



**Traditional knowledge
integration in national policy; a
review of experiences in Guyana**

Traditional knowledge integration in national policy: a review of experiences in Guyana

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SECTION 1: INTRODUCTION

Traditional knowledge of Indigenous peoples and local communities are key for the conservation and sustainable use of biodiversity globally as well as locally. International instruments such as the Convention on Biological Diversity, the 2030 Agenda for Sustainable Development and its Sustainable Development Goals, and the soon to be adopted Post-2020 global biodiversity framework recognize the critical role of traditional knowledge for the conservation and sustainable use of biodiversity.

In recognition of Indigenous peoples and local communities' contributions to biodiversity, instruments such as the recently expired Aichi Biodiversity Targets highlighted the importance of integrating the traditional knowledge in policies on conservation and sustainable use of biodiversity (Target 18). Yet, according to the Global Biodiversity Outlook 5, there are still few examples of national policies which take into consideration and effectively include traditional knowledge.

To this date, there has been insufficient focus on the development and testing of transparent and evidence-based methods that enable assessment and monitoring of the extent of traditional knowledge integration in policy. In response to this pressing need, a new methodological approach has been developed, applied and will be presented in this report for assessing the extent of traditional knowledge that is integrated in national policies into Guyana.

1.1 Purpose of policy review

The purpose of this policy review is two-fold: first, to establish the level of traditional knowledge and Indigenous people's rights integration in Guyana and how this has changed in the past four years; second, to demonstrate how the methodological approach to assess the level of integration is a useful tool for countries that want to monitor, document and demonstrate progress in their work on integrating traditional knowledge and Indigenous people's rights into policies.

This analysis is one of several outputs from the Darwin Initiative funded project 'Integrating Traditional Knowledge into National Policy and Practice in Guyana' (see project website for more outputs <https://cobracollective.org/resources/>)

This policy review initially assesses what the level of traditional knowledge and Indigenous people's rights integration was in Guyana up to 2017. It then reviews how the level of integration has improved in the past four years (2017-2021). The first review¹ serves as the baseline and assessed the level of integration of policies, strategies, plans and, acts (hereafter referred to only as policies) in Guyana from 1999 to 2017. Since then annual reviews have been undertaken between 2018 to 2021 on the new policies published by relevant sectors in Guyana. This report brings together the results from these previous reviews to illustrate the trends, patterns, and progress of integration in Guyana during these past four years.

The report will also highlight and describe the method developed and used to assess the level of traditional knowledge and Indigenous peoples' rights integration. This is followed by a discussion of the results of the past reviews with reference to the baseline and the trends that can be drawn. Throughout the report, we will demonstrate the usefulness of the new methodological approach to monitor and document progress in

traditional knowledge and Indigenous peoples' rights integration. This is an identified gap by many countries in their national reports to the Convention on Biological Diversity.

1.2 Benefits of integrating traditional knowledge

Integrating traditional knowledge into policy and practice has a multitude of benefits. Firstly, it ensures that a more holistic use of knowledge systems is represented in the evidence base used by decision-makers when producing policies. In 2019, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) established that traditional knowledge complements the scientific knowledge system and needs to be included in assessments and policies to ensure the most comprehensive data and knowledge are used to make decisions².

Second, inclusion and showing respect, and protecting Indigenous people's knowledge and rights are in line with many countries' commitments towards international treaties, such as the Declaration on the Rights of Indigenous Peoples, the Convention on Biological Diversity (particularly Aichi Target 18 and one of the key targets in the post-2020 Biodiversity framework) and the Sustainable Development Goals.

Third, including traditional knowledge and Indigenous peoples' rights demonstrates an understanding of Indigenous peoples' collective rights over natural resources and the importance to share management of the natural environment. For example, Indigenous conserved areas have been shown to be one of the most cost-effective ways to conserve biodiversity³. Furthermore, Indigenous peoples and local communities have also been shown to monitor the local environment very effectively, which is useful for regulating their own sustainable use of natural resources but also to inform local and national decision-making within a short timeframe¹. Lastly, integrating traditional knowledge is also an important way to ensure this unique knowledge system is maintained and protected. Supporting the use, while enabling and encouraging traditional knowledge practices ensures its viability.

SECTION 2: METHODOLOGY OF POLICY REVIEW

The evaluation of traditional knowledge and Indigenous peoples' rights integration in Guyana's policy landscape is based on a deductive qualitative content analysis of documents. Purposively selected policies and samples of texts within these have been analysed using a matrix-analysis of pre-established categories to establish the level of traditional knowledge and Indigenous peoples' rights integration for each relevant sector⁴.

Step 1: Determine the scope of assessment and identify relevant policies

The methodology starts with determining the scope of the assessment by identifying possible relevant sectors that would be useful to include in the assessment. To aid this process a good understanding of a country's governance structure is needed. Therefore, a diagram was produced to identify the different types of ministries and their roles and responsibilities in Guyana (Figure 1). By using the governance structure and consulting with traditional knowledge experts and in-country contacts, seven relevant sectors were identified: agriculture, climate change, conservation, development, extractive, forestry, and human rights.

¹ Danielsen, F., *et al* (2021) The Concept, Practice, Application, and Results of Locally Based Monitoring of the Environment. *BioScience*, 71(5), pp.484-502. DOI: [10.1093/biosci/biab021](https://doi.org/10.1093/biosci/biab021)

For four of these sectors, two sub-sectors in each were also identified to allow for more fine-grained analysis. The sub-sectors are: protected areas and biodiversity under the conservation sector; land use and culture under the development sector, mining and petroleum under the extractive sector, and lastly land tenure and Indigenous peoples under the human rights sector (Table 3).

After determining the scope of which sectors to include, a wide search of relevant ministry websites and a more general search using the Google search engine to locate specific policies was undertaken. However, this approach had limited success and further in-country consultation and contacts with relevant ministries (e.g. Ministry of Amerindian Affairs, Ministry of Natural Resources) and governmental agencies (e.g. Environmental Protection Agency, Protected Areas Commission) were needed to collate most of the policies.

Furthermore, once an initial list of policies was established, project partners and stakeholders were asked for further input, which resulted in additional policies added to the review.

Step 2: Understand and set up assessment approach and criteria

To assess the integration level of traditional knowledge and Indigenous peoples' rights, a three-level approach was developed^{5,6}. The first level of integration is classified as 'Conceptual', the second level is 'Operational' and the third is termed 'Implementation'. These three levels are defined as follows:

1) Conceptual integration; where documents underpinning sectoral policies (explicitly or implicitly) take traditional knowledge / Indigenous peoples' rights into account.

2) Operational integration; where specific *measures* or *instruments* are identified and committed to addressing traditional knowledge / Indigenous peoples' rights-related objectives within policy sectors.

3) Implementation integration; where concrete measures achieve integration on the ground in actual policy- and decision-making situations.

Table 1 provides examples of policy instruments that have been divided into three different types of instruments. The three types of policy instruments are: *information*, *decision support*, and *implementation*. These three types of instruments can be linked to the three levels of integration, with *information instruments* being examples of *conceptual integration*, *decision-support instruments* being examples of *operational integration*, and *implementation instruments* being examples of potential *implementation integration*. The examples of policy instruments in Table 1 can therefore be used to aid in the categorization (based on the traffic light evaluation system described below) of policies.





Figure 1. Governance structure of Guyana's Government in 2017.

Assessing the *implementation level* of integration is the most difficult because it requires impact-related documents, such as policy evaluations and annual reviews, and these are not always done or available. Thus, in the initial baseline assessment, our assessment did not include this level of integration due to the lack of suitable documents to review. However, in the annual progress reviews, some documents were found although only for a few sectors.

Despite these assessment difficulties, the implementation level is important to include as this allows measurement of real progress on the ground. The lack of suitable documents to review also demonstrates the importance of establishing monitoring and evaluation processes that enable this assessment of the impact of policies on the ground.

Table 1: This table provides examples of existing key policy instruments that may be relevant to the integration of traditional knowledge and Indigenous peoples' rights. The instruments are categorized into three different types, which can loosely be linked to the three integration levels. For the conceptual integration level to be achieved, information instruments are often needed to be recognized and included. For the operational integration level to be achieved, decision-support instruments are needed to be recognized and included. For the implementation integration level, some of implementation instruments need to be included.

Key existing policy instruments relevant for Traditional Knowledge Integration	
Instrument type	Instruments
Information instruments	Consultation process, participatory processes, indicators, mapping, monitoring (indicators, monitoring, mapping, assessments)
Decision-support instruments	Impact assessments, risk assessments, supported by information support tools such as indicators, mapping, and monitoring
	Reporting (supported by indicators, monitoring, and mapping)
	Planning and targeting
Implementation instruments	Dedicated legislative acts, regulations, and standards recognising and respecting traditional knowledge
	Community/Indigenous Protected areas
	Funding to allow for traditional knowledge to be included
	Land tenure rights to ancestral lands
	Indicators and relevant monitoring programme which specifically focus on Indigenous people and women.

The next part of the methodology is the use of a traffic light evaluation system to categorize each policy. Table 2 provides the criteria for each traffic light category. The highest level of integration is classed as 'green', and the text in the table specifies that this means that the policy has to both explicitly and comprehensively recognize traditional knowledge / Indigenous peoples' rights. The 'yellow category' is the second-highest integration level and includes some explicit integration but it is not comprehensive. The 'amber category' of integration only mentions traditional knowledge / Indigenous peoples' rights implicitly or indirectly and it focuses generally on preventing negative impacts on traditional knowledge / Indigenous peoples' rights. The lowest 'red' category of integration means that the policy document has no recognition, neither direct nor indirect, of traditional knowledge/ Indigenous peoples' rights.

The methodology combined the three-level approach to integration with the traffic light evaluation system to do a matrix analysis. This meant that each document that was reviewed was evaluated and classified into one of the traffic light categories for both the conceptual and operational integration levels. In addition, this was done for both traditional knowledge and Indigenous peoples' rights as - in quite a few cases - there is a difference between the two.

Table 2: Traffic light evaluation system, providing the criteria for each traffic light category (green, yellow, amber, and red).

Green	Explicit & comprehensive recognition of traditional knowledge/Indigenous peoples' rights
Yellow	Some explicit integration but not comprehensive (e.g. some mentioning of traditional knowledge/Indigenous peoples' rights)
Amber	Implicit & indirect integration, generally focusing on preventing negative impacts of a policy sector
Red	No recognition (direct / indirect) of traditional knowledge/Indigenous peoples' rights

Step 3: Review of Policies

The content analysis was undertaken once the policies had been identified, collated, and the matrix analysis set up. This included a two-step approach for each policy:

- i) Undertake a keyword search using the "find" function in the document. The following words were used: traditional, knowledge, Indigenous, hinterland, community, rights, tenure. This analysis provides a good first indication of the level of inclusion as it provides quantitative information on how many times the terms are included. It also shows how well the key terms have been incorporated throughout the policy, whether they are just in one or a few sections, and/or how they are combined with other words. For example, if the term "Indigenous peoples" is only mentioned once in a policy it is unlikely it will be classified as 'green', a good level of integration. If the term traditional knowledge is included four times but only under one heading in the policy this might indicate that there is some explicit integration but not comprehensive as it is not found throughout the policy.
- ii) Read through the policy in more detail and mark sections relevant to traditional knowledge/ Indigenous peoples' rights. After finishing the read-through, the analyst needs to go through each marked section in detail and evaluate these against the traffic light system and for each of the integration levels described above (Step 2). Once all the relevant sections in the policy were evaluated, a traffic light category for each policy and for both the conceptual and operational level

of integration was assigned, for both traditional knowledge and Indigenous peoples' rights in a matrix table.

Where there were several policies in the same sector, and if these were categorized into different traffic light categories, the median category was calculated and used. If resources allow for more than one person to evaluate the policies this is beneficial and again a median can be calculated for each policy and sector.

Once all the policies had been reviewed and evaluated in the matrix spreadsheet, the results were analysed according to the eleven sectors and sub-sectors, and two new tables were produced (one for traditional knowledge and the other for Indigenous peoples' rights). In the tables, the colour category corresponding to the level of integration was added for each sector and for both the conceptual and operational levels. These traffic light matrix tables provide a clear overview of the level of integration that is easy to update and analyse with each annual progress review (see Tables 4, 5 and 6a and b).

Further analysis used descriptive statistics to analyse the matrix tables and calculate the baseline percentage of how many sectors fall in each of the four different categories per integration level (conceptual, operational, and implementation). This analysis was then repeated for the annual progress reports (2018-2021) to enable assessment and monitoring of the integration progress. A progress table using arrows indicating which sectors have improved integration, stayed the same, or decreased was produced to enable clear monitoring and presentation of the findings from the annual reviews (see Tables 7a and b).



SECTION 3: RESULTS AND DISCUSSION

Level of traditional knowledge and Indigenous peoples' rights integration

In the initial baseline review, a total of 25 policies were reviewed (Table 3 and Appendix 1). These were produced between 1999-2017 and came from seven sectors (agriculture, climate change, conservation, development, extractive, forestry, and human rights) and eight sub-sectors (protected areas, biodiversity, culture, land use, mining, petroleum, Indigenous people and land rights). The three subsequent years' reviews included the policies that were produced by the sectors in each year and thus vary in number and sectors (Table 3). All the policies reviewed during the four years are listed in Appendix 1-3.

Table 3: Number of policies reviewed for each sector and per year from the baseline assessment 1999- 2017, 2018-2019, 2019-2020, 2020-2021.

Policy Sector	Sub-sector	No. policies reviewed			
		1999-2017	2018	2019	2020
Agriculture		3	0	0	0
Climate Change		2	0	1	0
Conservation	Protected areas	5	1	0	0
	Biodiversity	5	1	0	1
Development	Culture	1	0	0	0
	Land use	4	1	1	0
Extractive	Mining	1	1	1	0
	Petroleum	1	0	0	0
Forestry		1	2	1	0
Human Rights	Indigenous peoples	1	1	0	0
	Land tenure	1	1	1	0
Total		25	8	5	1

3.1 Traditional knowledge baseline integration results

The overall result of the initial review in 2017 indicated that most sectors needed to improve their level of traditional knowledge integration in national policy (Table 4 and Figure 2). Low or no integration of traditional knowledge (categories 'amber' and 'red') was found for 64 percent of the sectors both on the conceptual and operational levels (Figure 2). However, an encouraging result was found for traditional knowledge integration in the conservation sector, with the protected areas sub-section categorized as 'green' (explicit and comprehensive integration) on the conceptual level and categorized as a strong 'yellow' on the operational level (Table 4). The biodiversity sub-sector (e.g. National Biodiversity Strategy and Action Plan) also showed a relatively positive level of integration with a strong 'yellow' on the conceptual integration level and a fairly strong 'yellow' on the operational integration level. Another sector that showed fairly good traditional knowledge integration was the development sector, where the culture sub-section was categorized to have both a good 'green' level of conceptual and operational integration. However, the development sub-section of land use only showed an 'amber' rating for the

conceptual level and even lower for the operational level. Similarly, the human rights sector showed very different results between the two sub-sectors; Indigenous peoples’ rights showed a good ‘green’ conceptual level of integration and fairly good ‘yellow’ level of operational integration, while the land rights sub-sector showed a very poor result of no indication of traditional knowledge integration (red).

Table 4: Result of the policy review to establish a baseline for traditional knowledge integration level for seven policy sectors in Guyana.

Level of Integration	Policy Sectors										
	Agriculture	Climate change	Conservation		Development		Extractive		Forestry	Human Rights	
			Protected area	Biodiversity	Culture	Land use	Mining	Petroleum		Indigenous people	Land rights
Conceptual	Red	Amber	Green	Yellow	Green	Amber	Red	Red	Amber	Green	Red
Operational	Red	Amber	Yellow	Yellow	Green	Amber	Red	Red	Amber	Yellow	Red
Implementation	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey

Green	Explicit & comprehensive recognition of traditional knowledge/Indigenous peoples' rights
Yellow	Some explicit integration but not comprehensive (e.g. some mentioning of traditional knowledge/Indigenous peoples' rights)
Amber	Implicit & indirect integration, generally focusing on preventing negative impacts of a policy sector on traditional knowledge/Indigenous peoples' rights
Red	No recognition (direct / indirect) of traditional knowledge/Indigenous peoples' rights
Grey	Not able to be assessed

These results indicate that there is much room for improvement, even for the sectors that show a good level of integration, such as the protected areas and biodiversity sub-sectors. The integration level for both these two sub-sectors decreases from the conceptual to the operational integration level. This is a pattern that can be seen for quite a few sectors, where the conceptual level is higher throughout the review for both traditional knowledge (Table 4) and Indigenous peoples’ rights (Table 5). This result can - to some degree - be expected, as the level of integration needs to improve from conceptual to operational level and the same from operational to implementation level, thus making it easier for a sector to have a high conceptual level compared to operational and implementation levels.

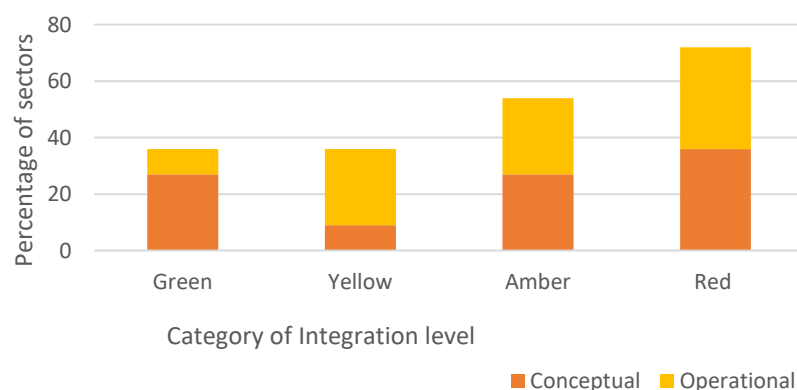


Figure 2: Percentage of sectors that are categorized into the four different integration levels of green, yellow, amber, and red for assessing traditional knowledge.

3.2 Indigenous peoples’ rights baseline integration results

The review showed that the integration level for Indigenous peoples’ rights was fairly good for about half of the sectors assessed, with 55 percent of the sectors categorised as either ‘green’ or ‘yellow’ (Table 5 and Figure 3). The sectors categorised as green were the same as for traditional knowledge: protected areas (conservation sector), culture (development sector), and Indigenous peoples (human rights sector). Sub-sectors categorised as yellow included biodiversity, land use, and forestry. These sectors were categorised as ‘yellow’ for both conceptual and operational levels. As the description of the different categories of integration explains, these sectors showed some level of explicit integration but it was not comprehensive (Table 2), and thus would benefit from further work to improve the level of Indigenous peoples’ rights integration, particularly as some progress had already taken place.

Table 5: Result of the policy review to establish a baseline for Indigenous peoples’ rights integration level for seven policy sectors in Guyana.

Level of Integration	Policy Sectors										
	Agriculture	Climate change	Conservation		Development		Extractive		Forestry	Human Rights	
			Protected area	Biodiversity	Culture	Land use	Mining	Petroleum		Indigenous people	Land rights
Conceptual	Amber	Amber	Green	Yellow	Green	Yellow	Red	Red	Yellow	Green	Red
Operational	Amber	Amber	Yellow	Yellow	Green	Yellow	Red	Red	Yellow	Green	Red
Implementation	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey

	Explicit & comprehensive recognition of traditional knowledge/Indigenous peoples’ rights
	Some explicit integration but not comprehensive (e.g. some mentioning of traditional knowledge/Indigenous peoples’ rights)
	Implicit & indirect integration, generally focusing on preventing negative impacts of a policy sector on traditional knowledge/Indigenous peoples’ rights
	No recognition (direct / indirect) of traditional knowledge/Indigenous peoples’ rights
	Not able to be assessed

Sectors categorised as ‘amber’, only showing implicit and indirect integration, were agriculture and climate change. Both these sectors’ activities and impacts could greatly affect Indigenous peoples’ way of life. Thus, improving the level of integration of Indigenous peoples’ rights is important in these sectors. Comparing the Indigenous peoples’ rights integration level with traditional knowledge shows that for the climate change sector the level is similar but for the agriculture sector it is even lower than for traditional knowledge. Thus, an even stronger case is provided to improve the integration of both traditional knowledge and Indigenous peoples’ rights for these sectors.

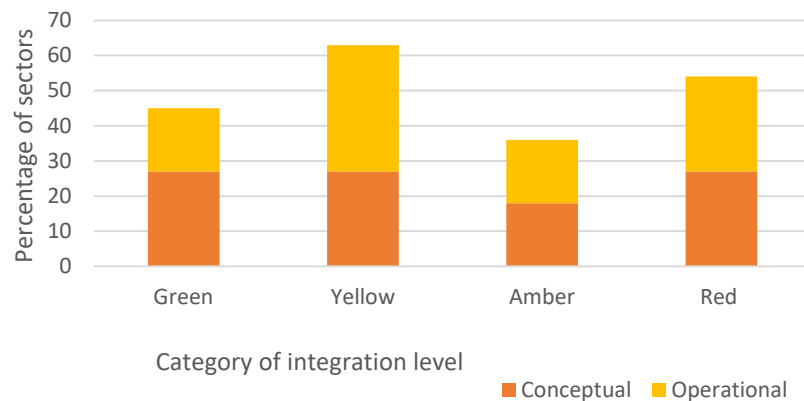


Figure 3: Percentage of sectors that are categorised into the four different integration levels of green, yellow, amber, and red for assessing Indigenous peoples' rights.

Finally, the sectors with no integration of Indigenous peoples' rights are the two sub-sectors in the extractive sector (mining and petroleum) and the land rights sub-sector. They can all have major impacts on Indigenous peoples', and the land rights sector is one of the most important sectors for Indigenous peoples' equality and poverty alleviation. Thus, an improvement in the level of integration in these two sectors is very much needed.

3.3 Conclusions from baseline assessment

This initial baseline assessment of traditional knowledge and Indigenous peoples' rights integration allowed for the first time in our knowledge an assessment of the extent of integration of traditional knowledge and Indigenous peoples' rights into policy. This approach is particularly useful in four main ways: first, it helps to highlight and make visible the importance of traditional knowledge and Indigenous peoples' rights per se. Secondly, it can identify in which sectors progress on traditional knowledge and Indigenous peoples' rights has already been made and where it is lacking. It can, for example, indicate where a sector that has progressed well at a conceptual level but is lacking at an operational and implementation level, can do better, through evaluating what type of instruments and actions are missing in policies. Thirdly, it provides information on where (limited) efforts and resources should be prioritised and directed to achieve the most progress. For example, although sectors categorised as red might seem the most important sectors to focus on and improve integration, having no/little progress to build on in these sectors might not be the most efficient way of improving the integration level. Resources might be better targeted trying to improve a sector that already has done some good work (yellow) to an improved green good level. Lastly, the integration baseline enables the establishment of an evidence-based monitoring process, which will enable a country like Guyana to document their progress in the integration of traditional knowledge and Indigenous peoples' rights and how they march towards achieving international conventions and agreements such as the Convention on Biological Diversity and the Sustainable Development Goals.

3.4 Progress of policy integration

Overall, the result of the annual policy reviews shows a positive trend of improved levels of both traditional knowledge and Indigenous peoples’ rights integration in the policies published from 2018 to 2021 compared to the baseline (1999-2017) (Table 6a and 6b).

Table 6a: Results of the policy review for the baseline assessment (1999-2017) and the three subsequent annual reviews between 2018-2021, for traditional knowledge integration within seven policy sectors in Guyana.

Level of Integration	Year	Policy Sectors										
		Agriculture	Climate change	Conservation		Development		Extractive		Forestry	Human Rights	
				Protected area	Biodiversity	Culture	Land use	Mining	Petroleum		Indigenous people	Land rights
Conceptual	Baseline yr 2017	Red	Orange	Green	Yellow	Green	Orange	Red	Red	Orange	Green	Orange
	2018-19	Grey	Grey	Green	Orange	Grey	Yellow	Red	Grey	Green	Green	Yellow
	2019-20	Grey	Yellow	Grey	Grey	Grey	Green	Orange	Grey	Grey	Grey	Grey
	2020-21	Grey	Grey	Grey	Green	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Operational	Baseline yr 2017	Red	Orange	Yellow	Yellow	Green	Orange	Red	Red	Orange	Yellow	Orange
	2018-19	Grey	Grey	Yellow	Orange	Grey	Orange	Red	Grey	Green	Yellow	Orange
	2019-20	Grey	Yellow	Grey	Grey	Grey	Yellow	Orange	Grey	Grey	Grey	Grey
	2020-21	Grey	Grey	Grey	Yellow	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Implementation	Baseline yr 2017	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
	2018-19	Grey	Grey	Orange	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Orange
	2019-20	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Orange	Grey	Orange
	2020-21	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey

Table 6b: Results of the policy review for the baseline assessment (1999-2017) and the three subsequent annual reviews between 2018-2021, for Indigenous peoples’ rights integration within seven policy sectors in Guyana.

Level of Integration	Year	Policy Sectors										
		Agriculture	Climate change	Conservation		Development		Extractive		Forestry	Human Rights	
				Protected area	Biodiversity	Culture	Land use	Mining	Petroleum		Indigenous people	Land rights
Conceptual	Baseline yr 2017	Orange	Orange	Green	Yellow	Green	Yellow	Red	Red	Yellow	Green	Orange
	2018-19	Grey	Grey	Green	Yellow	Grey	Yellow	Red	Grey	Yellow	Green	Yellow
	2019-20	Grey	Green	Grey	Grey	Grey	Green	Green	Grey	Grey	Grey	Grey
	2020-21	Grey	Grey	Grey	Green	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Operational	Baseline yr 2017	Orange	Orange	Yellow	Yellow	Green	Yellow	Red	Red	Yellow	Green	Orange
	2018-19	Grey	Grey	Yellow	Yellow	Grey	Yellow	Red	Grey	Yellow	Green	Yellow
	2019-20	Grey	Yellow	Grey	Grey	Grey	Green	Yellow	Grey	Grey	Grey	Grey
	2020-21	Grey	Grey	Grey	Green	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Implementation	Baseline yr 2017	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
	2018-19	Grey	Grey	Orange	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Orange
	2019-20	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Orange	Grey	Orange
	2020-21	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey

	Explicit & comprehensive recognition of traditional knowledge/Indigenous peoples' rights
	Some explicit integration but not comprehensive (e.g. some mentioning of traditional knowledge/Indigenous peoples' rights)
	Implicit & indirect integration, generally focusing on preventing negative impacts of a policy sector on traditional knowledge/Indigenous peoples' rights
	No recognition (direct / indirect) of traditional knowledge/Indigenous peoples' rights
	Not able to be assessed

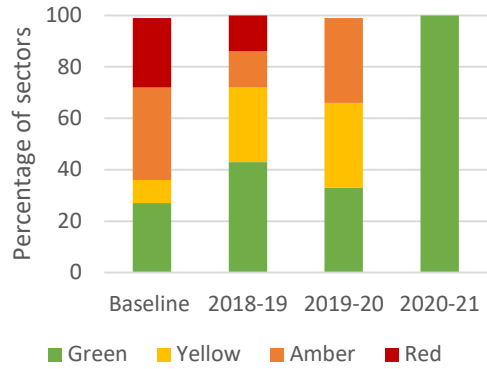
The result is strongest for the level of Indigenous peoples' rights integration, where Figure 5 shows that all policies reviewed after the baseline (2018-2021) were either categorised as good i.e. 'green' (*explicit and comprehensive recognition of Indigenous peoples' rights*) or fairly good i.e. 'yellow' (*some explicit integration*) for both the conceptual and operational level. This is an encouraging result that all new policies published since 2018 in Guyana have included the rights of Indigenous peoples to at least a fairly good level and that no policies were published with a poor 'amber' or very poor 'red' category (Figure 5a and b).

The positive trend in traditional knowledge integration can be seen in Figure 4, but not as strongly as for Indigenous peoples' rights. At the conceptual level, Figure 4a shows there is a considerably higher number of policies (72 percent 2018-19, 66 percent 2019-18 and 100 percent 2020-21) categorised as good - 'green' - and fairly good - 'yellow' - in the three annual progress reviews compared to the 36 percent from the baseline assessment (1999-2017). There are also no policies that were categorised as 'red' (no recognition (explicit not implicit) of traditional knowledge) in the last two reviews from (2019-20 and 2020-21).

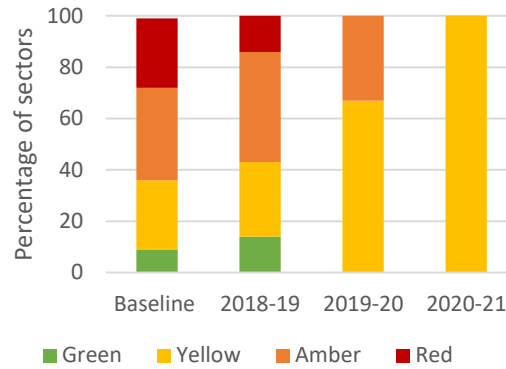
The pattern of a higher conceptual level integration compared to an operational level, as recognised in the initial baseline assessment, is still visible both for traditional knowledge and Indigenous peoples' rights. This is a pattern that can also be seen when comparing the result of the operational and the implementation level (Table 6a and 6b) which the annual progress review has managed to demonstrate, despite the low number of suitable documents (only 27 percent of sectors reviewed could be assessed on the implementation level).

These findings based on the new methodological approach provide evidence and documentation of a more inclusive policy landscape in Guyana, particularly for the rights of Indigenous peoples which are included more comprehensively and explicitly. However, further progress and improvements can be made, particularly on an operational level (Figure 5b) where the majority of new policies are still categorised as 'yellow', and on an implementation level where only an 'amber' rating was achieved for all sectors assessed.

For the traditional knowledge integration level, the pattern of progress is not as strong, but the reviews do provide good evidence that progress is occurring, just at a slower pace, and thus further work to support and facilitate the integration of traditional knowledge is important.

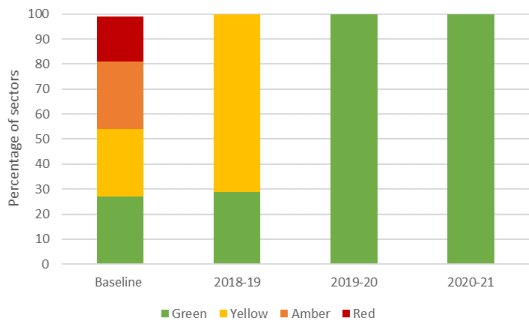


a) Conceptual level

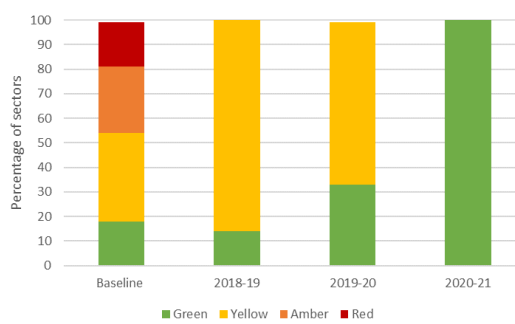


b) Operational level

Figure 4: The percentage of each integration category (green – explicit and comprehensive integration, yellow – explicit and some integration, amber – implicit integration, red – no integration) for: a) the conceptual integration level per year; and b) the operational integration level per year for the four traditional knowledge integration assessments.



a) Conceptual level



b) Operational level

Figure 5: The percentage of each integration category (green – explicit and comprehensive integration, yellow – explicit and some integration, amber – implicit integration, red – no integration) for: a) the conceptual integration level per year; and b) the operational integration level per year for the four Indigenous peoples' rights integration assessments.

3.5 Integration level results for the sectors

Further analysis of how each sector has performed compared to the baseline year shows that for traditional knowledge seven of the eight sectors/sub-sectors that have produced new policies have shown an improvement in integration in at least one category (Table 7a). The only sector not showing improvement was the conservation, sub-section protected areas, but this was already categorized ‘green’ in the baseline assessment. The analysis for Indigenous peoples’ rights shows a similar result, with five sectors/sub-sectors out of eight showing an improvement in integration (Table 7b). Two of the three sectors lacking any improvements have already been categorized as ‘green’, at a good integration level in the baseline assessment.

Table 7. Change in each sector’s integration level and category from the baseline year (see key below for the arrow explanations).

a) Traditional knowledge

Year	Level of Integration	Climate change	Policy Sectors						
			Conservation		Development	Extractive	Forestry	Human Rights	
			Protected area	Biodiversity	Land use	Mining		Indigenous people	Land rights
2018-19	Conceptual		→	↓	↑	→	↑	→	↑
	Operational		→	↓	→	→	↑	↗	→
	Implementation		→						→
2019-20	Conceptual	↑			↑	↑			
	Operational	↑			↑	↑			
	Implementation						→		→
2020-21	Conceptual			↑					
	Operational			→					
	Implementation								

b) Indigenous peoples’ rights

Year	Level of Integration	Climate change	Policy Sectors						
			Conservation		Development	Extractive	Forestry	Human Rights	
			Protected area	Biodiversity	Land use	Mining		Indigenous people	Land rights
2018-19	Conceptual		→	→	→	↑	→	→	↑
	Operational		→	→	→	↑	→	→	↑
	Implementation		→						→
2019-20	Conceptual	↑			↑	↑			
	Operational	↑			↑	↑			
	Implementation						→		→
2020-21	Conceptual			↑					
	Operational			↑					
	Implementation								

- ↑ Improved integration (to a better category)
- ↗ Slight improvement but within same category of integration
- Same integration category
- ↓ Decreased integration category



Figure 6: Number of sectors per category of traditional knowledge integration level comparing 2017 to 2021. ‘Green’ indicates a good level of integration, ‘yellow’ indicates a fairly good level of integration, ‘amber’ indicates a fairly poor level of integration whereas ‘red’ indicates no integration at all.

We also analysed how many improvements each sector showed at the different integration levels and it was found that, for traditional knowledge, half (52 percent) of the policies reviewed demonstrated an improvement in integration level compared to the baseline. For Indigenous peoples’ rights this was slightly more than half (55 percent) (Figure 7a and b). This positive result is encouraging, and the overall improvement in traditional knowledge integration level for most sectors can be seen in Figure 6, where the number of sectors categorised as good ‘green’ or fairly good ‘yellow’ has doubled (73 percent) compared to the baseline assessment of 36 percent.

There are some sectors that stand out in this progress analysis. One of these is the forestry sector for traditional knowledge, where new policies produced in 2018-19 improved by two categories at the conceptual and operational level, from ‘amber’ (only *implicit integration*) to a good ‘green’ level (*explicit and comprehensive recognition of traditional knowledge/dedicated processes exist for addressing traditional knowledge in a comprehensive manner within a policy area*). Unfortunately, similarly strong improvement is not seen for Indigenous peoples’ rights, but the forestry sector remains on a fairly good ‘yellow’ category for the conceptual and at the operational level.

Another sector that does show strong improvement but this time for Indigenous peoples’ rights is the mining sector. Here there is a three-category leap, from a very poor ‘red’ category (*no explicit nor implicit integration*) to a good ‘green’ category in the 2019-20 progress review at a conceptual level and a fairly good ‘yellow’ category for the operational level. While this improvement is positive to see, it is disappointing that there was limited progress for traditional knowledge level integration which only improved up to a poor ‘amber’ category from a very poor ‘red’ category.

These two examples of sectors that demonstrate a major improvement in their integration level are encouraging. In the baseline assessment, there were some discussions on how the result should be interpreted regarding guiding prioritisation of where resources should be focused, assuming not all sectors could be improved. These results indicate that Guyana focused on improving sectors that had lower levels of integration rather than further improving some of the sectors that already had a fairly good level of traditional knowledge and Indigenous peoples’ rights integration.

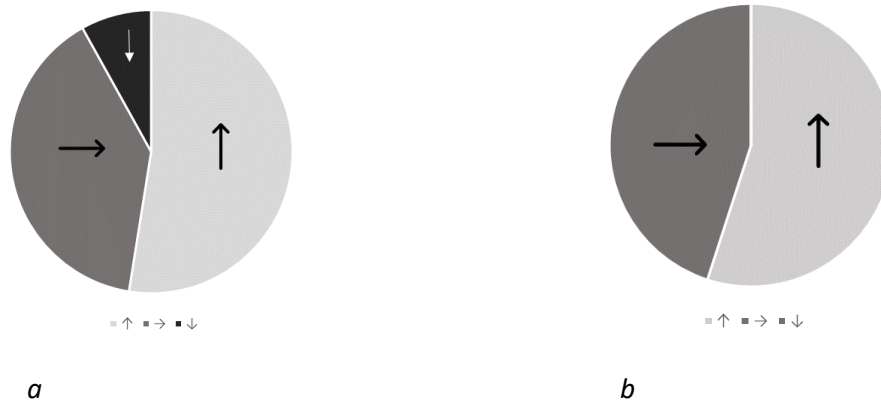


Figure 7: Percentage of policies that showed either one level of improvement, declined, or stayed the same (sectors categorized as 'green' are exempted as already at a good level of integration) for a) traditional knowledge (n=23) b) Indigenous peoples' rights (n=22).

CONCLUSION

This review of Guyanese policies to assess the extent of integration of both traditional knowledge and Indigenous peoples' rights has described and demonstrated an improved level of integration from the baseline assessment done in 2017 through the three annual progress reviews completed until 2021. This is a positive result where most sectors have improved. It was particularly encouraging to see that sectors that had a very poor level of integration (mining and forestry sectors) at the baseline assessment have improved the most. We cannot be certain of the reason for this improvement. However, it was the aim of this policy review work and the wider aspect of our project to improve the respect, inclusion, and maintenance of traditional knowledge at a policy and practice level in Guyana. We have engaged with several decision-makers and ministries during the past four years to raise the importance of traditional knowledge and demonstrate the new methodological approaches and other work that is being undertaken to facilitate improvements. We, therefore, see this progress - at least in part - as an impact of our project.

Another finding was the level of integration of Indigenous peoples' rights tends to be higher for most sectors compared to traditional knowledge. This indicates that Indigenous peoples' rights have had a wider and more substantial recognition at the national level compared to traditional knowledge. For example, Guyana's REDD+ agreement included a demand for improvement on Indigenous peoples' rights, especially land titling, but was unfortunately missing inclusion or demands for traditional knowledge inclusion. Reasons for this pattern could be linked to both the fact that recognition and understanding the importance of Indigenous peoples' rights are more straightforward compared to understanding the importance of traditional knowledge. This is grounded in the fact that we can relate and recognise that everyone is entitled to their human rights. To comprehend the importance of traditional knowledge for the different sectors is more complex and requires dedicated staff with the right skill sets. Thus, investment in capacity building is needed to progress this area.

Another pattern found was the higher level of integration at the conceptual level compared to the operational and implementation levels. This pattern was again noticed in the baseline assessment as well as

in the following progress reviews. To some extent this result is expected; the conceptual level is the first and easiest level to improve, as it does not necessarily require many additional resources in terms of skills and funding. On the other hand, for the operational and implementation levels further time, skills, and resources are required to identify the most suitable instruments and methods that will aid integration and implementation. This is probably linked to the engrained and common barriers for traditional knowledge integration, where *political* and *conceptual barriers*⁷ can explain, at least in part, the slower progress of integrating traditional knowledge on an operational and implementation level. Political barriers include an unwillingness or inability to acknowledge traditional knowledge and support traditional knowledge-holders, especially when conflicting with the agendas of the government or industry. This is also linked to and exacerbated by a lack of power for traditional knowledge holders, lack of official recognition and respect of tenure, and a lack of political and law consistency either due to contradictory policy or failure by the government to consistently apply policy. Conceptual barriers are linked to difficulties in comprehending the values, practices, and context underlying the traditional knowledge system, which could be addressed through capacity development and targeted training programmes, particularly for government agencies and other decision-makers.

At the same time, our results highlight that there is a clear lack of suitable detailed documents, such as annual reviews and surveys, for monitoring processes and indicators at the implementation level. For example, although one of the national parks in Guyana (the Iwokrama Forest) does produce an annual review, this is too general and does not include ongoing data or information on how traditional knowledge or Indigenous peoples' rights have been included, respected, or safeguarded. It is, therefore, possible to conclude that another finding of this review is a major lack of suitable monitoring processes for many sectors. Potentially these exist for internal use, but if this is the case, transparency is encouraged as this is important data that should be used to monitor and verify progress publicly in the field of Indigenous peoples' rights and traditional knowledge inclusion and safeguarding. In addition, the review illuminates the importance of achieving integration and inclusion of traditional knowledge and Indigenous peoples' rights all the way to an implementation level. Only when the progress of inclusion goes all the way from the conceptual to the implementation level can Indigenous people in the communities' experience and see with their own eyes that their rights and knowledge are respected, integrated, and safeguarded.

Finally, through the process of the initial baseline assessment and the annual progress reviews, data has been collated that demonstrates the usefulness of this new methodological approach to monitor and demonstrate progress on the integration of traditional knowledge and Indigenous peoples' rights. The approach also facilitates the identification of sectors and areas where policies/sectors need and can improve to further progress this important issue.

These results thus support our suggestion that this methodological approach is adopted by relevant government agencies in Guyana to continue the monitoring and assessments of the extent of traditional knowledge and Indigenous peoples' rights integration. It is particularly directed to the National Focal Point of the Convention on Biological Diversity (particularly Aichi target 18 and the proposed post-2020 Targets 20 and 21) and the Sustainable Development Goals in Guyana. This report demonstrates that the methodological approach is effective in supporting countries to comply with their international obligations related to providing evidence and reporting on their progress of integrating traditional knowledge.

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Appendix 1: List of policies reviewed for the baseline assessment from 1999-2017

Sector	Sub-Sector	Policy
Agriculture (General)		National Strategy for Agriculture in Guyana 2013-2020
Agriculture (Disaster and risk management)	Disaster and risk management	Disaster Risk Management Plan for the Agriculture Sector 2013-2018
Agriculture (Food Security)	Food security	Food and Nutrition Security Strategy 2011
Climate change		Guyana's Climate Change Plan
Climate change		Guyana's Nationally Determined Contribution
Conservation	Protected areas	Kanuku Mountains PA Management Plan
Conservation	Protected areas	Shell Beach PA Management Plan
Conservation	Protected areas	Kaieteur National Park Act (Amendment) 2000
Conservation	Protected areas	Protected Areas Act 2011
Conservation	Biodiversity	Guyana's NBSAP 2012 - 2020
Conservation	Biodiversity	Guyana Biosafety Bill
Conservation	Biodiversity	National Biosafety Framework for Guyana 2007
Conservation	Biodiversity	National Policy on ABS 2007
Conservation	Protected areas	Plan for Iwokrama Forest 2017
Conservation	Biodiversity	Wildlife conservation and management Bill
Culture		Guyana's Framework National Cultural Policy
Development	Land use	Guyana Land Degradation Plan 2006
Development	Land use	Sustainable Land Development and Management Project

Development	Land use	Guyana National Land Use Plan
Development	Land use	Low Carbon Development Strategy
Extractive	Mining	Guyana Geology and mines Commission Act
Extractive	Petroleum	Guyana Policy for the Petroleum Sector 2017
Forestry		Guyana's National Forest Policy
Human rights	Indigenous peoples	Amerindian Act 2006
Land rights		Guyana Lands and Survey Commission Act 1999

Appendix 2: Policies and Act reviewed in 2018 (up to February 2019)

Sector	Sub-Sector	Policy
Forestry		National Forestry Policy Statement 2018
Forestry		Forest Regulations 2018
Human Rights	Indigenous peoples	MoIPA Strategic Plan 2018
Human Rights	Land tenure	Our land Our Life for Amerindian Act 2006
Conservation	Biodiversity	JAGUAR 2030 NEW YORK STATEMENT
Conservation	Protected areas	KAP survey for Kanuku Mountains PA Management Plan
Development		Draft Green State Development Strategy
Extractive	Mining	National Mineral Sector Policy Framework and Action (2019-2029)

Appendix 3: Policies and Act reviewed in 2019- 2021

Sector	Sub-Sector	Policy
Climate change		Draft National Climate change policy and action plan 2019
Conservation	Biodiversity	Strategic plan for inland fisheries and aquaculture development and management in Guyana 2021-2026
Development		Green State Development Strategy Vision 2040
Extractive	Minerals	National Mineral Strategy Policy Framework and actions 2019-2029
Forestry		Annual Report 2017
Human rights	Land tenure	Our Land our Life 2019 Region 7