# Resilience and Community Social Organizations in Rural Myanmar

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#### Abstract

Consistent with prior research, analysis of data from two large rural household surveys conducted in 2015 and 2016 across all the administrative areas of Myanmar demonstrates that almost half of rural communities in Myanmar have at least one social organization, as distinct from religious, political or administrative organizations. Overall, households in communities with social organizations were less likely to be classified as vulnerable than households in communities without social organizations (27.6% vs. 28.8%). The positive effect was seen mostly in the West, Southeast and Delta areas, was slightly negative in central areas, and strongly negative in Northeastern areas. In villages with social organizations, percapita health spending was higher, but levels of debt relating to healthcare costs were lower, with better overall health indices. Likewise, educational spending was higher, but education-related debt levels lower in villages with social organizations. The presence of village social organizations was also associated with lower degrees of income inequality, and the degree of disadvantage experienced by being a poor household, a female-headed household or a household with a person with disabilities was lower in communities with social organizations, suggesting that the activities of these groups plays a significant role in addressing vulnerabilities and inequalities in their communities. These findings show evidence of strong association between the presence of community social organizations and favourable patterns of resilience. Policy-makers of social protection programmes should consider how to engage such organizations in the development of national social protection systems.

## Background: resilience, vulnerability, precarity

Although much of the initial thinking on resilience has taken place in other disciplines such as engineering and ecology (Adger, 2000; Holling, 1973), the concept of resilience "now dominates much of the mainstream aid discourse" where it is being used to." (Béné, 2013, p. 6) Together with the 'twin' concept of vulnerability, the concept of resilience is used to "frame discussions around climate change, social protection, sustainable development, macro-economic development and humanitarian response to emergencies". Resilience is understood at different levels: individuals, households, communities, societies, ecosystems and countries-and as related to numerous factors, such as food security, livelihoods, natural resources and political systems. However, it is acknowledged that the term itself is understood and applied with imprecision (Brand & Jax, 2007), or that in some cases, a quest for precision has resulting in more technically bound definitions (Alinovi, Mane, & Romano, 2009; Carpenter, Walker, Anderies, & Abel, 2001)

which in turn may restrict the usefulness of the concept or support particular developmental ideologies (J. Walker & Cooper, 2011). However, Walsh-Dillery and Wolford have argued that not only that 'uncertainty is central to the resilience concept' (Walsh-Dilley & Wolford, 2015, p. 175) but that this very lack of definitional precision presents "a unique opportunity and productive space of engagement for rethinking what really matters for development.. Indeed, it potentially provides opportunities to look beyond dominant knowledge paradigms to engage in non-hegemonic 'border thinking'" (Walsh-Dilley & Wolford, 2015, p. 174) Thus, this 'productive potential of epistemic ambiguity' allows resilience thinking to engage in 'border thinking' (Mignolo, 2000) to address issues such as power(Walsh-Dilley, Wolford, & McCarthy, 2013), politics and conflict, without which the application of resilience thinking may lead to serious, negative unintended consequences (Reid, 2012)

As with resilience, vulnerability is a term with both wide application and diffuse definition; applied to the development field, it again relates to both macro-level dynamics as well as individual and household contexts (Rothschild & Stiglitz, 1970). Although there are high degrees of overlap between resilience and vulnerability conceptually, "although related, vulnerability and resilience are not mirror-images of the same phenomenon: typically, vulnerability focuses on exposure to risk as well as lack of coping capacity" (Sibrian, 2008, p. 137) Vulnerability is "the degree to which a population or system is susceptible to, and unable to cope with, hazards and stresses" (Pasteur, 2011, p. 11) and the underlying factors are multidimensional, including exposure to risk, access to resources, coping capacity and environmental enablers (such as governance). Vulnerability is the product of three components; **exposure** to risks; **sensitivity** (likelihood of damage and extent of damage if exposed) and adaptive capacity (Ahmad et al in (J. J. McCarthy, 2001) Likewise, resilience "refers to the ability of a system, community or society to resist, absorb, cope with and recover from the effects of hazards and to adapt to longer term changes in a timely and efficient manner without undermining food security or wellbeing...resilience can be thought of as the capacity to endure shocks and stresses and bounce back" (Pasteur, 2011, p. 13). Put more simply, resilience is "the amount of change a system can undergo and still retain the same function and structure while maintaining options to develop" (Nelson, Adger, & Brown, 2007). In designing conceptual frameworks for resilience, Pasteur highlights the interaction between four components: hazards and stresses; future uncertainty; governance (enabling environment) and livelihoods (both diversity and security). This framework can be further informed by considering the dynamic aspects of building resilience, recognizing that "although it can be strengthened through external interventions, resilience is also an inherent, intrinsic, ability, which results first and foremost from population's activities and strategies." (Béné, 2013). Bene describes three key capacities for resilience: **Absorptive**, **Adaptive** and **Transformative** capacities (Béné, Godfrey Wood, Newsham, & Davies, 2012) where "resilience results from the synergy and trade-offs between three core <capacities> and that these three capacities are drawn on strategically to respond to different levels/intensity of stress/shock."

Since 2009, the notion of precarity has been increasingly used to describe the life-context of a class of workers whose economy is characterized by uncertainty (Anderson, 2010; Paret & Gleeson, 2016), although some have criticized the 'Eurocentric' nature of the concept, particularly when applied to describe the 'precariat; in terms of an emerging class (Munck, 2013; Standing, 2011). Precarity, derived 'from the

Latin root prex or precis, meaning "to pray, to plead" (Casas-Cortés, 2014, p. 207) is commonly applied to imply risky or uncertain situations. In her study of the development of the term as used by activist networks in Europe, Maribel Casas-Cortés describes four 'distinct although interrelated conceptual developments that redefine precarity: (1) labor after the rollback of welfare state provisions; (2) the new paradigm of intermittent and immaterial labor; (3) the unceasing mobility of labor; (4) the feminization of labor and life." (Casas-Cortés, 2014, p. 7). However, again like the concepts of resilience and vulnerability, precarity has been more broadly applied to a range of life contexts:

"Precarity is engendered by a wide range of processes and, as it extends across space and time and also materializes (differently) in social, economic, political, and cultural spheres, it is an enduring feature of the human condition. It inhabits every-thing from the global political economy to the vicissitudes of employment, health, social relations, self-perception." (Ettlinger, 2007, p. 324)

Precarity, when applied in the context of labour and livelihoods, describes workers whose lives are increasingly affected by uncertainty due to "Insecure and uncertain waged work ...the decline or elimination of social safety nets and entitlements... rising consumer prices because of inflation, and the gradual elimination of subsistence agriculture' (Arnold, 2013, p. 468). This is noted also to have effects beyond labour markets and employment, with economic liberalization at times undermining traditional and state support structures (Barchiesi, 2011). Although originally used to describe "the social divide separating permanent workers from contingent or casual workers" (Bourdieu, Darbel, Rivet, & Seibel, 1963, p. 6; Waite, 2009) the term has also been used more widely "beyond the world of work to encompass other aspects of intersubjective life, including housing, debt, and the ability to build affective social relations." (Neilson & Rossiter, 2005, p. 1) The notion of precarity has been increasingly employed to try to explain the phenomenon of the 'growing gap between wealth and well-being in the fast-growing economics of Southeast Asia" (Rigg, 2015, p. 71), where the relative lack of wealth-commensurate well-being is explained as "not the level of money wages or income earned...but the lack of community support in times of need, lack of assured enterprise or state benefits, and lack of private benefits to supplement money earnings" (Standing, 2013, p. 5). Precarity has been used predominantly to describe urban contexts, but is also applicable to the lived experience of those engaged in the rural economy (Berckmoes & White, 2014; Horgan & Liinamaa, 2012).

To what degree are vulnerability and precarity overlapping concepts? It is worth quoting Rachel Waite at length here:

"The conditions of precarity are arguably not substantively different from the conditions of risk and vulnerability as outlined above, but the semantic distinctiveness comes from what is omitted from the terms risk and vulnerability and included in the concept of precarity..the socio-political framing and conceptual depth of the term precarity encapsulates both a condition and a point of mobilisation in response to that condition, whereas risk and vulnerability generally refer to just conditions. The analytical advantage of the concept of precarity, therefore, is that it more explicitly incorporates the political and institutional context in which the production of precarity occurs rather than focusing solely on individualized experiences of precarity. The potential of the term precarity

over risk and vulnerability is thus in terms of what can be gained politically by adopting the term." (Waite, 2009, p. 17)

Briefly, then, vulnerability tends more towards a focus on the actual conditions of risk, rather than the wider context of what has led to, and which sustains, or which fails to mitigate against such risks. Resilience, in turn, tends towards a focus on adaptive capacity-and viewed through the lens of precarity, may take into account the individual, corporate and broader national/policy actions, taken in response to precarity which increase (or possibly decrease) resilience (Horgan & Liinamaa, 2012; Partridge, 2012).

## Measuring resilience

Based on the above, attempts to measure or quantify resilience and vulnerability need to be approached with caution, and measures taken to enable the analysis to take into account the dimensions of power, politics and precarity which relate to resilience, and paying attention to cultural bias (Kirchhoff, Brand, Hoheisel, & Grimm, 2010). Thus, in this paper, descriptions of attempts to measure resilience are then examined in the wider context of precarious conditions.

Whilst there is considerable convergence of the various conceptual frameworks for resilience, there is less clarity on how to measure resilience, particularly at household and community level. Reviewing a number of models, Bene concludes that many of the approaches to measurement use "an inductive approach whereby particular households and/or community characteristics are assumed to be building blocks of resilience, and as such, are used as proxies to measure the level of resilience...unavoidably, this inductive process leads to circular analyses where resilience indexes are first built from an a priori identified combination of household or community indicators, and then used to evaluate the impact of resilience interventions on households, leading to circular (or non-independent) analyses." The authors emphasize the need "to develop independent indicators of resilience...indicators that are not directly derived from the characteristics of the specific households or communities which are to be tested". However, the search for the 'independent metric' to measure resilience is surely misguided; it is hard to identify variables relevant to resilience which are sufficiently independent of it. Bene et al propose a model which looks at the costs associated with resilience (economic, ecological, social, psychological and nutrition/food security) postulating that "a household (community/system) that has acquired or developed resilience will face lower cost/sacrifice/pain to pass through and recover from a particular shock than a household (community/system) that is not resilient" (Bene 2013). Here, the costs accrued can be measured against 'capacities' such as social cohesion and likelihood diversity, to measure the extent to which these variables contribute to resilience. The problem is, it may be hard to separate a priori capacities with the outcomes: for example, food security may function both as a capacity which strengthen resilience, as well as a marker of resilience. Social relations can be described both as an outcome of, and as a contributor to, resilience. This is also characteristic of the four 'resilience outcomes' described by Pasteur: Ability to manage risks; Ability to adapt to change; Ability to secure sufficient food; Moving out of poverty" (Pasteur, 2011, pp. 14-15). The outcomes describe characteristics which contribute to resilience, as well as the state of affairs arising as a consequence of increased resilience. Likewise, resilience is dependent on a range of 'capitals': social capital, livelihood diversity, physical capital (wealth), and there is clear inter-relationship between different types of capital (Cassidy & Barnes, 2012). Again, there are often multiple elements which interact to produce functional social capital: social memory, social heterogenicity, buffering capacity, learning, adaptive capacity and trust (Bodin, Crona, & Ernstson, 2006). Intriguingly, the relationship between social institutions and social capital is complex: "Redundancy of social institutions or resources and social or ecological diversity/heterogeneity contribute to system resilience through enhancing its adaptive capacity" (Cassidy & Barnes, 2012). This links with the observation that typically, adverse events, crises, threats and change, by challenging or disrupting norms, can often lead to greater adaptive capacity through increasing learning capacity(B. Walker & Salt, 2012, p. 30).

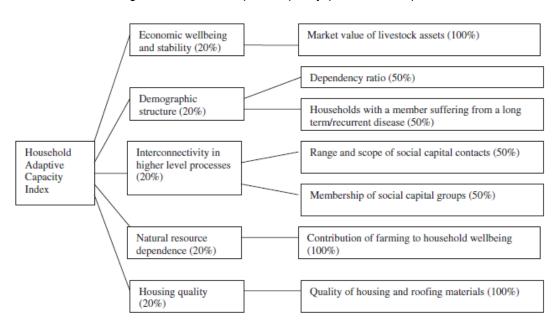
Accepting that there is interdependence between 'process' indicators and outcome indicators or resilience, it is nonetheless possible to measure resilience in ways which incorporate both the capacities and the outcomes dimensions. When considering resilience to climate change, the authors of the Working Group II to the Third Assessment Report (TAR) of the Intergovernmental Panel on Climate listed eight key elements essential to wider community resilience:

- 1. The range of available technological options for adaptation,
- 2. The availability of resources and their distribution across the population,
- 3. The structure of critical institutions, the derivative allocation of decision-making authority, and the decision criteria that would be employed,
- 4. The stock of human capital including education and personal security,
- 5. The stock of social capital including the definition of property rights,
- 6. The system's access to risk spreading processes,
- The ability of decision-makers to manage information, the processes by which these decisionmakers determine which information is credible, and the credibility of the decision-makers, themselves, and
- 8. The public's perceived attribution of the source of stress and the significance of exposure to its local manifestations

## (J. J. McCarthy, 2001)

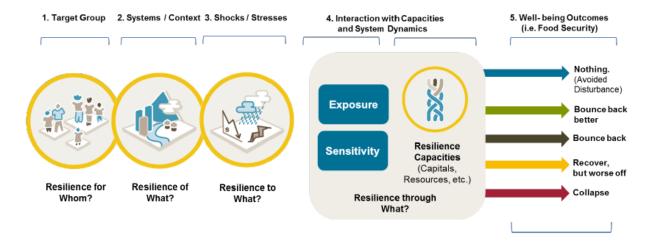
Following this framework, researchers have identified key elements of community and household resilience include livelihoods (including diversity) access to resources (Lebot & Siméoni, 2015) income and food access; assets; access to public services; social safety nets.(Sibrian, 2008, p. 137) social capital (Akamani, 2012) social cohesion(Islam & Walkerden), adaptive capacity (Henly-Shepard et al., 2015). Composite indices have been developed (Opiyo, Wasonga, & Nyangito, 2014); the most comprehensive resilience model, developed and tested on hosuehold data from Palestine, considers three main 'domains': assets (including physical and social capital), income and and 'well-being' capabilities such as eductaion and health. Algebraic formulas are used to measure resilience by combining stability, social safety nets, access to public services, assets, income and food access and adaptive capacity. These were plotted on radar graphs to show differential resilience patterns, and validated by measuring against a stochastic variable (food consumption), and demonstrated how the determinants for resilience differed between the different geographical regions sampled (Alinovi et al., 2009) Models developed by Bene et al, looking at the 'costs' or reslient behaviour, were applied to look at reslience patterns in different countries, suggesting an application suited to higher-level analysis. Again relating resilience to climate change in Africa, Katherine Vincent proposes a simple model to caputure and weight different capacities to calculate a household adaptive capacity index. In this model, each category was weighted, and an overall score was calculated. Households were ranked by overall score. However, in her conclusions, Vincent noted the extent to which scales and indicators were highly contextual: "these examples has highlighted uncertainties and the importance of scale when assessing vulnerability and adaptive capacity..indicator selection always requires atrade-off between specificity or transferability and accuracy or certainty. "(Vincent, 2007, p. 22)

Fig. 1 Household adaptive capacity (Vincent, 2007)



In the Myanmar context, resilience discourse is fairly recent, primarily occuring in the post-disaster recovery and disaster risk reduction sectors. Recent attempts to conceptualize resilience and vulnerability with regard to the local context have atriculated resilience with respect to economic growth (Bank, 2015) water and drought (UNDP, 2015) climate change and natural disasters (ACTED, 2013; CGIAR, 2016) and rural livelihoods (Mercy Corps, 2016). Theoretical frameworks developed by Mercy Corps to conceptualize resilience in the Delta and Dry Zone regions utilized the "Strategic Resilience Assessment (STRESS)" process, leading to well-atriculated models of resilience (see fig 2)

Figure 2: Resilience Framework (Mercy Corps, 2016)



This approach identified key systematic drivers which enhanced, or undermined resilience at community level, and further highlighted the need for an integrated understanding of vulnerability and resilience which is not solely focused either on households, or on wider external systems: "sustained improvements in livelihoods outcomes can only be achieved with a transformation in governance associated with land management and supporting infrastructure. Climate change and escalating pressure on Delta ecosystems will increase the impacts of salinity intrusion and floods. Reducing these risks will require shifts in governance associated with land use planning and associated investments in natural resources management, wastewater management systems, and flood protection infrastructure." (Mercy Corps, 2016, p. 3)

Field research in Myanmar, based on both qualitative and quantitative analysis, has further identified key household and community variables which are considered by rural communities to be significant contributors to household poverty, vulnerability and resilience (Griffiths 2012). These include income, assets, livelihood diversity, debt, landlessness, dependency, health, education, water access and "ethics and morals". Drawing on this and other research models demonstrates that measuring resilience at household level requires at least three domains:

- Measuring key 'capacities' at household and community level, which includes *financial capital* (livelihood diversity, expenditure/savings) *human capital* (dependency,health) *social and political capital* (engagement in village social life, engagement in decision making) *natural capital* (access to water, consumption) and *physical capital* (assets, debt).
- Measuring coping capacity, and in particular the extent to which households and communities can
  traverse a shock or change without resorting to 'negative' coping strategies which undermine key
  assets, capacities and capabilities (such as selling assets, risky labour, withdrawing children from
  school etc)
- 3. Measuring adaptive capacity, by which we mean the capacity of households and communities to learn and change and to apply the learning and change.

#### Measurement of capacities: Umbrella Model

The measurement of capacities is captured using the 'umbrella' model, developed by LIFT to measure vulnerability in Myanmar. This model collects data on ten indicators (dependency, debt, expenditure, livelihood diversity, food security, water & sanitation, health, social capital and decision making) and calculates relative vulnerability for each of the ten factors based on standard deviation from the population mean. Overall vulnerability at household level is based on having three or more of the ten factors classified as 'vulnerable' – which is defined as having a score less than one standard deviation below the population average for that factor/indicator. Data from the 2015 rural household survey, which comprised 22,000 households sampled from all 14 States and Regions of Myanmar was analyzed using the above model. Using the approach of Alinovi et all, food consumption was selected as a stochastic (independent) variable, and given that the resilience score was measured on an ordinal scale, correlation was measured using Spearman's correlation co-efficient. The correlation co-efficient is 0.305 (p<0.0001), indicating strong correlation between the resilience score and the negative consumption profiles. Analysis of component factors demonstrated that rank levels in each category except water and sanitation constributed to the

overall resilience, with rank differences in health and expenditure having more influence on overall cumulative resilience scores and overall classification of vulnerability. Of note, there was no significant correlation between other household variables such as gender of household head, education status of household head, landlessness and reliance on casual labour. This does not mean that there is no relationship, but the relationship is not linear. This demonstrates the overall applicability of the model to the Myanmar context, although further work needs to be done to analyze the relationhip and validity of water & sanitation variables in the overall model. However, incorporation of these indicators into the baseline survey will enable construction of various models which can illustrate and measure baseline household and community capacities and give a 'snapshot' of resilience.

Figure 3: ANOVA output for contribution of component factors to overall resilience capacity index

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Regression Statistics					
Multiple R	0.689994234				
R Square	0.476092043				
Adjusted R Square	0.475851354				
Standard Error	4419.884348				
Observations	21778				
ANOVA	df	SS	MS	F	Significance F
Regression	10	3.86417E+11	3.86E+10	1978.037	0
Residual	21767	4.25227E+11	19535378		
Total	21777	8.11644E+11			
	Coefficients	Standard Error	t Stat	P-value	_
Intercept	31608.67287	210.7438524	149.9862	0	
Food Security	-0.1710335	0.005148389	-33.2208	4.2E-236	
Dependency	-0.177373659	0.005138264	-34.5202	2.8E-254	
Debt	-0.112627089	0.005018671	-22.4416	2.8E-110	
Expenditure	-0.314293517	0.005231269	-60.0798	0	
Livelihood diversity	-0.168035082	0.007333984	-22.9118	8.1E-115	
Water & sanitation	0.010917555	0.005121691	2.131631	0.033048	
Health	-0.420882284	0.008897606	-47.3029	0	
Assets	-0.238036024	0.005048605	-47.1489	0	
Social capital	-0.221823554	0.005027736	-44.12	0	
Decision making	-0.089487246	0.0049923	-17.9251	2.45E-71	_

Thus, the umbrella model can provide information from which to analyze the relative resilience of hosueholds, and to some extent communities, and in particular, when linked to 'systems' data such as market access, rainfall, land access can provide a powerful framework through which to understand the vulnerability, resilience and precarity of rural households.

### Resilience, precarity and social cohesion

Absent from much of the discourse on resilience and precarity is social cohesion; despite evidence for increased rates of co-operative behaviour in post-disaster contexts (Bankoff, Frerks, & Hilhorst, 2004; Kaufmann, 2013) the role of social organizations in enhancing (or undermining) resilience is less well documented. In part, this relates to the focus of resilience on individual or household capacity (Duffield, 2001) or conversely, on how this focus on individuals ignores political realities (Reid, 2012). Development discourse relating to social protection has frequently focussed on broader structural policy and individualized benefits (Devereux & Sabates-Wheeler, 2004) with less emphasis on socially transformative processes. Moreover, the perception that social norms of reciprocity are frequently uneven, inequitable, unsustainable in terms of promoting resilience (Pearson, 2007), or have been used as excuses by the State for non-intervention (G. McCarthy, 2015) have led to a neglect of interest in social organizations by development agencies. The existence or emergence of distinct social structures, organizations or practices based on mutuality and reciprocity may be in spite of State interference or in response to State indifference; a key question, considered later, is whether State intervention to replicate community functions results in a weakening of 'social capital' and in particular, organizations or institutions which utilize and maintain such social capital at a local level. Analyzing rural communities in Vietnam and Lower Myanmar (Burma) in the 1970's, James Scott observed these "technical arrangements evolved by the peasantry to iron out the 'ripples that might drown a man... Many social arrangements served the same purpose. Patterns of reciprocity, forced generosity, communal land and work-sharing helped to even out the inevitable troughs in a family's resources which might otherwise have thrown them into subsistence" (James C Scott, 1977, pp. 2-3). These were observed to have evolved as 'insurance mechanisms' (Lipton, 1968): "there is an entire range of networks and institutions outside the immediate family which may, and often do, act as shock absorbers during economic crises in peasant life. A man's kinsmen, his friends, his village, a powerful patron, and even-though rarely-the state, may help tide him over a difficult period of illness or crop failure". These frequently became more complex: "as we move to reciprocity among friends and to the village, we move to social units which may control more subsistence resources than kinsmen and are still part of the intimate world of peasantry where shared values and social controls combine to reinforce mutual assistance" (James C. Scott, 1976, p. 27). Where the institutions have a role in risk and burden sharing, the issue of mutual trust is significant: "the experience of sharing risks within the community <stresses> the justice and necessity of a minimum land (resources) for the performance for essential social tasks. These standards usually have some sort of religious sanction" (Moore, 1967, pp. 497-498). The localization, and local knowledge of groups are significant assets; likewise, the degree of capacity may be a limiting factor: "the timing, size and scope of their (the institutions) contribution to peasant resources are the keys to their legitimacy" (James C. Scott, 1976, p. 29)

Do communities with high levels of existing social capital and organization tend to breed such institutions, or are these institutions the source of social capital? Undoubtedly there is mutuality at play. James Scott noted higher levels of strength of institutions promoting a social egalitarian ethic in areas less exposed to colonialism: "the social strength of this ethic (that all should have a place, a living)...was..strongest in areas where traditional villages forms were well developed and not shattered by colonialism-Tonkin, Annam, Java and Upper Burma-and weakest in more recently settled pioneer areas like Lower Burma and Cochinchina. This variation is instructive, for it is in precisely those areas where the village is most

autonomous and cohesive that subsistence guarantees are strongest. Given control over their local affairs, then, peasants choose to create an institution that normally insures the weakest against ruin" (James C. Scott, 1976, pp. 40-41). This corresponds today with observations in Myanmar of stronger social organizations in Upper Myanmar, which was colonized much later, and Lower Myanmar, colonized after the second Anglo-Burmese war. Likewise, such institutions, by contributing to resilience, act as a buffer against economic and social shocks, resulting in more stable communities. Commenting on the agrarian unrest in the 1920's and 1930'(which includes the Saya San revolution) "what was critical in this transformation was not so much a decline in income per se as a decline of earlier social insurance patterns..in the boom and scramble atmosphere of the pioneer regions of Lower Burma and the Mekong Delta..higher average income levels were accompanied by the absence of any of the traditional shock-absorbers that might provide some economic security. The comparatively tumultuous peasant politics in Colchinchina and lower Burma would thus seem to stem less from absolute levels of poverty than from their complete exposure to the fluctuations of the world economy-and exposure which made stable social patterns and expectations impossible" (James C. Scott, 1976, pp. 57-58) Of the Cochinchina rebellion "here too the problem was not so much poverty per se as economic insecurity and the absence of a protective social fabric" (James C. Scott, 1976, p. 78) However, Scott warns against any simplistic, idyllic view of these institutions: "it is all too easy, and a serious mistake, to romanticize these social arrangements that distinguish much of peasant society. They are not radically egalitarian...these modest but critical redistributive mechanisms nonetheless do provide a minimal subsistence insurance for villagers" (James C. Scott, 1976, p. 5). The effect of 'modernity'-whether in the form of State intervention in social assistance, socio-economic changes and shocks, or changing cultural norms, on traditional community organizations appears to be either extinction or evolution. "Undoubtedly the community has been losing functions just as the family lost functions in the transformation from a rural to an urban society. Also, there is a general increase in peoples' dependency on national levels of organization and their tendency to appeal to those organizations" (Suttles, 1972, p. 258) Kentjaraningrat noted a decline in mutual aid in Javanese communities resulting from 'modernization' (Hainsworth, 1982, pp. 43-52), but the relative proliferation of such organizations in Myanmar within the past 2 decades of albeit very limited modernization suggest possibilities of evolution (G. McCarthy, 2015). Far from being viewed as being in competition with, or opposed to government, a cooperative approach where "local and federal authority were closely linked, the local organization might be a more effective vehicle for insuring the rights and demands of people..it is quite possible that a cross-cutting form of organization like the local community will produce units which are comparable to one another and which can include everyone so as to promote greater equity and help maintain the legitimacy of government" (Suttles, 1972, p. 260).

## The place and nature of social organizations in Myanmar

In a review of the state of social protection globally, it was noted that in the Asia-Pacific region, informal social protection continues to play a predominant role, as it does in the Pacific. However, "many forms of informal social protection are breaking down due to forces of 'modernization' and globalization, and are less equipped to address increasingly frequent covariant shocks" (ESCAP 2011). Despite recent emphasis on national, universal mechanisms for social protection, evidence exists validating the efficacy and efficiency

of community based, community led social protection mechanisms (De Coninck & Drani, 2009; Habtom & Ruys, 2007) Such mechanisms reside in a contextual framework, and rely on local resources, and are shaped to deliver locally appropriate solutions in the community setting. In a 2003 policy brief, Stefan Dercon noted that "Local communities have a big role to play: public funds should not be used to replace indigenous community-based support networks; rather they should be used to build on the strengths of these networks to ensure broader and more effective protection" ((UNU-WIDER, 2003). Recent metapublications and reviews on social protection typically focus either on financial transfers or system building, with little or no mention of community processes or social cohesion as issues relevant to social protection dialogue, with much of the negative critique of the capacity of community organizations derived from research into community health insurance schemes (Jütting, 2004). Indeed, the presence of community organizations does not guarantee 'benefit' (Woolcock, 1999). The assumption that traditional organizations automatically lead to 'positive' social capital is also misplaced, as such organizations can be places where exclusion, racism and 'gang' tendencies also flourish (Portes, 2014). However, it is reasonable to state here that the role of traditional social organizations in social protection has not been fully explored, let alone robustly tested in a manner which accepts the wide degree of variation exhibited by organizations in different countries and settings. One challenging aspect of traditional social protection mechanisms is that they do not easily fit with a 'modernization' narrative, or with a 'universalizing' agenda, and hence their existence can be seen as an embarrassment to governments intent on modernization, and an inconvenience to international organizations keen to see adoption of particular instruments for social protection.

Recent research demonstrates a strong support for strengthening community social protection, especially in the areas of children's education, livelihood opportunities for women and persons with disabilities, and health support for older persons (Griffiths, 2012). Despite the gaps at central level, numerous traditional, community based mechanisms are in place which provide varying types and degrees of social protection such as funeral services, rice banks and donations to enable poor children to attend school. The use of social capital in the Delta has been documented in the ability of economically disadvantaged cycloneaffected peoples to secure loans and avoid land repossession. It is reported that relatives-turned-lenders tend not to repossess land as the social structure of kinship encompasses certain entitlements and obligations (Tripartite Core Group, 2010). In the Myanmar context, preliminary research points to the nearuniversal existence of community-led social protection mechanisms, (Thu, 2013) with a typical village having 4 different schemes, delivering an average of \$26.50 per household per year in grants in cash and kind, with over 80% of funding coming from within the community. Such schemes are organized using traditional cultural and religious principles, but each village typically having a slightly different structure. Anecdotal evidence suggest that these organizations have been functioning for decades(LIFT, 2015). If these findings are true for the entire country, the financial capital handled by such organizations dwarfs central government spending (ActionAid, 2013). The current question then is: what is the correlation between the existence and activity of social organizations and resilience in rural communities in Myanmar?

## Community social organizations and resilience in rural communities in Myanmar

The main evidence considered here is derived from secondary analysis conducted on data collected in two large rural surveys, both undertaken by the Department of Rural Development (DRD). The first, undertaken in 2015 rural household survey, comprised 22,000 households sampled from all 14 States and Regions of Myanmar, which included a wide range of indicators on household socio-economic, demographic and social participation factors (as part of the 'Umbrella Model'). The second, conducted in late 2015 and early 2016, was a sample of 10,000 households in 1,000 villages, again sampled from all 14 States ane Regions as part of a baseline survey for the DRD. Data collection included mumerous indicators relavant to resilience and rural livelihoods, as well as detailed information on the existence of different types of village organizations, as well as socio-economic characteristics of hosueholds and villages. The methodology for the umbrella model can be found at <a href="http://www.lift-fund.org/sites/lift-">http://www.lift-fund.org/sites/lift-</a>

fund.org/files/publication/vulnerability%20and%20disability%20using%20umbrella%20model\_0.pdf

The reporting or community organizations identified six main types: village development committees, social organizations, religious organizations, political organizations, maternal/child welfare organizations and militia (being non-state military organizations). The typology corresponds well to known categories in rural Myanmar; however, as analysis will show, there is frequently considerable slippage between religious and social organizations in some areas, where religious organizations assume many social functions. Analysis of data from the second of these two studies showed that nearly half of all communities reported having a social organization, with rates highest in Yangon, Eastern Shan, Tanintharyi, and Sagaing. Nearly one quarter of all communities reported having a religious organization, with rates highest in Yangon, Eastern Shan, Tanintharyi, and Kayin and Kachin.

Table 1. Villages reporting presence of a village organization, reported by community leader interview

	Development committee	Social organization	Religious	Any Social or Religious	Mean number of
		12.22/	organization		organizations per village
All	54.4%	49.0%	25.2%	58.6%	2.0
NPT	50.0%	70.0%	20.0%	90.0%	2.1
Kachin	72.3%	55.6%	38.9%	68.6%	2.0
Kayah	50.0%	50.0%	0.0%	50.0%	2.3
Kayin	58.6%	20.7%	34.5%	55.6%	1.7
Chin	25.0%	18.7%	18.8%	37.5%	2.6
Sagaing	69.1%	68.1%	28.8%	76.3%	2.4
Tanintharyi	83.4%	94.4%	55.5%	94.4%	2.9
Bago	69.4%	47.0%	36.8%	64.6%	1.8
Magwe	63.7%	62.5%	25.0%	65.3%	2.3
Mandalay	65.6%	42.5%	17.3%	51.2%	2.3
Mon	28.6%	71.4%	35.7%	78.6%	2.2
Rakhine	55.4%	47.3%	27.1%	57.5%	2.0
Yangon	60.5%	89.5%	52.6%	89.5%	3.2
Shan South	38.2%	19.8%	14.5%	27.0%	1.4
Shan North	41.5%	14.7%	6.1%	18.5%	0.7
Shan East	33.4%	61.1%	50.0%	76.5%	2.2
Ayearwaddy	39.4%	54.5%	18.9%	64.0%	2.1

Household involvement in social organizations was linked to village development status: 49% of households in villages in the lowest strata of development reported involvement in social organizations, with that figure increasing to 63.5% for the middle strata and 73% for the upper strata. Involvement rates were also correlated to village size, with larger villages (over 200 households) reporting over twice the rate of social organizations (88.6%) as small villages of under 100 households (43.7%)

Table 2: organizational status based on village size

	Small (<100 households)	Medium (100-200 households)	Large (>200 Households)
Average daily wage (kyat)	4011	3224	3963
Development index	1.9	1.8	2.3
Social organization present (any)	43.7%	60.6%	88.6%
Female headed households	11.8%	11.3%	11.0%
Any migration (% of households)	23.5%	21.2%	20.9%
Mean number of any organization	1.11	1.01	0.96

However, village size, developmental status or presence of other organizations were not significant predictive factors for the presence of a social organization.

Households in communities which did have a community social organization had lower rates of vulnerability (27.6% vs. 28.8%) compared with households which were in communities which did not have community social organizations, a difference which was not statistically significant. However, this conceals significant regional differences: the presence of a social organization was associated with lower rates of vulnerability in western, southeastern and delta regions. Overall, when analyzing at State and Region level, there was a positive correlation between the percentage of communities with social organizations and lower rates of vulnerability in those communities, which corroborates the observation that the lack of benefit of such organizations is mostly in areas where the proportion of communities reporting them is lowest.

Table 3: vulnerability in communities with and without social organizations

	% vulnerable in communities	% vulnerable in communities		Significance
	without social organizations	with social organizations	Difference	-
Central (Sagaing, Magwe,				P<0.05
Mandalay, Bago, Nay Pyi				
Taw)	21.04%	23.96%	-2.92%	
West (Chin, Rakhine)	48.74%	41.42%	7.32%	P<0.001
North & East (Kachin, Kayah,				P<0.001
Shan)	26.19%	36.42%	-10.23%	
Southeast (Kayin, Mon &				P<0.001
Tanintharyi)	48.39%	34.07%	14.31%	
Delta (Ayearwaddy and				P<0.001
Yangon)	31.31%	22.63%	8.68%	
Overall	27.6%	28.8%	1.2%	NS

Figure 4: correlation between % of communities with social organizations with the difference in vulnerability between communities with and without social organizations, by State and Region

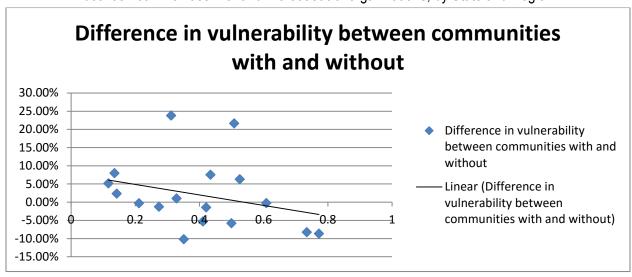


Figure 1 shows that, as the percentage of communities with social organizations increases, so the degree of difference in vulnerability between communities with and without social organizations changes from positive (where communities WITHOUT have higher rates of vulnerability) in States and Regions with LOW proportions of communities with social organizations, to negative (where communities WITHOUT have lower rates of vulnerability) in States and Regions with HIGH proportions of communities with social organizations. In summary, the more widespread social organizations are, the more they are associated with positive effects on lower rates of vulnerability.

Of more interest is the extent to which such organizations appear to be associated with decreased degrees of inequality. In these surveys, poor households, female headed households and households with persons with disabilities all experienced higher rates of vulnerability; however, the degree of difference in risk of vulnerability (represented by Odds Ratio) differed between villages with and without social organizations.

Table 4: additional risk of vulnerability amongst poor, female-headed and households with persons with disabilities in communities with and without social organizations

Additional risk of vulnerability	Odds Ratio	Confidence interval
Poor households in communities without social organizations	6.16	6.02-6.29
Poor households in communities with social organizations	5.38	5.2-5.59
Female-headed households in communities without social		
organizations	1.36	1.2-1.53
Female-headed households in communities with social organizations	1.31	1.1-1.53
PwD households in communities without social organizations	1.99	1.79-2.18
PwD households in communities with social organizations	1.42	1.15-1.68

Overall, the additional risk (degree of disadvantage) of being a poor, female headed or Person with Disabilities (PwD) household is lower in communities with social organizations, suggesting a positive impact regarding the resilience of households whose vulnerability may be higher.

In villages without groups, average incomes of the poorest were 65% less than the average income of the richest 20%, whereas in villages with groups, the difference was 59%.

Significant differences were noted in healthcare indicators: firstly, although the proportion of households reporting significant health are expenditure in the previous 12 months did not differ between households in villages with or without social organizations, the spending patterns differed. Households in villages without social organizations were likely to spend less overall, but were more likely to have debt resulting from borrowing for healthcare costs, to have a higher overall health-care related debt burden, and to have a higher proportion of healthcare expenditure as debt. Poor households in communities with social organizations spend 1.5% less of their overall expenditure on healthcare than poor households in communities without social organizations.

Table 5: Healthcare spending by households in communities with and without social organizations

	% of HH with health expenditure	% of households with significant health related debt	Annual household expenditure on health	% of expenditure on health	Per capita expenditure	Debt burden for those with health-related debt	% of all health expenditure as debt for those with health expenditure
No Group	67.67%	3.10%	215,686	8.97%	49,243	427,726	14.55%
Group	67.14%	3.03%	256,228	8.47%	60,243	379,363	14.15%

Healthcare indices also differed, with households in villages with social organizations having lower rates of morbidity (as measured by fewer days lost per household, and per working adult household member to ill health or caring for ill households member in the previous year).

Table 6: Healthcare indices of households in communities with and without social organizations

	Days lost per household per year to ill health Days lost per income adult to ill health	
No Group	9.35	7.71
Group	6.83	5.78

Similarly, with education, overall rates of expenditure on education were higher in villages with social organizations, but the levels of expenditure derived from debt, and overall education-related debt burdens, were lower in households in villages with social organizations.

Table 7: Education expenditure of households in communities with and without social organizations

	% of HH with education expenditure	Annual household expenditure on education	Debt burden for those with education-related debt
No Group	56.9%	330,905	521,144
Group	54.9%	377,538	338,896

Thus, based on findings from this sample, the presence of social organizations at community level appears to be associated with higher degrees of resilience, and in particular, a reduction in the degree of disadvantage experienced by poor, female-headed and households with persons with disabilities. However, an alternative explanation is that the perceived associated benefits are due not to the presence of social organizations, but to the fact that the presence of social organizations increases with village size and overall development status (table 8).

Table 8: Village size and development status in villages with and without social organizations

Status	Average household	Average of Dev elopement index
No group	159	1.69
Group	189	1.89

In fact, the probability of there being a social organization in a large (>200 household) village is more than double that of a small (<100 household) village (Table 9.).

Table 9: Village size and probability of social organization

Village size	% with social organization			
Small	21.9%			
Medium	37.8%			
Large	48.9%			

However, when data is analyzed to look at the relative effect of the presence of social organizations in different sized villages, we find that the relative advantage of community organizations is most significant in medium-sized villages

Table 10: Village size and vulnerability rates in villages with and without social organization

			Relative difference	Relative difference	Relative difference
			in inequality in rates	in inequality in rates	in inequality in rates
			of vulnerability of	of vulnerability of	of vulnerability of
			female headed	PwD households	poor households
	Vulnerability	Vulnerability	households between	between	between
	rate in villages	rate in villages	communities with	communities with	communities with
	without	with	and without social	and without social	and without social
Village size	organization	organization	organizations	organizations	organizations
			0.89	1.07	1.07
Small	28.24%	28.18%			
	00.400/	00.070/	0.87	0.79	1.01
Medium	29.49%	26.87%			
	00.440/	00.400/	1.17	0.78	0.86
Large	28.11%	28.42%			

From Table 10, we can see that the degree of 'positive effect', as illustrated by a relative difference less than 1, of having a community social organization is most consistent in medium-sized villages, and is present in smaller villages for female headed households, but not for poor or PwD households, whereas those effects are particularly present in larger villages. This suggests that in some areas, there is a 'village size' effect.

Another potentially confounding variable is that the model used to calculate vulnerability includes one dimension (political capital) which relates to the degree and nature of participation in village affairs. If this indicator was essentially a measure of participation in groups, then it would be expected that the indicator would be stronger in villages WITH social organizations-and hence, by virtue of this factor-such villages would be shown by the model to have more resilience. This would be analogous to using a model for village sanitation practice which incorporates use of soap, and then measuring sanitation levels comparing villages with and without shops selling soap. The availability of the shop would be expected to influence the purchase and use of soap-which if built into the model, would then make the comparison between villages with and without soap-selling shops less valid. However, in the case of measuring vulnerability, indicator for political capital is specifically linked to participation in village governance and administrative affairs (a distinction well understood at community level) and hence does not represent a direct overlap between presence of social organizations and degrees of political capital. Moreover, analysis of vulnerability levels when excluding this factor show that although the overall difference in vulnerability levels between communities with and without social organizations decreases, the 'inequality' ratios-the degrees to which poor households, women-headed household and households with people with disabilities are disproportionately affected-remains the same, with lower degrees of inequality in villages with social organizations.

### The ambiguity of the moral economy: engaging communities in wider social protection

Discussions of informal risk-sharing, reciprocity and the moral economy tend to be conducted in the language of 'modernity' and are framed around comparisons (usually unfavourable) between formal 'insurance' schemes and 'primitive' risk sharing: for example, in Coates et al

"Modern insurance arrangements take the form of written and legally binding contracts which stipulate transfer payments contingent on certain events occurring. These arrangements require a government to record and enforce written contracts and a literate population to make such contracts. Thus insurance markets are not found in primitive societies" ((Coate & Ravallion, 1993, p. 1)

The premise here is assuming equivalence between formal insurance arrangements and informal moral economy in the form of reciprocity (Coate & Ravallion, 1993; Foster, 1988; Kimball, 1988), and at times blindness to the cultural variations which inform moral economies of reciprocity(Westwood, Chan, & Linstead, 2004). Critics of the 'moral economy' have rightly pointed out to the inherent 'lumpiness' of informal arrangements of reciprocity, and the potential too for such arrangements to ignore, mask or even enhance inequalities and exclusion (James C Scott, 1977). However, this misses the point: why are these norms there in the first place, and what is it about their genesis, evolution and continued presence which offers pathways to resilience? Building on the autopoiesis theories of Niklas Luhmann (Luhmann, 1986), Mariele Kaufmann argues that, particularly in times of crisis or pressure, self-organization is both a natural and healthy response, indicating resilience, and offering pathways to resilience. "Self-organisation can...be identified as a constitutive part of resilience" (Kaufmann, 2013, p. 60) Following the ideas of autopoesis, "systems reorganise in the absence of direction... Self organization also includes a notion of selfreferentiality, because it re-organises without obtaining resources from outside" A key element to this is the ability of a system to self-correct: "a system's own knowledge production: it understands disruptions and knows how to restore" (Kaufmann, 2013, p. 61). When considering moral economies and norms of reciprocity, the key interpretive element is the context in which these system operate: what particular risks formed their backdrop, and how have the response modalities evolved with changing risk and resource profiles? This thinking has begun to inform scholarship seeking to advocate the re-establishment of cultures of interdependence characterized by a moral economy in situations where formalized structures have proved inadequate (Robertson, 1997) In the Myanmar context, McCarthy rightly points out the extent to which a lack of formalized, government-led social welfare system gave rise to, from necessity, informal systems of taxation and redistribution, resulting in a current situation where the majority of social welfare is non-state and informal, and where public confidence in formal taxation-redistribution by government is nearly non-existent. (G. McCarthy, 2015). However, as McCarthy points out

"the lack of popular reliance and confidence in state institutions does not imply the absence of any notion of a social contract, however. Rather, there is in reality a robust vernacular idea of social obligation in Myanmar which sees non-state institutions, kinship and family networks as the providers of first and last resort in times of crises, as well as practical partners in delivery of public goods such as roads. In these contexts provision of 'supplementary' support from government

officials is often seen as a welcome but unexpected complement to assistance from the community."(G. McCarthy, 2016, p. 4)

What many economists and development actors critical of systems of moral economy fail to grasp is that the value of the moral economy lies less in the amount or frequency of cash or assets transferred, but in the adaptive capacity which, in the absence of formal systems of welfare, has enabled informal systems of trust and reciprocity to function-hence the significance of a theoretical framework such as that posited by Kaufmann, which place value on the 'self-determining, self-corrected' capacity of systems which have had to function with a somewhat 'interior' compass. That these groups then serve as a reservoir of public trust in the concept of sharing/taxation should alert policy makers to their value. McCarthy again:

"efforts by newly elected governments to cultivate a vertical social contract between citizens and the state need to pay serious heed to this eco-system of social welfare and public goods provision and the divergent moral economies upon which it is based. Donors and policy-makers alike could learn from the sense of trust and transparency that non-state actors possess amongst the general public. Meanwhile, the imperative to build the association between taxation, social welfare and public good provision is clear as the current situation erodes perception of the government as a competent and reliable institution of reciprocity and thus is likely to compound low participation and contact with institutions of governance, a key factor in the consolidation of democratic systems" (G. McCarthy, 2016, p. 2)

Critical to any social contract is trust, and the challenge for policy-makers in Myanmar's current political landscape is to fashion a new contract between people and government; to do so, it must identify places where the materials for such a contract exist, and in the fashioning of the contract, must seek to avoid strengthening one at the cost of weakening another; the social contract as a triangular model between citizen, society and State promises to be the most expedient, and sustainable. This potentially is the point Robert Puttnam, a long-time champion of social capital, is making:

"Scores of studies of rural development have shown that a vigorous network of indigenous grassroots associations can be as essential to growth as physical investment,[or] appropriate technology ... Existing stocks of social capital are an important part of the story. Conversely, government interventions that neglect or undermine this social infrastructure can go seriously awry." (Putnam, 1993, p. 5)

How can policy makers harness the intellectual, financial, political and social capital present within community social organizations in the establishment of effective social protection? Before making practical suggestions, three key principles must be established:

 The notion of social protection needs to be defined beyond one-dimensional constructs relating cash-benefits and welfare to economic growth, or even expansion of access to services, to the broader objective of enhancing and enabling active citizenship in the pursuit of more equal, resilient and capable citizens and communities.

- Furthermore, the process of 'harnessing' existing capital should seek to be collaborative and cooperative, not exploitative: the 'harnessing' is not simply in order to enable the State to achieve its
  goals, but rather, a process which seeks to strengthen, not undermine, ties between citizens and
  State, between communities/civil society and State, and, crucially, between civil
  society/communities and citizens.
- 3. Beyond this, then, is the caveat that this collaborative process should, in fact, not seek to restrict the social protection activities of existing organizations, but rather to enable these to contribute positively to the wider social protection agenda. The State's role, however, need not be passive: rather, the State needs to active address issues of inequality and uneven-ness, as well as being alert to issues of exclusion and prejudice which may be present in non-formal structures.

Given, then, the degree of resource availability, evidence of strong association between the existence of social organizations and favourable patterns of resilience, the question arises as to how the vast resource of capacity, capital, horizontal trust and existing knowledge can be successfully interfaced with the development of national social protection programmes. When considering the future of community based social protection organizations, there are five possible scenarios for traditional organizations:

- Co-opted institutional role: although few examples exist, a possible trajectory could be for traditional social organizations to be co-opted into a national system, effectively being an implementing approach or mechanism for centrally-administered social benefits and grants
- Complementary role: traditional organizations play a complementary role, contributing human resources, local knowledge, and a localized approach which ensures that local vulnerabilities are addressed, and that gaps and excluded persons are included. In this scenario, local organizations also provide a degree of governance
- **Governance role**: local organizations play a role in contributing to the design of, development of and monitoring of social welfare services, through representation, forums and local networks.
- Commissioning role: in this scenario, local organizations manage centrally disbursed funds to purchase services for community members, potentially working in co-operation with other organizations to jointly commission and monitor services. This would require a high level of capacity and co-operation, and trust from regional or central government.

The most beneficial outcome would be a combination of co-option, complementary and watchdog, with the likelihood and benefit of an enhanced commissioning role being both remote and risky. The probability of groups becoming irrelevant, isolated or extinct is increased by benign neglect, or by intentional exclusion of community organizations from the national social protection systems.

- ACTED. (2013). Reinforcing resilience in Myanmar. Retrieved from <a href="http://www.acted.org/en/reinforcing-resilience-myanmar">http://www.acted.org/en/reinforcing-resilience-myanmar</a>
- ActionAid. (2013). Public Sector Service Reform.
- Adger, W. N. (2000). Social and ecological resilience: are they related? *Progress in human geography, 24*(3), 347-364.
- Akamani, K. (2012). A community resilience model for understanding and assessing the sustainability of forestdependent communities.
- Alinovi, L., Mane, E., & Romano, D. (2009). Measuring household resilience to food insecurity: Application to Palestinian households. *EC-FAO Food Security Programme: Linking Information and Decision Making to Improve Food*.
- Anderson, B. (2010). Migration, immigration controls and the fashioning of precarious workers. *Work, employment & society, 24*(2), 300-317.
- Arnold, D. (2013). Social margins and precarious work in Vietnam. American Behavioral Scientist, 57(4), 468-487.
- Bank, W. (2015). Helping Myanmar to Build Resilience, Equity and Opportunity. Retrieved from <a href="http://www.worldbank.org/en/news/press-release/2015/07/07/helping-myanmar-to-build-resilience-equity-and-opportunity">http://www.worldbank.org/en/news/press-release/2015/07/07/helping-myanmar-to-build-resilience-equity-and-opportunity</a>
- Bankoff, G., Frerks, G., & Hilhorst, D. (2004). *Mapping vulnerability: disasters, development, and people*: Routledge. Barchiesi, F. (2011). *Precarious liberation: Workers, the state, and contested social citizenship in postapartheid South Africa*: Suny Press.
- Béné, C. (2013). Towards a quantifiable measure of resilience.
- Béné, C., Godfrey Wood, R., Newsham, A., & Davies, M. (2012). Resilience: new utopia or new tyranny? Reflection about the potentials and limits of the concept of resilience in relation to vulnerability reduction programmes.
- Berckmoes, L., & White, B. (2014). Youth, farming and precarity in rural Burundi. *European Journal of Development Research*, 26(2), 190-203.
- Bodin, Ö., Crona, B., & Ernstson, H. (2006). Social networks in natural resource management: what is there to learn from a structural perspective. *Ecology and Society, 11*(2), r2.
- Bourdieu, P., Darbel, A., Rivet, J.-P., & Seibel, C. (1963). *Travail et travailleurs en Algérie: données statistiques*: Mouton.
- Brand, F. S., & Jax, K. (2007). Focusing the meaning (s) of resilience: resilience as a descriptive concept and a boundary object. *Ecology and Society*, 12(1), 23.
- Carpenter, S., Walker, B., Anderies, J. M., & Abel, N. (2001). From metaphor to measurement: resilience of what to what? *Ecosystems*, *4*(8), 765-781.
- Casas-Cortés, M. (2014). A genealogy of precarity: A toolbox for rearticulating fragmented social realities in and out of the workplace. *Rethinking Marxism*, *26*(2), 206-226.
- Cassidy, L., & Barnes, G. D. (2012). Understanding household connectivity and resilience in marginal rural communities through social network analysis in the village of Habu, Botswana. *Ecology and Society, 17*(4), 11.
- CGIAR. (2016). A roadmap to resilience and sustainability: Myanmar's climate-smart agriculture strategy. Retrieved from <a href="http://www.cgiar.org/consortium-news/a-roadmap-to-resilience-and-sustainability-myanmars-climate-smart-agriculture-strategy/">http://www.cgiar.org/consortium-news/a-roadmap-to-resilience-and-sustainability-myanmars-climate-smart-agriculture-strategy/</a>
- Coate, S., & Ravallion, M. (1993). Reciprocity without commitment: Characterization and performance of informal insurance arrangements. *Journal of development Economics*, 40(1), 1-24.
- De Coninck, J., & Drani, E. (2009). Social protection is centuries-old! *Chronic Poverty Research Centre Working Paper*(140).
- Devereux, S., & Sabates-Wheeler, R. (2004). Transformative social protection.
- Duffield, M. R. (2001). Global governance and the new wars: the merging of development and security (Vol. 87): Zed books London.
- Ettlinger, N. (2007). Precarity unbound. Alternatives: Global, Local, Political, 32(3), 319-340.

- Foster, A. (1988). WHY THINGS FALL APART-A STRATEGIC ANALYSIS OF REPEATED INTERACTION IN RURAL FINANCIAL-MARKETS. Paper presented at the Population index.
- Griffiths, M. (2012). Social Policy Priorities for Government: Public Opinion Survey. *Bulletin of the Social Policy & Poverty Research Group, 1*(2).
- Habtom, G. K., & Ruys, P. (2007). Traditional risk-sharing arrangements and informal social insurance in Eritrea. *Health policy*, 80(1), 218-235.
- Hainsworth, G. B. (1982). Village-level modernization in Southeast Asia: University of British Columbia Press.
- Henly-Shepard, S., Anderson, C., Burnett, K., Cox, L. J., Kittinger, J. N., & Ka'aumoana, M. a. (2015). Quantifying household social resilience: a place-based approach in a rapidly transforming community. *Natural Hazards*, 75(1), 343-363.
- Holling, C. S. (1973). Resilience and stability of ecological systems. *Annual review of ecology and systematics*, 1-23. Horgan, M., & Liinamaa, S. (2012). *Double precarity: Experiences of former seasonal agricultural workers who settle in rural Nova Scotia*: Atlantic Metropolis Centre.
- Islam, R., & Walkerden, G. How do links between households and NGOs promote disaster resilience and recovery?:

  A case study of linking social networks on the Bangladeshi coast. *Natural Hazards*, 1-21.
- Jütting, J. P. (2004). Do community-based health insurance schemes improve poor people's access to health care? Evidence from rural Senegal. *World Development*, 32(2), 273-288.
- Kaufmann, M. (2013). Emergent self-organisation in emergencies: Resilience rationales in interconnected societies. *Resilience*. *1*(1), 53-68.
- Kimball, M. S. (1988). Farmers' cooperatives as behavior toward risk. *The American Economic Review, 78*(1), 224-232.
- Kirchhoff, T., Brand, F. S., Hoheisel, D., & Grimm, V. (2010). The one-sidedness and cultural bias of the resilience approach. *Gaia-Ecological Perspectives for Science and Society*, *19*(1), 25-32.
- Lebot, V., & Siméoni, P. (2015). Community Food Security: Resilience and Vulnerability in Vanuatu. *Human Ecology*, 43(6), 827-842.
- LIFT. (2015). Engaging Communities in Social Protection. <a href="http://www.lift-fund.org/blog/engaging-communities-social-protection">http://www.lift-fund.org/blog/engaging-communities-social-protection</a>.
- Lipton, M. (1968). The theory of the optimizing peasant, Journal of Development Studies, April.
- Luhmann, N. (1986). The autopoiesis of social systems. Sociocybernetic paradoxes, 172-192.
- McCarthy, G. (2015). *Meta-frames and Buddhist revivalism: Social action, moral citizenship and the refraction of extremism into local life in provincial Myanmar*. Paper presented at the International Conference on Burma Myanmar Studies, Chiangmai, Thailand.
- McCarthy, G. (2016). Myanmar's Horizontal Social Contract:
- Eco-systems of Social Assistance, Public Goods and Entitlement in Central-East Myanmar. unpublished.
- McCarthy, J. J. (2001). Climate change 2001: impacts, adaptation, and vulnerability: contribution of Working Group II to the third assessment report of the Intergovernmental Panel on Climate Change: Cambridge University Press.
- Mercy Corps. (2016). The Dry Zone of Myanmar: A strategic resilience assessment
- of farming communities. <a href="http://www.lift-fund.org/sites/lift-fund.org/files/uploads/Dry\_Zone/MercyCorps%20DZ%20of%20Myanmar.pdf">http://www.lift-fund.org/sites/lift-fund.org/site
- Mignolo, W. (2000). The many faces of cosmo-polis: Border thinking and critical cosmopolitanism. *Public Culture*, 12(3), 721-748.
- Moore, B. (1967). Social origins of dictatorship and democracy. London:: Penguin.
- Munck, R. (2013). The Precariat: a view from the South. Third World Quarterly, 34(5), 747-762.
- Neilson, B., & Rossiter, N. (2005). From precarity to precariousness and back again: labour, life and unstable networks. *Fibreculture*. 5.
- Nelson, D. R., Adger, W. N., & Brown, K. (2007). Adaptation to environmental change: contributions of a resilience framework. *Annual review of Environment and Resources*, 32(1), 395.

- Opiyo, F. E., Wasonga, O. V., & Nyangito, M. M. (2014). Measuring household vulnerability to climate-induced stresses in pastoral rangelands of Kenya: Implications for resilience programming. *Pastoralism*, *4*(1), 1-15.
- Paret, M., & Gleeson, S. (2016). Precarity and agency through a migration lens. *Citizenship Studies*, 20(3-4), 277-294.
- Partridge, T. (2012). Organizing process, organizing life: collective responses to precarity in Ecuador. *Interface*.
- Pasteur, K. (2011). From Vulnerability to Resilience: A framework for analysis and action to build community resilience: Practical Action Publishing Rugby.
- Pearson, N. (2007). Reciprocity resurrected. Opinion The Australian.
- Portes, A. (2014). Downsides of social capital. *Proceedings of the National Academy of Sciences, 111*(52), 18407-18408.
- Putnam, R. D. (1993). The prosperous community. The american prospect, 4(13), 35-42.
- Reid, J. (2012). The disastrous and politically debased subject of resilience. *Development Dialogue*, 58(April), 67-80.
- Rigg, J. (2015). Challenging Southeast Asian Development: The Shadows of Success: Routledge.
- Robertson, A. (1997). Beyond apocalyptic demography: towards a moral economy of interdependence. *Ageing and Society, 17*(04), 425-446.
- Rothschild, M., & Stiglitz, J. E. (1970). Increasing risk: I. A definition. *Journal of Economic theory*, 2(3), 225-243.
- Scott, J. C. (1976). The moral economy of the peasant : rebellion and subsistence in Southeast Asia. New Haven, Conn. :: Yale University Press.
- Scott, J. C. (1977). The moral economy of the peasant: Rebellion and subsistence in Southeast Asia: Yale University Press.
- Sibrian, R. (2008). Deriving food security information from national household budget surveys: experiences, achievements, challenges.
- Standing, G. (2011). The precariat: The new dangerous class: A&C Black.
- Standing, G. (2013). Defining the precariat: A class in the making. *Eurozine*.
- Suttles, G. D. (1972). The social construction of communities: University of Chicago Press.
- Thu, E. E. (2013). Strengthening Community Based Social Protection Practices for Child Protection <a href="http://www.smeru.or.id/cpsp/Paper">http://www.smeru.or.id/cpsp/Paper</a>, %20Abstact, %20CV/01PD EiEiThu-paper.pdf.
- Tripartite Core Group. (2010). Tripartite Core Group, 'PostNargis Periodic Review IV'. <a href="http://reliefweb.int/sites/reliefweb.int/files/resources/B0F06845E98A406949257776001A4A56-Full Report.pdf">http://reliefweb.int/sites/reliefweb.int/files/resources/B0F06845E98A406949257776001A4A56-Full Report.pdf</a>
- UNDP. (2015). Reducing poverty and building resilience to climate change in Myanmar's Dry Zone. Retrieved from <a href="http://www.undp.org/content/undp/en/home/blog/2015/3/3/Reducing-poverty-and-building-resilience-to-climate-change-in-Myanmar-s-Dry-Zone.html">http://www.undp.org/content/undp/en/home/blog/2015/3/3/Reducing-poverty-and-building-resilience-to-climate-change-in-Myanmar-s-Dry-Zone.html</a>
- UNU-WIDER. (2003). "Insurance against Poverty" Policy Brief UNU World Institute for Development Economics Research. http://antoine.leblois.free.fr/Taf/Chap\_1/Revue\_recente\_INTRO/DerconRiskTrapInsurance.pdf
- Vincent, K. (2007). Uncertainty in adaptive capacity and the importance of scale. *Global environmental change*, 17(1), 12-24.
- Waite, L. (2009). A place and space for a critical geography of precarity? Geography Compass, 3(1), 412-433.
- Walker, B., & Salt, D. (2012). Resilience thinking: sustaining ecosystems and people in a changing world: Island Press.
- Walker, J., & Cooper, M. (2011). Genealogies of resilience from systems ecology to the political economy of crisis adaptation. *Security dialogue*, 42(2), 143-160.
- Walsh-Dilley, M., & Wolford, W. (2015). (Un) Defining resilience: subjective understandings of 'resilience' from the field. *Resilience*, 3(3), 173-182.
- Walsh-Dilley, M., Wolford, W., & McCarthy, J. (2013). Rights for resilience: Bringing power, rights and agency into the resilience framework. *Prepared for the Strategic Initiative of Oxfam America and the ACSF-Oxfam Rural Resilience Project. Available online: http://www.acsf.cornell.edu/collaborations/oxfam-cu. php.*
- Westwood, R., Chan, A., & Linstead, S. (2004). Theorizing Chinese employment relations comparatively: Exchange, reciprocity and the moral economy. *Asia Pacific Journal of Management*, 21(3), 365-389.
- Woolcock, M. (1999). Managing risk, shocks, and opportunity in developing economies: the role of social capital. Development Research Group, The World Bank, unpublished paper, 1(05), 01.