

STAP guidelines for screening GEF projects

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| Part I: Project Information | Response | |
| GEF ID | 10793 | |
| Project Title | Building climate resilient livelihoods and food systems | |
| Date of Screening | 23 May 2021 | |
| STAP member screener | Ed Carr | |
| STAP secretariat screener | Virginia Gorsevski | |
| STAP Overall Assessment and Rating | <p>Minor issues to be considered during project design</p> <p>STAP acknowledges the project “Building climate resilient livelihoods and food systems” in Lesotho. The project identifies and aims to address a number of significant barriers to food security and LDC graduation for Lesotho. To ensure this project has the greatest possible impact, and that those impacts are durable, STAP requests the following revisions:</p> <ol style="list-style-type: none"> 1) The project team should clarify and substantiate the relative current and likely future role of climate change in the agricultural challenges the project seeks to address. This will ensure that the project addresses important drivers of observed challenges. 2) The project team should consider more than one plausible future when setting out a problem statement and baseline scenario (see discussion in baseline below). This activity will help the project team assess 1) adaptation needs and 2) the potential effectiveness of different interventions across these plausible futures, ensuring robust results across a range of futures. 3) Note that there are assumptions about project implementation and problem identification on the part of the project team that are not identified in this PIF, but which could greatly impact project performance. The project theory of change should not put all responsibility for success on project beneficiaries. | |
| Part I: Project Information | What STAP looks for | Response |

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| B. Indicative Project Description Summary | | |
| Project Objective | Is the objective clearly defined, and consistently related to the problem diagnosis? | Yes, it is. The objective is “to enhance climate resilience of landscapes and communities for food and nutrition security through sustainable water management.” |
| Project components | A brief description of the planned activities. Do these support the project’s objectives? | Yes, they do. |
| Outcomes | A description of the expected short-term and medium-term effects of an intervention. Do the planned outcomes encompass important adaptation benefits? | Yes, they do. |
| | Are the global environmental benefits/adaptation benefits likely to be generated? | Yes, they are. |
| Outputs | A description of the products and services which are expected to result from the project. Is the sum of the outputs likely to contribute to the outcomes? | Yes, they are. |
| Part II: Project justification | | |
| 1. Project description. Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description) | Is the problem statement well-defined? | The problem statement is well-defined. However, there are some claims in the problem statement that should be substantiated. In particular: 1) Shrinking arable land is linked to climate change without any references. Many factors, including agricultural practices that produce land degradation (referenced in the PIF), can drive loss of arable land. What fraction of arable land loss is attributable to climate change? How does this compare to other drivers of arable land loss? 2) What is driving the decline in agricultural production over time? There have been documented shifts from farming to mining and other sectors over time, which would reduce production even without climate change. How much of this is related to land degradation that |

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| | | <p>is linked to farmer practices, not a changing climate?</p> <p>3) The PIF states that current food insecurity is driven primarily by the highly variable climate. Given the very limited changes in temperature seen in Lesotho and the prevalence of other drivers of agricultural change, including land degradation and shifts out of agriculture to other sectors, this claim needs to be substantiated with evidence.</p> <p>4) The increase of 1C by 2030/1.5-2C by 2050 is against what starting year? The chart in the PIF documents an increase of less than .5C over the past 60 years, suggesting that temperature increase is not a major driver of climate impacts in Lesotho.</p> <p>5) The significance of climate change for agricultural production is not necessarily negative. The PIF notes that that while maize yields are projected to decrease, there could be increases in sorghum, potato, and vegetable production. This suggests a clear adaptation pathway for farmers that does not require substantial intervention.</p> <p>The problem statement suggests that the confluence of climate change, drought, and land degradation “are expected to have devastating consequences on food security and livelihoods of vulnerable Basotho, in the absence of concerted efforts to address these problems” but the evidence in the PIF does not support this conclusion, at least not in terms of the details provided.</p> <p>This is not to suggest that Lesotho has no climate-related challenges, but that the PIF provides inadequate information for assessing the scale of</p> |
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| | | those challenges, the pathways of climate change to climate impacts, or means of identifying appropriate interventions that can address those pathways. |
| | Are the barriers and threats well described, and substantiated by data and references? | <p>As noted above, the climate threats are described but often not substantiated or differentiated/ specified relative to other drivers of change. This makes the identification of barriers to addressing those threats challenging.</p> <p>This said, the PIF does identify a number of barriers to addressing the challenges it lays out. Most of these barriers will be issues to be addressed regardless of the scope of climate change impacts, though their importance and therefore the appropriateness of addressing them will vary depending on the substantiation of some of the claims in the problem statement.</p> |
| | For multiple focal area projects: does the problem statement and analysis identify the drivers of environmental degradation which need to be addressed through multiple focal areas; and is the objective well-defined, and can it only be supported by integrating two, or more focal areas objectives or programs? | n/a |
| 2) the baseline scenario or any associated baseline projects | Is the baseline identified clearly? | <p>The baseline is most clearly established in the additional cost reasoning section of the PIF. The baseline suggests a continuation of current conditions going forward. The principle focus of the baseline statement is that Lesotho will not make progress needed to graduate from LDC status.</p> <p>STAP strongly recommends that projects consider more than one plausible future when setting out a problem statement and baseline scenario. The future climate is probabilistic and therefore even the best models have significant variance in their projections as they move into the future. In the PPG stage the project would be well-served to consider adding two more scenarios that capture some of this plausible variance in temperature and</p> |

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| | | <p>precipitation, and use all three scenarios to assess 1) adaptation needs and 2) the potential effectiveness of different interventions across these plausible futures. This will ensure the project selects interventions that target the most likely future needs while delivering adaptation benefits across a range of possible futures.</p> <p>There is some baseline-related data in the problem description that help to quantify some of the more general aspects of the baseline scenario as laid out in the additional cost reasoning section.</p> |
| | Does it provide a feasible basis for quantifying the project's benefits? | By connecting all of the information on current conditions in Lesotho found in the PIF, it will be possible to create a quantified baseline and baseline scenario against which to measure many of the project's benefits. The adaptation benefits section of the PIF also offers quantified targets. |
| | Is the baseline sufficiently robust to support the incremental (additional cost) reasoning for the project? | Yes, if the claims about climate change impacts on the problems identified can be substantiated. |
| | For multiple focal area projects: | |
| | are the multiple baseline analyses presented (supported by data and references), and the multiple benefits specified, including the proposed indicators; | n/a |
| | are the lessons learned from similar or related past GEF and non-GEF interventions described; and | n/a |
| | how did these lessons inform the design of this project? | n/a |
| 3) the proposed alternative scenario with a brief description of expected outcomes and components of the project | What is the theory of change? | STAP welcomes the clearly-articulated theory of change in the PIF, and acknowledges that the project team used the STAP primer to put this ToC together. |
| | What is the sequence of events (required or expected) that will lead to the desired outcomes? | See below |
| | What is the set of linked activities, outputs, and outcomes to address the project's objectives? | The project objective will be achieved through implementation of four interlinked components. These are very well-articulated and justified, with clear outputs targeting clear outcomes: |

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| | | <p>Component 1: Strengthening policy and institutional capacities</p> <p>Outcome 1.1: Strengthened policies, planning and investment frameworks to enable sustainable climate-resilient water management in production landscapes.</p> <p>The outputs supporting this outcome are:</p> <ul style="list-style-type: none"> a) Review and update of policies and financial instruments for leveraging investments for climate change resilient water management in production landscapes, with women and youth empowerment incorporated. b) Agro-ecological zoning and climate resilience actions integrated into local planning processes (community, catchment, district levels) c) Dynamic decision-support systems (DSS) developed for policy-makers and practitioners to assist with the formulation and evaluation of policies and measures for climate-resilient food systems transformations d) A gender-sensitive microfinance mechanism for adoption of climate-resilient technologies piloted. <p>Outcome 1.2: National and local/district level capacities strengthened to plan and implement climate-resilient agriculture</p> <p>The outputs supporting this outcome are:</p> <ul style="list-style-type: none"> a) Capacity building programs on climate-resilient agriculture for farmers (including women and youth), aggregators, agro- |
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| | | <p>processors, agro-dealers, and national and district level extension staff with special focus on drought and sustainable water management. The capacity building will include the translation and use of climate information for decision-making at farm and catchment levels, with feedback to the Lesotho Meteorological Services to help refine the early warning systems as necessary (link to GEF-6 EWSII project). It will also include components on soil fertility management and on integrated pest management in order to prevent and/or eliminate use of highly hazardous pesticides (HHPs).</p> <p>b) Capacity building program targeted at local private sector – engineers and technicians to support innovative technologies (particularly water management) introduced (youth and women inclusive)</p> <p>c) Strengthened inter-institutional multi-sector and multi-scale coordination for mainstreaming CC adaptation into management of land, water/irrigation and infrastructure development, building on existing structures.</p> <p>Component 2. Promoting innovative, sustainable and climate resilient agricultural water management.</p> <p>Outcome 2.1. Resilience of landscapes and livelihoods strengthened with improved agricultural water management and infrastructure, addressing droughts and floods</p> <p>The outputs supporting this outcome are:</p> <p>a) Participatory selection of innovative water management and drought management tools</p> |
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| | | <p>and technologies through a feasibility study (use of FAO Drought Portal)</p> <ul style="list-style-type: none"> b) Capacity building program for farmers on Participatory Integrated Climate Services for Agriculture (PICSA) tools to analyse weather and climate information (historical and forecast) for water management for crops to support decision making for climate resilience c) Climate resilient, sustainable, and inclusive water management systems and techniques introduced to increase availability and access to water for agriculture and domestic use (alternate wetting, mulching, deficit irrigation, drip irrigation, improved crop varieties, trash-lines, pitting, contour bonding, water retaining, integrated pest management, soil fertility management etc.) d) Livelihood diversification strategies and plans with the special focus on sustainable management and use of water developed and implemented. <p>Component 3. Strengthening resilience of agricultural and food value chains.</p> <p>Outcome 3.1. Agriculture and food value chains strengthened to enhance resilience to climate and other shocks</p> <p>The outputs supporting this outcome are:</p> <ul style="list-style-type: none"> a) Target agriculture value chain mapped to analyse barriers and market potential to initiate transformation for gender-sensitive resilient green value chains b) Aggregation of smallholder produce into upgraded value chains promoted and facilitated |
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| | | <p>c) Agriculture Clusters and Market Hub Enterprises developed as drivers of agricultural and food system resilience</p> <p>d) Climate-resilient and sustainable agribusinesses and cooperatives targeting women and youth entrepreneurs linked to green value chains</p> <p>e) Youth capacity development through incubation and mentorship programs to leverage commercialization potential for resilient agriculture and food value chains</p> <p>f) Access to finance facilitated through partnership with new and/or existing financing mechanism – support provided to development of bankable business plans for climate-resilient investments.</p> <p>Component 4. Communication, knowledge management, and M&E.</p> <p>Outcome 4.1. Monitoring and evaluation under a results-based approach, good practices and lessons learned, systematized and disseminated</p> <p>The outputs supporting this outcome are:</p> <p>a) A national platform to facilitate access to climate resilient agriculture information and knowledge established</p> <p>b) Exchange learning visits with similar biophysical and socio-economic contexts conducted Exchange within the farm community with farmer extension (FFS) A sound results based Monitoring and Evaluation system (with sex-disaggregated indicators) developed</p> |
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| | | <p>c) Midterm and final evaluations successfully conducted</p> <p>d) Project communication strategy (behaviour change communication) developed.</p> <p>The expected project-level outcomes of these components:</p> <ol style="list-style-type: none"> 1) strengthening the enabling environment for sustainable climate-resilient water management in production landscapes 2) increasing the drought and flood resilience of livelihoods in these landscapes 3) strengthening overall resilience of key agriculture value chains. <p>Project work is expected to rest on improved knowledge management to facilitate scaling up and out at the national level towards national social and economic resilience and sustainability.</p> |
| | <p>Are the mechanisms of change plausible, and is there a well-informed identification of the underlying assumptions?</p> | <p>Overall, the mechanisms of change are plausible.</p> <p>There is a very clear list of project assumptions in the ToC section of the PIF:</p> <p>A1: There is willingness of key stakeholders to be involved, participate, and cooperate on building resilience.</p> <p>A2: There is an interest of stakeholders in knowledge materials and capacity building.</p> <p>A3: Local people are interested in and motivated to build resilience of the landscapes. Local government is willing to participate and identify their priorities in a participatory manner.</p> <p>A4: Youth are interested in building innovative resilient and green value chains.</p> <p>A5: Relevant data and information for evaluating climate information gaps from previous projects</p> |

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| | | <p>will be made available and will have sufficient resolution for field application.</p> <p>ST AP notes that nearly all assumptions place responsibility for project success on a variety of local stakeholders without any parallel responsibility on the project.</p> <p>ST AP also notes that the project assumptions do not include a critical, cross-cutting assumption: that the project has identified key barriers to graduation from LDC status, and that the project has identified effective means of addressing the barriers to this goal.</p> |
| | Is there a recognition of what adaptations may be required during project implementation to respond to changing conditions in pursuit of the targeted outcomes? | Yes. The risks section of the PIF notes that extreme events could reduce the benefits of climate resilient agricultural innovations. It suggests that such events could be used to test the efficacy of these innovations and allow for adjustments. |
| 5) incremental/additional cost reasoning and expected contributions from the baseline, the GEF trust fund, LDCF, SCCF, and co-financing | GEF trust fund: will the proposed incremental activities lead to the delivery of global environmental benefits? | n/a as this is an LDCF project; however, if successful it is plausible that some of the proposed interventions related to climate smart agriculture and nature based solutions would have benefits in terms of carbon sequestration, reduced biodiversity loss, etc. |
| | LDCF/SCCF: will the proposed incremental activities lead to adaptation which reduces vulnerability, builds adaptive capacity, and increases resilience to climate change? | Yes, the planned adaptation benefits would reduce vulnerability, build adaptive capacity, and increase resilience to climate change. |
| 6) global environmental benefits (GEF trust fund) and/or adaptation benefits (LDCF/SCCF) | Are the benefits truly global environmental benefits/adaptation benefits, and are they measurable? | Yes, there are clear adaptation benefits and they are measurable. |
| | Is the scale of projected benefits both plausible and compelling in relation to the proposed investment? | The policy benefits are compelling, as they could reshape agriculture and other sectors to provide increased climate resilience. The on-the-ground direct adaptation benefits are plausible but not as compelling. However, if the on-the-ground activities serve to further the policy agenda, and thus allow for scale-up, they are valuable parts of the project. |

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| | Are the global environmental benefits/adaptation benefits explicitly defined? | Yes. |
| | Are indicators, or methodologies, provided to demonstrate how the global environmental benefits/adaptation benefits will be measured and monitored during project implementation? | Yes. |
| | What activities will be implemented to increase the project's resilience to climate change? | The risks section does not discuss activities to increase project resilience, but notes that extreme events will allow the project to test some of its interventions for robustness and make adjustments. |
| 7) innovative, sustainability and potential for scaling-up | Is the project innovative, for example, in its design, method of financing, technology, business model, policy, monitoring and evaluation, or learning? | <p>As the PIF clearly notes, the decision support system proposed is innovative in Lesotho but well-understood and utilized in other places. Therefore, this innovation is not likely to scale beyond Lesotho, as it is already out in the world. Also, while it is noted that maintenance of the system is inexpensive (compared with initial set up), the approach appears to be quite complex, requiring specialized technical skills to operate. Has the project identified which organization will be responsible for operation of this system which appears to form the backbone of much of the project? Is it one of the many government agencies and/or national university?</p> <p>Similarly, the climate-resilient irrigation and water management technologies are new and innovative in Lesotho, but already tested and proven elsewhere.</p> <p>Sustainability will be achieved by mainstreaming and capacity building – two measures that are often cited as promoting the continuation of projects; however, often without much supporting detail or evidence.</p> |
| | Is there a clearly-articulated vision of how the innovation will be scaled-up, for example, over time, across geographies, among institutional actors? | The project has the potential to scale up within Lesotho, but it speaks to very specific situations in the country. Further, it is using technologies that are already used and proven in other contexts. |

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| | | Therefore, scale-up beyond Lesotho is not likely to be a primary benefit of this project. |
| | Will incremental adaptation be required, or more fundamental transformational change to achieve long term sustainability? | The project seems to suggest that transformative change will be needed to farming in Lesotho to create sustained results. However, it is not clear this is correct – the discussion of climate as a driver of Lesotho’s challenges does not always substantiate the links between climate and challenge, and thus the need for change – and the extent of needed change – is not clear. |
| 1b. Project Map and Coordinates. Please provide geo-referenced information and map where the project interventions will take place. | | A very simple map is provided, which helpfully indicates where the project sites are located within the country. The map could be much improved by adding land cover and land use as background (or perhaps elevation as this is a mountainous area) as well as administrative boundaries and water bodies including rivers and streams to help orient the reader. |
| 2. Stakeholders. Select the stakeholders that have participated in consultations during the project identification phase: Indigenous people and local communities; Civil society organizations; Private sector entities. If none of the above, please explain why. In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement. | Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers? | The PIF identifies a wide range of stakeholders that appears to cover all relevant actors. STAP notes that the target beneficiaries have not yet been engaged, which is of concern as the PIF represents their situation extensively but, as noted above, does not always clearly demonstrate the connection between climate change and agricultural challenges. Also considering beneficiaries, there is little discussion, in the rest of the PIF or in this section, of gender-differentiated risks or challenges (or other differentiations that might produce different experiences of risks and challenges). However, STAP notes that the project plans to work with the Ministry of Gender and an NGO with a gender equality promotion mission going forward. This organization should help identify any such gendered or otherwise-differentiated issues. The private sector has not yet been engaged but will be in the PPG stage. |

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| | <p>What are the stakeholders' roles, and how will their combined roles contribute to robust project design, to achieving global environmental outcomes, and to lessons learned and knowledge?</p> | <p>Smallholder farmers will be engaged to identify their needs and priorities and selecting interventions. Government entities are implementers and managers of the project, along with critical technical and information providers. Various civil society organizations will serve to support implementation in a manner sensitive to local needs. The National University of Lesotho is to be engaged in the design and implementation of capacity development programs and knowledge management.</p> |
| <p>3. Gender Equality and Women's Empowerment. Please briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis). Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes/no/tbd. If possible, indicate in which results area(s) the project is expected to contribute to gender equality: access to and control over resources; participation and decision-making; and/or economic benefits or services. Will the project's results framework or logical framework include gender-sensitive indicators? yes/no/tbd</p> | <p>Have gender differentiated risks and opportunities been identified, and were preliminary response measures described that would address these differences?</p> | <p>The PIF generally recognizes that women are discriminated against in Lesotho, and that structural bias is something the project will have to confront. They have not at this stage conducted a gender analysis, however STAP is pleased to see a gender-focused NGO and the Ministry of Gender engaged in this project.</p> <p>STAP notes that a "gender-sensitive microfinance mechanism for adoption of climate-resilient technologies" will be piloted and is curious to know what this means (i.e. how can a microfinance mechanism be gender sensitive?)</p> |

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| | Do gender considerations hinder full participation of an important stakeholder group (or groups)? If so, how will these obstacles be addressed? | None are listed specifically in the PIF, but it notes that the project will focus on ensuring women are represented at every level of the project, which implies that women generally do not participate fully. |
| 5. Risks. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design | <p>Are the identified risks valid and comprehensive? Are the risks specifically for things outside the project's control? Are there social and environmental risks which could affect the project?</p> <p>For climate risk, and climate resilience measures:</p> <ul style="list-style-type: none"> • How will the project's objectives or outputs be affected by climate risks over the period 2020 to 2050, and have the impact of these risks been addressed adequately? • Has the sensitivity to climate change, and its impacts, been assessed? • Have resilience practices and measures to address projected climate risks and impacts been considered? How will these be dealt with? • What technical and institutional capacity, and information, will be needed to address climate risks and resilience enhancement measures? | <p>The risks are valid. ST AP suggests the project consider the risk that the agricultural challenges it has identified are shaped by many factors, including economic factors that extend beyond Lesotho (such as the engagement of rural populations in mining in South Africa) and which are not clearly identified in this PIF. The project should think about how it might pivot its activities if climate change impacts prove to be a secondary or tertiary cause of the agricultural challenges in Lesotho.</p> <p>The project has not conducted a climate risk screen, but as the project is fundamentally about managing climate risk its objectives and outputs are not likely to be affected by climate risk – indeed, the demand for project outputs could increase.</p> |
| 6. Coordination. Outline the coordination with other relevant GEF-financed and other related initiatives | Are the project proponents tapping into relevant knowledge and learning generated by other projects, including GEF projects? | This is not clear. The PIF notes a wide range of projects that the proposed work would align with and complement, but it does not make it clear how this project would build on lessons from the others and avoid unnecessary duplication of efforts. |
| | Is there adequate recognition of previous projects and the learning derived from them? | There is a great deal of recognition of current projects in Lesotho relevant to this one, but less detail about learning from them. |
| | Have specific lessons learned from previous projects been cited? | No |
| | How have these lessons informed the project's formulation? | It does not appear that they do |
| | Is there an adequate mechanism to feed the lessons learned from earlier projects into this project, and to share lessons learned from it into future projects? | It does not appear that there is |
| 8. Knowledge management. Outline the | What overall approach will be taken, and what knowledge management indicators and metrics will be used? | The KM strategy will be developed in the PPG phase. The overall philosophy, according to the |

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| <p>“Knowledge Management Approach” for the project, and how it will contribute to the project’s overall impact, including plans to learn from relevant projects, initiatives and evaluations.</p> | | <p>PIF, is understanding that behavior change is key to driving the desired results, developing a M&E system with a strong focus on capturing best practices and innovations, and producing/using tools and technologies to facilitate managing and sharing knowledge and information.</p> |
| | <p>What plans are proposed for sharing, disseminating and scaling-up results, lessons and experience?</p> | <p>To be developed during the PPG stage.</p> |

Notes

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| STAP advisory response | Brief explanation of advisory response and action proposed |
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| 1. Concur | STAP acknowledges that on scientific or technical grounds the concept has merit. The proponent is invited to approach STAP for advice at any time during the development of the project brief prior to submission for CEO endorsement. |
| | * In cases where the STAP acknowledges the project has merit on scientific and technical grounds, the STAP will recognize this in the screen by stating that <i>“STAP is satisfied with the scientific and technical quality of the proposal and encourages the proponent to develop it with same rigor. At any time during the development of the project, the proponent is invited to approach STAP to consult on the design.”</i> |
| 2. Minor issues to be considered during project design | STAP has identified specific scientific /technical suggestions or opportunities that should be discussed with the project proponent as early as possible during development of the project brief. The proponent may wish to: |
| | (i) Open a dialogue with STAP regarding the technical and/or scientific issues raised; |
| | (ii) Set a review point at an early stage during project development, and possibly agreeing to terms of reference for an independent expert to be appointed to conduct this review. |
| | The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement. |

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| <p>3. Major issues to be considered during project design</p> | <p>ST AP proposes significant improvements or has concerns on the grounds of specified major scientific/technical methodological issues, barriers, or omissions in the project concept. If ST AP provides this advisory response, a full explanation would also be provided. The proponent is strongly encouraged to:</p> |
| | <p>(i) Open a dialogue with ST AP regarding the technical and/or scientific issues raised; (ii) Set a review point at an early stage during project development including an independent expert as required. The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.</p> |