Power and Polycentric Coastal Governance: Livelihoods, Equity, and Environmental Change in the Philippines

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Abstract

Ocean and coastal spaces are sites of increasing complexity and environmental change, driven by declining resources and a rise in actors seeking to exploit marine environments. In response, recent years have seen a resurgence in scientific interest in polycentric governance as both an analytic tool and solution to coastal resource use and management. Research however has begun to critique polycentric governance's limited engagement with power, and how this influences the processes and outcomes of governance.

Drawing from institutional theory and political ecology, this research explores the role of power in polycentric governance. Specifically, it examines how actors use different types of power to interpret, support, and contest environmental governance processes, and how this impacts the equity, transparency, accountability, and legitimacy of coastal governance.

This research adopted a qualitative research approach, combining a qualitative evidence synthesis of existing research and a case-study of coastal governance on Palawan, the Philippines. The research focused on power dynamics within and between a peripheral island community and municipal/provincial meso-scale governance actors, with a specific focus on the rights and livelihoods of small-scale fishers.

The research highlights how formal governance processes and outcomes intersect with existing power relations, and the cultural norms, customs, expectations, and obligations that structure the relationships between resource-users, politicians, and state bureaucrats. The research found that elite and marginal actors also construct framings of coastal governance which draw from, and align with, global conservation agendas and the macro-scale political discourse of an oligarchic elite and oppressed rural poor, characterised by narratives of suffering, hardship, corruption, and resistance. This research shows how polycentric governance can be characterised as a fluid system of relational power, as actors both cooperate and compete in pursuit of their respective goals and desired outcomes. Power can be used by dominant and marginal actors to both advance and undermine the equity, transparency, accountability, and legitimacy of coastal governance.

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Definitions

Technical language

Blue Economy / Growth	Exploitation, preservation and regeneration of the marine environment by different sectors
Blue Justice	Critical approach examining impacts of the blue economy on small-scale fishers and coastal communities
Capitalocene	An alternative naming of the current geological epoch, implying capitalism as the primary driver of ecological crisis rather than humans as a whole
Collective action	Action taken by a group whose goal is to achieve a common objective
Compressor fishing	Type of fishing illegal in the Philippines which involves use an air compressor to stay underwater, with significant human-health and ecological impacts
Countervailing power	The wielding of opposing power from a counter-force
Cyanide fishing	Use of sodium cyanide to incapacitate fish for live collection
Dynamite / blast fishing	Use of explosives to kill or stun fish for collection
Elite capture	Form of corruption where resources benefit powerful groups or individuals more than others
Environmental entitlements	Legal or customary rights for people to use or access natural resources
Environmentality	The process through which knowledge is (re)produced and internalised by individuals who self-regulate their environmental behaviours
Evidence synthesis / systematic review	Bringing together information from different sources to come to an overall understanding
Fictive kinship	Forms of kinship or social ties without blood or marriage ties
Framing power	Power used to frame problems, set norms and influence discourse
Institution	Formal and informal mechanisms which govern the behaviour of individuals, including rules, norms, and customs

Institutional bricolage / critical institutionalism	The reformulation and building of new institutions by actors based on existing institutions and practice
Institutional theory / institutional economics	Social science approach that emphasises the roll of institutions in maintaining social structures
Live reef fish trade	Global trade system with fish caught live for either food or ornamental purposes, with many fish caught on coral reefs in Southeast Asia
Meso-level of Governance	Governance level that links international/national and the local/community scales
Monocentric	Ideal-type governance structure with a clear governance hierarchy from a central authority
Narrative network	The building of environmental networks through the construction of narratives around shared goals
Patron-client relations / political patronage	A reciprocal exchange relationship through which powerful actors (patrons) provide protection or support to less powerful actors (clients) in return for loyalty/support
Political ecology	The study of relationships between political, social, and economic factors and environmental use and change
Polycentric governance	A governance system where multiple decision-making centres interact to make and enforce rules in pursuit of collective action
Pragmatic power	The use of discretion to interpret and implement rules
Pragmatic power broker	Powerful actors which are able to mobilise pragmatic power to interpret and implement policies
Rules-in-use	How rules are implemented in practice
Swidden farming	A farming method involving the cutting and burning of plants to create fertile soil for agriculture
Weapons of the weak	Techniques of evasion and everyday resistance used by rural classes against oppressors
Wicked problem	A problem that is difficult or impossible to solve because of competing or contradictory requirements, and no single solution

Relevant Filipino words

Amihan	North/northeast winds
Balatan	Sea cucumber
Bantay dagat	'Sea Patrol' community-based wardens involved in protection of marine environments
Bangka	Motorised boat
Barangay	The smallest administrative division in the Philippines, equivalent of a village, district, or ward
Basnigan	Purse seine fishery
Compadre	Godfather
Fiesta	Festivals held in celebration of patron saints
Habagat	West/southwest winds
Kagawad	Councillor
Kaingin	Swidden cultivation method which involves clearing land for farming by cutting and burning of trees
Kumare	Godfather
Lapu-lapu	Grouper
Padrino	Patron
Palakasan	Patron-client system where connections are used to secure benefits
Patay	Dead
Poblacion	Municipal administrative centre
Purok / Sitio	Informal *barangay* sub-division, equivalent of a zone
Sagwan / Sibid	Oar-powered dugout outrigger boat
Sangguniang barangay	*Barangay* Council
Sari-sari	Everything
Suno	Red Grouper
Tanod	*Barangay* police officer
Tsismis	Gossip
Utang na loob	Debt of gratitude

Ethnic groups / languages

Agutaynon	Language and ethnic group of early low-land migrants to Palawan, originally from Agutaya Island
Batak	Indigenous group on Palawan
Cuyonon	Language and ethnic group of early low-land migrants to Palawan, originally from Cuyo Island
Molbog	Indigenous group on Palawan
Pala'wan	Indigenous group on Palawan
Taaw't Bato	Indigenous group on Palawan
Tagalog	Second largest ethnic group in the Philippines, from the Luzon region
Tagbanua	Indigenous group on Palawan
Visaya	Largest ethnic group in the Philippines, from the Visaya region

Place names

Barangay Bucadan	Synonym for *barangay* where I undertook my research
Balabac Island	Southernmost island of Palawan province
Calamianes Islands	Groups of islands in the north of Palawan province
Dumuran	Municipality in the north of Palawan
El Nido	Northernmost municipality on island of Palawan
Luzon	Largest island of the Philippines
Palawan	Island province in the southwest of the Philippines
Paly	Island *barangay* in Taytay
Puerto Princesa City	Provincial capital of Palawan
Roxas	Municipality in the north of Palawan
San Vicente	Municipality in the north of Palawan
Taytay	Municipality in the north of Palawan where I undertook my research
Visayas	Region located in central Philippines, comprised of several island

List of Acronyms

APC	Asian Peasant Coalition
ASEAN	Association of Southeast Asian Nations
BFAR	Bureau of Fisheries and Aquatic Resources
BLGU	*Barangay* Local Government Unit
CIA	Central Intelligence Agency
CEE	Collaboration for Environmental Evidence
CPP	Community Party of the Philippines
CRMP	Coastal Resource Management Project
CSO	Civil Society Organisation
DA	Department of Agriculture
DENR	Department of Environment and Natural Resources
EBFM	Ecosystem-based Fisheries Management
ECAN	Environmentally Critical Area Network
ELAC	Environmental Legal Assistance Centre
ENTMRPA	El Nido-Taytay Managed Resource Protected Area
ENTREQ	Enhancing Transparency in Reporting the Synthesis of Qualitative Research
FAO	Food and Agricultural Organisation of the UN
EU	European Union
FGD	Focal Group Discussion
GCRF	Global Challenges Research Fund
GDP	Gross Domestic Product
GNI	Gross National Income
ICRMP	Integrated Coastal Resources Management Project
ILPS	International League of People's Struggle
INGO	International Non-governmental Organisation
JCA	Jose Chavez Alvarez
LGU	Local Government Unit
LRFT	Live Reef Fish Trade

QES	Qualitative Evidence Synthesis
MAB	Man and Biosphere
MEA	Millennium Ecosystem Assessment
MPA	Marine Protected Area
MSPLS	Malampaya Sound Protected Land and Seascape
MTDMO	Municipal Tourism and Development Management Office
NGO	Non-governmental Organisation
NIPAP	National Integrated Protected Areas Programme
NIPAS	National Integrated Protected Areas System
NPA	New People's Army
PALECO	Palawan Electric Cooperative
PAMALAKAYA	National Federation of Small Fisherfolk Organizations in the Philippines
PAMB	Protected Area Management Board
PCO	Population, Context Outcome
PCSD	Palawan Council for Sustainable Development
PICO	Population, Intervention, Comparison and Outcomes
PO	People's Organisation
PM	Participatory Mapping
PTF-ELCAC	Palawan Task Force on Ending Local Communist Armed Conflict
R.A.	Republic Act
SEP	Strategic Environment Plan
UK	United Kingdom
UKRI	United Kingdom Research and Innovation
UNESCO	United Nations Educational, Scientific and Cultural Organization
WFFP	World Forum of Fisher Peoples
WHO	World Health Organization
WPU	Western Philippines University
WWF	World Wide Fund for Nature

1 Introduction

This thesis examines the intersection of livelihoods, governance, power, and equity in the context of coastal resource use and management in Southeast Asia. Specifically, this work explores the ways in which complex, multi-scalar governance processes impact the lives and livelihoods of fishing communities, utilising a systematic review of qualitative research and case-study of a peripheral island community on the island of Palawan, the Philippines. This chapter will introduce the broad context and rationale to the research, the research questions it seeks to answer, its contribution to knowledge on coastal governance, and the overall structure of the thesis.

1.1 Background and rationale to the research

Globally, it is recognised that rising pressures on natural resources are causing widespread environmental degradation, biodiversity loss, and climate breakdown. This has led scientists to characterise the current epoch as the Anthropocene, with humans the dominant driver of environmental change (Rockström et al., 2009). Using this blanket definition of 'humans' has been argued to be a simplification, however, with the drivers – and consequences – being distributed inequitably among different populations (Ellis Erle C. et al., 2021). This has led to its (re)conceptualisation as the *Capital*ocene, through focusing on the historical relations and social systems that drive exploitation and degradation of the environment and natural resources (Moore, 2016).

Coastal and marine ecosystems face a broad range of threats including climate change impacts such as coral bleaching and ocean acidification, pollution, habitat loss, overfishing, and use of destructive fishing methods (Bellwood et al., 2004; Hughes et al., 2003; Jackson et al., 2001). Unequal power dynamics and inequity are also driving – and are driven by – degradation of marine ecosystems. These combined pressures

pose a major threat to social-ecological systems, as marine ecosystems play a fundamental role in supporting a plethora of ecological, economic and sociocultural roles. From an ecosystem services perspective, marine and coastal ecosystems provide provisioning services (e.g. fisheries and building materials), regulating services (e.g. climate control and flood protection), supporting services (e.g. primary production and nutrient cycles), and cultural services (e.g. coastal recreation and spiritual values) (Daniel et al., 2012; Hynes et al., 2018; Lester et al., 2013).

Degradation of marine and coastal ecosystems poses a major threat to the global population, due to the varied ways in which healthy environments and the ecosystem services they provide contribute to human health and wellbeing (Sandifer et al., 2015). Although coastal zones make up 4% of the earth's total land area and 11% of the world's oceans, they contain more than a third of the world's population (FAO, 2015). For communities living in these areas, oceans and coasts provide diverse facets important for human wellbeing, such as food and nutrition security, human health, education, income and subsistence from livelihoods, as well as feelings of autonomy, identity, and social cohesion (Agarwala et al., 2014; Coulthard et al., 2011; Ding et al., 2017; Johnson, 2017; Sandifer et al., 2015; Weeratunge et al., 2014). Degradation and loss of marine and coastal habitats and species risks undermining the wellbeing of millions of people living in coastal areas globally (MEA, 2005).

Teh & Sumaila (2013) estimate that globally, 260 million people are directly or indirectly involved in fisheries and aquaculture, with 85% of these people living in Asia (FAO, 2020). Wild capture fisheries and aquaculture play an increasingly important role in supporting global food and nutrition security, with a 122% rise in total food fish consumption from 1990 to 2018, providing 3.3 billion people with almost 20% of their

dietary protein intake (FAO, 2020), and acting as a key source of micronutrients (Hicks et al., 2019).

With Southeast Asians relying more heavily on fish for dietary protein intake and income generation than any other people in the world (Pomeroy et al., 2007), fish stocks are no longer able to provide the protein needs of many coastal communities in the Philippines, with children in fisher households three times more likely to suffer malnutrition than the national average (D'Agnes et al., 2010). This highlights how declines in fish stocks and habitat loss can be directly linked to reduced food security, income, and increased poverty in coastal communities, in particular in low- and middle-income countries (Ding et al., 2017; Pomeroy et al., 2007).

Small-scale fisheries are arguably the most important group within the fisheries sector, comprised of a highly diverse, dynamic, and complex group of people found throughout the world (Cohen et al., 2019). Small-scale fisheries account for 91% of the total number of people involved in fisheries globally, sustaining the direct and indirect incomes and livelihoods for women and men throughout the world, and providing 30% of landed quantities of fish (FAO, 2015; Teh & Sumaila, 2013). They also play a crucial role in supporting food and nutrition security, in particular for the poor, with the majority of their catch destined for human consumption (Béné et al., 2015). Small-scale fisheries have powerful non-monetary cultural values that support peoples' diverse conceptions of human wellbeing, including self-identity, kinship, and community relations (Weeratunge et al., 2014; Johnson, 2018).

As Eder writes:

> fishing in coastal communities is not just an economic activity but an entire way of life. Despite its hardships, fishing may bring considerable affective satisfactions to those who pursue it, and […] it may be bound up with a person's sense of identity and self-worth (2012: 521).

Oceans and coasts have historically been on the geographical and political peripheries, with small-scale fishers largely living an isolated existence and managing their own affairs. Driven by coasts becoming places of acute population growth and intensification of development across the world (Glavovic, 2013), recent years has seen a rapid increase in state influence and control over coastal development (Bavinck et al., 2018; Raycraft, 2019b). This has led to an influx of new commercial interests such as aquaculture, tourism, oil and gas, renewable energy, blue carbon, seabed mining, and conservation, from a diverse range of state, private sector, and civil society actors (Cohen et al., 2019).

Research has highlighted that marginal voices and perspectives are being increasingly excluded from ocean and coastal governance and management, with disproportionate impacts on the livelihoods and rights of small-scale fishers (Ayilu et al., 2022; Cohen et al., 2019; Okafor-Yarwood et al., 2022). This includes instances of small-scale fishers being excluded from spaces they have historically used for their livelihoods in favour of other interests such as conservation, tourism, and commercial aquaculture (Barbesgaard, 2018; Bavinck et al., 2017; Bennett et al., 2015).

Ocean and coastal management interventions often seek to facilitate livelihood shifts away from small-scale fisheries, with 'alternative livelihood' programmes commonly promoted as a means to reduce fisher numbers in low- and middle-income countries (Salayo et al., 2008). These aim to reduce the prevalence of fishing activities deemed environmentally damaging by replacing them with what are perceived as lower impact livelihoods, frequently tourism-based (Pham, 2020). However, research has highlighted that these programmes are often based on assumptions that fail to

recognise people's needs and aspirations, heterogeneity in communities, and scalability challenges (Wright et al., 2016).

Béné (2003) argues that they are based on a flawed assumption that fishers will choose to replace fishing with more lucrative alternatives. This overlooks the non-monetary and social values of small-scale fishing, and reflects a longstanding small-scale fisheries and poverty paradigm which views it as 'an occupation of last resort', with small-scale fishers being 'the poorest of the poor' (Allison & Ellis, 2001; Béné, 2003). Research has shown however, that communities commonly prefer to continue fishing over 'delayed-return' alternatives, recognising the capacity of fishing to generate near instantaneous income compared with other livelihood strategies (Béné, Steel, et al., 2009; Sievanen et al., 2005).

Underpinning false assumptions about small-scale fishing livelihoods and coastal management interventions more broadly is the separation of the economic aspects of fishing from relational values such as identity and social relations (Coulthard et al. 2011), and the failure to situate governance processes and structures within their historical and current social and political context (Evans, 2009). In practice, environmental management interventions are shaped by and built upon the existing, complex social and political order, and the power relations between different actors with varied and often-competing identities, values, and interests (Cleaver & de Koning, 2015). This results in differentiated experiences of coastal management interventions, with the poorest and most vulnerable members of communities often being disproportionately impacted (Daw et al., 2015).

This increasingly complex, messy, and contested seascape has led to the conceptualisation of coastal governance as a wicked problem with different ecological,

political, social, and economic dimensions, which is difficult to define and delineate, and has no single solution:

> trying to maintain a healthy ecosystem and a good balance between the ecosystem and the social system is a persistent problem […] as governors deal with one issue or goal, unintentionally or intentionally they also deal with others (Jentoft & Chuenpagdee, 2009: 556).

In response, there has been increased scholarship on ocean, coastal, and fisheries governance in recent years, drawing from environmental governance concepts such as multi-level governance, adaptive governance, and interactive governance theories (Folke et al., 2005; Kooiman et al., 2005; Marks, 1996; Stephenson, 2013). In particular, there has been a resurgence in academic interest in theories of collective action (Ostrom, 2010b). Collective action approaches to analysing and conceptualising governance emphasises the role of formal and informal institutions (including rules and norms), and processes of self-organisation and cooperation, arguing that with the right social and ecological conditions, communities can effectively manage their resources in a sustainable way.

Related to this and simultaneously experiencing a resurgence in academic interest is the theory of polycentric governance. Polycentric governance characterises governance as fluid and comprised of multiple governing authorities at different scales, interacting cooperatively and competitively to find solutions for collective action problems (Carlisle & Gruby, 2019; Ostrom, 2010b). Polycentricity embraces complexity and can enable the involvement of a diverse set of actors in governance, for example nongovernmental/nonstate actors such as resource-user groups and non-governmental organisations (NGOs), and is seen to create more opportunities for experimentation, innovation, and adaptability (Morrison, et al., 2019). Partelow, Schlüter, et al. (2020) view polycentric governance as an ideal theoretical framework

to analyse the scale and complexity of coastal systems, which often span multiple jurisdictions, include transboundary resources, and encompass many actors and decision-making centres with diverse and often competing goals. This has led to a growing number of empirical studies of polycentric coastal governance (Abe et al., 2016; Carlisle & Gruby, 2018; Gelcich, 2014; Gruby & Basurto, 2013; Morrison, 2017).

However, recent research has started to critique normative assumptions about polycentric governance being better or more effective than other forms of governance (Berardo & Lubell, 2019; Lubell, 2013), and has highlighted conceptual weaknesses in how it engages with the role of power dynamics between different governance actors (Morrison et al., 2019). In light of the growing exclusion of small-scale fishers from increasingly complex ocean and coastal management processes and outcomes, there is a need for further research about the role of power in polycentric coastal governance, which is crucial if socially equitable ocean outcomes are to be achieved (Bennett, Katz, et al., 2021; Österblom et al., 2020).

To explore these issues further, my thesis examines the links between power, heterogeneity, cultural values, and social relations, and how this shapes the processes and outcomes of coastal governance. My research directs particular attention to the livelihoods, equity, and marginality of small-scale fishers and other marginal members of coastal communities, with a focus on the community- and meso-scales of governance.

1.2   Research questions and approach

I explore this by seeking to answer the following research questions:

>   RQ1: How do social differences and power relations influence the process and outcome of livelihood change in Southeast Asia?

RQ2: How does power influence livelihood and environmental outcomes at the community- and meso-scales of polycentric coastal governance on Palawan?

RQ3: How is bottom-up power developed by small-scale fishers and marginal resource-users in polycentric coastal governance on Palawan?

RQ4: How do different types of power work to maintain or undermine the equity, transparency, accountability, and legitimacy of polycentric coastal governance on Palawan?

In order to answer these questions, I began my PhD by designing and undertaking a qualitative evidence synthesis (QES) of existing research focused on livelihood change among coastal communities in Southeast Asia, with a particular focus on the rights, values, and interests of small-scale fishers. I examined how social complexity and social differences – gender, age, socio-economic status, and ethnicity – influence the perceptions and experiences of coastal livelihood change. This extends research which has demonstrated how the planning, implementation, and impacts of coastal resource management have varied effects for different groups of people (Fabinyi et al., 2010). Key to this is the role of social complexity and power dynamics between different actors, how this influences how decisions are made, and whose objectives, perspectives, values, and interests are present in or absent from management outcomes.

The wider focus of my PhD was iteratively developed from the findings of this synthesis, initial observations and data collection during my fieldwork, and an iterative review of theoretical literature on polycentric governance and power. Theoretically I draw from and seek to reconcile critical concepts from political ecology and anthropology with institutional theories for the commons. I do this through drawing on the strengths of the latter, namely its capacity to analyse complex, multi-scale, multi-actor polycentric governance systems made up of a diverse set of institutions, while drawing on the field of political ecology for its analytic strength in analysing power

dynamics, marginality, and inequality. I use these theories to structure my analysis about the relationship between governance and power, and how this impacts livelihood and environmental outcomes. My analysis examines the intersection of global conservation agendas and national political discourses in the Philippines with cultural values, norms, and institutions. I do this through examining how actors use a combination of pragmatic power to interpret and implement rules across centres of authority, and framing power to frame problems, set norms, and influence discourse across centres of authority.

1.3   Contributions to knowledge

Examining power and polycentric governance on Palawan, my thesis contributes to and expands upon existing marine and environmental social science scholarship empirically, theoretically, and methodologically. Empirically, I chose to undertake my research at the meso-level of governance. Focusing on the meso-level as the unit of analysis, my thesis addresses the lack of research in commons scholarship on institutional change at this scale (Cleaver & de Koning, 2015). To capture the different sets of institutions, knowledge, meanings, values and interests between community and meso-level actors, I will use a case study approach.

Specifically, I will explore the power dynamics and processes of institutional change which take place between formal and informal institutions across community, municipal government, provincial government, civil society, and private sector actors on Palawan, the Philippines, and how these influence the equity of environmental management outcomes. The Filipino socio-cultural, political, and administrative context provides an ideal empirical case-study to apply this theory in a novel way, due

to its unique and complex historical trajectories of macro-scale politics, decentralisation, grassroots civil society, and donor-funded environmental NGOs.

My research analysis directly contributes to the conceptual gap on the role of power in polycentric governance to address critiques of commons scholarship for dealing inadequately with social complexity within communities (Saunders, 2014). Recent research conducted on power and polycentric governance has included transboundary fisheries in East Africa (Mudliar, 2020), food sovereignty and climate resilience in the Philippines (Heckelman et al., 2022), transit migration in the Balkans (Koinova, 2022), and the development of regional marketplaces in Pakistan (Salman Khan & Syrett, 2022). I expand upon this empirically by focusing my analysis on the strategies used by dominant and marginal actors to influence, advance and undermine environmental rules and regulations on Palawan, as well as analysing the impacts of this within a local community setting.

I undertake these analyses by expanding the existing research base on power and polycentric governance by integrating concepts from critical institutionalism (Cleaver, 2002, 2012; Cleaver & de Koning, 2015). Specifically, I explore how actors (re)shape governance processes and outcomes through building upon and intersecting with local norms, cultural values, and social relations. In doing so I integrate institutional theories and concepts from political ecology, extending research which has sought to reconcile and draw from the strengths of each respective body of literature (Gruby & Basurto, 2013). I do this by expanding upon Morrison et al.'s (2019) polycentric power typology to examine how power impacts key governance principles: the perceived equity and fairness of outcomes, the level of transparency and effectiveness with which decisions are communicated, the levels of accountability and responsibility of governance

actors, and how these in turn influence the legitimacy of coastal management measures in the eyes of resource-users.

Empirically I also make an important contribution to political ecology research on oceans and coasts, for which there is limited amount of research compared with terrestrial habitats and contexts (Bennett, 2019; Scholtens, 2016). Throughout my thesis I adopt an explicit focus on the rights of marginal small-scale fishers, and the strategies they use to resist what they perceive as exclusionary governance processes and management outcomes. I do this through adopting political ecology's conceptual focus on power, inequity, and marginality, and directing analytic attention to how polycentric power can be used to maintain or undermine the principle of equity and fairness.

Methodologically, I make a unique contribution to marine social science through my novel use of a QES, a method which systematically analyses and synthesises primary qualitative research. While systematic reviews are increasingly being used within the environmental research, policy and practice fields, thus far this has largely been limited to the systematic review of quantitative studies. My synthesis of qualitative research makes a novel contribution to the systematic review of environmental evidence through recognising the value of qualitative research for decision-making, while also raising methodological questions about the appropriateness and usefulness of the methodology to the fields of marine and environmental social science.

1.4 Structure of the dissertation

This thesis is organised into nine chapters. Immediately after this introductory chapter is Chapter 2, which frames this thesis within the broader United Kingdom Research and Innovation (UKRI) Global Challenges Research Fund (GCRF)-funded Blue

Communities Programme in which my PhD was positioned. This chapter also provides brief demographic and contextual background to the Philippines and Palawan where I conducted my primary research, after which I detail the local partnerships that supported my thesis.

This is then followed by Chapter 2 which provides details of the theoretical framework that underpins my thesis. It describes and critiques a subset of the natural resource governance literature, specifically polycentric governance. Adopting a power typology for analysing the role of power in polycentric governance, this chapter presents and integrates key theories and concepts from institutionalism, common pool resources, and the critical social science fields of political ecology and political anthropology. The chapter sets out how the concepts and theories are used to frame the analysis of my primary research in the subsequent chapters.

Chapter 4 presents my research methodology, including the methodological approaches for my QES. I then detail the methodology developed and utilised for my primary research on Palawan, including case-study selection, background to the case-study site, research methods, key informants/translators, positionality, reflexivity, and ethics.

Chapter 5 presents the initial phase and first empirical contribution of my PhD – a QES. The focus of this chapter was to gain an understanding of the perceptions and experiences of livelihood change among coastal communities in Southeast Asia. Through the synthesis of 18 qualitative studies, this review identified declining marine resources, rising debt, changing global markets, and meeting material desires and needs as common contextual drivers of livelihood change across different study contexts. This synthesis also explored the highly context-specific ways in which

gender, age, socio-economic status, ethnicity, and perceptions of fishing can interact to act as both drivers and barriers to livelihood change. Elite capture and marginality, inequity, and rising competition for coastal spaces were livelihood outcomes common across study contexts, while positive outcomes were largely perceived in contexts where livelihood change resulted from locally-led notions and strategies for livelihood development. A key theme identified in this synthesis for the further development of the thesis was how power relations and governance influence the equity of livelihood change, which played a key role in the development and adaptation of my research methodology and areas for inquiry presented in Chapter 4.

Chapter 6 analyses how 'power by design' – power that is written, legislated, and visible within the design of governance systems – influences the design and administrative structure of governance in the Philippines, which in turn influences environmental use and management on Palawan. Decentralisation of authority to the meso-levels of governance – supported by donor-funded programmes and formally legislated in the Philippine Constitution and Local Government Code of 1991 – grants significant authority for natural resource management to provincial and municipal local government, supported by civil society actors. However, competing and contradictory mandates result in conflicts between different levels of government, most notably for management of the live reef fish trade (LRFT) and livelihood support programmes. This chapter plays an important role in detailing the formal governance structure on Palawan, before Chapters 7 and 8 provide rich empirical details and analysis of how governance actors draw on informal, subtle, and hidden forms of power in pursuit of their objectives and desired outcomes of environmental management.

Chapter 7 examines the way in which 'pragmatic power' – informal authority – is exercised by different actors through their influence on day-to-day decisions, and how this impacts polycentric environmental governance aims and outcomes. I specifically examine pragmatic power in relation to illegal fishing, the LRFT, municipal and non-state livelihood programmes, and commercial development interests on Palawan. I argue that pragmatic power is shaped by cultural values and relational institutions of debt, kinship obligation, and patronage that structure the relationships between politicians, municipal bureaucrats, *barangay* (village) officials, and fishers. Pragmatic power is exercised by influential community elites, leading to elite capture of government livelihood development programmes, and weak enforcement against illegal fishing that undermine the principles of equity, transparency, and legitimacy. Pragmatic power is also used by municipal politicians to weaken and undermine the enforcement of LRFT regulations, and is employed by national and local elites to advance private sector land- and coast-grabs.

Chapter 8 is focused on the influence of 'framing power' – how problems are framed, issues are constructed, and norms are set by different actors – on the aims and outcomes of polycentric environmental governance on Palawan. Environmental narratives are influenced by a macro-scale political discourse in the Philippines of conflict between a powerful oligarchic elite and a diverse and varied grassroots civil society movement, and a longstanding, contradictory and evolving framing of Palawan as the Last (Ecological) Frontier, used to frame the legitimacy of livelihoods and other environmental uses. Narratives of suffering/hardship and corrupt elites are used to undermine the legitimacy of environmental regulations, and act as a form of everyday resistance by marginal small-scale fishers, alongside livelihood continuation, gossip, slander, and collective direct action such as petitions, protests, rallies, and alignment

with activist small-scale fisher movements. This resistance has in turn led to state repression through deployment of a counter-framing and threat of violence that draws on macro-scale political conflict against armed separatists.

Chapter 9 concludes my thesis by summarising and integrating my empirical findings from Chapters 5, 6, 7, and 8. I demonstrate how these findings contribute new knowledge to the research gaps highlighted in Chapter 2. I then conclude the chapter and thesis by critically reflecting on the methodological and practical limitations of this study and providing suggestions for further research.

2 Research project context

In this short chapter I provide a background to the context of the research, covering the Blue Communities programme my PhD was part of, followed by a brief background to the Philippines and Palawan, and the local partnerships I formed there for my PhD.Blue Communities programme.

2.1 Blue Communities programme

Although the development of the research focus for this PhD was independent of any strict funder requirements, the PhD was associated with a UKRI GCRF-funded project called the Blue Communities programme. The PhD was in part funded by this programme, with matched funding from the University of Exeter Medical School.

Blue Communities is a four-year research capacity-building programme for marine planning in East and South-East Asia, comprised of 12 interconnected research projects covering a range of topics including governance and decision-making, ecosystem services, marine renewable energy, fisheries, health and well-being, evidence synthesis, future scenarios, and earth observation approaches. With a focus on United Nations Educational, Scientific and Cultural Organization (UNESCO) Man and Biosphere (MAB) Reserves in Indonesia, the Philippines, and Vietnam, and a marine park in Malaysia, the programme involved a range of academic and NGO partners from Indonesia, Malaysia, the Philippines, the United Kingdom (UK), and Vietnam.

My PhD was associated with the Blue Communities work-package focused on evidence synthesis but with a high degree of independence which resulted in a 'one-foot-in, one-foot-out' dynamic in relation to the programme. I participated in regular annual progress meetings in the UK, SE Asia, and virtually alongside project partners.

2.2   The Philippines

From the four Blue Communities case study sites, I chose the Philippines as the site of my PhD research. I made this decision based on my prior experience conducting research on marine resource use in the Batanes, the northernmost province of the Philippines, for my Master's Degree in 2015. Given my existing research experience, basic understanding of the culture, and some knowledge of the academic literature, I felt that this was the logical decision to make.

The following discussion of the research site is based upon a mix of secondary literature, discussions about the history, culture, and natural resources of Philippines and Palawan with WPU colleagues, and ethnographic accounts based largely on informal conversations with research participants, and participant and non-participant observation during my time living on Palawan (see Section **Error! Reference source not found.** of Chapter 4 for more details about research methods).

The Philippines is an archipelagic nation located in Southeast Asia, made up of around 7500 islands located between the South China Sea in the west, and the Philippine Sea in the east. It covers an area of 300,000 km^2, with 36,289km of coastline giving it one of the longest discontinuous coastlines in the world (CIA, 2022). The Philippines sits at the heart of one of the world's most biodiverse regions – defined by many scientific institutions as the Coral Triangle – with the second largest fringing coral reefs in Southeast Asia (Gomez et al., 1994).

In 2020 the population of the Philippines was approximately 109 million, making it the twentieth largest country in the world. Due to its location astride the Pacific typhoon belt and along the Ring of Fire belt of volcanoes, the Philippines is ranked eighth in the World Risk Index, experiencing frequent typhoons, landslides, volcanic eruptions, earthquakes, and tsunamis (World Risk Report, 2021).

The Philippines is highly diverse ethnically, culturally, and linguistically, with over 100 distinct ethnic groups. Due to its colonisation by the Spanish (16th-19th century) and Americans (1899-1946), there is a strong Euro-American cultural influence. The Philippines is also the source of one of the world's largest emigrant populations, known as Overseas Filipino Workers, whose remittances make up 10.2% of GNI (CIA, 2022).

While economic growth averaged over 6% per year from 2011 to 2017, there are ongoing challenges to achieving more inclusive growth, with around a fifth of the population living in poverty, the majority of which are located in rural areas (CIA, 2022). The service sector comprises the majority of GDP (59.8%), followed by industry (30.6%), and agriculture (including fisheries) (9.6%) (CIA, 2022). Table 1 below provides a list of socio-economic indicators about the Philippines.

Table 1. Socio-economic indicators for the Philippines (Sources: Human Development Report, 2020; World Bank, 2020)

Socio-economic indicator	
Population growth rate	1.39%
Human Development Index	0.718 (2020)
Life expectancy at birth	71.2 (2020)
Adult literacy rate	95.4%
Poverty rate	19.8% (2020)
GINI Index Score (income inequality)	44.4 (ranked 107 (2020)
GNI per capita	US$9400

Coastal and marine ecosystems play a key role in supporting local livelihoods and subsistence in the Philippines, in particular for coastal communities (Aldon et al., 2011;

Lim et al., 1995; Porter et al., 2018), for whom coral reefs make the greatest contribution (Gomez et al., 1994). Coral reefs of the Indo-Pacific, including the Philippines, are the epicentres of both global marine biodiversity – containing 45% of global coral species – and destructive fishing practices such as blast fishing and the use of sodium cyanide (Pomeroy et al., 2008). More than 85% of coral reefs in the Indo-Pacific are threatened by local stressors like destructive fishing, overfishing, pollution, and coastal development, substantially higher than the global average of 60% (Burke et al., 2011). Overfishing is a major challenge in the Philippines – in particular in nearshore areas – with coastal fish stocks severely depleted and fished down to 5-30% of unexploited levels (Pomeroy et al., 2007).

2.3 Palawan

Palawan is the largest province in the Philippines, located in the southwest of the country. Compared with elsewhere in the Philippines, Palawan was much more sparsely populated until it became a settler destination in the twentieth century (Eder & Evangelista, 2014). Prior to this Palawan was mostly populated by five Indigenous peoples: the Batak, residing predominantly in the north-central upland areas of Palawan, the Pala'wan (and closely connected Taaw't Bato), primarily in upland areas in the south of Palawan, the Tagbanua who live in the north and central coastal areas, and the Molbog that live in the south of Palawan (Dressler, 2009; Theriault, 2014).

Today, the population of Palawan is 939,594 (see Figure 1) and it is currently the fastest growing province in the wider MIMAROPA region it is part of, with an annual growth rate of 2.14% based on the 2020 census (Philippine Statistics Authority, 2020). The population of Palawan is predominantly made up of a mix of lowland migrant peoples: the Christian Cuyonon and Agutayanon who were early migrants from the

nearby islands of Cuyo and Agutaya, and increasingly a mix of Christian peoples from the Visayas and Luzon regions of the Philippines, and Muslim peoples from Mindanao and Sulu (Eder & Evangelista, 2014). The Cuyonon have become one of the dominant ethnic groups on Palawan, reflected by their widespread prominence in political and education institutions, while the Agutaynon people continue to reside mostly on the small islands around Palawan.
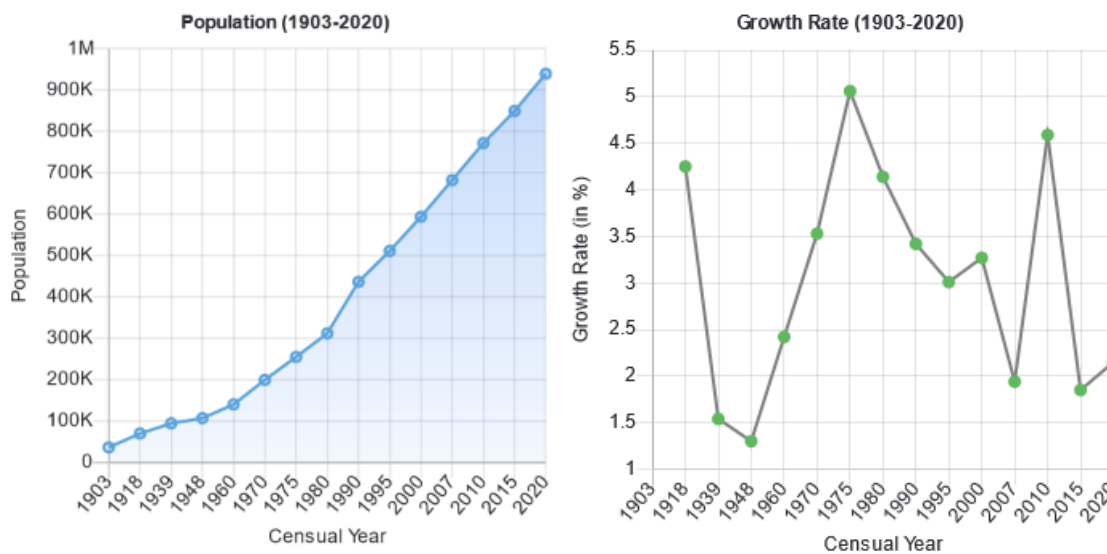
Figure 1. Palawan population and growth rates, 1908-2020 (Source: PhilAtlas, 2022.)

The mix of ethnicities has led to a melting pot of culture, language and religion, with more languages spoken in homes there than any other province in the Philippines (Evangelista & Eder, 2014). The most widely used languages on Palawan are Filipino (as the national language, based largely on Tagalog), Cuyonon, English, and Visaya, with MacDonald (2014) writing that Palawan's Indigenous languages are increasingly endangered due to a dwindling number of speakers, overwhelming presence of immigrants in a position of cultural dominance, and a tendency for children not to speak the vernacular. Roman Catholicism is the dominant religion on Palawan, followed by other Christian denominations such as the independent nontrinitarian

Iglesia ni Cristo sect, Baptist, Mormon, and Jehovah's Witness. With strong historical and cultural ties with Mindanao, Sabah (in Malaysia), and the Sulu Islands, the south of Palawan is majority Muslim (Evangelista & Eder, 2014.

2.4 Local partnerships

During my PhD I collaborated with the lead Blue Communities partner in the Philippines, the Western Philippines University (WPU), who have multiple campuses and extension sites across the island of Palawan. WPU provided valuable ongoing logistical, administrative, and technical support. This included support for the securing of national research ethics permits in the Philippines, and letters of support when engaging with community leaders and NGOs. I was provided with a regular office-space in WPU's Blue Communities office while I was based in the provincial capital Puerto Princesa City, and they helped with translations of consent forms and information sheets and in-field translations when conducting focus group discussions (FGDs). They provided valuable technical support and guidance about marine resources and livelihoods on Palawan, in particular as I tried to make sense of the cultural and political dimensions of marine resource use and management on Palawan. They also provided ongoing guidance about appropriate and expected cultural norms for communicating with different project stakeholders.

Being mindful of the often inequitable research relationships between academic institutions in high- and low/middle-income countries, I sought to take steps to avoid my research becoming another example of 'parasite' or 'parachute' science (Stefanoudis et al., 2021; The Lancet Global Health, 2018). While I was staying on Palawan, I engaged in and supported WPU outreach and extension activities, including annual academic celebrations and various joint programme activities with

local NGOs. I also designed and taught a research methods training on collecting and analysing qualitative data which WPU had identified as an area in which they wanted additional training, and I also provided advice and technical support to some of their ongoing qualitative research conducted as part of the Blue Communities programme. Towards the end of my fieldwork period, I also gave a keynote lecture on my emerging findings at a Blue Communities Research Symposium with invited guests from their academic, government, and civil society partners. In Section 4.2.8 of Chapter 4, I will reflexively discuss my relationship with WPU in relation to my positionality, and how this influenced the research process.

3 Theoretical framework: Power and polycentric governance

After conducting the QES at the beginning of my PhD – presented in Chapter 5 as my first empirical chapter – I undertook a review of environmental governance theories. Alongside iterative collection and analysis of my primary data on Palawan, this helped me to identify the theoretical framework for my thesis: power and polycentric governance. The following chapter provides an overview of the relevant interlinked literatures, while also indicating how I use this framework in support of my thesis.

First of all, I begin by providing brief definitions of governance, and the principles that underpin it. I then discuss the foundation and resurgence in interest in the concept of polycentric governance in environmental social science. I highlight emerging academic critiques of the concept for its limited analytical attention to the role of diverse types of power in influencing the structure, function, and outcomes of governance. I then introduce the power and polycentric governance typology developed by Morrison et al. (2019), who distinguish three types of power: power by design, pragmatic power, and framing power. I define these types of power and how they are used by different governance actors, drawing on theoretical and empirical literatures from the fields of institutional theory, governance, and political ecology. Throughout this I detail how my case-study research will answer research questions 2-4 below, which seek to address conceptual gaps related to polycentric governance, through the in-depth exploration of a coastal community on Palawan:

> RQ2: How does power influence livelihood and environmental outcomes at the community- and meso-scales of polycentric coastal governance on Palawan?
>
> RQ3: How is bottom-up power developed by small-scale fishers and marginal resource-users in polycentric coastal governance on Palawan?
>
> RQ4: How do different types of power work to maintain or undermine the equity, transparency, accountability, and legitimacy of polycentric coastal governance on Palawan?

3.1 Defining governance

At its simplest, governance is about who decides what is to be done, and how those decisions are taken; it is about who holds power, authority, and responsibility, and who is, or should be, held accountable (Borrini- Feyerabend et al. 2013). It involves:

> the interactions among structures, processes and traditions that determine how power and responsibilities are exercised, how decisions are taken, and how citizens or other stakeholders have their say. Fundamentally, it is about power, relationships and accountability: who has influence, who decides, and how decision-makers are held accountable (Graham et al., 2003: 1).

Key drivers of effective governance are the principles of equity, accountability, transparency, and legitimacy. Equity refers to what is considered just and fair in relation to how people are treated – including the distribution of costs and benefits, participation in decision-making processes, and recognition of rights and values – taking account of peoples' different levels of power and capabilities (Schreckenberg et al., 2016). Accountability involves clear and accepted lines of responsibility between different governance actors, and the encouragement and incorporation of positive or negative feedback. Transparency refers to the visibility of decision-making processes (how and by whom they were made), the clarity with which the justification behind decisions is communicated, and the timely availability of information (Lockwood, 2010; Schreckenberg et al., 2016). Legitimacy is defined as the acceptance of and justification for actors to make and enforce rules, commonly by the peoples subjected to them (Lockwood, 2010).

The diverse and growing scholarship on natural resource and environmental governance dates back to the 1950s, and has had a general aim of understanding how governance processes or policies influence desired outcomes such as conservation, livelihoods, sustainable use, and development (Partelow, Schlüter, et

al., 2020). There are numerous interlinked disciplinary approaches and frameworks used to examine natural resource management and governance – for example, resilience, social-ecological systems, environmental conservation, political ecology, institutional economics, multi-level governance, adaptive governance, and interactive governance theory (Cox et al., 2016).

As Partelow et al. write:

> Environmental governance theories provide diverse lenses attempting to explain social-ecological realities, whether on the coast or in other systems. Generally, theories are useful if they help us explain what we observe, and there are often multiple if not many useful explanations for observed phenomena. More specifically, we can use each theory to help answer different research questions, but no single theory is or will be sufficiently comprehensive. We believe healthy and constructive scholarship has multiple theories coinciding, supporting, and/or contrasting themselves in a field (2020: 9).

There are a broad range of theoretical frameworks for environmental governance, and it is beyond the scope of this thesis to provide a detailed and thorough overview of such a broad range of interlinked concepts and theories. For my thesis, I have chosen to frame my analysis through the concept of polycentric governance due to the dramatic rise of scientific interest in recent years, and its perceived usefulness as both a diagnostic and structural solution for the real-world complexity of environmental governance and the challenges it seeks to address. It also represents an ideal theoretical framework for my case-study research on Palawan, where the governance system involves an array of state and nonstate actors at different levels.

3.2 Polycentric governance

Polycentricity as a concept was first envisaged by Michael Polanyi (1951), who theorised the social conditions that preserve freedom of expression and the rule of law, using an analogy of the science community. He considered the success of

science as being a result of polycentric organisation, which gave participants the freedom to make individual and personal contributions, but in pursuit of a common ideal of objective truth (Polanyi, 1951 as cited in Aligica & Tarko, 2012).

The concept of polycentricity was extended to the institutional theory field by Vincent and Elinor Ostrom in the 1960s, initially through research on metropolitan governance (Aligica & Tarko, 2012). They introduced the concept of polycentricity at a time of significant criticism of what was seen as chaotic metropolitan governance in the US, arguing instead that various political jurisdictions could in fact function in a coherent manner as a 'system' (V. Ostrom et al., 1961). Their argument was that polycentric systems were in fact better suited than monocentric systems for providing local public goods (V. Ostrom et al, 1961 as cited in Berardo & Lubell, 2019).

Institutional theorists from the Bloomington School have played a key role in the continuing development of the concept, contributing to a growing amount of research among commons scholars that considers its advantages for sustaining natural resources (Gruby & Basurto, 2013). A polycentric system is conceptualised as comprised of multiple centres of decision-making and governing authorities at different scales. Each unit (or decision-making centre) within a polycentric system is said to exhibit and enact significant independence to make rules and norms for a specific domain; this has been theorised as having the advantage of drawing on local knowledge and learning processes of trial and error (Ostrom, 2010b).

According to polycentric governance theorists, whereas monocentric systems have a clear hierarchy from a central authority, there is no clear authority between formal and informal governing authorities in a polycentric system, with actors and institutions engaged in self-organisation and mutual adjustment, which enables systems to evolve

and reconfigure when necessary or desirable (Carlisle & Gruby, 2019; E. Ostrom, 2010b).

Scholars have attributed different advantages to polycentricity, primarily within three broad categories:

1. enhanced capacity to adapt to change
2. mitigation of risks associated with the failure of any single governance actor or policy because of redundant governance actors and policies
3. the production of institutions that are a good 'fit' to ecological and social context

These advantages are seen as increasingly relevant in the context of growing interlinked socio-economic and environmental issues. Scholars contend that polycentric governance systems provide greater representation of a diversity of actors that can initiate and implement sustainable solutions, while also providing institutional robustness, with different actors stepping-in in instances where parts of the system or the institutions involved fail (Carlisle & Gruby, 2019; Ostrom, 2010b). Collective action problems such as environmental use and management are complex and uncertain, and polycentric governance is often seen as an ideal-type solution.

A strength and value of polycentric governance as both a governance structure and an analytical tool is its embracing of the real-world complexity of governance, and how this is shaped by biophysical conditions, the attributes of communities, and the implementation of rules in day-to-day practice (McGinnis, 2011; E. Ostrom, 2010a). 'Rather than focusing solely on rules-in-form (regulations/laws) and actors with formal authority, polycentricity requires considering rules-in-use (how regulations/laws are implemented in practice), the role of nongovernment/nonstate actors, and their interactions at all levels of political and social organisation' (Partelow et al. 2020: 5).

This reflects the messy reality of many governance systems, with actors exhibiting a plurality of values and interests that can be characterised as an 'ecology of games' (Berardo & Lubell, 2019; Lubell, 2013).

Indeed, some environmental policy scholars have argued that monocentrism – against which polycentricity is often compared and measured – is no more than an ideal type, and that in reality, real-world governance systems are virtually always polycentric in nature (McGinnis, 2011), even in highly hierarchical organisations such as the US military (Berardo & Lubell, 2019), and conversely are rarely purely decentralised in practice (Partelow, Schlüter, et al., 2020). Some current research on polycentric governance is moving away from early descriptive analyses of polycentric and monocentric governance as two ends of the spectrum, instead arguing that polycentric and monocentric systems almost always co-exist, and are often intertwined in complicated ways (Lubell et al., 2017; Morrison et al., 2019). For example, Galaz et al. (2012) and Morrison (2017) – using examples of the Global Partnership on Climate, Fisheries and Aquaculture and the Great Barrier Reef Regime respectively – argue that both governance systems have been characterised by different degrees of polycentric order which have changed over time.

McGinnis (2011: 171-172), characterises polycentric systems as a governance structure that combines the following characteristics across different overlapping centres of authority:

1) Multi-Level: local, provincial, national, regional, global units of governance
2) Multi-Type: general purpose nested jurisdictions and specialised, cross-jurisdictional political units

3) Multi-Sectoral: public, private, voluntary, community-based and hybrid kinds of organisations

4) Multi-Functional: incorporates specialised units for provision (selection of goals), production (or co-production), financing (taxes, donors), coordination, monitoring, sanctioning, and dispute resolution.

This recognises not just formal bodies as decision-making centres, but also any unit (department, agency, organisation, individual etc.) that makes or enforces rules with a degree of autonomy, including informal organisations such as resource-user groups or nonstate actors such as NGOs (Carlisle & Gruby, 2019; McGinnis, 2011). For example, research has highlighted the polycentric nature of coastal resource use and management in Melanesia, and the relationship between different actors across family, community, tribal, confederations, Church, and local community-based organisation scales (Aswani et al., 2017). As Berkes et al. (2003) indicate, typically no single agency, organisation or group will have the full knowledge needed to manage complex social-ecological systems, which require the diverse perspectives and contributions of different actors to sustainably manage.

As commons scholarship has influenced a range of other concepts in environmental change and governance, polycentric governance has influenced or is closely related to other environmental governance theories that examine the links or connections between governance processes and actors (McGinnis & Ostrom, 2012), for example network governance (Jones et al., 1997; Robins et al., 2011), and multi-level governance (Hooghe & Marks, 2003; Marks, 1996; Stephenson, 2013)[1].

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[1] For a detailed review, synthesis, and comparison of environmental governance theories see Partelow et al (2020).

Recent years have seen a resurgence in scientific interest in polycentricity, which Morrison et al. (2019) suggest can be attributed to Ostrom's (2010b) influential paper which advocated polycentric systems for coping with collective action and the unique complex challenge of global climate change. This has included a growing amount of research about polycentric governance of marine and coastal ecosystems, including marine protected areas (MPAs) (Gruby & Basurto, 2013; Morrison, 2017), large marine ecosystems (Abe et al., 2016; Chen & Ganapin, 2016), marine shipping (van Leeuwen, 2015), ocean acidification (Galaz et al., 2012), and small-scale fisheries (Carlisle & Gruby, 2018; Gelcich, 2014; Mudliar, 2020).

With small-scale fisheries increasingly conceptualised as complex, research has argued that a shift to polycentric forms of governance for small-scale fisheries can be beneficial through incentivising the involvement of diverse resource-users and managers at different scales (Gelcich, 2014).

Writing about the potential application of polycentric governance to analysis of coastal governance, Partelow, Schlüter, et al. write:

> Understanding and informing governance of such complex systems requires a theoretical framework that embraces complexity and redundancy and enables the analyst to search for order in apparent chaos. Herein lies the overarching power of polycentricity for coastal systems (2020: 5)

From this viewpoint polycentric governance can be used both as an analytical tool to descriptively 'make sense' of complex coastal governance processes involving an array of actors across different scales, while it can also play a diagnostic role to identify deficiencies in coastal governance systems by measuring them against polycentricity as an 'ideal-type' (Partelow, Schlüter, et al, 2020). Berardo & Lubell (2019) critique this common prescription of polycentric governance systems as normatively better,

with Ostrom notably highlighting that they are not a panacea (Ostrom, 2010b). While Carlisle & Gruby (2019) argue polycentric governance systems cannot be seen as the definitive 'answer' for the governance of natural resource systems, they have developed a theoretical model of a functional polycentric governance system with a particular set of attributes and enabling conditions against which real-world examples can be analysed, deficiencies identified, and advantageous characteristics enhanced.

For my thesis I usethe theory of polycentric governance to descriptively analyse the structure of the complex governance system on Palawan, which is comprised of a range of different governance actors from different levels of government, the private sector, and civil society, with an array of different functions. As I discuss in Chapter 6, the structure of administrative and environmental governance in the Philippines – where I conducted my primary case-study research – is characterised by decentralised nested institutions involving multi-level state and non-state actors, including different levels of government, resource-user groups, NGOs, and private sector companies. Different actors have shared and contrasting goals for governance related to how the environment is used and managed, encompassing social, economic, and ecological dimensions, such as livelihoods and conservation. When combined with the diverse biophysical conditions on Palawan, this results in a complex and messy social-ecological system. Polycentric governance is thus an ideal way of both 'making sense' of and characterising the governance system on Palawan as is presented in my case-study findings in Chapters 6, 7, and 8. As I highlight in Section 3.3 of this chapter, I complement the use of this theory in my thesis by framing my analysis and building theoretical development upon a power typology that examines the role of power in polycentric governance.

3.2.1 Knowledge gaps and critiques of polycentric governance

In response to the growing amount of research on polycentric governance, some studies have begun to highlight inherent contradictions and assumptions in polycentric governance theory, and substantial gaps in knowledge (Morrison et al., 2019; Mudliar et al., 2020). In particular the role of power in polycentric governance has been shown as a conceptual gap, with 'scientific interest in the power dynamics of polycentric governance only now emerging as an important field in its own right' (Morrison et al., 2019: 2). The limited analytical attention to power is seen as due to the complexity and messiness of polycentric systems resulting in power dynamics being hidden, difficult to define, measure and manage, while also being sensitive to engage in and consider (Morrison et al., 2019). In the limited cases where power is highlighted in studies about polycentric governance, analyses tend to focus on the potential negative effects of (higher-level) power, contrasted with power which can be used to empower communities (Morrison et al., 2019).

My empirical research seeks to address this conceptual gap regarding the role of power in polycentric governance. Specifically, one of the key research questions of my thesis is to analyse how marginal actors are able to develop and use countervailing power to resist perceived inequities.

Morrison et al. (2017) argue that conceptualisations of polycentricity downplay the hierarchical or multi-level structures that polycentric systems are embedded within, not only ignoring the types of power present, but also how these can both positively and negatively affect governance processes and environmental outcomes. There is a false assumption that polycentricism is purely self-organising and non-hierarchical as, in reality, central governments almost always have a degree of influence. Morrison et al (2019) argue that this assumption has inadvertently rendered polycentricity power-

free, failing to deal with issues such as power imbalances and social and ecological (in)justice. Drawing from research on watershed management in India and the US, Mudliar & Koontz (2021) argue that this can conceal, perpetuate and exacerbate power asymmetries, limiting the equity and fairness of outcomes, even if achieving positive environmental outcomes. A key area of focus in my thesis is the relationship between social equity and environmental outcomes, by analysing the impacts of environmental regulations on the livelihoods of a coastal community on Palawan.

There are parallel criticisms of limited analytical attention to power within the closely related scholarship on institutional economics and the commons. It is critiqued for creating ahistorical and apolitical notions of locality, and for being based on the assumption that institutions will be rooted in moral economies based on equity, welfare and social security (Johnson, 2004; Li, 1996). Research has demonstrated, however, that common property institutions can be manipulated to serve and further establish the dominance and control of powerful individuals and social groups through elite capture of resources and benefits (Béné, Belal, et al., 2009; Béné & Neiland, 2006; Mosse, 1997).

As Agrawal writes, 'since all social relations are politically asymmetrical, it becomes crucial to understand how the effects of even seemingly equal and symmetric institutional rules fall unevenly on those subject to the rules' (2005: 207-208). My thesis will seek to address this gap by directing attention to intra-community social complexity, and the relationship between meso-level state and nonstate actors, in particular through the intersection of power, marginality, and relational institutions. My research will critically engage with the assumption of polycentric systems as self-organising and non-hierarchical by examining how dominant actors use their power to advance their governance objectives in pursuit of their desired outcomes.

Another emerging knowledge gap is the limited understanding of how different types of power influence resource distribution functions, the equity of outcomes across different beneficiaries of governance, and the closely connected principles of legitimacy, transparency, and accountability. One of the key aims of my thesis is to examine this through an analysis of how power impacts the equity of resource distribution within a small island community, the perceived legitimacy of governance actors and the rules they seek to enforce, and the perceptions of accountability and transparency within the governance system.

In the next section of this chapter, I provide a definition and overview of the concept of power, and how emerging research is theorising its relationship to polycentric governance.

3.3   Power and polycentric governance

From Aristotle to Machiavelli, and Weber to Foucault, power has been at the heart of social and political theories for thousands of years, with contestations around its meaning continuing today (Hay, 2002). It is beyond the scope of this thesis to provide a detailed examination and interrogation of the different ways that power is conceived, so I will instead set out how I define power in this thesis. Power is a relation among people (Dahl, 1957) and the causing of consequences (Lukes, 1986), which manifests as intent and the capacity to achieve desired and intended outcomes (Giddens, 1984). Power is expressed through agency – *the capacity to act and cause consequences.*

In order to analyse power in my thesis, I adopt a polycentric power typology developed by Morrison et al. (2017, 2019), which draws on literature from governance, institutional economics, political ecology, and political anthropology. This typology is the key theoretical framework and analytical tool that I use to analyse my primary data

presented in Chapters 6, 7 and 8. As noted earlier in this chapter and expanded upon in Chapter 6, the governance system on Palawan is polycentric, and for my thesis I used the polycentric governance power typology as an analytic tool and conceptual framework to structure my analysis by examining how power is used and contested by different governance actors as they pursue their objectives, visions, and values for the use and management of coastal resources.

Polycentric power is 'the uneven capacity to influence the goals, process, and outcomes of polycentric governance' (2019: 2), through (i) power by design, (ii) pragmatic power, and (iii) framing power (see Figure 2 for an overview of the key social science literatures and concepts related to these different types of power).

In the following sections I will provide an overview of the social science disciplines and key concepts that underpin the different types of power: power by design, pragmatic power, and framing power. I define their characteristics, and discuss how my primary research draws from these in order to contribute empirically and theoretically to the emerging body of work on power and polycentric governance.
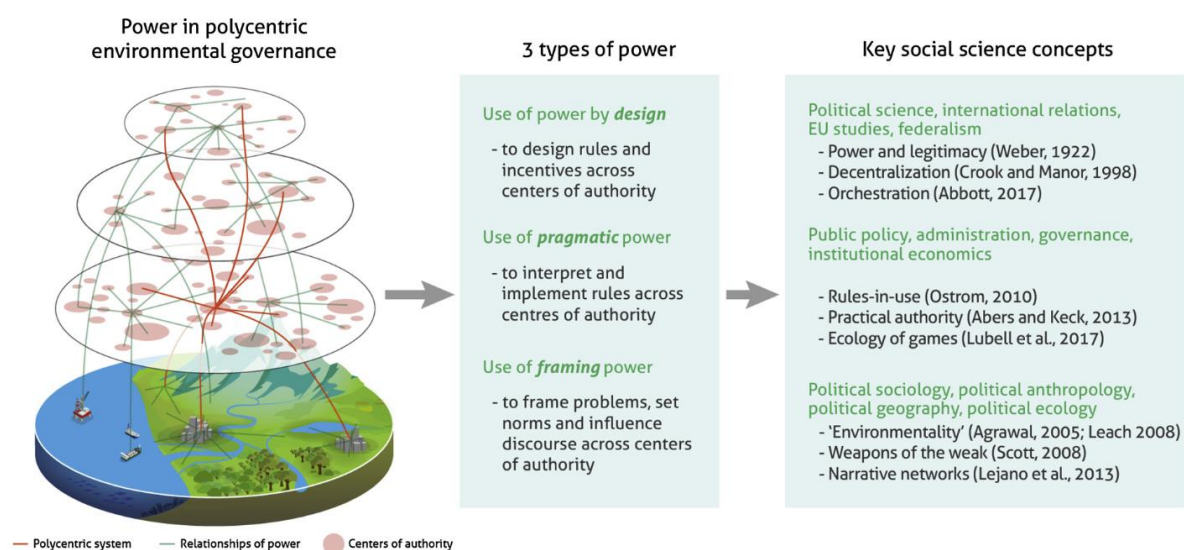
Figure 2. Key concepts and social science disciplines related to the three types of power relevant to polycentric governance (Source: Morrison et al., 2019)

3.3.1 Power by design

Power by design is power that is written, legislated, and visible in the policies that design governance processes and structures. This type of power is based on the legitimate authority of states (and other powerful actors) to independently legislate, create formal rules, tax, distribute resources, and design policy and markets (Jordan et al., 2016 as cited in Morrison et al., 2019). Authoritative power can be enacted from a central authority or distributed across and between different scales, as demonstrated by V. Ostrom et al.'s (1961) research on the role of metropolitan governments in providing public goods and services. Decision-making powers can be dispersed in many ways such as through establishment of regional organisations or the creation of semi-autonomous agencies (Morrison et al., 2017).

Decentralisation is a common feature of power by design within polycentric systems; in natural resource management research and practice this was a dominant perspective of the 1990s, with numerous low- and middle-income countries enacting legislation to decentralise power to community-level institutions (Berkes, 2015). As I detail in Chapter 6, a core characteristic of administrative and environmental governance in the Philippines is decentralisation of decision-making and enforcement of rules and regulations at the meso-level, in particular by municipalities.

Research on polycentric power has demonstrated that the other two types of power – pragmatic power and framing power – are often of more significance to the structure, function, outcomes, and beneficiaries of polycentric governance than power by design (Morrison et al., 2019; Mudliar, 2020). Throughout my thesis power by design will be discussed, but my analysis will be focused on pragmatic power and framing power, including how they undermine or are of more significance to power by design.

3.3.2 Pragmatic power

Pragmatic power is expressed through the discretion of the different actors and institutions involved (Morrison et al., 2019). It is expressed through day-to-day practice and implementation of formal and informal rules and decision-making. Pragmatic power involves actors using their discretion – or exertion of 'rules-in-use' – which can manifest as false compliance, feigned ignorance, tokenistic behaviour, and non-decision-making (Ostrom, 2010a). Actors who exercise pragmatic power have often been imbued with 'practical authority' (Abers and Keck, 2013), playing a vital role linking state and non-state actor policies and the actions that happen on-the-ground. High- and local-level bureaucrats and nonstate actors like corporations and activist groups can be viewed as pragmatic power brokers (Morrison et al., 2017).

Theoretically I expand upon existing conceptions of pragmatic power by drawing from Cleaver's (2002) concept of institutional bricolage, which emphasises the role of agency, with 'bricoleurs' playing a role in translating ideas, concepts, and information to a form and function that is understandable, appropriate, and usable in the local context (Cleaver, 2002). This commonly includes building new and emergent institutions (e.g. formal resource management committees) upon cultural institutions such as kinship and customary beliefs, and people's practical knowledge and experience.

Networks of leaders, entrepreneurs and other 'elite agents' mobilise and draw on their unique abilities and qualities (for example charisma) and their positions in networks to pragmatically determine choices. For example, in the Great Barrier Reef Regime, bureaucrats aligned with industry interests act as pragmatic power brokers, using their discretion to avoid the implementation of rules (Morrison, 2017). In Lake Victoria's fisheries in Kenya, Tanzania, and Uganda, Mudliar (2020) argues that pragmatic

power is exercised by actors through corruption, and a deliberate misrepresentation or disregard of rules, which undermines the implementation of regulations and sustainability of the fishery.

This demonstrates how pragmatic power is strongly associated with the giving or withholding of legitimacy for policies, compliance and non-compliance with management measures, and cooperation and conflict between stakeholders. Pragmatic power can be used to legitimise and support policies but can also be used to contest them, often in creative ways through which actors navigate or contest what are perceived as overly rigid rules (Morrison et al., 2019).

Pragmatic power considers the role of institutions in regulating environmental use and management (Agrawal, 2005; Berkes, 2015), for which institutional theories provide a useful analytical lens. Institutions exist in different forms and are defined in many different ways (Jentoft, 2004). In institutional economics, this refers to the regularised rules, norms and strategies that people use in making decisions and regulating the actions of humans (Ostrom, 2010a). This view of institutions and environmental governance is based on rational choice approaches, which Scott terms the *regulative* pillar of institutions (Scott, 2014). It assumes that economic calculations drive individual behaviour; institutions are the rules that prescribe and permit behaviour and the resultant reward or punishment, reconciling individual and collective rationality (Chuenpagdee & Song, 2012).

This has been the dominant perspective in fisheries and coastal governance, with institutions commonly being formal and codified at different scales, such as national legislation and local regulations enforced through monitoring, penalties, and incentives (Manlosa et al., 2021). This includes a broad range of regulative management

measures implemented across the world, including incentives, access regimes, property rights, and MPAs (Campbell et al., 2013; Cinti et al., 2010; Holland & Ginter, 2001; Kalikoski et al., 2002; Lobe & Berkes, 2004).

Jentoft (2004) argues that a broader conception of institutions beyond a rational choice view is necessary, particularly as ongoing challenges in fisheries and coastal governance are seen to be in part due to institutional failure (Acheson, 2006; Chuenpagdee & Song, 2012; Jentoft & Chuenpagdee, 2009). According to Coulthard (2012), a narrow view of adaptation to environmental change in fisheries as a rational decision-making process constrained by resources and technology can obscure value-laden and societal limits, and the ways in which strategies are advanced, interpreted and contested by different actors.

As Saunders (2014) writes, these assumptions also tend to conceptualise heterogenous communities as autonomous rational resource-users with fixed identities and a common purpose, failing to give meaningful consideration of local norms, values and interests. In practice, the aims, priorities, and outcomes of governance are shaped by the plurality of values, interests, aspirations, and strategies of different actors (Berardo & Lubell, 2019; Lubell, 2013). Cleaver & de Koning (2015) emphasise the multi-scalar complexity of institutions embedded in everyday social life, continually shaped by peoples' complex social identities, different worldviews, unequal power relations, and wider political contexts, as opposed to being deliberately developed for a specific function.

These can be characterised as informal institutions, and include social norms and relations which are continually maintained and reproduced through repeated social practice (Manlosa et al., 2021). Values and norms are rarely universal or static, they

vary across and within cultures, contexts, and social groups, and are internalised to varying degrees. As noted earlier, in order to explore this further in my research I integrate Cleaver's (2002) concept of institutional bricolage into conceptions of pragmatic power. I draw from the concept to examine how formal institutions such as resource management groups build on or around existing institutions (e.g. ethnicity, kinship, religion etc.), which is useful in understanding how governance shapes and is shaped by the heterogeneity of values, aims, and interests of resource-users and other governance actors. In a study about co-management in East African inland fisheries, Nunan et al. (2015) highlighted the importance of socially-embedded institutions beyond those created specifically for fisheries management – for example kinship, power and gender relations – which interact with formal institutions to determine access to fisheries benefits and enforcement of regulations.

A common feature is that normative aspects of institutions are usually morally binding – honesty is a respected value (de la Torre-Castro & Lindström, 2010). For example, in research on fisheries co-management in Zanzibar, Tanzania, de la Torre-Castro & Lindström (2010) describe how different fishing gears are normatively 'good' for different reasons such as productivity, perceived sustainability, use by elder community members, and preservation of traditional systems. In this instance different resource-users draw legitimacy for their particular fishing methods through different conceptions of what is perceived as 'good' in the community. From this perspective, institutions are *normative*; they are a collection of shared unwritten rules that give rights and responsibilities, privileges as well as duties, and licence as well as mandate (de la Torre-Castro & Lindström, 2010). I will explore this in my thesis through examining how context-specific social norms influence the design and implementation

of regulations across different scales of governance, their perceived legitimacy, and how they influence the equity of environmental and social outcomes.

Institutions are also conceived as having *cultural-cognitive* functions, structured by 'the shared conceptions that constitute the nature of social reality and create the frames through which meaning is made' (Scott, 2014: 67). From this view institutions are defined as structured and persisting patterns of behaviour that mediate access to, and control over, natural resources (Chuenpagdee & Song, 2012; Leach et al., 1999). Central to this is the inherent 'taken-for-grantedness' that exists in each society: the cultural habits, customs and social taboos which shape peoples' behaviour and interactions, and the social norms that guide these, defining what is inherently 'true' or 'false' by creating 'facts' or 'reality' based on shared conceptions of the world, and the frames through which meaning is given (de la Torre-Castro & Lindström, 2010; Jentoft, 2004; Scott, 2014).

In research about inland fisheries in Lake Tanganyika, Tanzania, Brehm et al. (2021) detail how cultural-cognitive values of beach seine fisheries undermine state policies which have made its use illegal, due to the shared notion of it being a fishery for the poor due to low entry costs, and a fishery for the collective through its provision of diverse benefits to a large group of people. This example supports the argument of Chuenpagdee & Song (2012) that there is a need to broaden the understandings of institutions in coastal governance, to consider how 'taken-for-granted' institutions influence and shape the interactions and behaviour of resource-users. My primary research engages with these broader conceptions of institutions, through an examination of how socio-cultural norms, relations, and customs influence the livelihoods people can or cannot engage in, and the shared cultural meanings and values associated with different livelihoods.

In research in Kenya, Funder & Marani (2015) demonstrate the powerful role played by meso-level bureaucrats who negotiate their complex positions between local communities and the state through compromise and pragmatism, which take shape as informal agreements and rules. As Cleaver & de Koning (2015) argue, the meso-level of governance (the space between national government and local communities) is frequently overlooked in research on natural resource governance institutions, despite playing a demonstrably crucial role in the degree with which regulations are implemented. My thesis contributes to this gap through directing the locus of analysis to the relationships between meso-level actors (municipal and provincial government, NGOs, and private companies) and the community-level (*barangay*). I do this by examining how socio-cultural institutions such as cultural habits, customs, political patronage, family and other forms of kinship, advance or undermine the implementation of formal rules and regulations, directing attention to how governance actors exert pragmatic power by using their discretion to interpret and translate rules across scales of governance.

Research has shown how the need to sustain livelihoods can be perceived as a legitimate reason for breaking rules. For example, in the Solomon Islands food insecure marginalised fishers violate resource management rules due to limited alternatives and daily subsistence needs (Sulu et al., 2015). Similarly, in research in the Philippines, illegally fishing in MPAs is legitimised by fishers through drawing on a basic rights discourse and right to survive that is a dominant feature of Filipino culture and local conceptions of poverty (Fabinyi, 2012).

These demonstrate the powerful roles of cultural norms, habits, customs, and taboos in the processes and outcomes of coastal governance, expressed as pragmatic power through the discretion actors use to set priorities and interpret regulations. Here I draw

from Leach's (1999) conceptualisation of 'environmental entitlements'; rights which extend beyond formal statutory systems and legislation to include customary rights and social norms for accessing, using, or managing resources. In my thesis I will contribute to the emerging body of research on blue justice, and the processes through which small-scale fishers, and small-scale fisher groups and networks resist coastal management measures deemed to be exclusionary in efforts to maintain and secure their resource use and access rights (Bennett, Blythe, et al., 2021; Ertör, 2021).

As discussed earlier in this chapter, polycentric governance provides a useful analytic tool for analysing the environmental governance system on Palawan,, with different types of actors from different sectors and at different scales interacting collaboratively and competitively in pursuit of their governance goals and outcomes. Through considering the formal and informal rules-in-use, applying a pragmatic power analytical lens is useful in examining the ways in which rules, norms, cultural habits and taboos influence the environmental and social outcomes of environmental governance, and the relationships between different actors.

3.3.3 Framing power

The third type of polycentric power conceived by Morrison et al. (2019) is framing power, which is the power that actors such as governments, civil society organisations (CSOs), the media, private sector, and lobbyists have to construct and shape issues around a particular vision of reality that enhances their own agendas and ideologies. These can be used to endorse, advance, contest or subvert governance objectives and outcomes, framing them as legitimate or illegitimate, prioritised or deprioritised (Morrison et al., 2019). When exerting framing power in polycentric governance, actors can establish and maintain complex social networks around their frames called 'narrative networks' (Lejano et al., 2013), for example through alliances of CSOs and

the private sector in advancing a particular understanding of environmental use and management. My research will expand on this by demonstrating how marginal resource-users can also use framing power to pursue their objectives in coastal resource use and management, including through forming their own social networks.

Concepts from the interdisciplinary research field of political ecology are useful for considering the relationship between discourse and power. At the heart of political ecology is a view that the environmental and social outcomes of ecological change cannot be understood without directing analytical attention to power and the role of political and economic structures and institutions. It analyses the relationship between ecological conditions, socio-political relations, and cultural practices, and how these produce particular kinds of environments (Nygren & Rikoon, 2008). Common areas of inquiry are: social marginality; resource use, access and tenure; and the political causes of resource allocation, and how these are influenced by the plurality of perceptions, rationalities, knowledge, and interests across different cultural, socioeconomic and political contexts (Peet and Watts, 1996; Agrawal, 2005).

Blaikie and Brookfield defined the field as 'combining the concerns of ecology and political economy, encompassing the constantly shifting dialectic between society and land-based resources and also within classes and groups within society itself' (1987: 17). At the heart of this is considering the poverty-environment relationship, and the systems, structures, and 'political circumstances that force people into activities which cause environmental degradation in the absence of alternative possibilities' (Stott and Sullivan, 2000: 4). This is 'useful in explaining how the consequences of environmental change in general, and access to and control over natural resources in particular, are socially differentiated' (Leach et al., 1999: 232).

These areas of inquiry largely fall under two broad themes. The first of these adopted a structuralist explanation of resource degradation as a result of the forces of capitalism and oppressive state policies, and their impacts on local people and the environment (Blaikie and Brookfield, 1989; Robbins, 2004). The second theme is influenced by poststructuralist social science, instead focusing on historical and cultural influences on the concept of environmental change and degradation as linguistic and political forces in their own right (Forsyth, 2003). The former seeks to objectively analyse the relationship between poverty and the environment, whereas the latter has a focus on subjectivities, and the ways in which perceptions of this relationship are constructed, configured and contested through the political agency of different actors (Escobar, 1998). This latter understanding forms a core aspect of framing power, which I will investigate in my thesis through examining how different actors construct framings about coastal resource use and management, and contestations between social and environmental objectives and outcomes.

Political ecology is not without criticisms about its research methods, conceptual frameworks and internal logic (Paulson et al., 2003). Vayda & Walters (1999) view political ecology as overemphasising the role of politics as *always* important and requiring prioritisation in research. They argue that 'some political ecologists do not even deal with literally the influence of politics in effecting environmental change but rather deal only with politics […] resulting in a politics without ecology' (1999: 168). It has also been critiqued by Walker (2006) for having a clear difficulty, reluctance or ambivalence to engage with, influence, and impact mainstream policymaking due to a lack of clear counter-narratives, the lack of a clear identity, and its roots in Marxist analysis which contribute to a hostile reception among policy circles.

Despite these critiques, recent arguments have been made about the need for much greater engagement with the political nature of ocean and coastal management and governance, in particular through theoretical frameworks in political ecology (Bennett, 2019). Growing recognition of the acute threats that face oceans and coasts have led to an increase in global ocean governance initiatives in recent decades, leading to the entry of a range of new actors in ocean governance and management spaces, typified by the competing visions of a sustainable Blue Economy (Voyer et al., 2018). While many of these processes are framed as apolitical and technocratic, increasing concerns have been raised about how this masks and exacerbates social inequities, marginalisation and exclusion of small-scale fishing communities and other marginal actors (Cisneros-Montemayor et al., 2019; Cohen et al., 2019).

Small-scale fishers have frequently been framed in relation to vulnerability, marginality and exclusion (Kolding et al., 2014; Sowman & Wynberg, 2014). With its focus on marginality, power and politics, political ecology thus provides a powerful analytical lens to examine this, yet there is a surprising paucity of research (Scholtens, 2016). Recent research on the political ecology of oceans and coasts includes small-scale fisheries (Fabinyi, 2012; Kadfak & Oskarsson, 2020; Menon et al., 2016; Nolan, 2019; Owusu & Adjei, 2021; Penney et al., 2017), MPAs (Fabinyi, 2012; Sergi, 2014), mangroves (Fent et al., 2019), marine aquaculture (Hadjimichael et al., 2014), tuna fisheries (Sinan et al., 2021), and the Blue Economy (Satizábal et al., 2020; Schutter et al., 2021). My research contributes to this research gap by examining how power and discourse intersect to create contested visions of coastal resource use, and how different frames positively and negatively impact the livelihood outcomes of small-scale fishers.

In the context of increasing commercial and state interests in ocean and coastal spaces long used by small-scale fishers, applying a political ecology lens can investigate the political processes and systems that restrict resource use and access, including 'ocean grabs' (Bennett et al., 2015) and 'coastal grabbing' (Bavinck et al., 2017). It can also examine the ways in which the drivers of marine and coastal environmental change are constructed through framing power, and contestations and conflicts around how these spaces should be governed and managed. It is suggested that there are four key, interlinked central themes related to political ecology and oceans: power and politics; narratives and knowledge; scale and history; and environmental justice and equity (Bennett, 2019). My thesis engages with these four interconnected themes in relation to power and governance; I focus on power by investigating the historical and current social and political context in the Philippines, the construction of frames and narratives by state, nonstate, and local community actors in pursuit of governance objectives, and the resulting outcomes on the equity of resource distribution.

The political ecology concept of 'environmentality' is useful in understanding how governance actors use framing power to frame the objectives of environmental governance, the process of governing, the resources available, and the structural design (Agrawal, 2005; Leach, 2008). Building upon Foucault's concept of 'governmentality' – which describes the techniques adopted by governments in order to control the conduct of people (Foucault, 1980) – environmentality is the process through which knowledge and discourse are (re)produced and internalised by individuals who become 'environmental subjects' that self-regulate their environmental behaviours, enabling governments to achieve their aims (Agrawal, 2005; Raycraft, 2020). Agrawal's research on forest conservation in India examines how state

decentralisation strategies reconfigure relations between different scales of governance, local-level decision-makers, resource-users, and the environment through the use of statistics and numbers, and the creation of new organisational structures for environmental decision-making. In research on environmental NGOs in the Philippines, Bryant (2002) argues that NGOs may unintentionally extend political rationalities of control by influencing and changing the relationships between people and the environment, for example through the primacy given to scientific knowledge, and 'education' about the types of behaviour that are 'correct'.

As Morrison et al. write, 'while the idea that power need not always be top-down and repressive is not new, many contemporary analyses of power continue to gloss over that observation by focusing in on the negative aspects of top-down power' (2019: 6). Research on polycentricity is starting to highlight the ways in which marginal actors can also deploy their own counter-framings to develop countervailing power, in order to contest and resist what they perceive as illegitimate. As Kerkvliet writes, acts of resistance are:

> what people do that shows disgust, anger, indignation or opposition to what they regard as unjust, unfair, illegal claims on them by people in higher, more powerful class and status positions or institutions. Stated positively, through their resistance, subordinate people struggle to affirm their claims to what they believe they are entitled to based on values and rights recognised by a significant proportion of other people similar to them (2009: 233)

A key focus of the literature on resistance is covert and subtle forms of resistance, which avoid or minimise the risks of punishment by the state for overt and blatant acts of resistance as they seek to re-assert and exert control over citizens and maintain social order (Scott, 1985; Kerkvliet, 2009). Scott (1985) characterises these acts as 'weapons of the weak'. Based on ethnographic research in a Malaysian village, he details the subtle ways that rural people resist domination through acts of sabotage,

foot-dragging, evasion, false compliance, feigned ignorance, and slander. Through this process counter subjectivities are formed as 'hidden transcripts', deployed through 'infrapolitics' which occur out of sight of those in power (Scott, 1990: 183). 'Depending on the context and setting, citizen action and engagement might assist in generating a counter-politics that helps to bring about the required changes' (Leach, 2008: 1793).

These strategies for resistance are an expression of agency that act as a source of power, even in contexts of extreme oppression and other structural constraints. As Foucault writes: 'as soon as there is a power relation, there is the possibility of resistance' (1978), which can take shape in a range of different formats, and often in highly creative ways in the most oppressive systems.

In the context of fisheries, Coulthard (2012) contends that illegal fishing and rule breaking is a means through which fishers use their agency to 'get back' at authorities in response to threats to their livelihoods. In research on discourses and practices of the Blue Economy in the Philippines, Satizábal et al. (2020) describes the role of grassroots CSOs in contesting and resisting the perceived privatisation of coastal resources, through direct engagement with small-scale fishers and engagement with global advocacy movements for food sovereignty and social justice. Similarly, Ertör (2021) provides an overview of resistance by fisher movements throughout the world, including successful mobilisation by fisher organisations in opposition to a land reclamation project in Jakarta, Indonesia, which led to successful outcomes for fishers such as the cancellation of permits and provision of compensation.

Holmes (2007) discusses resistance to conservation and protected areas, which ranges from subtle acts such as foot-dragging, ostracism, and livelihood continuation, to increasingly overt forms such as marches and petitions, sabotage and property

damage, fire, and deliberate destruction of protected natural resources. Similarly, in research in Tanzania, Raycraft (2020) draws on an example of the establishment of an MPA, detailing the ways in which fishers resisted through increasingly overt and direct ways, culminating in the bombing of the MPA office, which in turn led to a violent response by the state.

These examples highlight the role that the creative exercise of agency by marginal actors can play in resisting environmental policies and practices perceived to be exclusionary, with this resistance a source of power that can disrupt unequal power dynamics, albeit with the potential for harmful and degrading impacts on the environment. This demonstrates how power can be a form of resistance and empowerment that is bottom-up and enabling (*power to*), contrasted with the dominant conception of power as top-down, coercive, and manipulative (*power over*) (Foucault, 1980; Partzsch 2017).

My thesis will address the gap in knowledge about how marginal actors in polycentric governance systems can develop bottom-up power, through an examination of how it is developed by marginal fishers, and how this is used to contest coastal governance objectives and outcomes perceived as unfair and inequitable. An analysis of framing power is also useful in examining the processes through which other actors like the state, NGOs, private sector companies, and local communities build narratives around their ideological visions and agendas for environmental use and management. This analysis can make an important contribution to marine social science research on ocean governance and management, and the ways in which marginal actors like small-scale fishers can resist and contest dominant discourses and practices which seek to (re)shape how oceans and coasts are used.

These three different types of power are all present to varying degrees in polycentric governance systems, and interact and overlap across scales, leading to contestations, negotiations, reinforcement and undermining of power and the actors and institutions that exercise it.

3.4 Novel contribution to theory

Having presented the polycentric power typology, I will now provide an overview of recent research which has adopted this theoretical framework, before detailing how my empirical research builds upon this to present a novel contribution to scholarship on polycentric governance.

As noted in Chapter 1, the polycentric power typology has been applied in empirical research on a range of subject matters, including transboundary fisheries in East Africa (Mudliar, 2020), food sovereignty and climate resilience in the Philippines (Heckelman et al., 2022), transit migration in the Balkans (Koinova, 2022), and the development of regional marketplaces in Pakistan (Salman Khan & Syrett, 2022). These studies build upon Morrison et al.'s (2017, 2019) initial theoretical development of the typology which utilised empirical examples from the European Water Framework Directive, Reducing Emissions from Deforestation and Degradation Scheme (REDD+) in Indonesia, and the Great Barrier Reef Regime in Australia.

Alongside Morrison et al.'s (2019) polycentric power typology, similar frameworks that integrate critical social science (e.g. critical geography and political ecology) and institutional theories/commons scholarship have recently been developed, including locating power in Ostrom's design principles (Mudliar & Koontz, 2021), a relational typology to integrate power and institutional analysis (Bennett et al., 2018), and the critical institutional analysis and development framework (Whaley, 2018).

My research seeks to extend and build upon these through an empirical case-study of coastal governance in the Philippines, examining how this is shaped by multi-scalar politics across formal and informal institutions. The intersection of powerful INGOs and global conservation agendas with informal cultural institutions and relational values demonstrate a novel empirical application of this power typology, which can illuminate the tensions across and between multiple scales of governance. Theoretically I will extend the polycentric power typology by integrating the concepts of institutional bricolage and critical institutionalism into my analysis, in doing so addressing the gap in empirical research that adopts the meso-scale as the locus of analytical attention (Cleaver & de Koning, 2015).

Conceptually I draw from other critical approaches like political ecology to analyse how informal and formal institutions shape and are shaped by macro-scale politics, how this impacts the rights of marginal resource-users, and the strategies through which marginal actors are able to resist state policies they deem to be repressive and exclusionary. Throughout my analysis I will also direct analytical attention to the research gap about how power can advance or undermine the principles of equity, transparency, accountability, and legitimacy in polycentric governance, and how power can be mobilised in pursuit of (or resistance to) environmental goals and the livelihood outcomes of marginal resource-users.

Through applying the polycentric power typology in my thesis, I will extend research by Gruby & Basurto (2013) who integrated institutional theories of polycentric governance with critical human geography concepts on scalar politics and power. There is a longstanding lack of constructive engagement between the fields of institutional economics focused on collective action, and critical approaches focused on creating and sustaining resource access for poor and vulnerable groups,

characterised by tensions about core questions, values, assumptions, and methodologies (Gruby & Basurto, 2013; Johnson, 2004).

As Armitage (2008) argues, there is a need for continued cross-fertilisation of ideas for the evolution of environmental governance, with the author specifically calling for an exchange of ideas and complementarity between common property theory and political ecology. According to Poteete (2012: 147), drawing these concepts together in a broader perspective 'is less likely to overlook important elements, relationships, or processes'. The power typology for polycentric governance provides a framework which can further this complementarity, and can contribute to constructive theoretical dialogue that advances environmental governance. Through directing the analytical focus in polycentricity to the role of power, this can recast polycentricity as a combinatory theory which combines or builds upon multiple theoretical perspectives to attempt a comprehensive and pluralistic understanding; as Partelow et al. write, 'each theory [of environmental governance] has its own strength and value, and by learning about this analytical diversity more comprehensively as a field, we can provide more constructive and cooperative scholarship (2020: 13).

My research adds to this by primarily focusing on two of the three types of polycentric power: pragmatic power and framing power. Pragmatic power draws from institutional economics and governance theory, focusing on the formal and informal institutions involved in environmental decision-making. Conversely, critical social science concepts such as political ecology and critical geography underpin framing power, with a focus on the macro-scale political drivers of unequal power dynamics, inequality, and resource degradation.

3.5 Summary

This chapter reviews historical and contemporary scholarship on environmental governance and the role of power. I have chosen to focus on polycentric governance due to the dramatic increase in interest in the concept by researchers and practitioners over the course of the past decade, and the identification of emerging critical research gaps in how it considers the role of power on the structure, function, and beneficiaries of governance.

 In order to explore the concept of power further, I briefly outlined the concept of power before presenting the power typology for polycentric governance developed by Morrison et al. (2019), which draws on and integrates research on institutional theory, common pool resources, political ecology, environmentality, and resistance.

Guided by the polycentric power typology and the research gaps/questions noted in this chapter, Chapters 6, 7, and 8 of this dissertation present my case-study findings from Palawan, with Chapter 6 focused on power by design, Chapter 7 focused on pragmatic power, and Chapter 8 focused on framing power. Prior to this, the following chapter provides a background to the research methodology and methods I designed and implemented for my research, including my primary research on Palawan. Following on from this, Chapter 5 presents the QES undertaken as the first stage of my PhD, playing a key role in the iterative development of governance and power as the theoretical focus in my thesis.

4 Methodology

This chapter provides a background to the research methodology and the methods I used for my PhD. The first part of the chapter provides a reflexive discussion and methodological critique of the epistemological and contextual applicability of evidence synthesis to my research. This includes its application as part of the research process that I undertook, limitations of the database searches I conducted, the contribution of critical social science and ethnographic studies, and discussion of diverse formats and types of evidence. Following on from this, the remainder of the chapter details the methods I used for my primary research on Palawan. This provides details of the scoping visits I undertook in order to identify a case study, after which a detailed social, economic, and environmental background to the specific community I undertook my research in is presented. I then provide an overview of my main fieldwork period, before detailing the qualitative social research methods I designed, my approach to sampling, interlocutors/translators/facilitators, compensation, data analysis, my positionality and reflexivity, ethics, limitations and challenges I faced, and the impacts of Covid-19 on my research.

4.1 Qualitative Evidence Synthesis

During the inception phase of my PhD I conducted a literature review on broad themes in the marine (social) science literature. This was used to identify research gaps for investigation using a systematic review of qualitative research – also referred to as a qualitative evidence synthesis (QES) – which was the first phase of my PhD undertaken from June 2018 to August 2019.

Systematic reviews are an evidence synthesis research method that seek to identify, select and synthesise research on a particular question or topic, designed around a principle of transparency based on pre-specified and reproducible methods (Pullin &

Stewart, 2006; Uman, 2011). Systematic reviews are used widely in the public health and biomedical fields, and are increasingly used in the environmental fields, on subjects including climate change (Ford et al., 2011), conservation (Adams & Sandbrook, 2013; Brooks et al., 2013; Friedman et al., 2018; Sutherland et al., 2004), ecosystem services (Martin et al., 2016; Yang et al., 2018), and marine and coastal resource management (Mizrahi et al., 2018; Rasheed, 2020). While systematic reviews are increasingly being used in environmental research, policy and practice fields, there are very few QES, especially compared with the healthcare field. My QES thus makes a novel contribution to the systematic review of environmental evidence within the environmental social science field.

Qualitative evidence syntheses are a type of evidence synthesis that focus on qualitative research. As noted in Chapter 2, my PhD was situated within the Evidence Synthesis project of the UKRI GCRF Blue Communities Programme. During my PhD I was part of the University of Exeter's Medical School, in an interdisciplinary research centre investigating the intersections of environment and human health. It is common practice to undertake systematic reviews as the first stage of research, in order to synthesise what is known about a specific topic, and to identify and frame the focus for primary research. At the time I undertook my QES I was broadly interested in livelihoods and social diversity within coastal communities in Southeast Asia, and my QES helped to iteratively frame and develop my research focus on livelihoods, governance, equity, and power.

In the following section of the chapter I provide an overview of the methods and methodology that I used for this QES, covering: the searches; eligibility and study selection; data extraction; study characteristics; critical appraisal; coding, study comparison and derivation of themes; and analysis and synthesis.

4.1.1 Scoping

The first stages of my evidence synthesis ran complementary to my literature review. At this stage there were a number of broad research areas I focused on related to marine ecosystems, livelihoods, human wellbeing, and gender. As such, the scoping stage was iterative in nature, testing search terms related to these different areas. Supported by preliminary findings from a scoping visit to the Philippines and the rich availability of existing studies, I decided to focus on livelihoods as the topic through which to explore coastal communities and marine ecosystems. Different review questions and search frameworks (typically used in systematic reviews to structure and define key research elements that inform the review process) were tested for appropriateness, with the most suitable and effective being Population, Context, Outcome (PCO), an adapted framework for qualitative research based on the widely used Population, Intervention, Comparison, Outcome (PICO) framework used for reviews of effectiveness based on quantitative research (Butler et al., 2016).

4.1.2 Protocol registration

After the scoping period, the protocol of the study, detailing the planned approach for the QES was registered in the PROSPERO database (date of registration: 19/12/2019; ID: CRD42018116183). This can be seen in Appendix I.

4.1.3 Searches

The search was initially pre-planned, with comprehensive search strategies developed after first conducting scoping searches around different subject areas related to marine social sciences. As data were extracted and the studies synthesised, an iterative approach was adopted in order to adapt the research questions. Search results were exported into Zotero reference management software for management. Groups for

included and excluded studies were created for each search type (electronic database, reference lists, key experts).

4.1.3.1 Data sources

Electronic databases: A bibliographic search of English peer-reviewed publications in six databases (Applied Social Sciences Index and Abstracts; International Bibliography of the Social Sciences; GreenFILE; ProQuest Sociology; Environment Complete; Web of Science Core Collection) was undertaken up until the period of 08/01/2019.

Supplementary searches:

A range of supplementary searches were conducted alongside the bibliographic database searches. The first of these was hand searches of forward and backward citation searches of studies that were included after the first and second stages of screening. Key experts in the field were also contacted and provided with a background to the project and list of studies included after the first and second stages of screening and citation chasing.

4.1.3.2 Electronic search strategy

Searches were conducted of article titles and abstracts, using advanced search functions that utilised keywords and their truncations under four major search strings:

Table 2. Electronic search strategy for databases

Domain	Search terms
Population	"coastal communit*" OR "coastal village*" OR "coastal town*" "coastal cit*" OR "fishing" OR "fisher*"
AND	
Context - country	"Cambodia" OR "Indonesia" OR "Malaysia" OR "Myanmar" OR "Papua New Guinea" OR "Philippines" OR "Solomon Islands" OR "Thailand" OR "Timor-Leste" OR "Vietnam" OR "Cambodia" OR "Southeast Asia"
AND	
Outcome - livelihoods	"livelihood*" OR "fish*" OR "aquaculture" OR "mariculture" "seaweed" OR "crab fattening" OR "agroforestry" OR "agriculture" OR "entrepreneur*" OR "enterprise*" OR "craft*" OR "souvenir*" OR "touris* near/10 "coast"" OR "touris* near/10 "fish""
AND	
	"qualitative" OR "experiences" OR "interview"[2]

4.1.4 Eligibility and study selection

Table 3. Study inclusion criteria for QES

Domain	Inclusion criteria
Population	Perspectives of coastal/fishing community members
Context	Cambodia, Indonesia, Malaysia, Myanmar, Papua New Guinea, Solomon Islands, Philippines, Thailand, Timor-Leste, Vietnam
Outcome	Relates to livelihood change
Study type	Qualitative (and mixed-methods if qualitative data can be separated from quantitative data)
Study language	English
Study date	Published after the year 2000

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[2] Published guidance on the performance of qualitative filters was not available for research on environmental social science. After testing different search filters used for qualitative research in health research, a qualitative filter used in PsycINFO that balances sensitivity and specificity was selected.

4.1.4.1 Study screening methods[3]

The first stage of screening (titles and abstracts) was conducted by me as the lead author. The first 100 references were double-screened by my Primary Supervisor to ensure consistency of inclusions/exclusions. The remaining studies were double-screened by an undergraduate student I trained in systematic review screening methods. Inclusions from each reviewer were added to a database. In instances where a study was only included by one of the reviewers, discussions were held to reach a final agreement about whether a study would be included or excluded. The second screening stage (full text) was carried out independently by me.

Sampling strategy

After conducting supplementary searches, the total number of included studies was deemed too high for the purpose of a QES. Compared with quantitative systematic reviews where the aim is to identify as many studies as possible, Noblit and Hare (1988) argue that synthesising too many qualitative studies risks 'trite conclusions'. As such, a multi-level sampling strategy was developed (Harris et al., 2018) applying the following filters:

1. Removal of non-ASEAN countries – Southeast Asia was originally defined in a broad sense to include three island states in the Oceania/Asia-Pacific regions (Papua New Guinea, Solomon Islands, Timor-Leste). These were excluded as part of the sampling strategy, with the decision taken to define Southeast Asia as membership of the Association of Southeast Asian Nations (ASEAN), excluding Laos due to its land-locked geography and the nature of this synthesis being focused on coastal communities/livelihoods.

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[3] When conducting systematic reviews, it is best practice that some or all stages of screening are undertaken my multiple reviewers, which is why double screening was conducted by two other individuals at different stages of the first stage of screening.

2. Removal of multiple studies from the same data source – there were multiple studies identified during the database searches which were based on the doctoral research of two authors (Bennett, 2013; Fabinyi, 2012). In both instances the publications were excluded and the full theses were identified and included in the final list of studies. There were additional instances where multiple publications were published using the same data – the full text of each was screened and the most relevant one to the review questions was included.

3. Diversity of livelihood activities – this refers to a selection of studies that cover a mix of different livelihood activities undertaken in coastal areas, including but not limited to: different types of fishing, aqua/mariculture, tourism, seaweed, agriculture etc.

4. Exclusion of mixed-methods studies – the inclusion criteria included mixed-methods studies where the quantitative and qualitative findings could be separated. All mixed-methods studies were later excluded as part of the sampling strategy due to having a thin amount of qualitative data in them.

4.1.4.2 Study selection results

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources
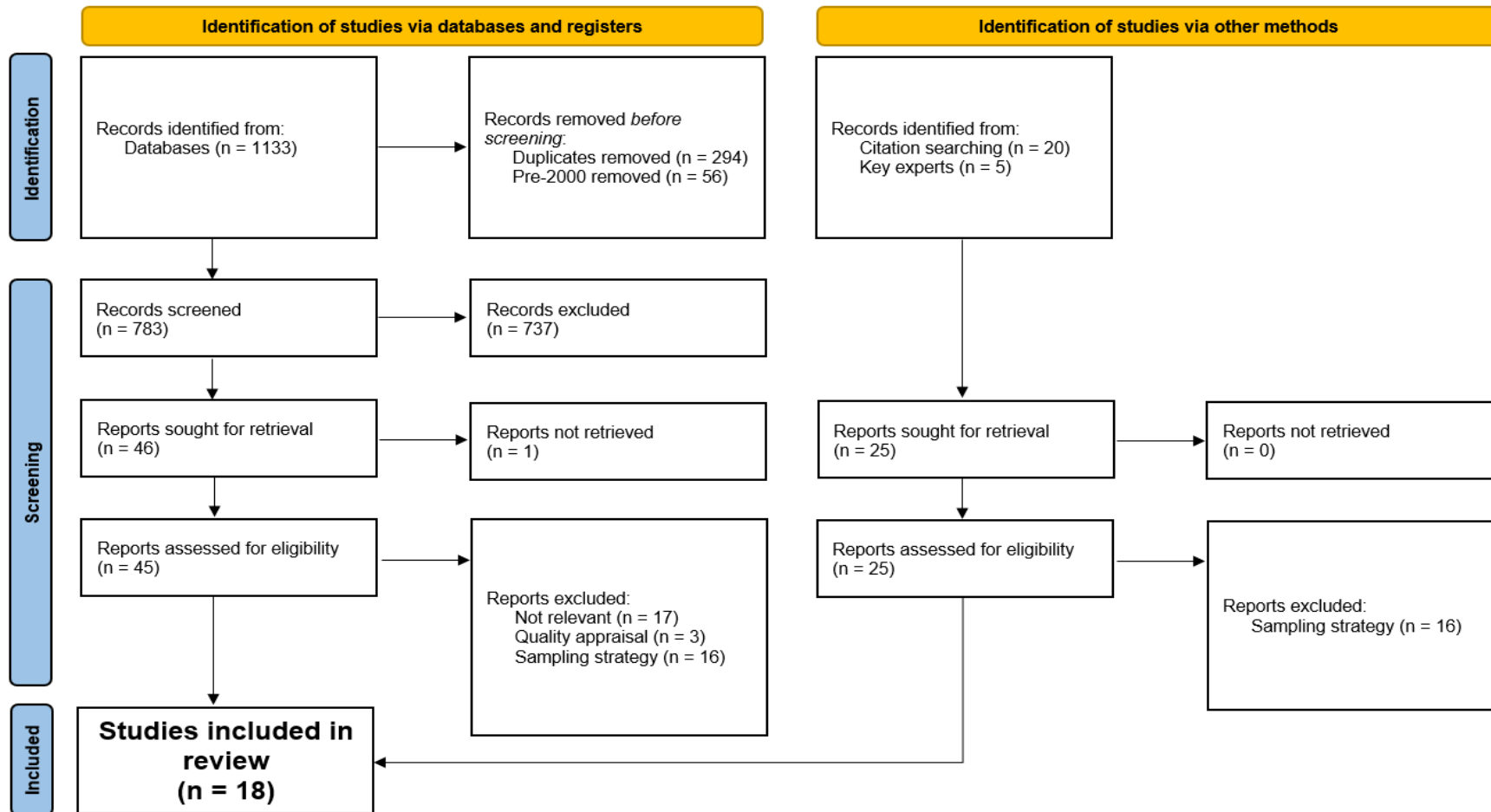
From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

Figure 3. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram of systematic review searches

4.1.5 Data extraction

The included studies came from different sources (theses and journal articles) in different formats – e.g. some theses were presented as monographs, others as theses by publication. Similarly, the included journal articles come from a range of journals with different article structures – e.g. humanities and different social science epistemologies. Data were extracted from any section where primary data was presented or discussed. Bibliographic information was also extracted from the study (e.g. study type and journal), as well as contextual and methodological information from studies (study location, participants, livelihood of participants, data collection and analysis methods, and conceptual framework used).

4.1.6 Study characteristics

The final number of studies included for this synthesis was 18 (15 journal articles, two theses, and one book). Nine of the studies were conducted in the Philippines, eight in Indonesia, and one in Thailand. Five studies focused solely on fishing, four focused solely on tourism, three focused on both fishing and tourism, one focused on fishing and farming, one focused on seaweed farming, one focused on human trafficking, one focused on mining, and one focused on a diverse range of livelihoods. Across all of the studies, participants were from coastal communities, with some studies also including participants from private sector businesses (n=6), government (n=5), and NGOs (n=3). The most common conceptual frameworks explicitly reported were the sustainable livelihoods approach (n=5), political ecology (n=3), and agrarian/livelihood change (n=2). Data collection methods included interview (n=14) ethnography/participant observation (n=7), and focus group discussions (n=4), with thematic analysis the most commonly reported analysis method (n=7) (see Table 4).

Table 4. Study characteristics of studies included in QES (N/A = Not Applicable; N/R = Not Reported)

Author	Year	Study type	Journal	Country	Livelihood	Data collection	Data analysis	Participants	Conceptual frameworks	Lead author institution country
Bennett	2013	Thesis	N/A	Thailand	Mixed	Initial interviews; in-depth interviews; key informant interviews; focus groups; Photovoice	Thematic analysis	Community leaders; community group leaders; community members; academics; NGO staff; government staff	Resilience, adaptive capacity, sustainable livelihoods	Canada
Dressler & Fabinyi	2011	Article	Agrarian Change	Philippines	Farming-fishing	Key informant interviews; in-depth interviews	N/R	Migrant communities; Tagbanua Indigenous communities	Agrarian change	Australia
Eder	2009	Book	N/A	Philippines	Fishing and tourism	Ethnographic	N/R	Coastal communities	Community, participation, natural resource management	USA
Fabinyi	2012	Thesis	N/A	Philippines	Fishing and tourism	Ethnographic - life histories from informal conversations; observation; informal interviews	N/R	Coastal community members; fishermen; NGO staff; tourism operators	Post-structuralist political ecology	Australia
Fabinyi	2019	Article	Maritime Studies	Philippines	Fishing and tourism	Ethnographic	Grounded theory	Coastal community members/fishermen	N/R	Australia
Ferse et al.	2012	Article	Coastal Management	Indonesia	(Ornamental coral) fishing	Key informant interviews; semi-structured interviews; informal interviews; observations	N/R	People directly involved in ornamental coral fishing, NGO personnel, researchers from local uni, 'islanders'	Sustainable livelihoods approach	Germany

Gier et al.	2017	Article	Coastal Conservation	Philippines	Tourism	Semi-structured interviews	Thematic analysis	*Barangay* captains; municipal office workers; community members	N/R	USA
Jaiteh et al.	2017	Article	Marine Policy	Indonesia	(Shark) fishing	Participant observation; observation; semi-structured interviews; informal conversations	N/R	Active shark fishers; retired shark fishers; shark fishing bosses; non-fishing community members	N/R	Australia
Kinseng et al.	2018	Article	Asia Pacific Journal of Tourism Research	Indonesia	Tourism	Key informant in-depth interviews; direct observation	Thematic analysis	Key community and business leaders	N/R	Indonesia
Knudsen	2016	Article	Human Ecology	Philippines	Fishing	Ethnographic	N/R	SSF community	Livelihoods, power, politics, social exclusion, political ecology	Brunei
Lasso & Dahles	2018	Article	Asia Pacific Journal of Tourism Research	Indonesia	Tourism	Ethnographic - participant observation; conversing; observing; listening	Thematic analysis	Former fisherman currently making souvenirs	Sustainable livelihoods approach	Indonesia/Australia
Lowe & Tejada	2019	Article	Ocean & Coastal Management	Philippines	Tourism	Semi-structured interview with key stakeholders	Thematic analysis	Fishers with and without connection to whale shark association; government and elected officials	Sustainable livelihoods approach	Australia
Missbach	2016	Article	Pacific Affairs	Indonesia	Human trafficking	Semi-structured interviews; open interviews; informal conservations	N/R	Fishermen involved in transport of migrants (including convicted smugglers during and after sentences); local policemen	Hyper-precariousness	Australia

Porter & Orams	2014	Article	Tourism Planning & Development	Philippines	Tourism	Semi-structured individual or group interview	Thematic analysis	Coastal community	Social entrepreneurship tourism model	New Zealand/ Philippines
Rosyida et al.	2018	Article	The Extractive Industries and Society	Indonesia	Mining	Semi-structured questions in household surveys; key informant interviews; focus group	N/R	Permanent residents - mostly knowledgeable people such as desa officers; dusun chief; local elders; mining committee members; representative fishers; farmers; miners; and religious leaders	Social licence to operate, governance, power	Japan
Segi	2014	Article	Human Ecology	Philippines	Fishing	Semi-structured and unstructured interviews, participant observation, fishing trips	N/R	Fishermen	Political ecology	Australia
Stanford et al.	2014	Article	Marine Policy	Indonesia	Fishing	Preliminary interviews; semi-structured interviews	Thematic analysis	Field extension officers and office-based staff from department of fisheries; small groups of fishers and their wives; community leaders	Sustainable livelihoods approach	Indonesia
Steenbergen et al.	2017	Article	Marine Policy	Indonesia	Seaweed	In-depth interviews; focus groups	N/R	Seaweed farming households; traders and community leaders;	Livelihood change, natural resource governance	Australia

4.1.7   Critical appraisal of studies

An important part of evidence synthesis is the process of critically appraising study quality, which I conducted during the data extraction stage. The rationale for the appraisal was to assess the reporting quality (transparency) and content/utility of the findings. The qualitative studies appraisal tool developed by Wallace et al. (2004) was used and conducted solely by me as the lead author. The results of the appraisal are presented in Table 5. The studies highlighted in red were excluded during the appraisal stage as the content/utility of the findings were deemed inadequate for the purpose of this synthesis.

Through conducting a critical appraisal of the included studies, it is evident that reporting of research questions was clear across the majority of studies (n=16), theoretical or ideological perspectives were clear (n=15), descriptions of the context of the studies were adequate (n=15), and study samples were drawn from appropriate populations (n=16). Contrasted to this, reporting of the adequacy of the sample to explore the range of subjects was low (n=7), as was reporting on the rigour with which data collection was conducted (n=7), and reporting on the rigour of data analysis (n=6).

As is highlighted later in Section 5.3 of Chapter 5 however, this likely reflects different standards between the health and medical sciences fields (in which evidence syntheses methodologies have primarily been developed) and the interdisciplinary marine social science field, namely due to normative differences in research design and epistemology.

Table 5. Critical appraisal of studies in QES (Y = Yes; N = No; CT = Can't tell)

Question	Is the research question clear?	Is the theoretical or ideological perspective of the author (or funder) clear?	Has this perspective influenced the study design?	Is study design appropriate to answer the question?	Is the context or setting adequately described?	Sample adequate to explore range of subjects or settings?	Sample drawn from appropriate population?	Data collection adequately described?	Data collection rigorously conducted?	Data analysis rigorously conducted?	Include or exclude?
Armitage & Marschke (2013)	Y	CT	CT	CT	Y	CT	Y	Y	CT	Y	**Exclude**
Bennett (2013)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Include
Bergquist (2007)	Y	Y	CT	Y	N	CT	Y	Y	CT	CT	**Exclude**
Dressler & Fabinyi (2011)	Y	Y	Y	Y	Y	Y	Y	Y	CT	CT	Include
Eder (2009)	Y	Y	Y	Y	Y	VT	Y	Y	CT	CT	Include
Fabinyi (2012)	Y	Y	Y	Y	Y	Y	Y	Y	CT	CT	Include
Fabinyi (2019)	Y	Y	Y	Y	Y	CT	Y	Y	CT	CT	Include
Ferse et al. (2012)	CT	Y	Y	Y	Y	CT	Y	Y	CT	CT	Include
Fisher (2008)	CT	Y	Y	CT	N	N	Y	CT	CT	CT	**Exclude**
Gier et al. (2017)	Y	CT	CT	Y	Y	CT	Y	Y	Y	Y	Include
Jaiteh et al. (2017)	Y	Y	Y	Y	Y	Y	Y	Y	Y	CT	Include
Kinseng et al. (2018)	Y	P	CT	CT	N	CT	Y	Y	CT	Y	Include
Knudsen (2016)	Y	Y	Y	Y	Y	CT	Y	Y	CT	CT	Include
Lasso & Dahles (2018)	Y	Y	Y	N	Y	N	Y	Y	CT	CT	Include
Lowe & Tejada (2019)	Y	Y	Y	Y	Y	CT	Y	CT	CT	CT	Include
Missbach (2016)	Y	Y	CT	CT	Y	CT	Y	N	CT	CT	Include
Rosyida et al. (2018)	Y	Y	Y	Y	Y	Y	CT	Y	Y	CT	Include
Porter & Orams (2014)	Y	Y	Y	Y	Y	CT	Y	Y	Y	Y	Include
Segi (2014)	Y	Y	Y	Y	Y	CT	Y	Y	CT	CT	Include
Stanford et al (2014)	Y	Y	Y	P	Y	Y	P	Y	Y	Y	Include
Steenbergen et al. (2017)	Y	Y	Y	Y	Y	Y	Y	Y	Y	CT	Include

4.1.8 Coding, study comparison, and derivation of themes

Data synthesis was undertaken across multiple stages. Initial line-by-line coding was conducted in NVivo, followed by the development of descriptive themes, and then analytic themes (Thomas and Harden, 2008). As studies continued to be coded, descriptive codes and categories began to emerge. Coding was iteratively conducted both within and across studies through coding subsequent studies into existing codes, categories and emerging concepts. At this stage key codes were extracted into a MS Excel spreadsheet and printed for iterative manual coding by hand using coloured pens and post-it notes. During this stage descriptive categories and themes were then merged and adapted to develop higher-level analytical themes.

For the presentation of the synthesis, first order constructs (participant quotes in studies) are presented using speech marks (" ") and are *italicised*, and second order constructs (quotes from the author(s) of the studies) are presented using quotation marks (' ').

4.1.9 Analysis and synthesis

For this synthesis, an inductive, interpretive synthesis methodology was adopted, with key themes and concepts identified across studies (Thomas and Harden, 2008). First order constructs (the direct views, accounts, and experiences of research participants) and second order constructs (the original study authors' views and interpretations of the views, accounts, and experiences of research participants) were translated across studies to create third-order constructs (my view and interpretation of first and second order constructs, expressed in terms of themes and key concepts). When present, this included the extraction of theories associated with the identified concepts in each study (Noblit & Hare, 1988).

The following three stages of thematic synthesis (Thomas and Harden, 2008) were used:

Stages 1 & 2: Coding text and developing descriptive themes – line-by-line coding of findings from each study was employed, from which meaning and content was drawn. This process was iterative as I built up a 'bank' of codes, at the same time beginning stage 2 of the synthesis as concepts were translated across studies, in turn developing and merging descriptive themes.

Stage 3: Generating analytical themes – At this stage, the descriptive codes were used to generate new interpretive constructs and explanations, by identifying emerging patterns and relationships between descriptive themes.

Studies were imported in PDF format into the NVivo qualitative analysis computer software package for analysis and synthesis.

4.2 Primary research

Fieldwork for my primary research was conducted during three trips to Palawan between November 2018 and March 2020, lasting for a total period of just under six months. The first scoping trip took place in November-December 2018, lasting for three weeks, followed by a second scoping trip in July-August 2019, lasting two weeks. My main fieldwork period lasted four and a half months and took place between October 2019 and March 2020. As noted in Section 4.2.12 of this chapter, my primary fieldwork period was cut short by the Covid-19 pandemic.

4.2.1 Scoping visits and case study selection

My primary research used a case-study approach, commonly used in sustainability research that examines the relationship between people and the environment (Evans, 2011). Early on in my PhD I had hoped to use a multi-sited ethnographic approach across two case study *barangay* sites, in order to overcome some of the limitations of single-sited research (Marcus, 1995). Due to time constraints because of the time taken to design and undertake my qualitative evidence synthesis, and delays in securing research permits, this was not feasible. As an alternative, I spent time in the municipality of Taytay and Puerto Princesa City (see Section 4.2.9 for more details about the structure of my main fieldwork period) which enabled me to contextualise my findings in *Barangay* Bucadan with my experiences and interactions elsewhere on Palawan.

As Bernard (2006) details, qualitative social researchers rely on their own judgement to find a research site that reflects the things they are interested in. To help in the selection of a location, I created a criterion for study selection based on:

- Blue Communities programme case-study partner

- High dependence on marine resources

- Diverse mix of marine resource-based livelihoods

Through the association of my PhD with the Blue Communities Programme and discussions with WPU, I decided to select a case-study location from one of the three municipalities WPU had identified as case-studies for their Blue Communities activities, in order to align with Memorandums of Understanding (MoUs) formed between the Blue Communities Programme and state and non-state institutions and communities. This allowed me to narrow down to one of three municipalities on Palawan.

In order to further identify the case-study for my research, I undertook two scoping visits to Palawan. The first of these was timed to coincide with the first Annual Progress Meeting of the Blue Communities Programme, held in late 2018 on Palawan. This provided an opportunity for me to establish and build relationships with WPU and other Blue Communities partners. During this trip I visited two of the three case-study municipalities on Palawan: Puerto Princesa and Taytay. For the latter, I provided support to WPU and UK Blue Communities partners undertaking a workshop with stakeholders from municipal and *barangay* local government, and also visited and was introduced to *barangay* officials from *Barangay* Bucadan. Based on this initial trip I identified the municipality of Taytay as the case-study for my research, due to the long history of coastal governance interventions that have influenced the livelihoods people engage in.

After completing my QES, I embarked upon a second scoping visit in July 2019. With the support of WPU, I returned to Taytay and was introduced to various local government and NGO staff based in the municipal capital, from whom I sought advice regarding my research interests. By this time WPU had purposively identified four case study *barangay*s (out of 32 in the municipality of Taytay), with the aim of including sites which encompass the socio-economic and ecological diversity of Taytay. Having already visited one of these – *Barangay* Bucadan – during my first scoping trip, I visited the remaining three. I held informal interviews and conversations with community leaders to inform them about the focus of my research and discuss any concerns, while also getting a sense of the location, the types of livelihoods people were engaged in, and logistical considerations.

Returning to the UK with socio-economic and ecological profiles of the four different *barangay*s – based on a combination of site visits and conversations with WPU,

government and NGO officials – I decided to focus on *Barangay* Bucadan as the site of my research due to the heavy reliance on marine resource-based livelihoods and ongoing engagement with state and nonstate coastal resource management and livelihood programmes.

4.2.2 *Barangay* Bucadan

In this section I will provide an overview of the environmental and socio-economic characteristics of the *barangay* in which I conducted the majority of my research. Due to the sensitive nature of some of my findings, I have used a synonym for the name of the *barangay*, and throughout this thesis use synonyms for all names of individuals and families, with the exception of known political figures such as the municipal mayor of Taytay and the provincial governor of Palawan. The information below is based on a combination of informal conversations, life histories, and participant and non-participant observation during my time living in *Barangay* Bucadan.

Barangay Bucadan is an island *barangay* located in Taytay Bay, with four *puroks* (sub-villages) spread across two islands. The ethnic make-up of the *barangay* is mixed, with people of Cuyonon, Agutaynon, Visaya, and Tagalog ethnic groups, and an increasing number of mixed households due to intermarriage. Filipino, Cuyonon, and Visaya are said to be the most widely spoken languages. The village saw a steep increase in population between 2007 and 2010, with the most recent census recording a total population of 1664 people (see Figure 4).

Census date	Household population	Number of households	Average household size
1990 May 1	1,357	217	6.25
1995 Sep 1	1,385	249	5.56
2000 May 1	1,284	217	5.92
2007 Aug 1	1,340	262	5.11
2010 May 1	1,733	344	5.04
2015 Aug 1	1,664	301	5.53
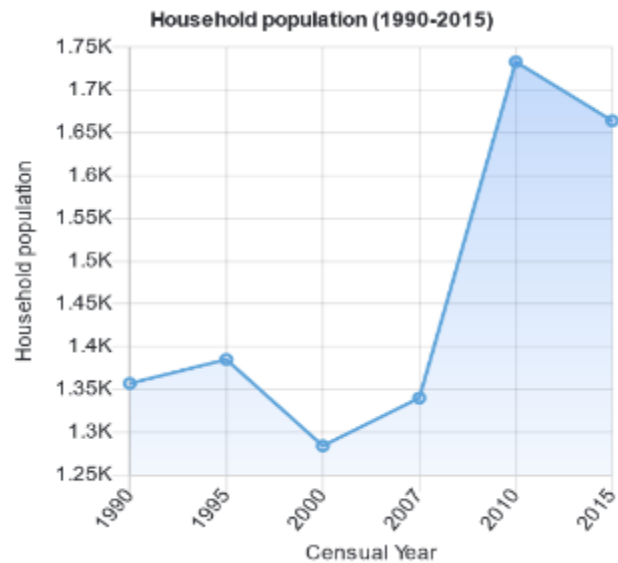
Figure 4. Census data for Barangay Bucadan (Source: PhilAtlas, 2022)

People are largely reliant on marine resource livelihoods such as multi-species and multi-gear capture fisheries (primarily hook and line) including for the LRFT, 'culturing' of live fish, fish processing (see Figure 5) , sea cucumber collection and 'culturing', and gleaning of other marine products for subsistence purposes (see Figure 6).

For agriculture, some households grow cash crops including cashews, coconut, and bananas, and many households engage in 'backyard gardening' to grow vegetables such as aubergine, okra, sweet potato, and sweet potato leaves. Some households – primarily of the Cuyonon ethnicity – engage in swidden farming (*kaingin)* for rice cultivation (also primarily women), through rotational harvesting on hillsides.

In general, however, households rely on importing goods from the mainland, in particular rice, vegetables, and processed foods. Most households raise some chickens, primarily for household use (for food and cock-fighting), and wealthier households are engaged in raising pigs. Other local sources of food include the gleaning of various gastropods, bivalves, and crustaceans from intertidal and mangroves areas (see Figure 6). In general, agricultural and gleaning activities are

undertaken by women and children. For some wealthier households, retail is also an important livelihood ('*sari-sari*' stores selling household products). Many households also support their incomes through remittances received from relatives working elsewhere in the Philippines and overseas, primarily in the Gulf region.

Figure 5. Post-harvest processing of anchovies

Figure 6. Examples of gleaned marine products important for subsistence

Until recently there was no electricity in the *barangay* aside from households with individual solar panels, but in the last five years the main sub-village (*Purok 1*) had a generator installed by the Palawan Electric Cooperative (PALECO) which provides daily electricity from 3-11pm. There is no running water on the island, so households rely on a mix of well-drawn water (for cleaning purposes once filtered), and a combination of rainwater harvesting and municipal piped water brought in barrels by boat from the mainland for all other purposes. In terms of infrastructure, *Barangay* Bucadan has a *barangay* hall, day-care centre, elementary school (age 6-12), and health station located in *Purok* 1. There is no high school in *Barangay* Bucadan, so most teenagers go to Taytay National High School in *Poblacion*, staying with relatives or in a boarding house during the school week, returning home over the weekend. There are no vehicles or bicycles on *Barangay* Bucadan, with people typically travelling around the island by motorised boat, oar-powered boat, or on foot, although the latter is time-consuming due to the steep terrain and dense forest. Travel to the mainland is undertaken by motorised boats of varying sizes, and wealthier households often own motorbikes or tricycles in *Poblacion*.

From the 1970s-1990s, there was a booming *basnigan* (purse seine) fishing industry in Taytay (see Figure 7), with life histories from elder fishers indicating that *Barangay* Bucadan was an important hub for the fishing industry, hosting a mix of local and seasonal fishers. Around this time there was also a Japanese enterprise that had a warehouse in *Barangay* Bucadan for storing and processing squid caught in Taytay Bay. Nowadays there are a number of abandoned warehouses from these industries, highlighting the decline of *basnigan* fishing after catches dropped dramatically in the 1990s. There is also an abandoned hotel and an abandoned villa, both built by foreigners.

Figure 7. One of the last remaining specialised boats for purse-seine fishing on Barangay Bucadan

After the decline of the *basnigan* fishery, many households switched to the LRFT, as was the case with many *barangay*s in the north of Palawan. Many households have engaged in 'culturing' and 'caging' fish, with sea-based infrastructure of varying sizes and formats. These are a combination of surface cages (see Figure 8), mid-water cages (around 5m), and deep-water cages (around 18m). The majority of surface cages are located in a bay close to *purok* 1 which is sheltered from high winds and strong waves during the northeast monsoon. The price paid by live fish buyers was said to have dropped significantly around 2015-2016, which has resulted in some households choosing to exit the sector to pursue other livelihood strategies. For households continuing in the sector, decreasing average size of Groupers require

increased inputs of feed – costing more money – in order to reach marketable sizes. Combined with the steep decline in prices on the international market, this is driving up costs and leading to debt.

Figure 8. A large grouper caging facility for the LRFT

As a result of livelihood development programmes initiated by various municipal government departments, a limited number of households have unsuccessfully tried to grow seaweed, and recent years have seen a rapid uptake of sea cucumber fattening, where juvenile sea cucumbers collected from around Palawan or caught locally are kept in sea-pens and sold once they reach a marketable size. There are increasing signs that the wild population of sea cucumbers is experiencing a steep decline in stocks as a result of over-harvesting of fingerlings. These livelihood programmes will be discussed in detail in Chapter 7 in relation to intra-community power dynamics, and the role this plays in determining the beneficiaries of these activities.

For the vast majority of the community, hook and line fishing is the primary source of income and livelihood. Wealthier households use a motorised boat (*bangka*), whereas others rely on oar-powered dugout outrigger boats (*sibid* or *sagwan*). Most people target *sari* (everything), with catch either being eaten, sold for local food consumption, or sold as feed for *lapu-lapu* (grouper). Other fishers are more specialised in fishing for *lapu-lapu* itself, either fishing locally or travelling further afield such as seasonal fishing trips up to Coron, part of the Calamianes Island group to the north of Palawan. Fishing is an activity primarily done by men, and while it is quite common for men to be accompanied by their daughters or wives, it is much rarer for women to go fishing by themselves, although there are some exceptions.

4.2.3 Qualitative social research methods

Qualitative social research is based on the interpretivist epistemology which views reality as socially constructed, with research aimed at revealing the personal or 'local' meanings and interpretations that characterise individuals, groups, or a particular topic (Neimeyer & Torres, 2015; Voyer et al., 2015). This departs from the objectivist or positivist epistemological perspective of universal truth which dominates the natural sciences (Crotty, 2020).

Interpretivist, qualitative research can play a key role when examining human-environment relationships, with purely natural science-based approaches and policies often failing to take account of the diverse knowledge systems and priorities of resource-users (Coulthard et al., 2011; Leach, 2008). Qualitative methods can be used to highlight the social and cultural meanings and values of the environment – across social differences and relations – often absent in the design of coastal resource management measures such as MPAs, (Chaigneau & Brown, 2016; Clifton, 2013),

integrated coastal zone management (Coffey & O'Toole, 2012), and fisheries management (Barclay et al., 2017).

In order to examine these differences, I drew on a mix of ethnographic qualitative social research methods that consisted of participant and non-participant observation, unstructured and semi-structured interviews, participatory mapping, and focus group discussions (FGDs). The use of multiple methods is recognised as maximising the reliability and validity of findings through triangulation across different types and sources of data (Creswell & Clark, 2007; Guest et al., 2012; Webb et al., 1999). Furthermore, with the interpretivist nature of my research, I felt that adopting a broad ethnographic approach to research provided the flexibility to iteratively adapt and develop my research methods and questions for investigation in response to my interactions with research subjects, my emerging findings, my understanding of the cultural context, and logistical considerations.

Ethnographic research is recognised for its usefulness in investigating and analysing complex issues related to power dynamics and social relations (Fabinyi et al., 2014; Segi, 2014), especially as a foreign researcher with a limited understanding of the context and cultural norms. As Falzon writes, ethnography involves 'an eclectic methodological choice which privileges an engaged, contextually rich and nuanced type of qualitative social research, in which fine grained daily interactions constitute the lifeblood of the data produced' (2009: 1). A key aspect of this was participant observation, which involves immersing yourself in the culture and daily lives of research subjects, while continuing to remove yourself from that immersion to analyse what it is that you have seen or heard (Bernard, 2006).

In *Barangay* Bucadan, these interactions and activities included joining fishing trips, participation in various community celebrations like *fiestas*[4] and birthdays, cooking, collecting drinking water, operating boats, childcare, and leisure activities such as basketball, videoke[5], and watching sports and soap operas. These activities provided rich insights into people's daily lives, as well as playing an important role in building trust with people. The unstructured nature of them (compared with interviews and FGDs) in many ways led to more natural, informal conversations with people, including discussion of peoples' life histories, experiences and interests. Wherever possible I carried a notebook and pen to record these immediately afterwards, although often this wasn't possible so notes were taken later. Many of these informal conversations took place in the morning while sharing coffee or snacks, evenings when participating in videoke sessions or watching TV, or in casual conversations before or after interviews and FGDs. When appropriate I also took photos of daily life, ensuring that ethical conduct was applied (see Section 4.2.10 of this chapter for more details).

In terms of language, my initial plan had been to undertake an intensive language course in Filipino ahead of beginning my fieldwork, but time constraints within my PhD unfortunately meant this was not possible. When I began my fieldwork, I had a very limited grasp of Filipino, although over the time period I was in *Barangay* Bucadan I was able to have basic conversations. Generally, people in *Barangay* Bucadan had a

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[4] In much of the Philippines, *fiesta*s are an important cultural event celebrated by the Catholic majority population. *Barangay*s, towns and cities have a patron saint, and *fiesta*s are the celebrations of these saints. Usually lasting three or four days, *fiesta*s are holidays where various games and celebrations such as basketball, volleyball, beauty pageants, dances, jingle-writing etc. take place, accompanied by communal feasting and drinking of alcohol.

[5] Videoke refers to the combination of karaoke with assorted videos in the background. It is one of the favourite pastimes throughout the Philippines, cutting across rural-urban, gender, and ethnic contexts. Videoke is easily accessible, with widespread videoke bars, videoke machines for rent, and individuals owning their own videoke machines and sound systems. It is particularly popular as a weekend past time, often in combination with heavy drinking of alcohol.

fairly good understanding of English which is taught in school from a young age. This was especially the case for younger people who I was commonly able to communicate easily with; in some instances when I visited households without my translator (see section 4.2.5 for further details about translation), younger household members were able to translate.

I also used participant and non-participant observation methods while based in the municipal capital of Taytay and Puerto Princesa City. While in Taytay I would periodically go scuba diving with a local dive centre, and would regularly stay at a guesthouse. I built up a relationship with the staff of both businesses and would often speak about the tourism sector and coastal resources in Taytay. While staying at the guesthouse I also had frequent informal conversations with tourists, local business owners, NGO and government staff, and another postgraduate researcher based in Taytay.

While based in Puerto Princesa City I participated in a range of WPU extension programmes with civil society partners which was valuable in building up my understanding of the roles of NGOs on Palawan, and the formal and informal partnerships between nonstate and state actors. I was also invited to and attended a mix of Filipino cultural events and celebrations such as a baptism, Christmas Eve, New Year's Eve, and birthday parties. I also visited tourism establishments such as scuba dive centres, bars, restaurants, and shops, speaking with a mix of international and national tourists, and tourism operators. During these periods I regularly spoke to middle-class educated Filipinos, providing a different insight into Filipino culture compared with in *Barangay* Bucadan. The many daily interactions and informal conversations I had with people from varied backgrounds were pivotal in building up

my understanding of the Palawan context, its history, social class relations, the growing tourism sector, and societal images of fishing.

The following sections will provide details of the interviews, participatory mapping workshops, and FGDs that I conducted as part of my primary research (see Table 6 below).

Table 6. Number of interviews, participatory mapping workshops, and focus group discussions conducted

Research Methods	Number conducted
Semi-structured interviews	19
In-depth interviews	2
Participatory mapping workshops	4
Focus group discussions (FGD)	7

4.2.3.1 Semi-structured and in-depth interviews

At the beginning of my fieldwork, I conducted initial semi-structured interviews (n=15) with individuals across all sub-villages, based around a pre-defined set of topics and questions but with the flexibility to probe (Bernard, 2006) (see Appendix VII for the Topic Guide). This was useful as both a means of introducing myself to people, and building up an understanding of the socio-economic aspects of peoples' lives in *Barangay* Bucadan. Semi-structured interviews are also a useful method to use with bureaucrats accustomed to efficient use of their time (Bernard, 2006), so it was the primary method I used when engaging with municipal officials in Taytay and provincial officials in Puerto Princesa City (n=4). I also conducted in-depth interviews in *Barangay* Bucadan (n=2) to probe deeper into specific issues that had arisen during other data collection methods. In my empirical chapters, excerpts from interviews are presented using the following format: **Interview number, Sub-village**, so for example, **I17, *Purok* 2** specifies it was interview number 17 which took place in *Purok* 2.

Table 7. List of interviews conducted, including participant information

Code	Interview type	Location	Participant	Sex	Age	Ethnicity
I1, *Purok* 1	Semi-structured	*Purok* 1	Community member	Female	47	N/R
I2, *Purok* 1	Semi-structured	*Purok* 1	Community member	Female	60	Visaya
I3, *Purok* 1	Semi-structured	*Purok* 1	Community member	Male	63	Agutaynon
I4, *Purok* 1	Semi-structured	*Purok* 1	Community member	Female	62	Cuyonon-Visaya
I5, *Purok* 3	Semi-structured	*Purok* 3	Community member	Female	38	Visaya
I6, *Purok* 1	Semi-structured	*Purok* 1	Community member	Male	51	Visaya
I7, *Purok* 3	Semi-structured	*Purok* 3	Community member	Male	72	Cuyonon
I8, *Purok* 3	Semi-structured	*Purok* 3	Community member	Female	30	Visaya
I9, *Purok* 3	Semi-structured	*Purok* 3	Community member	Male	N/R	Visaya
I10, Taytay *Poblacion*	Semi-structured	Taytay *Poblacion*	Municipal government official	Female	N/R	N/R
I11, Taytay *Poblacion*	Semi-structured	Taytay *Poblacion*	Municipal government official	Female	N/R	N/R
I12, Taytay *Poblacion*	Semi-structured	Taytay *Poblacion*	Municipal government official	Male	N/R	N/R
I13, *Purok* 2	Semi-structured	*Purok* 2	Community member	Male	49	Visaya
I14, *Purok* 2	Semi-structured	*Purok* 2	Community member	Female	37	Visaya
I15, *Purok* 4	Semi-structured	*Purok* 4	Community member	Female	39	Cuyonon
I16, *Purok* 4	Semi-structured	*Purok* 4	Community member	Female	60	Cuyonon
I17, *Purok* 4	Semi-structured	*Purok* 4	Community member	Male	59	Tagalog
I18, *Purok* 4	Semi-structured	*Purok* 4	Community member	Female	34	Visaya
I19, *Purok* 2	In-depth	*Purok* 2	Community member	Male	N/R	Visaya
I20, *Purok* 3	In-depth	*Purok* 3	Community members	Female, Male	59, 61	Visaya
I21, Puerto Princesa City	In-depth	Puerto Princesa City	Provincial government official	Male	N/R	N/R

During my initial period of fieldwork when I was mostly conducting semi-structured interviews, I found that people were quite reluctant to speak about the challenges they were experiencing, despite them being a feature of informal conversations. During one of my visits back to Taytay, I reflected upon my approach and decided to draw on participatory methods, because of the role they can play in enabling local people to share and analyse their knowledge of life and conditions (Chambers, 1994). I specifically selected participatory resource mapping, which is useful in investigating social values of the environment (Ribeiro & Ribeiro, 2016; Tyrväinen et al., 2007).

4.2.3.2 Participatory mapping workshops

Armed with a large supply of flip chart paper, pens and crayons, I purposively sampled mixed groups of individuals, taking account of social characteristics like age, gender, ethnicity, and livelihood type (see Section 4.2.4 of this chapter for more details about sampling strategy) and asked them to create a map as a visual representation of their area, and the places, spaces, and resources of importance to them. In one *purok*, there was reluctance from participants for a family living on the periphery to be involved due to accusations of engagement in illegal fishing. I made the decision not to invite this group due to concerns that it would stifle the discussions of others, but arranged a separate in-depth interview with the family to hear their perspectives.

During the participatory mapping exercises, I intentionally kept the specification broad to enable participants to create the visual representation of their choosing. As people began to plot more and more onto the map, I used specific points of interest plotted on the map as a springboard to probe deeper into explanations about the nature of the phenomenon. The mapping activity in effect acted as an ice-breaker which stimulated the discussion of issues and challenges related to coastal resource use and management, and was far more effective than the semi-structured interviews I

had previously been conducting. While the maps themselves acted as a source of data (see Figure 9 Figure 10), highlighting key resources and livelihood areas, the rich discussion during and after the map was created was even more important.

When presenting quotes from the participatory mapping exercises in my empirical chapters, the following format has been used: **Participant number, Sub-village, Participatory mapping** activity, so for example, **P2,** *Purok* **3, PM** means participant number two of a participatory mapping activity in *Purok* 3.

Figure 9 Participatory mapping workshop in Purok 1

Figure 10 Completed participatory map in Purok 3

Table 8. List of participatory mapping workshops conducted, including stratification and number of participants

Location	Sex	Number of participants	Code
Purok 1	Mixed	8	Px, *Purok* 1, PM
Purok 2	Mixed	6	Px, *Purok* 2, PM
Purok 3	Mixed	8	Px, *Purok* 3, PM
Purok 4	Mixed	8	Px, *Purok* 4, PM

4.2.3.3 Focus group discussions

Towards the end of my fieldwork I conducted FGDs (n=7), in order to explore the different perceptions and experiences within and between specific sub-groups of the population. The topics for the FGDs were based on the issues identified during the participatory mapping activities already undertaken, but with the flexibility to discuss other issues and phenomenon important to people (see Appendix VII for the initial Topic Guide). Six FGDs were conducted with 6-8 participants, which is recognised as an ideal number for most scenarios (Krueger, 1994; Bernard, 2006), but for one FGD

there were 15 participants due to word-of-mouth and a misunderstanding about the purpose of the activity. Although this was not ideal and became challenging to facilitate, I decided against sending the participants away which would have been perceived as rude. In my empirical chapters, FGDs are presented using the following format: **Participant number, Sub-village, FGD-Gender group**. For example, **P4, *Purok* 1, FGD-W** specifies it is participant number four of a FGD held with women in *purok* 1.

Table 9. List of FGDs conducted, including stratification and number of participants

Location	Sex	Number of participants	Code
Purok 1	Women	6	Px, *Purok* 1, FGD-W
Purok 1	Men	6	Px, *Purok* 1, FGD-M
Purok 2	Women	7	Px, *Purok* 2, FGD-W
Purok 2	Men	6	Px, *Purok* 2, FGD-M
Purok 3	Women	5	Px, *Purok* 3, FGD-W
Purok 3	Men	6	Px, *Purok* 3, FGD-M
Purok 4	Women	8	Px, *Purok* 4, FGD-W

4.2.4 Sampling, recruitment, setting

Throughout my research I used a mix of snowball and purposive sampling. Snowball sampling is a process where a community gate-keeper, key informant or interlocutor (see Section 4.2.5 below) suggests possible participants who themselves make recommendations for additional respondents (Neuman, 2000). Purposive sampling, on the other hand, allows the selection of individuals to represent certain groups knowledgeable about a specific topic (Neuman, 2000). Working alongside my primary interlocutor/translator, and additional key informants in each sub-village, the identification and recruitment of participants was based around social diversity, covering different sub-villages, ages, sexes, ethnicities, and livelihood type, in order to gain a broad understanding of the diversity of perspectives in *Barangay* Bucadan.

I had originally planned to stratify the FGDs by both sex and age (i.e. younger females, younger males, older females, older males) (Knodel, 1995). However, based on emerging findings from the other methods I used, it became apparent that stratification by *purok* (sub-village) was key for both logistical (distances between *puroks)* and participation reasons (emerging findings indicating intra-community tensions and barriers to participation for peripheral community members). In total I conducted seven FGDs, applying factorial design by conducting one each with women and men in all *puroks*, with the exception of one *purok* where delays and miscommunication meant that a planned FGD with men could not be held.

Research activities were undertaken in a setting intended to be most comfortable for research participants. Semi-structured interviews in *Barangay* Bucadan were mostly conducted inside or just outside the households of participants. Group activities were conducted in spacious communal outdoor spaces which provided privacy, and sufficient space for drawing maps during participatory mapping.

4.2.5 Interlocutors, key informants, translation, and facilitation

Having met community leaders during my first scoping trip, ahead of my main fieldwork WPU supported the writing and delivery of a letter informing of my decision to focus on *Barangay* Bucadan. When I travelled to the island, I was initially accompanied by a WPU team member who had met with community leaders during WPU's own research activities. The norm and existing pattern in *Barangay* Bucadan are that visitors from external agencies stay in the household of a *barangay kagawad* who plays an influential role as a gatekeeper and power broker.

Prior to travelling to *Barangay* Bucadan, I considered the appropriateness of having a translator/facilitator from within or outside the community. As Desai & Potter (2006) detail, when selecting interpreters, it is important to reflect on educational and cultural

differences between them, yourself, and research subjects, and a balance between their local knowledge, reliability, experience, and position within the community.

Based on consultations with WPU, I decided it would be most appropriate to hire someone from within the community due to their ability to relate to people. Although some methodologists place an emphasis on the neutrality of facilitators (Carey, 1994), others have flagged the importance of familiarity, knowledge of the topic, and a shared or similar ethnic background (Vissandjée et al., 2002). As Saint-Germain et al write, 'the moderator will ideally be from the same ethnic background or have established credentials in the community and will not be a completely neutral observer but a sympathetic and active listener' (1993: 365). Given that I spent a fairly limited amount of time in *Barangay* Bucadan, I decided to prioritise familiarity and knowledge over an explicit neutrality.

During my initial few days I sought to identify a translator from within the community. Initially a community gatekeeper/leader that I was staying with tried to convince me to hire a person of their choice as a translator, but this fell through and I was able to select and recruit someone else. The translator had spent a number of years living in Manila, she had a good level of English and professional administrative training, and had facilitation experience in a community poverty reduction project undertaken a few years prior. She proved to be highly reliable and hard-working, and throughout my fieldwork she played a pivotal role as both a translator, interlocutor, and key informant.

All research activities in *Barangay* Bucadan were conducted primarily in Filipino (based on Tagalog), with some participants also speaking in Visaya, Cuyonon, and English. All interviews and participatory mapping activities in *Barangay* Bucadan were translated in real time by my community translator, to enable me to ask follow-up

questions and probe deeper. As I spent longer in *Barangay* Bucadan my Filipino listening and speaking skills increased, enabling me to increasingly grasp the gist of conversations and ask basic follow-up questions. While conducting interviews, FGDs, and participatory mapping workshops I took hand-written notes, and they were also recorded using a dictaphone[6] (with informed consent granted). My translator and I would then spend the rest of the day and following few days translating and transcribing them.

For the FGDs, additional translation and facilitation support was provided by a WPU team member. My community translator continued to lead with facilitation, and the WPU team member provided discreet real-time translation. This allowed the natural flow of the discussion to continue, while also enabling me to ask follow-up questions relating to the topics being discussed. The FGDs were also recorded and were later professionally translated by a local postgraduate researcher identified through WPU, with added support from WPU team members in translating the Cuyonon language.

Despite my best efforts with Dictaphone placement, some sections of recordings were unusable. As the activities were conducted outside on the coast, wind, waves, boats, and animal sounds often impacted recording quality. In these instances I relied on the notes that I took during the FGDs.

4.2.6 Compensation

Before undertaking my research, I discussed with WPU colleagues the cultural norms and expectations regarding compensation for participation in research, while also reflecting on my prior research experience in the Philippines and elsewhere. It was decided that cash payment would not be given as this could incentivise token

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[6] For the participatory mapping workshops, the mapping exercises themselves were not recorded, but the discussions held afterwards to discuss the points of interest and related issues were.

participation and impact WPU's future research activities. Instead, I provided refreshments (coffee, and light snacks or lunch depending on length of activity) after finishing research activities. This proved to be very popular and created a nice atmosphere to unwind after the activities, with informative informal conversations related to the research often continuing.

For compensation to my translator and host household I consulted with WPU to discuss expectations and an appropriate and generous amount to be paid. For my translator, we agreed that she would be paid weekly and I added a bonus upon conclusion of the work. For the host household that I stayed in, I shared all the food that I brought from the market in the municipal capital, contributed to drinking water purchased from the mainland, and paid a wider contribution towards my stay at the conclusion of my fieldwork. When using boats for fishing and travel, I paid for fuel, and for travel I would also pay a daily amount to the boat operator.

4.2.7 Data analysis

With my research based on interpretivism and drawing on ethnographic approaches, the analysis process was highly iterative. Throughout the research I also kept a reflexivity diary which allowed me to reflect on my positionality in the research, and how that influenced – and was influenced by – the research process, as well as documenting my impressions and early findings. I recorded extensive field notes and took hand-written notes during interviews, participatory mapping and FGDs. After translating and transcribing the interviews and participatory mapping discussion, my translator and I regularly discussed the findings. While in Puerto Princesa City, I also discussed my emerging findings with various WPU team members to provide clarification and contextualisation relative to the local culture and environmental context.

For the FGDs, the professional translator translated to English verbatim and was asked to highlight emphases in speech, when words were used from languages other than Filipino (Cuyonon, Visaya, and English), while also providing both literal and metaphorical translations. This helped ensure that the richness and nuances of people's speech could be captured. For interviews with municipal and provincial officials conducted in English, I transcribed these using the AI-powered transcription software Otter, which I manually checked/edited for errors.

Transcripts were uploaded into the qualitative analysis software package NVivo. The type of analysis I used was thematic analysis (Braun & Clarke, 2006). I started by familiarising myself with my data by reading through my transcripts and cross-checking my hand-written notes, including any additional observations noted at the time. During this stage I also inductively generated initial codes in NVivo. These were iteratively grouped into descriptive themes, which were adapted, merged and progressively refined to conceptualise seven analytic themes. This forms the basis of the analysis in my primary research results chapters presented in Chapters 6, 7, and 8. My early analysis was informed by the findings of the QES that I conducted prior to fieldwork, and later analysis was shaped by the emerging conceptual framing of my research in relation to literature on environmental governance and power.

4.2.8 Positionality and reflexivity

As a qualitative researcher, I recognise that it is imperative for me to be reflexive about how my positionality and subjectivities can deeply influence the process and outcomes of research (Tuhiwai Smith, 1999). Positionality is the researcher's social, cultural, and subjective position, and how it affects the research process, including the construction of research questions, the relationship between researcher and research participant, and interpretations of research findings (Batool & Ali, 2021). Reflexivity is the process

through which researchers remain in 'flexible' dialogue with their research subjects, contexts, and methodologies, through a process of locating and relocating themselves within their work, while being mindful of how this is influenced by their positionalities and subjectivities (Bott, 2010).

With this in mind, it is important for me to state my positionality. I am a middle-class cis-male of mixed British and Turkish heritage. I spent half of my childhood in the UK, and the other half living in various countries around the world. This included spending four years in Indonesia as a teenager, which sparked my interest in Southeast Asia. It also contributed to my love of oceans and coasts, as did spending time in the Aegean part of Turkey where my father was originally from. My academic training includes an undergraduate degree in history and electives in social anthropology, and a master's degree in environment and development. During the latter I conducted primary research on marine resource use in the Philippines in a different part of the country to Palawan.

Between my master's degree and undertaking my PhD I worked for a grassroots environmental NGO in Zanzibar, Tanzania, with a focus on fisheries co-management and small-scale fisheries advocacy. In the latter stages of my PhD, I have been working for an international conservation NGO as part of their Social Equity & Rights team. My academic work continues to shape and be shaped by my professional experience, and I strive to strike a balance between being both critical and pragmatic through the intersection of these two positionalities of being both a practitioner and a researcher.

A thread that runs throughout my professional and academic work is a commitment to human-rights based approaches to conservation and natural resource governance;

I deeply believe that sustainability and environmental management must be built upon the principle of equity, and I have a strong commitment to the rights of small-scale fishing communities. These values and experiences influence the methodologies I used in this PhD, the literatures that I draw from, and the analysis and conclusions that I have come to.

Throughout my research, and in particular while living in *Barangay* Bucadan, I was acutely aware and mindful of how my being a foreigner could influence the research process. Interestingly people regularly commented that I looked different to 'Americans'[7], in reference to the physical characteristics I have from my Mediterranean heritage. When speaking about foreign tourists, it seemed that I was placed in a different box to 'Americans' and 'tourists' who were commonly portrayed to me as unhygienic and immoral, with people regularly commenting how I was 'nicer' or 'different' compared with them. My subjectivity as a foreigner did also allow me to ask 'silly' and sometimes direct questions – while being mindful of not being unethical – which was useful when probing into issues, in particular related to cultural and relational norms and dynamics.

In terms of my other subjectivities, my positionality as a young male enabled me to go fishing with young men and join them in social activities like drinking alcohol and playing sport, in a way that I might not have been able to do if, say, I was a young woman. My positionality as a foreign researcher and the associated status and privileges it gave me allowed me to easily arrange meetings with government officials and NGO staff. I was also able to draw on my positionality as a foreigner when

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[7] People would commonly use 'American' to refer to any person of Caucasian origin.

engaging with foreign business owners and tourists, who in some instances spoke to me in generalised – and often negative terms – about fishers and Filipino culture.

As much as I would be explicit that I would not be able to solve problems or provide livelihoods for people, inevitably there were some moments where this expectation was difficult to manage. For example, in one FGD a participant encouraged others to speak by saying that I (the lead researcher) would be able to tell the 'higher-ups' (referring to government officials) about the problems and hardship they are experiencing, to which a participant responded that they were fed up of always talking about their problems with outside people but nothing changing. From speaking to people on *Barangay* Bucadan about past research and practice focused on environment and development issues, a very limited number of researchers have visited *Barangay* Bucadan, so this is likely referring to government agencies and NGOs. This demonstrates that as explicit as I was about my purpose being purely for research, it was challenging to manage expectations. These perceptions are likely to have influenced what people told me, in particular while undertaking structured research activities. In some instances, people were quite hesitant and reserved. On other occasions it was evident that people used the opportunity to share their frustrations, especially in light of apparent expectations that I could provide solutions or influence government officials due to the high status accorded to me as a foreign researcher.

Due to the close relationship with WPU and our joint participation in the Blue Communities Programme, I regularly emphasised my independence from WPU throughout my fieldwork. Despite these attempts it was impossible to fully separate myself from the institution and programme. Additionally, my connection to WPU and their existing relationships with *Barangay* Bucadan played a key gatekeeping role.

The NGO WWF has been involved in a range of project activities in *Barangay* Bucadan, and community members regularly perceived me as working with WWF. People commonly also assumed that WWF and WPU were the same thing, and in one instance a community member recalled a government livelihood programme as being given from Blue Communities, despite this not being the case. Throughout my fieldwork I was mindful of these associations being made across various institutions, and while I continued to emphasise my independence from them, it was challenging to overcome the perception that external agencies and institutions were all the same or overlapping.

As noted in Section 4.2.5 of this chapter, community leaders had initially tried to pressure me into hiring their nominated translator. I instead selected and hired another individual who was resident in *Purok* 1 and a clan member related to some of the village elite. This initially raised concerns for me given the potential impact my translator's status in the community could have on the issues people felt comfortable sharing during research activities. As it transpired, my translator's family occupied a relatively marginal status within the clan elite however, which other community members appeared to be aware of. As far as I can tell this helped to minimise and overcome some of the power dynamics between her and other members of the community, while also retaining legitimacy in the eyes of community elites because of her relation to them. Given there are already substantial power dynamics between myself and the participants in my research, I felt that it would not be appropriate to employ a translator from outside of the community given the potential for added power dynamics related to their own subjectivities.

4.2.9 Main fieldwork period

My main data collection period lasted four and a half months from October 2019 – March 2020, cut short by the Covid-19 pandemic. My time was mostly divided between the provincial capital, Puerto Princesa City, *Barangay* Bucadan, Taytay, and *Poblacion*, the municipal capital of Taytay. My scheduling was influenced by my regular requirements to travel to Puerto Princesa City for administrative reasons such as extending my visa. After an initial 5-week period spent in *Barangay* Bucadan, it became apparent to me that monsoon seasonality plays a major factor in the livelihoods and day-to-day lives of people. Having spent my first period there during the *habagat* (west/southwest winds) season, I adapted my schedule so that my second 5-week period was during *amihan* (the north/northeast winds), which people spoke of as a time of hardship in *Barangay* Bucadan.
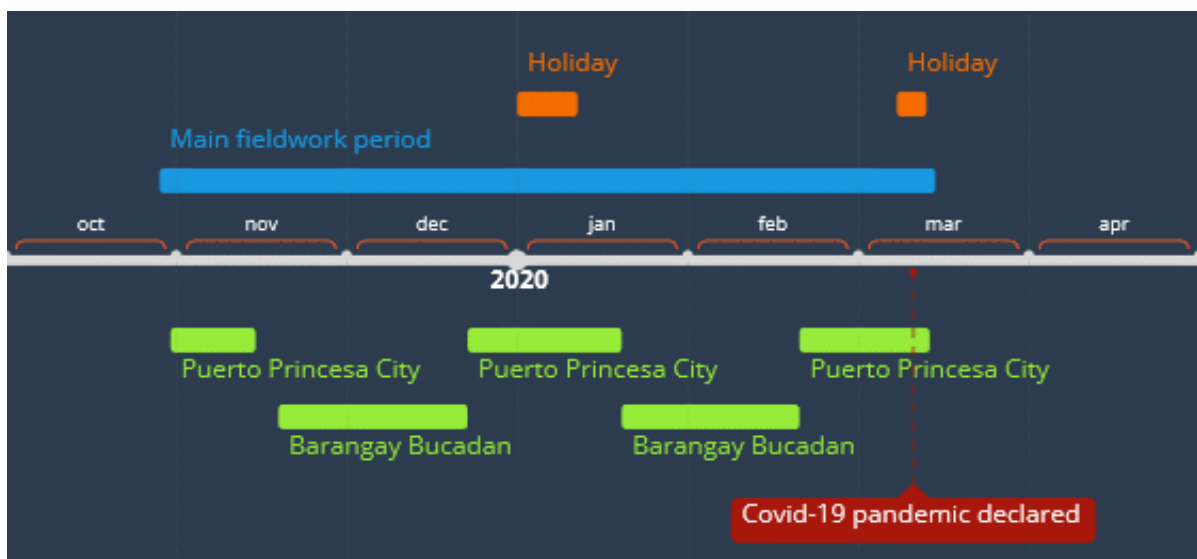
Figure 11. Timeline of main fieldwork period from October 2019 - March 2020

4.2.10 Ethics

Prior to conducting research, institutional ethical approval was secured from the University of Exeter Medical School Research Ethics Committee (approval reference: *Sept19/B/208* – see Appendix II). Institutional ethical approval was also secured in-

country from the National Ethics Committee of the Philippines (NEC Code: *2019-013-Creencia-Palawan* – see Appendix III).

When recruiting participants, they were provided with an initial brief overview of the research communicated through a mix of word-of-mouth and phone call via my translator and key informants I identified in each sub-village. When undertaking the actual semi-structured interviews, participatory mapping, and FGDs, participants were provided with an information sheet available in both Filipino and English (see Appendix IV), including information related to research aims, purpose of the research activity, timing, data usage, dissemination, right to withdraw from the study etc. A separate informed consent form in either English or Filipino (see Appendix V) was provided to give participants the choice of granting or withholding their consent to undertake research activities. Two copies were signed, one given to the participant, and one kept in my research administration file. For participants who were unable to read written text, the information was verbally communicated to them, and informed consent was given by providing a thumbprint, which participants informed me is the preferred norm in rural communities in the Philippines. Consent was secured for the use of a dictaphone to record research activities. Likewise, for photos, these were taken only if people consented to specific uses. Generally, I found that people were willing and comfortable with having their voices recorded or photos taken so I did not experience any issues with this, especially compared with some other research contexts where I have worked (e.g. Zanzibar, Tanzania).

In some instances, however, I found that the institutional ethics framework I used was narrow and Eurocentric, and I questioned the appropriateness of it to the Filipino context (e.g. an initial requirement to use a fixed template covering the principles of the General Data Protection Regulation (GDPR) in the consent form). As Padan

writes, 'these questions arise from the history of contemporary research ethics procedures, which are rooted in the social norms of western modernity that views researchers and research participants as "autonomous individuals"' (2020: 484). This is an especially key issue in the context of research by individuals and institutions from high-income countries in low and middle-income ones, given the unique ethical challenges of unequal power dynamics, cultural differences, oppression and exploitation (Mackenzie et al., 2007).

Scholars have questioned the appropriateness of legalistic or medical principles frequently based on quantitative methodologies for evaluating qualitative social research, which are often unsuited to the changing and context-dependent nature of qualitative research (Chenhall et al., 2011). I found this to be especially challenging when completing my ethics application for a study using an interpretivist and ethnographic approach, and the requirement to provide a detailed account of the research questions, methods, number of participants, and the selection and recruitment of participants, before having actually visited the research context. This meant that as my research unfolded in an inductive manner, the focus increasingly shifted away from what was granted ethical approval, and was detailed in my information sheets and interview/FGD guides. Due to logistical limitations I was unable to continually revise, translate and print updated documents, so participants were informed verbally about the emerging areas I was exploring in my research.

While on fieldwork I also continually reflected upon my positionality in the research context, as discussed in the previous section, and navigated various ethical dilemmas and challenges related to the power dynamics between myself and community members, the sensitivity of emerging findings, and the everyday misinterpretations and miscommunications across different cultures (see Section 4.2.11 below for more

details). For these issues, the 'formalised [institutional] guidelines and abstract values and principles provide[d] no tools for handling the muddles, or mess, of human interactions and the dilemmas posed by "everyday ethics"' (Banks et al., 2013, as cited in Padan, 2020: 486), instead requiring me to rely on my tacit knowledge, experience, and intuition from conducting research and spending a significant portion of my life living in different countries.

Throughout the research regular conversations with WPU team members played a key role in determining what was and wasn't culturally appropriate, in particular for more sensitive subjects surrounding payments and money. Discussions were held about the appropriate ways to address people of different status (based on characteristics like age, education, and job) to ensure my behaviour was as respectful as possible and followed local customs, norms, and expectations.

With a broad focus on coastal resource-dependent peoples – many of whom are living under the poverty line – the research participants in my study can be broadly characterised as vulnerable. Across the population, some groups and individuals are especially vulnerable, for example migrants that lack secure land tenure, and younger people with very limited livelihood opportunities. Illegal fishing is widespread in Taytay, and many people in *Barangay* Bucadan are alleged to be engaged in it. Research elsewhere on Palawan has shown it to be a sensitive subject that people are often reluctant to talk about (Fabinyi, 2012), even if it is known to be widespread. With this in mind, I was careful when speaking about it and other sensitive subjects related to illegal practices, poverty, hardship, and local politics.

I initially discussed the sensitivities of discussing these matters with WPU, and regularly discussed the appropriateness and sensitivities of discussing them with my

translator. This was also a key consideration when planning the translation and facilitation of group activities, and my decision to prioritise familiarity and trust as key attributes when identifying and selecting facilitators. By the time that I conducted FGDs towards the end of my second fieldwork period, my understanding of Filipino was sufficient enough that I could follow the gist of conversations, allowing me to wait for the natural flow of conversation to continue before pausing for translations, especially when covering sensitive and emotional subject matters.

4.2.11 Challenges

Through the established relationship between WPU and the community, a village leader who acts as a community gatekeeper for outside actors was expected by local leaders to be my host. The host family were an elderly couple living in the main sub-village, each from two of the most influential Cuyonon clans in the *barangay*. The matriarch of the household was a longstanding b*arangay kagawad* with a large extended family. During my stay it became clear that she played a very powerful role in the community, but was also a source of antagonism and division. While some people were hesitant to speak about her as they knew I was staying with her, many people spoke in direct terms about frustration they had about her.

Based on my time in the community, it was evident that the expected norm is for external actors (e.g. NGO staff, government officials, academics, microfinance representatives) to hold meetings in this household, and spend the night there if undertaking multi-day activities. While I had ongoing concerns about how other community members would perceive me because of staying there, I made continual efforts to emphasise and distinguish my independence from her, and provided assurances of confidentiality. Given the high degree of respect for elders in the Philippines, especially those in prominent social and political roles, great care was

needed on my part to manage expectations and avoid insulting the host I was staying with and other community leaders, in particular as the support of community leaders often helps lend credibility to research (Vissandjée et al., 2002).

Throughout the research there were many sensitive instances for which I will provide two illustrative examples. The first relates to my accessing of sub-populations within *Barangay* Bucadan. There was initial reluctance from community leaders about me visiting the geographically peripheral sub-villages and households, as I was frequently told that it was too dangerous (due to the alleged widespread use of illegal fishing methods in these areas). After careful conversations with community leaders, and consideration of the safety of research participants, my translator and myself, I was eventually able to justify why I needed to visit these sub-villages. Initially the community leader I was staying with insisted that she would then join, which would have significantly impacted people's willingness to talk. Eventually after further careful conversations and coordination I was able to visit these sites unaccompanied (except by my translator).

The second example took place towards the end of my second fieldwork period in *Barangay* Bucadan. As I visited and spoke to people in geographically – and as revealed through my emerging findings, socio-economically and politically – peripheral sub-villages, some suspicion and tension began to build with the *barangay kagawad* who hosted me. In one sub-village regularly said by people to be engaged in illegal fishing activities, I had carefully built up trust and was able to start talking about these allegations. On the day that I had scheduled FGDs with this sub-village, my host attempted to undermine my research. As I set off on foot, she called up some acquaintances in the sub-village and alleged that the WPU team member that was providing additional translation/facilitation support was a government fisheries official

whom I had invited to investigate illegal fishing. Fortunately, I had a well-respected key informant in the sub-village who refuted these allegations and the FGDs were able to take place. It is difficult to know if or how this challenge impacted the discussions that were held, but I was still able to hold a discussion about illegal fishing, which felt like it was an open discussion that people were comfortable participating in.

There were benefits to living in the main sub-village in a household of an influential person, which allowed me to hear the perspectives and experiences from influential community members, and witness and experience the power relations and *barangay* politics first hand, in particular through seeing how my research became politicised. However, the ongoing ethical dilemmas and challenges took quite a heavy emotional toll on me. I found it very challenging hearing people's allegations of abuse of power, including by my host, and then returning home to the household and continuing to be respectful and thankful for hospitality. I considered whether to move to a different household, but decided against it because of the potential that it could be perceived as a slight and snub of my host. As was discussed before, the norm in the *barangay* is for all external individuals and institutions to be based there. Seeking to bypass her and other community leaders could have damaged both my own research and that of the local partner, WPU, so I felt a strong sense of accountability to reduce and avoid conflict as much as possible.

As noted in Section 4.2.2 of this chapter, *Barangay* Bucadan does not have any running water and very limited electricity as a result of its peripheral geographic location as a small island off the coast of Palawan. Due to the limited amount of arable land, fruits and vegetables are scarce, in particular during the *amihan* monsoon period. In order to supplement my regular diet of rice and fried fish or gleaned gastropods, I would periodically travel to the municipal capital *Poblacion* when the weather allowed

it. This allowed me to eat a more diversified diet, purchase fruit and vegetables from the market to bring back with me, enjoy home comforts like a shower and mattress, and maintain contact with home. I found these trips away from the community very important as they gave me the space to decompress by stepping away from my immersion in community life, allowing me to reflect on findings and refine my research approach, and mentally process some of the emotionally challenging aspects of my research.

4.2.12 Covid-19 pandemic

The start of the Covid-19 pandemic had impacts on my primary research. By the time the pandemic was declared I had already completed my fieldwork in *Barangay* Bucadan, but had a few more weeks remaining in Puerto Princesa City when I was going to conduct further interviews with staff from environmental NGOs and provincial government departments. When the pandemic was declared by the World Health Organization (WHO) on March 11 2020, the Philippines announced that all international flights in and out of the country would be cancelled for at least one month, including my scheduled flight. This resulted in chaos as crowds filled the airport in Puerto Princesa City, and travel agent websites crashed. Thankfully my partner and colleagues from the University of Exeter were able to arrange a flight to get me home before airports were closed.

After returning home almost immediately into two months of lockdown in the UK, I struggled emotionally and mentally. As noted in Section 4.2.11, my fieldwork included some challenging ethical dilemmas and experiences which continued to take a long time to process. I also grappled with a sense of guilt about being able to leave the Philippines to the UK, while fearing the virus would run rampant in the Philippines. I also felt for a long time that while I had returned *physically* to the UK, I remained

emotionally and mentally in 'the field', compounded by an inability to see friends and family I had not seen since beginning my fieldwork in October 2019.

I had also intended to conduct an additional period of fieldwork after analysing my data in order to probe deeper into findings from FGDs translated after my fieldwork ended. I had also hoped to conduct further interviews with meso-level state and non-state actors at the municipal and provincial levels of government on Palawan. As it became clear that the pandemic would prevent any further fieldwork from taking place, I considered the possibility of conducting remote data collection. Due to very limited phone connectivity and no internet in *Barangay* Bucadan however, it was not possible to conduct this virtually. Although stable internet connections are available in the municipality of Taytay and provincial capital Puerto Princesa City, I also decided against conducting any virtual data collection. Already having sufficient data for my thesis, I decided that this would not be ethically appropriate as individuals, families, and communities grappled with the direct and indirect impacts of the pandemic. I have continued to stay in regular contact informally with project partners, and a small number of key informants and my translator in *Barangay* Bucadan. This has allowed me to ask additional clarifications and discuss the impact of the Covid-19 pandemic on the livelihoods and lives of people on Palawan.

4.3 Summary

Reflecting upon the key contribution of ethnographic studies to my QES, in particular in engaging with questions related to social complexity and power, my research methods include the use of a mix of ethnographic and broader qualitative social research methods, and reflexive engagement with my positionality as a foreign researcher part of a wider international research programme. Research took place primarily in a coastal resource dependent small-island community in the municipality

of Taytay, northern Palawan, with additional ethnographic work and interviews conducted in the municipal capital Taytay, and the provincial capital Puerto Princesa City. The following three chapters detail the results of my empirical research on Palawan, and how the methods detailed in this chapter supported my investigation of complex issues related to equity, power, marginality, and heterogeneity in the context of polycentric environmental governance. The majority of the discussion of these empirical findings are embedded throughout these chapters.

5 Qualitative evidence synthesis

5.1 Introduction and aim

As noted in the previous chapter, the QES was conducted as the first major phase of my PhD after conducting my initial literature review. It played an important role in iteratively developing my focus on governance and power, contributing to my analysis and critical reflections of natural resource governance theories. It also added depth and important conceptual understandings to the governance, equity, and power phenomena I sought to investigate during my primary research on Palawan, and the associated questions I asked people.

During the early stages of the systematic review process I undertook, Harris et al.'s (2018) paper on guidance for question formulation, searching and protocol development for qualitative research was followed. Based on the types of studies identified during the scoping stage, and combined with my skillset, a thematic analysis/synthesis approach was identified as the most appropriate methodology (Thomas and Harden, 2008). For the reporting of this synthesis, the enhancing transparency in reporting the synthesis of qualitative research (ENTREQ) framework was used (Tong et al., 2012). This framework groups 21 items across five domains[8]: Introduction; methods and methodology; literature search and selection; appraisal; and synthesis findings.

The aim of this synthesis was to answer research question 1 of my thesis (and sub-questions developed specifically for this QES) by exploring the drivers, barriers, facilitators, and impacts of livelihood change, through analysing and synthesising the qualitative perceptions and experiences of coastal community members. This focus

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[8] I adapted this further, resulting in 14 items across five main domains.

on qualitative research reflects the recognition by researchers that qualitative social research is integral for fisheries and coastal management (Barclay et al., 2017). Qualitative research is particularly important for research about small-scale fisheries in order to explore the highly context specific meanings, social connections and functions that they play for people and communities (Johnson, 2017).

As will be discussed throughout this chapter, as I began the searches for this evidence synthesis it became apparent to me that my original research questions broadly about livelihoods required further refinement. I found my initial questions too broad, resulting in too high a number of studies to synthesise meaningfully, which can lead to 'trite conclusions' (Noblit & Hare, 1988). The research questions were adapted to have a specific focus on how social differences manifest as barriers and facilitators to livelihood *change* as opposed to livelihoods more broadly. During the synthesis stage, the research questions were further adapted in response to the findings of the included studies. As is detailed later in this chapter, power dynamics and governance processes were found to interact in complex, context-specific ways to influence livelihood outcomes. This iterative process resulted in the following set of research questions I investigated through my evidence synthesis:

RQ1: How do social differences and power relations influence the process and outcome of livelihood change in Southeast Asia?
- 1.1. How are these perceived and experienced across gender, age, ethnicity and socio-economic status?
- 1.2. Are there barriers and facilitators to livelihood change, based on gender, age, ethnicity, and socio-economic status?
- 1.3. Have there been changes in the perceptions and experiences of livelihoods over time? If so, what is driving these changes?
- 1.4. How do coastal governance processes and power dynamics influence the equity of livelihood change?

5.2 Synthesis of findings

The following section of this chapter will present the synthesis of findings, covering the themes and sub-themes analysed and synthesised across the 18 qualitative studies included in this synthesis.

5.2.1 Themes

This section presents the themes and sub-themes identified and synthesised across the studies included in this QES. The results are presented across three topics. For contextual drivers of livelihood change, major themes were declining marine resources, debt and rising cost of living, global markets and new opportunities, and meeting material desires and needs. For social status, social differences as barriers and facilitators of livelihood change, the major themes were gender, age, class/wealth/ethnicity, and perceptions of fishing. For power relations and governance, the major themes were elite capture, inequity and marginality, competition for coastal space, and positive outcomes of locally-led development. Table 10 below presents these themes and their respective sub-themes, identifying the studies where these themes were present. The remaining sections of this chapter will present first- and second-order construct quotes from these studies, and my own third-order constructs/interpretations.

Table 10. Table of themes and sub-themes identified in QES

	Themes	Sub-themes	Study
Contextual drivers of livelihood change	Declining marine resources	People catching less	Bennett, 2012; Dressler & Fabinyi, 2011; Eder, 2009; Fabinyi, 2012; Fabinyi, 2019; Ferse et al., 2012; Gier et al., 2017; Jaiteh et al., 2017; Knudsen, 2016; Lasso & Dahles, 2018; Lowe & Tejada, 2019; Missbach, 2016; Porter & Orams, 2018; Rosyida et al., 2018; Segi, 2014; Steenbergen et al., 2017
		Abundance in the past	Bennett, 2012; Fabinyi, 2012; Rosyida et al., 2018; Steenbergen et al., 2017
		Increased time at sea	Dressler & Fabinyi, 2011; Ferse et al., 2012; Missbach, 2016
	Debt and rising cost of living	Increased debt and rising costs	Bennett, 2012; Dressler & Fabinyi, 2011; Fabinyi, 2012; Ferse et al., 2012; Gier et al., 2017; Jaiteh et al., 2017; Knudsen, 2016; Lasso & Dahles, 2018; Missbach, 2016; Porter & Orams, 2018; Rosyida et al., 2018; Steenbergen et al., 2017
		Debt drives engagement in risky and illicit activities	Jaiteh et al., 2017; Missbach, 2016; Steenbergen et al., 2017
		Increased cash economy and capital-oriented modes of production	Bennett, 2013; Rosyida et al., 2018; Steenbergen et al., 2017
	Global markets and new opportunities	Luxury seafood demand from East Asia	Fabinyi, 2012; Jaiteh et al., 2017
		Changing consumer demand and market declines leads to boom and bust	Fabinyi, 2012; Jaiteh et al., 2017; Lasso & Dahles, 2018; Steenbergen et al., 2017
		New opportunities	Dressler & Fabinyi, 2011; Eder, 2009; Fabinyi, 2012, 2019; Kinseng et al., 2018; Lasso & Dahles, 2018; Steenbergen et al., 2017
	Meeting material desires and needs	n/a	Bennett, 2013; Fabinyi, 2012; Ferse et al., 2012; Kinseng et al., 2018; Lowe & Tejada, 2019; Steenbergen et al., 2017

Social status, social differences as barriers and facilitators of livelihood change	Gender	Women's side-line activities for food and nutrition security	Bennett, 2013; Ferse et al., 2012; Porter & Orams, 2015
		New livelihoods accessible to women	Lowe & Tejada, 2019; Steenbergen et al., 2018
		Gender influence on livelihood development risk-taking by women and men	Eder, 2009; Fabinyi, 2012
		(Young) men target fish for fast material gains	Fabinyi, 2012; Ferse et al., 2012
		Masculinity, bravery and risk-taking of male fishers	Fabinyi, 2012; Knudsen, 2016; Missbach, 2016
	Age	Elders sad youth leaving community and losing traditions	Bennett, 2013; Steenbergen et al., 2017
		Young men want to leave fishing	Bennett, 2013; Fabinyi, 2012; Knudsen, 2016
		Young men livelihood choice of fishing due to poverty	Fabinyi, 2012; Knudsen, 2016
	Class, wealth, ethnicity	Low social class (Indigenous, migrants) as barrier to livelihood engagement	Dressler & Fabinyi, 2011; Rosyida et al., 2018; Stanford et al., 2014
		Migrants blamed for environmental degradation	Fabinyi, 2012, 2019; Knudsen, 2016; Segi, 2014; Stanford et al., 2014
		Migrants excluded from livelihood opportunities	Stanford et al., 2014
		Livelihood opportunities go to migrants	Fabinyi, 2012; Rosyida et al., 2018
		Internalisation of identity of marginality	Fabinyi, 2012; Rosyida et al., 2018; Stanford et al., 2014
	Perceptions of fishing	Varied status of skilled and less skilled, poor and wealthy fishers within communities	Fabinyi, 2012; Knudsen, 2016; Stanford et al., 2014
		Negative societal images of fishing	Fabinyi, 2012; Segi, 2014
Power relations and governance	Elite capture	Limited participation of marginal groups in state and nonstate interventions	Bennett, 2013; Rosyida et al., 2018; Stanford et al., 2014
		Patron-client relations	Fabinyi, 2012; Ferse et al., 2012; Jaiteh et al., 2017; Lasso & Dahles, 2018; Missbach, 2016
		Procedural inequities in decision-making	Rosyida et al., 2018; Segi, 2014

	Inequity and marginality	Distributive inequities in livelihood change	Bennett, 2013; Dressler & Fabinyi, 2011; Eder, 2009; Fabinyi, 2012, 2019; Jaiteh et al., 2017; Missbach, 2016; Rosyida et al., 2018; Segi, 2014; Stanford et al., 2014
		Inequities of marine protected areas (MPAs)	Bennett, 2013; Eder, 2009; Fabinyi, 2012; Segi, 2014
	Competition for coastal space	Increased resource pressure and competition due to new livelihoods	Bennett, 2013; Fabinyi, 2012, 2019; Gier et al., 2017; Kinseng et al., 2018; Lasso & Dahles, 2018, Rosyida et al., 2018; Steenbergen et al., 2017
		Coastal land bought by wealthy migrants and elites	Dressler & Fabinyi; Eder, 2009; Fabinyi, 2012, 2019
	Positive outcomes of locally-led development	n/a	Kinseng et al., 2018; Lowe & Tejada, 2019

5.2.1.1 Contextual drivers of livelihood change

Across the studies included in this synthesis there were a range of interlinked contextual factors driving livelihood change, with shifts to different types of fishing or new livelihoods altogether. In this section I will provide an overview of the following interrelated drivers and the associated sub-themes highlighted in Table 10:

- Declining marine resources

- Debt

- Global markets and new opportunities

- Meeting material desires and needs

5.2.1.1.1 Declining marine resources

Across the different studies there was a near universal context of declining fish stocks and reduced profitability from fishing (Bennett, 2012; Dressler & Fabinyi, 2011; Eder, 2009; Fabinyi, 2012; Fabinyi, 2019; Ferse et al., 2012; Gier et al., 2017; Jaiteh et al., 2017; Knudsen, 2016; Lasso & Dahles, 2018; Lowe & Tejada, 2019; Missbach, 2016; Porter & Orams, 2018; Rosyida et al., 2018; Segi, 2014; Steenbergen et al., 2017). In Bennett's study in Thailand:

> 'some participants suggested that the declines were because "*lots of people [are] making a living [from fishing]. There are more humans than fish*" and several others blamed the change on commercial boats coming into the area or the use of destructive fishing gear.' (2013: 40)

Participants contrasted this with perceptions of abundant fishing in the past: *"in the past, I got 100 kilograms of silago [fish] per day with no nets. Now it takes more than 10 days to get that many"* (2013: 40). This was mirrored in Rosyida et al.'s study on Bangka Island, Indonesia, where a participant stated:

> *"Before, I was able to build my bagan [stationary lift net used for fishing in Indonesia] within 500 metres of the coastline. The yields were abundant with a variety of fish",* contrasted with the present day where *"though the bagan is built*

almost two miles away, the yields are unpredictable and far from what we used to earn in the recent past." (2018: 168)

Participants in three of the studies discussed the impact that declining fish stocks was having on time at sea (Dressler & Fabinyi, 2011; Ferse et al., 2012; Missbach, 2016). In Dressler & Fabinyi's study in Palawan, the Philippines, participants 'describe how fish stocks in Ulugan Bay have declined rapidly in recent years, forcing them to travel further for more plentiful fishing grounds' (2011: 550). A similar phenomenon was found in research about ornamental coral collectors in Sulawesi, Indonesia, where 'distances between the collectors' home islands and harvesting areas have been steadily rising, causing an increase in transport times and costs' (Ferse et al., 2012: 537). According to participants in Missbach's study on Rote Island, Eastern Indonesia, 'overfishing resulted in expeditions becoming longer in time and distance, which increased the cost of fuel and the food that had to be prepared ahead of the trip' (2016: 763).

This demonstrates that across these different contexts, overexploitation of marine resources is having a damaging effect on fishers, in part due to the increasing costs of funding longer fishing trips. As costs rise, the need to secure enough catch is pushing fishers into a cycle of debt, where they must travel greater distances to secure enough catch.

5.2.1.1.2 Debt

Increased debt and rising costs of living were common themes identified across the synthesis (Bennett, 2012; Dressler & Fabinyi, 2011; Fabinyi, 2012; Ferse et al., 2012; Gier et al., 2017; Jaiteh et al., 2017; Knudsen, 2016; Lasso & Dahles, 2018; Missbach, 2016; Porter & Orams, 2018; Rosyida et al., 2018; Steenbergen et al., 2017).

In Jaiteh et al.'s study about Rotenese fishing communities in Eastern Indonesia, they found that 'struggling to free themselves of debt, many fishers saw no solution but to engage in increasingly risky and ultimately illicit activities' (2017: 229) – illegal shark fishing in Australian waters. In another study also about Rotenese fishing communities, Missbach observed that 'fishermen were drawn into [people] smuggling by their indebtedness and lack of opportunities to make money legally'. Their decisions were based on what the author calls a 'rationality of despair' (2016: 770), with parallels to the LRFT on Palawan, where 'for some fishers, having debt to a financier is like carrying a huge burden' (2012: 770).

In Bennett's study on the Andaman coast of Thailand, one participant commented 'there are more expenses, everything has to be bought… it all requires money. So instead of sharing [fish], people sell it' (2013: 46). Similarly, in Tanimbar Kei, Indonesia, 'the need to buy rice has propelled people further into a cash economy that requires households to make an income' (Steenbergen et al., 2017: 221), compared with previous livelihoods which were mostly subsistence-based in nature. Similarly, in Rosyida et al.'s study, 'shifting modes of production to capital-oriented, small-scale [coastal] mining activities, followed by large-scale tin extraction using suction dredging, creates socioeconomic dependence on resources' (2018: 166). This demonstrates how debt is closely connected to resource dependency for capital, marking a shift away from subsistence and reciprocity to being part of a cash economy influenced by global markets.

5.2.1.1.3 Global markets and new opportunities

Across nine of the studies (Bennett, 2013; Fabinyi, 2012, 2019; Ferse et al., 2012; Jaiteh et al., 2017; Kinseng et al., 2018; Lasso & Dahles, 2018; Steenbergen et al., 2017; Dressler & Fabinyi, 2011), one of the drivers of debt and increasing costs is the

growing impact of and engagement with global economic markets and changing perceptions of lifestyle. As Eder describes about Palawan, 'globalisation has brought new ways of making a living, such as seaweed farming, to San Vicente, and it has brought new notions about what kind of life to live' (2009: 122).

In the Calamianes Islands north of Palawan, entry of fishers into the lucrative fusilier and LRFT fisheries have been strongly influenced by the growing demand for luxury seafood in China (Fabinyi, 2012). Similarly, Chinese demand for shark fin soup played a fundamental role in the development of the lucrative shark fishery in Rote Island, before prices began falling in 2012, which in turn contributed to the rise of price of live fish in Palawan:

> 'this fall in international shark fin prices is thought to have resulted from a combination of factors, including awareness campaigns targeting consumers in China, and increasing demand for live reef fish at Chinese banquets, where shark fin appears to have lost some of its popularity due to food safety scares and international campaigns concerning the consumption of shark fin' (Jaiteh et al., 2017).

These livelihood changes have been impacted by changing values and perceptions of food in East Asia, demonstrating how changing consumer preferences in one place can have far-reaching impacts and consequences around the world. This was similarly the case in Steenbergen et al.'s (2017) research on seaweed farming which was volatile to changing consumer demands and market dynamics. In Lasso & Dahles' study (2018), tourism to Komodo Island increased significantly after it was nominated in 2011 as one of the new seven wonders of the world, which was later followed by the Indonesian government including it in the top-10 national priorities for tourism development. This increase in popularity among tourists led to a rapid increase in

tourist visitors, which influenced community members shifting away from fishing to tourism-based livelihoods.

Across studies in this synthesis, research participants expressed initial benefits from seaweed (Steenbergen et al., 2017), shark fishing (Jaiteh et al., 2017), fusilier and live grouper fishing (Fabinyi, 2012), and souvenir production (Lasso & Dahles, 2018) livelihoods, with a resultant 'boom' in people engaging and benefiting from them. Yet as an increasing number of people engaged in the activities across these contexts – contributing to degradation of resources and growing competition over resources and markets – the livelihoods entered a 'bust' phase when productivity and prices decreased.

This indicates how global socio-environmental processes such as market dynamics and consumer preferences can have a profound impact on local livelihoods, highlighting the potential precarity of livelihood shifts that reduce the diversity of livelihoods people are engaged in, particularly those that are subsistence in nature.

Four of the studies (Ferse et al., 2012; Lasso & Dahles, 2018; Lowe & Tejada, 2019; Stanford et al., 2014) in this synthesis utilise the sustainable livelihoods approach as a theoretical framework (see Figure 12). This provides a holistic understanding of livelihoods which is useful in examining the relationship between vulnerability and livelihood diversity, and how this can lead to the boom and bust cycles detailed in studies in this synthesis. The theory can be usefully applied to other studies in the synthesis which did not explicitly adopt it as a conceptual framework. For example, in Steenbergen et al.'s (2017) study, it can be used to understand the types of assets people were able to draw on for *copra* and seaweed livelihoods, and the vulnerability context of shocks from resource depletion. Similarly, it can be usefully applied to Jaiteh

et al.'s (2017) study when analysing the impacts of changing consumer preferences and policies that led to a decline in the market value of shark meat, and how this impacts the vulnerability context in which people undertake their livelihoods. The sustainable livelihoods approach has been critiqued for the limited attention that it gives to power, governance, and rights, which Lowe & Tejada (2019) and Bennett (2013) seek to address by adding a sixth type of asset: 'political assets', with Bennett also integrating concepts from the literatures on protected area governance and management.
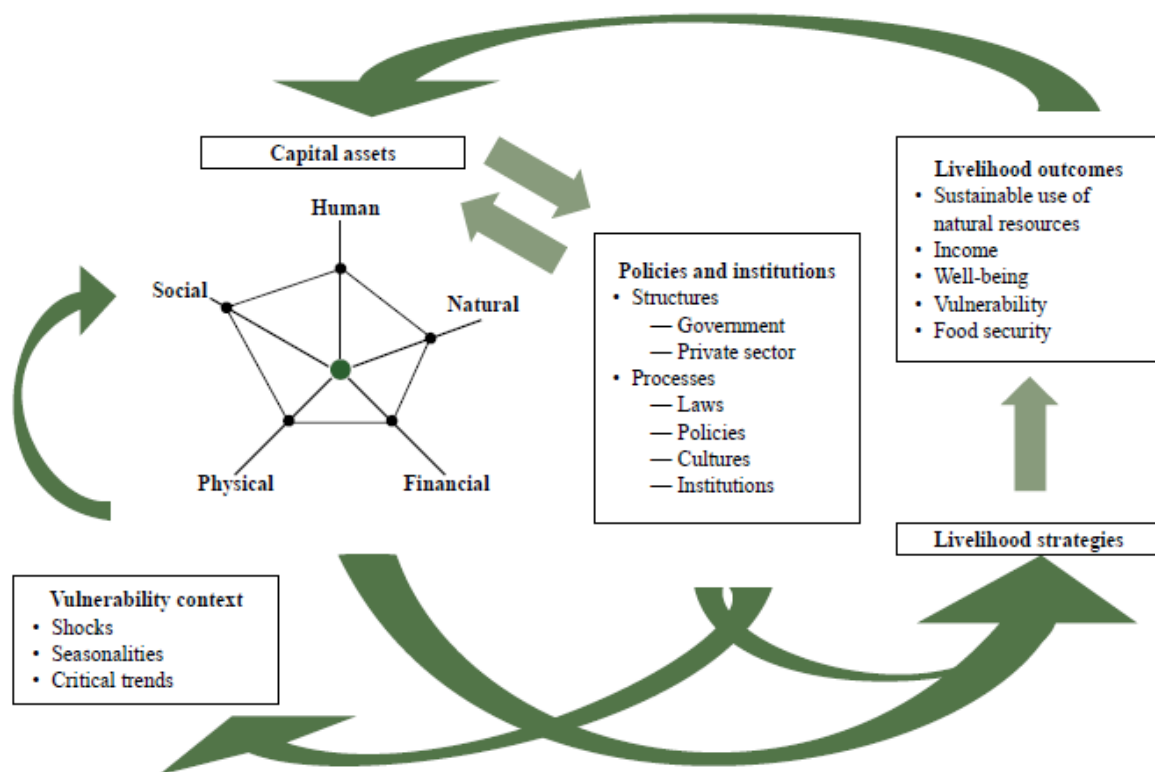
Figure 12. Sustainable livelihoods approach (Source: DFID,1999)

5.2.1.1.4 Meeting material desires and needs

Across seven of the studies included in this synthesis, material desires and needs acted as a driver of livelihood change (Bennett, 2013; Fabinyi, 2012; Ferse et al., 2012; Kinseng et al., 2018; Steenbergen et al., 2017; Fabinyi, 2019), for example in Bennett's study in Thailand where 'local desires for material goods [are] on the rise' (2013: 70).

In five of the studies, participants felt that livelihood shifts had positive impacts on peoples' quality of life (Fabinyi, 2012, 2019; Lasso & Dahles, 2018; Lowe & Tejada, 2019; Steenbergen et al., 2017). In Lasso & Dahles' (2018) study on Komodo Island, Indonesia, early livelihood shifts to tourism provided supplementary incomes at a time when the primary fishing livelihood type crashed due to increasing operational costs and declining catch. According to one participant in their study:

> *"I think this [business] is better [than bagan fishing]. I can take a rest whenever I need it. I think, when I work at a comfortable pace, I can produce 10 souvenir items and earn 200,000 [£12] rupiah a day. It is not bad because I do not force myself to work hard." (2018: 477)*

Similarly in Fabinyi's research on Palawan, 'taking tourists on daytrips is perceived by many former fishers as much easier work than the physically and mentally challenging work of fishing, as well as generating more income' (2019: 33).

In Steenbergen et al.'s research, the researchers observed that a shift to seaweed livelihoods has led to 'a noticeable increase in purchasing power amongst villagers, evident in the number of recent housing renovations, considerable boat-building activity, increased ownership of material goods (e.g. TVs, generators and mobile phones)' (2017: 219). On Palawan, the owners of successful commercial fusilier and live grouper boats 'have concrete houses, sometimes toilets with septic tanks, and appliances such as stereos and televisions', and it was particularly apparent among young male fishers for whom 'money […] tends to be spent on flashy consumer goods such as motorbikes, alcohol and clothes' (2012: 164).

In Kinseng et al.'s (2018) research, the authors observed that:

> 'access to food, clothing, building materials, education and health has all improved since more boats started bringing more tourists to the island. These

tourists have spent money on the island and resident's perceptions show a significant increase in family income and welfare as a result of tourism.' (2018: 1067)

There are parallels with the perceptions of community members from Gier et al.'s (2017) study in the Philippines, with expectations that tourism would create jobs, and lead to infrastructure development such as improved roads, public access to power and freshwater supply. This further demonstrates the positive perceptions and experiences people have of meeting their material needs through engaging in new livelihood opportunities.

However, as Steenbergen et al. write:

'the boom [of seaweed production] has shifted people's expectations of a satisfactory financial return from livelihood activities. The dramatic increase in household income from seaweed farming could not be matched by the collective income from [past livelihood] activities such as copra [dried coconut kernels] production or trochus collection.' (2017: 220).

This meant that when the 'bust' of seaweed production happened, many people shifted to high-risk livelihoods like illegal shark fishing rather than low-risk livelihoods. As Steenbergen et al. argue, 'to assume villagers can simply fall back onto former livelihood activities therefore misses the critical contextual developments which are shaped by (and shape) what people choose to do for a living' (2017: 222). This demonstrates the complex, context-specific nature of livelihood change, and the importance of considering their multi-faceted drivers, values, and impacts.

Based on the synthesis of studies, a range of factors act as drivers of livelihood change in different coastal communities. Across all of the studies, degradation of fishery resources and declines in fish stocks are leading to lower catches, increased costs of

fishing and longer periods of time spent at sea, which contribute to rising debt. New livelihood opportunities and ways of making a living from the coast enable people to meet their changing lifestyle and material needs and desires. These are influenced by connections to global markets and shifting consumer preferences. However, these changes also tie even the most remote places to global economies, as evidenced by the 'boom and bust' nature of some livelihood shifts, which can drive people to engage in higher-value but higher-risk livelihoods.

In the next section, the barriers and facilitators that enable or inhibit people to transition or diversify their livelihoods will be discussed, including the role of class and ethnicity, social relations, gender, migrant status, and governance.

5.2.1.2 Social status, social differences and barriers and facilitators to livelihood change

In this section I detail how social differences and identities can act as both barriers and facilitators to livelihood change, driven by the contextual drivers highlighted in the previous section. These are divided into the following categories:

- Gender
- Age
- Class, wealth, ethnicity and social status
- Perceptions of fishing

5.2.1.2.1 Gender

Across the studies there was limited attention to the barriers and facilitators faced by women in livelihood change, although some of the studies did highlight women's

contributions to household livelihoods, through 'sideline' activities[9] (Porter & Orams, 2014), in support of food and nutrition security (Bennett, 2013; Ferse et al., 2012).

In their study about shifts to seaweed cultivation, Steenbergen et al. (2017) describe how the low start-up costs and initial stable returns compared with male-dominated fishing activities are a driver for women's engagement. Additionally:

> 'cultivation sites are located close to the village and thus provide easy access for daily work. This also meant that labour can be easily provided from within the household, whereby men, women and children are all involved in various stages of production.' (Steenbergen et al., 2017: 219)

In their study about a community-led whale shark tourism project in Oslob, the Philippines, Lowe & Tejada (2019) noted new opportunities for single mothers, women, and youth, and the strengthening of women's associations through the provision of livelihood trainings. These examples demonstrate how new opportunities can sometimes be more easily accessed by women compared with existing male-dominated livelihood strategies, or better able to integrate with the existing gender roles and expectations of women.

In Eder's study (2009) in San Vicente, Palawan, the author describes how in co-headed households, gender influenced livelihood strategies, with a common pattern of women being more likely to take risks in trying something new in the interest of improving household economic wellbeing.

In one example, a husband wanted to invest their household savings into buying 500 metres of the same type of net he already used in order to 'maximize' his catch.

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[9] In the Philippines this refers to side businesses often undertaken by women and important for household food security and wellbeing, such as gleaning, mat-weaving, and small-scale grocery trading.

Contrasted to this, the wife wanted to buy a beach seine net so she could secure a much higher proportion of catch income, compared with what she currently received working as a net hauler.

In another household, a family wanted to better market the husband's rabbitfish catch that they dry and sell locally. With dried rabbitfish commanding a much higher price in Manila, the wife proposed using their household savings to buy large quantities of locally-caught and dried rabbitfish to sell combined with their own catch, which the husband was opposed to. Against the husband's objections, the wife went to Manila to sell the catch – which she described as a *'trial run'* and he described as *'doomed to failure'* (2009: 89) – returning home with a substantial profit.

Fabinyi details the role of masculinity in fishing, in particular among young men: 'fishing is a gamble and an opportunity for male fishermen to demonstrate their masculinity, economic prowess, and value' (2012: 155). This was further represented by repeated mentioning of younger, unmarried male participants wanting to get the 'windfall' or 'jackpot' catch and choosing to engage in higher risk, higher returns types of fishing:

> 'As well as signifying local status, therefore, high income levels are a way by which young men in these communities can actually move outside the local [area] and access a broader dream of success, such as that described by the young hook-and-line fisher earlier—going to college and getting a nice job in Manila or abroad. Thus, for these young fishers, the practice of fishing within MPAs also offers the potential of moving into a new, empowered space. The promise of high rewards in fishing within MPAs complements perfectly the desire for material status possessed by young men, and at the same time enhances the fishers' reputation for strength and bravery within the peer group' (2012: 165).

These examples from Palawan demonstrate the unique, context-specific ways in which gender can influence livelihood decision-making, and the different types of risks

taken by women and men. For women this is financial risk of trying new and innovative livelihoods, whereas for men it is the criminal risk associated with fishing illegally in MPAs. In Eder's study, livelihood risk-taking by women was driven by a desire to improve household wellbeing, whereas for young men in Fabinyi's study, livelihood risk-taking was associated with the pursuit of material status and prestige. This indicates the importance of considering the intersectional nature of peoples' social identities and relationships, and how these can interact to act as barriers or drivers of livelihood change and access. Across the synthesis this was highlighted in studies which used ethnographic methods during long periods of fieldwork (Fabinyi, 2012; Eder, 2009; Knudsen, 2016).

5.2.1.2.2 Age

As noted in the preceding section, age was another social characteristic which influenced the perceptions of different livelihoods across some studies in this synthesis (Bennett, 2013; Fabinyi, 2012; Knudsen, 2016). In Knudsen's (2016) study on Negros Island in the Philippines:

> 'young single men from fishing-oriented families would at times entertain ideas about a different lifestyle with higher-paying and more comfortable jobs. With the support of parents or older siblings, some took steps to invest in education and try out jobs outside of fishing' (2016: 343).

In Fabinyi's study, an inter-generational difference in the perception of fishing between the father and son existed: 'while the older man identified with the notion of being a fisherman, his son viewed fishing more as a (hopefully temporary) means or standby job to obtain a limited income than as a life calling'. This is closely connected to changing perceptions of lifestyle and status:

> 'many fishing households explicitly expressed the goal of their children to gain a good education and thus move out of fishing […] which is not a 'real' profession. Instead fishing is often viewed and practiced as a frontier establishment strategy (Fabinyi, 2012: 107)'

In Bennett's (2013) research, participants highlighted declines in fish and fisheries-based livelihoods and the out-migration of youth who moved to the mainland for new opportunities, demonstrating how age can act as a facilitator of livelihood change as youths seek jobs and income sources outside of fishing. Although as Knudsen (2016) found in his research, 'young boys may find fishing more exciting than going to school, their "choice" of livelihood is intimately linked to their families' poverty' (2016: 348), demonstrating how age can intersect with other social characteristics like class, ethnicity and social status as detailed in the following section.

5.2.1.2.3 Ethnicity and socio-economic status

Across studies in this synthesis, class, ethnicity, and social status frequently interacted to influence the outcomes of livelihood change (Dressler & Fabinyi, 2011; Fabinyi, 2012; Knudsen, 2016; Rosyida et al., 2018; Segi, 2014; Stanford et al., 2014), findings which were particularly evident in the studies which used long-term ethnographic approaches (Dressler & Fabinyi, 2011; Fabinyi, 2012; Knudsen, 2016; Segi, 2014). For example, in their research on Palawan, the Philippines, Dressler & Fabinyi (2011) found that Indigenous Tagbanua faced significant financial and socio-political barriers which restrict their capacity to engage in the lucrative live grouper fishery, dominated by lowland ethnic groups with higher social standing on Palawan.

In various studies, ethnicity and socio-economic status were closely related to migrant status, which was used to justify and contest access to marine resources and coastal livelihoods (Fabinyi, 2012, 2019; Knudsen, 2016; Segi, 2014; Stanford et al., 2014).

As Knudsen writes, 'it seems to be a nearly universal phenomenon that "locals" blame "migrants" or "outsiders" for environmental degradation [… for example,] the Sama (bajau)[10] were increasingly blamed for illegal fishing and house construction' (2016: 349).

In Stanford et al.'s study, 'migrant crew [on fishing boats] are frequently viewed as "outsiders" by local fishers and their families, making it difficult for crew members to be accepted by a local fisher group' (2014: 18). As the authors detail, migrant labourers – already one of the poorest groups of fishers – were further marginalised due to their limited social capital, evidenced by their low acceptance by local fisher groups and the absence of wider community-level support mechanisms. Similarly, in Bangka Island, Indonesia, negative impacts of mining on fisheries 'has forced [marginal wage-labour fishers] to find alternative income sources that are more sustainable, but the illiteracy factor, limited skills, and limited capital have become huge barriers for this marginalised group' (Rosyida et al., 2018: 174). Conceptualising livelihoods through the sustainable livelihoods approach – which characterises livelihood outcomes as a combination of social, human, financial, natural, and physical capitals/assets – indicates that the absence of social capital (Stanford et al., 2014) and financial capital (Rosyida et al., 2018) act as barriers to the livelihoods that marginal community members are able to engage in.

This was also highlighted by Knudsen (2016) in research about heterogeneity within a fishing community in the Philippines, with the author contending that 'even when fishing conditions are generally good, fishing families may remain poor due to lack of access to and ownership of productive assets, indebtedness, unequal trading

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[10] The Sama-Bajau is a collective term that refers to several Indigenous Peoples in Southeast Asia who largely live a seaborne and historically nomadic lifestyle.

relationships, and discrimination based on class, ethnicity, religious affiliation or settler status' (Knudsen, 2016: 343).

In some studies, marginal fishers appear to have internalised the societal view of their low status and inferiority compared with others. In Stanford et al.'s research, when discussing a community boat purchase for tourism – and the resultant capture of benefits by a local elite – 'one fisher commented, *"we cannot talk about the boat and the group situation. The problem is that there are people of influence here. We are afraid to say everything because later on they will be angry with us"'* (2014: 23). This was also a feature in Rosyida et al's study where one participant said: *"I just listened to the [mining] company, desa [village] officers, and some active participants because I am not an educated person so I think my opinion may be worth less than that of other participants"* (2018: 170).

These studies suggest that stereotypes of fishers as poor and of low status have been internalised by the fishers themselves, which can act as a major barrier to livelihood change and diversification.

5.2.1.2.4 Perceptions of fishing

Across and within different studies, societal perceptions of fishing were shown to play an influential role in livelihood change and social status. In Stanford et al.'s study about fishing communities in West Sumatra, 'a group of small boat owners argued "if you own your own boat, machine and gear you cannot be classed as poor anymore."' (2014: 19). In Knudsen's study:

> 'Leo, a full-time fisherman told me: *"The opinion of others about us fishers is pobre ra (poor)"*. Leo did not see himself as poor. Poor people cannot afford rice, have to skip meals or live in urban slums in Manila, he believed.' (2016: 345)

In Fabinyi's research, while fishing was a foundational and 'last resort' livelihood for some, it also played important social functions like kinship and reciprocity, suggesting that the image of fishing is highly context-specific and fluid. As the author writes:

> 'The fishermen who had managed to achieve relative success in their profession and own several commercial boats are the most respected men in Esperanza, the most financially well-off, and hold most positions of political authority. Although in broader Philippine society fishing remains a low-prestige occupation, it is one that can still bring relatively high status within a fishing community.' (2012: 155)

These examples demonstrate the heterogeneity of small-scale fisheries, the varied ways that fishers' view their work, and the status distinctions between them (Knudsen, 2016), and the importance of considering local conceptions and understandings of poverty (Fabinyi, 2012).

Wider societal perceptions of fishing were also highlighted across various studies. Segi writes how during the establishment of an MPA in Cebu, 'local fishers were considered as the cause [of habitat degradation] in MPA proponents' speeches and documents, frequently being characterized as "ignorant" and "abusive" […] backward and unwilling to change' (2014: 572).

This pattern was also evident in Fabinyi's study:

> 'this perception of fishing as an inferior occupation is also validated and reinforced by many other Filipinos. Many richer Filipinos view fishermen essentially as simple, poor peasants […]. Even many richer Filipinos such as conservationists or government workers who work with fishers, and are more sympathetic towards them, still view them in a paternalistic manner.' (2012: 115)

While it can be seen that within fishing communities there is considerable heterogeneity of wealth and social status among different groups of fishers, there is a

common theme of marginal status and negative stereotypes in relation to broader societies. Both this heterogeneity and general marginal status influence the power relations within communities and between other coastal governance actors as is discussed in the following section.

5.2.1.3 Power relations and governance

As I analysed and synthesised the studies included in this synthesis, it became increasingly clear that governance and power relations were a key theme running through the studies which I had not initially focused on in my research questions, in particular the role played by different state and nonstate actors in the aims, processes and impacts of livelihood change as part of wider coastal governance processes. In a number of the studies included in this synthesis, actors use their social status and power to advance their interests in coastal governance processes, including livelihood outcomes. The following section will focus on the following key areas identified in the studies focused on power relations and governance:

- Elite capture

- Inequity and marginality

- Competition for coastal space – land grabs and coastal squeeze

- Locally-led livelihood development

5.2.1.3.1 Elite capture and marginality

Processes of elite capture (where powerful actors secure benefits for themselves) of livelihood development were common across my QES (Bennett, 2013; Fabinyi, 2012; Ferse et al., 2012; Jaiteh et al., 2017; Lasso & Dahles, 2018; Missbach, 2016; Rosyida et al., 2018; Stanford et al., 2014). Actors benefiting from and driving this include a mix of local community elites, politicians, NGOs and private sector actors. As Rosyida et al. write in the context of coastal mining in Indonesia:

> 'Political control of tin resources reflects complex governance because it involves multilevel actors with diverse power, knowledge and interests […] the shift in governance increasingly transferred authority over the mining industry to non-state actors (e.g. civil society and the market).' (2018: 173)

With discussions dominated by local elites, power dynamics (shaped by social status and relations) were seen to limit the participation of some community members who were later disproportionately impacted by the negative impacts of small-scale mining activities on fishing livelihoods.

A similar pattern was observed in Indonesia by Stanford et al:

> 'the major historical interventions [by NGOs and government initiatives] would not be appropriate [for the] group of poor fishers; labourers. Labourers would not be helped by being given nets or machines because they do not own a boat of their own. Similarly, because they do not own the catch, fish boxes and processing equipment would not be useful to them. [As a result of this] some of the poorest fishers in West Sumatra seem to sit below the radar.' (2014: 19)

And in Bennett's research in Thailand:

> 'institutional supports – e.g. government livelihood workshops, NGO development programs – were more likely to be found in communities that were easier to access or that were more pleasant to visit than in those communities most in need of these programs. More marginalised participants discussed how assistance was often captured by powerful or wealthy members of the community.' (2013: 122)

These examples highlight how externally-driven livelihood development programmes from state and nonstate actors frequently fail to reach the most marginalised (members of) communities, commonly those that are least accessible, lack secure tenure or assets, or have limited social networks.

Across some of the studies in my synthesis, patron-client systems also had an influence on the equity of livelihood outcomes (Fabinyi, 2012; Ferse et al., 2012; Jaiteh

et al., 2017; Lasso & Dahles, 2018; Missbach, 2016). In Jaiteh et al. (2017) and Missbach's (2016) studies these relationships were said to be highly exploitative:

> 'patrons were often wealthy in comparison to other community members and frequently in positions of power, for example as *Kepala desa* (head of village), or members of *Pemerintah desa* (village government), *Adat (*village council), or *Tokoh agama* (religious council).' (Jaiteh et al., 2017)

This demonstrates how power can be consolidated and entrenched when new livelihood strategies are adopted within communities, with individuals and groups able to draw on their financial power and political influence.

However, as Fabinyi (2012) highlights based on the LRFT on Palawan, new and emergent livelihoods are not always the sole domain of local elites. Writing about a conversation he had with a fisherman who was extremely poor when he first entered the industry, Fabinyi recalls:

> 'As one live fish trader once told me as he raised a glass of rum to toast his fisherman counterpart sitting next to him, with a broad grin on his face: *'We are all winners in this fishery'*. Indeed, the life histories of some of the live fish traders themselves reflects both the transformative power of this fishery in the Calamianes, and the potential for social mobility in the Philippines.' (2012: 88)

Similarly, not all examples of patron-client relations were exploitative. Fabinyi (2012) and Ferse et al. (2012) discuss these in the context of the LRFT and the ornamental coral trade, with small-scale buyers commonly providing financial support or employment as a form of social security. In Fabinyi's research, 'personalised modes of reciprocity form[ed] the basis of much of the social relations between households of different status in Esperanza' (2012: 65).

Despite these exceptions, however, the general pattern across the studies reviewed is that of powerful individuals and groups within and outside coastal communities

dominating governance processes, leading to livelihood outcomes which are aligned with their values and objectives. Contrasted to this, the interests and priorities of marginal groups – often with low social status due to the intersection of social differences like class and ethnicity – are absent, which exacerbates their marginality.

5.2.1.3.2 Inequity and marginality

Across my synthesis, a major consequence of elite capture was found to be the inequity of the coastal governance processes and exacerbation of marginality (Bennett, 2013; Dressler & Fabinyi, 2011; Eder, 2009; Fabinyi, 2012, 2019; Jaiteh et al., 2017; Missbach, 2016; Rosyida et al., 2018; Segi, 2014; Stanford et al., 2014). This was predominantly highlighted in studies that explicitly and implicitly used a political ecology lens to examine the relationship between power, marginality, social differences, and natural resource use and management (Bennett, 2013; Dressler & Fabinyi, 2011; Fabinyi, 2012, 2019; Fabinyi et al., 2010; Knudsen, 2016; Missbach, 2016; Rosyida et al., 2018; Segi, 2014).

Decision-making procedural inequities for coastal management and livelihoods were highlighted, in particular in relation to livelihood development programmes initiated by external actors such as governments, NGOs, and the private sector (Bennett, 2013; Fabinyi, 2012; Eder, 2009; Rosyida et al., 2018; Segi, 2014; Stanford et al., 2014). In Rosyida et al's research, local elites used their power and influence to dominate 'participatory' processes and consultations with mining companies, drawing on and reinforcing existing social structures:

> 'not all community members attended the participatory consultation meeting, and most of those who attended did so without actively participating because of the local political setting that gave priority to local elites […] Limited opportunities, feelings of anxiety, and a lack of confidence became reasons for the low participation of attendees during public meetings […] The active participation of local elites during participatory consultation meetings reflected

the pattern of elite domination in the local power structure by using their power and influence to combat private gain. This leads to the centralisation of the interests of local ruling elites and potentially marginalises the interest of lower-level social groups, particularly the most affected groups.' (2018: 174)

Segi (2014) describes a similar process during the mandatory public hearing for the establishment of an MPA in Cebu, the Philippines, which was dominated by municipal politicians and NGO representatives. An NGO representative was said to have given a presentation in which they stated '[the reef] has to be protected, it has to be developed, and it has to be used to generate income for the municipality, because tourists are willing to pay just to dive at places where coral cover is excellent'.

Segi continues that:

> 'those Granada [*barangay*] councillors attending found his speech unfair and offensive to those who make their living in the sea. However, they found it difficult to express their opinions and concerns freely in front of municipal councillors and NGO workers. Indeed, three fishers among the village officials who attended the hearing did not make any statement during the session. These officials personally commented that none of the village officials supported the Dive Site plan, but that they felt too 'shy' to publicly speak out in that setting.' (2014: 570)

This demonstrates how the intersection of class, ethnicity, and social status – as described earlier in the chapter – can have a strong influence on the power dynamics that underpin governance processes, including those claiming to be participatory in nature, in turn leading to negative consequence on peoples' livelihoods.

Distributive inequities – the costs and benefits of coastal management and livelihood change – were also highlighted across various studies (Bennett, 2013; Dressler & Fabinyi, 2011; Eder, 2009; Fabinyi, 2012, 2019; Jaiteh et al., 2017; Missbach, 2016; Rosyida et al., 2018; Segi, 2014; Stanford et al., 2014).

In Eder's study about coastal resource management on Palawan, people told him 'that globalisation is not working so well for *them*. They say global changes are degrading their resources and undermining their livelihoods. Sometimes their point is that outside people are profiting from local resources, but not local people' (2009: 133). Similarly, in Fabinyi's study, fishers widely felt that:

> 'tourists, businessmen, and well-connected officials in the local government were frequently the only people who benefited from the declaration of such protected areas […] Operators managing resorts in an MPA were usually described as rich foreign businesses (or rich businessmen coming from Manila) who made a great deal of money out of the beautiful reefs of the Calamianes. They felt that those businessmen were given preferential treatment by the local government because of their money.' (2012: 153)

Similarly in Bennett's (2013) study in Thailand:

> 'local people felt that national marine parks were inequitable in two ways: they were only accessible to wealthy tourists who could afford the fees and financial benefits went mostly to those who already had money or power. […] Although tourism jobs were perceived to be a likely outcome of national marine parks, many participants discussed how there were limited benefits to most locals because of elite capture of financial benefits, outside ownership of businesses and resorts, hiring of outside labourers, or because the Department of National Parks managers owned restaurants and tourism businesses and were keeping the benefit for themselves.' (2013: 95)

Similar patterns were observed in relation to NGO and donor-driven establishment of MPAs. In three studies in the Philippines, MPAs were generally perceived negatively by small-scale fishers due to the threats they posed to their livelihoods and food security (Fabinyi, 2012; Eder, 2009; Segi, 2014). In Fabinyi and Eder's studies on Palawan, the siting of MPAs had a disproportionate impact on a specific sub-group of the poorest fishers; with the MPAs being located close to the shore, fishers with motorised boats could easily fish in areas further away (albeit with additional fuel costs), whereas it was much more difficult for poorer fishers using oar-powered boats

to reach fishing grounds outside of the MPA (Eder, 2009; Fabinyi, 2012). Similarly, during consultations about the establishment of an MPA in Cebu, the Philippines, the municipality was strongly in favour of establishing it in the nearshore area, despite it being an important fishing ground for fishers of an array of methods, and its accessibility during bad weather (Segi, 2014).

Feelings of exclusion were evident in these studies (Eder, 2009; Fabinyi, 2012; Segi, 2014). In Fabinyi's study, a net fisher complained *"I am just a poor fisherman… the government should be helping people like us, instead of making laws that will hurt us"* (2012: 131). This suggests a perception among marginalised sub-groups of fishers that their rights and interests are not being considered and that they are suffering the greatest costs of management measures as a result.

Eder (2009), Fabinyi (2012) and Segi (2014) write about the multi-scalar influence of conservation and tourism narratives on the livelihood outcomes of small-scale fishers. As Eder describes about the large-scale Coastal Resource Management Project (CRMP), which was also heavily involved in the MPA designation in Segi's study:

> 'Funded in Washington D.C., implemented from Manila, and directed from Cebu City, the CRMP was motivated by international concern about marine biodiversity conservation and reached down to local communities in San Vicente [Palawan] to influence where and in what manner individual fishermen could fish.' (2009: 121-122)

This example shows how social status, social hierarchies, and images of fishing both shape and are shaped by externally driven governance processes, creating uneven power dynamics within the design and enforcement of MPAs. Segi (2014) claims that in Cebu, the Philippines, NGO staff and local politicians viewed MPAs through an apolitical, technocratic, scientific and neoliberal lens, failing to account for unequal power dynamics and impacts on the existing livelihoods of small-scale fishers. This

suggests a disproportionate sharing of conservation burdens and outcomes, with small-scale fishers suffering the costs of exclusion from important fishing grounds and coastal spaces designated for conservation and tourism purposes. In Segi's study (2014), a very limited number of community members were employed in low-paying jobs in tourist resorts, suggesting barriers to their engagement in livelihoods related to tourism, despite being presented as 'alternative livelihoods' for local communities.

These examples demonstrate how the intersection of governance and livelihood change with existing socio-political dynamics and power relations are often overlooked by external actors such as NGOs and private sector companies. Fabinyi summarises this point succinctly in the context of fisheries management on Palawan:

> 'what these arguments have in common is a concern with the ways in which fisheries management initiatives tend to get 'sucked up' into pre-existing social and political inequalities related to poor governance. From this perspective, the problem in fisheries management are due not to the poverty or ignorance of the fishers, but primarily to poor governance by local elites.' (2012: 172)

As Rosyida et al. write in relation to private sector development, 'companies are often lax in their efforts to protect local environments and local communities, leading to "resource curse", whereby the poor stay poor and elites accumulate further wealth' (2018: 175). When governance actors fail to acknowledge or engage with structural inequalities and local power dynamics, coastal development activities often result in the exclusion of marginal small-scale fishers who are disproportionately impacted negatively, while benefiting less than more powerful actors (Segi, 2014).

5.2.1.3.3 Competition for coastal space – land grabs and coastal squeeze
Another inequitable outcome from coastal governance processes identified across various studies was competition for coastal space, which leads to fishers being squeezed out of the spaces they live and use for their livelihoods (Bennett, 2013; Eder,

2009; Fabinyi, 2012; Gier et al., 2017; Kinseng et al., 2018; Knudsen, 2012; Lasso & Dahles, 2018; Rosyida et al., 2018; Segi, 2014).

On Palawan, poor migrant and Tagbanua Indigenous communities are unable to secure the productive land they need for rice farming as the majority of flat land has been purchased by wealthier migrants (Dressler & Fabinyi 2011). On the Andaman coast of Thailand, Bennett writes that 'fishers, gleaners, and others are disallowed to enter or harvest in areas where there are resorts or that are used by national and international tourists' (2013: 70).

In Lasso & Dahles' (2018) study about tourism development on Komodo, national park authorities were said to have allocated limited space for souvenir trading in order to maximise the area conserved within the national park, resulting in fierce competition between traders. In Kinseng et al.'s study on a small island in Indonesia, a private company quietly bought up land without most of the community's consent:

> 'Since 2012 the company's enforcement has become stricter. Residents are forbidden to build new homes or add parts to their existing ones. This ban was monitored by the security company who warned residents to demolish illegal buildings [, yet] a portion of the community feel that their land was never sold to the company. […] One particular local government official played a major role in the sale of the land to the [external national] company in 1989. In Indonesian law there is a distinction between land that is legally owned (*Sertifikat Hak Milik*) and traditional land that has been managed by locals (*girik*). In 1989 the village head, assisted by the aforementioned official, requested that all *girik* ownership letters be handed over to him in order to check their validity. The key informants reported that was the last that was seen of the *girik* letters, with the suspicion being that the people's land was formally sold to the company at this point by way of collaboration between a local elite who sold the land on behalf of the people and the company. The lack of transparency and public records of this process support the sentiments of locals who argue this happened without their knowledge and support.' (2018: 1068)

As Eder writes about his long-term fieldwork on Palawan, the Philippines:

'Despite nominal ownership, beaches in the Philippines for a long time were legally and culturally considered open access resources, and anyone could put ashore and use them for the day. […] one of my most startling research findings was that more than half of San Vicente's prime beachfront property, both along the coast and on the various offshore islands, is under the ownership of foreigners and a handful of wealthy provincial politicians. Some foreign owners have built retirement homes or small private resorts for entertaining friends, but most reside abroad or live elsewhere in the Philippines. These absentee owners acquired the land for investment purposes or because they plan someday to retire and build it or to construct a beach resort of their own [...A] growing number of 'private property' and 'keep out' signs have begun to appear, and a few of the wealthiest owners have even hired guards or caretakers to discourage casual visitors.' (2009: 58-59).

These examples highlight the intersection of traditional/customary tenure with formal legal ownership. In both instances it appears that national and foreign elites have exploited the overlap of informal and formal tenure by formally purchasing land. In the Kinseng et al. (2018) example, this is alleged to have taken place through securing support from local government and village elites in order to obtain the land without the knowledge or consent of the villagers. In the Eder (2009) study, foreign elites are seen to use their wealth to buy and enclose lucrative beachfront land which was historically and culturally open-access. Both examples demonstrate the increasing competition for coastal land, and the strategies elites can use to exploit customary land tenure.

Similarly, in a study about the role of tenure in transitions from fishing to tourism in the Calamianes Islands of the Philippines, Fabinyi (2019) details how influential families and powerful government departments on Palawan have taken advantage of contradictory historical land records to evict residents and claim lucrative coastal land. Conflicting legal rights around coastal tenure has restricted the ability of people to capitalise on the tourism boom through restrictions on the sale of land and the building of structures, and 'the lack of secure tenure generates considerable anxieties and uncertainties about future household livelihood strategies' (2019: 36).

In these examples, private companies, government departments and individuals have used a mix of wealth and political influence to buy lucrative land for tourism purposes, leading to 'coastal squeeze' that excludes local communities from living and practicing their livelihoods in these spaces. The more explicit acts, alleged to have happened without community consent, can be characterised as land-grabs.

5.2.1.3.4 Locally-led livelihood development

While many of the issues discussed so far have highlighted elite capture, inequity, and exclusion of marginal coastal resource-users as a result of coastal governance, some of the studies highlighted positive livelihood outcomes for local communities where livelihood development was community-led. Lowe & Tejada's study provides an example where tourism development has resulted in benefits going to a local community. Discussing the development of whale shark tourism in Oslob, the Philippines, a local government official said:

> *"Before they don't have any clear income because they depend their livelihood on fishing and sometimes they don't have any catch so they could not send their children to school, they could not feed their family three times a day and they could not be able to have food on the table and security. So once I discovered that there are whale shark in Tan-awan we studied and think that it could be a good alternative livelihood for our fishermen."* (2019: 87-88).

Using the sustainable livelihoods approach as a conceptual framework, the authors found that human, natural, financial, physical, social, and political assets have been improved for members of the fishery association involved in the project, community members not part of the association, as well as people from the broader region through a rippling effect that distributes benefits outwards. The authors argue that:

> 'Oslob Whale Sharks is unique in that it is not a donor initiated, funded or managed livelihood project. It is a community-based dive tourism business created by fishers with local government to provide alternative livelihoods in a

diminishing fishery. Oslob Whale Sharks distributed approximately US$18. 4 million to fishers and their community in the five years from 2012 to 2016.' (Lowe & Tejada, 2019: 87)

There are parallels with Kinseng et al.'s study, where 'tourism has developed on Pari because local residents have seized the opportunities that exist. The role of the government and private companies has been limited to the provision of transport facilities connecting Pari with Jakarta' (2018: 1066).

In a study exploring tourism as a potential development strategy for an isolated fishing community in the Philippines, Porter & Orams (2014) highlighted the positive perception that participants had about tourism, but a limited understanding about what it could mean for them. Participants displayed a general contentment with their lives and current engagement in fishing, and positive perceptions about the establishment of tourism stemmed mostly from the perceived social value of hosting visitors, of seeing new faces, and of having people travel from far away to spend time in their village. As the authors write:

'Such approaches (development strategies) are likely based on a Western (developed world) understanding of development and livelihoods as desired outcomes rather than the desires of local community members. […] If the goal is to improve livelihoods, the desire for improvement must be present and a careful consideration of what type of improvement or change is desired needs to be undertaken within each local community.' (Porter & Orams, 2014: 66)

In the examples by Kinseng et al. (2018) and Lowe & Tejada (2019), there was an apparent desire by communities to shift to tourism-based livelihoods, reflecting a bottom-up process of change as opposed to being driven by outside actors such as private companies, government, NGOs, and donors. Ownership (both in the literal and conceptual sense) is said to have led to benefits going to local communities, high

degrees of support, and a sense of pride in maintaining tourism livelihoods. This contrasts with other studies in this synthesis where livelihood developments and shifts have been initiated through state livelihood programmes and development policies (Bennett, 2013; Gier et al., 2017; Stanford et al., 2014), NGO livelihood programmes (Steenbergen et al., 2017), private sector development (Rosyida et al., 2018), and public-private partnerships (Segi, 2014).

Across studies, social characteristics and relations intersect with coastal governance processes, influencing the livelihoods people are able to engage in. A common feature is the role that socio-economic status and ethnicity play in driving elite capture and marginality, and inequitable resource-use and access outcomes. This commonly led to resource access restrictions and physical exclusion and dispossession of marginal resource-dependent coastal people. Where benefits of livelihood change have been equitably distributed, this has resulted from locally-led initiations of livelihood change.

5.3 Critical methodological reflections

In the following section of this chapter I will reflexively detail the methodological and epistemological challenges which I encountered during the process, while also highlighting how the evidence synthesis influenced, and was influenced by, the wider research process I undertook across my PhD.

5.3.1 Evidence synthesis in the research process

After undertaking an initial literature review of the broad area of marine natural resource management, the next step I would have taken based on prior research experience would have been to visit potential field sites for my primary research. At this point I was fairly confident that it would be the Philippines – one of the four Southeast Asian countries Blue Communities partners are from – as I had previously

conducted research there during my Master's Degree in 2015. My prior research training was in the humanities (History) and social sciences (Anthropology and Environment and Development Geography). My previous empirical research experience had been ethnographic and inductive, employing Grounded Theory and Thematic Analysis (Braun & Clarke, 2006; Charmaz & Bryant, 2010). After my MSc I then worked for a grassroots NGO in Tanzania, involved in advocacy for coastal communities. This involved primary research to broadly explore the challenges and everyday experiences faced by coastal communities in relation to coastal resource management, primarily through the use of participatory approaches and participatory action research for project design, context analysis, and evaluating impact.

Joining an interdisciplinary research centre in a Medical School, I found myself in a very different setting and research paradigm compared with my experience until then. Systematic reviews – which I was unfamiliar with when beginning my PhD – were widely used, and the expected next step in my research was that I would conduct a systematic review to answer a set of research questions identified during my literature review. This contrasted to my epistemological grounding in a constructivist and interpretivist research paradigm which views knowledge as being the result of processes of social construction (Creswell, 2003).

For primary research, I view this as the thoughts, feelings, processes and interactions I experience with the people, culture, and environment in which my research is undertaken, and how this intersects with my existing knowledge and experiences. Without visiting and experiencing the research site – Palawan, the Philippines – I found it challenging to develop research questions for my evidence synthesis, without the process of 'construction of knowledge as the result of social interaction in contexts which form the foundation of shared knowledge' (Gerstenmaier & Mandl, 2001). At the

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beginning of my PhD I had some ideas to investigate, but these were adapted throughout different stages of the research process: first of all, during the evidence synthesis, and secondly while undertaking my primary research. During the initial stages of my fieldwork, I found that I was trying to see patterns, connect themes, and draw conclusions based on those developed during the evidence synthesis.

Additionally, I found that my own prior empirical research in the Philippines, and my familiarity with the existing body of research around coastal communities in Southeast Asia influenced the evidence synthesis, from question formulation through to the development of analytic themes, and eventual synthesis of the studies. With my training in the disciplines of critical geography, environmental anthropology, and political ecology, the studies which influenced the overall synthesis were predominantly from these disciplines.

With this in mind, given the central principle of transparency to systematic reviews, it is important that systematic reviewers of qualitative research integrate reflexive practice about their positionality, subjectivities and values in order to be as transparent about the influence their positionalities might have had on the synthesis. As highlighted by Noyes et al. (2022), being reflexive [in evidence synthesis] entails making conflicts of interest transparent, discussing the impact of the reviewers and their decisions on the review process and findings and making transparent any issues discussed and subsequent decisions. This could be expanded upon by having reviewers prepare and publish a positionality statement at the beginning of the evidence synthesis as part of the study protocol, as is now a requirement for QES published by Cochrane (Noyes et al., 2022). Failing to recognise and engage with this risks the projection of unacknowledged biases onto different stages of the evidence synthesis process. Constructivist qualitative research is an ongoing non-linear process, and this needs to

be taken account of when designing and conducting QES' in order to allow for methodological adaptation and flexibility, while still continuing to ensure transparency through ongoing reflexive practice.

Despite these challenges the evidence synthesis did provide a useful base to iteratively guide the methodological and theoretical development of my primary research on Palawan, with a focus on social differences as barriers and facilitators to livelihood change implicitly being about power relations between and within communities, and in relation to other governance actors like government agencies, NGOs, donors, and private companies. On reflection, a more useful or nuanced question would have been to ask about resource-dependent coastal peoples' freedoms to use and access coastal and marine resources, including for their livelihoods – whether that is to continue in fishing, or to diversify to other livelihoods along with fishing, or to shift away from fishing completely – and the structural barriers or facilitators – including social differences, social relations, and governance – which enabled or prevented them from doing this. When I went away to conduct my fieldwork, and the process of constructing knowledge through the structured research activities and informal conversations and experiences I had with people, I further realised that my focus on livelihoods and social complexity was too narrow, and that the issues and problems people spoke about were implicitly all about governance, of which livelihoods are one specific objective and outcome.

An alternative structure to the research process could have been to conduct a first, fairly unstructured period of fieldwork after the literature review. Based on the issues and ideas of importance highlighted by people, the next step could have been to then design the research questions for the evidence synthesis to answer questions of

importance to people in my research context, rather than coming in with a pre-defined set of research questions and research focus which I thought were of importance.

This type of approach follows the principles of action research, first developed by Lewin (1946), who argued that knowledge should be generated through engaging in problem-solving in the real world. Reason & Bradbury define action research as:

> A participatory democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes […] It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities (2001: 1).

A key principle that underpins this is the evolution of research through partnership and participation – the quality of the relationships we form with primary stakeholders, and the extent with which they are involved in the design and assessment of inquiry and change through discussing and shaping research questions (Bradbury-Huang, 2010). In the case of my research, the research questions for my evidence synthesis were developed before I had visited Palawan, and before I had met with and spoken to the participants in my research. When I did conduct my primary research, I iteratively developed and adapted my research questions based on the perspectives I heard from people. This recognises the in-depth knowledge stakeholders have acquired from their experience in a situation, and their personal reflection on this as a part of the research process (Herr & Anderson, 2005).

Key to this is engagement in reflexive practice about my positionality as a researcher and the subjectivities that I have, and how this shapes and is shaped by the research process and process of knowledge production in a cycle of action and reflection (Bradbury-Huang, 2010). Action research also has an emancipatory aim: 'in

oppressive contexts, it may take the form of empowering those with little voice through including those who have disappeared from a social system (Bradbury-Huang, 2010: 98-99), which reflects the grounding of action research in social justice (Adams, 2010).

In reality however, action and other forms of collaborative research like co-creation are challenging and time-consuming, and usually not realistic within the time and scope of a doctoral study, in particular for the facilitation of new actions and reflection upon them (Herr & Anderson, 2005). This was especially the case in my PhD given the combination of time constraints related to both my PhD research and the wider collaborations and meetings I was part of for the Blue Communities Programme. However, the initial use of participatory approaches for research design, and ongoing validation during the research process could have strengthened this evidence synthesis through better aligning the initial research questions I was asking with the issues and experiences that were of importance to people on Palawan, and the resultant adapted research focus which became the key focus of my empirical work.

Critiques have also been raised about the utility of systematic reviews to the international development and broader social science fields, with Cornish arguing 'against making universalising statement about "what works" [, instead] arguing for the importance of local context and local judgement to answer the more relevant question of "what works for this particular time, place, and these goals"' (2015: 274). These critiques tend to be levelled towards quantitative systematic reviews however, and methodological developments have sought to make these more useful and practical in complex contexts, for example through integrating with logic models, theories of change (ToC), and realist evaluation (Baxter et al., 2014; Marchal et al., 2012; Rehfuess et al., 2018).

An important aspect of systematic reviews in health research is the involvement of stakeholders, for example through public/patient involvement in identifying research questions. This approach could be extended to systematic reviews on environment and development issues in low- and middle-income countries. As noted in Chapter 4, there are often significant unequal power dynamics present in the relationships between researchers and practitioners and poor rural communities, in particular with researchers from high-income countries such as myself. The development sector has a deep history of designing and using participatory approaches for research and practice which seek to minimise these power dynamics, build trust and respect, and foreground subject matters in local realities and context. Future systematic reviews in the environment and development fields can integrate these values and approaches, which could be characterised as a 'participatory evidence synthesis'. This could include a transdisciplinary cycle of reflection and action between researchers and non-academic collaborators, namely non-academic stakeholders related to the area of research inquiry such as rural communities and practitioners. A key aspect of this cycle would be the flexibility to iteratively adapt research questions based on these cycles of reflection and validation between the systematic review team and non-academic stakeholders in the specific context.

5.3.2 Database searches

When I was designing the search strategy for my evidence synthesis, I found that published guidance on the performance of qualitative filters was predominantly from within the health research field, and associated databases. After testing different search filters used for qualitative research, a qualitative filter used in PsycINFO that balances sensitivity and specificity (further adapted to include just titles and abstracts) was used for the qualitative research strand of the searches. From the texts that

passed the second stage of screening, a further 25 studies were identified via the supplementary searches of forwards and backwards citation chasing and contacting key experts in the field. This supports research on systematic reviews of environmental research (Cooper et al., 2018) and development literature (Wanyama et al., 2021) which found that supplementary searches were of significant importance, compared with database searches which tend to be prioritised in health-based and quantitative systematic reviews.

In particular there were limitations to database searches in identifying studies from the field of anthropology. Six ethnographic studies central to the synthesis were not identified during the database searches, with three (Dressler & Fabinyi, 2011; Steenbergen et al., 2017; Segi, 2014) identified through reference lists (forwards and backwards citation chasing), and three (Eder, 2009; Fabinyi, 2019; Knudsen, 2016) through contacting key experts.

It is therefore recommended that further testing and adapting of qualitative filters is required to ensure these studies are captured in database searches. Suggested terms to include in title and abstract searches are "ethnograph*" and "anthropolog*. Consideration must also be given to the way that abstracts in the anthropology field are structured, so it is suggested that the major search strands should be searched in the full text of studies rather than just titles and abstracts, although this will have significant resourcing implications for review teams. The high number of studies identified through supplementary searches could also be as a result of the narrow focus of the search terms as explicitly relating to livelihoods, which overlooks the breadth of literature in the interdisciplinary marine (social) science field that implicitly refers to livelihoods, for example research on conservation, governance, social equity, wellbeing etc. Similar critiques have been made about the suitability of systematic

reviews in the multi-disciplinary field of international development compared with the health field in which they were pioneered (Mallett et al., 2012).

When contacting key experts and during my fieldwork, I came across entire books and book chapters specific to Palawan published by national university presses in the Philippines, which were not identified during my database searches. This has been highlighted as a significant weakness in the literature searches of qualitative evidence syntheses (Sandelowski & Barroso, 2007). Another issue with the search processed I used is the limitation of study language to English, which risks excluding studies by local researchers and practitioners published in their own language.

There is a risk that these omissions provide a geographically biased representation of the evidence, an issue which could be addressed through partnership with reviewers that speak local languages. As (Partelow, Hornidge, et al., 2020) argue, the dominance of the English language in scientific publishing and communication creates strong path dependencies which can create both challenges and opportunities for research and collaborations in different countries. The majority of the studies included in this synthesis were undertaken in the Philippines, which could be influenced by the high levels of English spoken there, in part due to the country's American colonial history.

A combination of the pilot nature of a qualitative evidence synthesis within the marine social science field, and the issues noted above, meant that a significant number of relevant studies were not identified through database searches. While supplementary searches can often be considered as a 'mopping-up' tool, they were of significant importance in the identification of studies in this evidence synthesis, which otherwise could have led to an even greater bias towards particular journals and epistemologies,

as well as authors from high-income countries. Given how high the number of studies identified through supplementary methods, it is likely that a number of relevant studies may still have been missed.

5.3.3 Critical social science and ethnographic studies

Another key reflection from the evidence synthesis process was the importance of studies with an explicit or implicit focus on critical approaches and power, and the value of critical geography, political ecology, and political anthropology for conceptually framing and analysing studies on natural resource governance.

Despite the key role that these studies played in the identficiation of themes across studies, a number of them could be seen as 'poor' quality according to the criteria of the critical appraisal, in particular for sampling strategy and data analysis. I would argue this is less to do with the study quality but more to do with disciplinary and epistemological norms. For example, in ethnographic research, data collection and analysis are highly inductive, iterative, and reflexive, making it difficult to report on. Similarly, it is challenging to report on sample size and sampling strategy given that a large proportion of the study sample would be identified and participate in the study through the array of chance encounters, informal conversations, and daily activities that are at the heart of ethnographic research. With evidence synthesis' foundation in the largely positivist and reductionist paradigm of medical sciences, I would argue that the critical appraisal process and reporting norms are incompatible with the ethnographic and critical social science studies included in this synthesis.

As the ethnographic studies included in my synthesis revealed, barriers and facilitators to engaging in livelihoods are strongly shaped by the complex interaction of social differences and social relations. There is a longstanding critique of natural resource management research and practice overlooking social cleavages (e.g. gender, age,

class, ethnicity), instead simplifying to the general homogenous categories of 'local community' or 'fisher/farmer' (Walker 2001; Eder, 2005; & Fabinyi et al., 2010 as cited by Fabinyi, Evans, & Foale, 2014), commonly referred to as the 'myth of community'. Context-specific social hierarchies and systems, structured by complex, fluid, and locally constructed dynamics require grounded research to understand. Ethnographic methods like participant observation, observation of daily life, and informal conversations with people can reveal a great deal about social complexity and power (Fabinyi et al., 2014).

This is especially important with the research dynamics – including in my own doctoral research – evident in the tropical marine field, where North American, European and Australian science programmes predominantly shape knowledge production (Partelow, Hornidge, et al., 2020). Of the final 18 studies included in this synthesis, only three had a lead author that was based at an institution in Southeast Asia, with lead author institution primarily being in Oceania, North America, or Western Europe. Given the nature of this research dynamic, and the context-specificity of qualitative research, the role of embedded ethnographic research is especially important.

With a common pattern of foreign researchers conducting studies, often in collaboration with NGOs and local partners, critical social science and ethnographic methods can play an important role in deepening the understanding researchers have of culture, building trust with communities, and reflecting upon the power dynamics of the research process and those involved. Often collaborations through NGOs or engagement with village chiefs/heads may obscure power imbalances that exist within communities, meaning more marginalised and excluded voices may not be reached. Identification of research participants may be tied to existing tensions or inequalities, whereby influential community gatekeepers identify friends and family (e.g. from the

same ethnic group or political persuasion). In these circumstances, the researchers may only collect data that serves to reinforce existing dominant perspectives from the community, while not actually reflecting the diversity of perspectives – in particular those less heard. This echoes the longstanding criticisms of participatory development undertaken by governments and NGOs, which have been argued as continuing top-down dynamics, while also commonly excluding marginalised groups and exacerbating inequalities (Agarwal, 2001; Cooke & Kothari, 2003).

5.3.4 What constitutes evidence?

Further to the location and disciplines of studies included, there are important considerations around the types and sources of evidence that are drawn upon in systematic reviews. With the increasing uptake of evidence-based decision-making among environmental policymakers, this question has arisen among critical environmental social scientists researching conservation. According to Adams & Sandbrook (2013), evidence-based conservation reviews are dominated by sources of evidence from the formal research literature (both published and web-searchable literature, and largely quantitative), in particular by professional researchers publishing peer-reviewed academic literature. This has been argued to centre Western epistemologies and science as expert judgement against which other types of knowledge should be evaluated; 'the assumption is that scientists themselves are detached from the world and operate in a value-free environment (Berkes, 1999: 176).

As Adams & Sandbrook (2013) argue however, 'evidence is never neutral (it never speaks for itself) because both science and policy-making are shaped by discursive practices that allow particular observations, findings or records to count as evidence' (2013: 332), at the same time discrediting other sources and formats such as Indigenous, local, and traditional ecological knowledge, which are framed as anecdote

and myth (Sutherland et al., 2004). Research has shown however, that these diverse, culturally embedded and context-specific knowledge systems can make fundamental contributions to conservation and environmental management decision-making and practice (Aswani et al., 2012; Cullen-Unsworth et al., 2018; Fraser et al., 2006; Gray et al., 2017; Sheil & Lawrence, 2004). A critical point here is about the nature of expertise, and recognition that it is not only derived from qualifications, certifications, and academic publications, but also the lived experiences and practice-based knowledge that cannot be separated from the cultural traditions and values of which they are part. Although still very marginal, there are early conversations about how evidence synthesis might incorporate Indigenous knowledge, as well as arts-based qualitative research (Hannes, 2022).

Conducting a systematic review largely by myself, I found myself hard-pressed for time to conduct thorough grey literature web searches, let alone searching for other sources of evidence, such as Indigenous, local, and traditional ecological knowledge. As Adams & Sandbrook argue in relation to conservation evidence:

> The time and resources available force the reviewer to take practical decisions to limit the task, and only by setting tight criteria of acceptability is it possible to reduce the world of evidence to a small number of papers that can be read and from which tables can be compiled. Our concern is that much potentially valuable information is lost in this process because it is not legible to the technology of systematic review (2013: 331).

As I synthesised the studies in my evidence synthesis and wrote-up the findings, I became increasingly uncomfortable in claiming that my synthesised findings represent the 'evidence base' of the subject matter, when there is likely to be a vast amount of information and knowledge in different formats beyond academic publications and grey literature sources relevant to the questions I was asking Indeed, according to the Indigenous academic, Darren Ranco (2022), for Indigenous Peoples the very word

'evidence' is often loaded with connotations of violence, theft, and dispossession rooted in colonial science.

Much of these diverse forms of evidence are likely to have been challenging and/or even impossible for me to have included in an evidence synthesis in light of the language, time, and resource-constraints of undertaking a systematic review as part of a PhD. I would argue that this challenge extends to broader evidence synthesis methodologies due to the knowledge politics of academia and the Eurocentrism of science and research. Claiming something represents an evidence base risks unintentionally or intentionally excluding information, driven by its inability to fit within the criteria and epistemologies of systematic review.

It is important to acknowledge the progress that has been made in expanding the types of research/data that are included and considered valid in evidence synthesis. There is increased recognition of the value of QES by policy-makers, for example, in the UK QES informs decision-making by the National Institute for Health and Care Excellence (NICE), and the WHO uses QES to inform policy. The environmental field continues to be further behind however, with the Collaboration for Environmental Evidence (CEE) only just beginning to think about how QES and developing guidance for them. In both cases however, there is still limited integration of a vast amount of knowledge and information which can be considered as valuable evidence – such as Indigenous and local knowledge – especially in light of the complex, messy social, economic, and political contexts in which conservation and environmental management occur (Adams & Sandbrook, 2013; Bennett, 2016). An important step could be adapting systematic review methodologies to integrate these diverse sources, or more explicit acknowledgment that the findings of evidence syntheses represent a portion of the available evidence which can be complemented by other sources.

Despite these challenges and tensions around epistemologies and research design, conducting my QES played an important role in setting the scene for aspects of my broader primary research related to livelihoods, equity, and governance.

5.4 Summary

This evidence synthesis highlighted the prevalence of interlinked contextual drivers of livelihood change across contexts. Declining marine resources, rising debt, the influence of global markets and new opportunities, and material needs and desires are influencing livelihood shifts. Gender, age, and the interlinked characteristics of class, ethnicity, and social status can act as major barriers and facilitators of these shifts, with differences in inter-generational values and perceptions of fishing a particularly powerful factor.

This synthesis identified how social characteristics shape the processes and outcomes of coastal governance, with a common pattern of elites capturing the benefits of new opportunities, while exacerbating the marginality of other groups. This drives procedural and distributive inequities of the objectives, processes and outcomes of governance. Rising competition for coastal space, with new and resurgent interests from state and nonstate actors commonly exclude the perspectives of small-scale fishers in favour of conservation and tourism. Across the studies in this synthesis, when livelihood change was perceived to have had broadly positive benefits, it was in instances of locally-led development as opposed to being initiated by external state and nonstate actors.

Conducting this QES provided useful context to the livelihoods of coastal communities, largely through drawing on studies from Indonesia and the Philippines. It indicated the centrality of governance and power to the research questions I was initially asking, the

way this influences how decisions are made and by whom, and whose objectives, perspectives, values, and interests are included and excluded in natural resource management policy and practice. With a number of the included studies conducted on Palawan, this helped develop my contextual understanding of natural resource use and governance on Palawan.

From a theoretical perspective, the QES led me to explore theories of environmental governance that could capture and integrate both the structural aspects of governance (e.g. different state and nonstate actors across different scales of governance), and the power dynamics and social relations that influence the relationships between them. My QES also highlighted the value of studies drawing from political ecology concepts related to equity and marginality for exploring questions related to social complexity, unequal power dynamics, and resistance.

With this in mind, methodologically the QES also informed the development of my research methods detailed in Section 4.2 of Chapter 4, building on the value of ethnographic approaches to my synthesis. This contributed to my decision to employ a mix of ethnographic approaches while living in *Barangay* Bucadan, recognising the value of ethnography and anthropology for exploring local-level social contexts and conditions, and incorporating social diversity and power into human-environment relations (Fabinyi et al., 2010; Fabinyi et al., 2014). These findings are presented in the following three empirical chapters based on my primary research on Palawan.

6 Environmental degradation, decentralisation, and donor-driven change: Power by design in polycentric governance

6.1 Introduction

As detailed in Chapter 3, power by design is power that is written, legislated, and visible in the policies that design governance processes and structures, commonly used by independent states and government authorities. This authority – and the policies themselves – are codified into law. Decision-making powers can be dispersed in many ways such as through establishment of regional organisations or the creation of semi-autonomous agencies (Morrison et al., 2017). The power and authority to design policies is sometimes decentralised to different levels of governance, for example to local government departments and community-level institutions (Berkes, 2015).

This chapter starts by providing an overview of the formal national administrative governance structure in the Philippines, and how this grants legislative and decision-making authority to different levels of government. After this I discuss how decentralisation of environmental governance has evolved in the Philippines since the 1980s – in part driven by the funding of international donors – and how authoritative power to set rules and design incentives for environmental management has been distributed across multiple governing authorities at different scales.

I then provide important contextual information to environmental use on Palawan and in the municipality of Taytay, after which I discuss how this has influenced the design properties of the governance system on Palawan and Taytay. I highlight how the formal governance structure grants authority to meso-level governance actors supported by NGOs, but also results in overlapping jurisdictions and contradictory objectives for environmental use and management between national-level agencies

and municipal government departments, in particular for management of the LRFT and the provision of livelihood support programmes to coastal communities. This chapter plays an important role in detailing and analysing the formal design properties and structures of governance on Palawan, after which Chapters 7 and 8 analyse how actors use pragmatic power and framing power to intersect with, advance, and undermine power by design.

6.2   National administrative governance in the Philippines

The Philippines has 17 regions, 81 provinces, 146 cities, 1488 municipalities, and 42,036 *barangay*s (Philippine Statistics Authority, 2016). The local government administrative system is three-tiered, consisting of: 1) provinces and highly urbanised cities; 2) cities as 'component cities' and municipalities; and 3) *barangay*s as the smallest administrative unit (see Figure 13).

The Philippines is a constitutional republic. The national government is divided into three different branches: *Legislative* (Congress comprised of a House of Representatives and the Senate); *Executive* (exercised by the government under the leadership of the President, elected to a single six-year term); *Judicial* (vested in the courts, with the Supreme Court of the Philippines as the highest judicial body) (Cullinane, 2021).

As per the Local Government Code of 1991, there are four decentralised local government unit (LGU) administrative divisions in the Philippines, with devolved state powers (see Figure 13). The first of these levels, regional, has limited power, and is mostly for administrative purposes. A provincial LGU is comprised of municipalities and component cities headed by an elected governor. Provincial LGU offices for different government agencies are responsible for province-wide decision-making.

Municipal LGUs are comprised of government offices responsible for decision-making in one municipality under the authority of an elected mayor.

Through power by design, a significant amount of formal decision-making authority, legislative power, responsibilities, and resources are held at the provincial and municipal levels; according to the Constitution of the Philippines, local governments 'shall enjoy local autonomy' (Republic of the Philippines, 1987). A significant amount of authoritative power is held by provincial governors and municipal mayors as the highest authority at these respective levels of government.
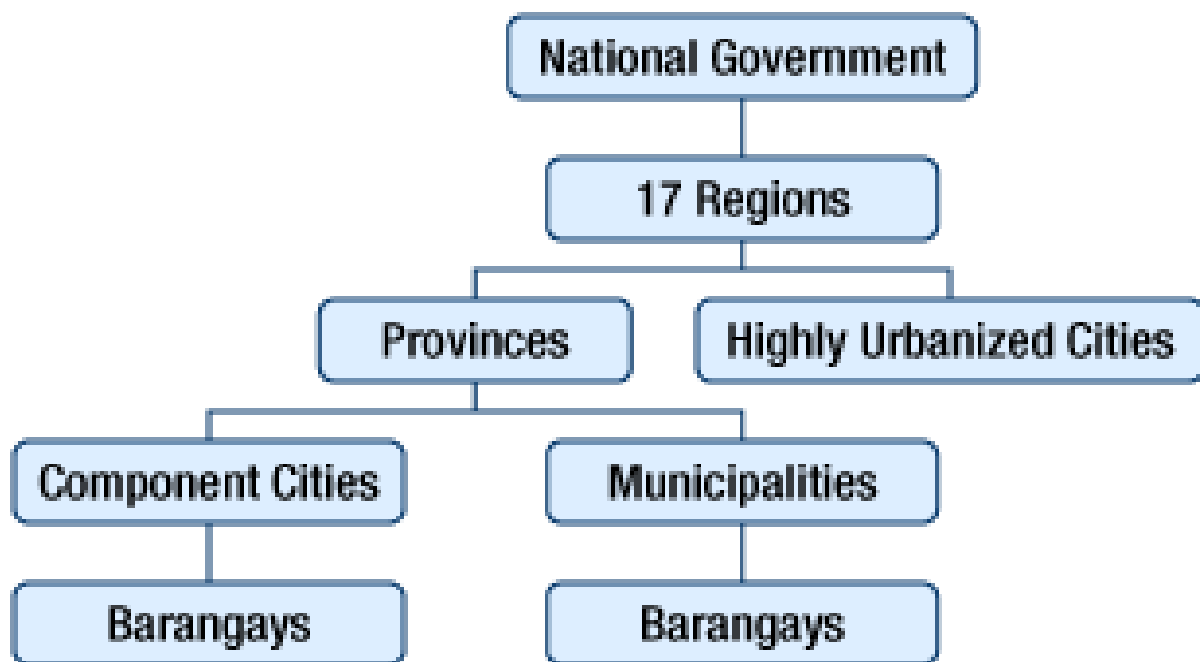
Figure 13. Philippines Administrative System (Source: MLIT, 2009)

The smallest administrative unit in the Philippines is the *barangay*. Depending on the context this can refer to an urban neighbourhood, a sizeable urban district, a single hamlet or village, a small town, or a rural district comprised of disperse settlements. The main political authority in a *barangay* is the *barangay* captain, similar to a village chief. Each *barangay* has a legislative body called the *Sangguniang Barangay,* made

up of the *barangay* captain and seven *barangay kagawads* (*barangay* councillors).

The *barangay* captain and *kagawads* approve resolutions and disburse funding they

have been allotted by the municipality, giving them power and authority to shape civic

development and welfare in the *barangay. Barangay* officials also chair various

committees that oversee *barangay* administrative activities such as Environment and

Peace and Order. All officials are elected on three-year terms with no limit placed on

the number of terms. Through power by design there are no limits on the number of

terms that *barangay* officials can remain in post, and in *Barangay* Bucadan some

barangay officials have occupied their roles for a number of terms extending beyond

a decade. *Barangay* officials often work closely with members of *barangay* 'People's

Organisations[11]', for example through Fisherfolk Associations that represent the

interests of small-scale fishers.

A *barangay* is further divided into *puroks* (a cluster of 20-50 households) or *sitios* (a

cluster of households/hamlets across a wider area as with many rural *barangays).*

They are not officially recognised as a LGU (as mentioned, *barangay* is the smallest

legal administrative unit), but have some limited administrative and service functions.

Puroks elect a *purok* leader as well as other voluntary positions, including for the

organisation of festivities and sporting activities.

As I will discuss in Chapters 7 and 8, the authority granted to meso-level provincial

and municipal politicians and technocrats – and *barangay* officials at the community-

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[11] In Filipino civil society, People's Organisations play an influential role in working for the promotion of protection of rights of different groups such as Indigenous peoples, fishers, farmers, teachers, health workers etc. For example, in *Barangay* Bucadan there is an elected Fisherfolk Association made up of fishers whose mandate it to represent the rights of fishers, which itself is part of the Federation of Small Fisherfolk Organisations in the Philippines.

scale – through power by design intersects with pragmatic and framing power to both advance and undermine livelihood and environmental outcomes on Palawan.

6.3 Decentralisation of environmental governance

Historically, traditional authority and resource tenure over coastal resources were defined by *barangays*, but this was eroded during the Spanish colonial period with authority superseded by municipal government control (Pomeroy & Courtney, 2018). During the American colonial period and under the regime of the former dictator Ferdinand Marcos Sr[12]., decision-making power and authority was centralised by national government (Brillantes, 1987).

Devolution and decentralisation of authority for management of natural resources to local governments through the Local Government Code of 1991 was a major national policy shift that has supported more localised management efforts (White et al., 2005) (see Figure 14). This legislation transferred control of coastal waters up to 15km offshore to municipal governments. Here we see that power by design has given local government a greater say in how to manage marine resources compared with the top-down power structures of the Philippines' authoritarian period. According to Morrison et al. (2019), the inclusivity of a diverse range of social actors in polycentric governance is often viewed by stakeholders as a more legitimate form of governance.

According to the Local Government Code of the Philippines, 'local government units shall promote the establishment and operation of people's and non-governmental organisations to become active partners in the pursuit of local autonomy (Republic of the Philippines, 1991: 12). According to Section 35 of the Code:

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[12] Henceforth I will refer to Ferdinand Marcos Sr. as Marcos

local government units may enter into joint ventures and such other cooperative arrangements with people's and nongovernmental organisations to engage in the delivery of certain basic services, capability-building and livelihood projects, and to develop local enterprises designed to improve productivity and income, diversify agriculture, spur rural industrialisation, promote ecological balance, and enhance the economic and social wellbeing of the people (Republic of the Philippines, 1991: 12-13).

This indicates how the design properties of governance in the Philippines – notably decentralisation and the granting of autonomy to meso-level actors – also formally recognises NGOs and People's Organisations as key governance partners with influence over environment and development outcomes in the Philippines.
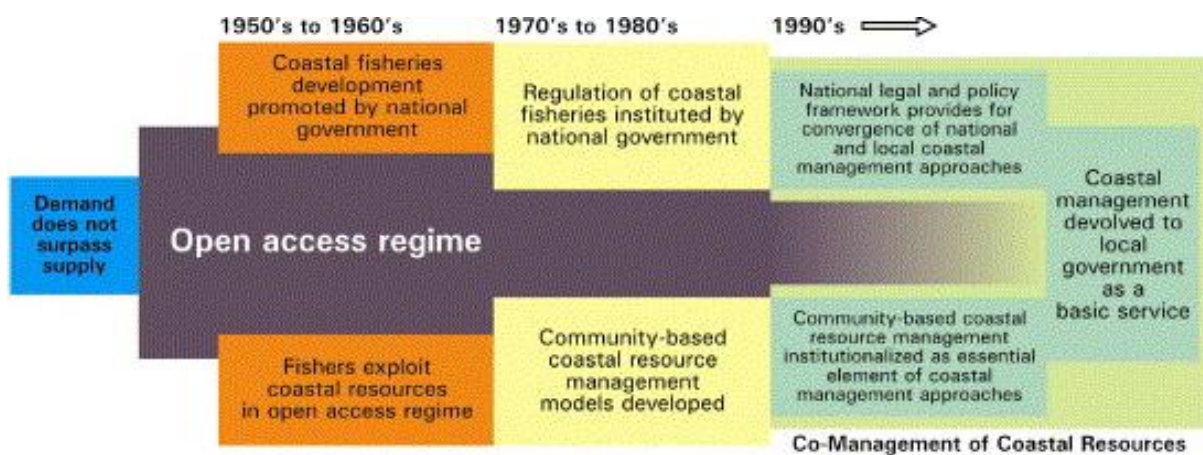
Figure 14. Transition from central to local government authority (Source: White et al., 2005)

The 1980s saw an influx of donor-funding for projects focused on natural resource management, conservation, and development in the Philippines. It was recognised as a global frontrunner in the establishment of community-based management of coastal resources, soon followed by co-management in the 1990s (Pollnac et al., 2001; R. S. Pomeroy & Pido, 1995). In the 1990s-2000s there was a strong focus on MPA management (Pomeroy & Courtney, 2018). In the 2000s this expanded to Integrated Coastal Management (ICM) (Courtney & White, 2000; Lowry et al., 2009), followed by Ecosystem-based Fisheries Management (EBFM) in the 2010s (Aswani et al., 2012).

Much of this work has been supported through and influenced by a substantial amount of bi- and multi-lateral donor funding, including the USAID-funded Coastal Resource Management Project (CRMP) from 1996-2004, and the Asian Development Bank-funded Integrated Coastal Resources Management Project (ICRMP) from 2007 to 2017. These projects sought to institutionalise community-based coastal resource management processes and systems through local government capacity-building, community participation, and policy formulation aimed at enhancing the institutional and policy framework for coastal resource management in the Philippines (ADB, 2019). Much of the work was implemented by the Department of Environment and Natural Resources (DENR), but as is often the case with donor-funded programmes, bi- and multi-lateral donors are able to shape top-down power by design through influencing the activities, approaches, and legislation enacted by the programmes through policy guidance, technical assistance, and incentives which influence the structural properties and formal rules of the governance system (Morrison et al., 2019).

The DENR also have authority to establish and manage ecologically and nationally significant protected areas (including MPAs) through the National Integrated Protected Areas System (NIPAS) Act of 1992 (R.A.7586) (Republic of the Philippines, 1992a), exercised by a Protected Area Management Board (PAMB) composed of representatives from the DENR, LGU, affected communities and the private sector (Mayo-Anda, 2016). This gives the DENR the formal authority to design, legislate, and implement protected areas, and the associated rules and regulations that govern resource use and access.

The primary national legislation that governs the management of fisheries is the Philippine Fisheries Code of 1998 (R.A. 8550) (Republic of the Philippines, 1998), which integrates all laws pertinent to the development, management, and conservation

of fisheries and aquatic resources. This includes regulations that prohibit the taking or catching of rare, threatened or endangered species, prohibited fishing activities/gears (for example use of sodium cyanide, explosives, and compressors), and the associated penalties for non-compliance. The Philippine Fisheries Code also grants cities and municipalities the power to manage the use of fisheries and aquatic resources by municipal fishers out to 15km offshore, including the establishment of measures such as MPAs. Commercial fisheries, on the other hand, are managed by the Bureau of Fisheries and Aquatic Resources (BFAR), which is part of the DENR.

This highlights how the design properties of the governance system on Palawan distributes power across multiple governing authorities at different scales, each with a degree of independence to design and implement natural resource management policies (Ostrom, 2010b). It also provides an illustrative example of how the structures and functions of governance systems in the Philippines have been shaped by the state's legitimate authority to legislate and create formal rules which manifest as power by design (Jordan et al., 2013; Morrison et al., 2019).

6.4   Environmental use on Palawan

Palawan is a global biodiversity hotspot known for its high rates of endemism, with 42 of the Philippines' 67 endemic species being endemic to Palawan (UNESCO, 2022). Its coastal and marine ecosystems include 379 species of corals, 13 species of seagrass, and 31 species of mangroves (with the highest remaining cover in the Philippines) (UNESCO, 2022). Palawan has a diverse range of endangered marine species, including the only population of the critically endangered Irrawady dolphin (*Oracella brevirostris)* in the Philippines, whale sharks *(Rhincodon typus)*, tiger sharks (*Galeocerdo cuvier)*, manta rays (*Manta sp.),* and dugong *(Dugong dugon*), with

breeding grounds for hawksbill (*Eretmochelys imbricate)*, green (*Chelonia mydas)*, loggerhead (*Caretta caretta)*, and leatherback (*Dermochelys coriacea)* turtles (WWF, 2013). Tubbataha Reefs National Park, a UNESCO World Heritage Site widely regarded as the crown jewel of marine biodiversity and conservation in the Philippines, is itself located 165 kilometres to the east of Palawan (UNESCO, 2022). Palawan's terrestrial ecosystems also hold significant ecological value, with one of the largest and most diverse old-growth and second-growth tropical rainforests in Southeast Asia, as well as karstic limestone and beach forest habitats (UNESCO, 2022).

Palawan's rich and diverse natural resources support a range of livelihoods and sectors. In 2004, areas under agricultural land comprised 15.2% of the total land area, marking an 18% increase over the 1991 level, with the majority being coconut, followed by banana and then cashew (Philippine Statistics Authority, 2004'). Temporary rice-farming is also a major livelihood, with pig-raising and chicken-raising the main livestock and poultry activities.

Marine resources also play a fundamental role in supporting commercial and small-scale fishery and aquaculture livelihoods, with Palawan long being at the top of the country's list for total amount of marine municipal fisheries production (WWF, 2013). Marine resource-based livelihoods are diverse, including a mix of multi-species and multi-gear capture fisheries, seaweed farming, gleaning, aqua/mariculture (including pearls and oysters), fish processing and fish trading, for both local and export markets. Small pelagic and demersal fish are mostly traded and consumed locally, with squid and grouper both being important exports to East Asia via Manila.

Declines in nearshore fish stocks on Palawan have forced fishers to travel further offshore for longer periods in order to secure enough catch. This has contributed to

noncompliance with fishery regulations through illegal fishing within MPAs, while also increasing fishing intensity and competition in already degraded nearshore areas outside of MPAs as highlighted in Chapter 5 (Dressler & Fabinyi, 2011; Fabinyi, 2010). This is leading to increasing conflicts and social tensions between and among different user-groups, contributing to reduced income and food security, and a cycle of increased poverty and resource degradation (Pomeroy et al., 2007).

Palawan also has a significant mining industry, with rich deposits of nickel, chromites, gold, copper, cobalt, and mercury, leading it to become one of the most attractive mining investment destinations globally (Novellino, 2014). The 2000s saw growing concerns and opposition by church denominations, environmental NGOs and academics due to environmental and social impacts, with the majority of mining concessions located in ancestral domain claims of Palawan's Indigenous peoples (Seki, 2014). This has led to the establishment of 'Antimining' Networks by Indigenous peoples on Palawan, and the Save Palawan Movement; as a result of campaigning and advocacy, a moratorium was placed on all mining activities in 2009. highlighting the powerful accountability roles that nonstate civil society actors occupy on Palawan. Recent years has seen a return to pro-mining policies, with different large-scale mining permits on Palawan covering 38,202 hectares, with mining applications covering almost the entire island. Overt opposition to mining has also resulted in the murder of environmental advocates (Novellino, 2014).

Palawan has a long history of commercial logging, with vast concessions of land granted to private companies by the national government during the 1970s and 1980s; the largest concessions were granted to the company owned by the current Governor of Palawan, demonstrating the connection between politics and natural resource use and management on Palawan (Dressler, 2009).

6.4.1 Taytay

Taytay is a municipality in the north of Palawan, located between the municipalities of Roxas, San Vicente, Dumuran, and El Nido. Taytay is made up of 32 *barangay*s, with the municipal capital being *Poblacion*. Based on the 2015 census the population of Taytay was 75,165, with over three quarters of households below the poverty line (Gonzales & Reyes Jr, 2017). The municipality is highly dependent on fisheries and agriculture, with 70% of the population dependent on fisheries (WWF, 2013).
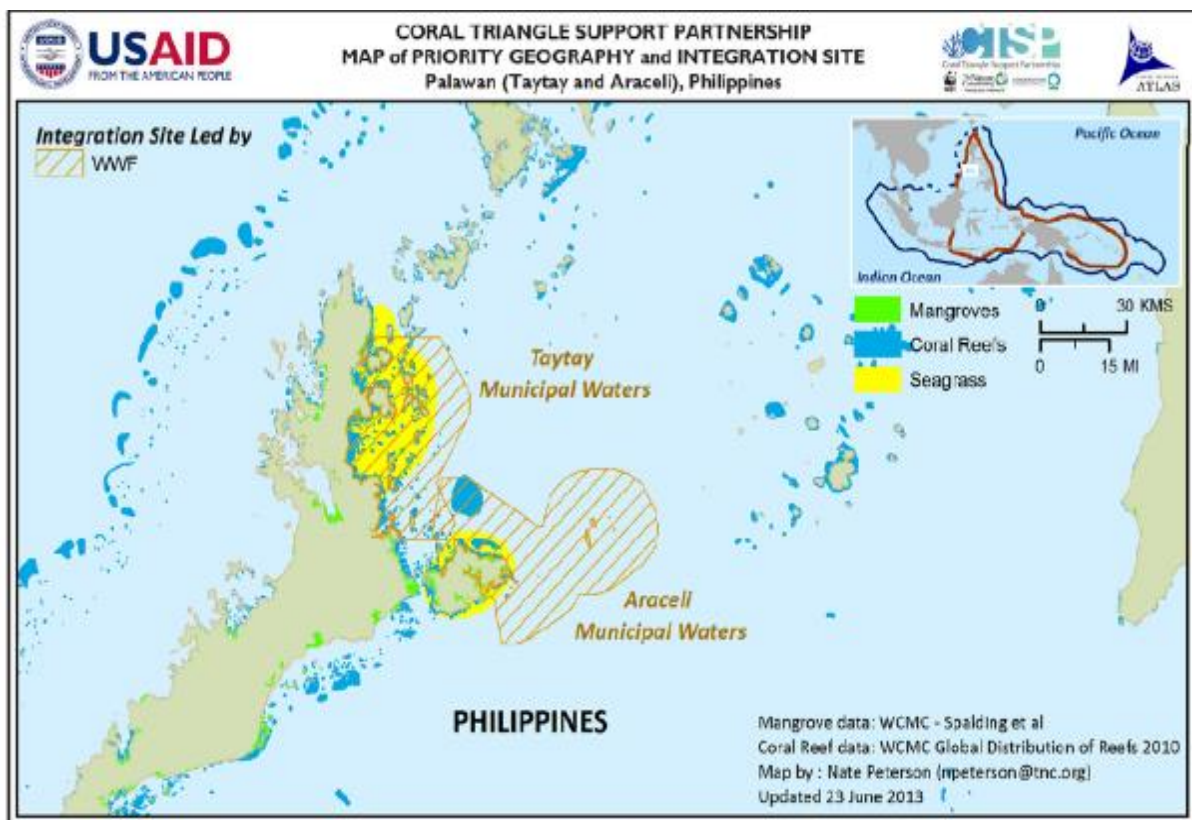
Figure 15. Map of northern Palawan showing locations of mangroves, coral reefs, and seagrass (Source: Flower et al., 2013)

Taytay has a land area of 126,768 ha., and an even larger area of municipal waters, which includes two ecologically distinct coastal areas. To the west is Malampaya Sound – an area of 107,000 ha. formerly referred to as the 'Fishbowl of the Philippines' – where widespread use of illegal fishing methods and overfishing have severely

degraded the ecosystem (WWF, 2013). Along the east coast of Taytay are Taytay

Bay, Shark Fin Bay and Paly Bay. Taytay Bay (see Figure 15 for locations of coral

reefs, mangroves, and seagrass), covers 196,000 ha. and is a known habitat for

dugong (*Dugong dugon*). The average live coral cover of reefs in Taytay Bay and

Malampaya Sound is 49.9% (47.5% in Taytay Bay and 57% in Malampaya Sound),

with a total of 224 species of fish (Municipality of Taytay, 2015).
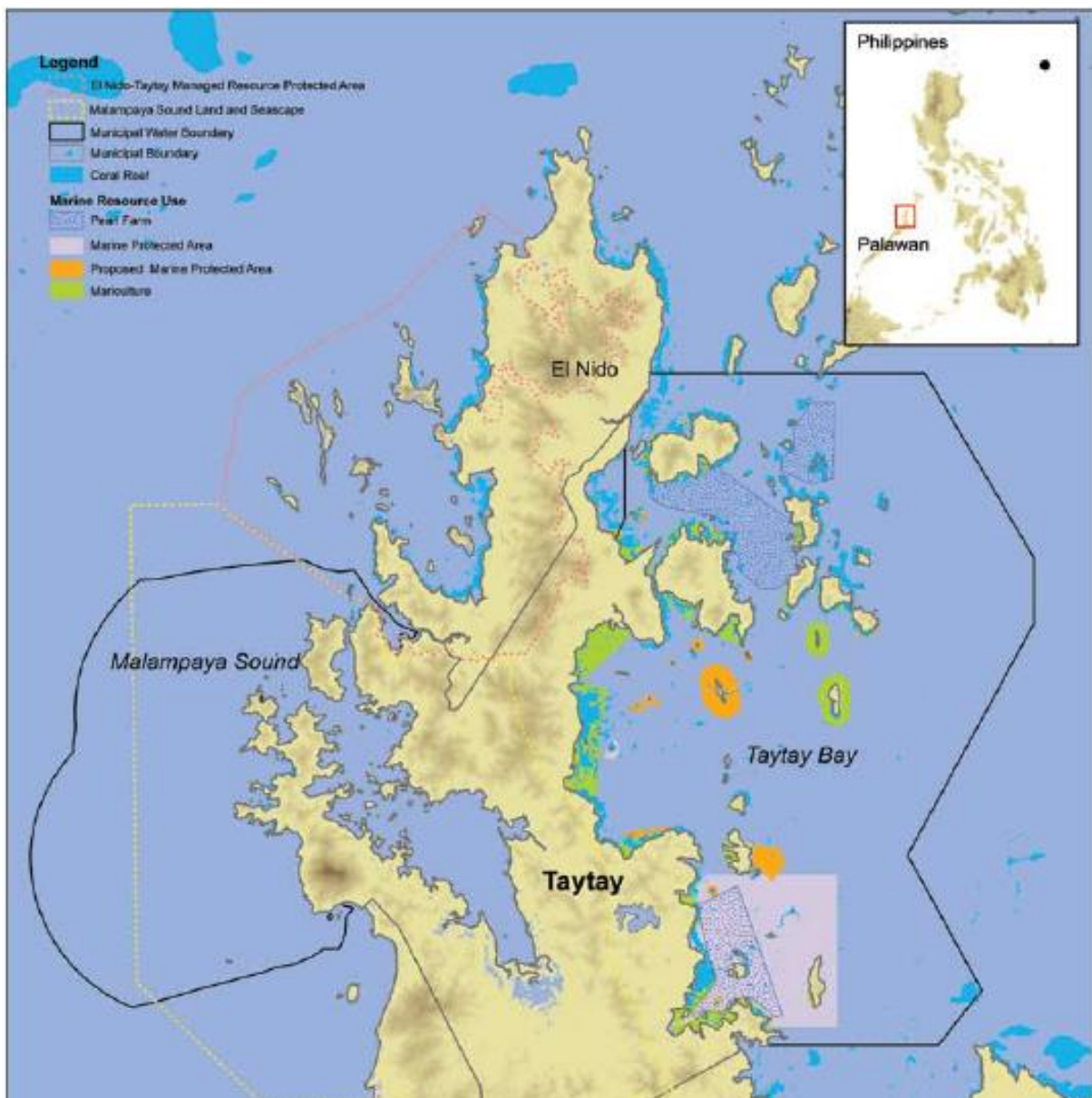
Figure 16. Resource-use map of municipality of Taytay (Source: WWF, 2013)

Taytay ranks among the top producers on Palawan for anchovies (*Engraulidae sp.),* leopard coral grouper (*Plectropomus leopardus),* red-belly yellow-tail fusilier (*Caesio cuning*), and tuna (*Thunnus sp.*) (WWF, 2013), reflecting the high dependency the municipality has on fishery resources. A number of mariculture livelihoods have been established in Taytay Bay, primarily by a combination of the municipal government and private companies (see Figure 16 for a map of resource-use areas). In 2010 the vast majority of these were pearl farming (18,000 ha.) and seaweed farming (1000 ha.) (WWF, 2013), which based on conversation I had with government and NGO staff both continue to be important sectors for the municipality in the present-day.

Since the late 1970s, the LRFT for grouper (known locally as *lapu-lapu*) has expanded rapidly in Palawan – in particular in the northern municipalities of Palawan such as Taytay – accounting for 70% of the Philippines' total exports of grouper (valued as at least US$30 million) (Palla et al., 2015; R. S. Pomeroy et al., 2008). This has been driven by rising global demand, in particular in Hong Kong and China, where it is served at luxury banquets as a status symbol (Fabinyi et al., 2012). It is the primary livelihood for coastal communities in the north of Palawan – with Taytay Bay being a major source of fish – where it has made a major contribution to economic development:

> According to the income profile, LRFT was not only supporting numerous households; it was keeping them out of poverty. An average household in Taytay engaged in LRFT earned PhP382,940 (US$9,300) per year. This was almost five times the poverty threshold for the province of Palawan at PhP83,100 (US$2,000) per year. Almost 54% of the LRFT producer's household income was from LRFT. Although on average the household had two to three income sources and used two fishing methods, its dependence on LRFT was still highly significant. The municipal government likewise earned a substantial amount from LRFT through licensing and other fees (WWF, 2013: 17)

The profitability of the sector led many people to switch to LRFT livelihoods; leopard coral grouper (known locally as *suno*) is especially lucrative for small-scale fishers, valued 50 times higher than common fish species due to being prized in East Asia for its red colour (Fabinyi et al., 2012; WWF, 2013). This was said to have brought significant wealth to *Barangay Bucadan*, with people being able to send children to college, purchase land in Taytay *Poblacion*, and build large specialised boats for the LRFT.

With growing numbers of people engaging in the fishery, a decline in fish stocks and average size has led to small-scale fishers 'caging' and 'culturing' undersized fish, keeping them in sea pens/cages and feeding them until they reach the 'good size' desired by overseas buyers. In 2006 there was a dramatic increase in the number of cages in Taytay Bay, and by 2008 these cage operators accounted for 69% of the total number of fish cages in all of northern Palawan (WWF, 2013). This has incentivised the catching of juvenile fish which require a significant amount of fish to feed their growth. This is said to have led to negative environmental impacts, with the sector seen to be a driver of destructive fishing methods such as cyanide – to stun Grouper in order to catch them – and blast fishing – to catch a sufficient volume of 'trash' fish in order to feed the Groupers (Fabinyi, 2012; R. S. Pomeroy et al., 2008).

6.5   Environmental governance on Palawan

Since the 1990s, Palawan has received a significant amount of international funding and support for coastal resource management due to its unique biodiversity (Austin, 2003). 'Palawan's forests and Indigenous Peoples soon became the twin beacons of conservation and development' (Novellino and Dressler, 2009: 168), leading to an influx of donor funding (Dressler, 2009). In part due to these activities and global

attention, Palawan has two UNESCO World Heritage Sites, and the entire province was designated a UNESCO Man and Biosphere (MAB) reserve in 1990 (UNESCO, 2018).

In 1992, with support from European Union (EU) funding, 'the Strategic Environmental Plan (SEP) for Palawan' was developed and passed (R.A. 7611), delineating core zones of strict protection and other zones where activities are restricted and controlled: 'a comprehensive framework for the sustainable development of Palawan compatible with protecting and enhancing the natural resources and endangered environment of the province' (Republic of the Philippines, 1992b). Passed as a national law that only applies to the province of Palawan, the SEP remains the only example of this type of legislation in the Philippines.

The rules and regulations designed and implemented under the SEP – and supported by the establishment of Palawan as a UNESCO MAB Reserve – are an example of authoritative, legitimate power exercised by the state in pursuit of their objectives for natural resource use and management, with significant and deliberate impacts on the structural properties and processes of environmental governance on Palawan. This use of power gives formal legitimacy to different conservation and development activities in different parts of the island, in turn influencing livelihood and environmental outcomes for resource dependents peoples and other stakeholders. Under the SEP, the Palawan Council for Sustainable Development (PCSD) was established as a multi-sectoral and interdisciplinary body responsible for the governance, implementation, and policy direction of the SEP (PCSD, 2022). PCSD is responsible for the issuing of resolutions and guidelines to implement the SEP, and is made up of the PCSD Council (comprised of political appointees from national ministries, LGUs, and representatives from the private sector and NGOs), and the PCSD Staff with the technical

responsibility to coordinate the policy, functions, and implementation of programmes directed by the PCSD Council (PCSD, 2022). The PCSD also promotes co-management between communities and local government, and public-private partnerships, especially amongst LRFT actors and government agencies (Flower et al., 2013).

Under the SEP, PCSD is establishing the Environmentally Critical Areas Network (ECAN) which designates core and buffers zonations (with allowed and prohibited human activities in each) across terrestrial, coastal and tribal (Indigenous) areas (Dressler, 2009). This provides an example of how power by design can be used by the state to legally designate which activities (such as livelihoods and conservation) are allowed or prohibited in different parts of the island.

However, the establishment of PCSD has resulted in conflicting and overlapping jurisdictions and management systems of different government agencies, including law enforcement mandates (Mayo-Anda, 2016). With different management agendas, zoning and devolved management initiatives each supported by different sets of regulations, this has resulted in legislation that is often contradictory (Dressler, 2009). According to Dressler (2009), this has caused past jurisdictional conflicts between the PCSD and the provincial DENR about the ancestral lands and domain claims of Indigenous peoples on Palawan. In this instance the Department of Justice's legal opinion verified that the SEP gives PCSD legal authority over the DENR, due to PCSD's unique status in the Philippines as an agency with national government legislative power despite its mandate only covering a single province.

Furthermore, while in theory the composition of the PCSD Council presents opportunities for mutual learning, experimentation, and compromise through its

diversity of state and nonstate actors from different sector and levels and functions of government, in practice pragmatic and framing power appear to undermine these formal design properties a I detail in the following two chapters. This raises questions about the appropriateness and effectiveness of polycentric governance if overlapping jurisdictions and competing interests lead to conflicts as opposed to apparent mutual adjustment and conflict resolution.

6.5.1 Taytay

As part of the Local Government Code of 1991 (R.A. 7160) (Republic of the Philippines, 1991), the municipal government of Taytay is responsible for a range of public goods and services – financial management, social services, infrastructure development, economic development (including environment and natural resources), and public administration – with the formal authority to legislate and implement municipal ordnances and activities. Across Taytay various 'sustainable livelihood projects' have been initiated by the municipal government, in part as attempts to provide 'alternatives' to illegal fishing and the declining LRFT. In *Barangay* Bucadan, municipal agencies have conducted a range of seminars on seaweed farming, sea cucumber fattening, and tourism, while also providing some materials to initiate these activities.

A number of different local, national, and international NGOs are also active in coastal governance and management in Taytay. This includes Malampaya Foundation, C3 Philippines, Sulubaaï Foundation, and WWF, undertaking a range of project activities related to MPAs, fisheries management, social welfare programmes, and enterprise development. This work has been implemented primarily in the municipality of Taytay's two NIPAS sites: the El Nido-Taytay Managed Resource Protected Area (ENTMRPA)

declared in 1998, and the Malampaya Sound Protected Land and Seascape (MSPLS), established in 2000, both through the EU supported National Integrated Protected Areas Programme (NIPAP) (WWF, 2013).

Since 2000, WWF has undertaken conservation and coastal resource management activities in Taytay, working closely with the municipal government and non-state actors such as WPU, the NGO Environmental Legal Assistance Centre (ELAC), LRFT buyers, and coastal communities (WWF, 2013). Project activities were initially focused on conservation of the critically endangered Irrawaddy dolphin but expanded to MPA establishment and fisheries management planning, supported by research activities and livelihood programmes (WWF, 2013). This work includes direct project activities in *Barangay* Bucadan in collaboration with the municipal local government as will be discussed in more detail in Chapter 8.

In order to address concerns about the environmental impact of the LRFT on Palawan – in particular in northern municipalities such as Taytay – the government has sought to design and implement a regulatory framework to effectively manage it. The PCSD is the regulatory body with the authority to design this legislation, with the Council agreeing the policy direction and the Staff designing the policies themselves. Responsibility for enforcement sits with different actors across the provincial, municipal, and barangay levels; the power to enforce rules is granted through the state's decentralisation of authority, although the legislation itself is designed and enacted by the national level body PCSD.

Tensions between different government actors with competing mandates were evident from conversations I had with staff from the Municipal Department of Agriculture in Taytay:

> The local government now with [the] Mayor is struggling for alternatives, what will be given to the fisherfolks in three months' time [during the] off season [regulating the LRFT]? They are not allowed caging [of Grouper], they are not allowed catching, and trading, so what is the alternative livelihood? PCSD are not the one who give alternative livelihoods, it's us as the local government unit... [I11, Municipal Official]

From my interview with this government worker, there was an evident sense of frustration at the widespread prohibitions and regulations relating to the LRFT, which were perceived to undermine the municipality's management agenda to support the livelihoods of small-scale fishers. The national government's decentralisation of authoritative power to set rules and create incentives has resulted in contradictions between governance actors at different scales. The lack of coordination and alignment between these actors suggests an absence of mutual accountability, and a lack of transparency in decision-making during the development of legislation for the LRFT. It also suggests that cross-scale linkages between different levels of government are non-functional, with a lack of consensus and limited agreement on rules.

In the past, PCSD's attempts to implement province-wide legislation for the LRFT have been resisted and overturned by municipalities based on their legitimate right to manage the municipal coastal areas where the majority of fish are caught for the LRFT (Fabinyi & Dalabajan, 2011). This was the case in 2006 when municipalities successfully united together and forced the provincial government to back down over its threat of a moratorium on the LRFT (Dalabajan, 2009). This highlights how the design properties of the governance system on Palawan – which decentralises authority to meso-level actors – allows municipalities under the authority of elected municipal mayors to advance their agendas for management of the LRFT, while undermining the goals of the higher-level governance actor PCSD.

The relationships between PCSD, provincial and municipal politicians and bureaucrats, and small-scale fishers – and how these impact regulation of the LRFT and provision of livelihood programmes – will be discussed in more detail in Chapters 7 and 8 alongside additional governance issues related to illegal fishing and commercial development activities. These later chapters detail and analyse how power by design intersects with pragmatic and framing power to advance and undermine different forms of power and the resulting environmental and livelihood outcomes of different actors on Palawan.

6.6   Summary

Through power by design, the Philippines has a formal administrative governance structure which distributes decision-making and legislative authority across different levels of government. Through the Local Government Code of 1991, this grants significant authoritative power to meso-level governance actors comprised of government departments with different functions at the provincial- and municipal-levels, as well as the *barangay* (community) level, while also formally recognising the supportive roles played by civil society institutions such as NGOs. This gives significant authority for local government to design and enforce environmental rules and regulations, with municipal mayors and provincial governors playing an especially powerful role.

On Palawan and the Philippines more broadly, the structure and functions of environmental governance systems have been influenced and shaped by a succession of donor-funded projects by bi- and multi-lateral funders. These have played substantial roles in the design and implementation of Palawan's SEP, which included the establishment of PCSD as the primary government agency responsible

for environmental decision-making, with the authoritative power to independently legislate, create formal rules, design incentives, and distribute resources on Palawan. For management of nearshore coastal areas key to the livelihoods of small-scale fishers, through power by design municipal authorities have the power to set and enforce rules alongside national-level policies.

The formal governance system on Palawan is characterised by a range of different governance actors: multi-level (national, provincial, municipal, *barangay*); multi-type (e.g. general-purpose actors such as municipal departments, and cross-jurisdictional political units such as PCSD); multi-sectoral (e.g. government departments, private companies, NGOs, and community-based People's Organisations); and multi-functional (e.g. a mix of state bodies involved in different aspects of governance). However, the array of different governance actors has resulted in overlapping jurisdictions, competing mandates, and contradictory objectives. This indicates how power by design has resulted in tensions and conflicts between different governance actors, most notably for management of the LRFT and trade-offs between environmental and social outcomes. These governance challenges will be discussed in more detail in Chapter 8, which examines how the formal rules and regulations are implemented in practice through their (re)interpretation through social norms and relational cultural institutions in the Philippines.

7 Kinship, ethnicity, corruption and patron-client relationships: Pragmatic power in polycentric governance

7.1 Introduction

As outlined in Chapter 3, pragmatic power is the 'rules-in-use', shaped by the discretion of governance actors with different values, interests, aspirations, and strategies. Power is expressed through day-to-day practice in the management and use of natural resources, and is shaped by formal and informal institutions such as rules, regulations, norms, customs, and taboos.

Actors who exercise pragmatic power have often been imbued with 'practical authority', playing a vital role linking state and non-state actor policies with actions that happen 'on-the-ground'. High- and local-level bureaucrats and nonstate actors can act as pragmatic power-brokers that mobilise pragmatic power and link the various governance sites and levels. Pragmatic power is strongly associated with the granting or withholding of legitimacy for policies, compliance and non-compliance with management measures, and cooperation and conflict between stakeholders. It can be used to legitimise and support policies but can also be used to contest them, often in creative ways through which actors navigate or contest rules perceived as overly rigid or unpopular.

This chapter examines the role of pragmatic power on environmental governance and the implementation of environmental policies in a peripheral island community. Drawing on the concepts of institutional bricolage and critical institutionalism, I expand upon existing research on polycentric governance and power by demonstrating how governance institutions and environmental regulations overlay the existing cultural institutions which structure the relationships between meso- and community-level actors. My analysis also examines how this influences equity, transparency,

accountability, and legitimacy, and how this in turn impacts the environment. *Barangay* Bucadan is the qualitative case-study used to examine this, with a primary focus on intra-*barangay* and *barangay*-municipality relations, with additional dynamics between the municipal and provincial scales of governance, and relationships with NGOs.

These areas of inquiry were iteratively guided by the inductive use of ethnographic approaches, observing daily life, the interactions between different groups and individuals in *Barangay* Bucadan, and the informal conversations I held with people. This was complemented by the use of semi-structured interviews, FGDs, and participatory mapping to probe deeper into specific issues and phenomena that arose. With a key focus on the linkages and relationships between communities and meso-level actors within the *barangay* and municipality, I spent significant amounts of time speaking with *barangay* officials in *Barangay* Bucadan, and also interviewed municipal government bureaucrats. My understanding of the influential role of *barangay* officials as pragmatic power brokers was in part developed through reflexivity around my positionality, and the complex and messy process through which my research became politicised as village elites sought to influence its outcomes.

This chapter begins by presenting relational institutions and cultural values – ethnicity, clan and family, patron-client relations, fictive kinship[13] and relationships of debt – as forms of pragmatic power which structure social life in the Philippines, and influence natural resource use and management in *Barangay* Bucadan. Natural resource management processes – including livelihood development and regulation of resource-use – are strongly influenced by and intersect with relational cultural values,

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[13] Fictive kinship refers to forms of kinship and social ties other than consanguineal (blood) and affinal (marriage) ties.

dynamics and expectations that structure relationships within the *barangay* and between the *barangay* and the municipal government.

These dynamics are then discussed in relation to four key environmental governance challenges identified by research participants in *Barangay* Bucadan, Palawan: illegal fishing, the LRFT, state and non-state livelihood programmes, and commercial development interests. Pragmatic power undermines the enforcement of illegal fishing regulations, the implementation of LRFT regulations, and the equity of livelihood programmes and commercial development activities, with governance actors prioritising maintenance of kinship, social ties and patron-client obligations. Across these governance issues, power undermines the principles of equity, transparency, and accountability, through the exacerbation of unequal power dynamics, elite capture, and marginality. This in turn undermines the legitimacy of governance actors and the rules and regulations they enact, hindering implementation and effectiveness.

7.2 Pragmatic power and relational cultural values and institutions

The following section presents what I have grouped as 'relational cultural values and institutions'; sociocultural systems and institutions that play a powerful role in structuring social life in the Philippines, including environmental governance. Béné (2003) characterises these as 'socio-institutional mechanisms' such as formal and informal rules, social norms, social relations, customs, expectations, and values. I will briefly discuss the role that these play in Filipino social and political life, before providing case-study insights of how these intersect with environmental use and management in *Barangay* Bucadan and Palawan more broadly.

7.2.1 Kinship: ethnicity, clan and family in Palawan

Relational institutions such as family, clan and ethnicity are highly influential on the beneficiaries of environmental governance on Palawan, reflecting the powerful functions they play in social life in the Philippines. As Tuaño and Cruz argue:

> the ubiquity of clan dominance in politics and patronage relations in governance have tended to skew economic and political institutions to favour and protect the private interests of elites, whether in terms of dynastic control of political offices, rent-seeking, and political appointments in the bureaucracy, regulatory capture, as well as arbitrary political interference in business and development programs. (2020: pp. 322)

Politics in the Philippines has long been characterised by political dynasties (Hutchcroft & Rocamora, 2003). Johnston describes the Filipino political system as composed of 'oligarchs and clans, with powerful families and their entourages plundering a weak state' (2008: 205). It traces its roots to the American colonial era when the institution of electoral democracy entrenched, legitimised, and institutionalised traditional elites comprised of landlords and capitalists (Sidel, 1999; Rivera, 2008). In the post-independence period, oligarchs further enhanced their power, reaching extreme levels of cronyism, corruption, and resource control during the authoritarian Marcos era of 1965-1986 (Dressler, 2009; Novellino and Dressler, 2009). Bautista writes that 'political clans and personal networks supersede parties as the main form of political organization [in the Philippines]' (2008: 88).

During my stay in *Barangay* Bucadan, it quickly became apparent that a handful of clans from the Cuyonon ethnic group dominate local politics and livelihood activities,. As the relations of the first people to inhabit the island of Bucadan, a significant portion of land on the island is owned by them. These areas provide a prime location for different livelihoods, encompassing sheltered intertidal areas suitable for sea

cucumber ranching and live fish caging, and steep hillside areas suitable for the limited amount of agricultural activities and farming that takes place on the island.

Members of these clans are also highly influential in local politics, continually occupying the elected *barangay* positions noted in Chapter 6. The current *barangay* captain is a close relative of a former *barangay* captain. With his current term soon ending there were widespread rumours and expectations that his niece would be running to be the next *barangay* captain. A similar pattern exists at the municipal scale, with politics in Taytay long dominated by a handful of rival clan and family factions who also dominate the private sector. Similarly, provincial politics and natural resource use on Palawan have long been dominated by the powerful Alvarez clan, demonstrating how this pattern is exhibited at different scales of governance. This highlights how pragmatic power intersects with power by design which grants authority to meso-scale actors through decentralisation, as highlighted in Chapter 6.

During my time in Palawan a common topic of conversation was an upcoming plebiscite to divide the province of Palawan into three, which would have significant impacts and transformations on environmental governance on Palawan[14]. The Governor of Palawan, Jose Chaves Alvarez (JCA), was widely seen to be spearheading this, with strong support from the municipal mayor of Taytay, which was proposed as the new provincial capital for 'Palawan *del Norte'*.

On one occasion during my fieldwork, villagers were invited en-masse to attend a speech by the Governor who was campaigning for a 'Yes' vote in the plebiscite. This was in February 2020, with campaigning in full swing ahead of the plebiscite in May.

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[14] The Palawan division plebiscite was originally scheduled for May 2020 but was delayed due to quarantine measures implemented in response to the Covid-19 pandemic. The plebiscite was eventually held in March 2021 with the province rejecting it. The final tally was 41.5% voting Yes and 58.5% voting No.

A number of meetings were said to be scheduled where people from across the municipality of Taytay were invited to the municipal capital *Poblacion*. It caused a mix of excitement and apathy in *Barangay* Bucadan. The Governor and Mayor hired a bus to collect villagers from a pier on the mainland, and attendees told me they were given a 'gift' of 3kg of rice in exchange for a 'practice vote', which some people I spoke with were suspicious would later be used to forge voting. One *barangay kagawad* told me that all *barangay kagawads* of Taytay were each personally given 3000 Php (£50) to attend and encourage their constituents to vote 'Yes'.

An exchange between participants during a participatory mapping exercise [*Purok* 3, PM] typified the cynical view that was commonly voiced about the plebiscite and wider governance of Palawan:

> P2: 'The family of JCA will rule all of Palawan'
> P1: 'He owns so much land…'
> P3: 'If the plebiscite is yes, three clan members of Alvarez will all rule Palawan by 2020…'
> P1: 'They would be even richer…'
> P4: 'Even within the [Alvarez] clan they'll be fighting each other to rule…'
> P1: 'He'll put all of the [provincial] budget in his name…'

As with the Philippines more widely, clan and families dominate politics and natural resource management at different scales of governance on Palawan. Closely connected to these dynamics, and a prominent major feature of politics in the Philippines is patron-client relations, as is discussed in the following section.

7.2.1.1 *Patron-client relations and the palakasan* system

Political patronage and patron-client relations refer to a personalised, reciprocal exchange relationship through which patrons possessing higher status and power provide protection or services to clients of lower status and power in return for their

loyalty, time, or service (Piliavsky, 2014). Relationships are structured by mutual understanding of needs and interests between members of the upper and lower classes (Lynch, 1959). Research has highlighted the role of political patronage in politicising public resources (Greene, 2010), securing the support of nominally democratic institutions (Gandhi & Przeworski, 2007), and everyday processes of building legitimacy and evaluating performance (Wenner, 2015).

In the Philippines, political patronage manifests as the *palakasan* system*,* an informal institution that has long dominated the social system of the Philippines, where people use connections to secure preferential treatment and access to benefits (Antolihao, 1999). Despite enormous transformations in Philippine politics in the colonial and post-colonial period, the overarching dominance of patronage over ideology has remained consistent (Hutchcroft & Rocamora, 2003). Clients expect material benefits and protection from their patrons. In return, patrons mobilise their clients for community affairs, in particular during local electoral contests (Hollnsteiner 1963, as cited in Miralao, 2008). According to Lande (1965), the mutual aid relationships between prosperous patrons and poor dependent clients constitute the building blocks of the country's political system, which Miralao (2008) argues still structures the relationships between politicians and local populations today.

Local elite patrons from powerful clans and families use a variety of means – kinship, personal ties, job offers, services and other favours – to build and maintain a clientele of people from lower social classes as a source of votes. Patronage in the Philippines is rooted in Filipino cultural norms of people depending on relatives and networks as a source of support during times of difficulty, particularly in their social interactions with the government and private sector (Antolihao, 1999).

With a limited number of elites controlling the economic and political structures of the Philippines, this maintains a patron-client system of mutual expectations and benefits based on these relational norms. This system links national politicians, politicians at the meso-scale of governance (provincial and municipal), and the community (*barangay*) level. Politics in the Philippines has thus been characterised as a vast market dealing primarily in the exchange of personal favours (Romero, 1970 as cited in Abueva, 1970). This also highlights how the scales of governance are connected and shaped through both power by design – the formal authority mandated through the decentralised governance system in the Philippines presented in Chapter 6 – and pragmatic power which manifests as practical authority which shapes and is shaped by the day-to-day norms and expectations that structure their relationships. A core aspect of the patron-client system is the importance placed on securing support from families in elections. People I spoke to in *Barangay* Bucadan told of favourable treatment accorded to influential and large families, in particular in the lead up to elections as politicians seek to secure votes. As one community member told me: 'before elections they [politicians] pick a large family of voters [to receive support] so they can vote for them' [P3, *Purok* 2, PM]. Government support through provision of projects, food and money was seen to be closely tied to the election cycle: 'if there is no election, then there's no "smell"' [P7, *Purok* 1, FGD-M], implying that social welfare and infrastructure development from the government is only available in the lead up to elections, with the expectation of votes in return. As one person joked when discussing the provincial governor's unfulfilled promise to install piped water to *Barangay* Bucadan: 'before the 2020 elections we'll have it![15]' [P4, *Purok* 3, PM]. This

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[15] Villagers from *Purok* 1 noted that the provision of electricity to their sub-village was a project provided by the Governor ahead of a previous election.

suggests the important role that patron-client relations play in structuring the dynamics and expectations between politicians and rural peoples, with benefits and support being given to people with an implicit expectation of a vote in exchange. This system benefits the largest and most influential families and clans – primarily from the Cuyonon ethnicity – due to their significant voting power.

7.2.1.2 Utang na loob and fictive kinship

Alongside the powerful function and role of families and clans, it is common for other types of social bonds to be formed in the Philippines. One such system is a form of exchange known as *utang na loob*. Roughly translated as a 'debt of gratitude', 'lifetime indebtedness' or literally a 'debt of the inside/heart' (Hollnsteiner, 1963; Kaut, 1961), it is a type of exchange and debt strongly linked to feelings of shame and pity (Fabinyi, 2012). It is common throughout social life in the Philippines, with particular significance among rural communities, often structuring relationships between well-off and less well-off families or individuals. Where it differs from other types of transactional exchange is that the debt is often unquantifiable, meaning it is not clear when the debt has been paid back.

One former *barangay* k*agawad* spoke about it in the context of 'solicitations' from the municipality – requests for monetary and financial support from politicians and government officials:

> *Barangay* Bucadan is known for its solicitations. In more than ten years of my political service, they can check the municipal records to see if I ever solicited from them, even if it's just for a ball like jackstone [a common Filipino game]. You can ask all the municipal councillors – even for cement, I didn't solicit. If I have money I will give it personally, I don't want [to sign off on people's requests from politicians]. Because I don't want *utang na loob*, I don't want them [politicians] to just give me an order that I don't want to do. [I13, *Purok* 2]

The example demonstrates this type of relationship where a debt would be owed to a politician in return for the support they provided. The debt would be of such moral significance to the former *barangay kagawad* (as the person owing the debt) that it would have obliged him to carry out the wishes of the politicians, even if it was something that he did not want to do. In these instances, *utang na loob* is a form of pragmatic power of more significance than what is written in formal law.

The dynamic works both ways and does not always revolve around people owing debts to wealthier politicians, as was illustrated in a discussion I had about *utang na loob* and voting during a FGD [*Purok* 3, FGD-M]:

> P2: We vote for them [politicians]… We place them in their position
>
> P3: With our votes.
>
> P4: It's a matter of them returning the favour back…
>
> P3: If you are caught doing illegal, they can vouch for you. Then once they were able to help you get out of it, you need to return the favour again for the next election. It's a form of exchange.
>
> P2: They are blinded by the truth! Vote buying…

This has the effect of undermining environmental regulations against illegal fishing, with those caught being protected by their patrons in return for their vote during the next election. As one interviewee told me when speaking about people in *Barangay* Bucadan allegedly engaging in illegal fishing:

> Sometimes when the *barangay* captain apprehends them [illegal fishers] and sends to Taytay, they are then just released and go home! It's because of the politics… sometimes they [illegal fishers] say [to the politicians], "when you run for the next election, we won't vote for you." [I13, *Purok* 2]

Another type of relationship participants said influences and undermines environmental governance in *Barangay* Bucadan is *kumare*[16] or *compadre*[17] 'connections' in the municipality. *Kumare* and *compadre* are a form of kinship whereby adults are joined and obligated through Godparent relationships, often extending to sponsorship of weddings and baptisms (Hollnsteiner, 1967 as cited in Austin, 2014). A range of participants claimed that illegal fishers would be protected through their *kumare* and *compadre* relationships.

The remainder of the chapter will provide specific examples of how relational cultural values and informal institutions impact the processes and outcomes of environmental governance on Palawan. Patron-client relations, *utang na loob*, and other forms of kinship lead to a tension between formal rules and norms, with the latter frequently undermining the former. An analysis of pragmatic power reveals how the processes and outcomes of environmental governance institutions are shaped by and reproduce existing cultural norms and unequal power dynamics.

As will be demonstrated in the next section, 'connections', patron-client relations and *utang na loob* are said to have a significant influence on illegal fishing in Taytay. As forms of pragmatic power, they help explain the lack of compliance with illegal fishing rules and regulations, in turn undermining implementation and effectiveness.

7.3 Pragmatic power and illegal fishing

As noted in Chapter6, illegal fishing is a longstanding and persistent environmental governance challenge on Palawan. In this section I will demonstrate how illegal fishing is enabled through the exercise of pragmatic power, with meso-scale and community leaders seen to prioritise their kinship ties and obligations over enforcement of illegal

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[16] Godfather
[17] Godfather

fishing regulations, undermining the equity, accountability and legitimacy of governance.

Across all four sub-villages in *Barangay* Bucadan, people complained that apprehended illegal fishers were regularly released without charge. These fishers were said to be protected by a powerful patron – a *padrino*[18]*, kumare* or *compadre* – in the municipality who would order their release. As one person told me: 'Politics! If you catch the illegal fishers… They have a municipal ordinance, when they catch illegal fishers, *padrino* gives the order and they are released…' [P1, *Purok* 3, PM].

Municipal politicians were commonly accused of protecting illegal fishers:

> When they catch them [illegal fishers] they just release them again. I think it's the son-in-law of the Garcia family. Don't tell them that I said this… After they [the family] went to Taytay, he was just released. Influential and powerful [Taytay Municipal Mayor] Salvame. […] The law are blind…' [I16, *Purok* 4]

During an informal conversation with a high-ranking municipal official, he made open accusations of corruption in the municipality, including by the municipal mayor. A fear of losing votes was said to be the reason why the authorities were instructed by politicians to release apprehended illegal fishers, especially those from large or influential families with significant voting power. Politicians thus use their discretion to undermine the enforcement of illegal fishing laws in order to maintain their patron-client obligations in return for votes. This demonstrates how pragmatic power and the values of influential actors can take precedence over the design properties (power by design) of polycentric governance, in this instance the illegal fishing regulations. Here we see how environmental management intersects with, influences, and is influenced by existing cultural values and systems, notably through pragmatic power. Natural

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[18] Patron

resource governance processes and outcomes are thus (re)interpreted and given meaning through relational institutions and historically informed and culturally patterned practices grounded in the local context (Cleaver, 2012). As Li writes:

> In rural contexts, the partial overlapping of local history, landscape, kinship and biography provide a richness of shared and separate experience which can be invoked by individuals to achieve specific outcomes, or, more generally, to suggest particular interpretations of cultural ideas. Negotiation in this context is a negotiation of meaning and value, not solely the manoeuvring of individuals within agreed rules. It is a social process which draws upon cultural traditions while in the process transforming them […] cultural ideas are adapted to meet new conditions, and culturally informed practices, in turn, structure daily life and shape and reshape institutions at various levels. (1996: 510)

The relationship between the *barangay* and municipal scales was commonly highlighted as a major factor undermining the enforcement of illegal fishing regulations in *Barangay* Bucadan. As one person told me: 'if they [illegal fishers] were caught by those law enforcers from Puerto [Princesa, the provincial capital] … they will be detained. But if someone from here arrests them, nothing will happen...' [P4, *Purok* 1, FGD-W].

The view that environmental governance issues would be better resolved at the provincial level of government was one often repeated. The perception was that well-connected people could utilise their social and familial networks within the municipality or *barangay* for support. Similarly, when speaking with people about politicians at different scales, perceptions were strongly influenced by whether or not they had a personal connection to them. Criticisms of corrupt practices were unanimous, but the individuals and scales of governance that were blamed varied. The b*arangay* captain and an influential *barangay kagawad* spoke highly of the municipal mayor and provincial governor, blaming distant provincial bureaucrats for the problems they faced. Contrasted to this, politically and geographically marginalised people who

lacked connections to municipal politicians would commonly accuse municipal politicians and bureaucrats of being corrupt and to blame.

This view was shared by another participant who similarly said: 'illegal fishing would stop if the patrollers are from the provincial level, but not if they're from the municipality of Taytay…' [P1, *Purok* 1, PM]. This pattern was also observed by Austin (2014), in research on coastal governance in Honda Bay, Palawan, where social bonds and kinship ties undermine the enforcement of illegal fishing by *bantay dagat*[19]. This contributed to a perception of corruption and limited enforcement as worse at the local level, which contrasts with the perspectives of common pool resource theorists that view conflicts and the sanctioning of offences as best handled at this scale (Ostrom, 2010a; Berkes, 2015). These findings suggest that pragmatic power has a greater influence on environmental and social outcomes in *Barangay* Bucadan than power by design; the legislative and administrative system in the Philippines mandates enforcement power to the municipal level, but pragmatic power in the form of relational dynamics and obligations between actors at the *barangay* and municipal scales takes precedence. This highlights the complex dynamics between meso-level governance actors and communities, with tensions between their formal mandates and the kinship groups, social relations and networks they are part of.

In my research a similar pattern was said to be exhibited at the *barangay* level. As one FGD participant complained: 'our *barangay* captain summons the illegal fishermen… he talks to them, but afterwards nothing happens. They decided to settle it over a bottle of Emperador [brandy]…' [P1, *Purok* 3, FGD-W]. In interviews with two former

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[19] Literally translated as Sea Patrol, *Bantay Dagat* are community-based local volunteer organisations in the Philippines that work with local and national government officials to protect nearshore coastal areas, in particular against illegal fishing. They were intended to empower communities to protect their coastal resources.

barangay kagawads vocal about stopping illegal fishing, they blamed their local election losses on their explicit opposition to these activities [I13, *Purok* 2 & I17, *Purok* 4]. In their view this led their constituents to stop voting for them; by opposing illegal fishing, the *barangay kagawads* reneged on their constituents' expectations that they would be protected. This implies that day-to-day implementation of illegal fishing rules are weakened at the municipal and *barangay* levels through the exertion of pragmatic power by actors when interpreting and enforcing policies.

A deep cynicism and frustration were expressed about how patron-client relations undermine the enforcement of illegal fishing:

> Before when we had a [municipal] seminar here I talked back pedantically and said: "is it even true that cyanide is illegal. And the dynamite has been happening since before I was born but still nobody has been sentenced or gone to jail. No one convicted…" [P1, *Purok* 3, PM]

Another participant spoke about the role of *kumare* and *compadre* relationships between illegal fishers and influential politicians in the municipality: 'Maybe it's because some people are greatly indebted to them, that's why favours like that are given to them. For example, if you have god parents that are higher ups, you can ask them for favours' [P2, *Purok* 1, FGD-W].

As with patron-client relations, *utang na loob* was also commonly cited as a major factor in the widespread illegal fishing taking place in *Barangay* Bucadan and the broader municipality of Taytay:

> For me *utang na loob* should not be practiced if illegal livelihoods are involved! Yes, *utang na loob* may last for a lifetime, but what about the impact on others? You have an *utang na loob* here and there… it should not be like that. Those *illegalista* should really be stopped. Stop considering *utang na loob* if it will affect others negatively. How about the livelihood of our husbands who only catch fish using hook and line? There is none for us, there is no other source of income… [P4, *Purok* 1, FGD-W]

The individuals responsible for enforcing measures to stop illegal fishing are seen to prioritise the customary obligations they have through *utang na loob*, unfairly impacting fishers that rely on hook and line. These findings suggest a perceived lack of accountability in the municipal government due to an inability of government agencies to uphold their commitment to stop illegal fishing. Central to this lack of accountability is the role of social networks and political dynamics structured by favours, which allow corruption and cronyism to thrive (Adger et al., 2005).

My research highlights that patronage relations extend between the *barangay-municipal-provincial* scales, with research elsewhere in the Philippines highlighting how this continues all the way up to the national level of government (Fortnam, 2017). This suggests the hierarchical structure of political patronage which connects different levels through a cross-scale culture of rent-seeking.

The principle of equity is also undermined through inconsistent enforcement of illegal fishing laws, whereby those with 'connections' avoid repercussions: 'It's because of *utang na loob*[20]. If they [illegal fishers] have a *padrino* they just get released, but if you don't have a *padrino* then you cannot be released' [P1, *Purok* 1, PM]. There are parallels with Fortnam's (2017) research in Mindanao which highlighted the relationship between municipal mayors and illegal fishers, with illegal fishers frequently released if they were politically affiliated with municipal mayors who would instruct authorities to release their supporters apprehended for illegal fishing. This demonstrates the highly influential role played by political clientelism and patronage in coastal resource governance processes in the Philippines (Fabinyi, 2009). There are further parallels with research on the polycentric fisheries system in Lake Victoria

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[20] Debt of gratitude

where corruption sustains the networks between fishers and the authorities; some fishers have a connection with the authorities who can protect them in case they are apprehended for their illegal activities, while those with limited social networks are punished (Mudliar, 2020).

As will be discussed in the following section, relational values, expectations, and norms also influence the design and implementation of LRFT regulations on Palawan.

7.4 Pragmatic power and the live reef fish trade

As noted earlier in this thesis, the LRFT has been a key industry on Palawan since the 1980s, supporting the livelihoods of small-scale fishers, predominantly in the north of Palawan. The industry has been blamed by the government, environmentalists and NGOs as a driver of illegal fishing, with cyanide used to stun and catch groupers (*lapu-lapu)*, and blast fishing used to catch 'trash' fish to use as feed for juvenile *lapu-lapu* which are 'cultured' in sea cages until they reach a marketable size. The industry has a long and complex history of regulation, which provides a useful case-study to examine how pragmatic power influences how policies designed by higher-levels of government are implemented and contested on-the-ground.

The 'off-season' for the LRFT – when catching and selling groupers in theory does not take place – was a major source of antagonism for virtually everyone I spoke with in *Barangay* Bucadan. The effects of a lack of viable livelihood diversification strategies away from the LRFT was particularly acute on *Barangay* Bucadan given its historic role as a live fish trading hub, and the limited resources and livelihood strategies available to community members due to the island nature of the *barangay*.

As one government official told me: 'it's really politicised' [I21, Puerto Princesa City], with the LRFT dominated by an influential lobby of buyers and traders, demonstrating

the pattern of close connections between politicians and the LRFT on Palawan (Fabinyi, 2009). The municipal mayor of Taytay was said to be a major live fish buyer in Taytay, while the Governor of Palawan was said to have significant stakes in the live fish business in the neighbouring municipality of San Vicente.

The major governance actor involved in designing LRFT regulations are the PCSD Staff under the direction of the PCSD Council. Although formed as a multi-sectoral, multi-stakeholder forum for environmental decision-making, the PCSD is said to be dominated by the provincial governor who is Chairperson of the Council. With this role in theory elected by Council members every three years, I was told that he has occupied this position indefinitely since becoming Governor of Palawan in 2013, wielding a large amount of power to set PCSD's agenda. As a PCSD Staff member told me about the PCSD Council meetings made up of representatives from different government departments, the private sector, and civil society: "Wow, it's intense! Intense discussion. But of course, eventually, because, hahaha, well, the Chairman is the Governor.... So they tend to defer … Yes, that's the reality of it…" [I21, Puerto Princesa City].

Below I present a vignette to highlight the challenges faced by PCSD in designing and enforcing regulations on Palawan [I21, Puerto Princesa City]:

A game of chess – balancing and reconciling different pressures

Christian is a senior PCSD Staff member based in Puerto Princesa City involved in environmental planning, with a background in fisheries and marine science. He has worked with PCSD for over 30 years, and was a staff member when the first LRFT regulation laws were passed in the 1990s.

He recalls when he first joined PCSD he became embroiled in a controversy around endangered and highly protected Giant Clams, with a PCSD Council member wanting to harvest and export them. That's when he realised that *"it's not about biology or the science of things, it's all actually political. If you wanted to push something, ensure that your head doesn't stick too much out of the water, otherwise you'll be* *miming being knocked down**"*. He went on to say that on another occasion *"the Council saw me as a traitor"* when an evaluation he compiled advising against a new mining project that the PCSD Council wanted was used by NGOs as evidence in court.

As Christian recalled: *"In my younger days I was really pissed off, like those clowns, and that the Council is a circus, but then I realised that no, it's not, because they're actually also coming at it from their own perspective."*

Reflecting upon his role, Christian told me: *"We [PCSD staff] can't just be scientists or researchers looking at one perspective, we need to look at things from different angles, and we need to be really creative. You have to think about other ways to look at it, it's like a game of chess […] Talking about the policy but then implementing the policy on-the-ground… it's really hard. In our case we have to convince the [PCSD] Council, we have to convince the people, and we have big strong NGOs here [on Palawan], we even have to convince the NGOs, because in most cases they see things from one perspective."*

From the vignette it is evident that there is a significant challenge in PCSD's mandated role in creating and legislating policies (power by design) and then actually implementing them on-the-ground on Palawan. In the situation described above, the plurality of overlapping and competing interests, aspirations and strategies amongst various actors manifest as an 'ecology of games' (Lubell, 2013). This leads to processes of cooperation, conflict and conflict resolution, with each actor seeking to advance their particular perspective (and goal) for governance. Actors draw on different resources and strategies to pursue their aims, with powerful political and

business elites using pragmatic power to dominate decision-making forums in order to advance and consolidate their aims.

This is especially the case for LRFT regulations due to the powerful vested interests among the political and commercial elite, and the importance of the LRFT as a key livelihood for small-scale fishers in the north of Palawan. As Christian, the PCSD official told me about attempts to design and enforce a closed season for fishing:

> They [LRFT lobby] said "no no no, no, you're wrong, you can't do that again, you have to talk to us, the consultation". And I said, "Come on you guys, you keep on delaying this for me". That's how I see them, they just keep on delaying things. The government gave a lot of consideration to them, delaying the policy, and then adjusting the policy, but my sense is that it's never going to be implemented. [I21, Puerto Princesa City]

Here we can see that the effectiveness of LRFT regulations have been significantly undermined by the powerful lobby of live fish buyers who use their political connections to undermine them. Feigned ignorance and tokenistic behaviour by the live fish lobby leads to a process of non-decision-making (Ostrom, 2010a; Sabatier, 1988). In theory the PCSD provides an opportunity for cross-scale linkages (a point of interaction or cooperation) for deliberation and learning (Carlisle & Gruby, 2019). In practice, however, the body is dominated by the provincial governor and the LRFT lobby, who use their pragmatic power to advance their own interests. This highlights how cross-scale linkages and multi-stakeholder forums can be dominated by powerful interests (Adger et al., 2005). This questions the normative assumptions of polycentric governance being better because of involving a diverse array of actors; even if different actors are present, the participation of some can be nominal or non-existent if powerful actors are able to dominate governance processes and outcomes based on existing social dynamics and political structures. According to Carlisle & Gruby:

> When networks or cross-scale linkages are captured by one or more powerful actors, the governance system may become dominated by a hegemony of ideas and interests that stifle dialogue, creative problem solving, and eliminate the diversity of institutions that underlie adaptive capacity. (2019: 938)

In *Barangay* Bucadan, many people I spoke with complained about the lack of consultation regarding LRFT regulations. The responses I heard suggest significant confusion about when exactly the closed season for fishing was, and some people I spoke to were unaware of any regulations at all, implying poor communication of regulations. This also suggests a lack of transparency about decision-making, and a lack of participation in the process itself, which undermines implementation and effectiveness of regulations.

When pragmatic power is exerted, stakeholders are capable of withholding or granting legitimacy to a decision in accordance with their overall values, thereby influencing and affecting the implementation of decisions (Morrison et al., 2019). The LRFT regulations were also said to be opposed by municipal politicians and bureaucrats in Taytay. A government worker I interviewed from the municipal Department of Agriculture (DA) Office openly spoke of her frustration at the national and provincial level policies they were being asked to implement:

> [The] Mayor has already met with the Governor and some [other] Mayors, but Mayor didn't yet communicate to us what is the result of their meeting. […] There are so many mayors who are... hahaha, mayors, vice mayors and local government officials who are angry at them [PCSD] because there are so many laws, but there is no alternative livelihood... If you can talk to Mayor [of Taytay], Mayor will not agree about off-season because Mayor is a fisherman… [I11, Municipal Official]

In this case, the Mayor appears to have withheld legitimacy for the rules, drawing on his shared value and identity as a fisherman, and involvement in the live fish industry. People in *Barangay* Bucadan and Taytay as a whole are highly reliant on the LRFT;

were the Mayor to give legitimacy and support the regulations, he would be failing to deliver what is expected of him through patron-client relations. Municipal politicians are also reluctant to implement the LRFT regulations designed by higher levels of government. Their discretion is influenced by the values and expectations placed on them by a population that is heavily reliant on the industry. This demonstrates the complex position that meso-level politicians and bureaucrats have on Palawan, linking the design and implementation of policies, pragmatically choosing when to support or undermine regulations in line with their values and obligations to small-scale fishers. It also suggests that cross-scale linkages between different levels of government are non-functional, with a lack of consensus and limited agreement on rules, evidenced by the constant implementing, overturning and changing of regulations.

As Fabinyi (2009) writes, the LRFT and attempts at its regulation have been strongly shaped and influenced by the patron-client system as highlighted in my QES in Chapter 5. Furthermore, street-level bureaucrats at the meso-level of governance demonstrate significant agency by making their own discrete interpretations of rules, drawing on both formal procedures and informal practical norms, and forming strategic alliances and informal agreements with communities as they seek to negotiate their complex position between communities and the central state (Funder & Marani, 2015). This highlights how meso-scale actors and institutions play a crucial role in 'translating' national and global policies to the local level, in turn influencing the effectiveness of implementation.

7.5   Pragmatic power and municipal and non-state livelihood programmes

In the following section I will detail how pragmatic power is used by *barangay* leaders in order to secure preferential access to municipal and non-state livelihoods trainings and materials. Due to resource constraints, municipal bureaucrats form informal

agreements and partnerships with *barangay* leaders who support the implementation of municipal government programmes. *Barangay* leaders use their discretion to decide who can and cannot participate, prioritising fellow clan and family members to the exclusion of others, undermining the principles of equity and transparency. This highlights how livelihood interventions intersect with existing norms, expectations, and social relations, and demonstrates how meso-level actors make strategic decisions when linking the design and implementation of policies.

As noted in the previous chapter, the municipal government is responsible for social welfare services which include livelihood development, and health and education programmes. Based on conversations and observations during my time in *Barangay* Bucadan, however, in practice people rarely adopted these as an 'alternative' to their existing, primarily fishing-based livelihoods. Instead, the livelihood activities were adopted alongside existing ones as they were unable to provide immediate, short-term returns, while also often having high entry costs due to the required material inputs.

Inequitable distribution of benefits was continuously highlighted as an issue by participants in my research, namely elite capture by relatives of the most influential and comparatively well-off clans and families which dominate *barangay* leadership positions. Some *barangay* officials wield significant pragmatic power as actors linking the community with the meso-scale of governance, primarily the municipal government and non-state actors such as NGOs. During informal conversations with municipal government and NGO staff, they spoke of the lack of resources and staff as a major challenge they faced in their day-to-day jobs. In order to adapt to this situation, I observed external state and non-state actors engaging with and through community-level pragmatic power brokers which act as the linkage between municipal

agencies/NGOs undertaking welfare, development and livelihood programmes and the wider community.

During an interview with a municipal official, communication and logistics were highlighted as a challenge they faced in reaching different communities:

> Related to seminars from other [municipal] departments, I've had feedback from some community members, especially in the further away *purok*s, that quite often the messages aren't always relayed to the more remote members of the community. That could be true, because for example in [*Barangay*] Bucadan, some places are really hard to reach unless you have a boat, or you don't have cell phone signal. So it is a bit of a challenge. But what we're doing, that's why it's really good to work with the *barangay* officials because we ask them [to relay the information] [I12, Taytay *Poblacion*]

In *Barangay* Bucadan these are largely coordinated through the *barangay* captain and an influential *barangay kagawad*. During my time in the *barangay*, the *barangay kagawad* in whose household I stayed was regularly visited and met with external actors from a range of government agencies, academia, NGOs, and private sector microfinance institutions. Rather than being held in the *barangay* hall, these were regularly held in her household. Both she and municipal government staff I spoke to openly told me how she would choose attendees for livelihood trainings, and was responsible for communicating activities from external agencies to the community. Acting as a pragmatic power broker, the *barangay kagawad* played a highly influential role in the day-to-day implementation of livelihood and welfare programmes.

A theme that arose across FGDs and participatory mapping exercises in the peripheral sub-villages of *Barangay* Bucadan was unequal access to livelihood programmes and community institutions. As two participants of a focus group in *purok* 2 told me:

> To cut the story short, it seems like residents of *Purok* 2 are always left behind from the programmes in the *Barangay*. We are usually not invited if there are trainings in the Barrio [the main sub-village]. I actually made some enemies because of it! I often argue with them, especially if I find out that there are

livelihood trainings we are not aware of. That is why I am asking them to please disseminate information about it to us. [P1, *Purok* 2, FGD-W]

That is our problem… we are usually left behind when it comes to being a member of associations. If they called for a meeting and interested residents, we are often the first residents who will participate and show interest. We will sign [the attendance sheet]… but afterwards our names are removed… [P2, *Purok* 2, FGD-W]

A similar view was shared during a participatory mapping exercise in *purok* 3:

I asked Ma'am Angie [of the DA] kindly to sort it out, because every time they give a livelihood project it is only for *purok* 1! I just want them to be fair by distributing the livelihoods to other *purok*. Why can't they [Bucadan *Barangay* Local Government Unit] order their *tanod*[21] to tell us when there is a training or seminar. I'm a fair man if the others don't have any [livelihoods]. But [if] the others [people in *purok* 1] have already, then they get another. I don't think that's fair… I feel sorry for those that don't have any livelihoods… It is the leader of the *barangay*, I told the [*barangay*] captain to feel pity for them… Captain said to me "You can't do anything, you have to be Captain first then you have the right to tell them". I said to Capt. "help the people who know nothing, not those that have it already. Those without are the ones to pity…" We in *purok* 3 are far behind *purok* 1… [P1, *Purok* 3, PM]

In conversations with marginal villagers in *purok* 1, living on the geographic periphery of *Barangay* Bucadan and with limited livelihood opportunities available to them, some also spoke of their frustration at not hearing about or being able to access trainings. This demonstrates that it is more nuanced than simply *purok* 1 receiving all the benefits while the other three sub-villages are left behind.

As one participant, a *barangay kagawad* in *purok* 4 told me:

Other *purok*s accuse us that all livelihood programmes are being monopolised by *purok* 1, but this isn't true. In reality not all from *purok* 1 benefit from them. Sometimes it is meant to serve selected people only. The problem is the people involved are always the same… [P2, *Purok* 4, FGD-W].

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[21] B*arangay* police who patrol *barangays* with a megaphone

This suggest that the practice and allegations of elite capture in *Barangay* Bucadan are more complex than simply the geographical division that *purok* 1 receive benefits while *purok*s 2-4 do not. Instead, through pragmatic power geography intersects with political affiliation and kinship. More powerful individuals and families in the community have larger personal networks to draw from in pursuit of their livelihoods, including through patron-client relations and preferential access to municipal livelihood programmes. This demonstrates how pragmatic power – in the form of customary relations and values – can influence the process and outcomes of environmental governance, including who benefits.

This view was shared by a focus group participant in *purok* 3 who complained that: 'If you are powerful or strong [in the community], then you are the one who is given the seminars, and you can also get the project [benefits]' [P1, *Purok* 3, PM].

Connections to the municipality through kinship play an important role in whether or not people could access trainings: 'If you know the person [from the municipality] giving the project or programme, then they will pick you first' [P2, *Purok* 2, PM]. During a FGD with women in *purok* 2, a participant expressed it in metaphorical form: 'We're not close to the ladle' [P4, *Purok* 2, FGD-W], meaning that only those with connections to municipal and *barangay* pragmatic power brokers are able to benefit.

During a FGD with men from *purok* 3, one participant complained:

> There are some [community members] who attend meetings in Taytay, then after availing some stuff, they don't share it with us. They should share whatever the good news is with us so we can also benefit. It's all politics. [P3, *Purok* 3, FGD-M]

This suggests people feel that certain individuals are privileged by the municipal government and invited to meetings about municipal support due to political

patronage. When those individuals return to the community, they in turn only relay information to friends and family. Here we can see an overlap between decentralised governance – which grants authority to local authorities for livelihood programmes – and hierarchical relationships of political patronage which privileges well-connected individuals and families.

When asking people about unequal access to livelihood trainings, people commonly simply responded by blaming the *palakasan* system of patronage [P3, *Purok* 3, FGD-M & P3, *Purok* 3, FGD-W].

As the participant continued to say:

> They only invite us if the meetings are to discuss about problems and the like, then we are all involved. But when it's meetings where there is good news or [livelihood] programmes that we can avail, then they don't invite us… [P3, *Purok* 3, FGD-M].

This view was echoed by another community member who told me: 'there is a lack of information and posting announcements if there is an important schedule, especially for the [livelihood] seminar training' [P2, *Purok* 3, PM]. Villagers from *purok* 4 suggested that *barangay* officials were intentionally choosing not to convey the information to them: 'we feel we don't even belong to *Barangay* Bucadan. When they have [municipal] programmes, the communication is supposed to come from the *barangay* captain and other officials but it is non-existent' [P2, *Purok* 4, PM]. This suggests that pragmatic power in the municipality and *barangay* is significantly undermining the transparency of governance in Taytay.

Municipal officials pragmatically rely on *barangay* leaders to relay information to the community due to logistical challenges, but *barangay* leaders are accused of selectively choosing who receives the information, and thus who is able to join the

trainings. Information is not readily available to everyone; community members with connections to pragmatic power brokers are informed, whereas those with limited social networks are not. Pragmatic power brokers thus occupy a powerful position by controlling the exchange of information across levels of governance. In *Barangay* Bucadan this leads to distributive inequities around how the benefits of livelihood programmes are distributed among community members, and procedural inequities around how and who makes decisions of who will benefit.

I will now demonstrate this further through detailing two specific examples of recent livelihood development programmes initiated in *Barangay* Bucadan.

7.5.1 Seaweed livelihood development

During my time living in the community, the municipal DA planned to conduct a seminar on seaweed livelihoods. Seaweed is an important source of income for communities on Palawan, but people in *Barangay* Bucadan informed me it had been relatively unsuccessful for the households that had attempted it there. Speaking with an official from the DA, I was told that the municipality had identified seaweed as an 'alternative' and supplementary income for people dependent on the declining LRFT and associated uses of illegal fishing gears [I11, Municipal Official]. The seminar was intended to provide villagers with technical knowledge and materials to effectively conduct it. When I spoke with a municipal official about it, she told me that they had identified the peripheral sub-village *Purok* 2 (in *Barangay* Bucadan) as the site of the training due to the apparent high prevalence of illegal fishing among the people there.

When I was later conducting FGDs in *Purok 2*, villagers claimed that the *barangay kagawad*s of *Purok* 1 blocked the decision and pressured the municipal officials to instead conduct the training in *Purok* 1. During an informal conversation with a *barangay kagawad*, she told me she planned to attend the seaweed training but was

not intending to engage in the livelihood herself, instead giving the materials she would receive to a God-daughter living in a different *barangay* on the mainland.

This suggests that community pragmatic power brokers in *Barangay* Bucadan play an influential role in deciding who benefits from government trainings. For the seaweed training, legitimacy was only granted by community elites when municipal officials agreed to hold it in the main sub-village, allowing them to control who was able to participate. Municipal government staff initially planned that the training would be for members of *Purok* 2 as an 'alternative' to illegal fishing, but the power to determine who the beneficiaries of these trainings are is held by well-connected pragmatic power brokers in the community. The actions of community level pragmatic power brokers significantly undermine the principle of equity; seaweed trainings were intended for marginal community members engaged in illegal fishing, yet these benefits are instead redirected towards those with customary relations and social ties to community elites.

7.5.2 Sea cucumber 'corporation'

Sea cucumber (*balatan*) fattening is another livelihood strategy to emerge in recent years on *Barangay* Bucadan, and is advocated and supported by various municipal government departments that have conducted trainings and provided material support. Development of the livelihood has been a source of contention in *Barangay* Bucadan, with widespread accusations of elite capture and inequitable distribution of benefits. The first programme was initiated by the Municipal Department for Social Welfare and Development, followed by a second programme by the Municipal DA. During my fieldwork a third initiative was being supported by the private sector company Land Bank who were providing loans to individuals sponsored by the DA.

During FGDs in the peripheral sub-villages, participants questioned why individuals who had already received support from the first two government sea cucumber

programmes were set to receive support for a third time. During a FGD in *Purok* 2, two participants complained about being unable to attend and benefit from the initiatives:

> P4: When I went to [the main sub-village of] *Barangay* Bucadan, there was a meeting concerning *Balatan*. I was not aware that they are having a meeting… so I said "what is that?" They replied that "it is a meeting for *Balatan*". I asked "why were we not invited?" They replied that "it's different…" so I left. I told them "you're having meetings here concerning *Balatan* but us from *Purok* 2 don't know anything about it." Nobody informed us. We are not benefiting from any livelihood trainings here in Bucadan!

> P7: Same thing happened to me. I asked them if they are having a meeting concerning *Balatan* but they made me leave. They told me I should not join since it is only exclusive for the ten of them! I said "I won't be joining… I will just listen". But they replied that "it is not a programme for residents of *Purok* 2… but is exclusive for *Purok* 1." They made me leave… It hurts me to think that they were chosen. How about us who are not aware about that information? How was it possible that none of us were chosen?

To illustrate this further, a vignette of the experience of one community member in sea cucumber collection is presented below [I5, *Purok 3*]:

A Bucadan pioneer of sea cucumber collection

As landless migrants from the Visayas, Aimee and her family are squatting (with permission from the landowner) on a part of the island where livelihood options are limited due to exposure to the northeast monsoon (*amihan).* Aimee and her husband have been targeting sea cucumbers for over a decade, a number of years before any of the government sea cucumber programmes. Rather than buying small sea cucumbers and fattening them before selling fresh to buyers, they would immediately process the sea cucumbers themselves before selling to a local buyer. While speaking with Aimee, she broke down in tears, recounting the suspicion and accusations of stealing directed towards them by other community members.

The species they target (*Stichopus sp.)* are particularly abundant in a sheltered sandy part of *Barangay* Bucadan where villagers from *purok* 1 have established sea cucumber ranching pens in recent years (for a different species, *Holothuria scabra*, known locally as *cortido).* With *Stichopus sp.* more active at night, Aimee's husband swims around the area at night. This caused suspicion among other community members who accused him of stealing their sea cucumbers:

Vignette continues on the next page

> *They even threatened to shoot my husband with a gun. That's why we stopped swimming near there… If something happens to my husband, he can't hide it from us. If something happens to him, I will fight for him. And I know my husband doesn't take anything. Even though our lives are hard now, the people see us as poor, but I don't let my husband take the easy option to feed our children. I don't want them to grow to just take the easy option. I would rather tolerate our lives being poor than steal.*

She spoke of conflicts with influential villagers who dominate sea cucumber ranching in the community:

> *In the past right in front of my house my children picked up 20 cortido [H. scabra], but now we don't collect any because people might get suspicious again, but since that time we don't collect at all. Sometimes they even check us, to see if we collected [H. scabra], they check that drum there [where processed sea cucumber is stored]. […] Now I'm so disgusted when I even hear the word cortido [H. scabra]…*

As Aimee continued: *'our source of income used to be good, but now that we cannot collect balatan in the area where the cages are located, our source of income is low.'*

In this vignette, Aimee and her family pioneered the collection of sea cucumbers in *Barangay* Bucadan. Recent years has seen external state and nonstate actors supporting the development of sea cucumber livelihoods in the community. Local leaders are said to have used their political influence to secure the benefits to these programmes for fellow clan members, demonstrating the role they play as pragmatic power brokers in the implementation of livelihood programmes. Aimee alleges not only her exclusion from these programmes, but negative consequences on her household's longstanding sea cucumber livelihoods. With state-sponsored sea cucumber 'ranching' activities now being undertaken in the key habitats they formerly collected sea cucumbers from, powerful individuals in the community have pressured them to stop collecting in these areas through the threat of violence.

As the sea cucumber and seaweed livelihood programme examples show, pragmatic power – exerted by local elites that draw upon relational institutions of political patronage – has enabled their consolidation of resource access and control of

municipal programmes, and domination of *barangay*-level associations. This reflects Cleaver's (2002) notion of institutional bricolage, with the creation of a formal institution (the sea cucumber corporation) intersecting with and overlaying existing informal institutions (kinship and political affiliation).

Pragmatic power undermines the principles of transparency and equity, while also hindering opportunities for experimentation and adaptation of resource institutions which are 'sucked up' by existing socio-political dynamics. The legitimacy of livelihood programmes is undermined as they are perceived to undermine the equity of resource distribution, benefiting local elites while excluding marginal community members. As will be discussed in the following section, community pragmatic power brokers also play an influential role in the processes and outcomes of private sector interests and development on *Barangay* Bucadan.

7.6   Pragmatic power and commercial development interests

As noted in Chapter 6, there are substantial private sector interests which have an influence on environmental use and management on Palawan. Commercial interests have led to increasing competition and conflicts over coastal resources and spaces, driven by sectors such as tourism (Fabinyi, 2010) and pearl farming (Theriault, 2014). On *Barangay* Bucadan, people similarly raised concern about private investors and companies attempting to purchase or secure coastal land and sea. Their tactics were said to include a mix of threats, exploitation, and sowing community division to pressure people into selling their land. Provincial, municipal and barangay elites were all alleged to be involved, suggesting their use of pragmatic power to shape the outcomes of coastal governance in their favour. I will now provide detail of two specific examples I was told about on *Barangay* Bucadan, demonstrating how these undermine the principle of equity through failure to recognise peoples' rights, limit

participation in decision making, and result in disproportionate impacts on villagers living in peripheral sub-villages.

7.6.1 Tourist resorts

During informal conversations with government staff and business operators in Taytay, I heard that tourism in Taytay has long been said to be on the cusp of booming. Taytay Bay, where *Barangay* Bucadan is located, has five past or current private luxury resorts on various islets located off the coast. Some are still functioning, while others are currently disused, including one on *Barangay* Bucadan. During my stay on the island, a prospective buyer from Manila visited Taytay with an expressed interest in a piece of beachfront land on *Barangay* Bucadan. The area is co-owned by a number of different families from a Cuyonon clan. An influential community member was trying to push through the sale for 16,000,000 Php (£240,000). I spoke with different individuals who partly owned it and a number were opposed to the sale as the land includes an ancestral burial site. Some meetings were held between the influential community member, a broker from the municipality, and the buyers from Manila, but in the end, they decided to buy land in the neighbouring municipality of San Vicente.

This type of situation has been common to Palawan since the 1980s and 1990s. Beachfront land has long commanded a premium price, often bought by foreigners and wealthy provincial government officials as retirement homes, small private resorts for friends, or investments for future sale or building of property (Eder, 2009).

During visits to *Purok* 4, on a beach-fringed island separate from the rest of *Barangay* Bucadan, people spoke of past and ongoing pressure from a different investor:

> The buyer's technique is to identify who among the siblings are interested in selling their land. Like my uncle who now lives in *Purok* 1. He doesn't live here but he was the one who first agreed to sell the land. When he had the money, he then talked to his siblings and convinced them to also sell the remaining shares. After seeing the money, most of his siblings were unable to resist and

say no, they also agreed to get their share. […] We are pressured [to sell the land]. Like what they've been doing now, they [the buyers] keep coming back convincing people. Especially the broker named Belinda, she threatens people… [P2, *Purok* 4, FGD-W]

When investors were first interested in the land, community members sought legal advice and were told they needed measurements of their plots to secure formal ownership of the land their families customarily own. An elderly Cuyonon lady said 'long ago' she paid 12,000 Php (£180) to a private company to measure the land, but they issued fake papers: 'we paid for it but were deceived' [P4, *Purok* 4, FGD-W].

Another participant spoke of her concerns about the same thing happening to her:

Consultations were recently done here, but I refused to talk to them. I will look in Puerto and not in Taytay. I am not sure with the latter, and what if I asked for help [and] then they take advantage of my lack of knowledge and don't measure the real area of my land. They might only give a small area, and they also contact the buyers... [P2, *Purok* 4, FGD-W]

During the FGD, a *barangay kagawad* from *Purok* 4 spoke of the lack of support from the other *barangay kagawads*, including the *barangay* captain:

It is frustrating to think about it… for example, our *barangay* captain whom we expect to discourage us to sell the land and motivate us to fight for our rights… We expect him to do that since it should be his job, to protect the populace and think about the welfare of the community. However, we even received threats from him... [P2, *Purok* 4, FGD-W]

People were upset that the *barangay* captain was not supporting them during this dispute, and even accused him of acting as a broker for the deal. One community member sarcastically commented that '*Purok* 4 doesn't *exist* anymore. There are no people living here' [P1, *Purok* 4, PM]. People also complained that they had not received any budget from the *Barangay*:

Lately our *purok* has not been receiving any money from the available [*barangay*] budget. We have a budget of 30,000 Php (£450) for each *purok*.

15,000 (£225) should be used to renovate the Plaza, and the remaining would go towards prizes for different games played during our community *fiesta*, but instead our *purok* doesn't have any budget. *Zero budget at all* (original emphasis). It's because this island has mostly been sold to investors. Some already sold their land, while some are still deciding. Now the buyer wants to buy the whole island so they can live here exclusively. But it's not yet possible since some have not decided to sell their land. There are only three remaining people who have not sold their land yet. Maybe that's why our *barangay* captain is not releasing funds. He's not interested in improving this place because it might be sold off soon. How about *Purok* 4? [P2, *Purok* 4, FGD-W].

When I asked people if they knew who the buyer was or what they intended to do with the land, one participant said: 'they want to build a beach resort here' [P1, *Purok* 4, FGD-W]. This view was echoed in another interview when speaking about an ongoing land dispute on another island *barangay* in Taytay: 'the Governor wants the place to become a beach resort, that's why he wants the people to move out…' [I19, *Purok* 2]. As someone else put it: 'if they [the Alvarez clan] want land, they just force people to give it to them' [P4, *Purok* 3, PM]. The frequency of which people made these types of claims about powerful politicians demonstrates the widespread perception of local elites instigating land grabs, and reflects a wider cynicism about environmental governance on Palawan as favouring elites, while unfairly impacting marginalised groups and entrenching poverty through undermining peoples' livelihoods.

7.6.2 Pearl farm

As highlighted in Chapter 6, commercial aquaculture is an important economic sector on Palawan. Pearls are a key commercial commodity, with a well-established large-scale pearl farming industry owned by national elites and foreign corporations (Theriault, 2014). This is likely due to Palawan's marine ecosystems having the ideal biophysical characteristics for pearls; it is recognised globally for the quality and size of South Sea Pearls, with the three largest pearls ever recorded coming from the seas around Palawan (CNN, 2016; Forbes, 2016).

One of these companies is called Jewelmer, an 'international luxury brand' whose products are sold in 10 countries across five continents. South Sea Pearls from Palawan form the centrepiece of the brand, for whom they are one of the largest global producers (Jewelmer, 2022). The owners of Jewelmer are a billionaire business tycoon Eduardo 'Danding' Cojuangco, who was a member of Marcos' inner circle, and a French pearl farmer (Theriault, 2014).

A few years ago, Jewelmer, who currently have pearl farms in a number of municipalities across Palawan, sought to establish a pearl farm in *Barangay* Bucadan, because of a favourable habitat sheltered from the strong winds and waves that affect Taytay Bay during the *amihan* monsoon period. A community member called Aquilino, present during a consultation meeting held by the company in *Barangay* Bucadan said:

> during the final agenda point, [when] it was late afternoon during the first and only public hearing, I got mad and asked the manager, "can I see the document you are holding?", I saw it and it was for only three hectares. But the pearl farm in Cajdanao[22], at first it was three hectares, but now the area is so much bigger and wider. I told him "you're a liar sir, are you trying to fool me!" Most of us then left the *Barangay* Hall. Our *barangay* captain said "whether you like it or not, I'm continuing with the pearl farm project". I spoke up that I'm not agreeing to it and he told me "who are you not to agree!" [I19, *Purok* 2]

During an in-depth interview I conducted with Aquilino and informal conversations with other community members, a broad range of accusations were levelled towards Jewelmer, including lying about the species to be farmed, attempts to appropriate key fishing grounds, destruction of LRFT cultivation sites, and enclosure of an important channel for navigation between different parts of the island. People raised their concerns about aggressive tactics used by the guards: 'if you accidentally bump [the buoys used in the pearl farm] it can cause trouble for your engine. If you tie the rope

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[22] A different coastal *barangay* in Taytay in which there is a pearl farm in its coastal waters

[from the boat to the buoy while fixing your engine], they're going to come and capture you…' [I19 *Purok* 2], while another person recalled how: 'when we went to Busuanga[23], we accidentally went through a pearl farm, within a minute there was a patrol boat by us with big guns, they had a spotlight too.' [Informal Conservation, *Purok* 1].

Other villagers spoke of failed promises of employment from the pearl farms, accusing them of initially hiring people from the local community – as was said to be a legal requirement – only for them to be dismissed after the compulsory one-year period ended, with staff instead being brought from elsewhere in the Philippines. These widespread accusations suggest a deep mistrust about the motives and beneficiaries of the pearl farm, and concerns of negative impacts on marginal community members. There are parallels with Theriault's (2014) research in Balabac[24], where Jewelmer's owner was said to have used his connections to Marcos to acquire two islands, which led to the Indigenous Pala'wan and Molbog customarily occupying the islands being 'voluntarily relocated' elsewhere by the military.

In *Barangay* Bucadan, the majority of the *barangay kagawads* were believed to have signed a *barangay* resolution to approve the pearl farm. When asked why the *barangay* captain was pursuing the project despite opposition in the community, Aquilino told me: 'for me there is a hidden agenda, there is money involved. I heard that the *barangay* officials received a payment from the company, and when the pearl farm was finished they would then get a job as a guard' [I19 *Purok* 2].

The tourism and pearl farm cases suggest that investors and companies attempt to secure legitimacy and support for their developments through local elites, in relationships governed by personal networks, influence and political power. For the

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[23] The largest island of the Calamianes Island group to the north of Palawan
[24] Balabac Island is the southernmost island off the coast of Palawan, 50km away from Sabah, Malaysia

pearl farm, Aquilino's accusations suggest the company formed a mutually-beneficial alliance with local community elites acting as pragmatic power brokers in order to secure *barangay* approval for the establishment of the pearl farm.

In the case of land purchases in *Purok* 4, there are allegations that the investor is similarly establishing an alliance with local leaders to buy the island, despite opposition from a number of community members. For both the pearl farm and land purchase cases, the principle of equity is undermined through a lack of recognition of peoples' rights. Furthermore, there is an inequitable distribution of costs and benefits, with the undermining of resource tenure and access disproportionately impacting members of marginal sub-villages where the proposed development and purchases are taking place. This demonstrates the negative impact pragmatic power can have in polycentric governance systems, with elite groups able to form alliances to pursue their aims while exacerbating the marginalisation of others. This supports the argument of Bavinck et al., (2018) that fisheries and coastal management have become a 'zero sum game' with gains accruing to one person or group resulting in losses to another, compounded by the rising incursions of new business interests into marine and coastal space, and the increasing role of state and private sector actors. With (un)equal power dynamics almost always at play in natural resource governance, this questions the normative assumptions that polycentric governance is 'better', which risks overlooking how governance processes and the resulting management outcomes can exclude or undermine the rights of politically and economically marginal actors.

As will be outlined further in the following chapter, marginal community members have drawn on a mix of pragmatic and framing power in attempts to protest against and resist the appropriation of land by commercial interests such as the pearl farm example discussed above, and in opposition to unpopular state policies.

7.7 Summary

Pragmatic power is primarily about informal authority exercised by different actors through their influence on day-to-day decisions (Morrison et al., 2017). In Taytay, my research found that the exercise of pragmatic power is heavily influenced and shaped by cultural values and relational institutions. Debt, kinship obligations, and patron-client expectations structure the relationships between municipal politicians and bureaucrats, *barangay* officials, and fishers. Environmental governance institutions and management practices are built upon these norms and expectations, which are widely perceived as undermining enforcement of environmental regulations, and exacerbating environmental degradation and poverty. Illegal fishers are said to avoid sanctions, through utilising personal networks and relationships structured by a combination of kinship obligations, cronyism and corruption. Political patronage is a significant factor, with votes alleged to be exchanged for protection from prosecution. An inability to enforce sanctions against illegal fishing hinders accountability and undermines the legitimacy of environmental governance.

Influential actors at the community and meso-scales of governance act as pragmatic power brokers linking scales of governance. They use their discretion to (re)interpret regulations, while also controlling the exchange of information across levels, acting as a crucial link between policies and action. For regulation of the LRFT, the 'rules-in-use' manifest as false-compliance and the withholding of legitimacy by municipal bureaucrats due to the highly unpopular nature of the rules, and widespread opposition from fishers. Pragmatic power also leads to non-decision-making through the actions of a powerful lobby of buyers closely connected to municipal politicians, leading to repeated changes to policies which impact effectiveness.

The role of pragmatic power in environmental governance in Palawan is also exercised through elite control of municipal livelihood programmes, and alleged profiteering by local elites through private sector development activities. Community-level pragmatic power brokers vested with practical authority control the exchange of information from the municipality, undermining the principle of transparency. In Palawan this was evidenced by the selection of friends, fellow clan members and family as participants for livelihood trainings, while community members that lack these social networks and connections are excluded. This undermines the principle of equity, and leads to a sense of injustice among community members unable to attend and benefit from trainings, in turn further undermining the legitimacy of environmental governance.

These issues demonstrate the subtle and hidden ways in which pragmatic power can dramatically undermine and subvert formal rules and regulations when they are implemented on-the-ground. In Taytay and *Barangay* Bucadan, customary values and personal networks take precedence over the formal design properties of polycentric governance. Actors seek to maintain and fulfil kinship and patron-client norms, obligations and expectations. In doing so, power (im)balances between different resource-users are replicated and reinforced, which undermines the principles of equity, accountability, and transparency. This extends a perception that environmental governance objectives and outcomes enrich elites while disproportionately impacting marginal groups negatively.

In the next chapter I will show how framing power is also used to frame problems and influence polycentric governance on Palawan. It was commonly used by powerful actors, intersecting with and reinforcing their use of pragmatic power, but is also deployed by marginal actors to contest pragmatic power and environmental rules and regulations deemed to undermine their rights and values.

8 From exclusion to resistance, and protest to suppression: Framing power in polycentric governance

8.1 Introduction

As outlined in Chapter 2, framing power can be used by actors to pursue their agendas in polycentric governance. This type of power is used to frame problems, construct issues and set norms, and is commonly used by state and non-state actors such as CSOs, the media, and the private sector to frame a particular vision of reality that enhances their own agendas and ideologies. Actors can use these frames to manipulate, persuade, induce, sanction, and coerce other actors, in order to advance or contest management decisions, framing them as legitimate or illegitimate, prioritised or deprioritised. Actors commonly develop powerful networks to support their framings, for example through alliances of CSOs and the private sector, or conversely as 'weapons of the weak' that contest dominant perspectives and empower communities through alternative framings.

In order to examine the role of framing power, this chapter will draw from the same governance issues discussed in the previous chapter – illegal fishing, the LRFT, municipal and non-state livelihood programmes, and commercial development interests – as well as the role of conservation NGOs on Palawan, using the qualitative case-study of *Barangay* Bucadan. The chapter is structured around the recurring narratives I heard from different actors during my time on fieldwork, and present in the wider literature on environmental governance on Palawan. These frames are heavily influenced by the macro-scale political discourse of wealthy elites, a powerful grassroots civil society movement, and the international conservation sector. The use of framing power commonly intersects with the relational cultural values and

institutions detailed in Chapter 7, including ethnicity, clan, family, and patron-client relations, in turn shaping the objectives, processes, and outcomes of governance.

As with the findings of the previous chapter, I used a mix of qualitative social research methods in order to examine and explore these issues, in particular through documenting and discussing the narratives I heard while living and interacting with the daily lives of people in *Barangay* Bucadan. Key to this was my conducting fieldwork periods in *Barangay* Bucadan during two different monsoon periods, which influenced the types of narratives and experiences I heard from people. As noted in Chapter 4 and as will be discussed later in this chapter, the different seasons have a major influence on the availability of local resources such as water, fish, and agricultural products, with significantly more hardship experienced during *amihan.* Macro-scale political events which coincided with my time on Palawan – namely the provincial governor's controversial campaign to divide the province of Palawan into three, with Taytay becoming a provincial capital, and a renewed state crackdown on alleged communist insurgents – also had a strong influence on the narratives and frames which people constructed and advanced related to inequality, marginality, and repression. Structuring my findings in this chapter around concepts from political ecology thus played a key role in analysing the role of narratives, scale, power, and politics on the equity of governance outcomes.

The chapter begins by situating these narratives in relation to macro-scale political discourses in the Philippines, notably longstanding conflict and competition between an established oligarchic elite and a diverse grassroots civil society movement influenced by national and international networks, and the international conservation sector. After that, I provide a background to the longstanding 'Last Frontier' narrative on Palawan, how this has shaped the historical trajectory on Palawan, and its present-

day use by state and nonstate actors to support their visions and objectives for the environment and development.

I then discuss the interlinked narratives of suffering/hardship and corrupt elites, and how these are used to undermine the legitimacy of environmental regulations. Small-scale fishers create, deploy, and align with these narratives as a form of everyday resistance through a mix of livelihood continuation, gossip, slander, and character assassination. I then discuss more overt forms of resistance and direct action that people have engaged in, through the use of petitions and rallies. The chapter concludes with an example of state suppression of these more overt forms of resistance through its own use of framing power that aligns with a longstanding national conflict between the state and militant social movements.

8.2 Framing power and macro-scale politics, global conservation agendas, and grassroots civil society

As was detailed in the previous chapter, environmental governance on Palawan is heavily characterised by its highly political nature, with natural resources and economic power in the Philippines controlled by political oligarchies and elites (Rivera, 2008). In this section I will detail how macro-scale political and historical discourses, global conservation agendas, and grassroots civil society shape and intersect with the discourses and practices of coastal governance and management on Palawan, influencing social and environmental outcomes, and their perceived equity, accountability, transparency, and legitimacy.

During Marcos' authoritarian regime, his Agrarian Reform programmes instigated a period of intense resource extraction across the Philippines by his family and associates, in particular after he declared martial law in 1972. On Palawan this led to

a heavy influx of development corporations and agribusiness companies claiming vast areas for logging, mining, corporate farming and fishing (Dressler, 2009).

After the Marcos regime's assassination of the popular opposition leader Benign Aquino in 1983, millions of people united to stage nonviolent protests culminating in the 'People Power Revolution' that overthrew Marcos and installed Corazon Aquino as President in 1986 (Bautista, 2008). This initiated a dramatic opening of democratic spaces which were quickly filled by NGOs that sprang up from the advocacy networks of protest against Marcos (Novellino and Dressler, 2009).

Since the 1980s, civil society in the Philippines has grown dramatically, as thousands of individuals and groups involved in the People Power Revolution directed their focus to the interests of disadvantaged groups such as farmers, the urban poor, women, and Indigenous Peoples (Silliman and Noble, 1998). At the same time, the Local Government Code initiated democratisation and decentralisation, through the devolution of powers to provinces, municipalities, and *barangay*s. Yet during this period, the pre-Marcos political structure of political patronage (as discussed in Chapter 7) was also reinstated, facilitating the restoration of the power of local clans and elites (Hutchcroft & Rocamora, 2003).

According to Rivera (2008), in the present-day, this has led to political struggle between national oligarchies and local elites on the one hand, and a wide network of civil society – national NGOs, local NGOs, NGO coalitions and People's Organisations (POs) – that plays an active role in articulating societal interests, monitoring government performance, and organising and mobilising people for political action. As the author goes on to write:

> With the institutionalisation of oligarchic control in electoral contests in the Philippines, the fundamental challenge to elitist modes of representation and

weak incumbency accountability has come mainly from extra-parliamentary forces – the armed movements, militant social movements and civil society organisations (2006: 21).

As will be discussed later in this chapter, my research found that macro-scale political tensions between national/local elites and social movements/civil society have a strong influence on the processes, outcomes and beneficiaries of environmental governance on Palawan. These historical legacies strongly influence the competing and contrasting frames constructed and deployed by different actors on Palawan, and intersect with discourses from the international conservation sector.

Since the 1980s, the rise in the influence of civil society in the Philippines has extended to the natural resources sphere with grassroots environmental NGOs springing up across the country. Throughout the Philippines, and in particular on Palawan, this has been shaped and guided by participatory development, and a deep commitment to pro-poor and social justice principles which advocate for the rights of marginalised peoples (Fabinyi, 2012). Drawing on research on coastal resource management projects in the Philippines, Austin (2003) argues that social justice is emphasised as much by environmental NGOs – if not more – than resource conservation itself.

Austin and Eder characterise NGOs on Palawan as meso-level 'hybrid' NGOs that have transformed to undertake project implementation of donor-funded projects, while remaining profoundly committed to political activism, 'exerting an unusual ability to leverage power within the provincial government and also within the government of Puerto Princesa City, the largest city of the island and the locus of environmental discourse, programmes, and policies in the province' (Austin & Eder, 2007: 364). Novellino & Dressler (2009) argue, however, that the institutionalisation of a 'community-based' conservation discourse has undermined the livelihoods of

Indigenous Peoples on Palawan, through aligning with the global conservation ideology of market-based approaches and 'alternative livelihoods'. Similarly, Bryant (2002) argues that the agendas of conservation NGOs on Palawan have contributed to Indigenous Peoples' internalisation of state control of the environment through self-regulation of behaviour. While these contrasting views imply significant contestations around the roles of NGOs on Palawan, it demonstrates that they play an influential role in environmental governance system, with the power to pursue their agendas and visions for conservation and natural resource management.

In the following sections of this chapter, I will highlight the ways in which environmental governance was commonly framed through the lenses of macro-scale political tensions between political elites and a pro-poor movement supported by civil society, and tensions between the meanings and values of conservation and development. Drawing from informal conversations that I had with staff from different local NGOs and INGOs, I will demonstrate the ways in which they continue to replicate particular framings of conservation on Palawan. Alongside this, I will focus on other actors at the *barangay* (resource-users) and meso-scales of governance (municipal bureaucrats).

8.3 Framing power and the 'Last Frontier' discourse

In this section I will provide a background to the longstanding narrative of Palawan as the Philippines' 'Last Frontier', which continues to be used and adapted by governance actors to frame their visions for environmental use and management on Palawan, in particular by local NGOs, INGOs, the state, and investors.

Friedmann (1966) describes resource frontiers as peripheral zones of new settlement, which Hyndman (1994) expands upon in the context of globalisation and resource extraction. Tsing (2005) views frontiers as a Western construct built from historical models of European conquest, enabling new economies of profit and loss. As Tsing

continues, the late twentieth century saw the creation of 'resource frontiers' through militarisation and the growing power of corporate transnationalism; the notion of resource frontiers is argued to have been constructed so entrepreneurs and armies could 'disengage nature from local ecologies and livelihoods, "freeing up" natural resources bureaucrats and generals could offer as corporate raw materials' (2005: 28).

A longstanding and widespread framing employed by different actors on Palawan is that of it being the Philippines' 'Last Frontier'. Eder & Evangelista write how this is closely connected to the history of migration to Palawan:

> For the Spanish colonial authorities in Manila and the Malay sultans in Sulu who long battled over its control, it was strategically important but otherwise thought of as a distant and peripheral place. As early settlers began to trickle in during the American [colonial] period, other notions began to take hold, notions of wildness and even of lurking danger. These notions were fuelled by reports of the island's endemic malaria and the establishment of a leprosarium at Culion and a penal colony near Puerto Princesa. In the years following World War II and as agricultural settlement began in earnest, these ideas slowly gave way to the more attractive image of Palawan as the nation's sparsely populated 'last frontier' – a land of pristine beaches, untouched forests, and economic opportunity for all (2014: 4).

As Fabinyi (2012) writes, the Last Frontier narrative captures the tension between conservation and development, and contestations about how natural resources on the island are used. Figure 17 below – a large advertisement that I saw in the centre of the provincial capital, Puerto Princesa City – exemplifies these types of tensions and apparent contradictions. The advert announces Rio Tuba Nickel Mining Corporation – which has substantial mining concessions across Palawan – as the winner of the 'Presidential Award' at the '2018 Presidential Mineral Industry and Environmental Award' and the 'ASEAN Best Practice in Sustainable Mineral Development 2017'. At the time of writing, Novellino (2014) highlighted how Rio Tuba Nickel – a joint Filipino-

Japanese partnership – had recently expanded their activities to a biodiversity hotspot in the south of Palawan, which suggests a contradiction between their awards for sustainability and apparent mining expansions into key biodiversity hotspots and the Ancestral Domains of Palawan's Indigenous Peoples, as noted in Chapter 6.

Figure 17. A large advertisement in Puerto Princesa City, designating the Rio Tuba mining company as an award winner of best practices in sustainable mineral development

The Last Frontier narrative has also contributed to ongoing migration by low-land Filipino ethnicities during the twentieth century, drawn by stories of its rich natural resources and very low population density. On *Barangay* Bucadan, I spoke with a number of different households that emigrated to Palawan during the twentieth century, primarily from the Visayas region of the Philippines. As one person I interviewed told me: 'The life in Negros was very hard. My grandparents were the first ones who moved here, then they came back to Negros and told us to move here, and we've lived here since 1990 (I17, Fisher, *Purok* 2). Another person, originally from Manila, told their story of arriving in Palawan:

> I was on a fishing boat called *Villaflor* that came to Palawan. We would go to the fishing ground near here and stay in *Purok* 4, especially during *amihan* [monsoon period]. […] I met my wife here in *Purok* 4, that's why I stayed [I17, *Purok* 4].

I heard many life histories like these: people originally coming on a commercial fishing vessel targeting the rich marine life around Palawan; people travelling with relatives, friends or acquaintances to escape from the hardship they were suffering; and Palawan's attractiveness because of being outside the typhoon belt and being earthquake-free. As another interviewee told me: 'In Masbate [Visayas region], there are a lot of strong typhoons and strong wind […] The people [who convinced us to move] had been telling us to move to Palawan for a better life' [I17, *Purok* 3].

These examples highlight Palawan's framing and popular image as a resource-rich frontier-land where people could start a new life. Many of the migrant households I spoke with had moved during the 1980s/1990s, which Bryant (2002) writes was a time of land and resource hunger throughout the Philippines. This pattern was also exhibited at the state level, in particular through the appropriation of Indigenous lands, and intense extraction of resources under Marcos, as noted earlier in this chapter.

After the end of martial law, the 'Last Frontier' narrative was successfully used by NGOs to secure large amounts of international funding, which spearheaded a successful campaign for a 25-year moratorium on logging (Novellino and Dressler, 2009). This demonstrates how the ideologies of global conservation actors have drawn on and adapted the Last Frontier discourse, recasting it as the Last *Ecological* Frontier, as indicated in

Figure 18 which highlights the use of the term on the UNESCO website. However, as discussed later in this chapter, this framing and prioritising of environmental outcomes of governance can undermine socio-economic outcomes, such as the prohibition of the livelihoods of marginal resource-dependent peoples.

More recently, the 'Last Frontier' discourse has been used by the private sector – including tourism and real estate – to drive Palawan's appeal as an apparent oasis of unspoilt natural and cultural treasures and area of sustainable growth and investment opportunities (Figure 19). While on Palawan I regularly encountered the 'Last Frontier' slogan being deployed, from advertising in the airport to hotel names, and in conversations to tourist souvenirs (see **Error! Reference source not found.** 20). As Eder & Evangelista write, 'the growth of the tourist industry in Palawan enables the popular image to live on, and is memorialised in the names of restaurants and hotels and on countless t-shirts (2014: 4). In recent years this has been furthered by growing attention from global media, including Palawan being voted the world's best island by the US travel magazine Travel + Leisure in 2017 and 2020 (Travel + Leisure, 2020), which has been used in government marketing materials seeking investment on Palawan (see Figure 21).

Figure 18. UNESCO MAB website page about Palawan begins by referring to Palawan as the 'last ecological frontier'

Figure 19 Excerpts from a government brochure seeking investment, which I was given while attending a conference on Palawan

Figure 20 'The Last Frontier' framing used for tourist souvenirs

Figure 21. Excerpt from a government brochure seeking investors, introducing Puerto Princesa as the heart of the best island in the world (Palawan)

In recent years the contradiction between conservation and development became acutely evident when US children's TV network Nickelodeon planned an undersea attraction and themed resort – including the popular TV character Spongebob Squarepants – as part of the development dubbed the 'Coral World Park' in Coron,

although plans were abandoned after widespread opposition from environmental campaigners and advocacy groups (see Figure 22).

These examples I have presented highlight how the 'Last Frontier' narrative has been (re)interpreted, co-opted and contested by different governance actors on Palawan in pursuit of their own visions and objectives for how the environment should be used and managed. As Eder & Evangelista argue about the deeper meanings and struggles about environmental governance, management, and resource-use on Palawan:

> for many within and beyond Palawan, simplistic 'last frontier' imagery has given way to more politically aware understandings of Palawan as a battleground for both environmental protection and social justice, one where the future dimensions of post-frontier economy and society are presently being determined (2014: 4).

Figure 22. Online environmental advocacy opposing a proposed Nickelodeon-themed resort

As will be discussed in the next section, NGOs and private sector actors also play a powerful role in the (re)creation of environmental discourses on Palawan, which in

practice leads to tensions and contrasting objectives for environmental use and management such as conservation, development, and livelihoods.

8.4 Framing power, NGOs, narrative networks and environmentalities

In the following section of this chapter, I will describe how NGOs on Palawan use framing power in support of conservation agendas. This includes the formation of informal partnerships with state and nonstate actors who align their objectives to advance their visions of coastal resource management, notably through combining conservation and tourism strategies and the creation of an environmentality which advances and undermines the legitimacy of different livelihoods. As I will demonstrate, however, these processes overlook social complexity, and risk undermining livelihood rights and exacerbating social exclusion, while increasing elite capture of resources.

8.4.1 Informal partnerships between the state and NGOs

As noted earlier in this chapter, NGOs and other civil society actors continue to play an influential role in environmental governance on Palawan. As powerful actors, NGOs can use framing power to create discourses that support their pursuit of governance objectives and vision of the environment (Morrison et al., 2019), which can be used to endorse what is legitimised and prioritised. A key aspect that I will discuss is the way that dominant conservation discourses and values shape – and are shaped by – local politics and socio-economic differences, with instances where the conservation agendas of NGOs undermine the livelihoods of marginal resource-dependent peoples.

During my fieldwork I had a mix of interactions with people working for local NGOs and INGOs, including informal conversations, interviews, and my invited participation in outreach activities. WWF Philippines has undertaken a significant number of project

activities in *Barangay* Bucadan because of people's strong dependence on the LRFT, and associated links with illegal fishing practices. Programme activities include increasing MPA management effectiveness as part of a wider network of MPAs in northeast Palawan, and livelihood and infrastructure development projects. Conversations with WWF staff indicated their vision for the establishment of community-based eco-tourism on *Barangay* Bucadan, a view shared by the Taytay Municipal Tourism Development and Management Office (MTDMO) who have designated the *barangay* as a site for community-based tourism [I12, Taytay *Poblacion*].

While WWF and the MTDMO both viewed tourism as a supplementary activity to reduce dependency on the LRFT as opposed to replacing it, the framing provides significant legitimacy and drive for tourism development. In an interview with a Taytay MTDMO staff member, he spoke of the close relationship they have with WWF:

> we're working with WWF on realizing the maximum potential of the [coral] reef [there,] not just as a marine protected area, but more importantly as a source of livelihood through indirect means, which is basically tourism […] we kind of like just join forces with them [WWF], so how our programme would fit on their activities, and our activities that would fit on their programmes. [I12, Taytay *Poblacion*]

This suggests that WWF and the Taytay MTDMO have formed a mutually beneficial relationship to pursue their joint objectives of sustainability and tourism development, employing diverse institutions at different scales of the state and civil society (Carlisle & Gruby, 2019) Here we see that WWF and the MTDMO pool resources and establish relationships of mutual learning and readjustment based on their respective needs and constraints, increasing institutional redundancy and robustness. If one actor's capacity is reduced – for example due to the ending of a funding cycle or political changes – another actor is able to step-in and fill the institutional gap. Combining resources and

capacity and aligning their activities is an effective strategy both actors use to achieve their desired governance outcomes.

As is the case in much of the Philippines and tropical coastal and island nations, the establishment of MPAs by conservation NGOs and governments is frequently accompanied by direct or indirect development of eco-tourism (Agardy, 1993; Leisher et al, 2007; Voyer et al., 2018). The framing of *Barangay* Bucadan as a site for joint conservation and tourism development is part of a global network of conservation INGOs and national governments pursuing a market-orientated conservation and development agenda aligned with donor demands and objectives (Cohen et al., 2019; Novellino & Dressler, 2009; Segi, 2014).

In response to unsustainable and unregulated development of tourism in the popular nearby town El Nido, the Taytay MTDMO has framed their vision and mission of tourism development in Taytay as ecologically sustainable, culturally sensitive, and ethically and socially equitable for communities (see Figure 23). This was further characterised as 'low impact, high value', with terrestrial and marine nature-based activities said to be a major component, along with cultural attractions [I12, Taytay *Poblacion*]. When I spoke with people from WWF and the Taytay MTDMO, they spoke of plans to hold tourism trainings and seminars and had identified potential activities for tourists to undertake on *Barangay* Bucadan.

MUNICIPAL GOVERNMENT OF TAYTAY, PALAWAN
OFFICE OF THE MUNICIPAL TOURISM

VISION STATEMENT

A model of sustainable tourism through improved accessibility of travel destinations, better and more affordable tourism products, with a thriving culture of tourism among local residents, and an increased recognition of tourism as an effective and efficient tool towards socio-economic development of the Municipality.

MUNICIPAL GOVERNMENT OF TAYTAY, PALAWAN
OFFICE OF THE MUNICIPAL TOURISM

MISSION STATEMENT

The Municipal Tourism Office shall be the primary agency charged with the responsibility in the development of tourism industry in Taytay that is ecologically sustainable, culturally sensitive, ethically and socially equitable for local communities.

Figure 23. Vision and Mission of the Taytay MTDMO

Having heard about these plans early on during my research, I often asked people I spoke with in *Barangay* Bucadan if they had heard of the word 'tourism', what it meant to them, how they felt about it, and if they had heard of WWF and the Taytay MTDMO's plans. A number of people had never heard of the word, and for those that were positive about it their associations were mostly relational: 'to see new faces' [I17, *Purok* 4]; 'to make new friends' [I6, *Purok* 1]; 'I'd love to be acquainted with foreigners – they are very kind people' [I2, *Purok* 1]. This suggests that there is a difference in what 'tourism' means to people and could entail for them compared with a 'Western' understanding of tourism.

This mirrors research elsewhere in the Philippines in a municipality similarly seeking to establish a tourism industry (Porter et al., 2018; Porter & Orams, 2014). During informal conversations I had with community members, some voiced concern about tourists taking drugs, drinking alcohol, and dressing inappropriately, while others voiced their worries about their perceived sexual immorality of foreigners and fears of exploitation of local women and children. These concerns were often based on stories from friends and family who had visited or worked in the nearby resort town of El Nido. This has parallels with research elsewhere in the Philippines which has highlighted the concern of local communities about coastal tourism causing an increase in drugs, alcohol and the sex trade (Gier et al., 2017).

These differences in understandings of, and interest in, tourism in *Barangay* Bucadan suggest that WWF and the Taytay MTDMO have created an environmentality through which some community members have internalised the apparent pro-environmental behaviour and activity of ecotourism. Through the internalisation of new ways of thinking, they have become the 'subjects' that further the aims of NGOs and the state (Agrawal, 2005). This demonstrates how powerful governance actors can exercise

framing power to create an 'environmentality' that frames the objectives and processes of governance (Leach, 2008). This frame is used to endorse what is legitimised and prioritised, in this case the establishment of 'legitimate' tourism-based livelihoods. Through processes of cooperation and an overlapping of decision-making centres, state and non-state actors on Palawan have formed narrative networks around their interlinked aims for environmental governance.

As highlighted in Chapter 7 on pragmatic power, however, the access and benefits of municipal livelihood programmes in *Barangay* Bucadan are perceived by many as inequitable and favouring of local elites. Given this existing pattern, there is a risk that pragmatic power could result in access to tourism trainings and the benefits of tourism-related activities being similarly captured by local elites, while excluding more marginal members of the community. During informal conversations, a number of elder community members voiced their concern that they would be unable to benefit from tourism opportunities due to their lack of formal training and comparatively lower levels of English than younger people. Indeed research in the Philippines suggests that the benefits of 'eco-tourism' livelihood programmes rarely benefit small-scale fishing communities at all, instead favouring national and foreign elites (Fabinyi, 2010; Segi, 2014), as has also been highlighted in other coastal contexts such as Thailand (Bennett & Dearden, 2014b), Indonesia (Kinseng et al., 2018), Vietnam (Pham, 2020), and Jamaica (Epstein et al., 2022).

When I told a foreign owner of a tourism business in Taytay about my research on a small island community, he joked that I should take advantage of the situation and clear *Barangay* Bucadan of houses and people in order to build my own hotel resort, implying a perception of opportunity for personal gain at the expense of local livelihoods. Similarly, when speaking to the owner of a business in nearby El Nido – a

Filipino who had spent a number of years living in the US – he held a similarly dismissive attitude towards fishing communities as being the 'problem', contrasted with tourism being the 'solution'. Throughout my time on Palawan I would often respectfully try and find out where Filipino staff of tourism businesses were from, and the common pattern was that they had migrated from other parts of the country rather than being from Palawan. Similarly, while visiting Coron Town, a popular scuba diving spot in the Calamianes Islands of northern Palawan, I struggled to find a locally-owned dive centre. Having successfully been able to, I had a conversation with the owner who was from Coron, who told me about the substantial barriers he felt he had to overcome compared with dive centres owned by foreigners and migrant Filipinos, with his business being the only locally-owned dive centre out of 27 on the island.

Here we see the potential consequences of framing power deployed by actors in pursuit of tourism, in particular if failing to take account of – or ignoring – the local socio-economic and political context, and how this influences the equity of governance outcomes. This follows a pattern observed in research elsewhere on Palawan, which argues that profit and the protection of biodiversity are pursued at the expense of equitable, democratic environmental planning (Novellino, 1999; Theriault, 2014). This raises questions about whether increased redundancy in polycentric governance from powerful actors forming mutual partnerships is a 'good' thing if their objectives and actions lead to apparent unequitable outcomes for marginal resource-users. In the following section I provide an example of how this same exertion of framing power can be used to frame other livelihoods as *il*legitimate and *de*prioritised, leading to inequitable livelihood outcomes for marginal members of *Barangay* Bucadan.

8.4.2 Livelihood prohibitions

In this section I detail how NGOs at the meso-scale of governance create and advance particular framings of environmental use and management on Palawan. As will be detailed however, the pursuit of environmental goals results in socio-economic trade-offs; the rights and values of marginal resource-users are undermined through prohibitions on their livelihoods which are framed as degrading and a threat to the environment.

To demonstrate this, I will draw from examples related to swidden farming (*kaingin*), a form of shifting cultivation where farmers move between cultivable areas, which is often termed 'slash-and-burn' agriculture. It has a long history of use on Palawan by upland Indigenous Tagbanua and Batak peoples, with a range of cultural and economic values and spiritual significance (Dressler & Fabinyi, 2011). Its increasing use by lowland migrants and growing agricultural intensification has led to concern among conservationists, which has led to its regulation by the state, including prohibitions. As Dressler (2011) details, this provides an example of how global conservation ideas have taken root in state bureaucracies and civil society, impacting livelihood outcomes for Palawan's Indigenous Peoples, and their relationships with the environment.

Below I present a vignette with an example of how NGOs have used 'environmental education' and 'awareness-raising' to frame *kaingin* as illegitimate, based on my experience and participation in a conservation event run by a local NGO:

Katala Day Celebrations – NGO environmental education and awareness-raising

During my fieldwork I was invited to participate in an education outreach activity conducted by the local NGO **Katala Foundation**. Blue Communities – the project that my PhD research is associated with – was invited to host a stand with information about the project and its mission for sustainable marine planning and coastal resource management.

Since the late 1990s, Katala Foundation have been involved in conservation of Palawan's endemic species, 'through active community involvement' and 'employ[ing] participatory and ecosystem approaches' (Katala Foundation, 2022). The name *katala* comes from the critically endangered Philippine Cockatoo (*Cacatua haematuropygia)*, one of the flagship species that Katala Foundation has developed their conservation programmes on. Their work has been recognised on the global conservation stage, including the awarding of the prestigious Whitley Award – informally referred to as the 'Green Oscars' – to their founder.

For the annual 'Katala Day' event I attended – themed 'Share a Place to Live' – school children from across Palawan were in attendance (see Figure 244). The day included a range of speeches, information boards, activities, games and competitions themed around conservation and sustainability.

I was asked to help facilitate one of the games, which was an adaptation of 'snakes and ladders' framed around positive and negative environmental behaviours. One 'snake' – negative – action was *kaingin* (swidden farming), which was communicated to children as something prohibited, illegal, and destructive to the environment.

Figure 24. Annual 'Katala Day' event organised by the Palawan local NGO Katala Foundation

The vignette suggests a continuation of early state discourses from the 1960s and 1970s which framed *kaingin* as 'backward' and 'irrational' (Dressler, 2011). During the Katala Day game, negative framings of swidden farming were intended to discourage children from engaging in the practice, to view it negatively and discourage others from practicing it. In doing so children become the subjects that advance the aims of NGO actors by becoming the instrument that self-regulates their behaviour (Agrawal, 2005).

Similarly, two 'WWF Coral Triangle Blog' pieces written about Palawan in 2009 include 'exposé photos' from a helicopter ride that showed 'how a mountain is raped […] by slash and burn or *kaingin*' (WWF, 2007a; WWF, 2007b). Notably, the visits when the photos were taken were in collaboration with the pearl farm company I discussed in the previous chapter, Jewelmer, and were used to advance the company's apparent commitment to protection of the environment, which included WWF's signing of a Memorandum of Understanding with an NGO established by Jewelmer called the Save Palawan Seas Foundation. This further demonstrates how environmental NGOs on Palawan, and their networks of partners, have used framing power to construct and advance a discourse that unilaterally frames swidden farming as damaging to the environment. Conservation actors have been able to create an 'environmentality' which frames the objectives of governance, and rejects what is deprioritised or illegitimate (Wilson et al., 2018). In this example an environmentality is constructed by NGOs on Palawan, which leads to resource-users internalising behaviour that self-regulates the livelihoods they engage in.

Underpinning this is a neoliberal, apolitical, technocratic view which commodifies nature, and is based on assumptions that the application of market logic to biodiversity conservation and natural resource management will lead to the 'win-wins' of ecological sustainability and economic growth (Brockington & Duffy, 2010; Büscher et al., 2012;

Igoe & Brockington, 2007; Dressler & Roth, 2010). Research has argued that this has led to the dispossession and eviction of marginal resource-dependent peoples, through the construction of degradation narratives which frame rural peoples and their livelihoods as economically 'irrational' and damaging to the environment (Bergius et al., 2020; Li, 2010).

From conversations about *kaingin* in *Barangay* Bucadan, however, it is evident that the framing of *kaingin* as illegitimate overlooks social complexity and vulnerability within communities. As a female FGD participant told me: 'since men are more involved in livelihoods related to fishing, *kaingin* is now a task mostly done by women' [P2, *Purok* 2, FGD-W]. As another female respondent said: '*Kaingin* is now prohibited! It's hard for us now they are also prohibiting it…' [P1, *Purok* 2, FGD-W]. As a key livelihood for women, prohibitions were said to disproportionately impact them. This demonstrates how framing power can undermine equity in terms of the distribution of costs across different community members.

After I returned back to the UK due to the Covid-19 pandemic, a key informant on *Barangay* Bucadan told me that many community members had re-engaged or increased their practice of *kaingin*. With some of the strictest lockdown measures globally put in place in the Philippines, I was told that people were reluctant and at times prohibited from traveling to the mainland to buy produce such as rice. With the LRFT and sea cucumber export markets from *Barangay* Bucadan completely crashing during the initial months of the Covid-19 pandemic, *kaingin* was said to have played a crucial subsistence role when other livelihoods had collapsed.

This demonstrates the risk of (global) conservation discourses – constructed and advanced through the exertion of framing power by conservation actors and their narrative networks – failing to take account of unique contexts and social complexity

at the local scale, leading to inequitable livelihood outcomes for marginal resource-users. This indicates how a singular pursuit of environmental outcomes can lead to negative, unjust social consequences (Klain et al., 2014; Mudliar & Koontz, 2021). As highlighted in my evidence synthesis, this has been similarly demonstrated in research on the effects of global shark conservation on coastal community livelihoods in Indonesia, which have exacerbated livelihood precarity (Jaiteh et al., 2017), and driven people into hyper-precarious livelihoods such as people smuggling (Missbach, 2016). Failure to consider social impacts can also undermine the legitimacy of governance processes and outcomes if they are perceived to exacerbate the marginalisation of vulnerable actors, leading to socially unacceptable, 'taboo' trade-offs (Daw et al., 2015).

In the following section I will discuss how framing power is also expressed 'from below' as a form of resistance against environmental management measures perceived as exclusionary.

8.5 Framing power and implicit forms of every-day resistance

As discussed in Chapter 2, analysts of framing power tend to focus on the ways in which it is used to marginalise and disempower communities, with limited attention to how it can be used to empower them. In this section I will demonstrate how framing power has been developed and used by marginal resource-users on Palawan to successfully resist environmental regulations they perceive as exclusionary.

Within the literature on resistance, there are varied ways in which actors are able to resist the hegemonic power of dominant actors. As Kerkvliet writes:

> How subordinates resist can vary from organised and confrontational forms, such as peasant demonstrations and rebellions, to less elaborate but still direct and confrontational action, such as peasants boldly taking over land they claim

> belongs to them or petitioning authorities or other superiors to meet their demands; to subtle, indirect, and non-confrontational behaviour (2009: 233).

The form of resistance varies greatly relative to the local norms and level of oppression in different contexts. In this way acts of resistance are an expression of agency within the structural constraints of a context, with actors creatively adapting to adverse situations to resist challenging circumstances. Subtle forms of everyday resistance are commonplace in repressive contexts where they can be more effective than explicit forms of resistance which can result in (fear of) repercussions.

In order to undertake my analysis of this type of resistance, I draw from Scott's (1987) concept of 'weapons of the weak', which highlights the ways in which communities are able to construct their own framings as a form of everyday resistance. These subtle acts can take shape in many different forms, and in *Barangay* Bucadan much of the everyday resistance to environmental regulations was framed in relation to macro-scale political discourses of inequality and corruption.

8.5.1 Discourse of suffering and hardship – livelihood continuation

A common theme that I heard across diverse contexts whilst undertaking my fieldwork was about peoples' suffering and hardship. As I will demonstrate in this section, this theme is rooted in a basic rights discourse which is a key feature of the national political culture in the Philippines, which emphasises the social obligations and moral relationships between the rich and poor, including politicians and rural peoples. Fishers draw on this discourse to legitimise livelihood continuation, rule-breaking, and occasional illegal fishing as both a fulfilment of their basic rights, and as an act of implicit resistance. My findings indicate how framing power can be used by marginal actors to undermine the legitimacy of formal rules, due to cultural norms about their livelihood rights.

During my research suffering was commonly associated with the *amihan* north-east monsoon period, which coincided with my second long-term stay in *Barangay* Bucadan. As people told me: '*amihan* causes poverty in Bucadan' [I13, *Purok* 2]; '[life] is hard in *amihan*, because sometimes we can't catch any fish because of the big waves' [I15, *Purok* 4]; 'during *amihan* [there is] no water and the soil is dried already [so] we can't plant vegetables' [I2, *Purok* 1]; 'as with now it's *amihan*… no livelihood for us. Those who can survive … well, it depends on the number of your children…' [P2, *Purok* 3, FGD-W].

During *amihan* there is very limited rain, which means people rely on purchasing and bringing drinking water from the mainland instead of a mix of rainwater (for drinking) and well-water (for cleaning clothes) during the *habagat* monsoon period. Strong winds and large waves make trips to the mainland for rainwater (and other goods) treacherous, while also making fishing more difficult and less productive.

Suffering and hardship were frequently also discussed in relation to food and hunger. As one FGD participant said:

> Nowadays it is better to be a chicken because if they scrabble and peck in the dirt once, they can already eat. For us people we can scrabble [metaphor for working] four times and we're still unable to eat… [P6, *Purok* 4, FGD-W].

As another participant in the same FGD commented: 'if you catch one fish you can only sell it for 200 pesos (£3). Try imagining that situation, how will it provide rice for a family of ten?' [P2, *Purok* 4, FGD-W]. In the view of a FGD participant in another sub-village: 'the people in *Barangay* Bucadan are barely surviving. We are way below the poverty line' [P4, *Purok* 2, FGD-M].

A second common association with suffering and hardship was environmental regulations and livelihood prohibitions, in particular for the LRFT. On three separate

occasions during informal conversations with people, when asked what impact LRFT regulations had on them they simply responded by saying *patay* (dead) while miming a knife cutting across their throats. In another FGD, a participant spoke about the impact of environmental regulations in relation to prohibition of other livelihoods, complaining that '*kaingin* (swidden farming) is prohibited, charcoal-making is prohibited… We're already starving!' [P3, *Purok* 1, FGD-W]. This highlights a tension between conservation objectives that enact environmental regulations and livelihood prohibitions on the one hand, and local political and customary norms around basic rights and the obligations of politicians on the other. These framings draw on what has been described as a basic rights discourse that plays a powerful function in politics in the Philippines, reflecting Filipino cultural norms around reciprocity, social obligations and morality (Fabinyi, 2012). Framings of suffering and hardship are an expression of everyday, informal resistance by marginal actors, which take the form of passive non-compliance. This highlights the complex interrelationships between global environmental discourses and Filipino cultural values, and how these intersect and influence the effectiveness and legitimacy of environmental governance. From a critical institutionalism perspective, this highlights how environmental institutions often build upon, are given meaning by, and integrate with cultural and relational institutions such as norms, expectations, and taboos.

This was evident through the intersection of pragmatic power and framing power on Palawan, in the form of personalised politics and patron-client relations and obligations (pragmatic power), and the discourse of suffering, hardship and basic rights (framing power) which structure the interactions between wealthy politicians and small-scale fishers. One participant in a participatory mapping exercise spoke of his personal appeals to the Governor: 'We just pray to have a livelihood [but we're] being forgotten.

Twice I went to the Governor's Office to ask for [sea cucumber] livelihood, but "no budget"' [P2, *Purok* 3, PM3]. During another FGD, participants similarly spoke of their personal appeals to the Governor to oppose regulation of the LRFT, which he was then seen to personally overturn.

For some people I spoke with, the use of illegal fishing methods was framed as an act of necessity to avoid starvation and suffering. As one FGD participant said:

> We cannot really comment about it [illegal fishing], all we know is life is much harder now… we even eat cassava by itself for breakfast. That's why we say to ourselves that if everybody is doing it [illegal fishing], why don't we too? We complained about it a couple of times but nothing happens. We fish there, in that area using hook and line but on the nearby reefs some are using dynamite. What will be left in our reef? Sometimes the left overs of dynamite are in our reefs. What will we eat? Not only from *Barangay* Bucadan… All *Barangay*s are involved in 'illegal'… [P1, *Purok* 2, FGD-W]

As shown in the quote above and across other conversations, a common feature when speaking about the subject of illegal fishing was for people to blame another *barangay*, or to blame a different sub-village in their *barangay*, and to use that to justify their *occasional* use. Justification would also sometimes come from the absence of any alternatives, and the need to use illegal methods for their existing livelihood, with one FGD participant saying:

> It is true that some of us here are involved in illegal… it can't be prevented if you are feeding the fish[25]. But it does not mean that it is our sole means of earning money. We don't depend on it. I admit that I sometimes join them doing illegal… [P1, *Purok* 2, FGD-W]

During a discussion after a participatory mapping activity, two participants disagreed about the illegality of using compressors:

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[25] The participant is referring to undersized Groupers which are 'cultured' until they reach a marketable size for sale in the LRFT

> P1. Yes compressors [are the] number one… plague in the world.
>
> P2: For compressor it depends on whether you're using [it] with an illegal substance. Our compressor is used only for the feeding of *lapu-lapu*. We don't use any illegal…
>
> P1: … We were talking about compressor, it is banned.
>
> P2: Yes it is illegal, but we don't use any substances [cyanide] with it.
>
> P1: I didn't say that you were doing illegal activities!

Based on the Philippines Fisheries Code, compressors are illegal, but the two participants use their discretion to interpret this law and the different meanings of "illegal" based on use. For P1, compressors are illegal and should be banned, whereas for P2, they view the use of compressors as legitimate if used specifically for feeding *lapu-lapu* being caged for the LRFT. Later on in the discussion, P2 said:

> When the government totally banned and enforced the law on compressor in another *barangay*, the people complained that they don't have any source of living, only compressor. In that *barangay* most of them use compressor for their living. Their *barangay* captain said if you catch your own people and they have *illegal substance* as well as compressor, then you can bring them to the municipality. [PM2, *Purok* 3]

This was similarly discussed during a FGD in a different sub-village:

> Someone was caught here last time… they were caught in possession of a compressor, but it wasn't actually used for illegal. Compressor is declared to be illegal, but they only use it to dive and feed *suno* [highest-value Grouper]*,* because it's not easy to swim without a compressor, it is deep. And if your fish isn't located deep in the ocean, you can only sell it for 600 Php (£9) per kilo. Where will you get the money to feed the fish? Nothing. You won't earn any profits… [P1, *Purok* 2, FGD-W]

These examples demonstrate the creative ways that people draw on pragmatic power to (re)interpret the laws about what is and isn't illegal, while using framing power through the discourse of hardship and suffering. This narrative is closely connected to the right to survive; people draw on this narrative to frame environmental regulations

as illegitimate and inequitable, thereby legitimising rule-breaking and non-compliance – for example in the form of illegal fishing – as an act of survival. This would be contrasted with rich illegal fishers or local elites with preferential access to municipal livelihood programmes, with parallels to Fabinyi's (2012) notion of the Poor Moral Fisher where fishing in MPAs is legitimised as a necessary act by 'moral', impoverished small-scale fishers, distinct from 'immoral', wealthy illegal fishers using cyanide and dynamite. Similarly, in Eder's research on Palawan, he describes the case of beach seining and the reluctance of municipal politicians to enforce regulations prohibiting it:

> Beach seining has considerable populist appeal, and the municipality does not currently enforce its ban on this activity. Any attempt by the mayor to enforce the ban could prove costly because his political opponents would likely argue that the mayor should not hurt the 'small people' (who after all, are just trying to survive) in his zeal to save the environment. (Eder, 2009: 121)

Hear we see how the livelihoods of poor small-scale fishers play a powerful political function on Palawan, as a means of survival and basic right on the one hand, and as a key driver of political legitimacy and support on the other.

As briefly noted in Chapter 2, Leach et al. describe the role of *environmental entitlements* in natural resource use and management:

> alternative sets of utilities derived from environmental goods and services over which social actors have legitimate effective command and which are instrumental in achieving well-being. By 'legitimate' [they] refer not only to command sanctioned by a statutory system but also to command sanctioned by customary rights of access, use or control, and other social norms. In some cases, these sources of legitimacy might conflict, and different actors may espouse different views of the legitimacy or otherwise of a given activity. (1999: 233)

In the case of *Barangay* Bucadan, these social norms include the basic rights discourse in the Philippines; for marginal people unable to draw on relational

institutions of kinship, clan, and the patron-client system, they see their acts as a legitimate claim to environmental entitlements necessary for their survival, and distinct from other types or drivers of illegal fishing.

The environmental rules and regulations that people break are implicitly delegitimised through the normative legitimacy of these acts as a means for survival people are forced to undertake, due to a perceived failure by the state to support their welfare needs. As Li writes about these interactions:

> To grasp such dynamics, it is necessary to explore the ways in which meanings and outcomes are negotiated, albeit within an uneven field of power. Categories that manifestly do not fit, plans that fail, and compliance withheld or withdrawn expose the fragile nature not only of the government agencies promoting this or that development programme but of the very idea of "the state" as knower, arbiter, and provider for "the people" (Li, 1999: 297)

This mirrors research on destructive fishing gears used in Mafia Island, Tanzania, where community-defined moral rights to fish for the fulfilment of basic material needs legitimise the use of blast fishing (Raycraft, 2019a). This contrasts with other contexts where illegal fishing has been legitimised as an act of resistance by fishers 'getting back' at authorities for environmental regulations (Coulthard, 2012) .

Holmes' (2007) research identified the continuation of banned livelihood practices as a central aspect of resistance, which becomes an implicit challenge to conservation and the regulation of peoples' activities. Continuing to perform these activities is a way of asserting their rights, serving both a political and livelihood function through securing material needs to support wellbeing, framed on Palawan as a basic rights discourse. 'Through their resistance, subordinate people struggle to affirm their claims to what they believe they are entitled to based on values and rights recognised by a significant proportion of other people similar to them' (Kerkvliet, 2009: 233). For all the

sources of tension and division that I heard and observed between ethnic and clan lines and across geographic boundaries in *Barangay* Bucadan, the vast majority of people that I spoke to were united in their opposition to regulation of the LRFT and its perceived inequitable impact on small-scale fishers. This demonstrates how conservation and Filipino macro-scale political discourses intersect, leading to contestations around the objectives and outcomes of environmental governance.

The discourse of suffering and hardship was deployed widely across *Barangay* Bucadan as a form of implicit, everyday resistance to environmental governance and management measures perceived as unfair and disproportionately impacting small-scale fishers. This serves the function of undermining the legitimacy of environmental regulations, while legitimising non-compliance and rule-breaking as a form of resistance and means of survival and implicit political opposition. Closely connected and often contrasted with suffering and hardship was a discourse of corrupt elites, maintained through other forms of everyday resistance like gossip, slander, and character assassination, as is discussed in the following section.

8.5.2 Discourse of corruption – evasion, gossip, slander and character assassination as everyday resistance

As highlighted in Chapter 7, environmental governance and management is widely perceived by people on *Barangay* Bucadan as leading to outcomes that favour local elites, while unfairly and disproportionately impacting marginal community members. These relationships are characterised by pragmatic power, with informal institutions such as local norms, kinship, and patronage often taking precedence over formal rules and regulations, which are said to contribute to a context of corruption in Taytay and *Barangay* Bucadan. In this section I will demonstrate how a national discourse of corruption and elite exploitation intersects with the discourse of suffering and hardship.

This undermines the legitimacy of coastal resource management measures; for marginal resource-users this leads to evasion, gossip, slander, and character assassination as acts of everyday resistance directed towards different levels of the state, in particular when actors are deemed to have undermined people's basic rights.

Illegal fishing and regulation of the LRFT were framed by marginal small-scale fishers as issues stemming from the practices of corrupt elites. This reflects a similar pattern observed by Fabinyi in the Calamianes:

> the process of regulation of the live fish trade was understood by local fishers as a political process, one which was representative of a pattern in fisheries governance, and more broadly, a pattern of governance generally in the Philippines, that was understood as unjust and inequitable (2009: 258).

As Ramos writes, neoliberalism in the Philippines has led to 'the promotion of an intellectual architecture that construes the realm of the state as a site of individual self-seeking behaviour and prone to corruption, which has thereby fostered cynicism in all forms of public authority' (2021: 312). This is evidenced by the deep cynicism that I heard from people in *Barangay* Bucadan when discussing politics and environmental governance.

As was discussed in Chapter 7, political figures at different scales – and politics as a whole – were widely framed as corrupt and exclusionary. As one FGD participant complained: 'their tactics include promising solutions to our problems. They know our weaknesses. They always do that to acquire support. How many politicians have done that already!? Once they win, all those promises disappear. Forgotten…' [P6, *Purok* 2, FGD-M]. This narrative was expressed succinctly by one FGD participant, who after a dialogue about illegal fishing exclaimed: 'Philippines has dirty politics! Filipino, *corrupt*!!' [P2, *Purok* 3, FGD-M]. It was common for people to single out individuals for slander, often contrasting them to other people perceived as fairer. As another FGD

participant said: 'our current [*barangay*] captain focuses on his personal business and not for the sake of the whole *barangay*' [P2, *Purok* 1, FGD-W]. When people criticised him, he was often contrasted to a former *barangay* captain. As one FGD respondent said:

> We already know the difference between our former [*barangay*] captain compared to our current leaders. Captain Michel provided something for us with all the improvements he introduced. Women were also given opportunities to work when the school was constructed. [P4, *Purok* 1, FGD-W]

There were similar contrasting framings when people spoke about municipal politicians:

> The current Vice Mayor is involved in illegal logging. After people are arrested, after a few weeks they [government authorities] give the chainsaw back. Apparently his [Vice Mayor] house is made from lots of very nice wood. When you ask people where they take the wood to, they say the Vice Mayor of Taytay. He is brothers with the former Mayor. Maybe it's because they're not from Palawan that they don't care about the environment. They're not from here, they're from Antique originally. They give money to people to help them, but it's from the environment. The former Mayors in the past had more concern about the environment here… [I13, *Purok* 2]

Here we see the intersection of framing and pragmatic power; these examples suggest that marginal fishers use framing power to align with the macro-scale political discourse of corrupt elites using pragmatic power to prioritise the personal gain of themselves and their kin over formal rules and regulations and equitable governance outcomes.

During informal conversations with an NGO staff member and a municipal official, I was told that fishers in *Barangay* Bucadan regularly under-declared their live fish catch when paying tax on their sales. During an interview with a fisher, he also implied that commercial traders were under-declaring their catch:

> The buyer doesn't tell the truth! […] For that ship *pointing at a live fish transport ship* they only declare three tons. How can you transport the live fish [to Manila] if it's only three tons!? If you secure a permit from the Municipality you would lose your profit because of the cost of fuel. Just open your eyes! [I13, *Purok* 2].

During the same interview the fisher voiced his frustrations about the high taxes that he needed to pay to the municipality and *barangay* for the live fish he sold:

> I pay 4050 Php (£60) annually [to the municipality], and 1950 Php (£30) to the *barangay*. I told them [the municipality] you should collect the tax from the pearl farm! But they don't collect it from them… Why don't they?

Also acting as a community-level buyer of sea cucumbers, he later spoke of how he would transport sea cucumber overland to the southern tip of Palawan, before taking a boat to Sabah, Malaysia in order to sell directly to a buyer, thereby avoiding paying tax. In this scenario the fisher's actions can be seen as an act of everyday resistance in the form of non-compliance and tax evasion, justified through his framing of wealthy pearl farm owners as not paying tax. According to Scott:

> it is precisely the fusion of self-interest and resistance that is the vital force animating the resistance of peasants and proletarians. When a peasant hides part of his crop to avoid paying taxes, he is both filling his stomach and depriving the state of grain (1987: 295).

By evading tax, the fisher is pursuing his material needs through livelihood benefits, while also depriving the state of taxes due to the perception that commercial LRFT and pearl farm companies are avoiding paying taxes themselves.

As in Section 7.6.2 of the preceding chapter, the pearl farm company in question was known to be owned by one of the wealthiest families in the Philippines, which benefitted greatly under the Marcos regime. This demonstrates how the fisher's framing draws on the broader macro-scale political discourse of corrupt wealthy elites benefiting while the rural poor are disproportionately impacted.

Scott writes further how this type of resistance is a contest for symbolic authority:

> the sanction of local opinion and custom continues to exert a small but perceptible influence on conduct. The desire to be thought well of, or at least not despised, is a material force in the village made possible only by the symbolic mobilization of the poor around certain customary values. […] By rewarding, if only symbolically, those whose conduct is more nearly in accord with their values, the village poor undercut the moral authority of their enemies by allocating virtually the only resources over which they have some control: reputation and social prestige. (1985 :235-246)

In the examples I provided above, people express a form of everyday resistance through a mix of livelihood continuation, evasion, gossip, slander, and character assassination (Scott, 1985). In particular, gossip (*tsismis)*, is a strategy that was deployed widely by both marginal and powerful people in the community to undermine the social standing and reputations of others. Living in a household that was a social hub for the neighbourhood I was in, I heard all manner of *tsismis* ranging from contentious things the Governor supposedly said to accusations that a family in the neighbourhood were shapeshifting ghosts, and gossip about the promiscuity of a neighbour to rumours of a villager being a communist rebel. When speaking about illegal fishing during interviews and FGDs, it was common for specific politicians to be blamed for enabling it, and on some occasions, specific families or individuals in *Barangay* Bucadan were named and accused of being engaged in it.

The tacit awareness of the role that gossip can play in social relations was demonstrated during an interview with a migrant household living on the physical peripheries of *Barangay* Bucadan. Having formerly had close relations with one of the most influential clans in the community, relations had broken down:

> It's because when *Barangay Kagawad* Esmerelda lost in the [*barangay*] election [9 years ago], she blamed us for not voting for her. That's why it's different now. We are civil. We are not 'plastic' [two-faced] type of people… We don't want to slander her, but she treats us differently now… [I23, *Purok* 3]

Slander and gossip – in particular about corruption by people with a higher social standing – are commonly deployed as a form of resistance against individuals perceived to have broken the normative values of morality and fairness. This type of resistance is a microcosm of macro-scale political discourse in the Philippines of inequity and exclusion, with governance outcomes influenced by relational cultural values and institutions like ethnicity, clan, family and patron-client relations, as discussed in Chapter 7. By resisting through framings of corruption and hardship, the legitimacy of governance actors to make and enforce rules is significantly undermined, while the voices of marginal community members are amplified. This demonstrates how marginal actors in polycentric governance systems can use framing power to pursue their own objectives and desired outcomes of resource use and management.

Through these acts human agents are able to resist and disrupt the system despite their limited power, demonstrating that even in highly unequal and oppressive structures, the weak are able to continually wage resistance to hegemony, dismantling the structural relationship between the forces of domination and those who are subjugated (Scott, 1985). Even in the most constrained of circumstances, agents have the capacity to act within that system, thereby reproducing and in some cases *transforming* social structures (Giddens, 1984).

As will be discussed in the next section, I found that resistance to governance processes and environmental regulations in *Barangay* Bucadan manifests in more explicit forms of indirect and direct collective action, most notably through protest.

8.6 Framing power and explicit acts of and responses to resistance

In this section I will describe how small-scale fishers in Barangay Bucadan have escalated from implicit acts of resistance to increasingly overt and explicit acts, such

as direct action in the form of petitions, protests, and rallies. In presenting this, I will further contribute to research on polycentric governance by highlighting how marginal actors can use framing power to contest perceived injustices, including through forming and aligning with national and global advocacy and protest networks.

8.6.1 Collective direct action

With a rich history of civil society and activism in the Philippines, some small-scale fishers in *Barangay* Bucadan have aligned their resistance to coastal management with democratic processes for collective action. In *Barangay* Bucadan and Taytay this has included petitions, rallies, and marches; through intersecting with the pragmatic power obligations and expectations presented in Chapter 7, these have increased the accountability of the state and led to the overturning of unpopular LRFT regulations. Strategies have also included aligning with a broader national collective action movement committed to the protection of the rights of rural people in the Philippines.

One such example was in response to the proposed pearl farm project that I discussed in Chapter 7. The majority of *barangay kagawads* and the *barangay* captain were said to have already signed their approval after the initial consultation held with the community by the pearl farm company. In response, Aquilino – the influential small-scale fisher from a peripheral sub-village on *Barangay* Bucadan – said:

> I spoke up to say that I'm not agreeing to it, I told *Kagawad* Jericho [a *barangay kagawad* at the time]: "if you do your resolution [to approve the pearl farm] in Taytay, then I'm filing for a petition to stop it! *Kagawad* Jericho dared me saying: "Can you do that?" I said "Yes!". I then went to Taytay to seek advice from an attorney, saying that we don't want to allow them to put up a pearl farm in Bucadan. I went home after that to ask the people for a signature campaign […] my petition was signed by 200 people [I19 *Purok* 2]

The petition was presented directly to the municipal mayor who was said to have personally overturned the decision. This highlights how power by design – the formal

authority granted through the decentralised administrative governance system in the Philippines as highlighted in Chapter 6 – intersects with pragmatic power, with the municipal mayor acting as a pragmatic power broker at the municipal scale, with the practical power to grant or withhold legitimacy to decisions regarding the environment. This supports research elsewhere in the Philippines which has highlighted the extremely powerful role played by municipal mayors on the objectives, process and outcomes of coastal governance (Fortnam, 2017).

The successful petition demonstrates the way in which framing power can be deployed from the bottom-up as a mechanism for accountability, in this case the *barangay* captain is accountable to the municipal mayor, who himself is accountable to his voters. Framing power intersects with pragmatic power, due to the obligations that politicians owe in return for their vote, a key facet of patron-client dynamics.

Additionally, the presentation of the petition to the Mayor, and his stepping-in to overturn the *barangay* decision to approve the pearl farm acts as an informal mechanism for conflict resolution, which allows socially vulnerable and marginalised groups – disproportionately impacted by the risks and receiving insufficient benefits of natural resource policies – to challenge decision-making authorities (Lebel et al., 2006).

Another person I spoke with recalled the petition during an informal conversation:

> the *Barangay* Captain arrived at the municipal mayor's office with the *Barangay* Resolution, but Aquilino was already there and the Mayor scolded the Captain saying "You said all of the people from Bucadan agreed to the pearl farm!" [Informal conversation, *Purok* 1]

In this situation, Aquilino used framing power to secure signatures for the petition by framing *barangay* leaders as corrupt, and the pearl farm company as dishonest. The

petition was initiated as a form of resistance against a decision perceived as unfair and procedurally and distributively inequitable, due to the lack of transparency of the public hearing, and the alleged capture of benefits by the *barangay* elite.

Whereas livelihood continuation, passive non-compliance, evasion, gossip, slander, and character assassination – as described in the previous section – are examples of everyday forms of resistance, the initiation and presentation of a petition to the authorities is an example of direct and confrontational action which stops short of explicit or violent direction action. During my interview with Aquilino, he provided detail of how he also engaged in explicit resistance to regulation of the LRFT.

The experience of Aquilino and others fishers from *Barangay* Bucadan is presented in the vignette below:

Pamalakaya (National Federation of Small Fisherfolk Organizations in the Philippines) – grassroots People's Organisations and fisher resistance

Aqulino is a migrant small-scale fisher living in a peripheral *purok* of *Barangay* Bucadan. A few years ago, some friends encouraged him to join a protest planned in opposition to Administrative Order No. 5, the primary legislation that regulates the LRFT on Palawan. After attending the rally, he and some other fishers were inspired to create a Municipality of Taytay branch of Pamalakaya.

Pamalakaya is an alliance of activist fisherfolk groups in the country with over 100,000 individual members and 43 provincial chapters. It was formalised as a federation on December 7, 1987, when it held its first national congress (Pamalakaya, n.d.). Pamalakaya has contested coastal territorialisation processes, such as reclamation projects (i.e. creating new land from coastal-marine spaces linked to oil exploration, large-scale infrastructure) and marine tourism development. Their concerns involve protecting the coastal spaces in which marginalised groups reside (and typically have little to no formal, tenurial claim over oceans and coastal areas) from further encroachment by intensifying reclamation projects, for-profit initiatives, and MPAs (Satizabal, 2020).

Aquilino was later chosen to become the President of Pamalakaya Palawan, which was said to be influential in protests in the provincial capital Puerto Princesa City that contributed to the revision of Administrative Order No. 5.

Vignette continues on the next page

Other fishers from *Barangay* Bucadan spoke of their experiences protesting against LRFT regulation and the role of Pamalakaya:

> *That is why we are fighting for it [overturning Administrative Order No. 5] … the [national] president of Pamalakaya helped us… when we had the rally there were more or less one thousand [small-scale fishers] who attended […] they were really helping us about our problems in illegal fishing. They help those who are suffering like us. I pity those who live here… [P3, Purok 3, FGD-M]*

Through engaging and aligning with Pamalakaya, some small-scale fishers in *Barangay* Bucadan have used framing power to align their objectives, and resistance, with a powerful social justice movement in the Philippines, with its own national and global narrative network. Pamalakaya is a member of the largest political activist group alliance in the Philippines, *Bagong Alyansang Makabayan* (Bayan-New Patriotic Alliance), while also being a member of global activist networks such as the World Forum of Fisher Peoples (WFFP), the International League of People's Struggle (ILPS), and the Asian Peasant Coalition (APC) (Pamalakaya, n.d.). Pamalakaya frames LRFT regulation – and wider conflicts over coastal and resource use and management – as class struggle and resistance to hegemony.

A FGD participant went on to detail his experience of the protest:

> *P2: When the barangay called for a meeting, all of us Pamalakaya members also conducted discussions. […] Some residents from Bucadan joined the rally, they were interested in joining. We didn't have to pay for our fare, it's free [paid for by Pamalakaya]. We were transported using a truck. Now when we reached the office of PCSD we were assisted immediately. We raised concerns like compressor being declared illegal for us but other are still using it non-stop. They reasoned that others are using compressor but they are not using sodium [cyanide]. Now they [PCSD] tell us that 'zero five' [small sized] lapu-lapu is prohibited to catch. We told them it's hard for us since we rarely catch fish because some are using compressors day and night. During day-time some use cyanide. So what was the comment of the Governor? We went to the Capitol and he told us that we should have asked for a proper dialogue. There were ten of us… they transported us from PCSD using a Hilux [car]. The Governor asked us why did we hold a rally. I explained that nothing would happen if we will only ask for a dialogue since there are many of us.*

From this example it can be seen that the small-scale fishers' engagement in the rally was facilitated by Pamalakaya members. Feeling that dialogue with the Governor would not lead to any changes, they elected to engage in direct action through rallying

at the offices of PCSD, the government agency responsible for regulating the LRFT on Palawan. Through using framing power to align with a larger network of resistance they were able to hold government agencies and individuals to account, while also increasing their voices and ability to raise their grievances.

Here we see how competing objectives for environmental governance in *Barangay* Bucadan – and Palawan more broadly – are (re)shaped by the interaction and interpretation of conservation and political values from the grassroots to the global scales. This demonstrates the construction and internalisation of an environmentality concerned with championing egalitarian, democratic and non-hierarchical systems of natural resource management, based on the principle of equity (Fletcher, 2017). These findings contribute to research on power and polycentric governance by indicating the creative ways that marginal actors can use framing power to contest and resist environmental rules and regulations, increasing accountability within the governance system.

However, as the following section details, engagement in increasingly overt forms of resistance runs the risk of pushback by the state.

8.6.2 State repression

As highlighted in the preceding and current chapter, coastal resource governance and management on Palawan intersects with macro-scale political discourses of the relationship between the rich and poor. It became apparent during my research that this intersection extends to the rise in state repression and suppression of opposition to the government. Warnings, threats of violence, arrests, and framings of opposition voices as terrorists are tactics the state has used to crush the resistance of small-scale fishers.

As noted in Chapter 3, Foucault (1978) writes: 'as soon as there is a power relation, there is the possibility of resistance'. Yet similarly, as Scott (1985) argues, where there is routine resistance, there is also routine repression. In the Southeast Asian context there are the more overt forms of repression and coercion, including mass arrests, liquidations, martial law, paramilitary units with the licence to abduct and kill, and the subtler forms of everyday repression such as occasional arrests, warnings, and legal restrictions (Scott, 1985).

National and international researchers, activists, NGOs, journalists, and public figures have continued to highlight the growing human rights abuses and state repression under the regime of Rodrigo Duterte, in particular in his war on drugs[26]. Recent research has also highlighted increasing suppression of activists on Palawan through the guise of Covid-19 public health measures, leading to a rise in harassment, arrests, and deaths of environmental defenders, and intensification of resource extraction (Dressler, 2021). The Duterte regime was characterised as a continuation of neoliberal economic practices combined with rising authoritarianism and strongman politics, with violent rhetoric that has historical resonance with the Marcos regime (Mccoy, 2017; Ramos, 2021). Within this increasingly repressive context, my time on Palawan coincided with a significant national push against the decades-long communist insurgency in the Philippines – led by the Communist Party of the Philippines (CPP) – one of the most protracted class struggle movements in the world (Rivera, 2006), which continues to be a major element of political discourse in the Philippines.

As highlighted in Chapters 6 and 7, regulation and management of the LRFT on Palawan is highly politicised with a number of local and national elites – including the

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[26] In September 2021, judges at the International Criminal Court in the Hague authorised an investigation into possible crimes against humanity.

Municipal Mayor of Taytay and Provincial Governor of Palawan – said to be major players in the sector. During an interview with a PCSD staff member, he spoke of how the opposing side of macro-scale political struggle – socialist networks – have taken advantage of conflicts around regulation of the industry: 'In the Philippines it's easy for political people, for the Reds – the Leftists – to take advantage of this. So they come in, so they actually, they are really coming in' [I21, Puerto Princesa City].

He went on to speak in detail about one of his original assignments when joining the PCSD:

> [The island of] Paly is sort of the prime production capital for live fish, and for the longest time. […] I was for a time assigned in Taytay for a six-month stint as a district manager there. When I assumed the position, I tried to find my way meaning where to focus, and because I am a marine person I thought immediately of the live fish trade, and went there [to Paly] to try and understand, to have a dialogue with the people to try and understand the industry. Well, after my visit there my attention was called by the [PCSD] office, and I was told I'm not supposed to go there, and don't go back to Paly because, as they say, there's a lot of influence by the Leftists through the Pamalakaya. But for me, I'm a really open person. Even now I want to work with people, with communities, because that's where the real action is, that's where you can really make a difference. Unfortunately that's not how the office sees it, so I was again recalled to be back here [in Puerto Princesa]. [I21, Puerto Princesa City]

This suggests that macro-scale politics – notably the longstanding tension between an established oligarchic elite and a left-wing civil society and political network – are having a strong influence on coastal governance processes. Despite the island of Paly being recognised as the centre of the LRFT in Taytay – similar to *Barangay* Bucadan – allegations of Pamalakaya being an arm of the 'Leftist' groups – prevented the PCSD staff member from engaging with the people there. This demonstrates how polycentric systems are often embedded in hierarchical structures, in this case the broader macro-scale political dynamics of conflict between the state and armed separatists.

Part-way through my fieldwork I observed a significant increase in the number of Philippine Marine roadblocks between municipalities – as part of the Palawan Task Force on Ending Local Communist Armed Conflict (PTF-ELCAC). At these roadblocks, as well as public noticeboards in municipal centres, posters were put up with photos and names of alleged New People's Army (NPA)[27] members.

Around this time, Aquilino – the community member who resisted the establishment of a pearl farm in *Barangay* Bucadan and protested against regulation of the LRFT – was wanted by Philippine Marines and subsequently turned himself in. Elaborate rumours were circulating in the community, with some people saying the Marines had turned up in force to arrest him, while another community member claimed to have once seen his house filled with machine guns. When the arrest warrant was first issued, I had returned to the provincial capital Puerto Princesa City for the Christmas period, and upon my return to *Barangay* Bucadan Aquilino had been released without charge. I held an in-depth interview with him to hear about his experience, and what he thought caused it. When he asked the Marines why he had been arrested, he was told that their intelligence unit had photos of him at rallies and protests with alleged NPA members, and that they accused the Palawan branch of Pamalakaya of being NPA supporters. He angrily told me: 'why did they accuse us of being NPA when we just fight for our livelihoods as legitimate fishermen!' [I19, *Purok* 2].

During a FGD in another sub-village, participants discussed the arrests:

> they are arresting members of Pamalakaya since it seems illegal. They were labelled as NPA […] But they were able to help us before… what I said earlier about them helping us so our voices will be heard. They were with us even the one with the higher position. A [press] reporter even joined us. Pamalakaya is a good organisation. But since news about it being a terrorist group is

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[27] The NPA are the armed wing of the CPP, engaged in a decade's long guerrilla conflict against the state, primarily in rural areas.

spreading… it's fine with us since we have no personal hatred towards them [P4, *Purok* 3, FGD-M]

Participants spoke of how they rallied in front of the PCSD office to protest against regulation of the LRFT. They recounted how the Governor arrived and asked why they were rallying and that he said: 'alright give them food, maybe they are just hungry!' [P2, *Purok* 3, FGD-M]. One participant said they were invited to a later meeting with the Vice Governor where they were 'again given food, so much this time!' [P2, *Purok* 3, FGD-M]. After they continued their protests during that meeting, they were told that the Governor would personally meet them on another date at a different location. When they once again attended this new meeting with the Governor, one participant said:

> I went there early and there were military personnel… even coastguards. It was too much! There was even a helicopter! Even police officers… they treated us like NPA rebels! […] It should not be like that… these leaders we have should just talk to us properly.' [P2, *Purok* 3, FGD-M].

The incident above suggests the use of different tactics by the state, to first try and appease the protesters by giving them food. When unsuccessful, this was followed by their intimidation and coercion through the threat of violence, significantly undermining accountability through the suppression of negative feedback from those impacted by environmental management outcomes. The state uses framing power to delegitimise protest and resistance by small-scale fishers by framing their actions as part of militant separatist attempts to overthrow the government. This significantly undermines the principles of fairness and equity; the small-scale fishers perceived themselves as being treated unfairly by the state through their characterisation as communist rebels.

As mentioned in Chapter 7, my time on Palawan also coincided with an intense period of political campaigning by the Governor of Palawan and municipal mayor in support of a plebiscite to divide Palawan into three provinces. On one occasion *barangay*

kagawads from all *barangay*s in Taytay were invited to the municipal capital of Taytay. Afterwards, I spoke with one of the attendees from *Barangay* Bucadan, who recalled how the Governor asked all present *barangay kagawads*: "who here is from Paly[28]?", and when people raised their hands he was said to have pointed at them and shouted: "You're all NPA!".

When I spoke with local academics about these incidents, they told of how frequently the accusations of 'NPA' or 'communist' can be used to denounce groups seen as dangerous or in opposition to the government, in what is locally referred to as 'red-tagging'. These tags can be damaging and used to intimidate and suppress opposition to elite interests. For example, Haribon Foundation, an NGO which spearheaded a moratorium on commercial logging on Palawan in 1998 was pressured by Philippine National Police, with staff labelled 'communists' (Bryant, 2005 as cited in Dressler and Novellino, 2009).

When I was preparing to present my preliminary findings at a Blue Communities Symposium for academic and government partners on Palawan, I was cautioned by colleagues to avoid using the word 'activist' because of the connotations it has in the Philippines, in particular at a time of significant sensitivity with ongoing reprisals of activists accused of being communist sympathisers and terrorists. Since my fieldwork, the highly controversial Anti-Terror Bill has been approved by the state; human rights advocates argue the use of vague terms to define 'terrorists' gives the state significantly more power to crush dissent and critics (Business & Human Rights Resource Centre, 2020).

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[28] The island *barangay* mentioned earlier in this chapter, which is said to be strongly opposed to LRFT regulation and alleged to support the NPA.

Even without arrests, this type of 'routine' repression has the desired chilling effect of crushing dissent through the threat of violence and coercion (Scott, 1985). While acts of violence and suppression are real and tangible for those that suffer them, they also carry tremendous symbolic power as an explicit gesture of state strength, authority, and intolerance for subordination, deterring people from engaging in overt acts of protest and resistance (Raycraft, 2020). Through the threat of violence, people have internalised an environmentality where the threat of top-down punishment suppresses peoples' actions in protesting against environmental regulations. This fear and risk of repercussions against overt forms of resistance drives peoples' use of the more subtle and covert forms of resistance described in Section 8.5 of this chapter.

8.7 Summary

In this chapter I have detailed how actors construct problems and frame solutions to support their visions and objectives for environmental governance, while contesting activities and actors they perceive as illegitimate. In the Palawan context, these frames are heavily influenced by the macro-scale political discourse of wealthy elites, a powerful grassroots civil society movement, and the international conservation sector.

Environmental governance on Palawan has a long and complex history, with periods of extreme resource extraction and appropriation of land and resources, and intense interest from global conservation actors due to the high rates of endemism and abundant natural resources on Palawan. In the latter half of the 20th century this contributed to high migration rates to the island, due to the attraction of Palawan as the Philippines' 'Last Frontier'. This discourse continues to be (re)deployed by state, NGO, and private sector actors to attract investment, visitors, and donor funding.

Many of these actors form informal partnerships – narrative networks – built around the intersection of their values and objectives. In my research this was exemplified by the informal relationship between WWF and the municipal government undertaking overlapping activities to establish tourism-based activities in *Barangay* Bucadan. On Palawan, framing power continues to be deployed by NGOs to frame certain livelihoods – such as swidden farming and the live fish sector – as destructive and illegitimate. As has been demonstrated however, in *Barangay* Bucadan this has had inequitable impacts due to the dependency of marginalised groups, and the elite capture of livelihood diversification opportunities by local elites.

In response, resource-users deploy their own counter-framings of suffering and hardship to legitimise their livelihoods, including the use of illegal fishing methods. This is given further legitimacy by narratives of corrupt elites and politicians enriching themselves and their families while exacerbating hardship of the rural masses. Small-scale fishers are engaged in everyday resistance through continuing their livelihoods as both a political act and for survival. Alongside this they use other 'weapons of the weak' to denounce and discredit politicians, including the use of gossip, slander, and character assassination, in particular of politicians.

People have also engaged in more direct forms of resistance, as demonstrated by the petition which successfully overturned a proposed pearl farm development in *Barangay* Bucadan, and the rallies held in opposition to LRFT regulations. For the latter, this has led to the state deploying its own framing power by 'red-tagging' protesters to discredit them and reassert control, including through the threat of violence. Despite the risks, this response demonstrates that different acts of resistance are able to subvert state repression, increasing the voices of marginal resource-users.

These acts of resistance demonstrate how framing power can be used to increase accountability and equity within polycentric governance systems.

In the following chapter I will briefly summarise my key research findings presented in Chapters 5, 6, 7 and8, after which I will highlight the implications of this research, its limitations, and suggestions of further research.

9   Conclusion

Oceans and coasts are sites of rapid and accelerating environmental and social change, making governance and management of these areas increasingly complex and challenging. A rise in multi-level global ocean policies and practices have led to a dramatic increase in marine social science research on the processes and outcomes that underpin these. Within this space, I chose to focus my research on the intersection of livelihoods, governance, power, social complexity, and equity, with a specific focus on the rights of small-scale fishers and other poor resource-dependent members of coastal communities.

I explored these issues through four research questions:

> RQ1: How do social differences and power relations influence the process and outcome of livelihood change in Southeast Asia?
>
> RQ2: How does power influence livelihood and environmental outcomes at the community- and meso-scales of polycentric coastal governance on Palawan?
>
> RQ3: How is bottom-up power developed by small-scale fishers and marginal resource-users in polycentric coastal governance on Palawan?
>
> RQ4: How do different types of polycentric power work to maintain or undermine the equity, transparency, accountability, and legitimacy of polycentric coastal governance on Palawan?

Using a combination of a QES and a primary research case-study on Palawan, the Philippines, I described and analysed how governance actors use different types of power to influence the objectives, processes, and outcomes of polycentric coastal governance. I examined the relationship between global conservation agendas and macro-scale political discourses with cultural norms, values, and expectations, and how these intersect to shape the equity of livelihood and environmental outcomes, the levels of transparency and accountability, and the legitimacy of governance and management.

The majority of the discussion of my empirical findings has been embedded throughout Chapters 5, 6, 7 and 8. In the following section I will summarise the key research findings from my thesis in relation to the four research questions which I sought to answer through my research, after which I will then discuss the implications of my research, highlight its limitations, and suggest areas of further research.

9.1 Research findings

RQ1: How do social differences and power relations influence the process and outcome of livelihood change in Southeast Asia?

As highlighted by my QES presented in Chapter 5, across different Southeast Asian contexts, social differences and power relations play a major role in shaping the processes and outcomes of livelihood change, which commonly (re)shape and entrench unequal power dynamics both within communities and between communities and other coastal resource-users. Age and changing societal norms and aspirations commonly intersect to create a desire to move away from fishing, while ethnicity, socio-economic status, and stereotypes of fishers create barriers for engaging in and benefiting from externally-driven state and non-state livelihood development programmes and other coastal management interventions. When communities are able participate, benefits are commonly secured by local elites, further exacerbating the marginalisation of vulnerable community members such as migrants. In answering RQ1 through conducting a QES, an additional key finding was the explicit emergence of power and governance as a theme influencing the process and outcomes of livelihood change. Combined with the preliminary findings from my fieldwork, this contributed to the iterative development and identification of my thesis' theoretical focus on polycentric governance and power, which was used to structure the analysis of my primary research on Palawan.

RQ2: How does power influence livelihood and environmental outcomes at the community- and meso-scales of polycentric coastal governance on Palawan?

As shown in Chapters 5, 6, 7 and 8, governance actors use different types of power to influence livelihood and environmental outcomes of polycentric coastal governance on Palawan, in line with their visions and objectives for environmental use and management. My research findings indicate that the meso-scale of governance is a site where significant contestations around meanings and value take place on Palawan, in part due to the existing norms, expectations, and obligations which structure the relationships between community- and meso-scale actors, and upon which coastal governance institutions are built. Socio-cultural norms, values, and expectations around livelihoods and resource-use commonly take precedence over formal environmental regulations designed at higher and more distant levels of governance.

In Barangay Bucadan, community elites from dominant ethnic and clan groups use pragmatic power to dominate participation in, and secure benefits from, meso-scale livelihood programmes, while also undermining the livelihoods and tenure of marginal community members through their support of commercial development interests. Pragmatic power in the shape of political patronage, kinship ties, and elite interests is also used to undermine illegal fishing and LRFT regulations at the municipal level, which results in negative environmental outcomes through continued overfishing and use of illegal/destructive fishing methods. This reflects similar patterns identified in studies included in my synthesis undertaken on Palawan as well as other contexts in Southeast Asia.

Conversely, as highlighted in Chapter 8, international and local environmental NGOs influenced by global conservation agendas form strategic, informal partnerships with

meso-scale governance actors in pursuit of their shared environmental goals. NGOs on Palawan use framing power to build and maintain discourses about how the environment 'should' be used in pursuit of environmental outcomes such as conservation, and the prohibition of livelihoods perceived as unsustainable, yet this often leads to negative livelihood outcomes for marginal community members whose resource use rights are undermined. This demonstrates the challenges of coastal governance in balancing trade-offs between socio-economic and environmental objectives and outcomes, with the pursuit of one commonly undermining the other, while also masking key differences in the equity of outcomes experienced by different groups within and between communities. These findings also contribute to the knowledge gap about how power can be mobilised in pursuit of (or resistance to) environmental goals.

RQ3: How is bottom-up power developed by small-scale fishers and marginal resource-users in polycentric coastal governance on Palawan?

In response to the use of power by dominant governance actors on Palawan, marginal actors are able to develop their own ways to resist governance and management which they perceive as unfair and exclusionary. Small-scale fishers in *Barangay* Bucadan deploy counter-narratives by drawing from and aligning with cultural norms and discourses around suffering, hardship, poverty, and the relationships between the rich and poor, reflecting similar patterns elsewhere on Palawan as highlighted in my QES. This manifests as a basic rights discourse in the Philippines that frames livelihood continuation as an act of survival, combined with a characterisation of coastal governance and management as an extension of the macro-scale political discourse and practice of a corrupt elite exploiting the rural poor. Aligning with this discourse enables the further mobilisation of power through alliances with a rights-based civil society movement focused on protecting the rights of small-scale fishers.

Bottom-up power is also developed by marginal small-scale fishers through explicit acts of resistance and direct action such as petitions, protests, and rallies. This demonstrates how marginal groups form their own networks around particular visions of coastal use and management on Palawan, which shape, and are shaped by the historical and current social and political context in the Philippines. These findings contribute to the gap in research on power in polycentric governance, in particular how power can be used to empower rather than marginalise communities.

RQ4: How do different types of power work to maintain or undermine the equity, transparency, accountability, and legitimacy of polycentric coastal governance on Palawan?

My findings highlight how governance actors can use different types of power to both maintain and undermine the equity, transparency, accountability, and legitimacy of polycentric governance on Palawan as they pursue their respective agendas for environmental use and management. The intersection of governance with existing social and political dynamics between community- and meso-scale actors contributes to inequitable outcomes within Barangay Bucadan, with a perception of unfairness among marginal community members; pragmatic power undermines equity and transparency through elite capture of meso-scale livelihood interventions. *Barangay* leaders and municipal/provincial politicians also act as pragmatic power brokers whose granting or withholding of authority can maintain or undermine the legitimacy and implementation of LRFT and illegal fishing regulations. The legitimacy of environmental governance and management in the eyes of small-scale fishers is also undermined, due to a perception of inequity and a lack of transparency and accountability from the inconsistency with which illegal fishing laws are enforced.

Marginal small-scale fishers and rights-based groups use framing power to successfully resist environmental regulations they perceive as exclusionary,

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increasing accountability within the coastal governance systems on Palawan. These findings address a research gap about how power can both maintain or undermine the principles of equity, transparency, accountability, and legitimacy in polycentric governance, highlighting the complex ways in which different types of power dynamically interact.

9.2 Implications of research

Having summarised my key research findings, I will now expand upon the implications my research has for both theory and practice.

As noted in Chapters 1 and 2, historically there has been limited constructive engagement and dialogue between institutional economics/commons scholarship and critical approaches such as political ecology and critical geography. Through focusing on the relationship between pragmatic power and framing power, I have contributed to this gap by extending research which has sought to draw from and reconcile concepts from these respective areas (Bennett et al., 2018; Gruby & Basurto, 2013; Mudliar & Koontz, 2021; Whaley, 2018).

The emerging area of research on power and polycentric governance provides an exciting opportunity to further integrate theoretical perspectives, through its analytic application to different empirical contexts. Recent empirical research has applied the polycentric power typology to the European Water Framework Directive, REDD+ in Indonesia, the Great Barrier Reef Regime in Australia (Morrison et al., 2019), transboundary fisheries in East Africa (Mudliar, 2020), food sovereignty and climate resilience in the Philippines (Heckelman et al., 2022), transit migration in the Balkans (Koinova, 2022), and the development of regional marketplaces in Pakistan (Salman Khan & Syrett, 2022).

I have made a novel empirical contribution to this area of scholarship through analysing power dynamics within a polycentric coastal governance system on Palawan, the Philippines. I did this through analysing the intersection of macro-scale global conservation agendas and national political discourses – common subject matters and modes of analysis for political ecology – with micro-level formal and informal institutions such sociocultural institutions, norms, and rules – a key area of inquiry of institutional approaches.

My thesis has also contributed to a gap in research about how actors in polycentric governance systems use different types of power to advance or undermine the principles of equity, transparency, accountability, and legitimacy in pursuit of (or opposition to) different socio-economic and environmental goals. Specifically, my research has highlighted the creative ways in which marginal actors are able to use and develop countervailing power to resist governance processes and outcomes they perceive as exclusionary, addressing a further gap in research about how power can be used to empower communities.

Theoretically, I have extended the polycentric power typology through integrating concepts from critical institutionalism and institutional bricolage and focusing primarily on processes at the meso-scale of governance. In doing so I have highlighted how state and non-state meso-scale actors have significant agency to (re)shape and influence the processes and practical outcomes of governance, translating and (re)interpreting formal rules from higher-levels of governance and facilitating, adapting, or undermining their implementation on-the-ground. Integrating a critical institutionalism lens also highlighted how influential community-level actors are able to dominate governance processes and institutions by drawing from and building upon

established relational institutions such as sociocultural norms, and kinship ties like ethnicity, clan, family, and patron-client relations.

As I have highlighted throughout my thesis, the governance of oceans and coasts is becoming increasingly complex, dynamic, messy, and laden with power dynamics extending across and between different scales from the global to local levels. Polycentricity and institutional theories can help make sense of and create order from this apparent chaos, while also not seeking to simplify or generalise it. The strength of political ecology lies in its deep focus on power, politics, and marginality, and how these shape – and are shaped by – environmental values, uses, and access. These perspectives are especially useful for directing attention to the exclusion of small-scale fishers and other marginal actors in ocean and coastal spaces. As my thesis has emphasised, governance processes and structures need to be situated within their historical and current social and political context, recognising that they commonly build upon and integrate with existing norms, values, power and politics.

As noted in Chapter 8, as I conducted my analysis and exploration of polycentric power, it became apparent that pragmatic power and framing power often overlap in ways which can both reinforce or undermine each other, while at other times it becomes challenging to even distinguish between the two. This was the case with the varied forms of resistance detailed in Chapter 8, which drew on and intersected with the relational values, norms, and institutions that shape pragmatic power discussed in Chapter 5. Similarly, the relational institutions of patron-client relations – an expression of pragmatic power – overlap with framing power, which politicians use to construct their personal images, political agendas and patronage networks.

Through integrating theoretical perspectives and the overlap and interaction of different types of power, polycentric governance can be reconceptualised as an interaction of relational power between actors across different levels, types, sectors, and functions, each with varied and often-competing social, cultural, economic, political, technological, and environmental values and interests. This recognises the fluidity and context-specificity of power dynamics, and the non-static and relational nature of different types of power (Morrison et al., 2019; Salman Khan & Syrett, 2022). A focus on power can help analyse and make sense of the processes of cooperation and conflict between diverse actors and institutions in pursuit of their respective visions and goals for how oceans and coasts should be used and managed. Using this analytical lens can identify how power relations can shape – and are shaped by – the functions, structures, and outcomes of governance, how this in turn influences environmental and social outcomes, and how power can work to advance or undermine the principles of equity, legitimacy, transparency, and accountability.

An important implication of my research for practice is the different scales of inequity that I observed on Palawan, with instances of inequity and unequal power dynamics both *within Barangay* Bucadan, and between the community and powerful external interests outside of small-scale fisheries. This distinction of multi-scalar power dynamics is important; across the key governance issues my research on Palawan focused on – the LRFT, illegal fishing, municipal livelihood programmes, and commercial development activities – people in *Barangay* Bucadan were at times in conflict with one another, and at other times united against perceived injustices that undermined their rights as small-scale fishers, for which they share a collective identity. This a crucial point that needs to be considered in the emerging literature on the exclusion and marginality of small-scale fishers in the ocean economy (Bennett,

Blythe, et al., 2021; Cohen et al., 2019; Okafor-Yarwood et al., 2022). While indeed there is a general pattern of exclusion, a singular focus on the dynamics between 'communities' / small-scale fishers and other governance actors risks inadvertently homogenising small-scale fishers as a unified whole, when in reality there are likely to be multiple relations of power at play both within a community, and between a community and other governance actors.

While in *Barangay* Bucadan people appear to have been united in collective action against specific issues like regulation of the LRFT, there were fault-lines and unequal power dynamics related to other resource-use issues which divided different groups and individuals within the community, in particular linked to municipal livelihood programmes and commercial development activities. This demonstrates how in collective action scenarios people are likely to hold various subjectivities and be part of multiple different networks, with different levels of influence and power. In some instances, the interests and identities of different individuals and groups may align, while at other times social cleavages and institutions like kinship, ethnicity, and economic status can result in competing values and interests. On a practical level, this highlights why ocean and coastal management interventions need to acknowledge, analyse, and engage with the heterogeneous nature of (fishing) communities, ensuring that the resource use and access rights of different groups and individuals are recognised and respected, and that their voices are included in decision-making.

9.3 Limitations of research

In the following section of the chapter I will reflect upon some of the methodological and practical limitations of my study. A limitation was only having one period of formal data collection. Although I undertook two scoping visits prior to this, I was still in the process of securing ethical approval for my research so could not formally collect any

data during this period, although inevitably my perceptions and experiences during those visits still informed my understanding of Palawan. A number of factors contributed to my only being able to undertake one period of fieldwork, including the extended period of time it took to secure institutional ethical approval, the time taken to design and undertake my QES after conducting my initial literature review, and the impacts of the Covid-19 pandemic which prevented further field activities from being conducted. Having one period of fieldwork limited the extent to which I could collect follow-up information and data as I adapted my research questions and theoretical grounding while undertaking my data analysis.

My theoretical focus on power and polycentric governance was iteratively developed throughout the research process. Whilst a constructivist and iterative approach to research allowed me to pursue emerging areas of interest and importance to people in Barangay Bucadan, in particular as I began to understand the social, political, and cultural context on Palawan, another approach could have structured my data collection and analysis more systematically around the polycentric power typology. This could have included integrating a network mapping approach to systematically map the perceptions that different governance actors have about the different types and amounts of power used across centres of authority.

My case-study research gave limited analytic attention to power by design in comparison to pragmatic power and framing power, but it was beyond the remit of my study due to time constraints within my PhD programme and the resourcing required to undertake a thorough review of policy documents and laws detailing institutional arrangements, in particular in light of the richness of data I had on pragmatic and framing power. Similarly, my research only paid limited attention to higher-level governance actors. As noted in Chapter 4, the Covid-19 pandemic resulted in my

fieldwork being cut short, requiring me to cancel interviews scheduled with provincial government and NGO staff, and it prevented me from conducting a planned follow-up period of fieldwork to focus on higher-level governance actors.

Of the methods that I used for my case-study research on Palawan, the majority of contributions to my empirical findings came from rich, in-depth conversations during FGDs, participatory mapping, and ethnographic approaches. Although I conducted 16 semi-structured interviews towards the beginning of my fieldwork, data from the majority of these was brief and fairly surface-level, as I was early in the process of learning about the context and culture of *Barangay* Bucadan. While these did play an important role in introducing myself to different members of the community, this could have been better combined with undertaking a brief household survey collecting demographic and basic livelihood data to triangulate with the broader perception and narrative-based data collected through FGDs, participatory mapping, and ethnographic approaches.

Despite the limitations I have listed, a key point that I have learnt through undertaking this PhD is the often fluid and non-linear nature of research, and the ongoing process of experiencing and navigating various twists, turns, steps and stumbles, ranging from internal epistemic tensions to external global shocks, and decisions to adapt my research design to navigating local politics. Along the way these drove iterative processes of (un)learning, adaptation, and change that all contributed to my thesis.

9.4   Further research

Further to the limitations highlighted in the previous section, I now conclude my thesis by suggesting further areas of research. Firstly, from my experience conducting a novel QES in the environmental social science field, it is evident that there is a need

to develop and test more appropriate methods to address some of the issues and challenges I discussed in Chapter 4. More research is needed to identify, develop and test appropriate search filters for qualitative environmental social science research, in particular for anthropological studies and the ethnographic methods that are employed. Additionally, more research is needed to develop efficient tools for screening full texts, and systematic approaches to better integrate supplementary searches that can identify studies from the broad and varied sub-disciplines of environmental social science.

For the emerging scholarship on power and polycentric governance, an exciting area of future research could include application of the polycentric power typology not just to geographically-bounded polycentric systems, but through reconceptualising global ocean governance (and the Blue Economy) as a polycentric system, as has been done with global climate governance (Galaz et al., 2012; Jordan et al., 2015; Ostrom, 2010b). With many competing narratives about how these spaces should be used and managed, ambitious global commitments agreed to by nation states, and a whole host of new, old, and resurgent actors interacting across different scales, these complex processes and interactions are replete with often unequal power dynamics. For example, the power and polycentric governance framework could be used to examine how different types of power are used to shape the objectives, processes, and outcomes of donor-funded marine conservation programmes, examining how decisions are made and power is negotiated across and between: statutory funders; philanthropic foundations; INGOs; local NGOs; different national government departments; different local government departments; community resource management institutions; and different community groups, each with their own respective values, interests, agendas, and obligations. Indeed, reflecting upon my own

position and work within an international conservation NGO which exhibits both hierarchical and decentralised elements across a complex mix of teams with different aims, the framework could be used to analyse the role of different types of power in influencing how decisions are made through processes of cooperation and conflict, and how this influences the resulting environmental and social outcomes.

Future research could include directing analytical attention to how countervailing power can be used by marginal coastal actors. Expanding upon research by Ertör (2021) which documented injustices faced by fisher peoples, their underlying causes, and their struggles to confront and resist them, there is an opportunity for cross-context learning and collaboration about how bottom-up and enabling power can be developed by small-scale fisher groups, organisations, and networks to successfully resist exclusionary governance goals and outcomes. This can be useful for identifying strategies and approaches to contest competition for coastal spaces and resources, notably through externally-driven tourism, conservation, and private sector initiatives (Bennett, 2013; Fabinyi, 2012, 2019; Lasso & Dahles, 2018; Rosyida et al., 2018; Segi, 2014). This can include positive examples of livelihood change being community-driven and owned (Kinseng et al., 2018; Lowe & Tejada, 2019), instead of the more common practice of being driven by external actors such as funders, governments, and private companies. As Bavinck et al. write, 'collective struggle can lead to empowerment of the poor, and thus real social transformation' (2018: 48), and documenting, linking, and synthesising successful examples of organised small-scale fisher resistance across contexts can further strengthen global alliances and networks pursuing environmental, social, and *blue* justice.

Another area of future research could include putting analysis of polycentric governance into practice. As I detailed in Chapter 4, I juggle the positionalities of being

both a researcher and an NGO practitioner working on governance, equity, rights, and the broader human dimensions of conservation and natural resource management. Moving forward I think there is an important – albeit challenging – opportunity for polycentric governance scholars to further engage with practitioners, to explore how polycentric governance theories can be 'translated' into practice. In particular I find there to be important opportunities for reflections about power, and the role that NGOs can, and do play in environmental decision-making and management practices, commonly linking different governance actors (e.g. funders and communities) and acting as pragmatic power brokers.

A key part of this could include planning or accounting for the influence of pragmatic power between the design and implementation of environmental regulations, and the challenges in navigating and balancing factors like donor requirements, government expectations, and the needs and rights of natural resource dependent-peoples. Similarly, an analysis of framing power can foster a reflexive process about the roles that NGOs play in (re)creating discourses about how the environment 'should' be used and managed, and how these intersect with the meanings and values of the environment held by diverse groups of resource-users.

Another area of future research on power and polycentric governance is questioning the underlying assumption that polycentric governance is normatively 'good' through examining how it is impacted by power dynamics. This could be conducted through integrating the polycentric power typology (Morrison et al., 2019) and Carlisle & Gruby's (2019) polycentric governance theoretical model, by analysing how different types of power intersect with the attributes and enabling conditions of polycentric governance, and how this in turn influences environmental and social outcomes. This can expand upon my preliminary findings, which identified examples such as elite

domination of cross-scale linkages between scales of government (*barangay*, municipal, and provincial pragmatic power brokers), elite domination of multi-stakeholder forums (the provincial governor and live fish buyer lobby having a coercive influence on PCSD policy-making), and resistance and direct action as mechanisms for accountability within the governance system (through petitions and marches by small-scale fishers and People's Organisations). Continued empirical research in this area can lead to the development of theory that can help distinguish between different real-world types of polycentric governance. and build insight into when different types may or may not be appropriate relative to context-specific relational power.

Further theoretical development and empirical research on power and polycentric governance can foster a complementarity of both structural elements from institutional theory (e.g. formal institutions like government agencies, NGOs, resource-user groups; and informal institutions like social norms, ethnicity, gender etc.), and insights from critical geography and political ecology, such as power, politics, scale, and narratives. This can integrate and recognise the interlinked roles of both structure and agency in reinforcing or transforming society and social action (Giddens, 1984). Applying this to polycentric governance can examine how institutions shape – and are shaped by – the agency of different actors, and the relational power dynamics between them. This can illuminate the ways in which governance processes can drive and subvert unequal power dynamics through drawing on one or a combination of different types of power, and how this in turn impacts environmental and social outcomes.

Appendices

Appendix I – Systematic review protocol

PROSPERO
International prospective register of systematic reviews
Exploring the perceptions and experiences of coastal livelihoods among coastal
communities in Southeast Asia: a systematic review and qualitative evidence synthesis
Timur Jack-Kadioglu, Ruth Garside, Karyn Morrissey, Felicity Thomas

Citation
Timur Jack-Kadioglu, Ruth Garside, Karyn Morrissey, Felicity Thomas. Exploring the perceptions and experiences of coastal livelihoods among coastal communities in Southeast Asia: a systematic review and qualitative evidence synthesis. PROSPERO 2018 CRD42018116183 Available from:
https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42018116183

Review question [1 change]
- What are the perceptions and experiences of livelihoods among coastal communities in Southeast Asia?
- How are these perceived and experienced across gender, age, ethnicity and class?
- Are there barriers and facilitators to people engaging in livelihoods, based on gender, age, ethnicity, and class?
- Have there been changes in the perceptions and experiences of livelihoods over time? If so, what is driving these changes?

Searches
The following electronic bibliographic databases will be searched for studies from 2000 to the present day:
ASSIA (ProQuest)
International Bibliography of the Social Sciences (ProQuest)
GreenFILE (EBSCO)
ProQuest Sociology (ProQuest)
Environment Complete (EBSCO)
Web of Science

As this review is focused on qualitative research which can vary substantially in terminology, a range of supplementary methods will be used: (forward and backward) citation chasing, key journal searches, contacting of key experts, and grey literature specialist searches. The search strategy will include terms related to: the population of interest (coastal communities); subject
context (coastal livelihoods); geographic context (Southeast Asia); and study design (qualitative - using an existing search filter from McKibbon KA, Wilczynski NL, Haynes RB. (2006)).

For further information, the search strategy (with details of scoping/preliminary searches, framework for review question formulation, supplementary search methods, and inclusion and exclusion criteria) will be available.

Types of study to be included
Inclusion: The focus of this systematic review is qualitative studies, and will include research from any discipline or theoretical tradition that uses recognised qualitative methods of data collection and analysis.
Data collection methods include (but are not limited to): focus groups; individual interviews; ethnographic interviews; participant or systematic observation; documentary analysis; audio visual/note collection.
Methods of analyses include (but are not limited to): grounded theory; narrative analysis; thematic analysis; hermeneutic phenomenological analysis; discourse analysis.
Any mixed-methods studies identified will only extract and synthesise the qualitative findings.

Exclusion: Any studies that use only quantitative methods will be excluded.

Condition or domain being studied
For coastal communities in the Global South, marine resources play a fundamental role in providing subsistence and supporting livelihoods, in particular through highly heterogeneous small-scale fishing activities (globally, this sector represents 90% of those involved in direct fish capture and associated value-chain activities) (FAO, 2015). There is an increasing recognition of rising anthropogenic impacts on coastal and marine ecosystems. Localised stressors such as rising populations and uptake of destructive fishing methods in coastal zones in the Global South, coupled with the global crises of overfishing and climate-change induced coral bleaching and ocean acidification (Bellwood, Hughes, Folke, & Nyström, 2004; Hughes et al., 2003; Jackson et al., 2001) have directed research and policy towards sustainable fisheries management and livelihood diversification. However, many projects and policies fail to engage with the diversity of stakeholders that exist in coastal communities, or overlook the non-monetary roles that fishing plays in the identities and social processes of communities (Coulthard, Johnson, McGregor, 2011). Furthermore, there is a risk that projects and policies exclude marginalised groups (such as women) in favour of dominant members of communities and the resources and activities they are involved in (Fröcklin, 2013; Daw et al, 2015).

Participants/population
Members of coastal communities from Southeast Asia (defined by coastal developing Association of Southeast Asian Nations (ASEAN) members and "Coral Triangle" nations – Cambodia, Indonesia, Malaysia, Myanmar, Papua New Guinea, Philippines, Solomon Islands, Thailand, Timor-Leste, Vietnam).

Intervention(s), exposure(s)
Livelihoods undertaken by coastal communities, this includes direct and indirect involvement in fisheries (direct capture, and pre- and post-harvest activities such as net-mending, boat-building, value-addition and marketing of products). It also includes other "alternative" livelihoods, and the diversification from fisheries-based livelihoods to "alternative" livelihoods strategies, including but not limited to:

aquaculture, mariculture, seaweed farming, crab fattening, agroforestry, agriculture, entrepreneurship/enterprises, craft-making, souvenir-making, and tourism-related activities.

Comparator(s)/control [1 change]
Different groups within the populations of coastal communities based on: gender, age, ethnicity, and class, and how perceptions and experiences related to livelihoods differs among and between these groups.

Context
The relevant setting for this review is livelihood activities in coastal communities in Southeast Asia, with a focus on perceptions and experiences of different members of these communities, based on qualitative research.

Main outcome(s) [1 change]
This is a qualitative evidence synthesis so these are not "measured" outcomes, but themes relating to individual and community quality of life and wellbeing. The review will explore how different livelihoods and changes in livelihoods affect local community wellbeing.

Additional outcome(s)
Not applicable.

Data extraction (selection and coding) [1 change]
Screening: Once searches have been conducted by the lead reviewer (TJK), results will be extracted into Endnote. The lead reviewer (TJK) and second reviewer (RG) will independently screen the titles and abstracts of each study, using a pre-piloted check-list for inclusion and exclusion. Full-texts will also be screened by the lead and second reviewers. A third reviewer will be consulted about any disagreements over study inclusion or exclusion.
Supplementary methods (as listed above) will be used by the lead reviewer (TJK), with eligibility of additional studies confirmed by the second reviewer (RG).
Extraction: An extraction form will be piloted and agreed by the review team for extracting data from studies. General data (including but not limited to): publication details – author, author nationality, journal, date, title, study funder; study details – type of study, data collection method(s), data analysis method(s), theoretical framework; setting: country of study, municipality of study, sample size, sampling strategy, recruitment strategy, research participant demographics (including but not limited to: gender, age, ethnicity, and class),
livelihood type.
Qualitative data: Studies will be uploaded in PDF format into the qualitative data analysis computer software package, NVivo. Coding of key themes (nodes) will be conducted. Qualitative data to be coded will include both first-order constructs (such as direct quotations from participants), and second order constructs (interpretations/analyses by study authors) (Toye et al, 2014). This will ensure a richness of data can be collected, by recognising that the study authors' interpretations drew on non-verbal communications and contextual understandings, as opposed to transcripts alone. The lead reviewer (TJK) will be responsible for the extraction of general and qualitative data, with the second reviewer (RG) checking to

ensure consistency. A third reviewer will be brought in to reconcile any disagreements between the lead reviewer (TJK) and second reviewer (RG).

Risk of bias (quality) assessment
A critical appraisal of study quality will be employed as part of the review. This will be based on Wallace et al. (2004) and will cover questions relating to the detail/relevance of: the research question, theoretical perspective, study design, context, sampling strategy, data collection, data analysis, reflexivity, consideration of data limitations, generalisability, and ethical considerations. All studies will be appraised of quality, but they will not be excluded as useful insights can be gleaned from all included studies, regardless of quality. A table will be used to show how each study was appraised against a set criteria. The appraisal of each study will then be considered during the synthesis stage so the authors are aware of each study's quality.

Strategy for data synthesis
For the data synthesis stage of the review, an inductive, interpretive synthesis methodology will be used. Key concepts will be identified across studies (Noblit & Hare, 1988). Explanations or theories associated with the identified concepts can also be extracted, leading to the development of an argument that draws from different studies by translating across them to create third-order constructs (Thomas and Harden, 2008). The exact type of synthesis will be determined based on the studies that pass screening, in particular how contextually "thick" and conceptually "rich" the data is. As it is expected that data may be drawn from studies whose primary aim may not be the same as that of the SR, thematic synthesis is expected to be used. The three stages of thematic synthesis in systematic reviews, as outlined by Thomas and Harden (2008) are described below:
Stages 1 & 2: Coding text and developing descriptive themes – line-by-line coding of findings from each study will be employed, from which meaning and content will be drawn. This process is iterative as the reviewer will build up a "bank" of codes, at the same time beginning stage 2 of the synthesis as concepts are translated across studies, in turn developing and merging descriptive themes.
Stage 3: Generating analytical themes – At this stage, the descriptive codes will be used to generate new interpretive constructs, explanations or hypotheses, by identifying emerging patterns and relationships between descriptive themes.
Although it is expected that thematic synthesis will be used, if "thick" and "rich" data is identified and extracted, meta-ethnography as developed by Noblit and Hare (1988) may be used. This will differ in that it will be working at a more conceptual level, translating meanings and analogies (themes, perspectives and concepts) from one text to another, while creating new interpretations in the process (Noblit and Hare,
1988).

Analysis of subgroups or subsets [1 change]
Using qualitative research, variation in experiences and perceptions will be explored across different groups (based on gender, age, ethnicity, and class) within coastal communities in Southeast Asia.

Contact details for further information
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Organisational affiliation of the review
University of Exeter
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Review team members and their organisational affiliations
Mr Timur Jack-Kadioglu. University of Exeter
Dr Ruth Garside. University of Exeter
Dr Karyn Morrissey. University of Exeter
Dr Felicity Thomas. University of Exeter

Type and method of review
Synthesis of qualitative studies, Systematic review

Anticipated or actual start date
30 December 2018

Anticipated completion date
31 May 2019

Funding sources/sponsors
This review is part of a PhD funded by the Research Council UK's Global Challenges Research Fund.

Conflicts of interest
There are no conflicts of interest for any of the members of the review team that could have undue influence on judgements related to this topic. None known

Language
English

Country
England

Stage of review
Review Ongoing

Subject index terms status
Subject indexing assigned by CRD

Subject index terms
Asia, Southeastern; Ethnic Groups; Humans; Perception

Date of registration in PROSPERO
19 December 2018

Date of first submission
09 November 2018

Stage of review at time of this submission

Stage Started Completed
Preliminary searches Yes Yes
Piloting of the study selection process No No

Stage Started Completed
Formal screening of search results against eligibility criteria No No
Data extraction No No
Risk of bias (quality) assessment No No
Data analysis No No
The record owner confirms that the information they have supplied for this submission is accurate and complete and they understand that deliberate provision of inaccurate information or omission of data may be construed as scientific misconduct.
The record owner confirms that they will update the status of the review when it is completed and will add publication details in due course.

Versions
19 December 2018
PROSPERO
This information has been provided by the named contact for this review. CRD has accepted this information in good faith and registered the review in PROSPERO. The registrant confirms that the information supplied for this
submission is accurate and complete. CRD bears no responsibility or liability for the content of this registration record, any associated files or external websites.

Appendix II ENTREQ Statement

Table 11. Page location of ENTREQ items

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8	Study characteristics	78-81
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10	Rationale for appraisal	82
11	Appraisal items	82
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14	Data extraction	78
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16	Number of reviewers	75
17	Coding	84
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Appendix III – University of Exeter Research Ethics Approval

UNIVERSITY OF EXETER

COLLEGE OF MEDICINE AND HEALTH

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Our Ref: MT/CB/19/04/208

4 June 2019

Mr Timur Jack-Kadioglu
PhD Student
European Centre for Environment and Human Health
Knowledge Spa
Truro
Cornwall

Dear Mr Jack-Kadioglu

Application Number: 19/04/208
Project Title: Coastal community perceptions of wellbeing-livelihood linkages in Palawan, the Philippines

I am writing to confirm that the University of Exeter Medical School Research Ethics Committee have reviewed the above project. I am content that you have addressed the points raised by the Committee and grant conditional ethical approval with immediate effect.

The Committee needs to be reassured that the appropriate permissions have been obtained from the locations where participants will be recruited and evidence of ethical approval from an approved ethics board in the Philippines via the Western Philippines University is therefore required as soon as it becomes available.

Good luck with your study.

Yours sincerely

Mark Tarrant, PhD
Deputy Chair
University of Exeter Medical School Research Ethics Committee

Pro Vice Chancellor and Dean **Professor Clive Ballard**

NATIONAL ETHICS COMMITTEE
Philippine Council for Health Research and Development
Department of Science and Technology

03 September 2019

DR. LOTA B. ALCANTARA-CREENCIA
Professor, College of Fisheries and Aquatic Sciences
Western Philippine University, Palawan Campus
Case Study Leader GCRF Blue Communities Project

Study Title: Coastal community perceptions of well-being-livelihood linkages in
            Palawan, the Philippines
NEC Code: 2019-013-Creencia-Palawan
Subject: Ethical Review

Dear *Dr. Creencia:*

This is to acknowledge receipt of the following documents dated 21 August 2019 in response to the initial evaluation of the National Ethics Committee (NEC):

1. Cover letter (dated 21 August 2019)
2. Consent Form, English and Filipino (version 21 August 2019)

The above study documents underwent expedited review by the NEC and were found to be generally acceptable.

**Ethical Clearance for the implementation of this study is effective
from 03 September 2019 to 02 September 2020.**

If the study has not been completed within the effectivity of the clearance, you are required to apply for renewal of ethical clearance one month before its expiry.

As part of its monitoring function, the NEC requires submission of a midterm Progress Report. Amendments to the protocol, informed consent form or questionnaires, need to be submitted to the NEC for approval, while other concerns like protocol deviations shall be communicated to the NEC for information and guidance.

Finally, the NEC requires the proponent to submit a Final Report one month upon project completion. This report shall contain a summary of findings and other issues encountered during study implementation.

Very truly yours,

FILIPINAS F. NATIVIDAD, PhD.
Chair

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COASTAL COMMUNITY PERCEPTIONS OF WELL-BEING-LIVELIHOOD LINKAGES IN PALAWAN, THE PHILIPPINES

INFORMATION SHEET FOR FOCUS GROUP PARTICIPANTS

NOTE: THIS INFORMATION SHEET HAS BEEN BASED ON A COMBINAITON OF ONE USED BY DR MAT WHITE FOR A SURVEY IN THE PHILIPPINES AND THE INFORMATION SHEETS USUALLY USED BY WPU. PARTS FROM THE TEMPLATE SUCH AS GDPR COMPLIANCE AND CHATHAM HOUSE RULE FOR FOCUS GROUPS HAVE BEEN INCLUDED IN SIMPLIFIED LANGUAGE.

NOTE: Will be translated to Tagalog by iterative discussions between TJK and WPU team. Any additional requirements from the Philippine National Ethics Committee will be included and the amended version submitted to the REC.

NOTE: To be read by interviewer/facilitator/translator if participant cannot read

Thank you for expressing an interest in taking part in this research. We would like to tell you a little bit about what we are doing and why we are doing it. Just so you know, taking part in this is completely voluntary.

What is the project about?

This project is by the University of Exeter Medical School, from England, [and WPU if relevant], and is part of the researcher's PhD studies. It is about what is important for living a good life for people in coastal communities like yours on Palawan, and how people's jobs and daily activities contribute to this, and if these are changing.

Who are we talking to?

We are talking to different people from your community, and we would like to hear from people who are involved in all kinds of activities, be it fishing, farming, business, teaching, tourism. We value all the views which are given so anybody over the age of 18 is welcome.

What will you be asked to do?

If you are happy to be a part of this, then you will be asked to do a few things. Firstly, we would like you to take some photos using your camera phone [or disposable camera depending on final logistics]. We would like you to take photos of what is important to you in your daily life. We ask you NOT to take photos of people or of yourself. If these things are important to you then you can just tell us when we meet instead. Once we have these photos, we will print them and talk about them when a group of 6-8 of your fellow community members will meet together.

When we are all together we will talk about why you took these photos and what they mean to you. If there are some other things which are important to you but you did not take a photo of then we would really like to hear these from you too. There are no right or wrong answers so feel free to share your views, whatever they may be.

How much of my time will this take?

For the photo activity we will give you [either 1 or 2 weeks, to be finalised based on logistics] to take some photos. You can do this when you are out or about at a time which works for you. Then once we get together it will take around three hours, which will include time for snacks and lunch. We will meet at [insert venue] on [insert date and time].

What if you want to stop being part of the discussion?

If at any time you would like to stop being part of the discussion for any reason (maybe you do not feel comfortable or you might just need to go somewhere) then that is absolutely fine, just let the researcher or translator know. You can decide to leave your answers up until that point, or we can simply take all your answers out. Even after the discussion, if you decide that you do not want your answers to be included, that is not a problem. However after [insert timeframe before transcript is anonymised] they cannot be removed, but after then nobody will know that it was you who gave these answers. At the end of this information sheet we will provide information about how to contact the researcher directly or through your barangay captain, all you need to do is contact them by [date 6 months after end of data collection period] and your answers will be taken out.

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Keeping your answers anonymous

None of your personal information like name, age, and address will be recorded. We will record the discussion but these will be kept on a "secure" computer that only the research team in England [and WPU if applicable] can look at.

If you agree to be recorded by video then you may appear in a video talking at a later time so people would be able to know it is you saying things.

What will we do with the information we collect?

The anonymous information we collect will be used by the researchers to look at what different people in your community consider important in their daily lives and if this is changing. This information will be used in the PhD studies of the researcher, and will also be used to make a short video and photos that will be shared with you in the future.

What if you have any questions?

While we are together you are free to ask any questions that you like. If you have any questions for me after I have left, then you may contact Prof. Lota Alcantara Creencia, Faculty member from the College of Fisheries and Aquatic Sciences (CFAS) of the Western Philippines University, Puerto Princesa City through the cell phone number +639282809419 or email at lotacreencia@gmail.com .

If you think that your safety and security has been compromised during the process, you may also contact the National Ethics Committee thru Dr. Filipinas Natividad via the following: Telephone number: (02) 837 7537 and email address: nationalethicscommittee.ph@gmail.com

COASTAL COMMUNITY PERCEPTIONS OF WELL-BEING-LIVELIHOOD LINKAGES IN PALAWAN, THE PHILIPPINES

INFORMATION SHEET FOR INTERVIEW PARTICIPANTS

NOTE: THIS INFORMATION SHEET HAS BEEN BASED ON A COMBINAITON OF ONE USED BY DR MAT WHITE FOR A SURVEY IN THE PHILIPPINES AND THE INFORMATION SHEETS USUALLY USED BY WPU. PARTS FROM THE TEMPLATE SUCH AS GDPR COMPLIANCE HAVE BEEN INCLUDED IN SIMPLIFIED LANGUAGE.

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Who are we talking to?

We are talking to different people from your community, and we would like to hear from people who are involved in all kinds of activities, be it fishing, farming, business, teaching, tourism. We value all the views which are given so anybody over the age of 18 is welcome.

What will you be asked to do?

If you are happy to be a part of this, then we can meet at a place of your convenience – maybe your place of work or somewhere outside in the village – and have an interview about what your thoughts are on the activities/livelihoods people in your community are engaged in. We would also like to hear what people value as important for their wellbeing. Then we would like to discuss if these values and activities people are involved in have changed over time.

How much of my time will this take?

The interview will require around 30-60 minutes of your time. We will meet at [insert venue] on [insert date and time].

What if you want to stop being interviewed?

If at any time you would like to stop taking part in the interview for any reason (maybe you do not feel comfortable or you might just need to go somewhere) then that is absolutely fine, just let the researcher or translator know. You can decide to leave your answers up until that point, or we can simply take all your answers out. Even after the discussion, if you decide that you do not want your answers to be included, that is not a problem. After [insert timeframe before transcript is anonymised] they cannot be removed, but nobody will know that it was you who gave these answers. At the end of this information sheet we will provide information about how to contact the researcher directly or through your barangay captain, all you need to do is contact them by [date 6 months after end of data collection period] and your answers will be taken out.

Keeping your answers anonymous

None of your personal information like name, age, and address will be recorded. We will record the discussion but these will be kept on a "secure" computer that only the research team in England [and WPU if applicable] can look at. If you agree to be recorded by video then you may appear in a video talking at a later time so people would be able to know it is you saying things.

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What will we do with the information we collect?

The anonymous answers we collect will be used by the researchers to look at what different people in your community consider important in their daily lives and if this is changing. This information will be used in the PhD studies of the researcher, and will also be used to make a short video and photos that will be shared with you in the future.

After you speak to us, nobody will know you were the person who said these things. We will also ask you for some information like your name and age, we will keep this for [xx period of time], but we will keep this on a locked "secure" computer that nobody can see, and will get rid of it after [xx time].

What if you have any questions?

While we are together you are free to ask any questions that you like. If you have any questions for me after I have left, then you may contact Prof. Lota Alcantara Creencia, Faculty from the College of Fisheries and Aquatic Sciences (CFAS) of the Western Philippines University, Puerto Princesa City through the cell phone number +639282809419 or email at lotacreencia@gmail.com .

If you think that your safety and security has been compromised during the process, you may also contact the National Ethics Committee thru Dr. Filipinas Natividad via the following: Telephone number: (02) 837 7537 and email address: nationalethicscommittee.ph@gmail.com

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COASTAL COMMUNITY PERCEPTIONS OF WELL-BEING-LIVELIHOOD LINKAGES IN PALAWAN, THE PHILIPPINES

TALAAN NG IMPORMASYON PARA SA MGA KALAHOK NG FOCUS GROUP

TANDAAN:
- Ang talaang ito ay hango sa pinagsamang talaan na ginamit ni Dr. Mat White sa isang pag-aaral sa Pilipinas at template na ginamit ng Western Philippines University (WPU). Ang ilang bahaging isinama dito ay alinsunod sa General Data Protection Regulation (GDPR) at sa Chatam House Rule para sa focus groups at pinasimple lamang.
- Ito ay isasalin sa Tagalog/ Filipino sa pamamagitan nang patuloy na pag-uusap sa pagitan ni TJK at ng grupo ng WPU. Ano mang karagdagang pangangailangan mula sa National Ethics Committee (NEC) ng Pilipinas ay isasama sa binagong bersyon na nauna nang naisumite sa Research Ethics Committee.
- Ito ay babasahin ng tagapagpanayam/facilitator/ translator o tagasalin kung ang kalahok ay hindi nakakapagbasa.

Salamat sa pagpapahayag ng interes sa pagsali sa pananaliksik na ito. Nais naming magbahagi ng kaunti sa inyo tungkol sa kung ano ang aming ginagawa at kung bakit namin ginagawa ito. Bago po tayo magsimula, nais po naming ipa-alam sa inyo na ang pagsali dito ay ganap na boluntaryo.

Ano and Proyektong Ito?

Ang poyektong ito ay isinasasagawa ng University of Exeter Medical School mula sa England kasama ang WPU at ito ay isang pananaliksik para sa PhD. Ito ay tungkol sa kung ano ang mga importanteng bagay na naka-aapekto sa pagkakaroon ng magandang buhay ng mga taong nakatira malapit sa dagat tulad ninyong mga taga-Palawan at kung paano ang mga pang-araw-araw na trabaho at gawain

Sino an gaming kakausapin?

Kakausapin naming ang iba-ibang residente ng inyong kumunidad at nais naming maunawaan kung sinu-sino ang mga bahagi ng mga gawain mula sa pangingisda, pagsasaka, pagnenegosyo, pagtuturo at turismo. Pinahahalagahan naming lahat ng haka-haka at ideya kaya lahat ng mga residenteng edad 18 pataas ay maaring makibahagi.

Ano ang inaasahan mula sa inyo?

Kung kayo po ay pumapayag na maging bahagi nito, nais po naming kayong gumawa ng iilang bagay. Una, nais po naming kumuha kayo gamit ang camera ng inyong cellphone (o ng disposable camera). Nais naming kunan ninyo ng larawan kung ano ang mahalaga para sa inyong pang araw-araw na buhay. Paki-usap lamang na huwag ninyong kunan ng litrato ang ibang tao o ang iyong sarili. Kung mga mga ito ay mahalaga, pwede ninyong sabihin na lamang sa amin kung tayo ay magkita na. sa oras na magkaroon kami ng kopya ng mga larawang ito, ito ay aming ipi-print o ililimbag at pag-uusapan natin

ito kasama ng iba anim hanggang walong kasamang residente ng kumunidad sa susunod nating pagkikita.

Kung tayo ay magkakasama sa isang pagpupulong, pag-uusapan natin ang dahilan kung bakit ito ang mga larawang inyong kinunan ang ano ang ibig sabihin ng mga ito sa inyo. Kung may ibang mga bagay pa na mahalaga sa inyo ngunit hindi ninyo nakunan ng larawan, nais din naming margining ang mga ito mula sa inyo. Walang mali at tamang sagot, kayo ay ina-anyayahan naming makibahagi atv magpahayag ng Malaya, ano man ang naisin ninyong iparating.

Gaano ito katagal?

Para sa pagkuha ng larawan, kayo ay bibigyan naming ng isa hanggang dalawang lingo (ito ay maari pang magbago ayon sa logistics). Maari ninyo itong gawin habang kayo ay nasa labas upang magtrabaho, gumawa ng ibang gawain o kung anong oras ninyo naisin. Ang ating susunod na pagkikita ay maaring magtagal ng tatlong oras. Kami ay maghahain ng meryenda at tanghalian sa (pangalang ng lugar ng pagpupulong, at ang araw at oras nito).

Paano kung nais ninyong itigil ang pagiging bahagi ng pag-uusap?

Sa anumang oras na nais ninyong tumugil sa kahit anong dahilan (kung hindi kayo kumportable o kung may mga bagay pa kayong kailangang bigyang pansin), ito po ay ayos lamang. Kahit na tapos na ang ating pag-uusap at nais mong burahin o tanggalin lahat ng iyong kasagutan, hindi ito magiging problema. Pagkatapos ng (ipasok ng takdang oras), hindi na sila maaring tanggalin, ngunit walang maka-aalam na ikaw ang nagbigay ng mga kasagutang iyon. Pagkatapos ng Talaan ng Impormasyon na ito, bibigyan namin kayo ng impormasyon kung paano kayo direktang makikipag-ugnayan sa mananaliksik o sa pamamagitan ng barangay kapitan. Ang gagawin nyo lamang ay makipag-ugnayan sa kanila sa loob ng (maaring lagyan ng anim na buwan o pagkatapos ng pagkalap ng datos) at ang iyong sagot ay tatanggalin.

Pagtago ng pagkakakilanlan ng iyong kasagutan

Wala sa inyong mga personal na impormasyon tulad ng pangalan, edad at tirahan ang itatala. An gating pag-uusap at itatala ngunit ito ay itatago sa isang ligtas na computer na ang mga mananaliksik lamang mula sa England (at WPU) ang makakakita. Kung pumapayag po kayong mai-record sa video, kayo po ay maaring Makita sa video na ipalalabas mamaya upang malam ng mga tao na ikaw ang nagsabi ng iilang bagay.

Ano gagawin naming sa impormasyon na aming makakalap?

Ang anomynous o lihim na impormasyon na aking makakalap ay gagamitin ng mga mananaliksik upang tingnan kung ano ang mahalaga para sa pang-araw-araw ng buhay ng iba-ibang indibidwal sa inyong kumunidad at kung may pagbabago sa mga ito. Ang impormasyong ito ay gagamitin ng isang mag-aaral ng PhD sa kanyang pananaliksik at gagamitin din ito upang gumawa ng maikling video na may kalakip na mga larawan upang ipakita sa inyo sa mga sususunod na panahon.

Paano kung meron kayong mga katanungan?

COASTAL COMMUNITY PERCEPTIONS OF WELL-BEING-LIVELIHOOD LINKAGES IN PALAWAN, THE PHILIPPINES

TALAAN NG IMPORMOASYON PARA SA MGA KALAHOK NG PAKIKIPAGPANAYAM

TANDAAN:
- Ang talaang ito ay hango sa pinagsamang talaang ginamit ni Dr. Mat White sa isang pag-aaral sa sa Pilipinas at ng template na gamit ng Western Philippines University. Ang ilang bahagi nitong alinsunod sa General Data Protection Regulation (GDPR) at sa Chatam House Rule para sa Focus Groups ay isinama sa mas simpleng linggwahe.
- Ito ay isasalin sa Tagalog/ Filipino sa pamamagitan ng patuloy na mag-uusap sa pagitan ni TJK at ng grupo ng WPU. Ano mang karagdagang pangangailangan mula sa National Ethics Committee ng Pilipinas ay isasama sa binagong bersyon na nauna nang naisumite sa Research Ethics Committee.
- Ito ay babasahin ng ng tagapanayam/facilitator/ translator o tagasalin kung ang kalahok ay hindi nakapagbabasa.

Salamat sa pagpapahayag ng interes sa pagsali sa pananaliksik na ito. Nais naming magbahagi ng kaunti sa inyo tungkol sa kung ano ang aming ginagawa at kung bakit namin ginagawa ito. Bago po tayo magsimula, nais po naming ipa-alam sa inyo na ang pagsali dito ay ganap na boluntaryo.

Ano and Proyektong Ito?

Ang poyektong ito ay isinassagawa ng University of Exeter Medical School mula sa England at WPU at ito ay isang pananaliksik para sa PhD. Ito ay tungkol sa Mga mahalagang bagay na naka-aapekto sa pagkakaroon ng magandang buhay ng mga taong nakatira malapit sa dagat tulad ninyong mga taga Palawan at kung paanong ang mga trabaho at gawain ay naka-aapekto sa mga ito, at kung ang mga ito ay may pagbabago.

Sino an gaming kakausapin?

Kakausapin naming ang iba-ibang residente ng inyong kumunidad at nais naming maunawaan kung sinu-sino ang mga bahagi ng mga gawain mula sa pangingisda, pagsasaka, pagnenegosyo, pagtuturo at turismo. Pinahahalagahan naming lahat ng haka-haka at ideya kaya lahat ng mga residenteng edad 18 pataas ay maaring makibahagi.

Ano ang inaasahan mula sa inyo?

Kung kayo po ay pumapayag na maging bahagi nito, maari po tayong magkita sa isang lugar kung saan kayo kumportable – maaring sa lugar kung saan kayo nagtatrabaho o sa labas ng nayon kung saan kayo po ay aming kakapanayamin kung ano po ang inyong saloobin tungkol sa mga gawain o kabuhayan ng mga tao sa inyong kumunidad. Nais din naming marinig kung ano ang mahalaga para sa mga tao upang

magkaroon ng mabuting buhay. Nais rin po naming pag-usapan natin kung ang mga kaugalian at gawain ng mga taong ito ay nagbago sa mga nakalipas na panahon.

Gaano ito katagal?

Ang panayam ay magtatagal ng 30 hangang 60 minuto. Tayo ay magkikita sa (Ilagay ang pangalan ng lugar) sa oras na (ilagay ang oras).

Paano kung nais ninyong itigil ang pagiging bahagi ng pag-uusap?

Sa anumang oras na nais ninyong tumugil sa sa kahit anong dahilan (kung hindi kayo kumportable o kung may mga bagay pa kayong kailangang bigyang pansin), ito po ay ayos lamang. Kahit na tapos na ang ating pag-uusap at nais mong burahin o tanggalin lahat ng iyong kasagutan, hindi ito magiging problema. Pagkatapos ng (ipasok ng takdang oras), hindi na sila maaring tanggalin, ngunit walang maka-aalam na ikaw ang nagbigay ng mga kasagutang iyon. Pagkatapos ng Talaan ng Impormasyon na ito, bibigyan namin kayo ng impormasyon kung paano kayo direktang makikipag-ugnayan sa mananaliksik o sa pamamagitan ng barangay kapitan. Ang gagawin nyo lamang ay makipag-ugnayan sa kanila sa loob ng (maaring lagyan ng anim na buwan o pagkatapos ng pagkalap ng datos) at ang iyong sagot ay tatanggalin.

Pagtago ng pagkakakilanlan ng iyong kasagutan

Wala sa inyong mga personal na impormasyon tulad ng pangalan, edad at tirahan ang itatala. Ang ating pag-uusap at itatala ngunit ito ay itatago sa isang ligtas na computer na ang mga mananaliksik lamang mula sa England (at WPU) ang makakakita. Kung pumapayag po kayong mai-record sa video, kayo po ay maaring Makita sa video na ipalalabas mamaya upang malaman ng mga tao na ikaw ang nagsabi ng iilang bagay.

Ano gagawin namin sa impormasyon na aming makakalap?

Ang anomynous o lihim na impormasyon na aking makakalap ay gagamitin ng mga mananaliksik upang tingnan kung ano ang mahalaga para sa pang-araw-araw na buhay ng iba-ibang indibidwal sa inyong kumunidad at kung may pagbabago sa mga ito. Ang impormasyong ito ay gagamitin ng isang mag-aaral ng PhD sa kanyang pananaliksik at gagamitin din ito upang gumawa ng maikling video na may kalakip na mga larawan upang ipakita sa inyo sa mga sususunod na panahon.

Pagkatapos nating mag-usap, walang maka-aalam na ikaw ang nagsabi ng mga bagay na ito. Maari rin namin kayong tanungin ng impormasyong tulad ng inyong pangalan at edad, ito ay itatago naming sa (ilagay kung gaano katagal), ngutit ito ay mananatiling naka-lock sa isang ligtas na computer na walang makakakita, at ito ay buburahin pagkatapos ng (ilagay ang oras).

Paano kung meron kayong mga katanungan?

Habang tayo ay magkasama, maari kayong magtanong ng mga nais ninyong malaman. Kung meron kayong mga katanungan sa akin kung ako na umalis na, maari kayong makipag-ugnayan kay Prof. Lota A. Creencia, faculty mula sa College of Fisheries and Aquatic Sciences (CFAS) ng Western Philippines University, Puerto Princesa City, sa cellphone number +639282809419 o sa email address na lotacreencia@gmail.com.

Kung sa iyong palagay ay nakompromiso ang iyong kaligtasan sa buong proseso, maari po kayong makipag-ugnayan sa National Ethics Committee sa pamamagitan ni Dr. Filipinas Natividad sa telepono bilang: (02) 837 7537 o email address na nationalethicscommittee.ph@gmail.com

UNIVERSITY OF EXETER | MEDICAL SCHOOL

COASTAL COMMUNITY PERCEPTIONS OF WELL-BEING-LIVELIHOOD LINKAGES IN PALAWAN, THE PHILIPPINES

CONSENT FORM FOR FOCUS GROUP PARTICIPANTS

Name of Senior Researcher: Mr Timur Jack-Kadioglu

1. I agree that I have been told **what the project is about**, and have been given the **chance to ask questions.**	☐
2. I understand that I can **stop being part of this study** at any time.	☐
3. I understand that my **answers are anonymous** (no one will know my name), and that I **must not** say the names of other people here today.	☐
4. I understand that audio (sound) of me talking will be recorded and stored on **'secure' computers** at the University of Exeter and Western Philippines University until they are destroyed.	☐
5.. I understand that my anonymised answers and those of other people from my community may be used by the University of Exeter on the **'Blue Communities' website**, at **academic conferences**, and **public engagement** activities.	☐
6. I am aged 18 or above.	☐
7. I agree to take part in the above project.	☐
8. (OPTIONAL) I understand that photos of me may be used by the University of Exeter on social media and in reports or publications of the research.	☐
9. (OPTIONAL) I understand that photos I have taken may be used by the University of Exeter and WPU in discussions and as a source of 'data'.	☐
10. (OPTIONAL) I agree to be recorded in a video that will be shared on the internet and with members of mine and other communities on Palawan	☐

....

Printed name of participant Signature of participant Date

To be completed by the researcher obtaining consent:
I have explained the research to the participant and answered all of his/her questions. I believe that he/she understands the information described in this document and freely consents to participate.

....

Name of person obtaining consent Signature Date

This project has been reviewed and approved by the University of Exeter Medical School Research Ethics Committee
UEMS REC REFERENCE NUMBER: (TO BE INSERTED ONCE ETHICAL APPROVAL HAS BEEN GRANTED)

When completed: 1 copy for participant; 1 copy for researcher/project file

COASTAL COMMUNITY PERCEPTIONS OF WELL-BEING-LIVELIHOOD LINKAGES IN PALAWAN, THE PHILIPPINES

CONSENT FORM FOR INTERVIEW PARTICIPANTS

VERSION NUMBER [1]: DATE [19/03/19]

Name of Senior Researcher: Mr Timur Jack-Kadioglu

	Are you happy for me to check this box?
1. I agree that I have been told **what the project is about**, and have been given the **chance to ask questions.**	☐
2. I understand that I can **stop being part of this study** at any time.	☐
3. I understand that my **answers are anonymous** (no one will know my name)	☐
4. I understand that audio (sound) of me talking will be recorded and stored on **'secure' computers** at the University of Exeter and Western Philippines University until they are destroyed.	☐
5.. I understand that my anonymised answers and those of other people from my community may be used by the University of Exeter on the **'Blue Communities'** website, at **academic conferences**, and **public engagement** activities.	☐
6. I am aged 18 or above.	☐
7. I agree to take part in the above project.	☐
8. *(OPTIONAL) I understand that photos of me may be used by the University of Exeter on social media and in reports or publications of the research.*	☐
9. *(OPTIONAL) I agree to be recorded in a video that will be shared on the internet and with members of mine and other communities on Palawan*	☐

....

Printed name of participant　　Signature of participant　　Date

To be completed by the researcher obtaining consent:
I have explained the research to the participant and answered all of his/her questions. I believe that he/she understands the information described in this document and freely consents to participate.

....

Name of person obtaining consent　　Signature　　Date

When completed: 1 copy for participant; 1 copy for researcher/project file

COASTAL COMMUNITY PERCEPTIONS OF WELL-BEING-LIVELIHOOD LINKAGES IN PALAWAN, THE PHILIPPINES

PAGSANG-AYON PARA SA KALAHOK NG FOCUS GROUP
Pangalan ng Pangunahing Tagasaliksik: Timur jack-Kadioglu

		Maari po bang lagyan naming ng kudlit ang mga kahong ito.
1.	Ako ay sumasang-ayon na nasabi sa akin ang tungkol sa proyektong ito at ako ay nagkaroon ng pagkakataong magtanong sa tagapanayam.	
2.	Nauunawaan kong maari akong tumigil na maging bahagi ng pag-aaral na ito anumang oras.	
3.	Nauunawaan kong ang aking mga kasagutan ay magiging lihim (walang makaka-aalam ng aking pangalan at hindi ko maaring ibahagi ang mga pangalan ng mga kasama kong kalahok.	
4.	Nauunawaan kong ang tunog o audio habang ako ay nagsasalita ay ire-record at itatago sa isang ligtas na *computer* sa *University of Exeter* at Western Philippines University hanggang sila ay burahin.	
5.	Nauunawaan kong ang aking mga sagot na lihim o anonymised kasama ng iba pang sagot ng mga indibidwal mula sa aming kumunidad at maaring gamitin ng University of Exeter sa Blue Communities website, sa mga pang akademikong pagpupulong at sa mga pampublikong pakikipag-ugnayan.	
6.	Ako ay 18 taong gulang o higit pa.	
7.	Sumasang-ayon ako na makilahok sa proyektong ito.	
8.	(OPTIONAL/ MAARING SAGUTIN O HINDI) Nauunawaan ko na ang mga larawan ko ay maaaring gamitin ng University of Exeter upang sa social media at sa mga ulat o lathalain sa pananaliksik.	
9.	(OPTIONAL/ MAARING SAGUTIN O HINDI) nauunawaan ko na ang mga larawang kinunan ko ay gagamitin ng University of Exeter at ng WPU sa mga pag-uusap at bilang pinagmulan ng datos.	
10.	(OPTIONAL) Sumasang-ayon ako na kunan ng video na ibabahagi sa internet at sa iba pang miyembro ng aking kumunidad at iba pang mga komunidad sa Palawan	

_____   _____   _____

Pangalan ng Kalahok   Lagda ng Kalahok   Petsa

Susulatan ng mananaliksik na kumuha ng pagsang-ayon:

Naipaliwanag ko ang pananaliksik sa kalahok at nasagot ang kanyang mga katanungan. Naniniwala akong nauunawaan nya ang ang mga impormasyong na nailarawan sa dokumentong ito at Malaya niyang ibinigay ang kanyang pagsang-ayon upang makilahok.

_____   _____   _____

Pangalan ng Kumuha ng Pagsang-ayon   Lagda   Petsa

COASTAL COMMUNITY PERCEPTIONS OF WELL-BEING-LIVELIHOOD LINKAGES IN PALAWAN, THE PHILIPPINES

PAGSANG-AYON PARA SA KALAHOK NG PANAYAM

Pangalan ng Pangunahing Tagasaliksik: Timur Jack-Kadioglu

	Maari po bang lagyan naming ng kudlit ang mga kahong ito.
1. Ako ay sumasang-ayon na nasabi sa akin ang tungkol sa proyektong ito at ako ay nagkaroon ng pagkakataong magtanong sa tagapanayam	
2. Nauunawaan ko na maaari kong ihinto ang pagiging bahagi ng pag-aaral na ito anumang oras.	
3. Nauunawaan ko na ang aking mga sagot ay anonymous o lihim (walang makakaalam ng aking pangalan)	
4. Nauunawaan kong ang tunog o audio habang ako ay nagsasalita ay ire-record at itatago sa isang ligtas na *computer* sa *University of Exeter* at Western Philippines University hanggang sila ay burahin.	
5. Nauunawaan ko na ang aking mga anonymised o lihim na sagot at mga ng iba pang risedente mula sa aking komunidad ay maaaring gamitin ng University of Exeter sa 'Blue Communities' website, sa mga akademikong pagpupulong at mga gawing pakikipag-ugnayan sa publiko	
6. Ako ay labing walong taong gulang pataas	
7. Ako ay sumasang-ayong makilahok sa proyekto	
8. (OPTIONAL/MAARING SAGUTAN O HINDI) Nauunawaan kong ang aking mga larawan ay maaring gamitin ng University of Exeter sa mga social media, sa mga pag-uulat at sa mga lathalaing may kinalaman sa pananaliksik	
9. (OPTIONAL) Sumasang-ayon ako na kunan ng video na ibabahagi sa internet at sa mga miyembro ng aking kumunidad at iba pang mga komunidad sa Palawan	

_____   _____   _____
Pangalan ng Kalahok   Lagda ng Kalahok   Petsa

Susulatan ng mananaliksik na kumuha ng pagsang-ayon:

Naipaliwanag ko ang pananaliksik sa kalahok at nasagot ang kanyang mga katanungan. Naniniwala akong nauunawaan nya ang ang mga impormasyong na nailarawan sa dokumentong ito at Malaya niyang ibinigay ang kanyang pagsang-ayon upang makilahok.

_____   _____   _____
Pangalan ng Kumuha ng Pagsang-ayon   Lagda   Petsa

Ang proyektong ito ay nasuri at sinang-ayunan ng University of Exeter Medical School Research Ethics Committee
UEMS REC REFERENCE NUMBER (*ilalagay sa oras na ng Pagsang-ayon ay naibigay na*)

Kung tapos na: Bigyang ng isang kopya ang kalahok at isang kopya para sa mananaliksik

FOCUS GROUP GUIDE

NOTE: As outlined in the methods section, this research is qualitative/inductive in nature so this guide is indicative of expected discussions. Questions are expected to adapt after further scoping visits, discussions with project partners, and trust-building/observation with the community prior to data collection. Updated guides will be submitted as an amendment to the REC.

1) Administrative tasks:
   a. Introductions made by researcher, translators/facilitators and participants
   b. Brief recap about the purpose of the research to be read to participants
   c. Consent forms completed if not done so already
   d. Answering of any further questions regarding purpose of study, procedures for the day etc.
   e. Refreshments provided at the beginning (tea, coffee, snacks)

2) Ice breaker/introductory questions:

Photovoice exercise will be used as an ice-breaker activity. Printed photos will be stuck/hung up on a wall. Participants will be offered the chance to discuss a photo they took, or to comment on one taken by someone else. They will be encouraged to describe what it is, why they took it (or why they think someone else took it). Using the photos as inspiration (but also encouraged to discuss things not shown), the following questions will be asked:

   a. If you weren't here taking part in this, where would you be?
   b. Do you enjoy being there/doing [relate to whatever the places/activities are]
   c. What other activities do you do often?
   d. What sorts of things do you do to earn money?
   e. Are there any things you do that you don't enjoy?
   f. What about ones you'd like to do but are unable to?
   g. Additional questions to pursue answers
      i. E.g. why you do it if you don't enjoy, why are you unable to do this

3) Participatory wellbeing activity:
   a. What does it mean to have the "good life" (culturally appropriate equivalent phrase will be used to explore aspects of life needed to live well) in your community?

Participant responses will be written on post-it notes (either by themselves or with support of translators/facilitators, depending on level of literacy). The facilitators will group them under different themes (these will not be too broad, to ensure specificity is retained). Participants will be split into groups of 2-3, and asked to rank these categories based on priority. This is intended to stimulate discussions/debates between participants. Below are some suggested prompt questions to be used by the facilitators during this exercise:

   b. Has it always been this way?
      i. Pursue response further
         1. Yes – do you think it will always remain the same?
         2. No – what has changed and why?
   c. Do you think everyone in the community shares the same view of the "good life"
      1. Pursue response further
   d. Using the wellbeing categories above, ask participants to discuss how easily they think they can attain it

BREAK (15 minutes)

4) Livelihoods/wellbeing linkages
   a. Are you happy doing what you do to earn money?
      i. Is money the only reason you do it or are there other reasons?
   b. Are there things you'd prefer to be doing instead? If so, what is stopping you from doing so?
   c. Have you been involved in other income-generating activities in the past – if yes, why did you stop?

      d.   If they could stop [livelihood activity they're involved in] for [livelihood activity not involved in] and earn the same amount, would they?

          i.   Pursue response

      e.   Questions on fishing/other long-standing activities

          i.   Do you think these will always be practiced in your community in the future?

          ii.   Do you want them to continue?

Wrap-up: Re-cap on study purpose. Ask if any questions for researcher. Means of contacting in future reiterated. Thanks to participants. Lunch provided. Optional short video segments to be recorded, if participants agree to it

APPENDIX E(2): SEMI-STRUCTURED INTERVIEW GUIDE:

1) Administrative tasks:
   a. Introductions made by researcher, translators/facilitators and participants
   b. If first time meeting the participants, information sheet is handed out to the participants and/or read out to the participants, depending on level of literacy
   c. Consent forms completed if not done so already
   d. Answering of any further questions regarding purpose of study, procedures for the day etc.
   e. Refreshments provided at the beginning (tea, coffee, snacks)

2) Place of work
   a. Can you please tell me a little bit about your role with [insert place of work]?
   b. What role does [place of work] have in [insert community]?
   c. What types of livelihoods are people involved in in the communities you serve?
   d. What is important for wellbeing in the communities that you serve?

3) Wellbeing
   a. What does it mean to have the "good life" (culturally appropriate equivalent phrase will be used to explore aspects of life needed to live well) in your community?
      i. Has it always been this way?
         1. Pursue response further
            a. Yes – do you think it will always remain the same?
            b. No – what has changed and why?
      ii. Do you think everyone in the community shares the same view of the "good life"
         1. Pursue response further
   b. What do you think is needed for achieving improved wellbeing in your community?
      i. What do you think is preventing this?

4) Livelihoods
   a. What sorts of livelihoods do you think can contribute to good wellbeing?
      i. Do you think everybody in the community can become involved in these?
      ii. Is there support/do you think there will be support for these activities?
         1. Pursue response further

NOTE: As participants in semi-structured interviews are expected to be government/civil society staff, questioning will attempt to explore both their own perspectives and those of the government department/NGO they work for. This is expected to be influenced by the interview location – e.g. in their office or elsewhere in the community.

5) Questions about what their government department/NGO is doing/advocating for in terms of livelihood strategies for the community.

Wrap-up: Re-cap on study purpose. Ask if any questions for researcher. Means of contacting in future reiterated. Thanks to participants. Refreshments provided. Optional short video segments to be recorded, if participants agree to it.

Appendix VIII – Participatory Mapping Maps

Figure 25. Participatory map created by community members from purok 1

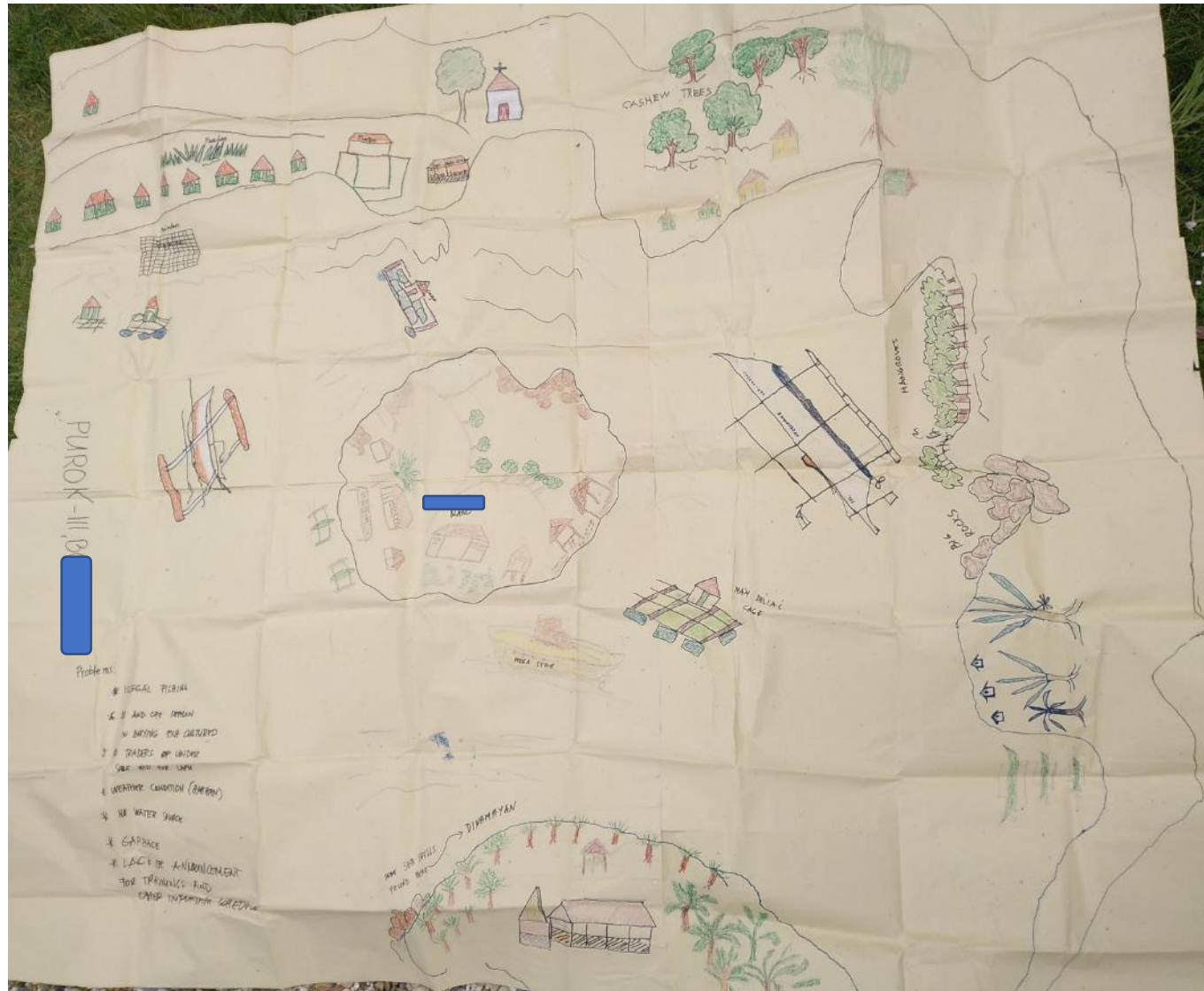*Figure 26 Participatory map created by community members from purok 2*

Figure 27. Participatory map created by community members from purok 3
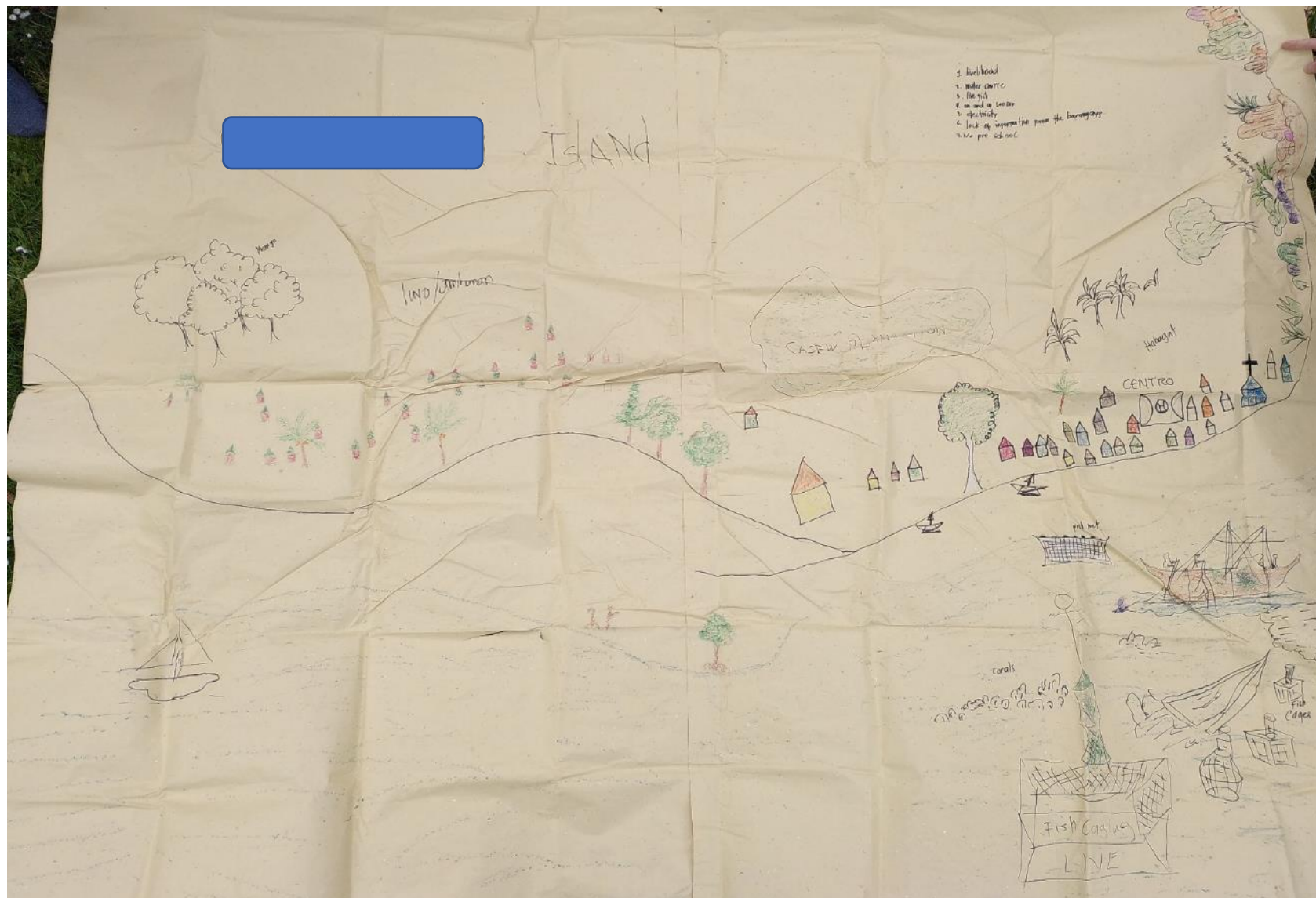
Figure 28. Participatory map created by community members from purok 4

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