1. Introduction

This paper examines the vulnerability and resilience of Pacific Island Countries (PICs) to shock at a national level before presenting the findings of research conducted at the household level in two Melanesian countries: Solomon Islands and Vanuatu. PICs represent a diverse group of countries, but they are often referred to as being among the most vulnerable in the world. This reflects both their considerable exposure to the effects of natural hazards and economic shocks as well as their limited ability to manage them (Naudé et al. 2009; Guillaumont, 2010). As small and highly open economies, PICs are highly exposed to volatility in international commodity prices and global economic downturns.

Shocks are sudden events that impact on wellbeing. Covariate shocks are events that have impacts on entire countries or communities, while idiosyncratic shocks affect only certain individuals or households. Shocks can be categorised into: (i) economic shocks, which include covariate price shocks as well as reduced employment; (ii) natural disasters that usually impact on communities; and (iii) other shocks, including crime and theft, job loss, death or illness of a household member, and crop failure, which are idiosyncratic in nature with impacts on specific households.

A single definition of vulnerability does not exist. It is a multifaceted, multidimensional concept. There is, however, general agreement that vulnerability is a forward-looking, or ex ante, measure of wellbeing. It therefore differs from the concept of poverty, which assesses current (rather than future) wellbeing status. At a household level, vulnerability is often defined as the likelihood or risk of being poor (however defined) or of falling into poverty in the future. Since different measures of poverty exist, vulnerability is conceptualised in different ways. In addition to being a function of the characteristics of risk or a shock and the ability of a household to respond to shocks, vulnerability also reflects relational considerations — between women and men, the young and old, people of different abilities, and between different social or ethnic groups. Importantly, to the extent that a households’ vulnerability is also a function of its ability to recover once a shock has occurred, it cannot be studied in isolation from resilience. The two concepts are inextricably linked.

Data from EM-DAT (2012) indicate that PICs have experienced 105 natural disasters since 2000. Of these disasters, 70 occurred in the Melanesian countries of Fiji, Papua New Guinea, Solomon Islands and Vanuatu and affected over half a million people. The United Nations University’s Institute for Environment and Human Security finds that these four Melanesian countries are among the 20 countries in the world that have the highest probability of experiencing a disaster. In the Disaster Risk Index, Vanuatu is ranked first and Solomon Islands fourth (Birkmann et al. 2011). The region is also one of the most vulnerable to climate change, which threatens agriculture, food security, health, the availability of fresh water, and the existence of coastal settlements. The potential human and economic costs of climate change in the Pacific region are catastrophic.

Similar to countries across the world, PICs have recently experienced a triple crisis with price hikes for both food and fuel, preceding a global economic crisis. During 2007 and 2008, households were likely to have felt the rise in the cost of living acutely. Among low-
income households in the Pacific, almost 50 per cent of household expenditure is on food, even in rural areas (Abbott 2008). Moreover, most PICs are heavily dependent on imported fuel for energy and transport. Rises in fuel prices make transport more expensive and increase the cost of getting goods to market, particularly for the majority of the population that lives in rural areas and outer islands.

McGregor et al. (2009) note that the relatively large subsistence sectors in Melanesia and the ability to generate agricultural export earnings in rural areas should make them relatively less vulnerable to food insecurity than atolls. However, they find acute vulnerability to food insecurity in low-income urban households in Melanesia. Moreover, the World Bank (2010) notes that, in the context of Solomon Islands, the development bias towards the capital Honiara and to natural resource enclaves means that outer regions of the country are at a considerable disadvantage, since their remoteness implies high costs of providing infrastructure and services. The resulting lack of transport and communications networks severely constrains the movement of goods and people. In rural areas, household budgets are quickly squeezed if the price of food or fuel increases suddenly.

PICs were also not immune to the impacts of the global economic crisis. Despite an array of intrinsic shock absorbers, including large informal sectors, small manufacturing sectors and a stable banking system with limited exposure to global financial markets, PICs were vulnerable to the sudden downturn in demand owing to their undiversified economic structures, with some being highly dependent upon tourism and capital inflows for foreign exchange and a dependence on strategic imports, such as processed food, fuel and capital goods (Jayaraman, 2004; Chhibber et al., 2009). At a macro-economic level, PICs were, to varying degrees, affected by the crisis through declining government revenues from trade and other taxes, a loss in the value of trust funds (invested on international markets) and, in some cases, a fall in revenue from tourism. Many PICS are once again experiencing high rates of inflation and significant increases in food and fuel prices as these commodities recover from the global economic crisis. At a regional level, while growth was expected to have picked up in 2011 (largely driven by the resource-rich economies of Papua New Guinea and Timor-Leste), it was forecast to be lower in 2012 and 2013 (ADB, 2009a, 2009b, 2011, 2012, Feeny 2010).

There is currently very little information about how these recent shocks have affected individuals, households and communities. In the absence of formal monitoring systems, evaluating the impacts at this level remains very challenging. Extrapolating human impacts from macroeconomic changes often obscures their differential effects for women and men, and in the informal and reproductive economy (Green et al. 2010). Often weak linkages between the macro economy and the household are compounded in PICs by the low level of participation in the formal economy and the reliance on subsistence and family support structures (Feeny 2010).

Moreover, predicting any long-term impact on development, without information on how households respond when shocks occur, is virtually impossible. In particular, there is limited information, beyond stylised views, on the extent to which the custom (or *kastom* in the local languages of Pidgin and Bislama) economy is used by households as a crucial resilience mechanism in the event of shocks. Former minister for ni-Vanuatu business Ralph Regenvanu considers the custom economy (which he refers to as the ‘traditional economy’) to be a key resilience mechanism that is unique to Melanesian countries. Regenvanu (2009) argues that a substantial proportion of Melanesian households (up to 80 per cent) reside in rural areas with universal access to land on which to access food and make a living, with customary dispute resolution practices, and strong familial ties characterised by norms of sharing and reciprocity. He suggests, therefore, that the ‘traditional economy’ provides households with a social security system that is largely absent in a formal sense as well as providing a buffer from the transmission of externally generated macro-economic shocks. However, according to Connell (2010), the effect of rapid urbanisation
and monetisation in Melanesia has been to break down these safety nets at the margin. He also suggests that low incomes and a lack of support in squatter settlements have meant that some traditional obligations have been abandoned by some households simply aiming to get by. In response to these challenges, this paper draws heavily on findings from research fieldwork that was specifically designed to provide insights into these issues.

The fieldwork was conducted across 12 sites in Solomon Islands and Vanuatu in 2010–11 and consisted of 1,000 household surveys, more than 50 focus group discussions, and a number of key informant interviews. It revealed that in both rural and urban areas, households have a high degree of exposure to international macro-economic shocks, in particular price shocks, which compound a range of other shocks affecting households, including natural disasters and idiosyncratic events. The food garden and the nearby coral reefs are clearly fundamental in providing resilience to households. Moreover, while a sizeable proportion of rural and urban households turned to the support of kinship networks to cope with the effect of shocks, remarkably almost one in eight households indicated that, to some extent, they had jettisoned their custom economy obligations, opting out of the payments to extended family and wantoks as they became overly onerous. Moreover, women in Vanuatu and Solomon Islands bore a unique burden in the adjustment to the recent food, fuel and economic crises.

In summary, the research finds important differences in the experience of shocks across location. A simple rural–urban disaggregation in Solomon Islands and Vanuatu is not appropriate to explain how lifestyles are changing rapidly in these countries. Given their strong ties to the formal economy, urban households are highly exposed to price shocks, and a lack of access to land threatens their food security and puts a strain on traditional resilience mechanisms. While it remains the case that many rural communities suffer from a lack of infrastructure, services and income-earning opportunities, their access to land and subsistence agriculture often provides them with a buffer during price shocks. There is evidence that rural communities with both good access to land and infrastructure that connects them with population centres are faring very well, with them benefiting from a combination of access to essential services, formal employment and international markets.

The remainder of this paper is structured as follows. Section 2 provides further details on the fieldwork activities and the information collected from Solomon Islands and Vanuatu. Section 3 summarises the different types of shocks that the targeted communities in Melanesia have experienced during the past two to three years. Section 4 evaluates the impacts of these shocks and how households responded to them. Finally, Section 5 concludes by summarising the various strategies that focus group participants recommended for reducing vulnerability and strengthening their resilience.

2. Research Fieldwork: Household And Community Data

This paper summarises data that were collected during extensive fieldwork in Solomon Islands and Vanuatu. Careful consideration was given to the location of fieldwork. In an attempt to capture the diversity in experiences of vulnerability and resilience, six locations were targeted in each country. These were selected based on criteria that sought to reflect diversities: remoteness, economic activity, and environmental differences. The locations of the communities and their common characteristics are provided in Table 1 below.

In Honiara, two communities — White River and Burns Creek — were visited. White River, known for its betel nut market, is a large and established settler community in western Honiara. It has a broad mix of ethnicities, encompassing settlers from as far away as Temotu Province and Kiribati. Burns Creek is a squatter settlement in the east of Honiara, housing mostly displaced Malaitians from the recent ethnic conflict known colloquially as ‘the tensions’. This settlement has been characterised by high unemployment, gangs, and, sometimes, violent crime.

Auki is the provincial capital on the neighbouring island of Malaita and is the country’s second largest town. The fishing villages of Lilisiana and Ambu, which mainly comprise villagers from Langa
Langa Lagoon in the chain of artificial islands along the southern region of Malaita, were visited. Both communities are coastal and experience flooding during king tides. Communities around Malu’u, the provincial substation in North Malaita about 80 km north from Auki, were also surveyed. A densely populated area, with hospital and schools, Malu’u is also renowned as a copra growing area. However, transport to the main markets in Auki is severely impeded by the very poor quality of the road.

The area around the Guadalcanal Plains Palm Oil Limited (GPPOL) factory is the major growing region for palm oil in Solomon Islands. In addition to leasing their land or being employed on the major estates, members of some communities in the area have opted to become outgrowers using production from small blocks of land to supply palm fruit to the GPPOL operations. These 176 blocks vary in size from less than one hectare to 22 hectares (Fraenkel et al. 2010). In recent years, households have been able to make considerable amounts of money from outgrowing.

The communities of Oa, on the Weather Coast, and Mariuapa in Marau Sound are located on the south east corner of Guadalcanal. Nestled in rugged terrain and astride fierce seas, communities in this part of the country are isolated, with very limited transport links to the capital (though the area does benefit from a small amount of tourism). Finally, small communities in Vella Lavella, located in the country’s Western Province, were visited to examine the extent to which geographically distant communities in Melanesia are integrated into the global economy.

In Vanuatu, an attempt was made to select broadly comparable communities to Solomon Islands. In the capital city, Port Vila, two settlements were visited: Ohlen and Blacksands. Both communities are home to migrants from the outer islands. Ohlen is a densely populated area, situated on an escarpment that also serves as Port Vila’s water catchment area. It has few services and there are concerns that residents could face evic-
tion. Blacksands is Port Vila’s largest and most established informal settlement and has often been characterised by tensions, conflict, and insecurity over land.

The two communities of Pepsi and Sarakata were visited in Luganville, Vanuatu’s second largest town on Espiritu Santo. While only separated by the Sarakata river, these migrant communities had very different access to government services.4

The communities of Baravet, on the south west coast of Pentecost, were selected on the basis of their heavy reliance on cash crop farming, in particular kava, which is shipped to the main markets on Port Vila. Lebot et al. (1997) note that around two-thirds of kava shipped to the main markets of Port Vila and Luganville originated in Pentecost, and that farmers were rapidly transitioning away from growing kava as a garden crop and into more industrialised growing processes, with dedicated growing areas.

Mangalilu (and the nearby island of Lelepa) are in north Efate — the same island as the capital. While rural in nature, these communities have good transport links to Port Vila following the recent completion of the island’s ring road — a large US-backed infrastructure project undertaken by the Millennium Challenge Corporation. The selection of Hog Harbour reflected its similarity to Malu’u in terms of its proximity to the second city and its involvement in copra farming. However, unlike Malu’u, Hog Harbour is provisioned with good access to Luganville following the completion of the East Santo Road sponsored by Millennium Challenge Corporation, and access to tourism owing to its proximity to the renowned Champagne Beach. Similar to Solomon Islands, a geographically distant community was selected: that of Mota Lava in the Banks Islands in the far north of the Vanuatu archipelago.

In each location, a survey specifically designed to capture the experience of shocks and household responses to them was conducted for approximately 85 households. The survey design drew on an extensive literature survey of economic vulnerability and resilience, particularly in the Pacific Islands, and a review of existing household surveys. In addition to capturing information on households’ income sources, asset endowments and demographic characteristics, it included questions on households’ experiences of shocks and their responses to them. In the interests of parsimony the survey considered a ‘household’ to correspond to the dwelling, while the survey deliberately eschewed concentrating on the ‘head’ of the household because in pilots it was discovered that the head was repeatedly identified as the oldest male in the family — irrespective of whether that person resided in the dwelling itself. One adult was therefore asked to answer questions on behalf of ‘the people living in the house’. In an attempt to draw on the experiences and perspectives of both men and women, the research teams aimed for a 45–55 per cent gender balance in survey respondents, and 10 per cent of households were re-surveyed so that there were both male and female respondents from within the same household in order to hone in on gender differences.

In each site, four separate focus group discussions were held, led by female or male local facilitators: one each with men over the age of 30; women over the age of 30; younger men; and younger women. The focus group outline was more open than the survey — allowing groups to define what ‘difficult’ and ‘good’ times had been in the past and how they had responded. This provided a local definition of significant events and hardship against which the assumptions of the survey could be tested. Key informant interviews were held with government officials, community leaders, and village chiefs.

Local research teams comprised team leaders, focus group facilitators and documenters (men and women), and surveyors. They were recruited in each country and a gender balance was strictly adhered to within the teams.

To assist with the research fieldwork, a ‘point of contact’, local to each research site, was recruited in order to negotiate access to the communities and provide them with information prior to the arrival of the research team. This proved to be a very effective method for gaining the acceptance of each community and is recommended for future fieldwork in Melanesia. On arrival in each research site, the research teams conducted a broad community-wide briefing to provide more detailed
information about the research, answer questions and generally build rapport — a key determinant of the success, or otherwise, of fieldwork in the region. In addition, prior to the teams’ departure, a community debrief was held, that outlined some of the initial findings and answered any further questions. This was also particularly well received.

3. The Experience of Shocks in Solomon Islands and Vanuatu

The household survey asked specific questions on each household’s experience of covariate and idiosyncratic shocks. Responses to these questions are summarised in Figure 1 below. Virtually all households had experienced at least one kind of shock during the previous two years.

Clearly, the most prevalent shocks relate to food and fuel price hikes. A household experienced a food/fuel price shock if, during the two years preceding the survey, they have experienced an increase in the price of food/fuel. Almost 90 per cent of households experienced a food price shock and over 70 per cent a fuel price shock.

There is no distinct pattern to the experience of food price shocks across country and communities. Many rural communities appear just as likely to experience a food price shock as urban communities — perhaps reflecting the fact that there are unlikely to be households living a pure subsistence lifestyle in Melanesia and most households purchase at least some of their food intake (Jansen et al. 2006). Moreover, fuel price hikes will have increased the transport cost of getting food to rural locations and outer islands so rural communities may be paying more for the same food items. According to the Asian Development Bank, fuel price rises are likely being magnified at each link of a very long value chain out to the most remote communities and being subsequently passed on to consumers — particularly for those foods that arrive by ship (ADB 2009c). This may partly explain why a high proportion of households in the geographically distant Banks Islands experienced a food price shock despite households having ample access to land for gardening. Food price shocks are also particularly prevalent in urban areas in both countries, as well as in Baravet in Vanuatu, where incomes from producing kava have helped shift households toward a diet more akin to urban areas. Conversely, the GPPOL villages and households located in Hog Harbour had the lowest proportion of households experiencing a food price shock, possibly reflecting a good availability of land for gardens in these communities and them benefiting from out-growing and tourism. A food price shock was also less commonly experienced by households on the Weather Coast, which is likely to reflect these communities’ genuine remoteness, and thus relative reliance on food from the garden rather than the store.

In Solomon Islands, the highest proportion of households experiencing a fuel price hike was found in Honiara and the isolated communities of the Weather Coast. In Vanuatu, the same was true for households located in Luganville and the Banks. These findings reflect the high use of fuel in both urban and remote areas of Melanesian countries. Fuel is required extensively for public transport, in particular buses, in urban areas but there is also the need for fuel in rural areas for energy, cooking, and transport in order to access health and education services. In rural areas, fuel is often purchased at a much higher price. Solomon Islands communities of Malu’u and Vella Lavella had the lowest proportion of households reporting a fuel price shock, possibly reflecting less reliance on transport and less need to sell their goods in markets other than local ones.

Interestingly, reduced employment, which is how a macro-economic shock is most often transmitted to households, has not been commonly experienced by households during the past two years. Reduced employment is defined as a household member losing their job or having their hours reduced. About 18 per cent of households report experiencing this type of shock. The highest proportion of households reporting this shock can be found in areas with the highest rates of formal sector employment: Port Vila (28 per cent), followed by Honiara (24 per cent) and the GPPOL communities (19 per cent).

Natural disasters are also a commonly experienced shock for households in Solomon Islands and Vanuatu. Over 50 per cent of households reported they had experienced a natural disaster during the past two years. However, the disasters
most commonly experienced are floods, storms and landslides as opposed to large-scale volcanic eruptions, earthquakes and tsunamis. Compared to urban households, a greater proportion of households in rural areas experienced a natural disaster during the past two years. The communities with the highest proportion of households experiencing a natural disaster were the Banks, the GPPOL villages and the Weather Coast. Less than 13 per cent of households in Luganville reported experiencing a natural disaster.

Crime/theft and crop failure are also prevalent shocks, with about one-third of households reporting that they had experienced such events in the past two years. Information gained during focus group discussions indicates that theft from the garden and burglary are the most commonly experienced crimes. The incidence of crime varies greatly across countries and communities. The proportion of households reporting the theft of livestock or crops in Vanuatu was a startling 48 per cent, compared to just 22 per cent in Solomon Islands. More than 70 per cent of households in the Banks reported theft, with high rates also reported by households in Port Vila, Mangaliliu, and Hog Harbour. Communities in Auki and the Weather Coast were virtually crime free, with less than 5 per cent of households reporting theft. Crop failure is another shock commonly experienced by households in Melanesia, with nearly 40 per cent for households experiencing crop failure in the past two years. It is most common in rural areas given the greater prevalence of the garden and land for cash crops.

In general, responses to experiencing different shocks did not vary greatly across male and female respondents. However, exceptions are that women were more likely to report food price hikes and they also experienced greater difficulty in being able to manage the rise in food prices. As a consequence, women more often reported reduced consumption of food, concern about family health and nutrition and increased reliance on the garden as food prices rise. This is likely to be reflective of women’s usual responsibility for purchasing the households’ food and underlying gender inequalities.

It is important to note that households can experience positive as well as negative shocks. Findings from the household survey reveal that 27 per cent of households experienced a positive economic shock, whereby the household received more money than they expected, primarily from obtaining more work, getting paid more, growing...
additional crops or receiving remittances. Households most commonly use windfalls to save, spend money on education, or improve the quality of their house.

Examples of events that might lead to households experiencing a positive economic shock include donor-funded roads in east Santo and around Efate in Vanuatu, and (global) price hikes in copra and palm oil. Roads and improved transport infrastructure allow for the cheaper transportation of goods (and people) to market. In some areas, households are responding to higher commodity prices by increasingly engaging in cash cropping and commercial agriculture. While this provides a higher income, it often comes at the expense of spending less time maintaining their garden. Households and focus group participants often reported neglected gardens being destroyed by wild pigs.

4. The Impacts and Responses to Shocks

The impacts and responses to shock are inextricably linked. Information on how shocks have affected peoples’ lives is best captured by the focus group participants, while gauging the relative frequency of different responses is best achieved through household surveys. On average, households suffered five shocks in the preceding two years.

In general, focus group participants reported that the shocks they had experienced had made it harder to make ends meet. Households experienced an inability to generate a sufficient income in order to maintain an adequate standard of living and this restricted their ability to access markets, health clinics, and schools. Health and education facilities can be a long distance from households — a problem that is exacerbated by poor infrastructure. The stress of having inadequate income is leading to broader social impacts, including crime, violence, substance abuse, and mental health problems. In focus groups, women consistently raised significant difficulties with access to sanitation and their experience of violence; issues that were not raised or emphasised in the same way by men.

Who are the most vulnerable to shocks and how do they experience the impacts?

Focus group participants helped identify specific groups who are most vulnerable to the impacts of shocks. In general, urban communities were cited as being more vulnerable to price shocks, given their relatively greater reliance on imported foodstuffs, than rural communities. This compounds the burden on households to find the money needed to pay bills for electricity and water as well as for transport. Greater access to land in rural areas is able to provide people with a buffer when prices increase.

However, our results nuance this perception — as many rural communities were also exposed to rising food prices. In rural and urban areas alike, people experienced higher prices for fuel, predominantly through higher transport costs. In urban areas, there is a heavy dependence on public buses, while trucks and boats are more commonly used in more remote locations. This makes it harder for people to transport goods, access jobs and markets; it is also more expensive to fish using outboard motors.

For households in urban areas, a lack of access to land for gardening clearly impacts on their vulnerability and resilience. High rates of urbanisation and population growth are adding to the pressure on land, both in terms of tightening supply and through environmental degradation. Where land is available its ownership is often disputed. Where plots of land do exist for gardening in urban areas they are often declining in size due to migration to urban areas. Households in urban areas are growing, with family members moving to urban areas and increasing the reliance on a garden as a source of food. The result is that urban households are increasingly finding the garden to be inadequate as a food source and, as a consequence, are moving towards lower cost, imported food (such as rice, tinned fish and packet noodles). While there is a danger that such moves will have negative health implications, it is not necessarily true that processed and imported foods are of lower nutritional value. Any assertions regarding nutrition must take into account the broader issue of current diets and the dietary requirements of house-
That said, alarmingly, sometimes families are even going hungry. In contrast, while rural households will nearly always get a certain proportion of their food from the local store, they generally have relatively good access to a productive garden, which increases their resilience to food price hikes given that there is a readily available substitute for sourcing their nutritional needs. However, rural households are still acutely affected by increasing costs and they remain constrained by a lack of income-earning opportunities.

Women have been bearing a substantial amount of the costs of adjustment as a result of these shocks. As a response, the workload of women has increased, as they have borne the responsibility of finding additional income while maintaining their traditional gendered responsibilities around the home. Women indicated that in order to make ends meet they had increased their production from the garden, made handicrafts and even cooked additional food to sell at local markets. In an effort to minimise fuel expenditure, women focus group participants stated that they travel less by public transport and walk more. They have also substituted firewood or charcoal for fuel when cooking. In spite of women’s efforts to generate income and increase cash flow within the household, they remain largely alienated from financial decision-making processes. Further, women are susceptible to domestic violence and some focus groups in urban areas even reported that women can be forced into prostitution. Although women focus group participants discussed increased feelings of insecurity at home as well as vulnerability to violence and rape, it cannot be determined that this is a direct result of economic shocks. Rather, women’s focus groups raised the issue of violence against women and advocated the need to urgently address it as an incidental matter during discussions about their difficulty in coping with shocks.

Youth (young men) were identified by focus group participants as another vulnerable group, as young people have high rates of unemployment and a lack of income-earning opportunities. This was substantiated by the household survey, which indicated that a smaller proportion of men under the age of 30 were formally employed relative to older men. Sometimes, when young men successfully find income-earning opportunities, focus groups reported that this has, on occasion, caused tension, as the traditional dominance of older men in the household is challenged. Squatter communities on insecure land were also identified as another vulnerable group, squaring with the findings of other studies (Chung and Hill 2002; Maebuta and Maebuta 2009). With insecurity over their land, such communities are often reluctant (or unable) to establish gardens, which significantly undermines their resilience when shocks occur. Widows, old people and those with a disability are also vulnerable since they are likely to rely on other people to meet their needs.

Focus group participants identified the least vulnerable households as those with working members who can provide other household members with remittances. Along these lines, households from Vanuatu with members that participate in New Zealand’s Regional Seasonal Employer scheme are perceived to be less vulnerable. Households with well-educated members are also perceived to be less vulnerable since they stand a better chance of finding employment. Further, most communities, particularly urban communities, are experiencing rapid population growth, and smaller families with fewer mouths to feed were cited as being less vulnerable and more able to cope in times of hardship.

How do households respond to shocks?

In collecting household responses to the different types of shock experienced, the survey found that households respond in similar ways to the different events. For example, households that experienced a food or fuel price shock responded in the same way as when they experienced a natural disaster. Further, households were found to undertake multiple actions following a shock with an average of eleven different responses. The most common responses to a food or fuel price hike are shown in Figure 2, which clearly highlights the garden as an important source of resilience. Almost 83 per cent of households turned to their garden in order to source more food. Not surprisingly, this was a less common response in the
urban communities of Honiara, Auki and Luganville but a universal response in the rural communities of Baravet and Malu’u. It was common in Port Vila, reflecting the access that communities in Ohlen and Blacksands have to urban gardens, despite insecurity of land tenure.

Another important household response to a food or fuel price shock was to source more food from the reef, through various forms of fishing. While none of the sampled communities are far from the sea, this response was most common in the rural communities of Baravet and Vella Lavella and undertaken to a far less extent by households in Honiara and the GPPOL villages.

Overall, over 75 per cent of households in the sample responded to a food or fuel price shock by either purchasing cheaper food or purchasing lower quality food. This practice is more common in urban areas and was notably far less prevalent on the Weather Coast, reflecting this community being more reliant on food grown from the garden. More positively, approximately 42 per cent of households responded by reducing their consumption of ‘demerit goods’, which are unhealthy goods such as kava, betel nut, cigarettes, and alcohol. Not surprisingly, this response was more widely undertaken in urban communities, in particular, Honiara, Auki and Port Vila with more widespread availability and use in these areas. However, 60 per cent of households in the rural location of Vella Lavella reported responding in this way.

Switching to a cheaper fuel was a much more common response in Solomon Islands than in Vanuatu. Almost 60 per cent of households responded in this way in the former compared to less than 45 per cent in the latter. It was a particularly common response in GPPOL villages and the Weather Coast, possibly due to the wide availability of firewood in these communities. While responses such as fishing more and turning to firewood for fuel can provide resilience in the short term, reductions in these resources can actually undermine resilience of communities in the longer term.

Purchasing lower quality and fewer clothes was particularly common in Port Vila and Mangaliliu, where people in these communities might purchase clothing more often than those located in rural and more remote regions. Working for food was a common response on the Weather Coast and the GPPOL villages. Clearly, there are good opportunities for work around GPPOL which neighboring communities take advantage of when necessary.

Figure 2: Most Common Household Responses to a Food Or Fuel Price Shock in Solomon Islands and Vanuatu

Note: Sample size (N) = 872 households
From a long-term development perspective, it is reassuring that 'no longer seeking medical help' and 'removing children from school' were not particularly common responses to a food or fuel price shock. Overall, less than 7 per cent of households did not seek medical help for an illness or injury following a shock, although this was more common in Vanuatu (10 per cent of households) than in Solomon Islands (3 per cent of households). While this can be viewed in a positive light, it is also likely to reflect the already poor access that these communities have to health services. However, approximately 22 per cent of households reported buying less medicine, with a higher proportion of households responding in this way in the capital cities given the better access they have to modern pharmacies.

Primary school education is now officially fee-free in both Solomon Islands and Vanuatu, although families still have to meet the costs of materials, uniforms and transport, and schools sometimes ask for their own fees. Only 9 per cent of households took their children out of school in response to shocks (this was the same for both Solomon Islands and Vanuatu). Moreover, just 3 per cent of households sent a child out to work. More commonly, households are found to move their child to a cheaper schooling option, with 29 per cent of households responding in this way. This move might involve sending a child to a closer school or to live with extended family members to reduce the cost of getting to school. This response was particularly common in Solomon Islands.

The survey also found that 11 per cent of households reduced their savings, but far fewer households borrowed money (about 2 per cent) given the limited availability of financial services in these countries. In response to a food or fuel price shock, about 18 per cent of households sold livestock or other assets to get food which could, unfortunately, make them more vulnerable to future shocks.

Table 2 explores the use of the custom economy. In total, 92 per cent of households that experienced a negative shock used the custom economy to cope with shocks. This included drawing on traditional support mechanisms as well as eating more food from gardens and the reef. The near-universal use of the custom economy in the event of a shock is a clear illustration that it remains an important dimension of Melanesian households’ sense of resilience. Looking at each of the response types in turn, around 64 per cent of households used traditional support mechanisms — that is sourced cash or in-kind assistance from friends/neighbours/wantoks or family and switched to traditional medicines. Households’ proclivity to resort to traditional support mechanisms to cope with the effects of a shock was higher in rural areas (65 per cent of households) compared with urban areas (61 per cent).

After using traditional medicines in place of modern medicines, the most popular of these responses was sourcing help from family, then a friend or neighbour. In each case, rural households were more likely to seek help than households in urban areas. Rural households clearly sought the assistance of the local environment more than urban households, with 92 per cent of rural households increasing their intake of food from the garden (and 62 per cent increasing food from the nearby reefs) compared to 62 per cent and 49 per cent of urban households, respectively. Other responses, however, demonstrated the tenuousness of the custom economy and the extent to which it is being undermined, including giving less money to the church; giving less money at a fundraiser; giving less money at a custom event; and giving less money to family/wantok. In fact, 37 per cent of households indicated that they had jettisoned, to some extent, their cultural obligations in response to a shock. Urban households were broadly similar to rural communities in this regard, though it appeared that there was a clear preference in terms of the order of with households tending to reduce contributions at custom events (such as bride prices and funeral contributions), then contributions to family/wantok followed by contributions at fundraising events and finally the church.

High levels of urbanisation in Solomon Islands and Vanuatu also highlight the important role of remittances as another coping mechanism. Respondents across both countries noted that they receive and send remittances of money, clothing and food. While remittances of money and clothing are
consistent with flows in other developing countries, it is food remittances that perhaps highlight an interesting feature of Melanesian economies. Approximately 90 per cent of households in both countries send remittances in the form of food, compared to 80 per cent who send money remittances. Clearly, inflows of food (and money) to vulnerable households can be an important form of household resilience. However, remittance outflows may be creating a large burden for the sending households. Over 75 per cent of urban and rural households in both countries send food remittances. Moreover, approximately 30 per cent of households have decreased their outflow of remittances as a result of recent hikes in food and fuel prices.

5. Conclusion: Policies and Strategies to Assist Households in Solomon Islands and Vanuatu Cope with Shocks

As part of the focus group discussion exercises, participants were asked what they feel they can do, and what others can do, to help make things better for their community. Focus group participants identified four broad strategies that could reduce their vulnerability and increase their resilience: reducing reliance on imported foods; improving the ability to generate an income; improving education; and reducing social tensions and fragmentation. Each is discussed in turn, and this section also draws on information from key informant interviews. Interestingly, while the traditional way of life in Melanesia provides resilience for communities, some of the strategies identified will actually embed them more in the formal economic system and increase vulnerability to future economic shocks.

Reducing their reliance on imported foods was a common theme across all focus groups and can be achieved in a number of ways. Some focus group participants suggested that households should grow more food as well as fish more to improve their food security, despite recognition that this is increasingly hard for urban households. At a community level, participants identified a need for community co-operatives to assist with both

<table>
<thead>
<tr>
<th>Response</th>
<th>Total</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Used Custom Economy</strong></td>
<td>92</td>
<td>87</td>
<td>94</td>
</tr>
<tr>
<td>Used traditional support mechanism</td>
<td>64</td>
<td>61</td>
<td>65</td>
</tr>
<tr>
<td>Used traditional medicine</td>
<td>39</td>
<td>36</td>
<td>40</td>
</tr>
<tr>
<td>Got help from family</td>
<td>31</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>Got help from friend/neighbour</td>
<td>17</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>Moved in with family/wantok</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Used Environment</strong></td>
<td>88</td>
<td>74</td>
<td>93</td>
</tr>
<tr>
<td>Garden</td>
<td>81</td>
<td>62</td>
<td>92</td>
</tr>
<tr>
<td>Coral reef</td>
<td>57</td>
<td>49</td>
<td>62</td>
</tr>
<tr>
<td><strong>Jettisoned Custom Economy</strong></td>
<td>37</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>Reduced contribution at church</td>
<td>8</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Reduced contribution at fundraising</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Reduced contribution at custom event</td>
<td>23</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>Reduced contribution to family/wantok</td>
<td>21</td>
<td>21</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 2: The Custom Economy and Shock Responses

Note:
Since households can undertake more than one response for dealing with a shock, the ‘Total’ column aggregates exceed one hundred per cent. Headline figures, such as ‘Used Custom Economy’ and ‘Jettisoned Custom Economy’ signify whether a household used at least one of the options listed. Twenty-four per cent of households nominated that they both used and jettisoned the custom economy.
the production and selling of locally grown food and to increase household incomes. Participants also identified a need for households, community leaders and the government to change attitudes towards food — promoting the production and consumption of traditional food. The need to change the attitude of children in particular was perceived to be very important. Rural focus group participants in Solomon Islands wanted greater support from the Ministry of Agriculture at times of crop failure or natural disaster, such as flooding, and participants of one focus group in Vanuatu believed that the government should subsidise the mass production of local food.

Focus group participants identified the ability to generate a sufficient income as fundamental to the capacity of a household to cope with price shocks. Here, participants asserted that government could play a role by implementing price controls to provide them with greater certainty, and therefore more incentive, to produce. A minimum wage would entice more people into the formal sector. Government could also play a role in capacity building, providing information on prices, livelihood training and providing greater access to financial services to assist households to save. In general, it was felt that governments should assist with the establishment of small enterprises (rather than impede them through, for example, the banning of betel nut vendors in Honiara).

In more affluent communities, particularly those benefiting from cash cropping, households earn enough to meet the basic needs of the household and school fees and then stop working. While this is sometimes attributed, in part, to attitudes to wantok obligations, an alternative explanation is that households have nothing they can do with their excess money. Financial facilities could assist with saving, as long as fees are kept at reasonable rates.

The local community and households themselves can play an important role in income generation. Again, establishing community co-operatives to pool resources, share information and reduce the costs of getting goods to markets that are further away could play an important role in income generation. Yet it should not be overlooked that in the focus group discussions emphasis was also placed on the individual or household for dealing with shocks, with little tolerance and acceptance of idleness within the community. ‘Plant more, grow more and sell more’ was a common mantra. Participants believed that household budgeting is currently inadequate to cope with shocks and could be improved. Again this places the responsibility to improve things on the household. A related issue is for households to reduce their spending on non-essential items such as mobile phones, kava, alcohol, and cigarettes.

Improved access to markets was also central in many focus group discussions. This is particularly important for women, as they are expected to engage in market activity and need to ‘make more market’ at certain times. High fuel prices and poor transport infrastructure makes travelling to markets very expensive in terms of both time and money. This is true for communities in both urban and rural areas. High transport costs are exacerbated by high market fees. Key informants spoke of a need for government to establish new marketplaces near key communities and for communities to pool resources to reduce the costs of getting goods to market. For instance, there is only one main market in both Honiara and Port Vila (although there are some, much smaller, roadside markets scattered across town). If there were additional markets on the edge of these cities improving the accessibility of markets would reduce both the need for and the cost of transport. Governments could also improve transport services. Better roads would enable communities to get produce to market a few times a week rather than facing the occasional very long walk.

The inaccessibility of education emerged as a common theme with focus group participants. They saw an education as a vital component of resilience by recognising the links between a lack of education and unemployment, idleness, social tensions, and crime. Despite being notionally free, the costs of sending children to primary school
are proving very difficult for many households to meet. Since children often take public transport to school, fuel price hikes can have a direct impact on school costs, combined with those for stationery, uniforms, and lunches. Participants identified an increased role for government in assisting households by providing free secondary schooling, providing boarding at schools in isolated areas, and assisting with other costs associated with gaining an education. Again, though, households themselves can play a role by increasing their income and ensuring the children attend school. Improving access to, and the quality of, health services, water, and sanitation will also assist in raising school attendance, particularly for girls.

Some participants and key informants viewed population growth as a key factor in vulnerability and recommended education on family planning. Finally, participants identified a need for government, communities and households to address rising social tensions, fragmentation, theft, and substance abuse. Women, young and old, particularly raised issues of domestic violence and an increasing rise of transactional sex and prostitution as young women are pressured to earn more money. Solutions emphasised improved law enforcement and punishment through official channels, but also through traditional mechanisms, such as village courts and chieftain dictates.

Kava use among youth in particular is an issue requiring special attention. In addition to improved law enforcement, government support for more sporting facilities, youth programs and rural training centres were spoken about as ways of getting youth to contribute to their communities and society.

Notes on Authors

Simon Feeny is an Associate Professor in development economics at RMIT University, Melbourne, Australia. He has published widely on international development issues. His research interests include the allocation and effectiveness of foreign aid, the Millennium Development Goals, poverty and human well-being and public sector economics. His research has focused on the Pacific region.

Lachlan McDonald is a development economist working with both Oxfam Australia and The Fred Hollows Foundation. Prior to this he gained several years’ experience in central banking, both in Australia and Vanuatu. He has also worked as consultant with the Vanuatu Utility Regulatory Authority on a rural electrification project. Lachlan has a Bachelor of Commerce and Bachelor of Economics, with Honours, from Monash University and a Masters of International Relations from the University of Melbourne. He is currently a PhD candidate at RMIT University, Melbourne.

May Miller-Dawkins is currently undertaking research on private–hybrid global governance and global environmental governance at New University as an LL.M. candidate. She was previously research manager at Oxfam Australia where she focused on research into economic resilience, human impacts of the global economic crisis and gender justice in countries across Asia and the Pacific Islands. Her academic interests focus on questions of power, legitimacy and impact of the exercise of authority by private and public actors seeking to regulate economic activity at the global level.

Jaclyn Donahue has worked in the not-for-profit sector since 2005 in the varied roles of community and volunteer liaison, marketing representative, program manager and researcher. Her research interests include the impacts of labour standards and access to food and nutrition on gender equality and poverty. She earned a Master’s degree from the University of Denver’s Josef Korbel School of International Studies.

Alberto Posso is a Senior Lecturer at RMIT University, Melbourne, Australia. He holds a PhD in Economics from the ANU. His core research area is in labour and trade economics with a focus on the developing world. Alberto has predominantly authored studies on the development experience of Latin America, East Asia, and the Pacific.

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Endnotes

1 Independent Pacific Island Countries include the Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

2 While high rates of urbanisation have been a feature of most Melanesian countries, figures from the 2011 preliminary census of Papua New Guinea indicate that population growth for the capital Port Moresby has slowed considerably (see Bourke 2012).

3 Outgrowing relates to agreements whereby households use their land and resources to produce palm fruit (or other produce) for a processing company.

4 At the time of the survey, the Pepsi community was not considered to be under the auspices of the Luganville Municipal Council. Therefore, unlike Sarakata, it had no access to public utilities.

5 Households were presented with a Likert scale to measure whether, over the past two years, the price of food/fuel had: (i) gone down a lot; (ii) gone down; (iii) stayed the same; (iv) gone up; (v) gone up a lot. A food/fuel price shock could also be defined as whether a household has found, over the past two years, that the ease of obtaining food has become ‘harder’ or ‘much harder’ on a similar Likert scale. The figures for a household’s experience of a food/fuel shock remain largely unchanged if this alternative definition is adopted.

6 Although a large proportion of households on the Weather Coast reported that fuel prices had ‘gone up’ only a small proportion reported that they had ‘gone up a lot’.

7 For example, Allen (2001) finds that food imports improved food security in Malo, Vanuatu. In the context of Papua New Guinea, Heywood and Hide (1994) found that moves to cash cropping led to higher incomes and more spending on rice, tinned fish and meat. This resulted in beneficial increases in the intake of protein among households. Bourke and Harwood (2009) provide an extensive overview of food and agriculture in Papua New Guinea.

8 It is not uncommon for people in Port Vila settlements to offer informal ‘payday loans’ to one another. Further, finance is sometimes available through non-government organisations such as the Vanuatu Women’s Development Scheme.
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State, Society and Governance in Melanesia
School of International, Political & Strategic Studies
ANU College of Asia and the Pacific
Australian National University
Canberra ACT 0200

Telephone: +61 2 6125 8394
Fax: +61 2 6125 9604
Email: ssgm.admin@anu.edu.au
Twitter: @anussgm

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