Agroecology and sustainable rural livelihoods: a conceptual framework to guide development projects in the Pacific Islands

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Figure 1 The DFID Livelihoods framework

Source: (Karntz, 2001, p.19)

Figure 2 Modified SLF as an integrated model of rural development

Source: (Amekawa, 2011, pg. 145)
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Figure 4. Scale of the ASRLF, entry at the community level

Abstract

Agroecology has expanded its boundaries to become an interdisciplinary field of study combining disciplines such as sociology, economics, agronomy and ecology. In rural development programs, combining agroecological and sustainable livelihoods approaches enables collective processes of decision making and action that offers alternatives to conventional growth strategies. The integrated Agroecology and Sustainable Rural Livelihoods Framework (ASRLF) was derived from participatory research in Vanuatu and Fiji in 2013/2014. The Pacific Island nations have a well-developed traditional economy, but appropriate rural economic development has been problematic. The ASRLF was developed to function in the local Pacific Island context while also having relevance to sustainable development and conservation projects elsewhere.

Keywords: Agroecology, Sustainable livelihoods, Sustainable development, Pacific, Traditional economy
INTRODUCTION

Pacific Island context

For traditional landholders in rural areas of the Pacific, subsistence agriculture is still the
predominate mainstay of socioeconomic life (Ratuva 2010). A large majority of Melanesian people
(people from a subregion of Oceania extending from the western end of the Pacific Ocean to the
Arafura Sea, and eastward to Fiji) have to this day access to land that has remained under customary
title, which is controlled by clans and families (Anderson and Lee 2010). Unlike many countries that
have shared a colonial history, the scale of dispossession of traditional landowners from lands in
Melanesia was radically less than that in countries such as Australia and Canada which experienced
nearly complete dispossession from their lands and culture (Fingleton 2005). Anderson (2011, p. 86)
identifies traditional Melanesian land systems as “vehicles for food security, housing, widespread
employment, social security, biodiversity protection and ecological stability; they are also a store of
natural medicines, as well as a source of social cohesion, inclusion and cultural reproduction”.

Yet it has also been documented that subsistence activities are no longer able to meet the modern
needs of most rural landholders (Hayes 1993). Due to geographical constraints these areas
experience multiple and now familiar obstacles to economic development (Easterly and Kraay
2000). Key factors contributing to these obstacles are remoteness from markets, diseconomies of
scale, and vulnerability to external shocks (Connell 2010). As a result, literature concerning rural
development in Melanesia has been predominately pessimistic in regards to the socio-economic
future of these areas (Felgentreff 1996; Hayes 1993; Murray 2000; Ward 1967).

There is much debate around the value of customary land ownership to the economic development
of Melanesian communities. A number of recent publications from concerned scholars suggest there
currently exists a neoliberal influenced donor driven program of reform in the Pacific with many
governments hastily committing themselves to liberalisation agreements without participating in
essential public debate (Anderson 2011; Anderson and Lee 2010; Daley 2010; Fingleton 2005;
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Lightfoot 2005; Regenvanu 2010; Simo 2010). Organisations such as the International Monetary Fund (IMF) and the World Bank, in addition to multilateral and bilateral donors, are dominating literature on development in the Pacific with a heavy emphasis on neoliberal discourses on ‘growth’, ‘efficiency’, ‘reform’, and ‘governance’, while only a handful of publications from NGO’s and researchers are challenging current economic and trade policy (Anderson and Lee 2010).

Huffer (2006, p. 49) emphasises “a lack of conceptual tools to integrate culture into practical economic and political measures” and highlights the apparent lack of will from many governments and aid partners to develop them. Slatter (2006, p. 36) suggests challenging economic ‘reform’ and trade liberalisation, urging a critical perspective on development. He warns that despite a few critics of neoliberalism found within academia in the region, critical development theory is “slipping off the curriculum, supposedly invalidated by the prevailing ‘wisdom’ of neoliberalism”. Anderson (2011) suggests many Western ‘growth’ strategies could be potentially damaging rather than supportive of rural-livelihood dominated developing countries. He suggests that growth strategies favour formal economies and private businesses, in particular export industries, while devaluing and often displacing more traditional ‘hybrid’ livelihoods which combine formal, informal and subsistence economies. Strategies focused on growth notoriously exclude environmental benefits and costs in their analyses whereas traditional economic activities are often centered on sustaining the resource base and therefore are more often based on sustainability (Anderson 2011).

There is emerging literature that is cautiously optimistic in regards to the socio-economic future of rural areas in Melanesia, with suggestions of alternative development opportunities (Christensen and Mertz 2010; Gough, Bayliss-Smith, Connell, and Mertz 2010; Mertz, Bruun, Fog, Rasmussen, and Agergaard 2010). The recognition and strengthening of the ‘traditional economy’ (also known as subsistence economy, custom economy) provides an alternative to unsustainable orthodox macro-economic strategies for growth and development (Regenvanu 2010; Simo 2010). This desire to strengthen the traditional economic base is predicated on engagement with the cash economy that
does not corrode the fabric of traditional social life and values. This would require new ways of integrating the cash economy and political institutions to work within communal structures and resource ownership in a sustainable manner (Westoby 2010). This needs to be one in which families gradually develop innovative cash economy activities that supplement traditional activities, while maintaining customary land ownership and a sustainable use of the resource base.

Vanuatu, Papua New Guinea and Solomon Islands are among the last remaining countries in the world where the traditional economy outweighs the cash economy in terms of providing for livelihoods (Regenvanu 2010). It encourages sustainable economic activity at the individual and household level while operating within reciprocal networks of exchange and obligation at the community level.

Few studies have attempted to consider the breadth of livelihood portfolios that may, or could exist in rural areas of Melanesia. Investigations of sustainable livelihoods on customary land in Vanuatu and Fiji that merge the traditional and cash economies can support national, regional and international development policies to reverse the focus on economic growth as a precursor to resilience (Fingleton 2005).

There has been a call for greater attention on the role of cultural and social resources as key components to the development of economic policy (Christensen and Mertz 2010). Christensen and Mertz (2010) argue that there is a lack of empirical and interdisciplinary studies that specifically target small island dynamics and link socio-economic and ecological processes of small island societies at temporal and analytical scales. Cheer and Peel (2011) suggest that little is understood about the impact of economic activities on nonfinancial and traditional livelihoods (Cheer 2013; Cheer and Peel 2011).

This research responds to these gaps in the literature and therefore seeks to explore adaptation of orthodox macroeconomic practices to cultural contexts thus enabling cultural values to become the
guiding framework of governance, economic growth, sustainable development and security. The merging of agroecology and sustainable livelihoods is explored as a tool for exploring development activities in rural areas of the Pacific that are guided by culture and integrates traditional economic activities with increased engagement in the cash economy.

Agroecology

The rapidly emerging field of agroecology is particularly concerned with the potential for agriculture to improve rural livelihoods while combining the stable and high production of food with nature conservation (Altieri 2002; Altieri, Funes-Monzote, and Peterson 2011; Gliessman 2007; Vandermeer 2009). Agroecology models can enhance synergies between subsistence agriculture, agroforestry, agroecosystems and the wider food network, while also providing for opportunities in agro-ecotourism and the sale of produce straight from the farm to the tourism industry. This can create interlinked products that meet the capacity requirements of the landholders. The focus on the relationships between local traditional knowledge and the landscape are vital to sustainable outcomes, and have become increasingly important to agroecosystem science in developing nations (Wezel and Jauneau 2011).

There is no single acknowledged definition of agroecology, reflecting the ongoing development within this field (Dalgaard 2003). In the beginning the word Agroecology emerged as a purely scientific term. First coined by Bensin in 1928, to describe the application of ecology in agriculture, and this meaning is still widely used today. Yet over time “agroecology” has taken on a number of meanings, depending on the context in which it is used. Differing interpretations of what agroecology is have appeared throughout the literature from the 1980’s, where Agroecology moved beyond its ecological scientific focus to encompass economic and social dimensions (Wezel et al. 2009).
The differing interpretations of agroecology could be divided into three distinct groups consisting of ‘scientific discipline’, ‘movement’ and ‘practice’. Francis et al. (2003) was the first to define agroecology from a food systems approach and defined it as “the integrative study of the ecology of entire food systems, encompassing ecological, economic and social dimensions”. Gliessman’s (2007) definition, while similar to Francis et al. (2003), is based more on a practical application “the science of applying ecological concepts and principles to the design and management of sustainable food systems”. The food systems approach allows for the study of “interactions, relations and influences”, thus allowing for the analysis and evaluation of how agriculture integrates between other activity sectors and society (Wezel and Jauneau 2011, p. 15). While Gliessman (2007) sees agroecology as existing within the natural sciences, Dalgaard et al. (2003, p. 42) expand their interpretation of agroecology as a discipline of integration defining agroecology as “the study of the interactions between plants, animals, humans and the environment within agricultural systems”. Finally, Dalgaard (2003) sees agroecology as an interdisciplinary framework that works across traditional disciplines such as agronomy, ecology, sociology and economics.

Agroecology has gained considerable prominence as a transformative agenda at the policy level in many countries. However, for agroecology to be transformative depends on the creation of wider development models that focus on enhancing the livelihoods of rural traditional landholders in a sustainable way and strengthening networks between landholders and relevant stakeholders operating within the wider environment (Wezel and Jauneau 2011). Within many agroecological social movements, particularly in developing areas, sovereignty, access to land and autonomy of local populations is considered of great importance to securing sustainable practices (Caporal and Costabeber 2000).

**Land tenure, multi-sectorial interaction and sustainable development**

The reform of land tenure has been advocated for Melanesia with the view that customary tenure represents a blockage for moving agriculture from subsistence to market orientation, as well as...
releasing land for other commercial purposes (Hughes 2003). What has not been investigated
properly is how altering land laws may accelerate the disintegration of the traditional economy (Ellis
2012).

Wezel and Jauneau (2011) apply the theoretical concepts of territorial (local) development and
multifunctionality with the food systems approach of agroecology to analyse, explore and evaluate
the relations and interactions between agriculture and multi sectors of society. They define
territorial development as a “set of social, cultural and economic processes that promote the
economic dynamics and improvement of life quality of the population of a territory” and suggest
that since the Rio Summit of 1992, sustainable territorial development is used more widely.

Key concepts of territorial development are described as: “valorisation of indigenous resources;
inter-sectorial development; valorisation of local identity; self-control of development processes;
and solidarity and democracy” (Percequeur 1998, cited in Wezel and Jauneau 2011, p. 15). From an
agroecological perspective, this approach to sustainable development encourages strengthening
relations between different sectors of the economy and agriculture, particularly subsistence
agriculture. This is particularly important in a Pacific Island context, as strengthening the traditional
economy and sustaining and enhancing the natural resource base is central to enhancing livelihoods
of rural traditional landholders. Territorial development principles have also become increasingly
important to many policy makers.

A growing number of publications are now associating agroecology with sustainable development
(Wezel and Soldat 2009). Linkages between nature-conservation and agricultural sustainability have
become increasingly important to agroecosystem science, with a focus on supporting the
relationships between local traditional knowledge and the landscape as vital to achieving sustainable
outcomes (Wezel and Jauneau 2011). Progressive nature conservation was put forward by the IUCN
(1980) which went beyond the preservation of species and pristine ecosystems to question how
conservation can be incorporated into agricultural landscapes. As agriculture was regarded as the
most important form of land use worldwide (Millennium Ecosystem Assessment 2005), developing
sustainability principles and practice in food systems is central to achieving conservation goals.

From sustainable development to sustainable livelihoods

The Brundtland Commission Report of 1987 heralded sustainable developments’ entry into policy
circles on a global scale, providing the first overview of the environmental aspects of development
from economic, social and political perspectives (Redclift 2005). It defined sustainable development
as:

*Development that meets the needs of the present without compromising the ability of the future
generations to meet their own needs. It contains within it two key concepts: the concept of ‘needs’, in
particular the essential needs of the world’s poor, to which overriding priority should be given; and
the idea of limitations imposed by the state of technology and social organisation on the
environment’s ability to meet present and future needs* (WCED 1987 pg. 43).

This led to subsequent reports (UN 1993, 1995; UNFAO 1996) which continued to shift the focus of
development thinking away from macroeconomic bias to sustainability and wellbeing of individuals
and households.

Since its entry into the global arena, sustainable development has appeared in a broad range of
discourses and applications in an academic, planning, business and environmental context. Norgaard
(1988) believed much of the mainstream debate on what is sustainable has largely ignored culturally
influenced definitions in favour of that put forward by the dominant science paradigm. Rennie &
Singh (1996, p. 17) highlight how “sustainability can prove a difficult criterion to agree on in practice,
even among experts”.

The Workshop on Urban Sustainability of the US National Science Foundation (NSF 2000, p. 1)
concluded that sustainable development “is laden with so many definitions that it risks plunging into
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meaninglessness, at best, and becoming a catch phrase for demagogy at worst. It is used to justify and legitimate a myriad of policies and practices ranging from communal agrarian utopianism to large scale capital-intensive market development.” Redclift (2005, p. 213) believes the simplicity of the Bruntland Commissions definition of sustainable development is “deceptive and obscures underlying complexities and contradiction”. Hopwood, Mellor, and O’Brien (2005, p. 40) support this view and suggest sustainable development as a concept is a representation of a “shift in understanding of humanity’s place on the planet, but is open to interpretation of being anything from almost meaningless to of extreme importance to humanity”.

The ambiguity surrounding sustainable development has been criticised as providing avenues for capitalism to push trickle-down theory as a sustainable development option (Daly 1993; Rees 1998). Haughton (1999) attempted to give clarity to the challenge posed by the many interpretations of sustainable development and to avoid definitions that could be considered quite meaningless. He provided a summary of the five underlying principles of sustainable development based on: futurity (inter-generational equity); social justice (intra-generational equity); trans-frontier responsibility (geographical equity); procedural equity (people being treated openly and fairly); inter-species equity (importance of biodiversity) (Hopwood et al. 2005).

The different approaches of addressing sustainability can reflect patterns of behaviour as people’s needs are defined in a way that directly excludes others from achieving sustainability. This leads to the fundamental question which should be made more visible in sustainable development discourse, that is how environmental costs are passed within societies and between them? As the concept of sustainable development has evolved it has developed global interconnections with the understanding that environmental actions and impacts must be considered internationally to ensure equitable sharing of the planet’s resources (Wackernagel and Rees 1996).
Becker, Jahn, and Stiess (1999) believe the power of sustainability as a concept lies in the discourses in which it is embedded rather than shared substantive, or heuristic value that it may have. Redclift (2005, p. 218) supports this argument and suggests as sustainable development has become more mainstream “much of it has been influenced by neoclassical economics, and an attempt was made to translate environmental choices into market preferences, following neoliberal orthodoxy.” Authors such as Mason (1999), Barnett (2001) and Martinez-Alier (1995) began to draw the emphasis of sustainable development away from human needs (which the Bruntland Commission Report was based on) to “more orthodox concerns of the social sciences: questions of power, of distribution and of equity” (Redclift 2005, p. 218). Redclift (2005) suggests the shift from an emphasis on ‘needs’ to that of ‘rights’ marked a shift from a broadly Keynesian paradigm of international economic relations, in the post-World War II period, to the neoliberal certainties of the late 1980’s and 1990’s.

A critical look at sustainable development discourses today suggests that the perceived need for global management of the environment stemmed, in part, from the assumption that it provided a way of correcting the anomalies of economic and trade policy. Only by exposing the assumption, and conclusion, of these discourses could we hope to clarify the choices and trade-offs that beset environmental policy and the environmental social sciences. Urry (2003) proposes sustainability is as much about new material realities as it is about epistemological positions and therefore require us to critically examine how new “materialitys influence the cultural constructions we place on the environment” (Redclift 2005, p. 219). Daly (1993) argued the term sustainable development must be seen as qualitative rather than quantitative improvements with greater clarity coming from focusing on sustainable livelihoods over sustainable development. In order for sustainable development to address the global environmental challenges now and into the future it requires acknowledgement of the principles which link social and environmental aspects to human equity. This would entail concentrating on sustainable livelihoods and people’s well-being over growth for growths sake.
The Sustainable Livelihoods Framework (SLF)

Development approaches pre 1980 had a tendency to assume that rural society was homogenous with single purpose economies, which resulted in narrow production orientated strategies that often deepened power imbalances, consequently resulting in little benefit to the more vulnerable (Krantz 2001). The 1990’s saw a shift in development thinking and gave rise to participatory research practices. The Sustainable Livelihoods (SL) approach was first introduced by the Bruntland Commission on Environment and Development to go beyond narrow manifestations of poverty and include such aspects as vulnerability and social exclusion (UN, 1995). The 1992 United Nations Conference on Environment and Development (UNCED) expanded the concept further in the context of Agenda 21 and stated that sustainable livelihoods could provide “an integrating factor that allows policies to address development, sustainable resource management, and poverty eradication simultaneously” (UNDP 1997).

The concept of sustainable livelihoods originated from the works of Robert Chambers from the Institute of Development Studies (IDS). In a working paper with Gordon Conway (Chambers and Conway 1992, p. 4) they criticised previous analysis of rural livelihoods as industrial and reductionist which “do not fit or capture the complex and diverse realities of most rural life”. They put forward a definition that linked the concepts of capability, equity and sustainability. Their definition relates to sustainable rural livelihoods which is applied most commonly at the household level and underpins the many variations of livelihood frameworks used today:

“A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and contribute net benefits to other livelihoods at the local and global levels in the long and short term” (Chambers and Conway 1992, pg. 7).
Sustainable livelihoods as a concept is more tangible and easier to discuss, observe and describe than sustainable development. Like sustainable development there can still be difficulties agreeing on the translation between differing cultures, yet overall it is easier to comprehend. Sustainable livelihoods in principle relates more directly to developing nations and meeting basic needs than sustainable development (Rennie and Singh 1996).

Chambers and Conway (1992) describe a livelihood as including the capabilities, assets and activities required for a means of living. The combination of livelihood practices that results from the utilisation of assets is termed a livelihood portfolio, while livelihood strategy refers to the adaptation of livelihood activities over time. Livelihood strategies that have been documented in previous studies (Cahn 2002; Scoones 1998) consist of: “natural resource-based intensification or extensification, livelihood diversification including both paid employment and rural enterprises, and migration” (Wilson 2013, p. 250).

Chambers and Conway’s definition emerged from the desire to “put the last first in development practice and agro-ecosystem analysis and the wider challenges of sustainable development”. This approach to development did not take off until the late 1990’s when the new Labour government in the UK appointed a development ministry, the Department for International Development (DfID) which committed itself to poverty eradication through livelihood development. In 1997 DfID affirmed their overriding aim was a commitment to policies and actions which promote sustainable livelihoods (Carney 1998) and developed a modified definition of a sustainable livelihood which followed on from Chambers and Conway (1992). Their definition stresses the importance of developing long term strategies that are flexible and dynamic:

Scoones (1998, p. 5) added to this definition “while not undermining the natural resource base” to give emphasis to environmental sustainability. In Ellis’s (2012) definition emphasis is placed on social relations such as gender, class, kin, belief systems and institutions and their influence on people’s access to assets, while sustainability is not a focus. The approach taken by DfID was to increase its
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effectiveness in poverty reduction by developing core principles that were people-centred, responsive and participatory, multi-level, conducted in partnership, sustainable and dynamic (Krantz, 2001). They also sought to apply holistic perspectives to ensure support activities were relevant to people’s livelihoods.

(FIGURE 1 HERE)

These approaches led to the development of a Sustainable Livelihoods Framework (SLF) (Figure 1), “an analytical structure to facilitate a broad and systematic understanding of the various factors that constrain or enhance livelihood opportunities and to show how they relate to each other” (Krantz 2001, p. 19).

The SLF offers a useful conceptual starting point, as it allows for a people-centered, holistic, and multilevel understanding of the dynamic ways in which traditional landholders can adapt their livelihood strategies in order to respond to the changes associated with modernisation (Scoones 1998).

Critics of the SLF suggest that few studies have successfully integrated local contexts and responses with concerns for global environmental change. Scoones (2009) highlights that his concerns with the SLF are due to its inability to address wider scale, global processes and their impingement on livelihood concerns at the local level. He believes if livelihood perspectives fail to engage with larger-scale debates about globalisation, that space can be filled by macro-economic scholars who are notoriously under-informed about local-scale complexities. Many case studies have found the relationships between rural livelihoods, traditional economy and the cash economy to be dynamic, complex and locally specific with no existing framework adequate to address these significant global concerns (Adams et al. 2004; Ashley 2000; Brown 2002; Cater 1994; Cattarinich 2001; Croes and Vanegas 2008; Hall 2007; Harrison 2008; Nyaupane and Thapa 2004; Ollenburg and Buckley 2007; Salafsky and Wollenberg 2000; Upton et al. 2008).
These issues of scale are particularly important to this research, for in order to understand the livelihood opportunities of rural landholders there must be acknowledgment of the current global trend towards the decentralization and/or de-concentration of natural resource management in tropical regions (Batterbury and Fernando 2006). This will require a broader livelihoods analysis that examines “networks, linkages, connections, flows and chains across scale but remain firmly rooted in place and context and seeks to understand how people, places and environments are related and mutually constituted and how they are affected by globalisation” (Bebbington and Batterbury 2001, p. 373). Only then can globalisation and associated processes of production and exchange (historically from colonialism to contemporary neoliberal economics), be appropriately examined.

Scoones (2009, p. 188) asserts:

“In such a view ‘the global’ and ‘the local’ are not separated – either physically or analytically – but intimately intertwined through connections, linkages, relations and dynamics between diverse locales. Livelihoods analysis must thus expose the inevitably highly variegated experiences of globalisation, and so the implications of multiple transformations and diverse livelihood pathways.”

The International Fund for Agriculture Development (IFAD) (2006) has responded to the deficiencies highlighted in the SLF and have developed methods to assess the linkages between policies and institutions that either support or hinder successful livelihood outcomes. By focusing on the macro and how it relates to the local context the SLF can provide a broad theoretical basis for exploring the linkages between traditional landholders in differing locations with the wider external environment. This can provide valuable information of how to create better networks between the tourism industry and rural landholders thus diversifying livelihood strategies in their desire to create sustainable livelihoods on customary land (Scoones 1998).

There are three basic elements to analysing sustainable livelihoods: livelihood resources; livelihood strategies; and institutional processes and organisation structures. The portfolio of livelihood assets has been described as the most complex components of sustainable livelihoods. Such assets consist
of tangible (such as stores and resources) and intangible (such as claims and access) (Krantz 2001).

The analysis of assets relates to what people have and recognition of what they don’t have, rather than what they need (Helmore 1998). This also places the analysis of assets within an historical context and considers how peoples’ access to assets has changed over time, as well as how access differs between social groups (Carney 1998).

The access, control and use of assets are influenced by institutional processes and organisation structures such as laws, policies, societal norms and incentives (Cahn 2002). The analysis of the linkages between assets and institutional processes and structures provides an understanding of restrictions, barriers or constraints that can impact on livelihood sustainability. This type of analysis links the macro (regional, government, private) and micro (individual, household and community) levels (Carney 1998; Ellis 2012; Scoones 1998).

Livelihood strategies have been described as “activities that generate the means of a household” (Ellis 2012, p. 40). People’s access to assets, the structures and processes that impact on them, and the external vulnerability context that they operate within influences what livelihood strategies they will choose. Livelihood strategies provide them with the perceived livelihood outcomes that can be short term coping strategies or long term adaptations.

Three types of livelihood strategies are identified by Scoones (1998) which consist of agricultural intensification or extensification, livelihood diversification, and migration. Carney (1998) identifies them as natural resource based, non-natural resource based and migration, while Ellis (2012) places migration within non-natural resource based activities. DfID (1999) suggests understanding livelihood outcomes can lead to a focus on people’s achievements, indicators and progress over top down objectives.

Livelihood outcomes is the preferred terminology by both DfID (1999) and (Scoones, 1998) as it provides a participatory approach to improving the well-being of people from the bottom up. The
vulnerability context frames the external environment where people exist which can create events largely out of their control, while also demonstrating how people respond, cope and adapt to these events. The vulnerability context can be influenced by trends in population growth, national and international economics, natural resources, natural disasters, agricultural issues, economic shocks, seasonality, employment opportunities and health (DfID 1999).

The SLF goes beyond general net benefit analysis, which has been the dominant way of analysing livelihoods in the past, and focuses on priorities of households and individuals (Jamieson, Goodwin, and Edmunds 2004). It also recognises people as actors with assets and capabilities, regardless of their financial status, who have their own aspirations of achieving sustainable livelihoods. Adato and Meinzen-Dick (2002, p. 6) suggest “whilst this may seem obvious, in many cases the poor have been regarded as passive victims or recipients of government policies and external aid.” Within Chambers and Conway’s (1992) definition participation in the cash economy is not absolute. A more narrow definition of livelihood would see the requirement of financial reward from participating in formal labour. Subsistence livelihoods are often not considered directly although some authors acknowledge the need to consider the effect of subsistence livelihood activities when determining the capacity to participate in formal livelihood activities in addition to the transfer of knowledge to enable greater participation in commercial markets (Anderson 2011; Fingleton 2005; Fontenay 2010; Regenvanu 2010; Simo 2010).

The SLF provides a focal point which enables key parties to address issues which are fundamental to the actors and stakeholders involved. It provides a conceptual framework used by a growing number of organisations such as: DfID, the United National Development Program (UNDP), in addition to NGOs such as CARE and Oxfam (Carney 1998; DfID 1999). By drawing on a number of theoretical and conceptual approaches, the SLF offers a more holistic approach to development thinking. This provides an avenue for multiple and interactive influences on livelihoods to be examined. This requires researchers to appreciate not only how assets may interact with each other (such as how
political and economic capital may impact on access to resources), but also the conflicts that can evolve between livelihood objectives (differing stakeholder perceptions of sustainable development) (Adato and Meinzen-Dick 2002).

The SLF provides a “checklist” (Ashley and Carney 1999) of explanatory factors that should be considered when designing research in the field of development. While covering such a broad range of factors would be difficult to achieve within a single study (Adato and Meinzen-Dick 2002), adopting a holistic framework enables researchers to understand issues that may be highly relevant to people’s livelihoods (Krantz 2001). Therefore the SLF can make explicit factors that may influence sustainable livelihood outcomes yet are too expansive to investigate in any detail within a particular study.

Access to land in particular is regarded as an essential requirement to creating sustainable livelihoods and this framework has helped to ensure that land holders and people seeking security of tenure are central to discussions. Strong institutional and land tenure arrangements are noted as crucial to sustainable development (Smyth and Whitehead 2012). In particular the SLF enables people to improve their lives by building on their assets, capabilities and existing activities while also securing resources for ongoing generations (Krantz 2001).

Many development projects have been accused of focusing on problems in a narrow, sectoral way. The SLF recognises the influence that the macro environment can have on the micro household environment and vice versa by providing a pathway to explore linkages between the macro and micro environment and between differing sectors (DfID 1999). Rennie and Singh (1996, p. 17) relate the changing relationships between differing sectors “and their response to external pressures and opportunities, leads to the concept of adaptive strategies”. Adaptive strategies are created in response to changing external and internal dynamics, which therefore sees sustainable livelihoods as not a static concept but one that is fluid and responds to changes. This is the ways that people
“durably recognise their livelihood systems in response to long term change and challenges” (Rennie and Singh 1996, p. 18).

Adaptive strategies arise from “the dynamic interaction and mutual interdependence between human agency and the ecosystem” (Singh and Titi 1994, p. 11). Successful adaptive strategies lead to the goal of attaining sustainable livelihoods. Therefore, it is essential to examine peoples adaptive strategies and how they have changed their mix of productive activities, “and modified their community rules and institutions” (Rennie and Singh 1996, p. 18). Some examples of adaptive strategies are “diversification of incomes earning (to include crafts, ancillary and tourism), commercialization of traditional collectibles, selective modifications to cultivation practices, formation of new association of producers and sellers, formation of pressure groups and formation of new institutions, or reinforcement of traditional ones” (Rennie and Singh 1996, p. 19). Not all adaptive strategies lead to sustainable livelihoods (Rennie and Singh 1996), therefore it is essential to examine agroecology and off farm activities within a mix of traditional livelihood systems and formal activities in a critical manner with the goal of long term sustainability over short term gain.

The SLF enables different views and dimensions of sustainability to be taken into account (Carney 1998). Many indigenous peoples’ views of sustainability differ from western notions of environmental management (Smyth and Whitehead 2012). In this regard, the SLF offers all differing notions of sustainability a place in a discussion.

Blending Agroecology and sustainable livelihoods

The multi-disciplinary development schools of agroecology and sustainable livelihoods have both made important gains in promoting people-centered approaches to rural development. Agroecology is continually expanding its disciplinary boundaries and influences. Over the last two decades it has developed into a holistic perspective that focuses on the goal of empowerment of small scale farmers, to enhance their livelihoods sustainably while ensuring food security in the developing world (Wezel et al. 2009; Wezel and Soldat 2009). The bottom up approach of sustainable
livelihoods enables collective processes of decision making and action that can identify, challenge or reject conventional growth strategies. Yet it is only recently that researchers have recognised the potential for cross fertilization of Agroecology and sustainable livelihoods and have attempted to make conceptual and methodological synthesis as an integrated approach to rural development (Altieri 2002; Amekawa 2011).

The movement of Agroecology into both sociology and economics is being driven by the need for more sustainable agricultural systems. Achieving this type of interdisciplinary research will require addressing the barriers to the flow of information between disciplines. These barriers are more cultural and political than technical and are “lying deeply embedded in the way science has developed... [they represent] the major obstacles to the development of agroecology” (Dalgaard, et al. 2003, p. 49).

The strengths of agroecology and sustainable livelihoods studies are demonstrated in their approaches to describing basic livelihood needs of rural households. Agroecology bases itself on the small scale model that stresses the importance of growth, equity and sustainability. It sees the small scale farmer as the actor of primary importance (Ellis and Biggs 2001). It is particularly concerned with the sustainability and vitality of smallholder farmers in managing environmental risk through effectively performed agroecological practices. Agroecology has now advanced its commitment to political ecology by recognising the structural biases of dominant policies and institutions. By incorporating political ecology and searching for political pathways agroecological social movements could stand up against current global tendencies towards neoliberalism (Amekawa 2011). The strengths in the sustainable livelihoods approach to rural development are in its analysis of household level dynamics and the importance of the non-farm activities, besides agriculture, in providing for vital livelihood strategies. The recognition of the importance of both agricultural and diversified livelihood activities demonstrates a significant departure from dominant traditional rural
development thinking which “rarely equates rural development with agricultural development” (Amekawa 2011, p. 141).

Many small farmers have been unable to compete against the consequences of neo-liberal policies globalisation, such as stagnating world food prices, declining government support and increasing household expenses (Rapley 2006). This has led small farmers to be increasingly engaged with non-farm activities to diversify their income streams (Bryceson 1999). These powerful factors are influencing agroecology to see the small farm sector as livelihood systems, which incorporate food security and income-generating strategies rather than just focusing on cropping or farming systems (Reardon, Taylor, Stamoulis, Lanjouw, and Balisacan 2000). An outcome has been the integration of sustainable livelihoods perspectives which unlike agroecology, seeks to understand the livelihood strategies of rural households that are not limited to on farm activities, but include structurally determined factors for development (Ellis 2000).

There is a growing body of literature that incorporates critical components of agroecology and sustainable livelihoods (Amekawa, Sseguya, and Onzere, 2010; Bacon, 2005; Bacon, Mendez, and Brown 2005; Bacon, Mendez, Gomez, Stuart, and Flores 2008; Holtz-Gimenez 2006; Westphal 2002, 2008), yet as Amekawa (2011, p. 121) suggests “most of these works only loosely incorporate relevant elements from the two camps of studies without conceptual and methodological synthesis prepared within an integrated framework”. Arguing for the potential benefits both disciplines could make a contribution to sustainable rural development through cross fertilization, Amekawa (2011) put forward a preliminary sketch of an integrated framework which identifies the commonalities and reconciles the differences between the two approaches. Amekawa (2011, p. 121) argued that this approach could offer a “holistic vision of sustainable rural development” that could enable agroecology to “extend its range of contribution from traditionally limited focus of agricultural production” while also seeing new insights from sustainable livelihood studies “regarding the distinctive conceptions of sustainability that agroecology could provide for smallholder livelihoods”.

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Amekeawa (2011) suggests through the development of an integrated model (see Figure 2), serious shortcomings of agroecology and sustainable livelihoods can be addressed.

(Figure 2 here)

Agroecology deficiencies lie in its restrictive sectorial focus on agriculture in securing sustainable livelihoods. Sustainable livelihoods studies have found that in many cases diversification and off farm income generation have been more influential to coping and adaptation strategies of rural smallholders than agriculture. Yet the deficiency in sustainable livelihood studies appears to lie in its undervaluing of agriculture by not recognising the non-monetary benefits agriculture can bring, especially the sustainability benefits that can be brought about through agroecological methods such as traditional agriculture and agroforestry (Amekeawa 2011).

Agroecology and Sustainable Rural Livelihoods Framework (ASRLF)

Many development projects in the Pacific have failed to make substantial changes to peoples’ well-being (Cahn 2006). Within many of these projects, culture and tradition is often cited as an impediment to growth as it does not fit the dominant neoliberal approaches to economic growth (Hooper and James 1994). Very little research or strategic thinking in the Pacific has attempted to devise new ways for the cash economy and political institutions to work within communal structures and resource ownership. Huffer (2006) suggests advocates of the market economy and globalisation are unwilling to accept there may be another more appropriate solution that requires the market to adapt itself to each region’s social and cultural context. Some researchers have suggested most economists have failed to debate or even critique newly developed economic policy in the region (Slatter 2006,)

Huffer (2006, p. 49) emphasises with no doubt “a lack of conceptual tools to integrate culture into practical economic and political measures” and highlights the apparent lack of will from many
governments and aid partners to develop them. Slatter (2006) suggests to challenge economic ‘reform’ and trade liberalisation, a critical perspective on development is required and warns that with few critics of neoliberalism found within academia in the region, critical development theory is “slipping off the curriculum, supposedly invalidated by the prevailing ‘wisdom’ of neoliberalism” (Slatter 2006, p. 36).

The ASRLF (Figure 3) was developed in collaboration with many stakeholders from local to macro levels in both Vanuatu and Fiji. The integrated framework was created to respond to a complex array of issues found in many rural development projects in the Pacific. While the ASRLF is influenced by aspects of various sustainable livelihoods frameworks (Cahn 2002; Amekawa 2011; Tao, Wall and Wisemer 2010; DfID 1999; Scoones 1998; Ellis 2012) participatory discussions with various stakeholders in Vanuatu and Fiji found that no one framework was suitable to address the development needs in these countries. Therefore elements from various SLF’s were adopted along with additions from the outcomes of participatory discussions to enable the ASRLF to fit within a Pacific Island context.

(Figure 3 here)

The process of developing the ASRLF

By combining extensive literature analysis of sustainable livelihoods frameworks and agroecology with comprehensive dialogue with various stakeholders we were able to design the ASRLF to meet the local context while also having relevance to the current global contest in regards to development and conservation projects. These initial and on-going discussions contribute to the study’s participatory approach.

A series of workshops and conversations were conducted through our role on Australian Centre for International Agricultural Research (ACIAR) projects in Vanuatu and Fiji in 2013/2014. These workshops and conversations took place with traditional landholders, community members,
government officials, Non-Governmental Organisations (NGOs) and multi-lateral donor agencies such as FAO, European Union (EU) and GIZ (German Aid). Participatory research approaches have been applied effectively in Vanuatu and Fiji in recent years (Bronson et al. 1995; Wilson 2013) and as such have resulted in increased engagement of local communities in addressing local goals concerning development and management of local resources. In this way, successful participatory research connects the local and the global (Kemmis 2006). By describing and identifying conditions, participants can investigate their own circumstances to strengthen their community capacity (McTaggart 1991).

The most effective way of gaining insights from participants were through small group conversations, while one to one interviews were not so effective in opening and sharing of information. This was also reported to be the case in Warrick’s (2009) study undertaken in the outer islands of Vanuatu, as she found that small group interviews worked exceptionally well and suited Ni-Vanuatu participant’s ways of communicating. She identified these techniques as ‘storian’, which is the Bislama term for ‘chatting, yarning or swapping stories’ (Crowley 1995, p. 235).

The central feature of ‘storian’ is relationship building between participants and the researcher which enables members of the community to play an important role in providing a collaborative environment to address the research problem (Warrick 2009). Implementing these research methods enabled this research to be interactive rather than extractive (Warrick 2009), which is key to empowering communities (Beeton 2006).

**Cultural as a context in the ASRLF**

As the traditional landholders in this study are still very much guided by culture and customary law and practices, it was essential to provide a much stronger presence of culture in the ASRLF. Cahn (2002) highlights how research utilising the SLF has largely been carried out in Asia and Africa and suggested when applying the SLF to Pacific cultures, aspects such as culture and tradition were
largely missing from the SLF and as such recommended that the SLF must be adapted to fit local contexts. She makes reference to various frameworks (DfID 1999; Scoones 1998) as not providing clear guidance on the way in which “traditional and culture can be incorporated into the livelihood system” (Cahn 2002, p. 286).

Cahn’s (2002, p. 287) definition of a Pacific sustainable livelihood comprises:

...the capabilities, assets and activities that provide a means of living: a sustainable livelihood works within a traditional and cultural context adapting to and coping with vulnerability, while maintaining and enhancing assets and resources (Cahn 2002 adapted from Chambers and Conway 1992).

Cahn’s (2002, p. 287) provides a clear summary of the differences between the SLF for the Pacific and previous versions of the SLF:

Definition: Emphasis that the livelihood must work within the culture and traditions; Includes sustainability as maintaining or enhancing all assets and resources; simplifies the wording.

Framework: Influencing structures and processes-includes the three domains; traditional (including gender), public, private sector; Vulnerability context includes cultural and household aspects; Influencing structures and processes, and the vulnerability context are placed outside the livelihood as they impact on ALL aspects of the livelihood assets, strategies and outcomes; The linkages and flows between factors are clearly stated; Traditional assets are included as a separate asset; Well-being is included as the final goal.

This definition declares that all resources and assets must be maintained or enhanced, not just limiting sustainability to the natural resource base. Cahn (2002) viewpoints on culture are also supported by Tao, Wall and Wismer (2010, p. 16) who found in their study that Scoones’ (1998) SLF did not place “sufficient emphasis on the processes of adaptation of customary ideology and community identity to adequately encompass [their] findings on tourism development”. In this way culture is recognised as influencing sustainable livelihoods through beliefs, traditional, identity,
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language, sacred site, ceremonies and festivals in addition to the influence of culture on social networks and social capital through reciprocity, redistribution, and exchange as well as attachment to land. Therefore this framework has sought to overcome some of the criticisms found within current versions of the SLF (DfID 1999; Ellis 2000; Scoones 1998) while emphasising culture and tradition as prominent factors to accurately represent Pacific rural life.

While DfID (1999) attempted to include culture as a process along with laws, institutions and policies, the linear approach of the DfID (1999) SLF assumed that culture had no feedback onto other aspects of the SLF. The ASRLF sees rural livelihoods in the Pacific as existing within the context of culture and tradition and acknowledges how this can impact on livelihoods in many aspects such as: the risks and vulnerability context, influencing structures and processes (such as societal norms, gender roles and relations, organisations, and traditional policies), access to and control of resources, choice and success of livelihood activities, priorities for livelihood outcomes, and the incentives that people respond to.

The ASRLF recognises the role of culture as an external context and internal force (Tao, Wall and Wismer 2010) that influences individual, households and communities’ choices, activities, and overall well-being. Recognising culture as encompassing every component of the ASRLF makes space for culture to be seen as fundamental to sustainable and equitable forms of development rather than an obstacle and therefore rejects dominant neoliberal approaches to economic growth in the Pacific context.

The research process of the ASRLF

Each of the components of the framework have been removed from the linear setting that is typical of many SLF frameworks (Amekawa 2011; DFID 1999; Scoones 1998) and instead are represented in a circular motion with the curved arrows demonstrating the research process, which is a continual cycle beginning and restarting with an analysis of the smallholders assets. The straight arrows...
demonstrate the influence each of the components of the ASRLF have on every aspect of people’s livelihoods in addition to influencing each other.

The ASRLF enables traditional landholders to “utilise their human and cultural resources to enhance livelihoods while participating in the market economy” which is rarely described in the literature to date (Huffer 2006, p.49). This is achieved through the recognition of the traditional economy as a key livelihood activity and outcome for sustainable livelihoods. The traditional economy encourages sustainable economic activity at the individual and household level while operating within reciprocal networks of exchange and obligation at the community level (Westoby 2010). Therefore, scale at which initial contact is made is very important. As such, the primary contact point for ASRLF is at the community level (Figure 4) to ensure research is culturally appropriate, sensitive and safeguards culturally based reciprocal obligation systems. This also promotes full participation from all community members and enables the research process to narrow in on the household and individual level while remaining culturally sensitive.

(Figure 4 here)

The following step of the research process involves the analysis of agroecological and sustainable livelihood assets with smallholders, which takes place at the smallholder level. The ASRLF places great importance on enabling smallholders to identify key ecological processes, problems, and methods for potential solution and therefore involves a participatory method of enquiry. This ensures the research process encourages smallholders to contribute their knowledge to address complex problems thus empowering change from the bottom up.

The ASRL framework then replaces the term strategies, which has been commonly used in past SLF frameworks (Cahn 2002; Amekawa 2011; Tao, Wall and Wisemer 2010; DFID 1999; Scoones 1998; Ellis 2012) with the term activities. This decision is guided by IFAD (2005) who highlighted that “the term ‘activities’ takes into account non-income livelihood ‘chores’ which also require use of time
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resources and thus have an impact and importance to livelihood analysis”. The ASRLF recognises how people’s aspirations and values are reflected in their livelihood activities and outcomes and therefore highlights alternative development opportunities. In response to the desire for many Pacific countries to see a strengthening and recognition of the traditional economy (Regenvanu 2010), the ASRLF recognises the traditional economy as a values based livelihood activity and outcome that may not generate income per se but is extremely important in contributing to a person’s wellbeing.

The ASRLF aims to investigate the well-being of smallholders, which as an integrated approach endorses a smallholder livelihood model that takes into account the multifaceted aspects of both agroecological farming practices and off and non-farm activities (Amekawa 2011, p. 144).

Agroecological multifunctionality is a sociological concept which is transforming agriculture from a mono-functional focus to comprehensively including multifunctional goals beyond the primary focus of supplying food such as: conservation, biological diversity, soil and water health, tourism, regeneration, recreation and leisure activity, non-use values and quality of life (Lovell et al., 2010; Tschamntke et al. 2011). Wezel and Jauneau (2011, p. 15) describe how the role of agriculture within the concept of territorial development is closely linked with the promotion of multifunctional agriculture. They describe these functions as:

“the three classic pillars/goals of sustainable development: economic sustainability, social sustainability and environmental sustainability and can contain economic (e.g. sale of products, income, services like clearing snow from roads, maintenance of ditches), societal (e.g. workplace, employment, family living place, promotion of local identity, education), or environmental (e.g. preservation of a certain landscape type which is attractive for tourism, creating heterogeneous landscapes and often higher diversity of species and ecosystems).
When approached from this perspective multifunctionality is closely aligned with the food system approach in agroecology and can therefore align these fields to offer a more comprehensive view of sustainable rural development (Lovell et al. 2010). It is a western construct which gained international attention at the Rio Earth Summit 1992 (Renting et al. 2009). Although there has been scepticism from developing nations (Seehofer 2006), Amekawa (2011) believes the term could be constructively modified to fit within the less developed rural context.

Agroecological multifunctionality could represent the avenue through which various on-farm livelihood fulfilments by small-scale farmers are mediated by ecological processes in agroecosystems thus helping to highlight the multifaceted livelihood needs of small landholders. From a livelihood standpoint agroecological multifunctionality could provide an all-encompassing view of sustainability that serves to maintain or improve small-scale livelihoods. This approach sees agricultural sustainability as serving ecological and socioeconomic ends of small landholders, especially those living in marginal conditions in environmentally risk prone areas.

Much of the terminology in Amekawa’s (2011) framework reinforces the focus on the cash economy and does not recognise the importance of non-monetary activities in providing for people’s well-being. The concept of ‘pluriactive sustainability’ is applicable when diversification refers to non-agricultural activities (Van Huyltenbroeck and Durnad 2003). Amekawa (2011, p. 148) felt the “concept of pluriactivity could usefully be incorporated into the synthesis between agroecology and sustainable livelihoods by filling the gap that sustainable livelihood studies leave by not taking into account the degree and state of different sector contributions to sustainable rural livelihoods. Therefore, pluriactive sustainability offers a “unified perspective of sustainability stemmed from both on-farm and non-farm livelihood activities... which seeks to increase multifunctionality in agroecological farming practices while simultaneously securing sufficient incomes through [off-and] non-farm income diversification” (Amekawa 2011, p. 149). Although pluractivity provides for a useful synthesis between sustainable livelihoods and agroecology it does not make sufficient space for the
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traditional economy and its role in rural Pacific islanders’ livelihoods. Therefore the ASRLF excludes the concept of pluractivity to make a more substantial place for the traditional economy in livelihood activities.

The term *sustainability* has been added to the *vulnerability context* component of the ASRLF to recognise the macro, meso and micro links between agroecology based smallholders and the wider social, economic and biophysical environment. The division of four categories in the vulnerability/sustainability context of the ASRLF have been adopted, which consist of: political economic, agroecological, socioeconomic and socio-cultural. The socioeconomic and sociocultural components are related to “the chance of access by communities, households or individuals to resources as a whole, whereas the agroecological context is concerned with the regional or local environmental conditions to engage in agroecological farming practices” (Amekawa 2011, p. 144).

The political economic context is relevant to political systems and administration in addition to economic systems (globalisation, world food prices, population growth, rapid urbanisation, adverse impacts of climate change). In addition political ecology from an agroecological perspective is of particular interest to this study as it explores the links between the livelihood context and wider societal context (Scoones 2009). Using a *political ecology approach* addresses macro level issues such as measuring national well-being using Gross Domestic Product (GDP) per capita, as GDP measures only the cash value of activities and does not recognise then many tangible social and economic benefits delivered by the traditional economy (Regenvanu 2010). The ranking of levels of formal social protection in Pacific Island countries through the global Social Protection Index (SPI) fails to acknowledge the existence of informal community and culturally based social protection systems. The ripple effects of the global financial crises were recorded as having little impact on majority of rural families in the Pacific living a more traditional subsistence based lifestyle. This is due to the fact that informal non market related activities are more ready to respond to market-
generated calamities while also being cheaper, embedded within the community and therefore more sustainable than many formal activities (Ratuva 2010).

Arguments began to surface surrounding the emphasis on poverty and dependency within development literature as being a western mindset which has been inherited by scholars and local people from the colonial past (Hau’ofa 1994). The concept and definition of ‘pro-poor’ and ‘poverty’ are widely used in development literature and yet these terms have been constructed by those who are not poor, and are therefore imposing the term ‘poor’ on societal groups (Cattarinich 2001). Nyaupane and Poudel (2011, p. 1348) suggest terms such as ‘pro poor’ and ‘poverty’ “may be appealing to donors, western tourists, and marketers because the term is attractive and sympathetic. However, local people may not want to be labelled in a way that portrays them as helpless, miserable, and primitive” and highlight that this has in fact “been documented on various occasions” (Nyaupane and Poudel 2011, p. 1348). Pfohl (1994) supports this claim and says that these terms portray the poor as abnormal losers, and stigmatizes them. Therefore, the ASRLF framework consciously avoids terms such as ‘pro-poor,’ or ‘poverty reduction’ wherever possible and instead replaces these terms with ‘sustainable livelihoods’ or ‘well-being’. Poverty eradication is at the core of development yet there are many other local context concerns in addition to poverty, such as a lack of power and rights, security, equity, social harmony, and a clean environment (Ashley and Carney 1999; Baker 2004; Sen 1999). In recognition of this the ASRLF framework payed specific attention to the social inclusion of various groups including women, minorities, and indigenous people in the livelihood outcomes.

The *Institutional processes and organisation structures* recognises societal norms, gender roles and relations, informal and formal institutions, organisations and traditional policies and provides strategies to strengthen network linkages. In particular it focuses on institutions such as land tenure and how this impacts (positively and negatively) on the ability to achieve sustainable livelihoods. The
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ASRLF makes a place for all types of governance both political and customary and seeks to increase the linkages between these formal and informal institutions and smallholders.

The ASRLF seeks outcomes and opportunities for agroecological smallholders to participate in both the traditional and market economy while encouraging resilience and maintenance of healthy ecosystems. Key outcomes are described as seeing a strengthening of traditional economy, resilience, sustainability (social, cultural, economic & environmental), equity and empowerment. Determining the extent of outcomes is achieved through revisiting the livelihood assets, resources and capabilities with smallholders to determine if they are agroecologically sustainable.

There is increasingly high level recognition that the policy focus for societal development and progress needs to be reorientated away from the measurement and promotion of production to the question of how societal development is to sustainably support human wellbeing (see Sarkozy, Commission Report 2009). The ASRLF provides an avenue to address modern issues, such as the need for increased services and access to the cash economy alongside the desire to continue to operate sustainably within the traditional economy and meeting subsistence needs through continued customary land ownership. While entering into the cash economy is seen as an important strategy for rural areas in the Pacific, focusing solely on economic growth may undermine development goals essential for wellbeing, equity and sustainability (Scheyvens and Russell 2013).

Conclusion

Literature concerning rural development in the Pacific has been predominately pessimistic in regards to the socio-economic future of these areas. Within much of the literature culture and tradition are often cited as impediments to growth as they do not fit the dominant neoliberal approaches to economic growth. This paper attempted to provide a more positive approach to rural development issues and address the gap in research and strategic thinking in the Pacific surrounding new ways for
the cash economy and political institutions to work within communal structures and resource ownership.

It is argued that rural development in the Pacific requires new ways of integrating orthodox macroeconomic strategies and political institutions to work within communal structures and resource ownership in a sustainable manner. This needs to be one in which families gradually develop innovative cash economy activities that supplement traditional activities, while maintaining customary land ownership and a sustainable use of the resource base. Few studies have attempted to consider the breadth of livelihood portfolios that may or could exist in rural areas of the Pacific. Investigating sustainable livelihoods on customary land in the Pacific that merge the traditional and orthodox macroeconomics can provide a supporting basis for national, regional and international development policies, to reverse the focus on economic growth as a precursor to resilience.

Agroecology has been shown in the literature to be continually expanding its disciplinary boundaries and as such has become an interdisciplinary holistic perspective combining disciplines such as sociology, economics, agronomy and ecology. This approach to development has the potential to complement the bottom up approach of sustainable livelihoods to enable collective processes of decision making and action while rejecting conventional growth strategies and therefore offers the potential for cross fertilization of these two approaches.

In order to address the issues raised in the literature, the authors attempted to work collaboratively with the people who development projects in the Pacific are intended to benefit. As many development projects in the Pacific fail to make sustained positive changes to peoples’ well-being, the authors felt it was essential to develop a framework for development in a collaborative manner through participatory research methods. The authors combined information gathered through an extensive literature analysis of sustainable livelihoods frameworks and agroecology literature with the viewpoints of traditional landholders, community members, government officials, Non-Governmental Organisations (NGO's) and multi-lateral donor agencies operating in the Pacific. This
enabled the authors to develop a framework to meet the local context while also having relevance to the current global climate in regards to development and conservation projects. These preliminary discussions contributed to the participatory approach taken by the research team and enabled an inclusive environment that ensures the framework is of relevance to all involved.

The ASRLF makes an important space for the acknowledgement that people do not necessarily fit within neat categories which are often implemented by researchers or development professionals. It does this by acknowledging that individuals and households pursue a multitude of activities to achieve a broad set of objectives (Toulmin et al. 2000). The holistic approach guiding the ASRLF recognises that although livelihoods analysis is required at the individual and household level it must also include the community and communal institutions in a holistic manner.

This paper demonstrates the relevance of these two approaches to rural development in the Pacific and therefore contributes to the literature by attempting to make conceptual and methodological synthesis through the development of the ASRLF as an integrated approach to rural development. Further implementation of the ASRLF would benefit greatly from future testing in Pacific countries that were not involved in this paper to determine whether the ASRLF has relevance to other rural regions of the Pacific.

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Figure 1 The DFID Livelihoods framework

Source: (Karntz, 2001, p.19)

Figure 2 Modified SLF as an integrated model of rural development

Source: (Amekawa, 2011, pg. 145)
Figure 3 Agroecology and Sustainable Rural Livelihoods Framework (ASRLF)
Figure 4. Scale of the ASRLF, entry at the community level