and achievements in relation to driving aspirations. Finally, an attitudinal evaluation emphasises the effect of life's experiences on one's current overall disposition.

As a result of all these different ways that happiness can be measured, or appreciated, we usually find it hard to say *why* we are happy, even though most of us in the western world insist that we are (e.g. Pew Research Center 2006). And, partly because of this, we are rather poor at predicting what actions will make us happy. That is, we are not clear on the basis of personal well-being. To complicate matters, happiness, or inner life satisfaction, is taken to be the gold standard of personal well-being – the "proof of the pudding". Because it is mostly assessed in a rather shallow, emotional way, we often make the wrong choices in life, and events turn out not to deliver the happiness we expected. These confused signals, then, affect our ability to learn, and be clear on how we should manage ourselves to achieve life-satisfaction (Gilbert, 2006).

## **Achieving happiness through personal well-being**

In order to achieve happiness, it helps to be mildly deluded. This finding was highlighted by Taylor and Brown (1988), who examined contrasting perspectives on well-being and happiness between those whose focus is on psychological disorders, and those whose focus is maximising well-being. Study of treatment of disorders has concluded that one of the most important indicators of mental health is the ability to perceive reality accurately. In contrast, well-being studies have found that holding illusions can promote well-being in important ways. These illusions are more substantial than an error or bias in perception. They are "an enduring pattern

of error or bias, or both, that assumes a particular direction or shape” (Taylor & Brown 1988). There are three main ways that these illusions may manifest themselves. We may have unrealistically positive views of ourselves, we may believe we have more control over our environments than we actually do, or we may be unrealistically optimistic about the future. Individuals with more balanced views have often been found to have low self-esteem, or to be moderately depressed. On the other hand, optimism tends to be a feature of the outlook of most (“well”) people, and contributes to their ability to directly experience happiness and contentment – which in turn affects social bonding, social functioning, and ability to care for others. It also affects our ability to be creative and do productive work. Here, illusions can boost creative thinking, motivation and performance. To help sustain these illusions, we also tend to be adept at using various tactics and strategies – such as avoiding challenging situations - that “immunise” ourselves psychologically from negative feedback that might diminish our well-being, but allow more accurate perception of reality.

Psychologists also affirm the power of “intentional activity”, such as setting goals and achieving them, as a means for enhancing well-being (McGregor & Little 1998). In a similar vein, Buddhism believes happiness is a skill that can be learned: happiness derives from altruistic, compassionate behaviour, whether motivated by social pressures, or by personal empathy, with altruistic love being the most powerful (Ricard 2006). Ultimately, however, “true” happiness is seen by Buddhists as a state of being, unrelated to any particular activity. This state of being is believed to require a transformation of mind. Achieving this transformation is a protracted process facilitated by exposure to and responding to human suffering of all kinds, meditation, saturating the mind with “loving-kindness”, and consciously managing thoughts and emotions. Above all, Buddhists suggest, happiness requires us to free ourselves from aspirations related to wealth and personal standing. When we achieve a state of true happiness, we possess an inner radiant joy through which we are able to bring about change in people we interact with (Ricard 2006). In similar vein, Christians emphasise compassionate love, forgiveness, and the importance of consciously seeking out and encouraging the good in others, and refraining from the pursuit of material wealth. Similar themes permeate the world’s major religions (Sharma 1993).

Behavioural models for personal well-being tend to reflect a lack of a clear distinction between well-being and life-satisfaction. Jahoda (1958) identified criteria for mental health – the ability to *be happy* (italics inserted); positive attitudes toward the self; the ability to grow, develop and self-actualise; autonomy; environmental mastery in work and social relationships; and integration. Similarly, Jourard and Landsman (1980) required a positive self-regard, the ability to care about others and for the natural world, openness to new ideas and to people, creativity, the ability to do productive work, the ability to love, and realistic self-perceptions. Similarly, Ryff (1989) listed self-acceptance, positive relations with others, autonomy, environmental mastery, having a purpose in life, and personal growth. This latter author noted that such lists were likely to be tainted by a researcher’s own values, and these interactions themselves deserved further examination.

Models for positive well-being point to behaviours that collectively indicate well-being. However, many of these behaviours are affected by inherited personality traits. Schmutte and Ryff (1997) found there were strong links between the “Big 5” personality measures (extraversion, neuroticism, openness to experience, agreeableness, and conscientiousness), and six conceptually different realms of psychological functioning used to assess personal well-being that we have already mentioned – positive appraisal of one’s self and one’s past life (self-acceptance), the capacity to effectively manage one’s environment (environmental mastery), presence of high quality interpersonal ties (positive relations with others), the belief that one’s life

is purposeful and meaningful (purpose in life), a sense of continued growth and development as an individual (personal growth), and, a sense of self-determination (autonomy). Investigators have found evidence for a strong to very strong genetic effect – up to 50% or more – on levels of happiness, which would suggest there is moderate or limited room for managing oneself to maximise happiness, depending on the levels that one assumes. Life circumstances (such as age, gender, ethnicity, personal history, marital status, job security, income, health, and religious affiliation) account for 10% of the total variation, and intentional activity, 40% (Lyubomirsky *et al* 2005).

Despite a significant genetic effect, Lyubomirsky *et al* (2005) found there were four main reasons for believing that we can systematically improve our levels of happiness. Firstly, researchers have demonstrated benefits from consciously engaging in virtues such as gratitude, forgiveness, and thoughtful reflection. Secondly, motivational and attitudinal factors have been linked to well-being. These are factors that we can influence, for example by taking an optimistic outlook. Finally, genetic effects are often predicated on contextual factors, and some situations that reduce happiness can be avoided.

In a study of how “personal projects” (goal-directed activity) influenced happiness levels, McGregor and Little (1998) found that traditional measures of happiness led to weight being placed on accomplishment as a source of shorter term happiness, whereas projects that provided opportunity for individuals to “be themselves”, leading a life of integrity, or consistency, were potentially more important for long term well-being. Other investigators had not emphasised integrity as a source of happiness because it could be a source of frustration as individuals pursued great but difficult projects that held the promise of providing real meaning for their lives. However McGregor and Little quoted Deci and Ryan (1991) on the importance of integrity: “Organismic integration refers to the most basic developmental striving of the ‘self’, that is, toward coherence in one’s regulatory activity and experience...[and] ... toward interacting in a coherent and meaningful way with others so as to experience satisfying relationships with individuals and a harmonious relationship to the larger social order”. McGregor and Little then went on to present their idea of consonance in terms of projects that provided opportunities for aligning eight elements of the self that could be manifested at different times and contexts. These authors found that the type of project activity that made gave people happiness depended on whether they were agentic (individualistic), communal (gravitating to group situations), or hedonistic (pleasure-seeking). Perhaps contrary to expectations, greatest rewards were obtained when participants engaged in activities that were “inconsistent with their primary identity orientation”. Thus agentic participants were happiest when their goals were supported by others, communal individuals were happiest when their goals provided opportunities for fun, and hedonic individuals were happiest when their goals were simply being accomplished. Observing the importance of goal accomplishment, these authors found that “Rigid insistence on one facet of integrity might leave one unhappy because of decreased attunement to counterthematic efficacy opportunities”, and, further on, “If efficacy [i.e. goal accomplishment] is not vacuous, and integrity is not rigid, both should be able to animate a balanced and prudent project system.” So, we should be careful not to overdo integrity.

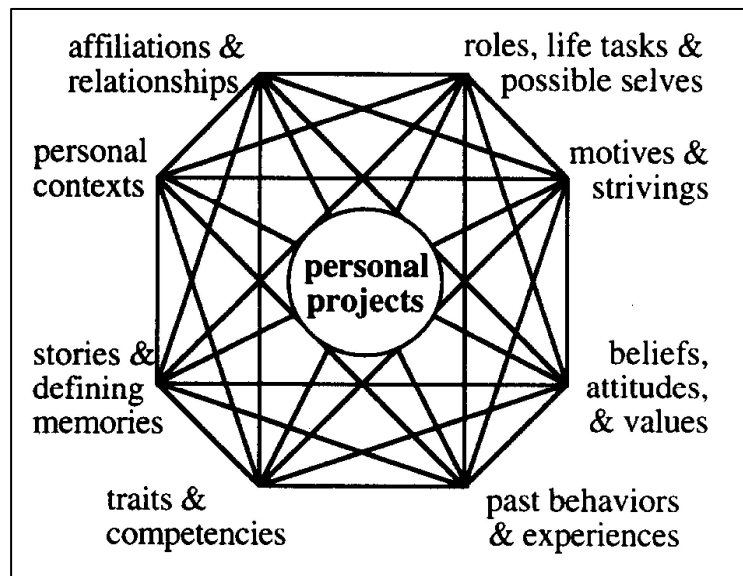
Given the importance of intentional activity in promoting happiness, Ryan and Deci (2000) emphasised the importance of individual competence, autonomy, and relatedness as necessary conditions for self-determination. Motivation arising from autonomy resulted from deep, holistic reasoning, and was most effective in producing lasting changes in behaviour. Autonomy is not entirely beneficial, however. Gilbert (2006) observed that much personal anxiety and unhappiness today resulted from inability to cope with the considerably increased amount of

personal freedom of modern living, compared to older societies where decisions about where to live, what work to do, and who to share one’s life with, were often made by someone else. Given the unreliability of our methods for predicting the impact of our actions on lasting happiness, Gilbert observed that it is perhaps not surprising that western democracy and capitalism do not always live up to the expectations of new converts or liberated peoples.

## Ecological systems approaches

Ecological systems approaches have already found application in psychology. Since at least the early 1990s (e.g. Cooper & Upton 1991) “ecosystemic” or “ecological” approaches have led to perspectives in which a client or subject is seen to be at the centre of an interacting ecosystem of individuals and groups, all of whom needed to be considered as part of addressing their health and well-being. Chung and Pardeck (1997) used an ecosystem approach to structure social work practice for ethnic minorities in the USA, Newes-Adeyi *et al* (2000) used the approach to define formative research for a training programme, Brown and Kasser (2005) demonstrated synergies between psychological and ecological well-being, Maller *et al* (2005) summarised evidence for direct impact of contacts with nature on human health and well-being, and Dishion and Stormshak (2007) described how an ecological approach led to a family-focused approach to mental health care. Focusing on the individual human being, White *et al* (2007) presented people as “adaptive behavioural systems” that performed life history tasks while operating within an overarching evolutionary framework.

**Figure 1.** Elements of the “temporally extended and contextually distributed self” (McGregor & Little 1998).



The human body itself may be modeled as an ecosystem of collaborating and cooperating components, involving organs, the various systems of the body, and their connecting and communication mechanisms. Even the mind itself, may be considered as such a complex, as, for example discussed by Lucas (2005) and, from an artificial intelligence perspective, Marvin Minsky in his *Society of Mind* (Minsky, 1988). Goertzel (2005) critiqued ideas of the mind as a

complex system and supported efforts to see the mind itself as a whole, in which even thought itself could be viewed as emergent systems behaviour from the underlying consciousness.

## The KiwiGrow model

KiwiGrow provides a model for community and ecosystem health, or well-being, and for this reason has relevance to models for human well-being. At its heart is the idea of an entity that co-exists in a mutually beneficial, harmonious way, with its surroundings. Although such a concept might seem to be rather restrictive as a lens through which to view human behaviour and well-being, it turns out that the model has quite substantial implications for how we might wish to model human well-being. First, it is helpful to review the origins and nature of the basic model.

An ecosystem can be defined as ‘a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit’ (UNEP 1992). The earth’s surface can therefore be visualised as a mosaic of ecosystems, nested within one another. Ecosystems, both natural and metaphorical, can range from small wetlands to cities, or entire landscapes (Pickett *et al* 2004), and sustainable development can be conceptualised as integrated management of this mosaic (United Nations 2004). The ‘ecosystem approach’ to sustainable development revolves around building understanding of the structures, processes, and interactions within the ecosystem, and adopting a management process that will deliver sustainability (e.g. Slocombe 1993). However, because assembling the necessary tools and competencies presents major challenges, progress in this direction has been mainly in the area of managing natural or ‘green’ areas, with an emphasis on maintaining or restoring natural ecological processes. The approach has been difficult to operationalise to the point where it can provide a basis for managing entire landscapes.

These difficulties have motivated interest in the concept of ecosystem health, with the aim of developing a diagnostic and problem-solving approach analogous to that used to manage human health (Costanza *et al* 1992). Because a healthy ecosystem can be regarded as sustainable (Costanza and Mageau 1999), an ecosystem health model provides a means for operationalising the concept of sustainable development. However, it has proven difficult to establish models of ecosystem health that would apply to a range of natural or modified ecosystems, let alone the infinitely variable ‘ecosystems’ associated with human activities.

These difficulties in producing a satisfactory generalised ecosystem health model largely stem from the problem of representing interacting human and natural ecosystems in a single model. However, the KiwiGrow model is based on a different approach. Instead of seeking to conceptualise an entire complex system, involving anthropic and non-anthropic components, the KiwiGrow model is based on conceptualising the entire system as alternately a social system, an economic system, an environmental-ecological system, and a cultural system – following Checkland (1981). Each of these systems is a complex, adaptive, evolving living system, and therefore able to be modeled, by itself, as an ecosystem. The KiwiGrow ecosystem health model was developed by constructing a generic health model that maintains validity within each of the four idealisations (social, economic, environmental and cultural) in turn (Luckman, 2006a,b).

Table 1 presents the seven qualities of healthy ecosystems that form the basic KiwiGrow ecosystem health model, or ‘common sustainability language’, together with the underlying themes that provide the basis for applying them in the four contexts. Healthy, sustainable ecosystems are nurturing, supportive, stable, contributing, responsive, directed, and adaptive. These qualities were identified most directly from analysis of previous work by Okey (1996) on the health of agro-ecosystems, aiming for a small number of systems qualities that could

adequately capture the essential characteristics of a complex system that responds and adapts to change, maintains its stability and integrity, renews itself, and has healthy relationships with the external world. In order to be practically useful as an operational basis for sustainable development, these system qualities had to be easy to understand and communicate, and descriptive of healthy behaviour, rather than being contestable “fundamental determinants” of this behaviour. They also had to be intuitive, or consistent with common-sense ideas about health, and clearly point to risks where the quality was degraded or absent. Finally, in addition to being equally valid in social, economic, environmental and cultural contexts, they also had to be practical, not directly requiring costly or inaccessible data.

According to the KiwiGrow model, healthy ecosystems are safe, regenerating, and provide care for the young and vulnerable. They also support a healthy diversity in the form of a range of components, or resources, that are critical to health and the ability to meet challenges. Healthy ecosystems are also stable and have a clear role or function within the nested complex of ecosystems that makes up the landscape mosaic – they contribute positively and do not waste resources. They are also responsive to threats and challenges – meaning that they are reactive and resourceful, and responses are timely and appropriate in terms of the size of the commitment. They also adapt to long term change, while remaining directed, with an ability to generate and implement a blueprint for the future. In communities, this requires community spirit, inner resources, and leadership that produces coordinated, integrated action. As ecosystems are themselves composed of multiple nested component ecosystems, the goals of ecosystems have to be compatible and mutually supportive, at every level.

As this seven-quality “common sustainability language” model applies in each of the four principal contexts, it results in a 28 sector KiwiGrow Universal Ecosystem Health Model (Table 2). This model is applicable to natural ecosystems such as lakes, forests, and native grasslands, as well as to systems like cities, farms, households, neighbourhoods, and organisations, which are created or dominated by the activities of human beings.

The KiwiGrow health model is also evidently valid in the context of personal health and wellbeing. Here again, there is an equation between sustained development and well-being: an individual is regarded as a local “ecosystem” of mutually supportive components directed toward the common goal of a personal growth and maximising health and well-being. Analogous to the four primary perspectives from which a community’s health may be viewed, personal well-being is regarded fundamentally as a fusion of physical, intellectual, emotional, and spiritual well-being.

Thus the KiwiGrow Universal Ecosystem Health Model (Table 2) can be seen to capture Veenhoven’s “livability of environment”, while Personal KiwiGrow (Table 3) captures “life-ability” or personal well-being. Personal KiwiGrow describes the personal factors that we can manage as individuals to maximise our own satisfaction and long term happiness and well-being. The model encapsulates themes that are recurrent in the literature and wisdom on human health and well-being.

KiwiGrow therefore provides a seamless, structured model for the individual in the world, that has potential as an organising influence in research, as well as facilitating advancement of human well-being in practice. At the heart of the model is the idea of alignment, or harmony. Individuals align their lives with the needs of the wider entities to which they belong and contribute – the family and household, the neighbourhood, or community, the workplace, and so on. In turn, these entities are also aligned to meet the needs for sustainable development, providing opportunities for individuals to contribute socially, economically, environmentally, and culturally.

**Table 1:** The seven system qualities of KiwiGrow Common Sustainability Language.

<b>System quality</b>	<b>Underlying themes</b>
Nurturing	Regenerating, safe, caring
Supportive	Respectful of roles of components, non-inhibiting, fulfilling, maximising potential, equitable
Stable	Strong, not fragile, continuing, protective, respectful / honouring of traditions, not capricious
Contributing	Providing goods and services, not wasteful or draining, or a source of harmful constituents or activities
Responsive	Reactive and resourceful, having a strong capital base
Directed	Energetic, inspired, motivated, self-sustaining, confident, purposeful, self-organising
Adaptive	Resilient to change, accommodating change, innovative

**Table 2:** The KiwiGrow Universal Ecosystem Health Model, presented as a graphic sustainability (well-being) scorecard. In this hypothetical example, the cells are shaded to indicate the extent of the risk associated with each of the 28 well-being sectors.

	Social	Economic	Environmental	Cultural
Nurturing				
Supportive				
Stable				
Contributing				
Responsive				
Directed				
Adaptive				
<b>Overall</b>				

Just as a healthy community balances concern for 28 aspects of its well-being, so individual well-being is seen to require balance. Individuals may choose to design their lives and their own development primarily around their physical, intellectual, emotional, or spiritual contributions to the well-being of the household, or to the wider community and environment, but well-being can be assured only if there is balance across the four dimensions. Consequently the model suggests we need to understand how health and well-being depends on being nurturing, supportive, stable, contributing, responsive, directed and adaptive, in all four well-being dimensions.

Clearly, our own well-being is intimately linked with the well-being and sustainability of the entities with which we must interact, or of those, such as the household, the workplace, or the community, of which we form a part. The KiwiGrow model represents the world as an interconnected whole subject to universal principles or “rules” that, to the extent that maximising well-being is our main motivation, collectively represent the purpose of existence. Our well-being is therefore intimately linked to our spiritual health and development. These spiritual dimensions of KiwiGrow have been discussed at length elsewhere (Luckman 2006e). KiwiGrow, in various mutually reinforcing, interconnected ways, is consistent with a spiritual outlook on life. This can be summarised as follows. Fundamentally we need to be directed in our commitment to our own well-being, and to the well-being of the wider community and world around us. We need to have a caring and respectful approach to life. All living systems have their role, and ultimately our well-being depends on respecting these roles. We would be wise to be humble and respect the simple sustainability “rules”, and their power to determine health, well-being, success or failure of any entity. Where understanding of these rules is limited – especially in relation to specific contexts – it is easy to see how the success or failure, advancement or decline, of any entity, whether a city, kingdom, or individual, might lead to ideas of divine intervention. Ultimately, it seems, there is a higher power, that can give us some cause for faith in the overall direction of events. This, in turn, might lead to an attitude of acceptance, and inner peace and calm, which can strongly influence relationships with others and contribute further to collective well-being and harmony.

**Table 3:** The *Personal* KiwiGrow framework for managing personal health and well-being.

	<i>Physical</i>	<i>Intellectual</i>	<i>Emotional</i>	<i>Spiritual</i>
Nurturing				
Supportive				
Stable				
Contributing				
Responsive				
Directed				
Adaptive				

## Applying KiwiGrow

The KiwiGrow model is an application of the ecosystem health approach to sustainable development. This is designed to facilitate a diagnostic, problem-solving approach as practised by human health professionals. Here, human health is assessed against a set of criteria, or indicators, such as blood pressure, blood sugar levels, and so on. Interventions are devised to improve performance according to these indicators, and progress is monitored to establish the appropriateness of the treatment. Widespread adoption of the KiwiGrow model of sustainable development would lead to a global mosaic of mutually-supportive “ecosystems” being managed in much the same way, and each would aspire to be nurturing, supportive, stable, contributing, responsive, directed and adaptive, in the fullest sense. Within this evolving mosaic, we, along with all the other interconnected entities, develop and advance our own well-being.

**Table 4.** Elements of an ecosystem approach (after Waltner-Toews & Kay, 2005)

- Defining the boundaries of the area of concern, clarifying the agendas of the principal participants, and high level issues to be addressed;
- Gathering information on the historical ecosystem and the present economic, environmental, and social conditions and trends, and building understanding;
- Identifying stakeholders and associated perspectives on the situation, including their conflicting aims;
- Identifying issues, assembling information on possible solutions, and creating alternative visions for the future, from the perspective of various stakeholder groups, firstly qualitatively with stakeholders, then increasingly quantitatively drawing on resources available for research and modeling, with clarity on tradeoffs;
- Debating the alternative futures, and producing a common vision, and designing an implementation plan including provision for collaborative learning;
- Implementing the plan, including resolving priorities and responsibilities, and establishing institutional arrangements and policies;
- Monitoring and evaluating implementation and associated outcomes, including selecting indicators and resolving responsibilities for measurement, information management, interpretation and subsequent action and adaptive responses.

For a community, Waltner-Toews and Kay (2005) presented steps for applying an ecosystem approach (Table 4). The process involves ongoing research and information gathering. In the case of KiwiGrow, this investigation centres on a matrix-style framework of health indicators. One of the first tasks, therefore, in applying KiwiGrow, is to define the meaning of each of the seven system qualities, in each of the four major contexts. Table 5 provides an example of how these definitions may be begin to be expanded for a mature individual living in a Western society. Clearly, any application brings its own expanded definitions, and these will be determined either by the stakeholders who engage with the process – or an ability to “see ourselves as others see us”. Selecting measures to characterise the 28 well-being sectors will always have a subjective element, but strong guidance is provided by the seven, readily-understood, system qualities that form the basis for the model.

Table 6 similarly shows how definitions can be expanded to derive criteria for a healthy household. Again, the process of expanding the “base” definitions of Table 1 in the four dimensions reflects the values and involvement of stakeholders. Again, this requires us to see ourselves, and our households, from the outside looking in, as viewed by the community.

**Table 5:** Example of how the basic definitions of the seven KiwiGrow system health qualities can be elaborated, in the four dimensions, in the case of a mature individual in a Western community.

	<i>Physical</i>	<i>Intellectual</i>	<i>Emotional</i>	<i>Spiritual</i>
<b>Nurturing</b>	Minimises exposure to physical hazards. Fitness levels and age-related health risks are carefully managed. Time is allocated for physical relaxation and replenishment.	Retrains and updates older skills. Consciously seeks out new intellectual stimuli, including social contact, and new types of literature. Allows time for intellectual relaxation and reflection.	Allocates emotional re-charge time with spouse and family. Engages in pastimes that allow personal emotional recharge, such as walking, contact with the natural environment, and music.	Provides secular or religious opportunities to nurture sense of belonging, and a sense of awareness of being part of something bigger than self. Consciously fosters positive, altruistic thoughts and actions.
<b>Supportive</b>	Food and water, clothing, housing, sanitation and transport are adequate to support a productive, active lifestyle. Medical and related attention is accessed to counter disease, illness, or injury.	Books, magazines, TV, internet, social network, work challenges and colleagues, family, and other linkages provide a supportive intellectual environment, that allows healthy thinking and decision-making.	Maintains ongoing emotional oversight; manages relationships to fulfill normal emotional needs. Relationships underpinned by respect for self and others.	Meets ongoing personal spiritual needs through membership of secular or religious groups, providing time for reflection, contemplation or meditation, and engaging in altruistic and self- or identity-affirming activities.
<b>Stable</b>	Sudden changes to physical conditions are minimised, and parameters of physical well-being are kept within healthy limits.	Currency of models, ideas, and skill-base are not declining to unsafe levels, and are grounded in a sound education and mature belief system.	Maintains levels of change and stress levels to within healthy limits. Keeps emotional conflict to minimum through mature view of happiness and well-being.	Explores spiritual questions, and builds robust spiritual belief system that is adequate for purpose and personality, and resilient to negative events and challenging life periods. Honours heritage.
<b>Contributing</b>	Contributes positively to well-being of others, through physical and financial means. Minimises wasteful use of material and financial resources. Physical assets are not wasted.	Contributes positively to well-being of others, through sound thinking, problem-solving, and decision-making. Maximises utilisation of intellectual resources to benefit self and others.	Generously contributes love, warmth, kindness, good humour, and compassion to contribute to well-being of others. Controls and minimises negative emotions that impact others.	Contributes positively on a spiritual level to well-being of others – e.g. by enhancing individual or team spirit, faith, hope, and sense of meaning and purpose.
<b>Responsive</b>	Responds physically or materially to threats and challenges, such as attack or injury, occupational risks, or financial shocks.	Does not avoid intellectual challenges. Identifies need for re-training, upskilling, or any kind of work-related, personal or social challenge requiring a rational response.	Rises to emotional challenges, including sudden changes, or loss, or threats. Sensitive to emotional needs of others. Takes care to maintain emotional reserves.	Recognises and responds to changing needs of others for leadership, direction, or spiritual comfort and reassurance.
<b>Directed</b>	Has clear long term aims for own physical and financial health and well-being, and is committed to materially contributing to well-being of others. Approaches goals tactically, maximising opportunities arising from short term events.	Has clear long term aims for improving or maintaining intellectual well-being, and contributing to well-being of other entities, and commits to these. Approaches goals tactically, maximising opportunities arising from short term events.	Has clear long term aims for maintaining and building emotional relationships, and contributing to well-being of other entities, and commits to these. Approaches goals tactically, maximising opportunities arising from short term events.	Aspires and commits to advance, for self or others, any of: a sense of belonging, engagement in altruistic or spiritual activities, an increase spiritual knowledge and understanding, or coming to terms with a wider “presence” in the world.
<b>Adaptive</b>	Adjusts diet and exercise to reflect trends in personal metabolism. Changes employment or spending/saving patterns to balance physical fitness and need for material support.	Adjusts intellectual load to reflect physical limitations and other changes. Changes ideas about the world to reflect new realities. Learns new skills appropriate to changed circumstances.	Adjusts emotionally to long term change, such as loss of friends, family, or vocational change, or to increased emotional demands of an extended family.	Adjusts spiritually to new realities. Questions and revises cultural beliefs that demonstrably lead to negative impacts on well-being of self and others.

**Table 6:** Example of how the basic definitions of the seven KiwiGrow system health qualities can be elaborated for a household.

	<i>Social</i>	<i>Economic</i>	<i>Environmental</i>	<i>Cultural</i>
Nurturing	Household is safe, caring and regenerative for children, old people, and people who are vulnerable through sickness or injury.	Household supports development of new ways of earning income, and obtaining goods and services from others. New ventures are encouraged.	Household nurtures environmentally-supportive values and practices. Natural or quasi-natural vegetation elements are created or restored, to contribute to the household's functions as a healthy ecosystem.	Household contributes to renewing and building the knowledge, beliefs, attitudes, skills and traditions, that underpin making a positive cultural contribution. Valued but vulnerable traditions and skills are protected.
Supportive	Household provides the food, shelter, means of transport, socialisation, and other elements of a physically healthy environment to allow the members to grow, develop, and contribute positively to communities and ecosystems.	Household supports activities which earn income, and encourages ongoing development of income-earning capacities, such as skill levels, education, and acquisition or upgrading and replacement of tools and other equipment and resources.	Household supports constituent environmental systems such as gardens, fields, and areas of bush or forest. Sound environmental management practices help to minimise resource use, recycle waste, and minimise polluting discharges to land, air or water.	Household supports development of knowledge, skills, the arts and crafts, and belief systems that underpin abilities to function healthily as a unit and to contribute positively.
Stable	Household is stable socially. Partnerships are stable, and relationships are well-maintained.	Household is a stable economic unit. Threats to income-earning are anticipated and managed. Other financial risks are managed through appropriate means.	Household is stable environmentally. Weed and pest populations are controlled, and constituent natural ecosystems are maintained within healthy limits.	Household is stable culturally. Cultural adaptation occurs while retaining the most highly valued knowledge, beliefs, skills, and traditions.
Contributing	Household contributes positively socially, providing healthy well-adjusted children and young people and adults, who participate effectively and knowledgeably in the life of the community.	Household contributes positively to the local economy, through paid work, operating a family business, or other enterprise. Waste of economic potential is minimised through appropriate employment.	Household minimises pollution or toxic emissions, does not function as a source of weeds or pests, soil erosion or excessive water runoff. Energy, land, and water are used efficiently, and waste is recycled.	Household contributes knowledge, skills, and traditions, that enrich and empower the community.
Responsive	Household responds to threats to its existence or security, and maximises benefit from opportunities to enhance it as a healthy, supportive home and living environment.	Household responds to economic opportunities and threats, through training, upskilling, changing nature of the family business, or pursuing just solutions to disputes.	Household responds to environmental issues, whether global, such as the need to reduce emissions of CO <sub>2</sub> , or local, such as the need to avoid runoff pollution that has effects downstream.	Household responds to cultural threats and opportunities.
Directed	Household has a clear sense of its social purpose, and has healthy aspirations for improving living conditions for its members, and for contributing socially to the wider community.	Household has clear economic goals, and works purposefully to achieve these.	Household is resolved not to impact negatively on the environment and to make positive improvements and contributions where possible.	The household is committed to contributing to the cultural enrichment of society, and to a healthy cultural life at home.
Adaptive	Household adjusts its needs and lifestyles to fit changing circumstances, whether improving or more constraining. Members are aware of and understand the nature of long term change.	Household adjusts its means of livelihood to changing economies and economic fortunes. Members are aware of and understand the nature of long term change.	Household adjusts its environmental and resource management practices to reflect new realities and fortunes. Members are aware of and understand the nature of long term change.	Household adjusts culturally to new realities, seeking out knowledge and being well-informed of changes with implications for knowledge levels, communication skills, beliefs and traditions.

## Discussion

The purpose of this article has been to determine whether the KiwiGrow well-being model contributes to our understanding of how we should approach living our lives in a time of rapid change and concerns about sustainability. We have found that although it provides a framework for addressing sustainability concerns, it also provides a perspective on individual and household well-being that is consistent with much of what we know already about well-being, reinforcing many of the conclusions from recent research. Importantly, the KiwiGrow model does not appear to contradict in any significant way, any earlier model for well-being. This is the first of a number of observations that we wish to make.

**Table 7:** Assessing congruence between KiwiGrow well-being model and other models.

<i>Model</i>	<i>Criterion</i>	<i>KiwiGrow criterion</i>
Jahoda (1958)	Ability to be happy	Emotionally responsive, contributing, and stable.
	Positive attitudes toward self	Nurturing, supportive
	Ability to grow, develop and self-actualise	Adaptive
	Autonomy	Directed
	Environmental mastery	Contributing, responsive, adaptive
	Integration	Contributing, directed
Journard & Landsman (1980)	Positive self regard	Nurturing, supportive
	Ability to care about others and for the natural world	Physically, emotionally and spiritually contributing
	Openness to new ideas and to people	Responsive, adaptive
	Creativity and ability to do productive work	Contributing
	Ability to love	Physically and emotionally contributing
	Realistic self perceptions	(No equivalent)
Ryff (1989)	Self-acceptance	Nurturing, supportive
	Positive relations with others	Contributing
	Autonomy	Directed
	Environmental mastery	Contributing, responsive, adaptive
	Having a purpose in life	Directed
	Personal growth	Adaptive

**Table 8:** Coverage of KiwiGrow systems qualities by models of Jahoda (1958) and Ryff (1989).  
( ✓ = coverage; ✗ = non-coverage)

	<i>Physical</i>	<i>Intellectual</i>	<i>Emotional</i>	<i>Spiritual</i>
Nurturing	✗	✓	✓	✗
Supportive	✗	✓	✓	✓
Stable	✗	✗	✗	✗
Contributing	✗	✓	✓	✓
Responsive	✗	✓	✓	✗
Directed	✗	✓	✓	✗
Adaptive	✗	✓	✓	✗

*KiwiGrow is consistent with earlier models of well-being.*

These consistencies are highlighted in Table 7. The qualities identified by Jahoda (1958) appear to be captured adequately by the KiwiGrow model. For the Journal and Landsman (1980) model, KiwiGrow has no equivalent to the requirement for realistic self perceptions, which we have noted previously is given prominence in disorder-focused research. It also does not explicitly address creativity. Creativity, however, does not feature in the models of Jahoda (1958) and Ryff (1989). Overall, the concept coverage provided by KiwiGrow appears satisfactory.

Table 8 summarises the level of congruence with the models of Jahoda (1958) and Ryff (1989) from the reverse perspective, and reveals there are significant differences. Coverage of KiwiGrow well-being criteria by Jahoda (1958) and Ryff (1989) is deficient in the physical domain, consistent with their focus on psychological well-being. These other models omitted a requirement for psychological stability, and make few demands on spiritual development, apart from having the ability to love, the ability to care about others and the natural world, and the requirement to have a purpose in life. KiwiGrow recognises the importance of spiritual growth in personal development, especially in a world with high levels of uncertainty about values and direction, where a sense of belonging, direction, and meaning in life can make the difference between a healthy contributing life and a life of antisocial behaviour. Healthy people also adapt and grow spiritually, as their beliefs are challenged by cultural diversity and the experiences of living in a complex world.

*Traditional values underpin the healthy life*

The Personal KiwiGrow model is consistent with traditional values. This lends credence to the model itself, as well as demonstrating that it may be a useful tool for supporting and maintaining these values within societies. Each of the seven system qualities has relevance to the behaviours that are widely acknowledged as the basis of a healthy life.

*We are dynamic ecosystems*

The facility with which the KiwiGrow ecosystem health model reproduces traditional values and concepts of personal well-being suggests that viewing the individual as an ecosystem may have more value than simply as a modeling artifice. Our senses tell us that we are bounded by our physical being, but the ecosystem model suggests that our boundaries are much less clearly

defined, and dynamic, extending into the environment with which we interact. The more “well” we become, or the greater our personal development, the greater the extent of this personal ecosystem, and the more our own well-being as physically-bounded individuals is tied to that of the wider ecosystem: we identify ourselves with the emergent behaviour and contributions of this personal ecosystem. There is also a further feature of “ecosystems”, or complex adaptive evolving systems, that we can recognise in people – the capacity to undergo a transformation in behaviour as a systemic response to external influences.

#### *Components of our being are also ecosystems*

Our physical being can be viewed as a collaboration between various subsystems, for circulation, awareness and communication, respiration, protection against disease, movement, providing support, managing the supply of nutrients, extracting and removing waste, and so on. Defined functionally, none of these systems has clear boundaries. While the skeletal system, for example, is a key element of the system for providing support, support also requires contributions from the muscles, the nervous system, and other systems. Each of the functionally-defined systems can be viewed as an “ecosystem”, whose health and well-being may be considered in terms of the seven KiwiGrow system qualities. Moreover, it is not possible to exclude intellectual, emotional, or spiritual elements from an ecosystem that is concerned with providing a physical function. Analogously, functions superficially provided through the three non-physical domains – such as the systems providing reasoning, memory, feelings of love and happiness, companionship, and altruistic behaviour – may also be seen as elements in a whole interconnected system of ecosystems.

#### *Well-being must be approached holistically*

Regardless of whether we view ourselves from a physical, intellectual, emotional or spiritual perspective, we function as complex, adaptive, evolving systems. A diversity of interrelated resources underpins our motivations and achievements. The four KiwiGrow dimensions are not separate, objectively defined components of our being, but different ways of viewing ourselves as wholes. Thus we expect “horizontal synergies” to be found within the Personal KiwiGrow matrix (Table 5). For example, behaviour which is physically nurturing may also prove to be intellectually or emotionally nurturing. Or directed behaviour focused on physical or material aims may help in developing our emotional, intellectual and spiritual aims. Through these linkages, improvements in any one of the 28 sectors may lead to improvements in our whole being. Also, when envisaging some future “happy state” that we might aspire to, we can examine it in terms of the entire 28-sector matrix. This will increase the chances that the goals we commit to will deliver the expected levels of satisfaction, and not contain foreseeable “fish-hooks” that mean the reality does not measure up to the dream, which might have focused on just one or two desirable aspects.

#### *Integrity is important*

If well-being is holistic, then behaviour cannot be compartmentalised without affecting health. Interactions among the 28 sectors of the well-being matrix ensure that actions in any one sector will eventually have implications for the other sectors. For example, if we expect to challenge ourselves physically, we should also expect to be challenged in other areas, whether intellectually, emotionally, or spiritually. And if we persistently engage in activities that drain us emotionally, this can affect our physical well-being, our ability to make rational decisions, and ultimately also our spiritual well-being. There is only one self, and engaging in contradictory and inconsistent behavior detracts from the KiwiGrow well-being requirement for consistent, directed behaviour.

### *Happiness is self-perpetuating*

Simply “being” happy is important. The Personal KiwiGrow model is a statement of both means and ends. True happiness, or life-satisfaction, is achieved when we are truly, nurturing, supportive, stable, contributing, responsive, directed and adaptive. Thus, engaging in the behaviours that promote individual well-being requires, to a certain extent, that we adopt the attitudes of being positive, optimistic, and happy. Also, because reciprocity is part of human nature, positive, contributing behaviour will elicit a similar, reinforcing, response. By being happy, we encourage well-being in others, and we benefit from this.

### *Personal well-being can be measured*

We have seen that other theoretic models exist that provide a basis for measuring personal well-being. However all of these have an element of arbitrariness that limits their acceptance as a universal basis for assessment. In contrast, the KiwiGrow model has a universality that lends credence to it as a robust basis for a science of human well-being, and for related policy and well-being practice. As for any other application of KiwiGrow, the indicators that are chosen in any context to characterise personal well-being will be a mixture of those relating to the groups to which the individual belongs, and measures that are unique to the individual and the context. While we all see ourselves as unique and different, we have much in common that can form the basis for research with general application.

### *Alignment and “positive contributions” are crucial*

Fundamentally, when we crave happiness, we may in reality be seeking harmony and alignment with the needs and purposes of society and ecosystems. Individual well-being in the true, holistic sense is thwarted where there is poor alignment between individual capacity to contribute, and society’s or a household’s own perceived needs. In the case of extreme deprivation of opportunity for self-realisation, happiness may only be achieved as an illusion. In the continuum of worlds between normal reality, which offers opportunity for some degree of alignment, and a world which provides no such opportunity, individuals will resort to illusion to a greater or lesser degree to support subjective well-being.

There is a corollary to the requirement that health and well-being can only be assured if we are able to contribute positively to the world around us: our well-being is undermined by the negative contributions we make – whether physically harmful activities, damaging decision-making processes or beliefs, negative emotions or attitudes, or actions which deny spirituality in others. The first context within which we can learn to contribute is the family, which, in turn, must provide a healthy environment that encourages and supports these contributions. Unhealthy contexts, whether families, communities or nations, hinder development of healthy individuals.

### *Intentional “directed” activity is important*

The KiwiGrow “directed” quality reflects the importance of goal-setting, or at least direction-setting, to achieving well-being. Directedness also involves some autonomy in decision-making. Not only is it important to have this direction, but it is also important that this effort is directed at whole-system health. This provides the most general sense of motivation that underpins well-being.

### *Spirituality is integral to well-being*

The KiwiGrow model as a whole, including Personal KiwiGrow, promotes an infinitely interconnected, holistic view of the world, and is consistent with long-standing traditional values. Managing ourselves and the world according to these values can increase awareness of

connectivity and unity, enhance our sense of belonging and sense of purpose and meaning, lead to caring attitudes towards people and nature, and also a humility, as we acknowledge there are “rules of life” that determine our long term success or failure, and the well-being of people, institutions, governments, natural ecosystems, and nations.

#### *Commonalities exist with the major religions*

Values inherent in KiwiGrow are reflected in the major religions. Each of these religions has its own defining characteristics, many of which have been influenced by the cultural context in which they have evolved. Similarly, KiwiGrow can be seen as arising from a scientific culture that values measurement. We do not pretend to speak for these religions, but some of the commonalities that appear to exist are:

- Hinduism: believing in integration of mind, body and spirit, and that the essence of the world pervades all reality;
- Buddhism (not strictly a religion, as it does not accept the existence of a deity): a pragmatic, holistic approach to life, emphasising compassion and loving-kindness;
- Confucianism: being and doing what is right, and seeing our well-being and purpose as intimately linked to the well-being of an inclusive family, community, and the world, and developing and cultivating and transforming ourselves through engaging;
- Taoism: seeing the world as a fusion of the “feminine” or negative yin – nurturing, supportive, and stable – with the “masculine” or positive yang – responsive, adaptive, and directed – to bring unity – and the ability to be contributing;
- Judaism: the people and the sacred are united by their shared history and are intimately identified – as an ecosystem – with the “gifted” land (Israel);
- Christianity: with its message of love, forgiveness, seeing and encouraging the good in others, living righteously, and renouncing material wealth and status, and seeking perfection;
- Islam: emphasising a primordial unity, universality, or truth that brings together and gives meaning to diversity, and defines how life should be lived - tolerantly, with love and compassion to others, seeking to reveal and celebrate the nature of the unity, and observing a set of divinely-inspired laws.

#### *Religions can advance KiwiGrow, both implicitly and explicitly*

With these commonalities, there is potential for the great religions to contribute to advancing KiwiGrow values. Ultimately there will be issues of doctrine or dogma, however, that will need to be resolved. Over the centuries, and sometimes in spite of themselves, religions have evolved. They themselves are complex, adaptive, evolving, living systems. Recognising the necessity and inevitability of change is an essential step to shedding those cultural influences that are peripheral to each religion’s central truth, and hinder its ability to contribute to creation of a peaceful and harmonious modern world.

If KiwiGrow reflects different but complementary elements of all the major religions, and, in all probability, minor or more localised belief systems as well, it follows that none of these is an entire complete truth. All, including KiwiGrow, seem to be in the nature of glimpses of a perennially-emergent truth than mankind may ultimately be privileged to share. KiwiGrow is one more culturally-formed attempt to answer age-old questions, this time embedded in a scientific modernistic culture that demands measurement.

### *People are fundamentally good*

The KiwiGrow model suggests that, if we are to grow and develop, we need to view life from the perspective of the ecosystem. It suggests that traditional values espoused as “good” are indeed fundamental to the human condition, but that our inability to express them has limited our ability to achieve happiness. Cultural influences can hinder our ability to behave in ways that are “good”, and can constrain our spiritual development. Thus, to be “good”, we need to transcend these cultural influences. To transcend them, we must see that they exist. To see that they exist we must be exposed to cultural diversity, either through a multicultural society, or through exposure to diverse cultural experiences through life. And of course we must live in a society that supports us by assuring the freedom to explore those cultural differences.

### *KiwiGrow values can underpin model behaviour and leadership for the 21<sup>st</sup> century*

The KiwiGrow model provides some clarity, not only regarding the behaviour we ourselves should aspire to, but also as to the behaviour we should expect in our leaders. And because well-being is so holistic, we should be careful that we do not observe its “rules” in a very narrow sense, but model ourselves on leaders who have achieved a healthy balance in their lives, and are contributing positively to the world.

### *Emergence into adulthood requires “general competence” in self-management*

A globalising, secular world which esteems material values has given importance to the ability to support oneself financially, as an important criterion for passage to adulthood: with secure financial circumstances, it is safe to leave the shelter of the family or the household. The KiwiGrow model of well-being encourages us to see adulthood as a level of progression in human development where we have acquired sufficient competence in self-management to minimise risks to our well-being if put in charge of our own life.

### *Reciprocity in societies that endorse KiwiGrow values means we can expect healthy behaviour*

If KiwiGrow tells us how we should behave in order to maximise our well-being, normalising or institutionalising KiwiGrow values in society provides a rational basis for expecting such behaviour in others. Our natural tendencies towards reciprocating behaviour mean that acting in a way that anticipates “good” behaviour increases the likelihood of it actually occurring.

### *We are not doomed to serve the machine*

Gilbert (2006) observed that people’s striving for wealth and fame was the principal driver of national and international economies: “Market economies require that we have an insatiable desire for stuff, and if everyone were content with the stuff they had, then the economy would grind to a halt.” He concurred with Adam Smith, that “people want just one thing – happiness – hence economies can blossom and grow only if people are deluded into believing that the production of wealth will make them happy. If and only if people hold this false belief will they do enough producing, procuring, and consuming to sustain their economies.” He then goes on to quote Smith’s *Theory of Moral Sentiments* directly:

“The pleasures of wealth and greatness.... strike the imagination as something grand and beautiful and noble, of which the attainment is well worth all the toil and anxiety which we are apt to bestow upon it.... It is this deception which rouses and keeps in continual motion the industry of mankind. It is this which first prompted them to cultivate the ground, to build houses, to found cities and commonwealths, and to invent and improve the science and arts, which ennoble and embellish human life; which have entirely changed the whole face of the globe, have turned the rude forests of nature into agreeable and fertile plains, and made the

trackless and barren ocean a new fund of subsistence, and the great road of communication to the different nations of the earth.”

If we accept the KiwiGrow model of well-being and sustainable development, we can normalise decision-making behaviour and an economy that is not based on deception and pursuit of wealth and greatness. A society based on values such as embodied in KiwiGrow can be enriching and enable the highest forms of human development while still serving, directly and honestly, the fundamental needs of human nature. The world’s economy can be transformed and realigned to a refreshed, more benign, set of values and harness a new set of hitherto underutilised resources, through tapping more directly into the human spirit.

#### *Responsibility for alleviating suffering must be shared*

Reducing suffering and achieving happiness requires changes in both ourselves and society. We have a responsibility to be compassionate. Unfortunately we have a tendency to exalt the individual’s ability to overcome, and to overlook fundamental problems in society that may hinder our development as human beings. In presenting KiwiGrow as a general model for sustainable development of societies, we have already described some of the changes that would help to create a society which positively supports and nurtures people, rather than providing them with an environment in which they can succeed heroically against the odds.

#### *We can advance our values through investing and purchasing decisions*

In the modern world, we are all becoming investors as well as purchasers. KiwiGrow tells us the values that we should look for in the businesses whose produce we should buy, and which we should invest in. In clarifying, at least to some extent, the basis for our own well-being, and of our households, it is clearer how our interactions with other entities affect ourselves, as whole individuals. Our financial and business behaviour is not conducted in isolation from the non-physical, or non-material, dimensions of our well-being, or that of our households.

## **Conclusion**

We started in this paper by observing the need for better guidance in personal decision-making as we pursue happiness in a world undergoing major change. We observed that traditional values were struggling to provide a robust basis for living in the modern world, and were drawn to the idea of a basis for human conduct which was grounded in ideas of ecosystem health, interconnectedness, and sustainability.

We have now seen that the new KiwiGrow model for well-being has much in common with traditional values and scientific models of well-being, but subtly and significantly extends these values and models in a way that addresses the challenges we face in the 21<sup>st</sup> century. Now, it seems, that in spite of Daniel Gilbert’s (2006) conclusion, we have a simple, usable model or formula, for personal well-being that is attuned to modern social, economic, environmental and cultural challenges. In it, we have a new basis for defining desired behaviour in society, and, with this, a new, succinct basis from which to construct policy and build new sources of professional services.

Advancement of Personal KiwiGrow would therefore see changes in areas such as psychological counseling, family counseling, pastoral and spiritual care, life and career counseling, all forms of social policy, the content of secular education, and the manner of delivery of health-care, including aged care, as well as human resources and organisational management. It has

implications for how religions see themselves, for the pressures they might expect to experience, and for the positive role they can play in a globalising world.

None of the changes to thinking that are embodied in the KiwiGrow model is particularly radical. Most of the ideas have been with us in one form or another for many years. What is new is the way these ideas have been compressed into a simple easily communicated model that can form the basis for new standards of behaviour, and new levels of trust, within society. And because it provides a basis for measurement, it provides tools for managers, so that the apparatus of government and business can be brought effectively to bear on the problems that confront us in the search for systems of governance and ways of living that lead to happy, harmonious living.

As the company that developed the KiwiGrow model, Creative Decisions has reserved copyright on public use of the model. While the model is freely available for private use, commercial or public applications must be authorised and approved by Creative Decisions. The company's aim is ultimately to develop a set of KiwiGrow-branded products and services that epitomise the approach, preserve its integrity, demonstrate its benefits, and provide social, economic, environmental, and cultural leadership in a world that demands new models.

In a deeper sense, KiwiGrow causes us to reflect on what it means to be human, and our relationship with nature. Far from relegating us to the status of just another species on the planet, it holds the potential for a reinvigorated global society in which achieving one's true potential is not only more likely, but closely tied to global well-being and sustainability. In a world where science has come to hold a commanding position, KiwiGrow offers a marriage between science and fundamental human values, and the promise of more systematic and purposeful improvement in the lives of many. It draws on and is consistent with contemporary psychology and religion, and, managed well, could lead to a grand synthesis and convergence in thinking, that will be necessary if this new globalised world is to be a world of peace, happiness, and harmony.

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