



PAPUA NEW GUINEA
**CONSERVATION
AND ENVIRONMENT
PROTECTION AUTHORITY**

**INSTITUTIONAL AND REGULATORY REVIEW
OF PROTECTED AREA MANAGEMENT AND
FINANCING IN PAPUA NEW GUINEA**

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ACRONYMS

BTF	Biodiversity Trust Fund	MRA	Mineral Resource Authority
CA	Conservation Area	MTDP	Medium Term Development Plan
CCA	Community Conservation Area	MTRS	Medium Term Revenue Strategy
CBO	Community Based Organisation	NEC	National Executive Council
CBD	Convention on Biological Diversity	NFA	National Fisheries Authority
CCDA	Climate Change and Development Authority	NGO	Non-Government Organisation
CEPA	Conservation and Environment Protection Authority	NP	National Park
CITES	Convention on International Trade Endangered Species	OLPGLLG	Organic Law on Provincial Government and Local Level Government
CLRC	Constitutional Law Reform Commission	PA	Protected Area
CTF	Conservation Trust Fund	PAN	Protected Area Network
DAL	Department of Agriculture and Livestock	PAP	Protected Area Policy
DCI	Department of Commerce and Industry	PAPIP	Protected Area Policy Implementation Plan
DJAG	Department of Justice and Attorney General DSP	PES	Payment for Ecosystem Services
DLPP	Department of Lands and Physical Planning	PNG	Papua New Guinea
DPLLG	Department of Provincial and Local Level Government	PNGFA	Papua New Guinea Forest Authority
DSP	Development Strategic Plan	PoWPA	Program of Work for Protected Areas
EP	Environment Permit	StaRS	Strategy for Responsible and sustainable Development
FMA	Forest Management Area	UNDP	United Nation Development Program
FPIC	Free Prior Inform Consent	UNCLOS	United Nations Convention on the Law of the Sea
GEF	Global Environment Facility	WCS	Wildlife Conservation Society
GoPNG	Government of Papua New Guinea	WMA	Wildlife Management Area
GSO	General Standing Order	WWF	World Wildlife Fund for Nature
HCV	High Conservation Value		
LLG	Local Level Government		
LMMA	Local Marine Managed Area		
LMMPA	Locally Marine Managed Area Protected Area		
LUPs	Land use plans		
MEA	Multilateral Environment Agreement		
METT	Management Effectiveness Tracking Tool for protected area		
MPA	Marine Protected Area		

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Note that all photographs in this report are taken by Biatas Bito but otherwise stated are acknowledged accordingly.



The Sogeri Gorge along the Sogeri Snake Road leading up to Varirata National Park outside Port Moresby.

EXECUTIVE SUMMARY

The long-term sustainability and effectiveness of Protected Area (PA) management and financing in the Papua New Guinea (PNG) requires a nationwide multi-stakeholder commitment and alignment of existing laws and regulations. This multi-stakeholder nature was reflected in the consultation process and interviews conducted with government agencies, civil society organisations, landowners, donors and the private sector. ***The purpose of this review is to critically assess the institutional and regulatory system in order to determine whether the existing system encourages, promotes or enhances conservation effectiveness and efficiency in protecting the country's rich biodiversity, culture and environment.***

In this review it was evident that the current regulatory and institutional system is not functioning effectively and efficiently. ***There is evidence of gaps or impacts of a fragmented system within legislations and different stakeholders from the national level to provincial and the community level.*** Consequently, the implications of not addressing those regulatory and institutional system amicably and profoundly have resulted in a fragmented, isolated and bottleneck system that is not efficient and effective. Nonetheless, those implications are discussed in the institutions and legislations and recommendations that potentially provide the roadmap for closing those gaps are discussed. Most likely this would ensure PA management and conservation are done differently, effectively and efficiently than current systems faced by many PAs across the country, to achieve

the overall improvement in performance and efficiency of institutions involve. The current hinderance include lack of capacity, collaboration, financing, enforcement and effective management.

Essentially, the Conservation and Environment Protection Authority (CEPA) is mandated by the ***CEPA Act 2014 and the Environment Act 2000 to oversee all conservation and environment work in the country.*** CEPA is responsible for facilitating, monitoring and overseeing the establishment of Protected areas (PA) and management effectiveness. Currently, CEPA's role and work is dysfunctional because of its centralisation of work in Port Moresby and lack or loss of focus on its role and function. This now prove to be a big challenge to implementing conservation in PNG which consequently is having an effect on PA management in the country. The Organic Law on Provincial Government and Local Level Government (OLPGLLG) 1989, Part III S42 and 44, also allows Provincial Governments and the Local Level Governments (LLGs) to establish and manage various PAs under whatever names or types they desire at the provincial and LLG level. The PA policy 2016 has categorised all PAs types under two categories under National and Provincial PAs.

Since pre-independence, the Government through CEPA and its preceding departments prior to CEPA, have been instrumental in establishing Nature Reserves and National Parks. It is also responsible for ensuring conservation and environmental laws are enforced and these parks and reserves

monitored. The Provincial Government is also responsible for establishing the provincial parks and reserves. On the other hand, local communities have also been establishing other PAs namely Wildlife Management Areas (WMAs), Conservation Area (CAs), Marine Protected Areas MPA and Locally Managed Marine Areas (LMMA), with support sometimes coming from non-government organisations (NGO) and community-based organisations (CBO) under various conservation laws.

Moreover, there are other government agencies and institutions govern by their own Acts of Parliament such as the National Fisheries Authority is empowered by the National Maritime Zone Act and National Fisheries Act (see Annex 3). Those agencies or institutions are responsible for promoting sustainability, conservation and environment management. Some also provide institutional support in administering environment management, climate change mitigation and adaptation and conservation in the country. Although, these institutions are not responsible for the overall administration or management of PAs in the country, they can only provide functioning support to conservation efforts. For instance, the Ocean's office and NFA can support CEPA do maritime conservation at landscape level since CEPA is more focused on terrestrial and coastal community conservation within customary waters. Nevertheless, communication and coordination between these institutions is lack.

Most institutions and stakeholders know how to work with CEPA conserving some of the outstanding landscapes and biodiversity and are contributing to doing conservation work with limited funding. **Only 14 of the existing 63 PAs receive any financial support whatsoever and no direct government funding.** It seems PA management and financing in the country is a bigger challenge as CEPA cannot support all PAs given its limited funding received from the national government. Out of 58 PAs in the country assessed by Leverington et al. (2017), indicates four PAs achieved good progress, while the remainder struggled to deliver basic management. Out of the current 61 PAs in the country, CEPA with the help from its donor partners, have support an estimated 1% of the PAs, while it is estimated that international and national conservation non-government organisations (NGOs) and community-based organisations (CBOs) are providing support to less than 10% of the PAs in the country. **Majority of the PAs are unmanaged or not supported.** Fortunately, other stakeholders have been collaborating with communities and CEPA to facilitate or support conservation programs across the country. However, there seems to be a significant fragmentation in the whole PA system, in both institutions and existing regulations. Hence, CEPA needs to create a policy or regulation framework or provide legal advice to make this become effective, so that devolution of powers to provinces and districts for doing conservation work is implemented nationwide through the National Protected Area Round Table (NPART) and Regional Protected Area Round Table

(RPART) to achieve conservation outcomes. Theoretically, this looks good but needs proper structures for the NPART and RPART to function effectively and not failed. Once the PA bill is enacted by parliament, it is envisaged that all this will come into effect or still more work has to be done.

There is still evidence of lack of collaboration, funding and resources, coordination, presence, capacity building, resources and communication within the conservation sector. Moreover, capacity and research skills, and information on how to establish or manage PA, do monitoring and do other conservation work effectively for national, provincial, district and local level government staff, including local Community Conservation Area (CCA) are lacking. Hence there needs to be a complete and holistic approach to the entire conservation and environment sector. **Forty nine (49) people were interviewed (see Annex 2). A validation meeting took place in person and virtually involving participation of 44 stakeholders.** At the meeting, feedback was provided on the findings and voting on the recommendations was conducted. The recommendations presented below were approved by more than 70% of stakeholders.

Therefore, key ten (10) recommendations are proposed which may provide ways to improve the performance or address the gaps in the institutions and regulations in order to improve PA management effectiveness and efficiency in the country. They are:

1. CEPA is mandated by CEPA Act 2014 and the Environment Act 2000 to ensure CEPA is mandated to ensure environment and conservation laws, regulations and legal framework conditions on conservation and protected areas are implemented effectively and efficiently. There are other laws which CEPA is also implementing. Hence, CEPA is required to coordinate better all conservation work and work in collaboration with other agencies and stakeholders going forward and mutually implement its mandate to achieve better conservation outputs. This would enable CEPA to fill the legal and regulatory gaps with other stakeholders. It is recommended that **CEPA initiate interagency working groups in order to progress better collaboration and coordination in PA management.** In order to create awareness on PA policy and update on PA management. The groups should meet every quarter.

2. Annual provincial level budgets have to be allocated to protected area management, planning and supporting provincial level climate change and environment departments/divisions. The role of CEPA in providing financial support for PAs in the country insufficient and support must come from provincial governments and other stakeholders. Therefore, advocating for provincial budget allocations is strongly recommended to bridge the funding gap. It is recommended that **CEPA should formalise MoU signings with the Department of Provincial and Local Level Government and Provincial Governments,**

to allocate budgets for Protected Areas and collaborate in enacting laws and developing policies and regulations to collect fees and support PA work in the provinces. This may enable ward development plans to be approved and captured in provincial development plans to complement the PA policy requirements. CEPA needs to have fortnightly meetings with its partners to talk about different topic on PA work and development issues in provinces. Establishment of a Provincial protected Area Roundtable is also recommended for discussions on PA matters.

3. CEPA should provide advisory support to provincial government and communities and find ways to reward them for protecting the environment. CEPA must have continuous communication and education programs in promoting conservation work in the country, and must work closely with CBOs, NGOs, provincial governments and other government agencies to educate people of events, conservation, PA establishment processes, environment management, policies, laws, business opportunities etc. It is recommended that **CEPA has the option of stationing its representative in provinces to attend to PA issues or it can provide regular training of provincial level environment officers who do the tasks on CEPA's behalf.** There is also option for CEPA to provide online learning materials for provinces. A quarterly meeting with provincial government and other stakeholders would enable strengthening of conservation work in provinces.

4. CEPA should collaborate with relevant legal experts and agencies including NGOs to provide support to provinces and local PA communities. Some provinces have legal officers who are not familiar with the technicality of conservation work. Hence, the lawyers must be provided with better technical advice by CEPA to provide legal advices to the respective provinces and the communities. It is recommended that **certain tax benefits can be promoted whereby a legal firm can provide pro-bono legal support to the provinces and communities and in return is taxed exempted, for providing free legal and support services to the provincial government and administration, and communities.** This would encourage the legal firm to provide advices to provincial administration and communities. CEPA need to work with the Department of Justice and Attorney General (DJAG), the State Solicitor Office and the Department of Provincial Government and Local Level Government (DPGLLG) by signing a Memorandum of Understanding (MoU) to find solutions in addressing environment and conservation legal issues and needs in provinces and communities. A quarterly meeting is required to strengthen partnership and collaboration and update one another on conservation matters in the country.

5. CEPA should enforce rules through its rangers in government reserves and National Parks for protection of national and global species of significance and heritage. CEPA should also closely collaborate with its provincial counterparts and partners to work with local communities and their rangers to

enforce these rules. In communities, CEPA can only provide support or empower communities to improve rules to make PA management effective. Hence powers and trainings must be given to rangers to conduct monitoring and enforcement of rules and laws in PAs. It is recommended **that a national ranger program is activated and rangers are trained, empowered and recognised for their roles in doing ranger and monitoring work in PAs.** A six-monthly training program is required for all across all PA to be conducted by CEPA and relevant trainers and institutions and rangers are equipped with basic materials, knowledge and equipment to do their work. A national rangers forum or an association can be established so rangers can share experiences as well.

6. Monitoring of government established PAs must be done by CEPA officers whereas local communities are responsible for their own monitoring programs through their rangers and committees. However, both CEPA officers and communities must be empowered and trained to do monitoring. Even if stakeholders do not agree to this, there needs to be an agreed monitoring system for PAs in order to: (1) determine overall changes; (2) build national level support for PA; (3) encourage a system approach to PA management; and (4) know how to prioritise future funding. By doing this, CEPA becomes effective in ensuring PAs are managed effectively when regular monitoring of PAs is done. It is recommended that a **national training on Management Effectiveness Tracking Tool (METT) for PA is conducted every one or two years to get everyone working on PAs to become accustomed with their task of managing PAs effectively.** An annual meeting can be organised to coincide with the PA Forum so experiences can be shared.

7. Communities are able to understand and choose what economic option is best for their area and can consider what is non-allowable. That is, once land-use plans (LUPs) are developed and established, using a national standard for LUPs (also need to be established), then the best economic options can be realised. Any development must be clearly understood in communities so they make inform decisions on what is best for their environment, conservation and sustainable livelihood or economic benefits. It is recommended that a **list of conservation compatible economic options and minimum conservation standards for PA sites must be developed to demonstrate how the actions are supporting biodiversity conservation and sustainable rural development.** CEPA needs to work with provincial government and ward development committees to develop the list annually if there are changes or new options emerging.

8. A holistic approach should be undertaken by CEPA to work in collaboration in a coordinated manner with relevant government agencies and partners to promote conservation and management of PAs in PNG. It is recommended that **CEPA initiate interagency working groups in order to progress better collaboration and coordination in PA management.**

CEPA should sign MoUs with those relevant government agencies and partners and improve communication and presence in other forums in order to bridge gaps and forge or harness friendship for better partnership and collaboration.

9. In order to achieve better conservation outcomes with CEPA, the following key priorities must be aligned with relevant legislations, policies and governance mechanisms; implementation of work plans and activities, regulations, enforcement, partnership, work ethics trainings. In addition, CEPA and its partners can support capacity building in financial literacy, report writing, funding accessibility and monitoring and evaluation of activities and work in PA. This would help promote collaboration, partnership and improve work performance and ethics that produces better conservation outputs. Hence, it is recommended that ***an inter government agency is established to work with existing legal institutions such as DJAD, Constitutional Law Reform Commission (CLRC) and other partners to review gaps in conservation and environment policies, regulations and legal framework and address them.*** This group can meet every six months or annually to discuss legal matters in conservation and align their activity plans. Also CEPA and its partners should facilitate capacity building for PA managers, provincial government and communities annually to keep them abreast of the latest development in PA activities.

10. NGOs and relevant partners should continue to provide support on PA management in the country because the

government (CEPA) has limited capacity, the capacity is stretched or lacks attributes to improve conservation, given its national focus. Since there is lack of or limited collaboration and communication among different stakeholders and CEPA, implementing this recommendations may not work. This may see the efficiency and management effectiveness of PAs stalled. The gaps seen in the current system will become wider and conservation will just become be a paper thing and not practical, thereby putting the future of species, human and the environment at risks from emerging or existing threats and pressures. Hence it is recommended that the ***role of NGOs must be recognised because it is important in conservation work and must be supported by the government going forward to achieve better conservation and national building outcomes.*** Also ask NGOs/CBOs to report annually on how they are contributing to achieving the PA policy. CEPA would simply need to developed the reporting template and provide training on how to link their actions to the policy or PA Implementation Plan

The current situation facing PA management and financing demonstrates lack of collaboration. Without addressing some of these recommendations amicably, conservation work may continue to become stalled and conservation work may not be implemented effectively and efficiently into the future. Those gaps seen in the current system will become wider and conservation will be impractical thereby putting the future of species, human and the environment at risk from emerging or existing threats and pressures.



Mangrove Planting along Kimbe Bay. Photo: Desmond Vaghelo | West New Britain Provincial Government

INTRODUCTION

Papua New Guinea (PNG) is situated on the eastern part of the Island of New Guinea, the largest tropical island in the world. It contains only one percent of the earth's land surface, yet it is one of the most biodiversity rich and culturally diverse places on earth.

Though PNG is tiny by global standard, PNG contains about 5-8% of the world's biodiversity, of which 80% of mammals and 50% of bird species are endemic. It also contains the third largest tropical forest with diverse flora that are unique to the country. PNG has the third largest tropical rainforest in the world. It also has some of the richest marine ecosystem of global significance within the Coral Triangle. Culturally, PNG contains over 1000 tribal groups which speaks over about 843 to 1020 known languages (pers. com. J. Himugu), and this is three times the combined languages spoken in Europe. Out of the 843 languages recorded, about 43 languages are dying out, or only one or two speakers are alive. Another report shows a high level of linguistic and cultural diversity with 852 distinct indigenous languages, of which 12 are now extinct, including an unknown number of associated dialects (Ethnologue, 2018).

The livelihood of the people depends on the environment, where the 80 percent of the population live in villages and rural areas. They depend on the environment for their cultural norms, food, aesthetic and spiritual values, medicine, building materials and other environmental services. The environment is also the foundation on which the national economy of the country relies on such as forestry, mining, fisheries, tourism, agriculture, and oil and gas.

PNG is a signatory to several Multilateral Environment Agreements (MEA). This includes the Convention on Biodiversity

(CDB). The Convention on Biodiversity (CBD) Aichi Target Strategic Goal C Target 11-13 focuses on improving the status of biodiversity by safeguarding ecosystems, species and genetic diversity. Target 11 of the CBD Aichi Target states that *"By 2020, at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape"* (CBD COP 10 Decision X/2 2010; cited in GoPNG, 2015).

The Program of Work for Protected Areas (PoWPA) recognises this specific conservation targets to be achieved by 2020. However, PNG and other countries have not achieved much. Hence, a post-2020 Taskforce Working Group under the CBD Secretariat developed a framework to achieve those targets post-2020. Among the framework developed is the expansion on the Theory of Change Framework that leads to transformative change to biodiversity conservation and in line with other MEAs (<https://www.cbd.int/article/zero-draft-update-august-2020>).

Protected Area establishment and growth

Since the establishment and gazettal of the Varirata National Park (first National Park in PNG) in 1973 under the National Parks Act 1967, the number of Parks and other Protected Areas (PA) in the country has increased significantly to 61 to date. Various protected area types are documented in the Protected Area Policy (PAP) 2014 and Leverington et al., 2017.

The Organic Law on Provincial Government and Local Level Government (OLPGLLG) 1989 gives powers to provincial governments to establish Marine Protected Area (MPA) in respective provinces such as Locally Managed Marine Areas (LMMA). The PA policy also recognises the establishment of LMMA, which is promoted by NGOs working in with rural maritime communities. A new Protected Area Bill was drafted recently and is yet to be enacted by the National Parliament to become an Act also recognises sacred sites or *Tambu ples* conserved by customary landowners. Most National and Provincial Parks are owned and managed by the State but until recently, the National Parks Act was repealed and replaced by the CEPA Act 2014. A report by Leverington et al., (2019) concludes that management of PNG’s protected areas is a shared obligation, with most of the on-ground responsibility falling to management committees and boards under both existing and proposed legislation. However, the National Government can provide oversight where there are national PAs, but customary landowners own the majority of land and PAs and have customary rights over the marine and terrestrial areas. This means CEPA has a duty to support the management committees with technical advice, assistance and regular engagement, and to assist them in obtaining resources to carry out their work effectively, to achieve effective management that meets the government’s international obligations.

In the 1990 and 2000s, non-government organisations (NGOs) were working closely with the local communities and the then Department of Environment and Conservation (DEC), now Conservation and Environment Protection Authority (CEPA) and established many WMAs throughout the country. Figure 1 shows the rise in PA across the country over the years since the first PA was established in 1970s. In 2017, 59 PAs of various categories were established, covering 2.14 million hectares or 4.1% of land area and less than 1% of marine areas protected (Leverington et al., 2017). The marine PAs are low because CEPA is not focusing on Marine PAs because the jurisdiction is spelt out in the Fisheries Act and the National Maritime Zone Act.

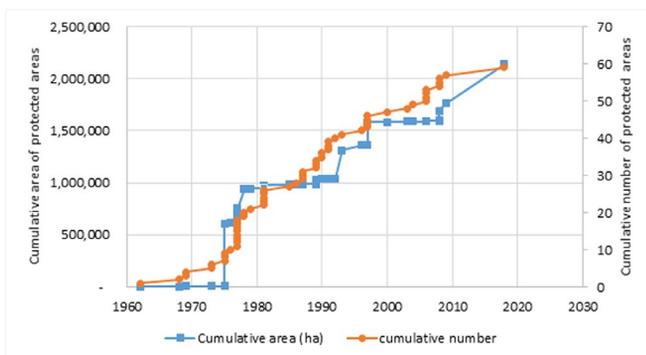


Figure 1: Cumulative area and number of Protected Area establishment between 1960 and 2020 (Leverington et al., 2017)

In 2021, CEPA internal data shows there are 61 recognised PAs but these figures are not always correct and up to date. A total of 19,743,919ha, with maritime PAs comprising of 5,9868,029 hectares (ha) and Terrestrial consisting of 13,772,645ha (CEPA internal database). Out of the current 61 PAs in the country, CEPA with the help from its donor partners, have supported approximately 1% of the PAs, while it is estimated that international and national conservation non-government organisations (NGOs) and community-based organisations (CBOs) are providing support to less than 15% of the PAs in the country. Majority of the PAs are unmanaged or not supported.

Protected Area management and effectiveness

Managing protected areas across the country is challenging given issues faced by both the local landowners and government and the efficiency that leads to effective management is missing or absent. The Management Effectiveness Tracking Tool (METT) analysis shows decline in the management of most PAs across the country (Leverington et al., 2017). For instance, the McAdam National Park in Bulolo Morobe province is completely decimated by gardening and forest fires and within the park there are alluvial mining operations. A METT score of between 0 and 10% was documented for the Park, indicating poor management. The report also shows forty (40) of the fifty eight (58) PAs receive no financial or budgetary support whatsoever. This shows that with increasing PA coverage in the long run would require long-term financial support. Hence there is a long-term need to find a solution to provide reliable financial resources to the entire, expanded PA system across the country and in perpetuity. Other contributing factors needed for the success of PA include (Leverington et al., 2017):

- Strong governance, management planning and leadership;
- Human resources, capacity and training;
- Resource management, and economic benefits;
- Condition of PA values;
- Information research and inventory;
- Control and enforcement;
- Reasonable resources and management; and
- Good information and communication.

Since the PA Policy came into effect, several progress has been made. The Government’s intervention via the Policy generates interest from stakeholders in the private sector and civil society. For instance, CEPA used the Policy to facilitate the PA Bill that generated some fierce reactions from the Extractive Industry. PAs are now a Key Result Area of the MTDP 3 and this has raised the profile of Protected Areas. National and Regional Protected Area Round Table

were also developed and yet to be gazetted in the PA Bill. Figure 2 shows the five pillars recognised in the PAP for the effective management of PAs in the country and they are (GoPNG, 2014):

1. Protected Areas, Governance and Management;
2. Sustainable livelihoods for communities;
3. Effective and adaptive biodiversity management;
4. Managing the Protected Area network; and
5. Sustainable and equitable financing for Protected Areas.

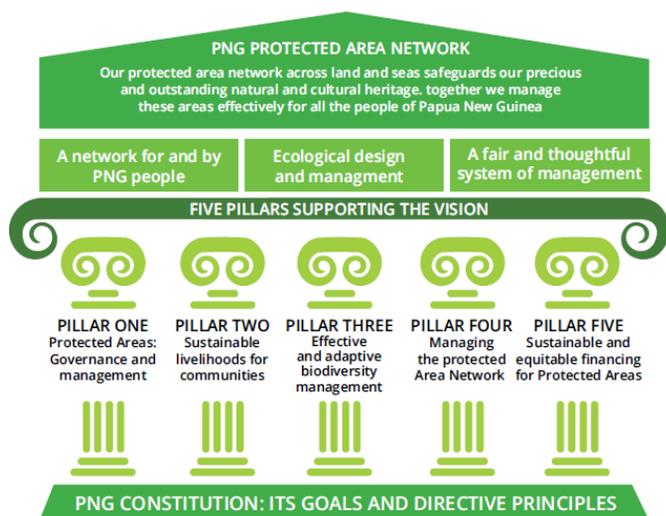


Figure 2: Framework for National Protected Area Network (Source: PA Policy, 2014)

Moreover, other government strategic development policies such as the Vision 2050, Development Strategic Plan (DSP) 2010-2030, Medium Term Development Plans (MTDP) I-III and the National Strategy for Responsible Sustainable Development Plan (StaRS) all recognised the importance of conservation and protection of the environment. Although these policies captured the importance of sustainable environmental management and conservation, they focused more on development and socio-economic growth of the country.

There are also other environment Acts, laws and policies which capture sustainable environment management and biodiversity management, and most derive their pre-embled from the National Constitution 4th Goal. They include the CEPA Act 2014, Forestry Act 1988, Climate Change and Development Authority Act 2014, Lands Act 1996, Organic Law on Provincial Government and Local Level Government 1988, Conservation Areas Act 1978, Fauna (Protect and Control) Act 1969, Environment Act 2000, Crocodile (Trade and Protection) Act 1978, International Trade of Endangered Species (Flora and Fauna) 1978, Fisheries Management Act 1998, Mining Act 1988, and other regulations, policies and ratified regional and international conventions and protocols.

The role of GEF 6 Sustainable Financing project in addressing effective PA management and financing

Another document, the Protected Area Policy Implementation Plan (PAPIP) 2018-2027 was also developed by CEPA. It aims to guide organisations, agencies and resource owning communities of PNG to collaborate and harmonize their sustainability efforts towards developing new protected areas in PNG (CEPA, 2017). The PAPIP supports the vision of the PNG Policy on Protected Areas and translates the five pillars into corresponding goals with clear objectives, strategies, targets, monitoring indicators and actions. The PAPIP was used as a basis of CEPA’s CIP submission for funding via the National Budget in 2017 for 2018 funding support.

Since the Policy came into effect in 2014, progress has been made in several areas. The Government’s intervention via the Policy generates interest from stakeholders in the private and civil society. CEPA used the Policy to facilitate the PA Bill that generated some fierce reactions from the extractives. Protected Areas are now a Key Result Area of the MTDP 3 and has raised the profile of Protected Areas.

The achievement of all five pillars in the PA Policy may help the expanded PA system to meet global targets such as the Convention on Biodiversity (CBD) Aichi target of 17% of land and 10% of sea area being conserved. Currently the UNDP Sustainable Financing Project is working on addressing Pillar 5 which in turn will achieve the other 4 Pillars. In the long-term, an effective sustainable financing will result in a system that will provide catalytic financial support that will lead to stable ecosystems (both within and outside of protected areas). Other impacts include social transformation and to make that happen, it will transform the institutions at various levels to become supporters or facilitators of this process and the establishment of long-term partnerships. The Project has three major objectives: (a) secure stable and long term financial resources for the management of protected areas across the country; (b) ensure that these

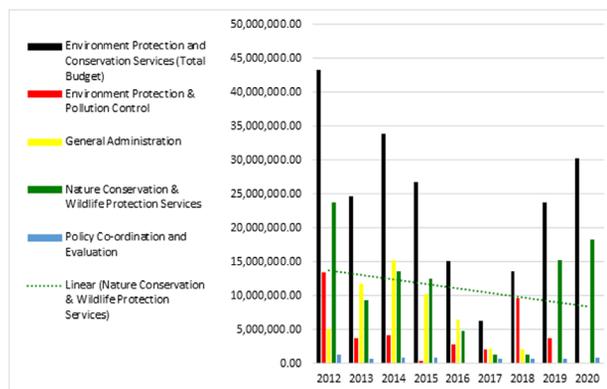


Figure 3: National budget appropriation to CEPA between 2012 and 2020. Department of Treasury. National Budgets reports from 2012-2020. [www. https://www.treasury.gov.pg/](https://www.treasury.gov.pg/).

financial resources are allocated to improving effectiveness of management of protected areas across the country; and (c) to ensure that they are managed cost- effectively and efficiently with respect to their conservation and other complimentary development objectives, including livelihood support for local communities in these areas.

Currently there is no sustainable financing for PAs in the country. The money appropriated to CEPA for its work between 2012 and 2020 has been fluctuated or reduced over the years (Figure 3). The actual budget allocated is not clear.

It is envisaged that the findings of this report will support and CEPA and various government and non-government agencies to collaborate and improve the management, resource, capacity, financing, and support of PAs management across the country. It will also provide pathways to align institutional support and regulations that supports various mandates, thus leading to more inefficiency of support but also financial sustainability.



Photo: Ted Mamu | UNDP Papua New Guinea

METHOD

This Report review is based on but not limited to the following Terms of Reference (ToR):

- a. Map institutions and organisations that are involved in PA management and financing conservation to determine their current and intended roles and responsibilities. The mapping should consider stakeholders at a national, provincial, district, local and ward level, as well as both public and private, highlighting how they interact with each other. This area of work should also incorporate a focused section on CEPA's role and capacity to implement its mandate.
- b. Identify gaps where institutions are not fully fulfilling their roles, and propose how best they can be structured to fulfil their identified roles and responsibilities. This should include, but not limited to, issues related to PA governance, management, implementation, monitoring, enforcement, legal support, introducing financial mechanisms, revenue collection, auditing and reporting.
- c. Determine how different genders and vulnerable groups are included in the system (including within the government and non-state actors), and propose to strengthen underrepresented groups in the governance, management and implementation of conservation activities.

According to the ToR, the consultant is primarily responsible for identifying, obtaining and providing detailed information on the nature of the PA sector in PNG; supporting linkages with key stakeholders in the country (organise meetings and field mission) and conduct analysis of past and future trends, with guidance from the United Nations Development

Programme (UNDP) Global Environmental Facility (GEF) Sustainable Financing Project and Conservation and Environment Protection Authority (CEPA).

The method used in undertaking the task of reviewing institutions and regulatory frameworks was a combination of literature review and semi-structured interviews with key informants (within and outside PNG). Tailored questions (Annex 1) were discussed with each stakeholder group based on their specific experience in accordance with the ToR.

Interviews were conducted with individuals or groups, in Port Moresby, through provincial field visits and provincial workshops, and telephone interviews. While on field trips, appropriate protocols and standards were adhered to as provided by UNDP. Virtual meetings were only conducted because of distance from the interviewer and the Covid 19-protocols of UNDP and the Pandemic Act 2000 or because of isolation.

A final validation workshop with key stakeholders was hosted in Port Moresby and attended by forty four (44) participants to gather expert opinions on proposed recommendations. Prior to this workshop, the draft report was circulated widely to various stakeholders for their review and comment. These comments and reviews were latter captured in the final draft and was submitted to UNDP and CEPA. At the validation workshop, PowerPoint presentations were delivered by GEF 6 Project, CEPA and the national consultant, facilitated by CEPA. The first two presentations provide the background to the project and the role of CEPA respectively while the national consultant presented the findings and recommendations of the report. At the end of the workshop online polling was

done for those participants attending remotely and those present in person, to find out agree, disagree or have no opinion on the ten recommendations provided in the report. A separate polling was conducted for CEPA staff as their attended virtually as a group.

In addition, at a later date, key government stakeholders and provincial representative of the four Sustainable Financing Project sites (West New Britain, East Sepik, Madang and Simbu) are expected to signed off the report, thus accepting the recommendation and findings.

A total of 49 people were interviewed, with 28 people interviewed from the four provinces. Figure 4 shows the composition of different interviewees and organisations represented. NGOs comprised of 13 people, Government Department or Authority with 9 people, Provincial Administration 6 people universities and donors comprised of 4 people each, PA managers with 3 person and the rest below 2 people.

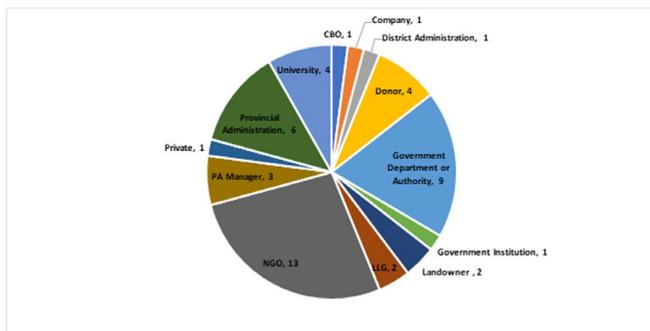


Figure 4: Total number of stakeholders consulted in provinces and in Port Moresby and organisations represented.



Photo: UNDP / Papua New Guinea

FINDINGS

Since PNG is one of the last frontiers of global species and cultural diversity, the effectiveness of PA management is more crucial now than ever before, because of the escalating losses of species and destruction to habitats and cultures. Commercial logging accounts for almost 48.2% of forest change and biodiversity loss in PNG (Sherman et al., 2008; Bryan et al., 2015). Tallwin et al., (2017) argue that many of the terrestrial biota are found in forest, hence the destruction, loss and fragmentation to forest habitats can cause species loss. The marine and freshwater systems are also lushed with unique species and diversity but these are now under threat from development activities (CEPA and SPREP, in press). One way to conserve these rich biodiversity and cultures is through a well-managed Protected Areas system empowered by legislations, policies and institutional support and effectiveness.

The Conservation and Environment Protection Authority (CEPA) is mandated by the CEPA Act 2014 and the Environment Act 2000 to oversee all conservation and environment work in the PNG. These legislations give CEPA the responsibility to facilitate, monitor and oversee Protected areas (PA) gazettal and de-gazettal processes as well. The Organic Law on Provincial Government and Local Level Government (OLPGLLG) 1989 also allows Provincial Governments and the Local Level Governments (LLG) to establish and manage PAs at the provincial level.

Since pre-independence, the Government through CEPA and its preceding departments prior to CEPA, have been instrumental in establishing Nature Reserves and National Parks. It is also responsible for ensuring conservation and environmental laws are enforced and these parks and reserves monitored. The Provincial Government is also responsible for establishing the provincial parks and reserves. Another group

of PAs are established and managed by local communities, with support sometimes coming from non-government organisations (NGO) and community-based organisations (CBO) under various laws such as Wildlife Management Area Act 1969 and the Conservation Areas Act 1978.

There are other government agencies, namely the resource and extractive agencies such as Papua New Guinea Forest Authority (PNGFA), Mineral Resource Authority (MRA), Department of Petroleum and Energy (DPE), Department of Agriculture and Livestock (DAL) and National Fisheries Authority (MRA) govern by their own Acts of Parliament, are also promoting sustainability, conservation and environment management. Other institutions such as, Climate Change and Development Authority (CCDA), National Agriculture and Quarantine Inspection Authority (NAQIA), Department of Justice and Attorney General (DJAG), Department of Commerce and Industries (DPI) also provide institutional support in administering environment management, climate change mitigation and adaptation and conservation in the country. All these institutions are not responsible for the overall administration or management of PAs in the country but only support conservation work because there are still some gaps in the CEPA Act and the Environment Act and all those environmental laws governing these government institutions.

Most institutions and stakeholders know how to work with CEPA conserving some of the outstanding landscapes and biodiversity. Some are even taking the initiative to do conservation on their own, with limited funding. For instance, the YUS Conservation Area in Morobe Province has been supported by an endowment fund via the Woodland Parks Zoo of United States of America (USA) without CEPA oversight. Nature Park in Port Moresby is another example. In both

cases, CEPA has facilitated for funding via Global Environment Facility (GEF) grants. It seems PA management and financing in the country is a bigger challenge as CEPA cannot support all PAs with the limited resource and funding it receives from the National Government. Obviously, the government funding provided to CEPA has dropped significantly over the years. This means other stakeholders namely donors and international organisations, private sectors, non-government organisations (NGO) and Community Based Organisations (CBO) may collaborate with communities and CEPA to facilitate or support conservation programs across the country.

The Environment Act 2000 (amended 2014) and the OLPGLL 1998 does allow for devolution of powers down to provinces from Waigani. However, there seem to be a huge fragmentation in the whole PA system, in both institutions and existing regulations. For instance, the implementation and management of OLPGLL to promote PA establishment and management in provinces has never been fully realised and supported effectively. Hence, CEPA needs to create a policy or regulation framework or provide legal advice to make this become effective, so that devolution of powers to provinces and districts for doing conservation work is implemented nationwide. CEPA is yet to work with the provinces to improve the National Protected Area Round Table (NPART) and Regional Protected Area Round Table (RPART) to achieve conservation outcomes.

In the 1990s, there used to be provincial Department of Environment and Conservation Officers but this disintegrate and non-functional as powers when CEPA became an authority. To address this issue, there should be overall Provincial Responsible Sustainable Development Committee, which link/incorporate all current different individual government committees, e.g. fisheries, climate change, forestry. Only that will give the prominence to conservation considerations at the provincial level. Otherwise, conservation will continue to be seen as something anti-development and on the periphery, whereas world-wide and also in PNG at the national level, it is realised how important conservation considerations are nowadays to come to long-term sustainable development and management in the country.

Most existing environment Acts which promote conservation work are too vague or not too specific yet they still can achieve conservation outcomes. For instance, the implementation of the Maritime Zone Act 2015 complements the promotion and establishment of Marine Protected Areas (MPA), which is supported in the National Oceans Policy of Papua New Guinea 2020-2030 (DJAG, 2020). Though both the Act and policy are brief and lacking finer details, they still can be used to support CEPA to implement conservation work in the country, from customary coastal and marine waters, seas, estuaries and mangroves out to the three Nautical Mile Zone in the provincial waters (as stipulated in the Organic Law on Provincial Boundaries and OLPGLL 1989) and into

the high seas or Economic Exclusive Zone (EEZ) bordering international boundaries, thus covering landscape conservation. Though it is not the jurisdiction of CEPA, the Maritime Zone Act captures protection of seascapes in high seas.

There are clear processes stated in the Ocean's policy to work within these different zones but still the processes are not clearly understood. Hence, In the PA Bill, a section should be included to include high seas and seascapes. Once this is done, the Maritime Zone Act and the PA bill will complement each other, including the PA and Oceans Policy. Only one or two statement are needed to expand from current Maritime Zone Act.

Currently, CEPA is more focused more on customary waters, within the 3 Nautical Mile Zone. Work has been done in mapping hotspots within provincial waters and the EEZ, hence working with the Oceans office and the National Fisheries Authority (NFA) is critical for marine conservation. It seems CEPA is more focused on terrestrial conservation than marine conservation and this needs to be rectified.

On the contrary, the Maritime Zone Act does not fully cover establishment of Locally Marine Managed Areas and does not have regulations under existing laws. This requires alignment of regulation and policy in order to develop best practices. A legal review with technical people within CEPA and other government agencies who have some gaps in certain acts or laws to ensure those laws synchronise laws to meet conservation goals and objectives. If new laws are developed or existing laws are amended to complement the Protected Area Policy, Environment Act and CEPA Act, this could harmonise government agencies approaches to conservation. This may also enable these institutions to identify their roles and responsibilities. For instance, the Ocean's Policy can now work in partnership with CEPA to implement some conservation initiatives. A dialogue has to start somewhere.

Despite presence of CEPA on several Government Boards and communication with various stakeholders in the conservation and environment sector, there are still evidence of lack of collaboration, funding and resources, coordination, presence, capacity building, and communication within the conservation sector. Moreover, capacity and research skills, and information on how to establish or manage PA, do monitoring and do other conservation work effectively for national, provincial, district and local level government staff, including local Community Conservation Area (CCA) are lacking. Hence there needs to be a complete and holistic approach to the entire conservation and environment sector.

In terms of fees and levies collection to do conservation work, there is lack of legislation or support in fee collection. CEPA needs to work with state agencies to support themselves reduce the present dilemma of support conservation work

throughout the country. The OLPGLLG clearly supports provinces and LLGs to make conservation laws, and collect fees and levies. However, CEPA must provide capacity building to provinces with support coming from the Department of Provincial and Local Level Government, Department of Treasury, Department of Finance and Department of Planning, Monitoring and Implementation to advance this course. CEPA also need to work with DJAG to seek legal advice and work with provincial governments and LLGs to pass by-laws and regulations. Constance capacity building and enough resources would enable conservation work to become efficiently implemented in the provincial and local level. There is a mechanism provided by the Public Solicitor’s office to access information as well to do enforcement of threats to conservation and environment when dealing with environmental issues or opportunities but existing government institutions must improve their functions, roles and responsibilities.

The above dilemma is similar to other resource development government agencies and a review of various laws is required. This is summarised in Appendix 3. The findings herein the report present the PA functions and how different legislations and institutional mandates promotes or support conservation work in the country. It also provides the situation analysis of the existing and future situation that need to be addressed in the PA functions, legislations and institutions (Table 1) and what future would be for PA functions, legislations and institutions if certain actions are undertaken to make drastic improvement in PA management and functions (Table 2). For example, the key functions of PA establishment and management have been identified and then the legalisation and institutional support related to each function assessed. It demonstrates where legislation and institutional supporting is available, missing or overlapping. It also discusses the recommendations and actions require to address issues affecting conservation work. Finally, it provides the perception of people on the recommendations whether they support, did not support or have no opinion on the recommendations.

PA functions. How different legislations and institutional mandates promotes or support conservation work in the country.

Existing situation

Table 1: Existing PA functions, legislation and institution

PA functions	Legislation	Institution
<p>Establishment and gazettal process</p>	<p>CA Act 1978, Fauna (Protection and Control) Act 1969 and NP Act 1973. These legislations are now under the PA Bill 2016.</p> <p>MPAs – There is no legislation for MPAs except recognised under the Fisheries Management Act, Maritime Zone Act and OLPGLLG.</p> <p>The PA Bill also recognised the traditional sacred sites and the LMMAs as PAs.</p>	<p>CEPA has developed steps to establish CA.</p> <p>Kamiali Driman Group comprising of conservation NGOs and CEPA developed 10 step guide to establish WMA.</p> <p>CEPA-JICA and NGOs (e.g. WWF, WCS and others) developed steps to set up MPA and LMMAs</p> <p>NFA and Oceans office at DJAG can work with CEPA to do marine conservation work since CEPA is focusing more on terrestrial than marine.</p>

<p>Setting minimum standards</p>	<p>Some of these are stipulated in various environmental regulations pertaining to standards, still have gaps.</p> <p>The CEPA Act 2014, the Environment Act 2014 (Amended), and the PA bill gives CEPA the mandate to set minimum standards for national PAs and conservation.</p> <p>The Maritime Zone Act, the Fisheries Act, the OLPGLLG, Fauna (Protection Control) Act 1966 and CA Act 1978 gives the respective, Forestry Act 1993, Mining Act, Oil and Gas Act allows them to set minimum standards as well (see Annex 3).</p> <p>Various conservation laws such as CA Act, Fauna (Protection and Control) Act and the PA Bill sets minimum standards to follow to establish and manage the PAs.</p> <p>The PA Bill provides different Schedules for establishing PAS for Provincial Government, LLG, customary owners and private individuals.</p>	<p>The minimum standards for National PA is the responsibility of CEPA to establish.</p> <p>The responsibility of setting up minimum standards for other PAs established by Provincial government, LLG, communities and private person is the sole responsibility of the respective group. This requirements or minimum standards are captured in the PA Bill.</p>
<p>Zoning and management planning (including the allowable activities)</p>	<p>Fauna (Protection Control) Act 1966 allows planning, zoning and does not restrict some activities. It is governed by its rules.</p> <p>The CA Act 1978 allows planning and zoning and may allow and restrict certain activities. This is governed by its rules.</p> <p>The Fisheries Act 1988 and the Maritime Zone Act 2015 also recognise the establishment of MPA using the UN Convention on the Law of the Sea.</p> <p>The OLPGLLG and the PA Bill allows proposed some activities to occur in the PA.</p> <p>The PA Bill allows areas >1000 ha to have 10% as set-aside for conservation of timber production forest. This is also now under review in the forestry Act. The zoning within PAs can also be done through management plans or social mapping.</p> <p>Community Conservation Areas under the PA Bill consist of various user zones, including conservation, food gardening, cash crop areas, etc, meaning the overall customary land area of the clan(s) involved is recognised as the actual CCA.</p>	<p>Other government entities, especially government extractive and economic development agencies recognise the importance of PAs and conservation and work closely with CEPA to ensure conservation is captured in the Environment Permits to conserve areas of High Conservation Value (HCV).</p> <p>PNGFA are set aside 10% of FMA for conservation purposes. This is also captured under the PA Bill.</p> <p>CEPA, provincial government, LLG, customary landowners and any private person are to develop Management Plans or do social mapping for PAs they established.</p> <p>CEPA to partner with other government entities to develop National Landuse plans and for maritime activities for any development activities. Currently the DLPP is developing a National landuse policy.</p> <p>CEPA recognise the establishment of setting up Buffer zones of 500m from either side of the boundary of the PA in the PA policy.</p> <p>CCA's will be compatible with the bottom-up Sustainable Land Use Planning system as proposed under the (3rd revised draft) National Sustainable Land Use Policy (NSLUP) and link CCA requirements to NSLUP.</p>

<p>Conservation-compatible economic development (i.e., in buffer zones – this requires economic departments, banks, certification etc)</p>	<p>The PA bill looks at promoting sustainable livelihood in PA.</p> <p>See comments above on Zoning of CCA</p>	<p>Government is responsible developed but this is captured in PA Policy.</p> <p>See comments above on compatibility with NSLUP</p>
<p>Legal support for communities to resolve land/ encroachment issues</p>	<p>There is no law indicating CEPA will provide legal support to PAs.</p>	<p>There is opportunity for CEPA to partner with legal firms, NGOs, provincial government and CBOs, to conduct para-legal and resource laws trainings, education and awareness.</p>
<p>Monitoring and reporting</p>	<p>There is no regulation at the moment on monitoring and reporting.</p> <p>The PA bill allows for monitoring and reporting</p> <p>The METT currently used for PNG is not properly adapted for use at the community level. Also its implementation has been flawed with individuals of community conservation areas (WMA's) being brought to provincial centres to be interviewed.</p> <p>The METT is currently being revised to be made suitable for use at the community level in PNG, with clear implementation guidance added, suiting PNG's situation</p>	<p>CEPA is responsible for reporting on all PAs as part of its international obligation to MEAs. Since CEPA is only responsible for nationally established PAs, provincial government, LLGs, customary landowners and private persons responsible for monitoring and report on behalf of their PAs. The management plan could provide the stepping stone for monitoring and report.</p>
<p>Partnerships</p>	<p>There is no law that talks about partnership. The PA bill recognise collaboration and partnership.</p> <p>All environmental laws draw their mandate from the National constitution and captures conservation and environment sustainability. Hence to make this work, collaboration and partnership is necessary.</p>	<p>All government and non-government entities are not working together effectively in a coordinated manner.</p> <p>NGOs and donors are facilitating some great partnerships with government agencies.</p> <p>Proper education, awareness, communication, capacity building and support is required for stakeholders across the country.</p> <p>There are some Memorandum of Understanding (MoU) signed between CEPA and donors or NGOs to work in partnership to deliver conservation outcomes across the country.</p>

<p>Enforcement and penalties</p>	<p>Most PAs have set their rules and standards for enforcing laws – catch limits, encroachment etc. The powers were given to rangers and management committees in PAs set by customary landowners or private person. CEPA is responsible for the national established PAs with powers given to its rangers under various fauna and flora control Acts. This is recognised in the PA bill. The same also applies to Provincial Government and LLG.</p> <p>Strength in enforcement has to come through local Community conservation laws, developed in a participatory manner and agreed to by the whole community.</p> <p>Each province has its own jurisdiction under the OLPGLLG to set rules, do enforcement and impose penalties for infringements as per the provincial or LLG regulations.</p>	<p>CEPA versus Provincial Government vs. LLG law vs informal law.</p> <p>National and provincial enforcements and penalties are the responsibility of both the provincial and National government (CEPA).</p> <p>CEPA can enforce rules and penalties but lacks the resources and capacity. Its presence is not seen in all provinces except Port Moresby.</p> <p>CEPA needs to work with Department of Justice and Attorney General (Ocean’s Office) and NFA in enforcing marine and conservation laws.</p> <p>Provincial government and LLG can establish their own rules and regulations to do enforcement and penalties law breakers.</p> <p>At the LLG and ward levels, PA managers through their Committees and rangers can enforce rules and penalties but this is lacking or not implemented.</p> <p>Community conservation laws can be strengthened by incorporating them into Ward/LLG by-laws.</p>
<p>Financing</p>	<p>The CEPA Act, Environment Act and the PA Bill allows for CEPA to support national established PA and not CCAs. The law does not allow for national PAs to generate their own financing and keep it such as Varirata National Park.</p> <p>The PA bill stipulates that CEPA will facilitate funding and human resource for sustainable livelihood for PAs (i.e., training, capacity building and infrastructure support) including CCA livelihood. The PA bill recognises that the National Budget, the Biodiversity and Heritage Trust Fund, Biodiversity off-setting, other financial streams, ecosystem services, international agencies, national mechanisms, taxes, levies, and site level fees, charges, sales are potential sources of financing for each PAs in the country.</p> <p>The Environment Act also promotes payment of environment bonds and biodiversity off-set to support conservation work. This is not implemented yet.</p> <p>The National Cultural Commission Act also promotes conservation of cultural diversity.</p>	<p>Financing of protected areas is not clear. Various stakeholders (CEPA, private entities, donors, CBOS, NGOs, customary land or sea groups, provincial government and LLGS) are responsible for financing their own activities.</p> <p>Environmental NGOs and donors also help support PAs in financing some activities on ad hoc basis.</p> <p>The Department of National Planning and Finance can provide funding to CEPA for conservation work but is very limited. It requires tangible and achievable plans, budget and reporting from CEPA.</p> <p>The National Cultural Commission is responsible for protection of cultural diversity and is allocating some funding for its activities.</p> <p>Private entities can help finance PA work through biodiversity offsets and other environment bonds. For example, Exxon Mobil PNG Ltd, Oil Search Ltd New Britain Palm Oil are supporting community conservation initiatives and efforts as their social-corporate responsibility.</p>

<p>De-gazettal</p>	<p>There are no laws promoting de-gazettal of PA except the WMA under the Fauna and (Protection Control) Act 1966.</p> <p>Under the PA Bill, de-gazettal of a PA can be done through the advice of the Conservation Council advising the National Executive Council (NEC) to be removed it from the PNG PA Network registry.</p>	<p>CEPA is not responsible nor promoting de-gazettal of PAs but facilitate the processes. Under the Fauna (Protection Control) Act 1966, communities through their WMA Chairman can write to CEPA for de-gazettal of a WMA. CEPA then writes to the National Legislative Council for advice and approval before de-gazettal is done.</p> <p>Hence, all de-gazettal processes are facilitated by CEPA and decisions are made by the NEC.</p>
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Future situation

Table 2: Future directions to improve PA functions, legislation and institution

PA functions	Legislation	Institution
<p>Establishment and gazettal process</p>	<p>The PA Bill is enacted and all conservation and gazettal processes followed.</p> <p>There is option of Conservation Deeds signed outside of the PA Bill arrangements currently being utilised by some conservation organisations, private entities and communities. There is an increasing number now in the country.</p>	<p>All steps and decision trees must be standardised by CEPA and readily made available for all stakeholders to follow. This will cut down on the process of establishing PAs gazetting PAs. CEPA officers will help facilitate when proposals are submitted to its office and everything can be done online, even it means certain processing fees are required. Whenever there are urgent issues, conversation can be made in person or via appropriate media platforms. For instance, the Tavolo WMA committee in West New Britain province submitted a request for expansion of their WMA more than 3 years ago with CEPA and to date has not received any reaction from them. They have now signed a Conservation Deed over the area.</p>
<p>Setting minimum standards</p>	<p>There are various laws and Acts indicating minimum standards for PA management, financing, processes etc. as mentioned above in Table 1. However, there needs to be some amendments and changes to policies or regulations to ensure they synchronised with each other if required.</p>	<p>CEPA and all stakeholders involve in PA establishment and management must establish minimum standards for their respective PAs.</p> <p>These minimum standards must be trailed, accepted, sanctioned and readily made available to the public through respective offices, be available online in portals and or some platforms, and communicated widely. These minimum standards must be developed in simplified and easy to understand languages and formats.</p>

<p>Zoning and management planning (including the allowable activities)</p>	<p>All zonings must be done in such a way that compliments various land-uses in PNG for resources, settlement and township (urban and rural), infrastructure and so on.</p> <p>NSLUP proposes bottom-up land use planning, meaning the zoning for CCA's can be done as part of this process, starting at community/Ward level.</p> <p>The Maritime Zone Act and Fisheries Management Act supports the establishment and management of coastal, traditional waters out to 3 nautical miles, provincial waters and high seas within the Economic Exclusive Zones (EEZ). The OLPGLLG also administers provincial boundaries.</p>	<p>This can be easily fit into the National Land use plan spearheaded by the DLPP.</p> <p>See earlier comments on current focus of the 3rd revised draft NSLUP. This also proposes Sustainable Land Use Planning Teams (1 male + 1 female) at the LLG level to inform and facilitate the SLUP processes at all Wards.</p> <p>Zoning of maritime areas can be done to support conservation work, which CEPA must work closely with NFA, JJAG and Dept of Provincial and Local Level Government (DPLLG).</p> <p>All stakeholders must be empowered, trained and understand the purpose of zoning for the benefit of infrastructure and economic development and conservation.</p> <p>Proper management plans and social mapping must be done in consultation and collaboration with different agencies or stakeholders' input.</p>
<p>Conservation-compatible economic development (i.e., in buffer zones – this requires economic departments, banks, certification etc)</p>	<p>The PA bill looks at promoting sustainable livelihood in PA. This must be synchronised with existing resource laws and other laws and policies or regulations.</p>	<p>Effective partnership between different stakeholder needs to be harnessed and strengthened. Customary landowners, provincial government and LLG plus wards, and private persons must be provided with essential information to make wise decisions to be involve in PES activities as the reward for doing conservation. That information must be readily made available when needed.</p> <p>NSLUP proposes national level Sustainable Land Use Planning Guidance & Advice, to be disseminated down to Province, District and LLG plus Wards, which would include information on appropriate sustainable livelihood options and SME's.</p>
<p>Legal support for communities to resolve land/encroachment issues</p>	<p>There must be amendment in the CEPA Act, Environment Act or PA Bill and the OLPGLLG indicating CEPA or provincial government will provide legal support to PAs.</p>	<p>There is opportunity for CEPA to partner with legal firms, NGOs, provincial government and CBOs, to conduct para-legal and resource laws trainings, education and awareness. This can be achieve through provincial government budgets or any sustainable financing managed by CEPA or donors.</p>
<p>Monitoring and reporting</p>	<p>The PA bill allows for monitoring and reporting and this must synchronise with other conservation or environment laws.</p> <p>See comments above on METT.</p> <p>Maximum involvement and responsibility for monitoring and reporting should be with the communities involved. Simple, yet scientifically sound community conservation monitoring & management systems should be developed.</p>	<p>CEPA and stakeholders responsible for PA management are responsible for monitoring and reporting on behalf of their PAs. This can be facilitated by CEPA who provide training and capacity building through various programs by engaging competent institution to conduct training. After training, all reports can be submitted to CEPA for its reporting obligations. CEPA needs to work with donors and other institutions.</p> <p>NFA can support CEPA provide report on marine PAs within its jurisdiction when monitoring fisheries and species management..</p>
<p>Partnerships</p>	<p>There is clear demarcation of roles and responsibilities and jurisdiction of different stakeholders involve in conservation, such as NFA, Oceans' office, PNGFA, DPGLLG, and MRA, including the private sector.</p>	<p>CEPA need to improve its communication and relationship with all partners. A better and improve work ethics, planning, collaboration, and coordination is needed to harness and strengthen partnerships.</p>

<p>Enforcement and penalties</p>	<p>There are existing laws about enforcement stipulated above. However proper recognition of the powers and responsibilities of the enforcers must be strengthened by existing laws through as collaborative effort.</p> <p>Strength in enforcement also has to come through local Community conservation laws, developed in a participatory manner and agreed to by the whole community.</p>	<p>The approach to enforcement and penalties must be revisited. Powers given to respective officers and rangers must be re-emphasis and strengthen and the enforcers must be recognised as policemen of the PAs. They must be recognised by all with power to enforce laws, arrest perpetrators and monitor activities in PAs. Training of the law enforcers must be made to understand their legal rights. NB: Management and monitoring of laws and penalties should clearly entail on the PA regulations on different categories of Protected Areas in the country</p>
<p>Financing</p>	<p>The Enactment of the PA Bill is urgently needed to ensure PA financing through a sustainable financial mechanism is needed. Also, provincial government and LLG laws need to be amended to collect fees to support PA work</p>	<p>A sustainable financing mechanism is required to support PA work at the national, provincial, LLG or at ward or community in the country. All potential avenues to secure funding must be sought.</p>
<p>De-gazettal</p>	<p>The Enactment of the PA bill is a pre-requisite.</p>	<p>CEPA to work with processed spelt out in the PA Bill.</p>

Recommendations

A total of forty-four (44) stakeholders participated in person or remotely (virtually) for the validation workshop held at Lamana Hotel in Port Moresby on Wednesday 17th of March, 2021 (Annex 4). At the workshop, the above findings were presented with the ten recommendations provided below explained to the participants. At the end of the workshop online polling was done for those participants attending remotely and those present in person of which the result is presented below. More than 70% of stakeholders validated the recommendations. If any recommendations received less than 70%, they were either amended or replaced. It is proposed that all recommendations that achieved 70% or more approval are accepted. However, recommendation 6 received 60%. This recommendation is still kept, but based on the comments received from the participants during the validation workshop and feedback, the recommendation 6 was reworded. The polling results are discussed further in Section 7.3 and Table 3.

1. Role and functions of CEPA is clearly promoted to stakeholders. The overall approval is 70%.

The mandate and role of CEPA in doing conservation work is clearly define by laws distinctly from other government agencies and provincial and local level government. Delegation of powers and shared responsibilities must be clearly defined. CEPA is mandated by CEPA Act 2014 and the Environment Act 2000 to ensure environment and conservation laws, regulations and legal framework conditions on conservation and protected areas are implemented effectively and efficiently. There are other laws which CEPA is also implementing. Hence, CEPA

is required to coordinate better all conservation work and work in collaboration with other agencies and stakeholders going forward and mutually implement its mandate to achieve better conservation outputs.

However, it cannot do all PA work, including providing resources and helping every communities and conservation NGOs. It still can assist local communities, CBOs and NGOs facilitate and oversee conservation work in the country. CEPA's role is to establish laws and regulations, and establishing minimum standards or frameworks that are recognised for maintaining PA status in the country. CEPA is also responsible for enforcement but can delegate powers to provincial and local level governments and must provide ways to ensure this happens effectively. CEPA still has power to degazette a PA that does not meet the required standards to function effectively. Overall, CEPA is required to coordinate better all conservation work and work in collaboration with other agencies and stakeholders going forward to achieve better conservation outputs. This would enable CEPA to fill the legal and regulatory gaps with other stakeholders.

Action: CEPA initiate interagency working groups. An interagency working group must be established in order to progress better collaboration and coordination in PA management in the country. In order to create awareness on PA policy and update on PA management. The groups are to meet every quarter.

2. Provincial level budgets to be allocated to protected area management, planning and supporting provincial level Climate change and environment departments. The overall approval is 76.7%.

CEPA can't fund all PAs across the country. Hence provinces need to provide budgetary support for and establish its climate change and environment division/departments to support Conservation work at provincial and district level. Annual provincial level budgets have to be allocated to protected area management, planning and supporting provincial level climate change and environment departments/divisions. The role of CEPA in providing financial support for PAs in the country insufficient and support must come from provincial governments and other stakeholders. Therefore, advocating for provincial budget allocations is strongly recommended to bridge the funding gap.

Action 1: Establishment of a provincial Protected Area Roundtable. The Provincial Protected Area Roundtable is a way forward for conservation work in provinces as stipulated under the PA Policy and must be harnessed by sustainable annual budget allocation from the provincial government for protected area establishment or management of existing PAs, for planning purposes and for supporting provincial level departments doing environment and climate change work. There are also funding challenges faced by many NGOs to engage in conservation work, hence provincial government need to provide budgetary support as well. Note that the role of the provincial government is not of the national government but a clear demarcation has already existed in the OLPGLLG. CEPA can only provide technical support to provincial government through trainings using institutional and financial videos, PA guides, planning information and other workshops. An environment awareness portal can also be established through existing donor projects such as Lukautim Graun Project of USAID as a communication tool where all documents are stored. This portal can be used as a capacity building tool and knowledge support system for PA work because most people don't know their responsibilities or have knowledge of existing regulations. There are Conservation officers (Responsible sustainable development officers) at the District level but capacity building through CEPA and partners are required.

Action 2: Formalise signing of MoU with partners. It is recommended that CEPA should formalise MoU signings with the Department of Provincial and Local Level Government and Provincial Governments, to collaborate in enacting laws and developing policies and regulations to collect fees and support PA work in the provinces. This may enable ward development plans to be approved and captured in provincial development plans to complement the PA policy requirements. CEPA needs to have fortnightly meetings with its partners to talk about different topic on PA work and development issues in provinces.

3. CEPA to provide Advisory support to provincial government and communities and reward them for protecting the environment. The overall approval is 70%.

CEPA should provide training or advisory support to provincial government and communities through online portal populated with PA information for communities protecting the environment as stewards and the rewards or incentives provided to them using a national payment for environmental services.

CEPA must have continuous communication and education programmes in promoting conservation work in the country. It must work closely with provincial counterparts, CBOs, NGOs and other government agencies to educate them of events, policies, laws, etc happening at the national level. Currently conservation and environment advise is not available for provincial governments that provide support for PA management and establishment in the country. CEPA could provide all advice via an online portal that becomes a one-stop shop for PA management support, establishment and management. The portal provides vital information and guides advising those in provinces on how to do conservation work and these are easily accessible online. If require, trainings can be provided by CEPA staff in a workshop. This portal links to steps on how communities can establish protected areas to conserving biodiversity, improve livelihoods and other intrinsic values. As managers and stewards for future generations, communities and provincial officers have to be well informed. Protected a global good is challenging because there is no legislated financial support to protected area management. Hence both an obligation from both the national and provincial government to reward communities for ecosystem services protection a way forward because people need to be rewarded for the ecosystem services that they generate. Thus, a National Payment for Environment Service (PES) system is needed as a reward for the Environmental Services that communities protect. Such incentive is performance based to reward communities everything a milestone is attained. There should be a system of regular (annual?) budget support for agreed identified community needs for communities/Wards committed through conservation, shown through development and adherence to their sustainable land use plan and community conservation laws, including clear set-aside conservation areas. CEPA must have continuous communication and education programs in promoting conservation work in the country, and must work closely with CBOs, NGOs, provincial governments and other government agencies to educate people of events, conservation, PA establishemnt processes, environment management, policies, laws, business oportunities etc.

Action: CEPA to provide advisory support or training to provincial governments and communities. CEPA should provide advisory support and training of the trainers to provincial government and communities and find ways to reward communities for protecting the environment. CEPA also provides backstopping and information is available to provinces to support them (i.e. training programme developed under GEF 5). It is recommended that CEPA has the option of stationed its representative in provinces to attend to PA

issues or it can provide regular training of provincial level environment officers who do the tasks on CEPA's behalf. There is also option for CEPA to provide online learning materials for provinces. A quarterly meeting with provincial government and other stakeholders would enable strengthening of conservation work in provinces.

4. Legal support. The overall approval is 73.3%.

A legal firm or the State Solicitor Office is to provide pro-bono legal services (advice, developing templates for conservation, land, resource and development rights, para-legal trainings, financial incentives etc) to provincial government and communities through tax incentives.

It is not CEPA's mandate to provide legal support to provinces and this is not clear with most provinces. However, certain tax benefits can be allowed for legal firms to provide pro-bono legal support for conservation work. If there are tax benefits for legal firms this would help the firm to provide legal advises to both provincial government and local communities. CEPA can only facilitate this to happen because most provincial governments don't have an environmental lawyer that is well vested on how to establish provincial laws to create protected areas. The kind of legal advice or service provided by this legal entity could include; 1) developing templates for conservation and development rights; 2) financial incentives from provincial government since most things are not done rightfully; and 3) provide good legal support and advice to communities and PA sites such as conducting para-legal trainings and education and awareness on land and resource rights.

Action: CEPA to collaborate with legal experts, firms and agencies to support provinces and local communities. CEPA should collaborate with relevant legal experts and agencies including NGOs to provide support to provinces and local PA communities. Some provinces have legal officers who are not familiar with the technicality of conservation work. Hence, the lawyers must be provided with better technical advice by CEPA to provide legal advices to the respective provinces and the communities. It is recommended that certain tax benefits can be promoted whereby a legal firm can provide pro-bono legal support to the provinces and communities and in return is taxed exempted, for providing free legal and support services to the provincial government and administration, and communities. This would encourage the legal firm to provide advices to provincial administration and communities.

CEPA need to work with the Department of Justice and Attorney General (DJAG), the State Solicitor Office and the Department of Provincial Government and Local Level Government (DPGLLG) by signing MoUs to find solutions in addressing environment and conservation legal issues and needs in provinces and communities. A quarterly meeting

is required to strengthen partnership and collaboration and update one another on conservation matters in the country. There is option to utilise the State Solicitor officers to facilitate local legal support and paralegal trainings so people have skills to raise concerns in courts or have the ability to quickly address community concerns.

5. PA law enforcement. The overall approval is 76.7%.

PA law enforcement and monitoring is revived through trainings, capacity building and awareness, and powers and responsibilities given to rangers and PA committees to do enforcement, penalise law breakers and monitoring PA activities.

CEPA is mandated to enforce rules through its rangers in government reserves and National Parks. Hence, Powers must be entrusted to them but these requires legal trainings. In communities, most rules are set by the community themselves, and they appoint rangers/committees to enforce those rules. Therefore, CEPA can work with experienced NGOs/CBOs to support this ranger/committee training and empowerment at the national level so that rangers/committees know their powers and responsibility to enforce the laws and penalties in communities.

Action: Enforcement and monitoring of PAs is promoted and rangers are trained through a national ranger program. CEPA should enforce rules through its rangers in government reserves and National Parks for protection of national and global species of significance and heritage. CEPA should also closely collaborate with its provincial counterparts and partners to work with local communities and their rangers to enforce these rules. In communities, CEPA can only provide support or empower communities to improve rules to make PA management effective. Hence powers and trainings must be given to rangers to conduct monitoring and enforcement of rules and laws in PAs. It is recommended that a national ranger program is activated and strengthened and rangers are trained, empowered and recognised for their roles in doing ranger and monitoring work in PAs countrywide. There are also opportunities to train village police officers to be empowered to do law enforcements. A six-monthly training program is required for all across all PA to be conducted by CEPA and relevant trainers and institutions and rangers are equipped with basic materials, knowledge and equipment to do their work. A national rangers forum or an association can be established so rangers can share experiences as well.

6. Monitoring and reporting obligations of the PA conducted effectively. The overall approval is 60%

It was agreed that only recommendations that received approval of 70% and above are accepted. Recommendation 6 only received 60% approval. Stakeholders subsequently provided their suggestions on changes which has resulted

in the updated recommendation 6. This implies that issues raised were addressed for this recommendation despite it did not meet the high pass standard.

Monitoring of government established PAs must be done by CEPA staff whereas local communities are responsible for their monitoring programs. However, both CEPA staff and communities must be empowered and trained to do monitoring. By doing this, CEPA becomes effective in ensuring PAs are managed effectively when regular monitoring to PAs is done. A national training is required to get everyone working on PAs to become accustomed with their task of managing PAs effectively.

CEPA and Community conservation areas (CCA), with support from donors or NGOs/CBOs, conduct monitoring of PAs, analyse effectiveness for individual PAs, and develop strategies or policies for National deliberation and international MEA reporting.

Monitoring of government established PAs must be done by CEPA staff whereas local communities are responsible for their own monitoring programs. The communities can also be supported by NGOs and CBOs when working with them. This monitoring can be done through research of Monitoring and Effectiveness Tracking Tool (METT) of Protected Area. The METT currently used for PNG is not properly adapted for use at the community level. Also, its implementation has been flawed with individuals of community conservation areas (WMA's) being brought to provincial centres to be interviewed. The METT is recently being revised to become suitable for use at the community level in PNG, with clear implementation guidance added, suiting PNG's situation.

Such monitoring exercise will help analyse the effectiveness of PA management. All information collected are then sent to CEPA to analyse and ensure the PAs are monitored, managed or administered effectively and efficiently. Most information provided from the PAs will then be aggregated to provide national reporting advise on policy changes. CEPA must seriously sactioned all reports and recommendations provided by consultants and implement strategies provided. These reports or ifnformation collected will enable CEPA to communicate extensively, providing vital backround to meet its international obligations such as reporting to the CBD scaratariat, IUCN and other MEA sacratariats.

Action: CEPA officers and communities are trained to do monitoring and reporting of PAs across the country. Monitoring of government established PAs must be done by CEPA officers whereas local communities are responsible for their own monitoring programs through their rangers and committees. However, both CEPA officers and communities must be empowered and trained to do monitoring. Even if stakeholders do not agree to this, there needs to be an agreed monitoring system for PAs in order to: (1) determine

overall changes; (2) build national level support for PA; (3) encourage a system approach to PA management; and (4) know how to prioritise future funding. By doing this, CEPA becomes effective in ensuring PAs are managed effectively when regular monitoring of PAs is done. Communities and provinces are provided with information or are trained to conduct METT analysis of PA effectiveness and management and reporting. Also, the PNG METT currently developed has a training package developed and adapted for use. It is recommended that a national training on Management Effectiveness Tracking Tool (METT) for PA is conducted every one or two years to get everyone working on PAs to become accustomed with their task of managing PAs effectively. An annual meeting can be organised to coincide with the PA Forum so experiences can be shared.

7. Determination of conservation-compatible economic options. The overall approval is 86.7%.

A conservation-compatible economic option is provided to communities with available information so inform choices and decisions for their area can be made, though available information, education and awareness mechanisms and platforms (government agencies, portal and PA forums) to secure assistance and funding support for any development activities they pursue.

Communities are able to understand and choose what economic option is best for their area and what is considered non-allowable. This requires decisions to be made collectively by the managers (e.g. Wildlife Management Area or Conservation Area Committees). The powers of enforcement in WMAs and CCA are given to the local rangers/community conservation committees to enforce the allowable activities within a PA. There are existing legislations for establishing a company, Business and Association promoted by the Investment Promotion Authority (IPA) that encourages communities to mobilise and do whatever business on their land. There is also, Corporative Society the Small Medium Enterprise (SME) policy that support small business. These are managed through the Department of Commerce and Industry. Access to information and trainings on certification, access to bank loans and other necessary requirements to start-up businesses are needed. Legislation support may support their involvement in sustainable activities through the PA Bill which sets minimum standards, business plan, business development plan and where to what are necessary requirements. The communities must work closely with rangers and communities to address disputes, do monitoring to ensure their choices in whatever activities is done with Free and Prior Informed Consent (FPIC). There are opportunities for communities to get involve in roundtables and other forums to leverage funding to support their livelihood in the PA. Funding support for sustainable livelihood options should be a key focus of the sustainable financing for the PA network.

Action: A list of conservation compatible economic options and minimum conservation standards for PA sites must be developed to demonstrate how the actions are supporting biodiversity conservation and sustainable rural development. Communities are able to understand and choose what economic option is best for their area and can consider what is non-allowable. That is, once land-use plans (LUPs) are developed and established, using a national standard for LUPs (also need to be established), then the best economic options can be realised. Any development must be clearly understood in communities so they make informed decisions on what is best for their environment, conservation and sustainable livelihood or economic benefits. Mapping of conservation compatible economic opportunities and minimum standards should be developed to determine compliance with biodiversity conservation objectives. Hence, it is recommended that a list of conservation compatible economic options and minimum conservation standards for PA sites must be developed to demonstrate how the actions are supporting biodiversity conservation and sustainable rural development. CEPA needs to work with provincial government and ward development committees to develop the list annually if there are changes or new options emerging.

8. Partnership and collaboration. The overall approval is 83.3%.

Partnership and collaboration between different stakeholders (government agencies and institutions, communities, provincial government, NGOs/CBOs, private companies, and donors) are improved, and communication and transparency in work is harnessed in a holistic manner to bridge gaps, thus promoting conservation and management of PAs.

A holistic approach should be undertaken by CEPA to work in collaboration in a coordinated manner with relevant government agencies and partners to promote conservation and management of PAs in PNG. This can be done through biodiversity offsets, environmental bonds collection and other similar arrangements. There needs to be open communication and transparency involving all government agencies, NGOs, CBOs, private companies and provincial and local level government dealing with environment and conservation activities. Communities unfortunately lack technical capacity and knowledge in certain areas but will need support from other stakeholders and government agencies to improve management of PAs such as monitoring, and addressing local issues on the ground in PAs such as land and resource use issues (e.g. paralegal training).

Also there needs to be a coordinated effort within CEPA to communicate information widely through an organised Forum such as the PA Forum or its environment portal. This will improve engagement and collaboration to share lessons and experiences. There are other formal Forums and Roundtables such as the the Maritime Province Governors Roundtable,

NPART and RPART that can promote such coordination for other stakeholders to get involve or act upon certain issues as well. There should be overall Provincial Responsible Sustainable Development Committee, which link/incorporate all current different individual government committees, e.g., fisheries, climate change, forestry. Only that will give the prominence to conservation at the provincial level. Otherwise, conservation will continue to be seen as something anti-development and on the periphery, whereas world-wide and also in PNG at the national level, it is realised how important conservation considerations are nowadays to come to long-term sustainable development and management in the country.

Action: Signing of MoU with partner organisations for collaborative work. CEPA should sign MoUs with those relevant government agencies and partners and improve communication and presence in other forums in order to bridge gaps and forge or harness friendship for better partnership and collaboration. The establishment of the PA Forum is important also for various stakeholder involvement in conservation work in the country and must be promoted widely.

9. Key priorities to improve conservation outcomes. The overall approval is 83.3%.

Legislations, policies and governance mechanisms, coupled with institutional and staff capacities are improved to achieve better conservation outcomes. In order to achieve better conservation outcomes with CEPA, the following are proposed; Get the legislation, policies and governance mechanisms right, especially the processes; Upskill the staff and those implementers/practitioners; develop the Terms of Reference (ToR) for its staff and have work plans formulated so activities can be implemented successfully. Similar thing can be done for provinces and PA managers; work on specific areas that needs improvement such as work plan, ToR, regulation, enforcement, partnership, and improve work ethics; as an institution, promote the spirit of volunteerism (not get paid) and use students or invite tourist and retirees from within PNG and abroad so they can transfer knowledge to communities (e.g. Australian volunteer service, PNG VSO); conduct financial literacy, report writing and funding accessibility trainings; and conduct monitoring and evaluation of activities and work. Close collaboration work and clear agreements with NGOs/CBOs to achieve better outcomes by CEPA need to be forged. Strong communication and collaboration with Province down to the District level is necessary. This may require establishing District Conservation Officers/Responsible Sustainable Development Officers.

Action: An Inter-governmental group is established to address policies, legal and conservation issues. An inter government agency is established to work with existing legal institutions such as DJAD, Constitutional Law Reform Commission (CLRC) and other partners to review gaps in

conservation and environment policies, regulations and legal framework and address or adjust them. This group can meet every six months or annually to discuss legal matters in conservation and align their activity plans. Also CEPA and its partners should facilitate capacity building for PA managers, provincial government and communities annually to keep them abreast of the latest development in PA activities.

10. PA management support from Environmental NGOs. The overall approval is 80%.

PA management support by environmental NGOs and CBOs done to achieve the directive principles and goals of the Constitution, sustainable development goals, national policies aspirations. NGOs and relevant partners should continue to provide support on PA management in the country because the government (CEPA) has limited capacity, the capacity is stretched or lacks attributes to improve conservation, given its national focus. Since there is lack of or limited collaboration and communication among different stakeholders and CEPA, implementing this recommendations may not work. This may see the efficiency and management effectiveness of PAs stalled. The gaps seen in the current system will become wider and conservation will just become be a paper thing and not practical, thereby putting the future of species, human and the environment at risks from emerging or existing threats and pressures. Hence, exchange programs between PA level and provinces must be encouraged so local communities can share or learn from each other in order to improve management of the PAs.

Funding must also be provided to local NGOs to implement and execute some activities. International NGOs must have respect for traditional conservation activities and ideologies and must promote them. More emphasis should be stressed on promoting the 5th National Goal and Directive Principle of the Constitution.

The establishment of PA Forum that meets annually should provide a platform to address issues and share lessons

learned by conservation practitioners. This would strengthened coordination between CEPA, support insitutions and PAs.

Action: Conservation NGOs work are recognise and supported by the government to achieve better conservation outcomes. It is recommended that the role of NGOs must be recognised because it is important in conservation work and must be supported by the government going forward to achieve better conservation and nation building outcomes. Also ask NGOs/CBOs to report annually on how they are contributing to achieving the PA policy. CEPA would simply need to developed the reporting template and provide training on how to link their actions to the policy or PA Implementation Plan

Polling results of the ten recommendations

A total of 30 participants participated in the poll. Eleven attended remotely, ten in person and the other 9 are CEPA staff doing it remotely was conducted respectively. The result indicates that over 60 percent (%) of the participants in the poll accepted the recommendations. Between 60-80% agreed with the recommendation (Yes), between 1-8 % do not agree with the recommendations (No) while 3-16 percent have no opinion. The results for each recommendation vary but there is a trend where over 80% are in agreement with Recommendations 7 to 10 while recommendations 1 to 5 receives over 70%. Only recommendation 6 has 60%. Secondly, there is fluctuation with those not agreeing with the recommendations (No). Recommendation 1 has 26%, followed by recommendations 2 to 6 having 16.7% each, while recommendation 8 having 13.3 %. Less people say no to recommendation 7 and 9 and 10 with 3.3% and 6.7% each. Thirdly, those having no opinion is strongly seen in Recommendation 6 (23.3%), 10 (16.7%), 4 and 9 (13.3%) and 4 (10%). There might be varying reasons such as not understanding the recommendation that influence the results. Therefore, any recommendations with a score above 70% were accepted while those less than 70% are reworded or omitted (i.e. Recommendation 6).

Recommendation Number	Agree with Recommendation (Yes)	%	Do not agree with the recommendation (No)	%	Have no opinion on the recommendation	%
1	21	70.0	8	26.7	1	3.3
2	23	76.7	5	16.7	2	6.7
3	21	70.0	5	16.7	4	13.3
4	22	73.3	5	16.7	3	10.0
5	23	76.7	5	16.7	2	6.7
6	18	60.0	5	16.7	7	23.3
7	26	86.7	2	6.7	2	6.7
8	25	83.3	4	13.3	1	3.3
9	25	83.3	1	3.3	4	13.3
10	24	80.0	1	3.3	5	16.7

Table 3: Percentage of response agree with recommendation (Yes), do not agree with recommendation (No) and have no opinion to the recommendation



Photo: UNDP / Papua New Guinea

CONCLUSION

The importance of this review is to document the gaps, issues and challenges faced by different government and non-government conservation and environment stakeholders to address regulation and institutional issues in order to improve the performance in the conservation sector in the next 5 years. Obviously the 10 recommendations provided in this report will require enormous contributions by all players to make them work. This requires commitment and support from everyone, including the government and CEPA. Even if only one or two of these recommendations are achieved, it is still better because PNG is at a crossroad where development, community livelihood, conservation and institutional functionality and efficiency cannot be compromised.

CEPA is the lead agency responsible for conservation, management and protection of the vast natural resources and biodiversity in PNG. It is responsible for setting up the pathway and standards for conservation to succeed. It is responsible for setting up policies and regulations, enforcement and monitoring of PAs, conduct conservation education and awareness, and establish PA establishment and declaration processes and setting up processes that leads to tangible conservation outcomes.

This review envisages to provide solutions to detect issues in the financing of PAs, capacity building of community and national government and provincial staff, education and awareness, communication and collaboration and coordination of activities among others, in order to reverse unworkable processes back to achieving PA management effectiveness and efficiency in the country.

There must be a drive and political will to overhaul the failures and things not working ideally to be on par with the mandate and co-mandated of groups and agencies working

on conservation. The views and perceptions to regulate, monitor and do better management of PAs in the country has to change.

Although financing of PAs is one of the biggest obstacles at both national and provincial level, discussions must also be held with CEPA, the Department of Finance, Department of Treasury and Department of National Planning and Monitoring, to find ways to improve budget allocation and solutions to raise the necessary revenue to sustainably do PA work in the country. The issues of limited funding have a drastic impact on effective management of PAs across the country.

Other government and non-government entities are not doing enough in managing the environment given their own challenges faced such as lack of communication, uncoordinated effort and commitment, lack of funding among others. Despite CEPA having the overall mandate to promote or guide conservation work in the country, more collaboration and coordination is needed with other stakeholders and organisations including international counterparts. Partnerships have to be strengthened or developed than working in isolation. Also there needs to be improvement in internal performances and relationship with others to improve PA management effectiveness and efficiencies, thus bringing much needed changes and reformation to the organisation's operation. To move forward, CEPA should have a vision on what type of institution it wants to become in the future and the functions it will implement.

Finally but not the least, the limited or lack of regulatory, funding, partnership, capacity, and community agreement that creates negative impression in conservation are huge challenges to be tackled. The challenge for CEPA now is to ensure everything, including government agencies, laws, and

institutions are synchronised. Conservation activities at the national, provincial and local level must be coordinated and improved in order to get the regulations, activities, research, monitoring of activities, PA financing, establishing of PAs among others needs to be done effectively and efficiently by landowners, NGOs and important stakeholders. This should be the first step for CEPA to undertake to in order improve conservation outputs.

What is key is for conservation no longer to be seen as fully locking in areas, stopping any development, and something driven by foreign NGO's. All partners have to clearly communicate that conservation is part of wise and sustainable use of land and resources for now and into the future, and has to be part of all land use and development planning. Also, stakeholders need to communicate that globally biodiversity and forest conservation have become key aspects for consideration for all major investors and multi-national companies, and have become important considerations for the sourcing and production of all major agricultural commodities (RSPO, FSC, SAN, Organic certification). The same is true for marine conservation in the fisheries sector. Conservation has to

be seen as an integral part of the (responsible sustainable) development path of PNG, as outlined in StaRS.

CEPA will have to provide the support in some ways in order to make PA management and effectiveness successful right across the country despite the limited resources. The negative aspects about doing conservation needs to look at rather than focusing primarily on the positive side of what conservation brings. That is, there are environment costs where the people lose their land and places for the sake of money and development but it is utmost important that their livelihood is not replaced. Hence, there should be separation of community livelihood and biodiversity through biodiversity offset and PES activities that encourages local people not to abhor conservation. Finally, all necessary criteria and standards must be set now so people can be trained, educated or made aware of what choices they have to make in doing conservation or opted for activities that are not detrimental to their livelihood or environment. It can be concluded that conservation is still not effective and efficient unless drastic changes are undertaken in the conservation sector.



Photo: UNDP / Papua New Guinea

REFERENCE

- Adams V.A., Tulloch V.J., Possingham H.P (2018). Land-sea conservation assessment for PNG June 2017. CEPA, Port Moresby, PNG
- Alamgir M., Sloan S., Campbell M.J., Engert J., Kiele R., Porolak G., Mutton T., Brenier A., Ibisch P. J. and Laurance W. F. (2019). Infrastructure expansion challenges sustainable development in Papua New Guinea. PLOS One, pp 1-20; <https://doi.org/10.1371/journal.pone.0219408>.
- Appleton, M. R. (2016) A Global Register of Competences for Protected Area Practitioners. IUCN, Gland, Switzerland.
- Blazey P and Perkiss S (2016). The empowerment of Papua New Guinea's tribespeople: Overcoming the challenges of foreign investment. Australasian Journal of Regional Studies, Vol. 22, No. 2; pp 206-224.
- Bryan J., Shearman P., Aoro G., Wavine J. and Zerry J. (2015). State of the forest of Papua New Guinea: Measuring change of the period 2002-2014. UPNG, Port Moresby, PNG. FAO (2015). FAO Global forest resource assessment. Rome, Italy.
- Conservation and Environment Protection Authority (CEPA) (2000). Environment Act 2000. CEPA, Waigani, National Capital District.
- DJAG (2020). National Oceans policy of Papua New Guinea 2020-2030. Waigani, NCD, PNG.
- Ethnologue (2019). Living language of the world. Papua New Guinea:
“ <https://www.ethnologue.com/country/PG>
- Government of Papua New Guinea (GoPNG) (2014), Papua New Guinea Policy on Protected Areas. CEPA. Waigani, National Capital District, Papua New Guinea.
- CEPA (2014). CEPA Act 2014. CEPA, Waigani, National Capital District.
- CEPA (2017). The Protected Area Policy Implementation Plan (PAPIP) 2018-2027. Conservation and Protection Authority, Port Moresby, PNG.
- CEPA and SPREP (in press). State of the Environment Report 2020. SPREP, Apia, Samoa.

- Department of Treasury (2019). 2019 National Budget. Volume 1 Economic and development policies for the year ending 31st December 2019. Waigani, PNG.
- GoPNG (2009). Papua New Guinea Vision 2050. Dept. of Prime Minister and NEC, Waigani, National Capital District.
- GoPNG (2010). Papua New Guinea Development Strategic Plan 2010–2030: Our Guide to Success. Department of National Planning and Monitoring (ed.), Port Moresby.
- GoPNG (2014): Papua New Guinea Policy on Protected Areas. Conservation & Environment Protection Authority, Waigani, National Capital District, Papua New Guinea.
- GoPNG (2014b eds.). National strategy for responsible sustainable development for Papua New Guinea. Dept. of National Planning and Monitoring, Waigani, National Capital District.
- GoPNG (2018a). 2019 Budget estimates of revenue and expenditure for national government departments for the year ending 31st December 2019. Department of Treasury, Port Moresby, PNG.
- GoPNG (2018b). Medium Term Development Plan 2018-2022. Development planning framework and strategic planning, Volume 1. Department of National Planning and Monitoring, Waigani, National Capital District.
- GoPNG (2020). 6th National Report for Convention on Biodiversity. CEPA, Waigani, National Capital District.
- Leverington F, Peterson A, Peterson G, Jano W, Sabi J and Wheatley A (2017). Assessment of management effectiveness for Papua New Guinea's protected areas. Final Report. SPREP, Apia, Samoa.
- Leverington F, Peterson A, Peterson G, Mitchell D, Wolniski M and Kalim K (2019). Working with protected area management committees in PNG, PNG Protected Area Management Guideline No.MC1 version 1. PNG Conservation and Environment Protection Authority, Port Moresby.
- Shearman L.P., Ash J., Mackey B., Bryan J.E, and Lokes B. (2008). The state of the forests of Papua New Guinea: Mapping the extent and condition of forest cover and measuring the drivers of forest change in the period 1972-2002. UPNG, Port Moresby, PNG.
- Tallowin O., Allison A., Algar A.C., Kraus F. and Meiri S. (2017). Papua New Guinea terrestrial-vertebrate richness: Elevation matters most for all except reptiles. *Journal of Biogeography*; pp, 12. doi:10.1111/jbi.12949.



Photo: UNDP / Papua New Guinea

ANNEXES

ANNEX 1: Sample questionnaires

Background – this guide is intended for an interview setting. Its purpose is to prompt a conversation and probe further questions. Therefore, it is not necessary to stick to the questions verbatim. That is, when talking to landowners, private entities, government agencies, extractive industries, associations and others, questions will be tailored to suit individual organisations or people.

Date:

Interviewer(s):

Method: (Zoom, in person, other):

Interviewee(s) Name:

Organization:

Position/Title:

Introduction of interviewer(s)

Explanation of the project.

I am working as an independent consultant in coordination with UNDP and the Government (CEPA) to map the different roles and responsibilities of different government and non-government actors that work or may contribute to the conservation and protected area management in PNG. This is one of the many assignments undertaken by various consultants that would led to setting up a biodiversity trust fund or sustainable financing mechanism that will managed the Protected Area Network in PNG.

I wanted to talk to you today to ask a few questions and get your ideas and input about the establishment how CEPA can work best with various stakeholders and what gaps need to be filled to make this mechanism work. I do not expect this to take more than around 40 minutes to an hour.

Introduction of the interviewee(s) – ask them to please give their background and current role.

I. General Questions

Which institutions and organisations are involved in PA management and financing conservation? What are their current and intended roles and responsibilities?

How do different stakeholders at a national, provincial, district, local and ward level, as well as both public and private interact with each other to achieve conservation or environmental outcomes?

What are the support functions required for PA establishment, management and financing in PNG and who provides the specific support within each of these requirements?

What is the ability of a specific institution to deliver that support effectively?

What is CEPA's role to implement its mandate for PA management in the country? Please describe.

What are the gaps in the institutions and why are they not fulfilling their roles? i.e., making wildlife permits/ rehabilitation centres.

II. Strengthening Institutions and groups

How best the institutions (i.e. CEPA, provincial government and government agencies) be structured to fulfil their identified roles and responsibilities? This should include, but not limited to, issues related to PA governance, management, implementation, monitoring, enforcement, legal support, introducing financial mechanisms, revenue collection, auditing and reporting

How are different genders and vulnerable groups are included in the system (including within the government and non-state actors) of PA management and financing?

How can the under-represented groups be strengthened in the governance, management and implementation of conservation activities?

What are the benefits of working together in a coordinated manner?

III. PA policy and legislations

What is your knowledge and understanding of the national policy and regulatory frameworks governing PA management and financing in the country?

What are some gaps and overlaps seen in the policies and laws? What are the existing gaps that you want to see addressed in policy, planning, legislations, government agencies, etc?

Can you provide some practical solutions on how these relevant legislations with lead agencies can support the biodiversity fund?

IV. Training needs

What are some of the training needs required by you or your organisation? What are the most important training needs or priorities?

What must be done to identify those training needs?

Who should provide those trainings?

V. Challenges and recommendations

What are the biggest challenges in doing conservation and PA management in the country and why?

Are there any recommendations you think will help improve conservation outcomes in the country?

What are some priorities that should be taken to improve conservation?

ANNEX 2: List of people interviewed

No	Name	Organisation	Title	Telephone/ mobile phone contact number and email address
1	Yolarnie Ameopu	Piku Biodiversity Network Inc	Director	Email: yamepou2014@gmail.com
2	Bernard Suruman	CEPA	Manager, Marine PA	Email: bsuruman2020@gmail.com
3	Benside Thomas	CEPA	Manager, Terrestrial PA	Email: beside.thomass@gmail.com
4	Fabian Taimbari	CEPA	Senior Scientific Officer, Oil and Gas	Email: taimbari.67@gmail.com
5	Gerald Natera	CEPA	Manager, GIS	Email: gnatera.gn@gmail.com
6	Andrew Rylance	UNDP	Advisor	Email: andrew.rylance@undp.org
7	Ted Mamu	UNDP	Manager	Email: ted.mamu@undp.org Mobile: +675 7215 9893
8	Simon Simoi	Madang Provincial Government/ Administration	Director, Policy and Planning	Email: simonsimoi2018@gmail.com Mobile: +675 72289890
9	Derek Warakai	East Sepik Provincial Administration	Director Disaster, Environment and Climate Change	Email: derekwarakai@gmail.com Mobile: +675 70885385
10	Desmond Vagelo	West New Britain Provincial Government	Director, Environment and Climate Change Unit	Email: dvaghelo@gmail.com Mobile: +675 73024322
11	Saina Jeffery Philyara	CEPA-JICA Biodiversity Project	Terrestrial Local Expert	Email: jeffreysaina@gmail.com
12	Simon Saulei	UPNG	Professor and head of Biology	Email: simon.saulei@upng.ac.pg
13	Graham Sem	UPNG	Professor and Dean of Environmental Science	Email: graham.sem@upng.ac.pg
14	Omoro Asi	Kae Association	Chairman	
15	Moira Lunge	MRA, Geological Division	Senior Exploration Geologist	Email: mlunge@mra.gov.pg
16	David Mitchell	Eco Custodian Advocates Inc	Director	Email: dmitchell.eca@gmail.com

17	Vojtech Novotny	Department of Ecology, Biology Centre, Czech Academy of Sciences, University of South Bohemia New Guinea Binatang Research Centre	Professor and Head Director	Email: novotny@entu.cas.cz or vnovotny@binatang.org.pg
18	Michelle McGeorge	Port Moresby Nature Park	Director	Email: michmcgeorge@hotmail.com
19	Guy Dutson	The Biodiversity Consultancy Ltd	Senior Principle Consultant	Email: guy@biodiversitysolutions.com.au
20	Paul Baker	Institute of National Affairs	Director	Email: paul.barkerinapng@gmail.com
21	Modi Ponto	Tree Kangaroo Conservation Program	Assistant Director	Email: modi.pontio@treekangaroo.org
22	Peter Dam	FORCERT	Advisor and Assistance Director	Email: dam.forcert@gmail.com
23	Pamela Avusi	FORCERT	Senior Program officer	Email: pavusi@forcertpng.org
24	Cosmas Makamet	FORCERT	Director	Email: cmakamet.forcert@gmail.com
25	Claudia Sipison	FORCERT	Project Officer	Email: csipison.forcert@gmail.com
26	Wilfred Tangole	NBPOL	Superintendent, Small Holder	Email: Mobile: 7182 2298
27	Leo Mapmani	Talasea District Development Administration (DDA)	District Administrator	Email: lmapmani@gmail.com Mobile: 71552546
28	Somei Jonda	Mahonia Na Dari	Care Taker Manager	Email: office@mndpng.org or someijonda@gmail.com Mobile: 7991 8560
29	Timothy Gitua	Fraud Directorate, PNG Constabulary	Deputy Director	Email: Mobile: 70881820

30	Gabriel Bakani	Kulungi LMMA Committee and Healthy Island Concept. Ward Development Committee Member, Ward 2, Talasea District, Kulungi village	Former Secretary of Kulungi LMMA Committee and Chairman Healthy Island Concept and Former MP of Talasea and Minister Public Utilities (1977-1982), former teacher,	Mobile: 723 17818
31	Kale Simon	Director/Advisor, Division Planning and Monitoring	Simbu Provincial Administration	Mobile: 73524 322 Email: kalesion45@gmail.com
32	Panu Wagum	Balek Wildlife Sanctuary, Madang	Assistant, leader	Mobile: 75978365 Email: panujefferywagum@gmail.com
33	Rebecca Samuel	WWF Madang	Coordinator, Marine Program	Phone: 4221337/1338 Mobile: 726 36675 Email: rsamuel@wwfpacific.org
34	Francisca Dem	New Guinea Binatang Research Center, Madang	Deputy Director	Phone: 74671982/79399892 Email: fdemic@gmail.com
35	Bill Kiatig	Kau Wildlife, Madang	Committee and community leader	Mobile: 79334918
36	Markus Kachau	Madang Provincial Administration	Acting Provincial Administrator	Email: markuskacau@gmail.com
37	Kenneth Mamu	PNGFA, Madang	Project Supervisor, Ramu Block 1	Mobile: 71787 7570 Email: kmamu@pngfa.gov.pg
38	Benny Gowep	CEPA, Ambunti	Wildlife Range, Sepik Wetlands, Ambunti	Mobile: 73992359
39	Louise Koinduo	Wewak Town LLG	Executive Officer, Office of the Mayor	Mobile: 70630701
40	Jerry Wana	SWAMI, Ambunti	Chairman	Mobile: 73498654 Email: jwana038@gmail.com
41	Pricilla Hokoi	PNGFA, Wewak	Monitoring Officer, Hawain LFA	Mobile: 72548295
42	Kevin Hawan	East Sepik Provincial Government, Wewak LLG	Executive Manager	Phone: 4562688 Mobile: 74313470 Email: hawankevin5@gmail.com
43	Mathew Kakoto	Wewak District, East Sepik Province	District Program Manager	Mobile: 72031857

44	Sophie Numbuk	NAQIA, Wewak	Senior Agriculture Quarantine Officer	Phone: 4562586 Email: snumbuk@naqia.gov.pg
45	Jeffery Yawi	Provincial Planning Office, ESP Provincial Government, Wewak	Acting Executive Manager, Planning and Monitoring	Mobile: 70439873 Email: jbyawi@gmail.com
46	Michael Sakar	Wom War Memorial Park	Supervisor for maintenance	Mobile: 71481096
47	Martha Wamo	CEPA-JICA Biodiversity Project	Local Marine Expert	Mobile: 75498043 Email: mrthwm47@gmail.com
48	Benedict Gaga	DPGLLG	Senior LLG Advisor	Mobile: 7968 7921 Email: bgaga@dplga.gov.pg or benedict.gaga@gmail.com

ANNEX 3: Key conservation government agencies and partners in conservation and environment management, regulations and gaps in compliance to Protected Area Policy

Legislation	Lead agency	Compliance with relevant MEAs, and existing policy and law/purpose	Gaps in application generally/remarks	Protected Areas Policy, compliance and gaps
BIODIVERSITY PROTECTION AND CONSERVATION				
PA Bill	CEPA	<p>CEPA completed drafting the Protected Area Bill 2016, which is now before the First Legislative Council and the Department of Justice and Attorney General (DJAG) for deliberation. Once the PA bill is enacted by Parliament, it will become an Act, to provide for and give effect to the National Goals and Directive Principles of the Constitution, in accordance with other national laws and obligations in international law to:</p> <p><i>(a) to provide for the conservation and replenishment of the environment, biodiversity and land and its sacred, scenic and historical qualities in Papua New Guinea, for the benefit of ourselves and posterity, in accordance with the Fourth National Goal and Directive Principle (Natural Resources and Environment) of the Constitution;</i></p> <p><i>(b) to regulate the management of a protected area network, protected area policies and protected areas, including measuring, reporting and verification and the establishment of targets for protected areas, and for future protected areas, in accordance with treaties and international and domestic agreements, including the Treaty between Australia and the Independent State of Papua New Guinea concerning Sovereignty and Maritime Boundaries in the area between the two Countries, and the area known as Torres Strait, and Related Matters, Sydney, 18 December 1978 Entry into force: 15 February 1985, known as the Torres Strait Treaty, the Convention Concerning the Protection of the World Cultural and Natural Heritage, known as the World Heritage Convention other international and domestic agreements, and for related purposes; and</i></p> <p><i>(c) to repeal various Acts and for other related purposes.</i></p>	<p>The PA bill will be in compliance with the Constitution and other requirements and promotes Section 41 of the <i>Organic Law on Provincial Governments</i> and Local Level Governments, which declared that this Act relates to a matter of national interest.</p> <p>The Bill allows for proper planning and zonation, consultation with communities and many other things missing in the CEPA Act and Environment Act. It also is done in such a way to capture what was written in the PA Policy.</p>	<p>Section 53 of the Act discusses the importance of creating a Biodiversity Trust Fund that would help support PA networks in the country. However, a recent review suggests there is political influence on how this fund is set up and proceeds are used. If that is amended, then it becomes independent as much as possible.</p> <p>The new Act will provide an enabling condition for the conservation and management of PA across PNG.</p>

<p>Conservation Areas Act (1978)</p>	<p>CEPA</p>	<p>This Act allows the conservation and protection of biodiversity through the protection of habitats and not just species, which is the best form of conservation. It promotes basic right of local communities and landowners in ensuring consultations before the establishment of the protected area. In addition, the Act promotes the involvement of local communities and key stakeholder participation in the development of conservation areas management rules and the composition of the conservation areas management committee.</p> <p>The Act also ensures involvement of communities in the control and decision-making in the management of the conservation area. It also allows public excess to information.</p> <p>More significantly, the Act establishes the environment council, a group of appropriately qualified experts, responsible for influencing the ultimate decision-making over protected areas</p>	<p>The Act does not expressly declare the adoption or observance of relevant MEA's that PNG has signed up to. i.e., World Heritage Convention or CBD etc. It does not provide for access to benefit sharing in biological resources, intellectual property rights and transfer of technology in biological resources.</p> <p>Moreover, the Act does not provide for the proactive dissemination of information of protected areas by the Authority.</p> <p>It lacks adequate grievance mechanisms. The PA under the Act are restrictive and do not encourage traditional methods of hunting and gathering which ultimately does not enhance local community livelihoods. It also does not cater for PA's under REDD+ programs nor does not address the issue of conflicting uses of land i.e. i) though intended to be protective is inconclusive as it does not specify the nature of activities can be allowed as an alternative to conservation or what is the criteria to be applied to justify the alternate use; and ii) restricts only customary interests when a conservation area is declared but does not restrict developmental activities such as logging and mining.</p>	<p>Sections 12- 17 provides for the conservation of biodiversity and its habitat by making provision for the setting aside of customary land as protected areas also meeting the CBD Article 8 and PA Policy Pillar 1 requirements for 'in situ' biodiversity conservation and one that is relevant to local communities and protect traditional lifestyles.</p> <p>The Act also allows for consultation with local communities thus satisfying the requirements for Free Prior Inform Consent (FPIC) under the CBD and the Pillar 1</p> <p>Sections 25- 29 allows for participation by local communities in the formulation of the rules for the conservation area (CA) and in the management and control of CA's.</p> <p>Sections 25 provides from wide stakeholder partnerships in the initiation discussion, declaration and management of the CA and allows local communities membership in the governing body of the PA ensuring transparency in decision-making.</p> <p>Section 12(4) and s21 allows public access to information being held by relevant authorities in relation to registered protected areas by anyone.</p>
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			<p>what public purpose takes precedence and a criterion should be set in law should apply in the event of such decisions by those required to make such a decision including the Minister.</p> <p>PA Policy</p> <p>Rules for zoning and the different protected areas type are not provided (Pillar 1.) It does not provide for conservation and benefit sharing arrangements as required under Pillar 2, nor does it provide for benefits that should arise from the commercialization of genetic resources (a requirement under CBD but not captured in new PA Policy. Currently CEPA has signed the Nagoya Protocol in 2019. It is in collaboration with SPREP and working towards establishing the Access Benefit Sharing Mechanism or ABS).It does not provide for financing mechanisms for the sustainability of protected areas. (Pillar 5) and; It does not provide of the CARR (comprehensive, Adequate, Resilient, relevant) system of conservation. (Pillar 4)</p> <p>Requirements for field visits, stakeholder consultations and monitoring by CEPA and government as per Pillar 4 is absent.</p>
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<p>Conservation Areas (Amendment) Act No. 2 of 2014</p>	<p>CEPA</p>	<p>This Act amends sections 2, 18, -20(2), 24 and repeals sections 22 and 23 to cater for the change from the “Department” with Minister as head to an “Authority” with Managing Director (MD) as the head.</p> <p>These changes were necessary as a result of the introduction of the Conservation and Environment Protection Authority Act No. 9 of 2014 and certified the 3rd May 2014.</p> <p>References to the “Department of Environment and Conservation” is deleted and the “Conservation and Environment Protection Authority” is inserted (s2).</p> <p>References to “Minister” are deleted and the “Managing Director” is inserted in some places . (s18 - s20 and s24).</p> <p>Section 22 and 23 are repealed and replaced giving authority to the MD to issues certificates recognizing conservation areas rather the Minister.</p>	<p>Does not change the objectives of the Conservation Areas Act however does propose some negative implications;</p> <p>i) The MD assuming responsibilities of the Minister in some aspects is not good practice as it under rates the significance of conservation efforts from a national perspective and undermines the level of authority needed to ensure equal significance to pursuit of conservation objectives in the country.</p> <p>ii) It is good practice to have a high level policy authority within government for a national system of protected areas and the ministerial level is necessary and should not be any lower.</p>	<p>The implication for protected areas is that conservation efforts in the country are being lowered to bureaucracy level which will make it harder to address country constraints which requires high level policy input, i.e.</p> <p>i) Current issue with conflicting/competing stakeholder interests in the use of land, that is an issue that needs to be addressed at ministerial level.</p> <p>ii) Lack of resources is also an issue that needs to dealt with at ministerial level hence conservation efforts should be given equal importance at that level.</p>
<p>Fauna (Protection & Control) Act 1966</p>	<p>CEPA</p>	<p>This Act does provide for protection of fauna species and allows the establishment of protective zones for the protection of these species. (s6-7)</p> <p>It does not control harvesting/destruction of fauna. (s4)</p> <p>The law allows for establishment of sanctuaries, wildlife management areas (WMA’s), i.e., classes of fauna, protected areas, i.e., one class of fauna. (s11, s15, s14)</p> <p>It also Promotes conservation initiatives by the community and provides for local community engagement/ participation in the management of WMA’s, protected areas and sanctuaries, i.e. development of wildlife management rules and being part of the wildlife management committee.</p> <p>It enhances community livelihood by allowing for traditional methods of hunting and gathering in the protected area. (s23)</p>	<ul style="list-style-type: none"> - Scope is limited as it is restricted to the protection of just fauna as distinct from flora and the habitat. - Does not expressly declare the adoption/observance of relevant MEA’s that PNG has signed up to. - Does not provide for access to benefit sharing in biological resources, intellectual property rights and transfer of technology in biological resources. - Does not provide for the proactive dissemination of information of protected areas by the Authority. - Does not expressly provide for adequate grievance mechanisms 	<p>Compliance:</p> <p>Section 6 - s 7 is significant in that it is the only Act that gives the Minister power to make declarations of protection over endangered species.</p> <p>Provides for protection of only particular species declared under and for the purposes of the Act and become the property of the State.</p> <p>Section 17</p> <p>Requires public (local communities) participation in the formulation of WMA rules and management of WMA’s.</p> <p>Gaps: General</p> <p>The scope is limited, it allows for protection of</p>

			<p>only fauna (as distinct from flora) and only particular species especially those officially declared by the Minister. It does not ensure a holistic approach to conservation which is globally preferred and seen to be more effective at all levels, global and locally.</p> <p>Participation of local communities in the planning and monitoring of WMA's is limited. Whilst it allows for community participation, it also makes provision communities and LLG to be excluded in the formulation of rules that will apply to the WMA.</p> <p>Penalties and fines for breaches under the Act range between K20.00 and K1000.00 and are outdated and ineffective. Would need to be reviewed to ensure a deterrent effect.</p> <p>PA Policy</p> <p>The policy does not expressly within its provisions encourage the practice of <i>'in-situ'</i> conservation which is the most effective form of conservation as it protects the natural habitat and provides a more complete form of protection than just specie protection. It is a requirement of the CBD being also adopted by the PA Policy. (Pillar 1)</p> <p>Does not expressly cater for the basic legal and social rights of the people, i.e., FPIC, access to natural resources and biodiversity and access</p>
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				<p>to use of customary land. (Pillar 1)</p> <p>Does not provide incentives (payment for conservation duties) for conservation and expressly prohibits monetary compensation for conservation duties. (Pillar 2 & 5)</p> <p>Also does not provide for conservation and benefit sharing for the use of biological / genetic resources for local communities. (Pillar 2)</p> <p>Being specific to species protection, it does not provide for the support of protected areas system nor does it allow for a fair and equitable financing to ensure sustainability of protected areas. (Pillar 4 and 5)</p>
<p>Fauna (Protection & Control) (Amendment) Act No.3 of 2014</p>	<p>CEPA</p>	<p>Amends provisions of the principle Act to cater for the introduction of the Conservation and Environmental Protection Authority Act No. of 2014 and the establishment of CEPA.</p> <p>Amends sections 1, 6, 11, 13, 7-8, 15-17, 24 and 27 and repeals sections 2, 4, 23, 26, 27.</p>	<p>Apart from errors in the amendment (s1), the same arguments are raised in the discussion of the amendment to the Conservation Areas Act, that these amendments have the effect of limiting the influence of a higher level policy authority i.e. the Minister. This takes away focus by higher level authorities in government on conservation objectives in the country.</p> <p>Amendments to s4 (repealed) is short sighted and do not encourage opportunities for exercise of due governance limiting decisions on protection of fauna in hands of just one person the Managing Director.</p>	<p>Act previously, the following are negative implications that can be foreseen:</p> <p>i) Changes to s4 identifying the MD as the conservator is a bad decision and should still be an appointment by the Minister formally through the National Gazette as previously. It may mean that the functions of the conservator will be exercised by a group of persons above the MD, i.e. CEPA Board or a ministerial committee considering duties of protecting the environment does not fall only under CEPA.</p>

			<p>Amending s26 to refer all conflicts to the National Court is also short sighted, i.e.</p> <p>i) It limits the opportunity of dealing with conflicts in a more responsible and affordable manner considering access to justice in this country is limited and not unaffordable.</p> <p>ii) It is negligent, being inconsiderate already of the back log in cases in the formal judiciary system. This does not alleviate the problem of inaccessibility to the courts in environmental conflicts.</p> <p><i>[See discussion under Conservation Areas (Amendment) Act]</i></p>	<p>ii) Repeal of section 23 takes away useful, immediate and affordable conflict resolution mechanisms provided under the principal act to attend to grievances and conflicts that may arise.</p>
<p>International Trade (Fauna & Flora) (Amendment) Act 2003</p>	<p>CEPA</p>	<p>The law adequately and expressly adopts the application of the Convention on International Trade in Endangered Species of Fauna and Flora (Preamble). It also controls exports, re-exports and imports of species of fauna and flora identified by the Act (s3A</p>	<p>The scope is limited to protection of species rather than the habitat and does not promote in-situ conservation of biodiversity. It also does not provide access to information for the public etc. In addition, it does not provide for grievance mechanisms to address conflicts that may arise.</p>	<p>Compliance:</p> <p>Section 3A provides for the regulation of the trading of flora and fauna species (dead and alive) declared for protection under the Cites Convention and under the Act pertaining to local species. The manner of protection is by the controlling of the export and import of such species.</p> <p>Section 13A - 13K adequately provides procedures for enforcement of breaches under the Act.</p> <p>Gaps:</p> <p>General</p> <p>Limited in the scope of application in that it applies only to the trade and export of</p>

				<p>particular species under the Cites Convention and the Act as distinct from protection of such species.</p> <p>PA Policy</p> <p>The Act is specific only to protection of species both flora and fauna and not in their natural environment hence is not supportive of the requirements for '<i>in situ</i>' conservation and protection of natural forests as a whole which is necessary habitat for plant and animal life. (CBD Article 8 and PA Policy, Pillar 1)</p> <p>The Act does not make provision for benefit sharing mechanisms and benefits from genetic resource use for local communities where local species are involved. (Pillar 2 and 5). The Act does not expressly provide for consultations and consideration of the basic rights of local communities regarding local species. (Pillar 1)</p>
<p>International Trade (Fauna & Flora) (Amendment) Act No. 4 of 2014</p>	<p>CEPA</p>	<p>This is being also one of the recent legal amendments to cater for the changes to the Department of Environment & Conservation to an Authority.</p> <p>Amends s1 (interpretation) to refer to the MD of the newly established CEPA as the Management Authority. Other sections amended includes sections 3A and 3C.</p>	<p>Still compliant with the CITIES convention.</p>	<p>No negative implications.</p>

<p>Crocodile Trade (Protection) Act 1974</p>	<p>CEPA</p>	<p>The Act controls the harvesting and trading of crocodiles and crocodile products.</p>	<p>The Scope is limited to just the protection and control of one specie, the crocodile. It does not provide for access to information.</p>	<p>Compliance:</p> <p>Section 3 regulates the harvesting and trading of the crocodile, it's by products, skin and related matters.</p> <p>Sections 3-6 and s 11 provides for protection of its species is done by limiting the harvest of crocodiles only to citizens. Foreigners and non-citizens require a license to farm, harvest and kill crocodiles</p> <p>Gaps:</p> <p>Too limited in its scope as the Act applies to only one specie i.e., the crocodile. Furthermore, like the International Trade (Flora and Fauna) Act, despite its title, it is specie specific, it only applies to the trading of the crocodile skin and makes provision for the protection of its species by controlling the harvest through a license to harvest crocodiles. Also, like other Acts that apply to the protection of species, this Act does not expressly provide for protection of natural habitats for the purpose of preserving the crocodile. It does not provide for the principles and objectives of the PA Policy generally. Breaches under the Act are yet to be prosecuted and penalties and fines are outdated and needs to be reviewed and updated.</p>
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<p>Crocodile Trade (Protection) (Amendment) Act No. 5 of 2014</p>	<p>CEPA</p>	<p>This Act amends sections 1, 5-7, 10, 15, 17-18, 24 and repeals s21. Much of the changes are to cater for the changes to an authority as per the Conservation and Environmental Protection Authority.</p>	<p>Same remarks as in discussion of the other amendment legislations on protected areas, there is an intention to remove the authority of the Minister as the highest level authority in decision-making.</p>	<p>Changes in references to the minister must be considered carefully and generally there are typos in the legislation.</p> <p><i>[Refer to other discussions on amended legislations to align with CEPA]</i></p>
<p>Conservation and Environment Protection Authority Act No. 9 of 2014</p>	<p>CEPA</p>	<p>This Act provides for the establishment of CEPA apart from the protection and conservation of the environment as per the 4th National Goals and Directive Principles.</p> <p>It is also intended to observe the basic social obligations, the Goals and directive of the constitution for the purpose of public interest, public order and welfare.</p> <p>The Act also provide for the observance of objective and principles of environment conservation matters related to in international agreements and conventions.</p>	<p>The Act does not provide access to public of information to be kept by the authority nor does provide for the keeping of register.</p> <p>It also restricts the right to information on the basis of confidentiality and upon the discretion of the managing director.</p> <p>The Act does not provide for the collation of relevant data and information and nor for the proactive dissemination of relevant environmental information to the public on a regular basis for public awareness.</p>	<p>Only relevance to protected areas in s4 the objectives of the Authority. Only makes reference to the duty of the administration of the different conservation legislations.</p> <p>Gaps :</p> <p>The Act does not make reference to the different principles and objectives of the Protected Areas Policy (PAP)</p> <p>It also does it make reference to the different working groups, steering committees related to by the PAP in the different types of protected areas.</p> <p>It Does not refer to financial options for conservation objectives. etc</p>
<p>Fisheries Management Act 1998</p>	<p>NFA</p>	<p>This Act adequately and expressly adopt and apply the international treaties in its objectives. These objectives and principles allow for the;</p> <ul style="list-style-type: none"> i) conservation the living resources for both present and future generations; ii) application of precautionary approach to the management and development of aquatic living resources; 	<p>The Act is limited to protection of marine biological resources. There is no provision recording of relevant information and ensuring excess of such information to the public.</p>	<p>Compliance:</p> <p>Section 3 like the EA and the FA, this Act is the principal act responsible for the use and management of marine biological species and gives effect to the National Goals and directive Principles.</p>

		<p>iii) protection of the ecosystem as a whole, including species which are not targeted for exploitation, and the general marine and aquatic environment;</p> <p>iv) preservation of biodiversity;</p> <p>v) minimisation of pollution; and</p> <p>vi) the implementation of any relevant obligations PNG has under international law and international agreements (s25):</p> <ul style="list-style-type: none"> - recognizes basic rights and traditional fishing rights of local communities (s26); - provides for grievance/conflict resolution mechanisms within its administration (s64-s66); and - provides within its provision's recourse for resolution of conflicts. (s56-s59). 		<p>Section 25 set outs the functions of the NFA and incorporates principles of sustainability, i.e., conserving for future generations, integration of social, economic and environmental considerations, the precautionary principle and the protection of ecosystems and biodiversity.</p> <p>Section 30 allows for protection depleted or threatened marine resources. Like the Fauna Act this section allows NFA to create rules to control the harvest of fish and marine life in and by seasons. The regulations also offer protection by providing a framework in which fish farming and harvest can work.</p> <p>Section 32 prevents the use of poisons and explosives in fishing and protects marine biodiversity as a whole.</p> <p>Gaps:</p> <p>Like the Forestry Act (FA), though legally mandated to protect natural resources and biodiversity, which aspect is lacking due to biased focus on commercial fishery.</p> <p>Like the EA and FA, if effectively implemented it will successfully contribute protection of fish and marine life.</p> <p>CEPA would need to collaborate effectively</p>
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				with both PNGFA and NFA to enhance conservation efforts in the country. It is not enough to create marine sanctuaries as protected areas but to also ensure sustainable fishing as well.
Forestry Act 1991	PNGFA	<p>This Act controls the management, development and protection of PNG's forest resources and environment through the sustainable use of forest resources and to renew these for future generations through conservation and restocking of forest reserves. It provides for local community's participation in the wise use and development of the forest resources as a renewable asset. It also:</p> <ul style="list-style-type: none"> - provides for scientific study and research into forest resources to contribute to sound ecological balance, in line with the country's development objectives; - recognizes the right of the landowner to land and specifically requires for that right to be considered in all transactions regarding their forest resource; - expressly provides for landowner participation in decision -making regarding the project i.e. development project guidelines/ document and review of project and performance of the developer; and - expressly provides for the keeping a public register of matters 	<p>Though there is a requirement to keep a record of matters, there is no provision for access of information on those matters to the public in this Act. The Act expressly restricts information of board resolutions /decisions and facts from public domain on the basis of confidentiality and expressly states, such information is not of public interest (s103A(3)(a)).</p> <p>PNGFA work in partnership with CEPA in the management of the forest through EIS/EIA and permit issuance. CEPA is represented on the Forestry Board but does this partnership really work effectively is still questionable.</p> <p>The amended National Forest Policy also calls for PNGFA to demarcate 10 % of loggable areas as set-aside areas for conservation. This is still not clear and not practiced nationally. Does that mean the 10% set aside are those buffer zones in logging coupes and set-ups or does it mean 10% of loggable forest area must be demarcated for conservation purpose? In Wanag in Madang Province, PNGFA through the Forest Research Institute (FRI) has partnered University of Minnesota and New Guinea Binatang Research Centre under the ForestGEO Project to conserve 50,000ha of forest for global biodiversity and carbon stock assessment.</p>	<p>Compliance:</p> <p>Section 47 gives basis to NFDG to guide the development of the forestry sector and update the forestry policy and the plan to comply with international developments.</p> <p>Section 6 refers to the 4th National Goals and Directive principles (Constitution) and apart from declaring the use of PNG's forests for economic development, it also provides for the protection and sustainable use of forests and particularly requires the maximizing of PNG's forest resources in its objectives.</p> <p>Gaps:</p> <p>As with the EA, it is largely focused on planning and management of forests and does not specifically provide for conservation or protected areas.</p> <p>However, compare with other state agencies who are mandated to observe the environment this sector can contribute effectively to environment protection if the LCOP, the TLS and other</p>

			<p>In retrospect, there is hardly any conservation work done by PNGFA. It is mandatory for all Forest Management areas (FMA) to conserve 10% loggable forest as this is captured in the FMA agreement as a condition. Generally, most provinces and companies are not aware of this 10% set-aside rule.</p> <p>The amended Forestry Act 1998 also calls for the establishment of a fund called the National Forestry Fund. The proceeds of the Fund shall be used to promote the protection, development and sustainable use of forest resources, and to promote community forestry, and community development.</p>	<p>strategies are effectively implemented.</p> <p>Likewise, if a balanced approach is taken and timber production is given less and equal consideration much can be achieved by its mandated objectives for protecting, conserving and maximising forest resources for future generations.</p> <p>With the possibility that the country REDD+ programme may be housed under PNGFA, CEPA would need to collaborate with all stakeholders including PNGFA as to how these REDD project areas can be included as protected areas to meet its targets under the CBD and the Nagoya protocol.</p> <p>There is opportunity for CEPA to partner with PNGFA to ensure levies provided to landowners for reforestation and export of logs can be utilised to do conservation work. Some time back in 2019, some of the levies were accessed by the District Development Authorities (DDA) to utilise these funding for infrastructure project development. A clear example was the use of funds from reforestation levies by Bulolo DDA to upgrade and seal a road in Bulolo town (Pers. obs., B. Bito). Nevertheless, PNGFA and CEPA are not working closely and CEPA is not attending some of the meetings</p>
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				PNGFA invited them to participate (e.g. REDD+ dialogue with CCDA).
Mining Act 1992	MRA & DMPGH	<p>The Act provides for portion of land in the area subjected to a mining lease to be set aside for a reserve for the life of the mining lease. It recognizes the right of the landowner to the land and the need for consultations and allows for consultation with the landowner, though only once through the development forum before a mining lease is granted. The Act expressly identifies avenues for conflict resolution with disputes regarding land and allows for grievance mechanisms within its administrative arrangement</p> <p>The Mining Act 1992 gives the power for Mineral Resource Authority (MRA) to be established as an administrative support and regulatory Authority for the mining industry in the country. It deliberates on many things such as acquisition of state interest, mining development contract, mining leases and tenements, compensation to landholders, and savings and transitional provisions. The Act stipulates that any minerals 6 feet underground belongs to the State.</p>	<p>The Act does not indicate anything to do with conservation but is subjected to land acquisition under the Lands Act 1996.</p> <p>The Act authorizes the holder of a mining lease in accordance with the <i>Mining, (Safety) Act 1977</i> and any conditions to which the mining lease to use the land as described in Section 41. However, Section 8 on Exploration and mining on reserve land stipulates that:</p> <p>(1) An application for a tenement over land reserved for exclusive use under the Land Act 1996 or any other Act may not be granted without the consent of the Minister responsible for that reserved land; and</p> <p>(2) Where consent has been obtained under Subsection (1) no further consent shall be required if the tenement is converted to another tenement.</p> <p>That reserved land under the Mining Act refers to areas within the mining lease areas that are of cultural and archaeological significance, have heritage values such as scared sites or are protected under some form of conservation.</p> <p>These reserve sites are located within the mining lease area and are supposed to be left undisturbed (conserved).</p> <p>As to what reserve is not specified and is left to the discretion of the Minister responsible and is not specific. There is no provision for the keeping</p>	<p>The Act focused on accessing resources for the purposes of mining minerals and other extractive resources, it is does not have be compliant with the PA Policy. Section 7 however may have to be improved to enable better use of areas set aside as reserves. Likewise, the protected areas legislation or legislations on protected areas would need to cater for use of these areas for conservation of biodiversity.</p> <p>The Act vaguely talks about conservation of the marine environment. These areas are not set up by the mining companies, however, the company only identifies and protects them by not disrupting them. This means the role of conservation is left with the company's Community Affairs Department to implement while MRA only provides support.</p> <p>There are some consultations between CEPA and MRA to work together to promote or do conservation but yet there are less tractions. More recently, in 2018, the geological survey division of MRA started a meeting with CEPA and the Tourism Promotion Authority (TPA) to venture</p>

			<p>of a register and the access of that information to the public, and the information, rather, is expressly restricted on the basis on confidentiality. The public and landowner consultation is limited as there is no provision for only one occasion, i.e. the development Forum.</p>	<p>into geo-environmental conservation. The geological survey division is responsible for geoscience, which is a new field in PNG, which promotes landscape and landform conservation where information can be provided as part of the promotion of the sites for conservation and eco-tourism.</p> <p>MRA understands CEPA can handle conservation but MRA can provide information on landform formation history, soil geological history, tectonic plate movement, and hazards such as volcanic and earthquake. MRA believes there are different areas in PNG such as Mt Wilhelm and Kokoda Track that have different histories. Mt Wilhelm can be used in geo-ecotourism where tourists can be educated about how it was formed. Once documented and promoted as part of the geo-ecotourism, it will promote ecotourism and conservation. At Boera village outside Port Moresby, there is evidence of land connectivity or land bridge between PNG and Australia. This information can be linked to the Owen Stanley Mountains of the Kokoda which is an iconic tracking place. Hence tourist visiting Kokoda might as well visit Boera to know the history of the land formation between Australia and PNG.</p>
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<p>Oil & Gas Act 1998</p>	<p>DPE</p>	<p>The Oil and Gas 1998 Act governs the exploration for and production of petroleum (including oil and gas) in Petroleum Development Licence areas (PDL), including the offshore areas, and is managed by the Department of Petroleum and Energy (DPE).</p> <p>The Act also allows granting to traditional landowners and Provincial Governments and Local-level Governments the benefits arising from projects for the production of petroleum (including oil and gas), and the processing and transportation in the country of petroleum and petroleum products.</p> <p>The Act also repeals various Acts and for related purposes. There is nothing capture in the Act that captures conservation but the Act and is still compliant to the Constitution and Directive Principle goals, including natural resources and environment.</p> <p>Like the Mining Act, all petroleum and helium at or below the surface of any land are the property of the State. However, social mapping and landowner identification studies must be done on the land of interest. The national interest is often put first like the Mining Act.</p> <p>The Act also provides for a portion or portions of land within the petroleum tenement and not to be used for the purpose of the tenement. It recognizes the right of land owners to land and specifically expressly provides for full scale land investigations, social mapping and compiling of genealogical history of landowners before the development forum and the granting of a petroleum license.</p>	<p>Unlike the Mining Act, this Act not specific as to whether it should be a reserve and also in the same breath gives discretion to the minister to revoke the same at his discretion. Also, there is no criteria specified for such a decision.</p>	<p><i>[Same as above]</i></p> <p>Any conservation areas or areas of conservation values are still protected and managed by the developer. It seems there is lack of collaboration work with CEPA and DPE</p>
<p>National Parks Act 1982</p> <p>[Now repealed by CEPA Act]</p>	<p>DEC (now CEPA)</p>	<p>Provides for protected areas in the form of parks and reserves on State land. Differing from the Conservation Areas Act, it provides for conservation sites, parks and reserves only on state Land. (s3- s5)</p>	<p>The Act does not encourage public and community participation in the control and management of these areas hence protected areas declared under this legislation are rundown, ill-maintained and not effectively functioning anymore.</p>	<p>Compliance:</p> <p>This Act is the only protected areas legislation that is similar with the Conservation Areas Act and also provides for conservation of sites, and areas that are of biological, topographical, geological, historical,</p>

			<p>It has been documented that of the 50 plus protected areas registered, a majority (73 percent) have minimal or no management structure.</p>	<p>scientific and cultural significance.</p> <p>Gaps:</p> <p>Unlike the Conservation Areas Act, this Act does not provide for public participation in decision making towards plans for parks, reserves or cultural sites.</p> <p>The PA Policy does not make reference to the National Parks Act due to the fact that upon the gazettement of the CEPA Act, the National Parks Act was repealed. Literally as it is now there is no legislation that provides for the application, declaration and management of conservation sites, or reserves on state land, including those areas in the country already declared as National Parks.</p> <p>In terms of the PA Policy, it appears much of emphasis is on conservation/protection sites and areas on customary land rather than state land and there is an obvious lack of reference to declaration and management of protected areas on State land. The only reference to it is National Parks as types of protected areas.</p> <p>That is a blunder considering we already have areas declared as National Parks, sanctuaries, etc and the PA Policy does not provide for them.</p>
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				This would need to be rectified in a legislation for protected areas which should encompass conservation/protected areas on both state land and customary land.
ENVIRONMENTAL PLANNING AND MANAGEMENT				
Environment Act (2000)	CEPA	<p>- As an Act particularly focused regulating and managing the environment to ensure a wise use of the country's natural resources rather than conservation of biodiversity, it ensures under s6;</p> <p>(i) management of the country's natural resources for the benefit of the whole nation and ensures renewable resources are replenished for future generations.</p> <p>(ii) protection of the environment through the monitoring of large impact developmental project activities to improve the quality of life and ecological processes on which life depends on,</p> <p>(iii) means to give effect to country obligations under any international treaty and conventions relating to the environment ratified by PNG.</p> <p>- s5 expressly provides for the protection of biodiversity and endangered biological species.</p> <p>The Act being a more recent legislation, it has captured major principles and best practices highlighted by global conventions and treaties i.e. the precautionary principle, polluter pay principle etc. (s6). It more than most environmental legislation and sectoral resource legislations, it ensures public consultations and public participation in environmental decision-making in a timely manner. (sections 24, 26, 29, 31, 33, 38, 55, 68)</p> <p>The Act also provides for access to information by all persons and anybody. (s131). It caters for rights of resource owners in the acquisition of resources and makes</p>	<p>The Act does not require/ regulate the need for proactive dissemination of regular environmental information for the benefit of the public and for general awareness. It does not also require the regular collation of data by the CEPA for public benefit and information and to inform the state of the environment report required by treaties and conventions.</p>	<p>Compliance:</p> <p>Emphasis under this Act is on environmental planning and management of harmful impacts on the environment.</p> <p>Regarding compliance with the PA Policy the EA contributes to protection of the environment by regulating the operations of large-scale impact projects in order to mitigate their impact on the environment. It therefore understandable that it would not, within its provisions make reference to protected areas or conservation sites.</p> <p>In application, the EA covers operations of all large-scale impact projects which does include mining, oil and gas and logging and does have an influence in minimizing harm to the environment.</p> <p>Gaps:</p> <p>The PA Policy does not apply. Though the PA policy does not apply, the EA is still a crucial piece of legislation because its effective enforcement is likely to minimize</p>

		<p>provision for payment of compensation where necessary. (s85 and s87). It also accords to landowners, opportunities to pursue relief for environmental harm/ damage by the developer in proceedings taken in the prosecution of breaches under the Act (s129).</p>	<p>environmental harm due to the wide ambit of its application and will ensure sustainable development. As realized globally, specie protection and control of pollution alone will not ensure protection of biodiversity and a holistic approach is needed. That efforts should be made by all environmental sectors where lawfully mandated to observe to ensure sustainable economic development.</p> <p>Its enforcement should be a priority because as related by the CBD and other more recent MEA's, biodiversity protection is likely to be successful provided a holistic approach is emphasized which does require focus on ensuring sustainable development as well.</p> <p>The PA Policy does make providence for a conservation council (CC) and a multi-stakeholder technical working group who will be responsible for decisions and recommendations for protected areas and for assessing applications and proposals for establishment of protected Areas.</p> <p>It would be practicable and advisable that CC or the body responsible for assessing applications and proposal for protected areas j should also be the same council referred to as the Environment council under the EA so</p>
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				as to ensure consistency in the knowledge and information of protected areas and major impact projects alike to allow informed decisions and avoid clashes in the different use of land and conflicting stakeholder interests.
Prevention of Dumping of Wastes at Sea Act 1979	Dept. of Transport	<p>Being an Act, preventing and controlling the pollution of the sea by oil and other harmful substances is a challenge but it is intended to protect the internal waters on PNG and is especially focused on oil pollution.</p> <p>It adopts and gives effect to 4 separate international conventions regulating oil spillage and pollution and applies to all ships sailing in PNG waters. Discharge of oil from these ships attracts a penalty.</p> <p>The focus is similar to those below concerning marine biodiversity.</p>	<p>The Act adopts and gives effect to 4 separate international conventions regulating oil spillage and pollution and applies to all ships sailing in PNG waters. Discharge of oil from ships attract a penalty. The focus is similar to those below concerning marine biodiversity.</p> <p><i>[see comments on Dumping of Wastes at sea Act]</i></p>	Being specific to oil pollution, it does not provide for protected areas. The Act also does aid the protection of the environment and contributes to the holistic approach to biodiversity protection as intended by the CBD
Dumping of Wastes at Sea Act 1979	NMSA	<p>This Act like the Environment Act contributes to the protection of the environment by preventing pollution of the sea by requiring permits for the dumping of wastes to protect marine biodiversity and the fragile marine ecosystem. It is in compliant with relevant international conventions on pollution including the CBD which promotes a holistic approach to conservation of biodiversity.</p> <p>It also gives effect to the International Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter, 1972 and provides for its application of in the country. Hence, it prescribes penalties for breaches under the Act in both local and international waters. It also clearly identifies the relevant state agency responsible for enforcing the Act which is the National Maritime and Safety Authority. It also provides for a register of permits and ensures its availability for public inspection by the public and anyone.</p> <p>It provides for a register of permits and ensures its availability for public inspection by the public and anyone. (s8)</p>	<p>The penalties and breaches have not been enforced effectively to date.</p> <p>Being an Act of the 1970's, the penalties may have to be revisited to ensure its consistency with world standards</p>	Like the EA, by its nature and application, it does not make reference to protected areas and therefore the PA Policy does not apply here.

<p>Prevention of Pollution at Sea Act 1963</p>	<p>CEPA</p>	<p>This Act ensures environmental protection through managing harmful impacts on the environment by preventing and controlling the pollution of the sea by oil and other harmful substances.</p> <p>It focuses on the dumping and spillage of oil in the sea and ensures the application of the International Convention for the Prevention of Pollution of the Sea by Oil, 1954, as amended in 1962, 1969 and 1971 including other related MEA's (conventions and their protocols) which are prescribed under the Act.</p>	<p>The Act does not specify the relevant state agency responsible for monitoring and carrying out the functions of the Act and the adopted conventions.</p> <p>Considering the plural number of state agencies responsible for environmental protection, it is either the National Fisheries Authority, the National Maritime Safety Authority or CEPA.</p> <p>The acts establishing these state agencies also do not specify which treaties and conventions they are responsible for enforcing.</p>	<p>Like the EA and the DOWASA, established for the purpose of protecting the environment from pollution, it need not refer to the Protected Areas Policy. Hence, the PA Policy does not apply specifically to protection and conservation of flora and fauna habitats and the natural environment.</p>
<p>Maritime Zone Act 2015</p>	<p>DJAG</p>	<p>The Maritime Zone Act identifies three principal marine management zones for PNG: 1) These are the inshore zone of high water mark to 3 nautical miles; 2) the coastal zone from 3 – 12 nautical miles; and 3) the Exclusive Economic Zone, from 12 – 200 nautical miles. Section 2.11 of the Ocean's Policy allows protection of species and ecosystem and restrict or manage fisheries activities under whatever applicable PA types used in MPAs (GoPNG, 2020). This is applicable over the full extent of PNG's maritime waters from the mean high-water mark to the outer reaches of the Exclusive Economic Zone.</p>	<p>The DJAG is responsible for managing the United Nations Convention on the Law of the Sea (UNCLOS) in PNG. The Maritime Zone Act 2015 ensures that PNG's rights and obligations in those zones stated above are reflected in the legislation consistent with the governance framework under UNCLOS. The Maritime Zone Act 2015 repealed the National Seas Act 1977 and corrected the country's National Baseline and Maritime Zones, consistent with the technical requirements of UNCLOS. Section 40 of the Act calls for the protection of marine waters, seabed, and land associated with waters, and wetland to be protected. This calls for setting up MPAs in the form of fishing reserve, marine park marine reserve or a sensitive sea area designated by a competent international organisation (GoPNG, 2020b).</p>	<p>The Oceans Policy 2020-2030, which was developed from the Maritime Zone Act 2015, iterates that the National Seas Act gives effect to the proclamation of PNG's maritime boundaries, namely the archipelagic baselines, the territorial sea, and the 200 mile offshore boundary.</p> <p>The challenging question is, does DJAG do conservation work or it's just a paper conservation institution? A close collaboration needs to be encouraged with CEPA because CEPA needs to work with DJAG to implement marine conservation work stipulated under the Maritime Zone Act and the National Ocean Policy.</p>

<p>Physical Planning Act (1989)</p>	<p>DLPP</p>	<p>- Purpose is to regulate planning for all kinds of development both at the National and provincial government levels and applies to all land in PNG including customary land. (s2)</p> <p>The preamble provides for the establishment of a comprehensive mechanism for physical planning to regulate physical development to give effect to public interest in public welfare and public health.</p>		<p>PA does not apply</p> <p>Though not directly applicable to protected areas, features within the Act can be used to contribute to biodiversity protection and sustainable use of resources. With its reference to all the development plans whether provincial, urban, local or a subject for the development of land and its other uses, It can be used to co-ordinate all development activities over land, therefore providing an opportunity to address the issue of conflicting land uses.</p> <p>It should be addressed in protected areas legislations and relevant legislation to enhance efforts in biodiversity conservation.</p>
<p>Organic Law on Provincial and Local Level Governments (OLPLLG) 1995</p>	<p>Provincial Government & Local Level Governments,</p>	<p>The Organic Law on Provincial and Local Level Government (OLPLLG) 1998 Section 40 gives the delegation power of the National government to the provincial and local level governments.</p> <p>The OLPLLG was intended to promote equal opportunity and participation in all levels of government pursuant to the 2nd National Goals and Directive Principles and also observe the 4th national goal in the implementation of its functions.</p> <p>Section 41 of Organic Law on Provincial and Local Level Government Act 1995 recognises that any decisions made by the provincial and local level governments in any matters that are of national interest, is recognised. This means they can pass laws and make decisions at the provincial and local levels but their powers do not supersede the national laws and Constitution, or the</p>	<p>The Organic Law on Provincial and Local Level Government (OLPLLG) 1998 Section 40 gives the delegation power of the National government to the provincial and local level governments.</p> <p>The OLPLLG was intended to promote equal opportunity and participation in all levels of government pursuant to the 2nd National Goals and Directive Principles and also observe the 4th national goal in the implementation of its functions.</p> <p>Section 41 of Organic Law on Provincial and Local Level Government Act 1995 recognises that any decisions made by the provincial and local level governments in any matters</p>	<p>Compliance:</p> <p>This Act does not provide for protected areas except to the extent of enabling LLG's to create their own laws to manage protected areas.</p> <p>Gaps:</p> <p>The OLPLLG has no provisions dealing with protected areas and conservation sites. And if going to be dealing to catering for RPA's under the PA Policy, its provisions will have to amended to make reference to that rather than have 21 other laws dealing</p>

		<p>functions of the national agencies. Section 42 gives the power to provincial legislators to make laws ranging from business, education, cultural business, gambling, land development, urban and town planning, and natural resource development among others. The most notable one are laws on the parks, reserves, gardens, scenic and scientific centres.</p> <p>The Act was entered into force in 1995 placing emphasis on LLG's and vesting it with powers of law-making and a wide range of matters including environmental matters as distinct from the provincial governments who are more restricted on environmental law-making also under the Environment Act 2000</p> <p>The OLPLLG provides avenue for communities to collaborate with LLG's and provincial governments to create law to give effective control over their conservation areas and community land use plans that which can provide for REDD as well. It also provides for benefit sharing agreements and includes biological diversity as a natural resource along with gold, timber and oil.</p>	<p>that are of national interest, is recognised. This means they can pass laws and make decisions at the provincial and local levels but their powers do not supersede the national laws and Constitution, or the functions of the national agencies. Section 42 gives the power to provincial legislators to make laws ranging from business, education, cultural business, gambling, land development, urban and town planning, and natural resource development among others. The most notable one are laws on the parks, reserves, gardens, scenic and scientific centres.</p> <p>The Act was entered into force in 1995 placing emphasis on LLG's and vesting it with powers of law-making and a wide range of matters including environmental matters as distinct from the provincial governments who are more restricted on environmental law-making also under the Environment Act 2000</p> <p>The OLPLLG provides avenue for communities to collaborate with LLG's and provincial governments to create law to give effective control over their conservation areas and community land use plans that which can provide for REDD as well. It also provides for benefit sharing agreements and includes biological diversity as a natural resource along with gold, timber and oil.</p>	<p>with the declaration and management for RPA's.</p> <p>It would be better still to have RPA's provided for in overall protected areas legislation to ensure streamlining and clarity of roles and functions.</p> <p>This Can happen only if provincial governments and local level governments have the political will and are adequately resourced. There is also less collaboration and communication between provinces and CEPA. Thus, CEPA needs to work with provincial and local level governments to create legislations and policies to support conservation work at the provincial, district and ward levels. This is not happening, hence CEPA is struggling to do conservation work on the ground. Such laws and policies will help the provincial and local level governments to generate revenue, set up offices, hire environment and conservation officers and enforce or manage PAs. This is lacking at the moment.</p>
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ACCESS TO NATURAL RESOURCES

Forestry Act 1991	PNGFA	Provides for access to timber resources by the developer and though it provides for conservation and maximising of forest reserves, it does not make reference to protected areas.	<i>[See discussions above under forestry Act]</i>	PA does not apply <i>[See discussions above]</i>
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Mining Act (1992)	MRDA	Being solely responsible for regulating mining and extraction of minerals in the country, it would rightly so not make any reference to protected areas	<i>[See discussions above under Mining Act]</i>	PA does not apply <i>[See discussions above]</i>
Oil and Gas Act (1998)	MRDA	<i>[same as above however to petroleum and gas instead]</i>	<i>[See discussions above under Oil & Gas Act]</i>	PA does not apply <i>[See discussions above]</i>
ACCESS TO LAND				
Land Registration Act 1981	DLPP	This Act applies to the registration of title to land, and for related purposes. This would apply only to all land registered formally, i.e. state land and land registered under a freehold title.		<p>- Protected Areas Policy does not apply being a legislation purely regulating land title registration in the country.</p> <p>- Relevance here is when land set aside for the purpose of protected areas is on state land or is on land that is privately as distinct from customary land.</p>
Lands Act 1998	DLPP	The Lands Act 1998 spells out the functions, roles and responsibilities of the Department of Lands and Physical Planning (DLPP). Five main divisions, namely the Administration, Valuer General, Surveyor General, the Lands Division comprising of the Customary and Alienated Divisions, and the Physical Planning Division are housed within DLPP. Any acquisition of land for conservation work on customary or alienated land are managed by the Lands Act. The Act also allows for setting up of Provincial land offices across the country which then reports to the National office in Port Moresby.		<p>Recently, UNDP provided support to DLPP to develop a National Sustainable Land Use Policy. This policy is developed by the Physical Planning Division, which is currently undergoing regional consultation nationwide. The desired outcome of this policy is for the:</p> <ol style="list-style-type: none"> 1) preparation of the national landuse plan; and 2) Establishment of the national landuse information management system. If this policy is passed, it will provide for

				<p>the management of three broad zoning for planning purposes namely:</p> <ol style="list-style-type: none"> 1. Development Promotional Zoned areas 2. Conservation Zoned Areas; and 3. Sustainable Rural Zoned Areas <p>The whole purpose of this policy is to gather all development (township, industrial etc), conservation (Protected areas, sacred sites, archaeological sites etc) and resource development (mining, forestry, agriculture etc) mapped and zoned.</p>
Land Registration (Amendment) Act 2009	DLPP	- Provides for the voluntary registration of customary land which has the effect of rendering customary land a freehold and therefore registrable and a title is issued as all registered lands		As above the PA Policy is irrelevant here and will only apply when land registered under the Act is set aside as a protected area.
Incorporated Land Group Act 1974 Incorporated Land Group (Amendment) Act 2009	DLPP	<p>The Act provides for the incorporation of land groups to identify owners of the land. It does not convey ownership rights and is only a recognition of clan ownership or rather rights over a particular piece of land.</p> <p>It also allows for recognition of the corporate nature of local land groups and allows these groups to hold, manage and deal with their land under their customary names.</p>		PA does not apply. Though it does not reference to the Protected Areas Policy, this is likely Act that will be utilized (as already under the Conservation Areas Act) to organize land groups into legal entities with an established structure capable of engaging in financial and legal responsibilities over the use and management of their land.

<p>National Fisheries Act 1998</p>	<p>NFA</p>	<p>The Act sets the role and function or institutional arrangement of National Fisheries Authority (NFA). NFA is the government statutory body which the Act gives it power for fisheries management (development of management plans), conservation and development of fisheries industry in the country. NFA is given mandate to govern all fishing activities in the country, in both marine and aquatic environment and to manage fisheries stocks and control the industry's operation in both on-shore and off-shore.</p> <p>The amended NFA Act (2015) also gives effect to international conservation and management measures.</p>	<p>Thought the amended NFA Act (2015) gives effect to international conservation and management measures. Section 40 B clause (2, 3 and 4) does not mention setting up specifically what type of marine protected areas (MPA). However, the Act recognises conservation forms under any international convention or laws such as reflected in the 1982 United Nations Convention on the Law of the Sea (UNCLOS), the FAO Compliance Agreement and the United Nations Fish Stocks Agreement either by global, regional or sub-regional organisations, or by treaties or arrangements to which Papua New Guinea is a party, or is a cooperating non contracting party, or is otherwise bound by their provisions (Section 40A).</p> <p>The Amended Fisheries Act 2015, Section 49 subsection 9 stipulates that based on Subsection (2), the Managing Director may authorise an authorised officer to undertake any fisheries inspection, and compliance and enforcement measures within or beyond the fisheries waters which have been adopted by a regional fisheries management organisation of which PNG is a member. This means enforcement can be at provincial water or high seas within the Economic Exclusive Zone (EEZ).</p>	<p>NFA is given the right to set up conservation areas and manage the fisheries industry and for enforcement. The Act does not explain if NFA has the mandate to establish MPAs. This means NFA must work closely with the Department of Justice and Attorney General (DJAG) and CEPA to manage and conserve fisheries activities in the country. The challenging question is: Does NFA support CEPA in managing MPAs or do other conservation work or this is just another legal blunder? The fisheries Act clearly demarcates traditional marine zones (3 nautical mile), the provincial waters and the Economic Exclusive zones (EEZ). The national interest is often put first. Yet, coordination and cooperation between CEPA and NFA is still miles off the track.</p>
<p>National Cultural Commission Act 1994</p>	<p>NCC</p>	<p>The Act spells out the functions of the NCC previously implemented by the former National Cultural Committee to:</p> <p>(a) assist and facilitate, preserve, protect, develop and promote the traditional cultures of the indigenous peoples of Papua New Guinea;</p> <p>(b) encourage the development, promotion</p>	<p>NCC is a very important partner which CEPA must work with to preserve cultures traditions. CEPA is the designated implementer of CBD and World Heritage Conventions. This means more coordinated effort and collaboration is need to be effective. To date CEPA is working inadequately with NCC</p>	<p>There seem to be lack of coordination and corporation between CEPA, Department of Education and NCC, thought their work is important in preserving cultures and traditions and working on World Heritage Sites. To date,</p>

		<p>and protection of the contemporary cultures of Papua New Guinea;</p> <p>(c) facilitate the marketing of selected and approved aspects of the cultures of Papua New Guinea;</p> <p>(d) co-ordinate with related Government and Non-Government Agencies on cultural matters;</p> <p>(e) co-ordinate cultural activities with Provincial cultural bodies;</p> <p>(f) liaise with Non-Government organisations on cultural matters; and</p> <p>(g) liaise with international cultural organisations.</p>	<p>to preserve those culture and traditions. To date, there is a greater challenge to document and map all scared sites across PNG and nothing concrete has been done.</p> <p>The Department of Education (DE) is currently housing the United Nations Educational, Scientific and Cultural Organisations (UNESCO) office within the department. The primary function is to document PNG’s cultures and customs into the education curriculum and teach students. Like the NCC, CEPA needs to work closely with the UNESCO office in PNG to document culture and customs as part of its conservation work.</p>	<p>work on establish World Heritage Sites are very poor.</p>
<p>Government/ Ministerial Directives. No Act governing Agriculture but various Commodity Board Acts exist such as Cocoa Board, Coffee Industry Corporation (CIC), Kokonas Industri Koperasen (KIK), Spice Board</p> <p>It also housed Oil Palm Industry Corporation (OPIC) and National Agriculture Research Institute (NARI)</p>	<p>DAL</p>	<p>The functions of the Department of Agriculture and Livestock (DAL) include providing policy advice and sector coordination relating to agriculture and livestock (including advice on the application of agricultural legislation, administered by statutory bodies); promoting agricultural development; assisting provincial governments with the provision of extension; and preparing and implementing appropriate investment programs for major commodities and livestock.</p>	<p>The then O’Neill-Dion Government in 2013 announced that a Functional and Expenditure Review (FER) of the Agriculture Commodity Boards and Agencies be undertaken as an initial contribution to a major overhaul of government agencies serving the agricultural sector in PNG. This was because of the ongoing policy implementation problem that has been a pervasive feature of the agriculture sector of PNG over many years. Major reforms of government agencies in agriculture are needed to enable them to contribute effectively to key development outcomes relating to growth of production, exports, employment, household incomes, food security and increased private sector investment in the sector (DAL, 2014). A Functional and Expenditure Review made about 33 recommendations with regards to the restructuring of the DAL with the following being most significant:</p>	<p>In the 1970s DAL lost responsibility for extension services when they became a provincial function. Export tree crops research was transferred to specialised research institutions in the mid-1980s. During the 1990s, remaining research and quarantine functions held by DAL were moved into separate institutions, and commodity boards and corporations were given greater independence. The department struggled to adapt to its new role and wasted resources in trying to regain some of its lost functions.</p> <p>Following on the recommendations, the FER Implementation and Advisory Unit drafted two specific bills to provide the agricultural sector with a better overarching</p>

			<p>1. The functions of DAL have to be redefined so it can play an effective role as the agricultural sector apex body responsible for (a) development of policy and legislation, (b) coordination and monitoring of government policy implementation by commodity boards and provincial agencies, and (c) facilitation and linking of sector programs and resourcing requirements with government central agencies and external donors.</p> <p>2. The Secretary of DAL should be given responsibility for scrutiny of commodity boards and agencies. It is proposed that the Secretary be enabled to do this as chairperson of the policy and funding entity to be called the Agriculture Investment Corporation.</p> <p>3. DAL must address the issue of inadequate funding of various commodity boards and agencies in agriculture. It is important in the long run that effective funding mechanisms be determined and these be embedded in legislation so that there is continuity and sustainability of these sources of funding to agriculture institutions (DAL, 2014).</p> <p>The impact of the review's recommendations on the agriculture sector is potentially transformative for the sector and requires particular attention. Out of 33 recommendations proposed, five of the key changes proposed have relevance to sustainable agricultural commodities are:</p>	<p>legislative framework namely: 1) Agricultural Administration Adjustment (AAA) Bill 2015; and 2) Agriculture Investment Corporation of PNG Bill 2015.</p> <p>1) Agricultural Administration Adjustment (AAA) Bill 2015</p> <p>The PNG AAA Bill has been prepared primarily to redefine the role of DAL so it can play an effective role as the agricultural governing body responsible for (a) development of policy and legislation, (b) coordination and monitoring of government policy implementation by commodity boards and agencies, and (c) facilitation and linking of sector programs and resourcing requirements with government central agencies and external donors.</p> <p>The AAA Bill shall clearly define the role of the DAL, all agriculture commodity boards and agencies, and provincial agencies and the manner in which they are intended to interact with each other. The closer cooperation between agencies is expected to enhance productivity, effectiveness and efficiency within the agriculture sector in addressing the developmental and livelihoods needs of the rural population.</p>
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			<ul style="list-style-type: none"> • Restructuring of the Department of Agriculture and Livestock; • Restructuring of the different Commodity Boards including the Cocoa Board, Kopra Industri Koporesen, Coffee Industry Corporation and Oil Palm Industry Corporation (to be replaced by an Oil Palm Commodity Board); • New funding mechanisms for the agricultural sector to be embedded in legislation; • Development of new extension policies; • Definition of new rules for investors to operate in the agricultural sector. 	<p>2) Agriculture Investment Corporation (AIC) Bill 2015</p> <p>The AIC bill was prepared primarily to (a) provide for the establishment and management of the Agriculture Investment Corporation, and (b) secure funding and manages investments in the agriculture sector. Against a backdrop of deficiencies in existing funding and governance arrangements, amongst other things, the FER recommended that an Investment Vehicle be established in the agricultural sector to promote and encourage new funding arrangements for innovation, growth of agribusiness micro, small and medium enterprises, large commercial investments and farm input subsidies support.</p> <p>The National Executive Council (NEC) approved the PNG AAA Bill in November 2015 and the AIC of PNG bill was also believed to have been passed by the National Executive Council (NEC). However, actual operation of the new Acts (if passed) is not implemented due to some unknown reasons.</p> <p>These two bills are expected to have far reaching implications for the development of palm oil, coffee or cocoa in the coming years and for any activities related</p>
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				<p>to sustainable agriculture commodities in PNG.</p> <p>While those two new bills are aiming to address the current challenges facing the agricultural sector, concerns have been raised by some key informants with regards to the limited dialogue and consultation, and lack of transparency, over their development. Some people interviewed outside of the DAL were unclear about the potential outcomes of these new bills for the agricultural sector and what it will mean for them in the near future.</p> <p>Another important missed opportunity appears to be disconnection between the recommendations of the Functional Expenditure Review and the proposed long-term strategy of StaRS. The FER is looking at agriculture transformation and a new direction for enhancing productivity in agriculture largely outside of the framework proposed by the National Strategy for Responsible Sustainable Development. For example, neither the FER report nor the two bills make references related to the Green Growth Framework proposed under StaRS. This could be partly explained by the fact that both strategy development was conducted at similar times and their report both published in the beginning of 2014 but</p>
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			<p>mostly results from the lack of coordination between DAL and the Department of National Planning and Monitoring. It will be essential for the newly formed DAL to address this disconnect in future MTDPs if the country is to achieve its long-term ambitions.</p> <p>It's a challenge now that CEPA must work closely with DAL and other government agencies to ensure agriculture lands are used wisely and not compromising the conservation and environmental values for development purposes.</p> <p>The CCDA Act is under review while some policies have been approved for collecting revenue from emissions GHG products.</p> <p>There is collaboration with other government agencies such as DLPP, PNGFA and others but CEPA seem to be absent or not actively involved in many meetings and discussions.</p> <p>The current CCDA Act does not give it the mandatory rights over land and forest, including sea, hence CCDA is subjected to report or work in collaboration with other government entities under their respective Acts such PNGFA and CEPA.</p> <p>Close collaboration with CEPA is crucial but it is understood there is less collaboration between</p>
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				the two agencies even though they are both under one Ministry of Environment, Conservation and Climate Change.
Government/ Ministerial Directive	Department of Commerce and Industry (DCI)	DCI is responsible for foreign direct investments into the country, dealing with industry development, investment and commerce. It facilitates development in the fisheries, forestry, agriculture and other cottage industry development. For instance, DCI had facilitated direct foreign investment in forest, hotel development, fisheries, agriculture and forestry. This means whatever activities it does is done in close collaboration with all key agencies and CEPA is one of them.	More recently, the Government of PNG approved K200m for supporting Small and Medium Enterprise (SME). K100 million was parked with the Bank of South Pacific (BSP) and K80mil with the National Development Bank (NDB). These funds would go towards financing SME activities in agriculture with the primary producers and value chains. K20m goes to DCI for managing the project.	<p>Suitable agriculture land is limited due to the topography, soil fertility, arable land, rainfall and other edaphic factors.</p> <p>Mechanised commercial and subsistence agriculture has been the major drivers of forest degradation and deforestation in the country.</p> <p>Hence, CEPA must work closely with DCI DAL to ensure the environment is conserved and managed wisely. There seem to be little coordination between CEPA and DAL.</p>
Various laws and Acts (e.g. IPA Act, IRC Act etc) and international treaties or conventions (CBD, WTO etc)	Others	<p>Private companies, especially those in the mining and petroleum sectors, international donors (e.g. UNDP, FAO, USAID), Multilateral agencies (EU, USAID, JICA, AUSAID, GTZ etc), and NGOs (local and International) are partners working with CEPA to do conservation work in PNG. They operate under various company laws managed by the Investment Promotion Authority (IPA) and Internal Revenue Commission (IRA to name a few.</p> <p>Those government-to-government partnerships are managed under international laws and obligations. CEPA was fortunate to work with many of these organisations in doing conservation in the country given the fact that it lacks resources, manpower, capacity and finance to managed PAs around the country effectively.</p>	There is immense potential for PNG to tap into various donor funding given its rich biodiversity and cultural values.	<p>Leverington et al., (2017) stated that most PA work was not affected unless managed by well-resourced and skilled International NGOs.</p> <p>There seemed to be lack of political traction and collaboration with various partners and government agencies.</p> <p>Government funding of conservation work has been reduced and not prioritised.</p>

ANNEX 4: List of participants at the report validation workshop

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