Upgrading the United Nations Environmental Programme to Meet the Needs of the 21st Century

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This project proposes that the current UN environmental programme needs to be reformed to help encourage the international community to act more urgently in the pressing issue that is climate change. The current international environmental architecture is made up of a plethora of multilateral environmental agreements (MEAs), a United Nations environmental programme (UNEP) lacking powers to enforce their normative goals, strong scientific backing and lots of international organisations whose primary focus is in other technical areas offering small concessions towards environmental matters. In the first section of this proposal I will highlight the gap within the international environmental architecture which this work will propose should be filled by an upgraded version of the UN environmental programme in the form of a UN Specialised Environmental Agency (UNSEA). In this project I don't mention the debate around how much reform should happen when reforming UNEP because of word limitations. However it is important to mention that this is an ongoing debate where academics have suggested options from keeping UNEP as a UN programme and just upgrading it slightly, to creating an autonomous environmental organisation which is linked to the UN, similar to the World Trade Organisation (WTO) and completely self-governing. My proposal suggests that a middle-ground would be best and I reached this decision through this work: This proposal works through one of many ways in which to order the designing of an international organisation and my choice of institutional design will influence the third chapter of this work.

Chapter two briefly explores the history of UNEP, highlighting why there are intentional flaws in the design of the UN programme that causes the weaknesses it has been criticised for in recent history. I will look at the discussions from the highest levels of UNEP raising the possibility and need for upgrading UNEP. Chapter three looks at the development of an International Environmental Court which would be tied to and associated with a UNSEA. This is drawn from the work on institutional design in the earlier chapter and is primarily about encouraging compliance in the international sphere. Chapter four will be a case study on illegal deforestation in Indonesia and the response of UNEP and the international community in attempting to stop and prevent the ecological tragedy. This is included to show the application of theory into a real world situation and ultimately concludes that more progress could be made with a UNSEA than has currently been made, whilst acknowledging that the progress made in the last decade or so is quite promising.

This proposal looks at the conditions for reform of the UN Environmental Programme because climate change is an issue that transcends national borders and the solution must come from the international sphere. The existing systems have so far failed to influence any binding and committed change, whilst the need for change gets more and more pressing. Climate change will be a significant security risk within the next century as environmental conditions deteriorate to predicted levels. In the past there has been a debate about whether climate change was real or not. Work in the international community developed the Intergovernmental Panel on Climate Change (IPCC), which is an amalgamation of thousands of scientists, whose combined work has unequivocally affirmed that climate change is happening and humans are the main drivers of this rapid changing in climate. (IPCC, 2014, p. 2.).

In this project the narrative focuses on the political implications of climate change but it is important to clarify some simplified aspects of the scientific understanding of how our climate works and how human's actions are contributing to the warming of our planet. The Earth has a natural greenhouse effect that regulates its average temperature. The

earth gets its heat from the sun and heat is released through infrared radiation. These are the basic primary inputs and outputs. Crucially, not all heat radiates back up into space, some of it is trapped in the earth's atmosphere. This is done through gases which are commonly known as greenhouse gases (GHGs). (Wielicki, 2011). Without this naturally occurring greenhouse effect, life on earth would be unrecognisable as the average temperature would be 35C less than it currently is. (Maslin, 2009, p4). The Earth's climate has changed across its history and it is a naturally occurring process. The cause for concern among scientists is the rate at which the climate is currently changing. And evidence from the IPCC suggests that this is being driven by human actions. Human activity since the industrial revolution, has been driven by fossil fuels that are deposits of carbon that have been formed over millions of years. By burning these, humans are releasing a significant amount more GHGs than would naturally be released into our atmosphere. At the same time, humans are cutting down vast swathes of forest land to build homes. Rising global temperatures are causing ice caps to diminish and all of the natural mitigating factors that the Earth has in place to absorb GHGs are dwindling in effectiveness. If humans carry on in a business as usual manner, by 2100 estimates suggest there could be 6 degree Celsius warming or more. (International Energy Outlook, 2015a). This proposal argues that action needs to begin as soon as possible to prevent significant human tragedy and that there needs to be legally binding commitments to encourage this. The vehicle to drive this paradigm shift should be a UNSEA.

CHAPTER ONE. Designing an institution within international environmental governance

In this chapter I will discuss the considerations from academics within the field of global environmental governance about the conditions, propensity and need for reform of the current prominent UN environmental organisation (UNEP), upgrading it to a UN specialised environmental agency (UNSEA). This formation of a UNSEA will act as an umbrella organisation which will take up the plethora of environmental international agreements and monitoring systems under one organised institution. It would take over the work currently performed by UNEP. I will also look at institutional design theory and show what the formation of a new environmental organisation will entail. This will show that a UNSEA is the best case scenario, with regards to institutional design, and effectiveness of the institution.

The current make-up of international environmental management is through hundreds of multilateral and over a thousand bilateral environmental agreements. These cover a whole swathe of environmental issues from protecting endangered species to mitigating climate change. (Winchester, 2009, p. 11). The expansion of MEAs came after the Stockholm Conference in 1972 and is an area in which there has been some success in the international sphere in tackling and mitigating the harmful effects of climate change. However, an issue with the plethora of MEAs is that they are often either very similar or overlap on their intended purpose. This creates inefficiencies and confusion at the international level. (Desai, 2012, p. 168). A positive to take from this overburdening of criss-crossing MEAs is that there are similar instances in history where this has happened, only it wasn't in international environmental agreements but free trade. In the case of free trade the GATT was quite successful at managing multiple multilateral and bilateral trade agreements from its inception at Bretton Woods. With the creation of the WTO there was an influx of economies welcoming free trade and subsequently an increase in the amount of multilateral agreements, this hasn't hindered the performance of the WTO, only lent it more legitimacy. This shows that international organisations are capable of simultaneously managing and streamlining lots of multilateral agreements, making gains in efficiency. A streamlining of MEAs under one strong and coherent institution would have long lasting benefits to help future generations live on a world that is hospitable because there is improved efficiency and more coherent and focused environmental policy as it comes from a more centralised body. (Biermann, Davies, Grijp, 2012, p. 362). Through MEAs, it is clear to see that attempts have been made at governing the international environment but, barring the success of a few such as the Montreal Protocol (1987) which banned the use of ozone depleting chemicals, lots of these agreements lack an overarching monitoring system and consequently have suffered in performance.

One of the biggest obstacles to global agreement on most environmental issues, aside from the debate over scientific proof of climate change, is how policies to mitigate or adapt to climate change will affect the balance of power within the international sphere. The heads of states and members of governments around the globe are focused on how the implications of climate change will affect their state, its economy and its security. This can be seen through the views of US politicians and think tanks that believe climate change is a hoax or a left-wing ploy to bring about socialist style policies. Contrasted with Yoweri Museveni, President of Uganda who 'has called climate change "an act of

aggression by the rich against the poor." (Winchester, 2009, p. 15). This inability to get an agreement between developed and developing countries has repeated through all of the last major conferences of party meetings and environmental meetings between states and is one of the biggest barriers to advancing global environmental governance. This has led to critics suggesting international conferences are nothing more than an act of publicity with no strong policy to follow up on the rhetoric. (Evans, 2012, p. 100). This inability to reach agreements highlights a governance gap that a UNSEA could fill. The development of an international organisation could work to alter the institutional framework and encourage states to see past the realist typology that climate change policies could alter the balance of power status quo, moving towards coherent and effective environmental policy and actions.

The stalling of environmental action among developing states is often played out through developmental issues rather than in an environmental arena. This is where developing states see climate change as the developed nation's way to prevent developing states from developing further. This is one reason why UNEP has lacked effectiveness and an area that a UNSEA could act to improve harmony. Some people argue this issue was addressed somewhat with the Brundtland report and the formation of the concept of sustainable development. But it can be developed further by a UNSEA. Proposals supporting the design of an upgraded international environmental organisation have faced some criticism. It can be argued that because there is a difference between institutions and organisations (Najam, 2003, p. 368) there is no point in designing an international environmental organisation if significant flaws are evident in the institutional aspects of the international environmental sphere. The institutional framework helps to determine what organisations are formed and how these institutions can evolve. (North, 1990, p. 4). As we will see in the next chapter, the institutional framework when UNEP was formed resulted in constraints in its design. In the environmental institutional framework, there has been an overbearing sense of distrust from developing states that wasn't offset by attempts at Rio in 1992 to enshrine sustainable development in environmental policies. (Najam, 2003, p. 369). However, since then there have also been the millennium development goals which have helped to show that environmentalism and development shouldn't be conflicting ideas. With a UNSEA, it would be crucial to make sure it is inherently equitable whilst including principles agreed in the past such as the polluter pays principle. Overall I think, as the movement toward the agreements post COP21 in Paris begins, the issues seen in the institutional framework in the early 2000s are inconsequential compared to the need post-2015 to act on climate change. And as such, the climate is right for a UNSEA.

An alternate and more contemporary way to encourage developing states that environmental policies would be of a benefit to their nation-state would be to argue that environmentalism, particularly the UNSEA can protect, to some extent, developing countries from being far too reliant on multinational corporations which can have greater revenue than a countries GDP – ExxonMobil's reported revenue of $433 billion in 2012 (TNI, 2013) is more money than nominal GDP of three quarters of the countries in the world. (World Bank, 2014). A large debate within the study of international politics is whether there is declining state power, and whether businesses have more influence than some states, internationally. Newell addresses this and suggests that it 'depends very much on which aspect of state power is under scrutiny'. (Newell, P. 513). In the case of environmental issues, it has been seen that large multinational companies have, in some developing states case, ignored the laws of the land. This was seen in Nigeria in the 1990s whereby oil companies in the delta area were getting rid of excess product in the cheapest way possible by a process called flaring. This was despite it being illegal and incredibly bad for the environment, used only to reduce company costs. (Klein, 2014, p. 219). With a strong international environmental organisation that has the ability to hold excessively polluting countries and companies to account if they violate environmental agreements, you can empower and increase the sovereignty of developing states that have suffered at the hands of more powerful states, or have been reliant on dirty business. This is a powerful argument for a UNSEA that could increase support for such an idea in the developing world that are often hostile to environmental laws as they are seen to impeach on development.

When one talks of institutional design, it is important to understand that within institutional design there is 'no single design or designer'. (Goodin, 1996, p. 28). Thus whilst in this work I have, and will continue to, identify the need for a UNSEA and explore a mechanism within a UNSEA, I will not attempt to design an institution in its totality. My proposal will not even design a singular part of a UNSEA, instead I will write about processes which, through research and normative beliefs, I have concluded would be an important aspect, if a UNSEA was formed. It is also important to understand what an institution is. Koremenos et al describe institutions as 'rational, negotiated

responses to the problems international actors face' (2003, p. 8), the Conference of Parties in Paris in 2015 (COP21) formally recognised that climate change is an 'urgent issue' (UNFCCC, 2015) thus there is a clear, recognised problem for international actors to face. As there is a truly global acceptance that climate change is an urgent issue, the extent of the issue requires a global, effective, environmental organisation to help states adapt or mitigate the problems of climate change. Designing a UNSEA is imperative because the issue is so multi-faceted and complex you need an organisation which is capable of dealing with this and encouraging state cooperation. (Koremenos et al, 2003, p.6).

To address the case for the creation of a new, more authoritative UNSEA, it is imperative to look at what it is institutions should do. Irrespective of the subject area of an institution, the primary goal of the majority of institutions is to have an influence for change in the world. To achieve this, you have to understand how agents such as people, or states are likely to act. One way that tries to explain how people act is rational choice theory. This theory argues that people generally behave in social situations as they would in market situations. (Pettit, 1996, P. 70). Meaning they are, as Adam Smith said in the formation of classical economics, self-interested, rational actors. In this proposal, it assumes that states actions on the international sphere are like humans actions in social situations in that they are rational. There are implications for this within institutional design, and in my focused area of a UNSEA. Rational choice theory is the best way to convince self-interested agents to adopt the policies such an organisation proposes when it may at the outset seem to be counter-productive to their self-interest. The 'deviant-centred strategy' is an example of how this would be possible. This strategy argues that to convince self-interested agents to comply with what your institution proposes, you need to convince actors through positive or negative sanctions.
Essentially, you want compliance with your institution to be the most favourable option for self-interested actors. (Pettit, 1996, p. 72). You can either do this through a policy of the carrot or the stick where you have either a reward for compliance – be it collective security within NATO – or a punishment for noncompliance such as fines from the WTO for breaking free trade agreements. Both these examples show how for the rational actor the rational choice is to comply with institutions because the benefits of compliance outweighs the cost of noncompliance. A further way to help compliance within an environmental institution is to shift the focus of the international framework from economic growth to environmental sustainability. This is because 'collective-action problems are… subjective' (Wendt, 2001, p. 1023), thus you need to show that collective-action on environmental issues is of more importance than unfettered economic liberalisation and growth. An institution works best when it fits with the other mechanisms in the social environment. (Goodin, 1996, p. 34.) In further chapters I will talk about a UNSEA having an environmental court and through this I believe you can empower a UNSEA to bring about compliance through a deviant centred way and help to shift the international framework to a more environmental focus.

Within institution design, one significant factor which shapes an institution is how it acts in the real world. This is because you can't predict every shortcoming an institution may face, and even with the 'best' intentional design, often things fall into place by accident or various aspects become more effective than anticipated, meaning they should grow. (Goodin, 1996, p. 25). For example, I will talk about an international environmental court as a part of the UNSEA as I believe that in the design of the institution this would be the most effective way to give empowerment to the institution. However, it may transpire that a UNSEA was formed and that the treaty forming aspect, or lobbying aspect were more effective. In this situation you would accept that and focus on what works best to achieve the normative goals set out by the institution. This being an example of how it could evolve by accident and by evolution. Whilst it is important for an institution to be organic and evolve, it must also be robust. This means they must be able to adapt without simply changing at the hint of a gap between the wider social and political atmosphere that isn't fully formed or apparent, but also be flexible and not look ancient or outdated. (Goodin, 1996, p. 40). For example, the single monetary union of the EU was a policy adapted by an institution that has become contentious in recent years. Many southern European states find that, with the global financial crash, being tied to a single monetary union has negatively affected their ability to spend their way out of recession. However, in the long term, it could be that maintaining membership of a part of the largest single consumer market globally will help their economies more than short term currency controls. This is highly contested but used to raise the point that institutions need to be both robust and flexible. The European Union cannot drop the single monetary union project as soon as it falters but if it continually falters and becomes outdated, then it must change. Transporting this logic onto the creation of a UNSEA, there must be checks and balances to prevent changes in the institution but also allow transparency and change when required.

The first half of this chapter has addressed several points as to why there should be an upgraded international environmental organisation and the second half looked at the some of the theory behind how an institution is created. This chapter is not designed to explore, in totality, all of the nuances behind institutional design theory or environmental governance. Rather, it has been designed to complement my argument that the planet needs a more authoritative environmental organisation as the current system is flawed. As this chapter has pointed out, flaws are seen in inefficiencies through hundreds of MEAs and a UN programme found to be lacking in many areas is a significant part of environmental governance system as it stands now.

CHAPTER TWO. UNEP: The road to reform

The United Nations Environmental Programme (UNEP) has been the leading voice in the international sphere for championing the protection of the environment since its formation in Stockholm in 1972. Over the past 40 years, UNEP has had successes and faced challenges in trying to achieve its goals and more recently academics and those in the higher echelons of UNEP have discussed whether UNEP should be upgraded. In this section, I will define the core principles that define UNEP as a distinct UN programme, outline the differences between a UN programme and a specialised UN agency, and explore the most recent internal discussions on whether UNEP should be strengthened and upgraded into a specialised agency of the United Nations. By the end of this section, the evidence should suggest that upgrading UNEP will be the most efficient way to achieve the core beliefs that underpin the current environmental conscience of international governance.

UNEP was formed in 1972. This time period in international politics was defined by the Cold War, meaning it was overwhelmingly difficult to bring about any political union between the East and West. Despite this, environmental politics acted as a neutral ground to talk as both capitalism and communism are resource maximising, meaning the competing sides of the Cold War were both excessively exploiting the environment. There were further competing interests in the build up to the formation of UNEP, notably the divide between the 'North' and 'South'. This divide was defined by development, with less developed countries arguing that environmental concerns were another barrier preventing their development. Whilst this issue is still a defining feature of environmental politics, one of the ways it was offset at UNEP's formation was by basing the programme in Nairobi where it became the first UN programme based outside of the global North. (Ivanova, 2007, p. 338 – 339). The political atmosphere that UNEP was formed in goes a long way to understanding some of the criticisms raised in this work. UNEP describe themselves as a leading authority in the global environmental sphere where they claim to set the environmental agenda for the globe, provide coherence in sustainable development policies and a source of advocacy for the environment. (UNEP, 2016, Ivanova, 2012, p. 567). UNEP's mandate comes from its Governing Council which currently has 58 Member States. They serve for four year terms and the Member States are elected to the Governing Council by the UN General Assembly. The Member States elected are regionally non-biased, meaning there isn't an obvious majority with a vested interest in one specific region. The distribution of Member States consists of 16 seats from African states, 13 seats for Western European and other states, 13 seats for Asian states, 10 seats for Latin American and Caribbean states, and six seats for Eastern European states. (UNEP, 2010., UN, 1972).

It is important to look at the differences between a UN programme and a specialised UN agency. This is because the bulk of the debates within the International Environmental Governance (IEG) framework about upgrading or reforming UNEP centres around what it should be upgraded to, if it should be at all. A UN programme is a subsidiary of the UN general assembly that has been set up to help the general assembly achieve its functions. (Article 22, UN Charter). Programmes are also very varied in scope, some last for a finite amount of time to achieve a set of focused objectives and others, such as UN Development Programme (UNDP) or UNEP, are more permanent fixtures. The majority of UN programmes assume their legal personality from the UNGA but it is possible to have some limited legal personality that is needed for the programmes to fulfil their work with a degree of independence. (UNEP, 2010, p. 10). Legal personality is an important factor for a successful environmental organisation because it means the organisation can have a greater impact and influence on international law. This is a tool that would be an extremely useful tool for an environmental organisation to wield to transfer their normative beliefs into actual policy.

UN specialised agencies are often created to focus on particular issues or because they have a specific function. They are 'autonomous intergovernmental organisations' who are linked to the United Nations through articles 57 and 63 of the UN charter. (UNEP, 2010, p. 2., Ivanova, 2012, p. 568). Specialised agencies exist because a degree of expertise is needed. For example the complex issues the World Health Organisation deals with, such as attempting to prevent global endemics or improve healthcare in countries that desperately need it requires a high degree of expertise. In the environmental sphere, this degree of expertise is also greatly needed and is an underlying reason as to why UNEP should be upgraded to a UNSEA. The link between these autonomous intergovernmental organisations and the United Nations comes primarily through the Economic and Social Council (ECOSOC) which links the specialised agencies to the UN general assembly. This degree of autonomy means that they have the potential to have a greater legal personality than UN programmes as legal personality and the extent of the agencies autonomy is set up in provisions established when the agency is formed. (UNEP, 2010, p. 2). One often cited benefit of being a UN specialised agency is that the budget often increases. This is because the budget for specialised agencies comes from mandatory contributions. (Ivanova, 2012, p. 572). UNEP have often been seen to be constrained by their budget which is relatively low for the potential scope of their work**.** UNEP's budget for 2014/2015 was $631 million whereas the UN Development Programmes (UNDP) contributions reached $9.5 billion in the same year. (UNEP, 2015, UNDP, 2013). This suggests that getting specialised agency status doesn't guarantee significantly more funding. If there is the desire from donators, UN programmes can often be better funded than specialised agencies. However, in the case of UNEP currently, it is obvious to see that the desire isn't there and that making it a specialised agency would greatly benefit its budget.

The last three Executive-Directors have discussed the options regarding the evolution of UNEP's role and how it can be made to be more influential. Does this suggest that it is not viable or there is no better alternative? On the one hand, you could argue this, because there has been no change. On the other hand, it shows that from the highest levels in UNEP there is recognition that something fundamental needs to change. The concept of upgrading UNEP has gained in popularity since the Nairobi Declaration in 1997 which showed the support of several European and developing countries support for 'reform and strengthening of UNEP and the establishment of a global environmental umbrella organisation within the UN' (Elliot, 2007, p. 13). Elizabeth Dowdeswell was Executive-Director at the time of the Nairobi Declaration and suggested, in reference to the declaration, that to grow in its role as the primary authoritative voice for the environment UNEP needed to be adequately equipped and empowered (UN, 1997, p. 49). Three years after the Nairobi Declaration, and under a new Executive-Director, came the first global ministerial environmental forum to explore the future problems and solutions of environmental issues. One of the defining features of upgrading UNEP to a specialised agency and a feature developed further in the following chapter, is one of an environmental court and of UNEP having a greater legal personality in international law in general. One of the key environmental challenges highlighted in the Malmo Ministerial Declaration was the gap between 'commitments and actions'. (UNEP, 2000). This is an issue of compliance and strengthening UNEP by giving it the ability to enforce compliance will be a fundamental aspect of bridging the gap between commitments and actions. There were also calls at this meeting for a 'greatly strengthened institutional structure for international environmental governance' (UNEP, 2000). The Nairobi Declaration and Malmo Ministerial Declaration were both a part of the building support for reforming UNEP and was built upon more in the following years.

Under the current Executive Director of UNEP Achim Steiner leadership, UNEP has addressed the notion of reform several times. Notably in 2009 starting in Belgrade, a series of meetings were organised to discuss the potential for reforms in the sphere of international environmental governance. In the build-up to the meetings in Belgrade and Rome, Steiner talks of the need for greater consistent funding, more efficient international environmental governance including restructuring MEAs, and the potential for 'all options of reform' to be discussed in the meetings. (Steiner, 2009, pp. 6 – 8).This series of meetings concluded there was a need for some reform of UNEP, offering options for incremental reform and for broader reform of the international environmental sphere as a whole. Part of the broader aspects of reform focused on the potential for the creation of a specialised UN agency that could be called the World Environmental Organisation. (UNEP, 2009a, p. 6) whilst it also looked at enhancing UNEP and linking development and the environment under an umbrella organisation. The active involvement from the highest levels of UNEP in engaging with the debate around reform of the UN programme suggests that UNEP, in its current framework, is inadequately designed to deal with the IEG in the 21st Century. This debate has been an important part of UNEP's recent history with Rio +20 where there was a call to upgrade and strengthen UNEP (Rio +20, 2012, p. 16). It is

important to focus on the internal discussions on reform of UNEP as well as those by academics and others outside of the institution. This is because if it was apparent that there was no will from UNEP to upgrade, making the case for reform would be more difficult because it would assume that UNEP was successful without need for reform. Thus, the focus from the last three Executive Directors on the idea that UNEP should be upgraded lends legitimacy to those making the case for reform and helps to change the debate from whether UNEP should be reformed to how UNEP should be reformed.

To conclude, the active interest from the most recent executive directors of UNEP in reforming UNEP suggests that UNEP are facing a governance deficit and failing in its role to advance compliance to sound environmental policies on the international sphere. The current criticisms of UNEP can be clearly traced back to a story of compromise in its formation (see Ivanova, 2007) but upgrading it to a specialised programme will help address the governance gap which has become apparent since its formation. Changing UNEP's nature to a specialised agency will give it greater legal personality, allowing it to make treaties and allow it to develop an international court for the environment (ICE) which will be discussed next.

CHAPTER THREE. An International Court for the Environment

One key marker in the transition of UNEP from an environmental programme to a specialised agency of the UN would be the creation of international court of the environment (ICE) to enforce compliance of environmental treaties and agreements. This would work in much the same way that the International Court of Justice is the 'principle judicial organ of the UN' as a whole. (ICJ, 2016). This section will outline the key principles that an environmental court should adhere to, explain why the environmental court should be coupled with an upgraded UNEP and it also looks at the common failings and successes of various dispute mechanisms and international courts that have evolved in the international sphere. It looks at these because it is important to build on the work of previous designers and try and adapt or improve the flaws that become apparent when something moves from theory to practice.

An ICE should encourage compliance, both by ruling and by its presence. Compliance is the most important part of an international institution and the aim of upgrading UNEP into a UN specialised agency is to advance compliance of states in environmental treaties and actively attempting to deal with the issue of climate change. The defining feature of international environmental governance since its formation has been large scale meetings such as the COPs. The aim of these has been to negotiate treaties, such as the Kyoto Protocol, Rio + 20, and the most recent, COP21 Paris Agreement. The outcome of the majority of these treaties has generally been loose agreements with a large degree of flexibility, mostly non-binding commitments. The value these COPs have had for the environment can be brought into question. Carbon dioxide emissions have generally increased year on year, excluding financial crises, for decades (CDIAC, 2015). Thus, whilst there have been big successes born from international negotiations, CO2 emissions which are one of the most important contributors to climate change have consistently increased, suggesting that not enough has been achieved. Even when there have been legally binding commitments such as the Kyoto Protocol, there has been a failure to reach targets – Europe managed a saving of 1% of emissions from 1990 to 2010 and the developing world's emissions have risen by 7%. (Clark, 2012). This suggests that the mechanism for non-compliance that the Kyoto protocol favoured hasn't worked, because many states have got around their legally binding commitments. The original solution for compliance in the Kyoto protocol was, in part, to put faith into the invisible hand of the markets (Maljean-Dubois, 2010, p. 78). Elsewhere in the international sphere the common mechanism for helping to deal with non-compliance have been DSMs. Seen often in bilateral agreements, they have also had success in Maritime law and in the WTO. Developing an international court of the environment with a dispute settlement mechanism (DSM) as well would be integral for the development of a strengthened environmental agency within the UN. One of the most critical factors for successful treaties is the inclusion of 'formal enforcement provisions'. (Haas and Speth, 2006, p. 129). Therefore the strength of an environmental court would be reliant on the wording of the agreements and treaties which would developed by the UNSEA.

The inclusion of state and non-state actors in an ICE would reflect the changing nature of international relations where non-state actors are beginning to have more influence. But it is also about empowering developing states

which have been damaged by free-trade agreements and multinational corporations taking advantage of weak environmental laws, or circumventing environmental laws entirely because the judicial system of the state has been perceived as weak. Across the developing world, there are instances where, either through negligence or disregard for local surroundings, businesses have caused vast amounts of environmental damage. From illegal gas flaring in the Niger Delta (Klein, 2014, p. 197) to massive chemical waste dumps in India (Das, 2015), the developing world have felt the full force of the polluting aspects of influential non-state actors. Providing a platform on the international sphere to open dialog between a mix of actors and hold to account polluters if they break international law would be a step forward in advancing an equitable and environmentally secure future for the planet. Furthermore, being conscious of the needs of developing states as well as the developed, the formation and residency of an ICE should preside, as UNEP currently does and as UNSEA will, in the developing world. This is because in the interconnectedness of the modern world, there is no / limited technology delay as was suffered when UNEP originally was positioning in Nairobi and the symbolism of including an ICE in the developing world is very important.

The key involvement of a UNSEA is to make sure that responsible and effective environmental norms are the central part of the environmental law under which the ICE would operate. International courts see maximum effectiveness when 'states' legal uncertainty before the court is minimised'. (Mitchell and Powell, 2011, p. 70).Without clear legislative language, and even with clear language, states and non-state actors, if found to be non-compliant will try to avoid a negative ruling. This has been seen in rulings from the dispute settlement of WTO such as the Antigua / US gambling case where the US were found to violate free trade laws but did everything in their power to stop this ruling. One of the reasons the US did this was because they had significantly more financial capital to take part in protracted and drawn out court proceedings. (Lester, 2008). This highlights one of the biggest issues with international courts which is that they are costly and because of this price barrier they favour richer nations. In the WTO, the most frequent complainants of the dispute settlement system are the United States, the Europe Union and Canada (Shaffer, Melendez-Ortiz, 2010, p. 22). This clearly suggests that developed countries get more out of the DSM, otherwise they wouldn't use it as frequently. This is an issue that should be avoided when proposing an ICE with a DSM to be the linchpin of a UNSEA. Naturally in most cases if the developing state wins their case they will be recompensed their fees, however high initial costs are the problem, and hard to justify if there is a need for government expenditure elsewhere.

Developing an international environmental court will change the nature of international environmental law. Currently environmental international law has mostly been considered soft law in that it is more the spread of accepted environmental standards and norms rather than binding law. (Rosencranz et al, 1999). Developing an ICE to deal with disputes with those breaking international environmental treaties would transition parts of the international environmental law sphere into hard law. There are striking similarities here between international environmental law and international financial law, both of which are predominantly focused on spreading international standards that countries should adhere to, rather than clear enforceable law. In both finance and the environment, soft law has not been effective – since the global financial crisis which began in 2007, some academics have called for a hardening of this soft law approach. However, there are benefits to a system of soft law, many view hard law in international law as an encroachment on a state's sovereignty, and in the international public sphere there is no overarching authority to enforce the law due to the anarchic nature of international relations. (Waltz**,** 1959, p. 160**)**. Coupling the ICE with UNSEA helps to address the issue of the lack of overarching authority. Countries actively choose to opt in / out of international organisations but a strengthened international environmental organisation could act as the overarching authority in environmental law. The issue of sovereignty can be addressed two-fold. Firstly, globalisation itself is challenging the traditional nature of sovereignty (Jayasuriya, 1999, p. 425). In the case of the EU, countries have seceded parts of the traditional notion of sovereignty in exchange for a plethora of security, economic and political reasons. (MacCormick, 1996, p. 553). This arose because of a will from states to act and get benefits from the joining of this political union. Highlighting that losing small amounts of sovereignty may help this planet become sustainable and prevent it becoming inhospitable, along with other potential benefits may help to address the issue of sovereignty over international environmental law. However, it is easy to see how a lot of states would disagree with this as not all have as strongly held beliefs that the environment needs protection when there are such vast economic benefits from extracting resources from the environment.

Secondly, there are instances within international law where it is acceptable for international law to supersede state

sovereignty. Most frequently this happens when states are found to be violating basic human rights. In the restructuring of UNEP as a specialised agency, either enshrining within it a 'new' human right such as the right to a clean and healthy environment (Ewnetu, 2013, p.16) would allow violators of this right to be held to account in international law. This can be considered quixotic and thus unlikely to happen as Nation States would be hesitant to allow this loss of sovereignty. An alternative to this can be found through work from the Office of the High Commissioner for Human Rights (OHCHR) and UNEP which found that 'climate change related effects have a range of direct and indirect implications for the effective enjoyment of human rights'. (UNEP, 2009b). As such, rulings in environmental law could address the sovereignty issue around the framework that states are violating human rights through environmental damage. The implications of this could be that environmental issues become human rights issues and then that would take place in an international human rights court but if the issue is profoundly environment based, and within the jurisdiction of the UNSEA, the benefits of the technical expertise brought forward by an ICE would make it the logical option to settle disputes.

To conclude, there are a lot of issues that have been found with DSM and international courts and, especially in the early years for organisations such as the WTO they were quite contentious. However, over the past 20 years, they have developed and evolved and have moved from an exclusive agent for the rich to seeing more involvement from developing nations. This can only be a good thing for developing treaties that are binding and accountable, but just and equitable. If used in an optimal manner within an upgraded UNEP, together they could help to restructure, reaffirm and enforce the international community's commitment to providing a safe and sustainable world for future generations to come, as was enshrined in the sustainable development goals of the Brundtland report in 1987. The key features suggested here to be included in an ICE will work to forward the normative goals of an upgraded UNEP. However, the mere presence of an ICE will not be enough to completely generate compliance and most of the work will still be with a UNSEA type body whose job it would be to create clear and enforceable treaties to make an ICE possible.

CHAPTER FOUR. Illegal Deforestation: Indonesia and the response of the international community

This chapter looks at the illegal deforestation in Indonesia as a case study. This will include a background of the issue at hand with the ultimate conclusion that despite the illegal deforestation taking place in Indonesia, it is an international issue. It shows what UNEP have done so far in their attempts to curtail and ultimately stop illegal deforestation in the region. From this I will suggest that an upgraded UN environmental agency provides a greater chance of success in attempting to monitor and prevent illegal deforestation.

Indonesia is a collection of hundreds of islands situated in South East Asia and is the biggest economy in the South East Asian region. (BBC, 2016). One part of the success of their economy has come through the sale of rare woods and, in more recent years, the production of palm oil. These two areas are the main drivers of illegal deforestation in Indonesia. Illegal logging in this context is defined as activities concerned with the processing of wood, harvesting and the trade of wood that do not conform to Indonesian law. (UNEP and UNESCO, 2007, p. 16.). Oil palm plantations have flourished in South East Asia with 85% of global production taking place in Indonesia and Malaysia. (UNEP, 2011, p.2). The most common method of clearing rainforest to make way for the lucrative oil palm crops is known as slash and burn where 'land is set on fire as a cheaper way to clear it for planting'. (Balch, 2015). This is after the valuable wood has been harvested. Amplified by the El Nino weather phenomenon, the slash and burn tactics in Indonesia in 2015 spawned the worst CO2 emission producing forest fires in the region since 1997. (Global Fire Data, 2015). The effect of the forest fires was made worse as lots of the ground in the region consists of peatlands which have vast deposits of CO2 stored in them. The CO2 is released when the peatlands and trees burn. This slash and burning method of clearing forests is illegal under Indonesian law but enforcement of the law has been lax, leading to the persistent use of this tactic to clear land. The end goal of the forest fires is the production of palm oil, which is used in hundreds of items consumed around the world as palm oil accounts for '65% of all vegetable oil traded internationally.' (WWF, 2016). In the 2014 in Riau, the region with the largest area of oil palm plantations, it was found that half the plantations were illegal. (Fern, 2015, p.11).

Logging and selling of wood, or breaking wood down into pulp and paper mills is the other main source of deforestation (legal and illegal) in Indonesia. Whilst many commercial loggers have access to permits, it is common for companies to cut down trees outside of the approved boundaries. This is because the demand, both internationally and internally, outstrip the supply of legal licenses that are issued. (UNEP and UNESCO, 2007, p. 23). Indonesia is the perfect storm of factors allowing illegal deforestation to happen on such a large scale. Despite it being illegal, only around 10% of cases actually make it into court. There are issues of corruption and the majority of companies operating in the area are better equipped and trained than the guards employed to protect the rainforest. (UNEP and UNESCO, 2007, p.42). Corruption is a big issue in developing countries where there is such a vast amount of money to be made from these natural resources. (UNEP and INTERPOL, 2012, p. 33). It is unfair to lay all of the criticisms on the regulation of the Indonesian area because illegal deforestation is primarily an issue of demand. Demand from international markets outstrips global supply and it is often too easy for log merchants to mix illegally and legally harvested wood. When Indonesia experienced a dip in illegal deforestation in the mid-2000s, this had repercussions elsewhere as it increased the demand for wood sourced from other countries. (UNEP and INTERPOL, 2012, p. 14). This shows that illegal deforestation is a demand issue as much as a supply issue.

Declining forests and woodlands have a direct impact on the accelerating effects of climate change. Reducing deforestation and increasing afforestation is an effective way to mitigate the effects of climate change. This is because forests are carbon sinks that turn Carbon Dioxide, one of the most common GHGs, into oxygen through photosynthesis. The forest fires in Indonesia in 2015 have been described as a 'crime against humanity'. (Lamb, 2015) and it is reported to have cost Indonesia $15.7bn, more than double the cost of the 2004 Tsunami natural disaster. (World Bank, 2015). However this isn't an issue that is unique to Indonesia or a problem that can be solved by focusing only on supply-side activity in Indonesia. Demand for the products that influence illegal deforestation comes from around the world and globalisation has been a driving force in driving deforestation in tropical landscapes. (Butler and Laurance, 2008, p. 471). The EU are one of the largest importers of goods whose externalities include deforestation. Recent research has found that 'one quarter of EU imports of agricultural commodities are estimated to be linked to illegal deforestation in Indonesia'. (Fern, 2015, p. 13). However, the report stresses this is an estimate. The methodology of the report suggests it is hard to monitor the source of wood as it often changes hands multiple times before ending up in European markets. This can be seen a by-product of globalisation. Pursuing efforts to stop both demand and supply aspects of this trade means there is a greater chance of success than focusing on just supply or just demand. This turns a national issue into an international issue, where it enters into the remit of UNEP or, ultimately as this report is proposing, a UNSEA.

Current efforts from UNEP to reduce the effects of illegal deforestation have come through their United Nations collaborative initiative on Reducing Emissions from Deforestation and forest Degradation (UN-REDD) which draws on the expertise of UNEP, along with the UNDP and the Food and Agriculture Organisation of the UN. The REDD+ initiative aims to give economic incentives to developing countries who reduce emissions by managing their forests sustainably. (UN-REDD, 2012, p.2). The aims of this programme in Indonesia was to provide technical assistance, educate and develop a 'fair and equitable payment mechanism at the provincial level' (UN-REDD, 2013, p. 15). However in the development of a payment mechanism, the outcome was of little success with no guarantee of where funding would come from. Some involved question whether countries should even be dependent on external funding for conservation, believing in more of a reward system. (UN-REDD, 2013, p. 15). There should be further progress in the international sphere to agree to commitments to fund programmes (perhaps linking into the development of the green economy). This could be an effective was of tackling the supply side issue of illegal deforestation in Indonesia if it gave economic incentives to developing countries that don't exploit their natural resources. However, it doesn't address the issue that the shifting trend of illegal deforestation in Indonesia has gone from small-scale subsistence farmers to globalised multinationals. To deal with this you have to address the issue of demand.

One way an international environmental organisation could help reduce the demand side issue that helps fuel illegal deforestation is through international treaties. There has been progress in the international community in addressing the issue of deforestation (legal and illegal) which built up to the 2014 climate summit in New York where over 130 countries, companies, civil societies and indigenous peoples endorsed the New York Forest Declaration. (UN Press Release, 2014). This was a legally non-binding commitment to reduce deforestation by 2020 and altogether eradicate deforestation by 2030. (UN, 2014, p.1). Recommendations to help further the New York Forest declaration

included allowing states to 'strengthen implementation and enforcement of legal frameworks for protecting and sustainably managing forests.' (UN, 2014, p. 11). With an upgraded UNSEA, backed by the judicial remit of the ICE, creating an international legal framework to prosecuting states and non-state actors involved in the supply and demand of illegal deforestation would advance the desire of reducing the effects of climate change. The 2014 Forest Declaration is good example of how state and non-state actors have both signed up to the declaration and shown good intent in addressing a significant problem and, through all the current channels available, coming up with a broadly agreed solution. However, the issue associated with a lot of environmental declarations or agreements is that they are legally non-binding and therefore harder to enforce. This means that failure to reach these commitments does not result in direct, significant repercussions for the deviant actors involved. Not addressing the issue of illegal deforestation in Indonesia will have significant negative repercussions in the efforts to reduce the effects of climate change but national politics is too often focused on the short-term. This short-termism of politics and the long-term policies required for addressing the issues associated with climate change is the overarching dichotomy of climate politics. With a UNSEA designed to operate within a rational choice sphere, the presence, and fair implementation of court rulings for not adhering to a legally binding treaty would hopefully be enough to encourage compliance in the international sphere and help Indonesia to address the supply side issue causing illegal deforestation and reduce the rest of the world's states and multinational corporations demand for goods that encourage illegal deforestation.

UNEP have developed and advanced 'Global Forest Watch' which can help the international community and national governments and legal enforcement monitor, in almost real time, deforestation rates around the world. (Global Forest Watch, 2016) This service is a very good initiative with high technical expertise and open access so free to use for anyone. This means that it is very useful for developing countries such as Indonesia. Using a service such as the Global Forest Watch to get alerts when areas of forests are being cut down mean it is possible for Indonesian law enforcement to respond in real time and prevent larger swathes of forests being cut down outside of legally agreed permits. It would also be beneficial to the international community if there were legally binding treaties to prevent deforestation. The monitoring system makes it possible to oversee how countries commitments to deforestation was progressing.

To conclude, illegal deforestation has been an issue that has defined a whole host of problems in Indonesia, from encouraging corruption to the negative health effects of the slash and burn tactics. But in the context of a globalised world, the process of illegal deforestation in Indonesia has also been defined by the impacts it has on the rest of the world. This is why, for there to be any solution, there must be a political will from both the Indonesian government and the international community to act on this issue. This has been seen with the REDD programme and further development of this could turn it into the principle economic incentive to help countries shift away from deforestation without sacrificing development. UNEP have developed important scientific reports and monitoring systems to help level the playing field between developing countries like Indonesia and the often large, well organised businesses involved in the process of illegal deforestation. But further developing UNEP's work, under the auspices of an upgraded UN environment agency with rights to monitor and powers to enforce, with developments of binding international treaties to deal with the issue of deforestation in Indonesia and around the globe.

Conclusion

The principle aim of this project was to show broadly how and why UNEP needed to be upgraded to make the international community respond with greater urgency to mitigate and adapt to the impacts of climate change. In this conclusion, I will first draw together the work from the previous chapters and show how they are all connected and what I have concluded from this. I will then look at limitations I found in the work and how further research could build on this.

This project began by looking at the current international environmental arena and highlighted a governance gap which could be filled by a UN Specialised Environmental Agency. It went on to propose one option for designing an institution in a manner that works for all of the states involved. This was the rational choice theory of design which assumes that all states (who are the principle actors in international organisations) are rational and will be compliant

if the costs of non-compliance outweigh the benefits of compliance. This theory of institutional design was the background for the proposal of an International Court for the Environment to be part of the UNSEA because judicial control is one of the most efficient ways to help enforce compliance. However, it is more similar to a 'compliance at the last resort' mentality, where it would be better for states to comply without use of the courts but their presence is such that if they don't comply there will be sanctions and repercussions. The final chapter on deforestation and the previous work looking at UNEP's history both moved away from theory and looked at what UNEP has been doing, in terms of its discussion of reform and also in the field with their work in Indonesia.

There are several large constraints on UNEP, notably the relatively small budget and constant competition it has with free trade. This competition with free trade was because of the disconnect between trade liberalisation and environmental policies. This impacts on its ability to see as much success as was envisioned by Maurice Strong when setting up the international meetings to form UNEP in 1972. Nonetheless, in my project it was found that even though UNEP have been constrained in their ability to act due to their original design, there are positives in what they have been able to do, especially with initiatives such as the REDD+ programme and Global Forest Watch. Ultimately, UNEP have produced large amounts of valuable work over the course of its history but within the post-2015 agenda, now is the right time for it to be upgraded into a UNSEA. Throughout the research, I have found that upgrading UNEP to a UNSEA would be the right thing to do to help protect the environment. However, a large part of UNEP's work in the past and, logically, the future work of a UNSEA would be reliant on political will. Where there is a collective will to act from the heads of states of countries, there has been progress. This was seen in Indonesia with initiatives and programmes developing because the issue was so severe that there was consensus that action had to take place to prevent the issue of illegal deforestation in the long term. Sadly, evidence shows that one of the only ways to help prevent an environmental organisation from being at the whims of a changing political will is the ICE and enshrining of environmental agreements in international law.

This project provides a broad overview of one option to design an international organisation, the benefits if it happened and a look into one of the principle mechanisms of such an organisation. This leaves a large scope of work to be explored further in academia. Lots of research has been done on an ICE but it would be interesting to see more of the technical aspects of how the ICE would work in conjunction with an UNSEA.

This project began and was written within the build-up to the post-2015 agenda that was pursued at COP21. Continuing work pursuing an upgraded international environmental organisation with judiciary capabilities is critical now there is more of a consensus between states and science. Since the COP in Paris there has been rising political will to act multilaterally and in a binding way with regards to climate change. As such, pressure should be increased to create a strong international organisation in the environmental sphere to effectively harness the political will and keep it on the path to mitigating the harmful effects of climate change.

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