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Environmental Assessment

NCEA Advice on Sustainable Programme Development in Somalia

SOMALIA



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Advisory Report by the NCEA

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To	Embassy of the Kingdom of The Netherlands, Somalia unit
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Date	3 June 2021
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1. Introduction

The Netherlands Commission for Environmental assessment (NCEA) supports environment and sector ministries, assessment professionals and non-governmental organisations, to improve their environmental and social assessment practice. In addition to these general advisory and capacity development activities, the NCEA also runs the Sustainability Advice Programme. This programme, specifically designed for Dutch embassies and Ministry of Foreign Affairs departments, aims to support integration of sustainability considerations in short-to-medium-term policy development. Developing sustainable policies requires the consideration of many policy issues, such as food security and water availability, climate and gender, aid and trade and others.

1.1 Request to the NCEA

In the framework of this Sustainability Advice Programme, the NCEA received a request from the Netherlands Embassy in Kenya, concerning Somalia. The request concerns the following:

- Assess the Embassy's current policy for Somalia (Multi Annual Country Strategy- MACS and commitments) on its contribution to sustainable development, taking into consideration the effects of climate change. The main question is: 'how would we steer our programme to reduce social consequences of climate change'.
- Advice on the proper integration of climate change research in the Embassy programme development (at a later stage).

More specifically, the Embassy has asked to:

- Assess the social consequences/impacts of climate change to the social contract in Somalia and when developing the different climate scenarios for Somalia. Political underpinning of assessments and scenarios will need to be considered (in line with the thinking and working politically in Somalia).
- Look at the current strategy period (2019–2022) but also advise on the next strategy period.

1.2 NCEA approach

This advisory report has been prepared with inputs from experts on environmental sustainability, climate change and socio-economic and institutional sustainability (see colophon).

The MACS and commitments¹ have been assessed against the DSU² Assessment framework for Sustainability Analysis that has been developed specifically for Dutch water and food security programmes. It looks at governance, people, planet and profit along seven dimensions, for each of which sustainability issues (up to 37 in total) have been defined.

¹ An overview of central and decentral projects being implemented with Dutch support in Somalia is provided in annex 1

² Dutch Sustainability Unit, the predecessor of the current NCEA/Sustainability Advice programme

Assessment framework

Dimensions of sustainable development	For a full checklist, see annex 3. For each of the issues the following four questions have been answered:
1. Political economy	1. Is the issue relevant for the MACS?
2. Policy culture & Representation	2. What is the current context concerning this criterion?
3. Rule of Law	3. Does the MACS take this criterion into account?
4. Organisational dimensions	4. Are there opportunities to contribute to (or to strengthen) the integration of this criterion in the next MACS?
5. Economic	
6. Social	
7. Environment and climate	

The detailed findings are presented in annex 4. As not all issues are relevant for the assessment of the MACS, some boxes in the table are left without text.

A summary of conclusions and recommendations is presented in the next Chapter. The first paragraph elaborates on climate impact on Somalia, followed by a paragraph on the political economic constraints on climate impact. Paragraph 2.3. presents the NCEA's findings on the analysis of the current MACS, whereas paragraph 2.4. subsequently provides our recommendations on the way forward.

2. Findings

2.1 Climate impact on Somalia

In considering the development cooperation with Somalia, the question of climate impact is highly relevant, in fact it is a theme that is 'not to miss'. It is safe to say that Somalia faces the brunt of climate impact and the country is highly climate fragile. Droughts – as in 2011 and 2016/7 – have become more frequent and more long-lasting. In high rainfall years flooding has been uncontrolled and has become more problematic. In the last ten years unusual weather events have translated into humanitarian crises multiple times, due to the lack of preparedness and the lack of buffering capacity in the natural resource system.

On the combined ND-GAIN³, Somalia is ranked as the country most vulnerable and ill-prepared to climate change (rank 181/181). Zooming in on the parameters behind this aggregated ND-GAIN score, Somalia is the second least prepared country (179/180), with only Chad being less prepared. The lack of preparedness relates primarily to governance. Here Somalia scores 188/188. In contrast it performs relatively well on economic preparedness (107/184). The high vulnerability of Somalia is particularly related to lack of

³ Notre Dame University Global Adaptation Initiative: <https://gain.nd.edu>

adaptive capacity (175/175), food availability (186/189) and to a lesser extent to water availability (154/169).

This high vulnerability to climate shocks comes on top of a natural resource system that over the decades has steadily degraded as manifest in severe gullyling and erosion, deforestation, more severe flooding and increase in invasive species and dwindling groundwater stocks:

- Gully formation is rampant in North East and North West Somalia, particularly where soils are shallow. Of the land mass in Puntland 50% is severely affected by land degradation. This reduces the ability to retain water when it falls⁴.
- Grazing areas have been degraded due to overuse and restrictions on pastoralist movement, related to the conflicts. At the same time livestock and fodder production constitute a large part of economy. It is said that no other country in the world depends so strongly on pastoralism⁵.
- Invasive species – there is an upsurge of invasive species in the drylands of Somalia, especially with the deep-rooted *prosopis juliflora* that reduces the grazing potential of rangelands, clogs the dry river beds and consumes soil moisture and shallow groundwater. *Prosopis juliflora* was calculated to occupy 9% of the land close to Hargeisa⁶.
- Locust attacks have affected Somalia badly, causing the Government to announce a national emergency. The locust outbreaks are related first to the climate change related unusual heavy rain events over desert territory causing the larvae to come out and second to the reduced surveillance in potential emergency areas, due to the lack of security.
- Forests in Somalia have been reduced. Depending on different estimates the loss is 40–70,000 ha/year⁷, which is one of the largest deforestation rates in Sub Saharan Africa. Charcoal production particularly from acacia has been a major driver in the Southwest of the country. Here 14% of the stands disappeared in the last fifteen years. The trade is much controlled by Al Shabab. Efforts have been taken to control this trade.
- Water resources from ephemeral streams constitute a potentially important resource but they are not systematically harnessed – not much effort is put in retaining water through flood based systems. The area under rainfed cropland in Somalia is relatively small, estimated at 234,000 ha⁸.
- Water use and water management in both the rainfed and irrigated croplands in Somalia has been stable in the last decade. A country wide analysis was undertaken to assess the trends in water consumption (evapotranspiration), biomass production, water productivity and atmospheric water demand (as indicator of climate change) between 2009–2020⁹. In this period water consumption in the irrigated areas has fluctuated over the years, more than one would expect in controlled irrigation. On balance however biomass production (an indicator of crop output) has increased and hence the water

⁴ World Bank (2020). Somalia Country Environmental Analysis: Diagnostic study on trends and threats for environmental and natural resources challenges. World Bank: Washington DC.

⁵ World Bank (2020). Somalia Country Environmental Analysis: Diagnostic study on trends and threats for environmental and natural resources challenges. World Bank: Washington DC.

⁶ Michele Meroni, Wai-Tim Ng, Felix Rembold, Ugo Leonardi, Clement Atzberger, Hussein Gadain, Muse Shaiye (2017). Mapping *Prosopis Juliflora* In West Somaliland With Landsat 8

Satellite Imagery And Ground Information. Land Degradation and Development 28: 494–506

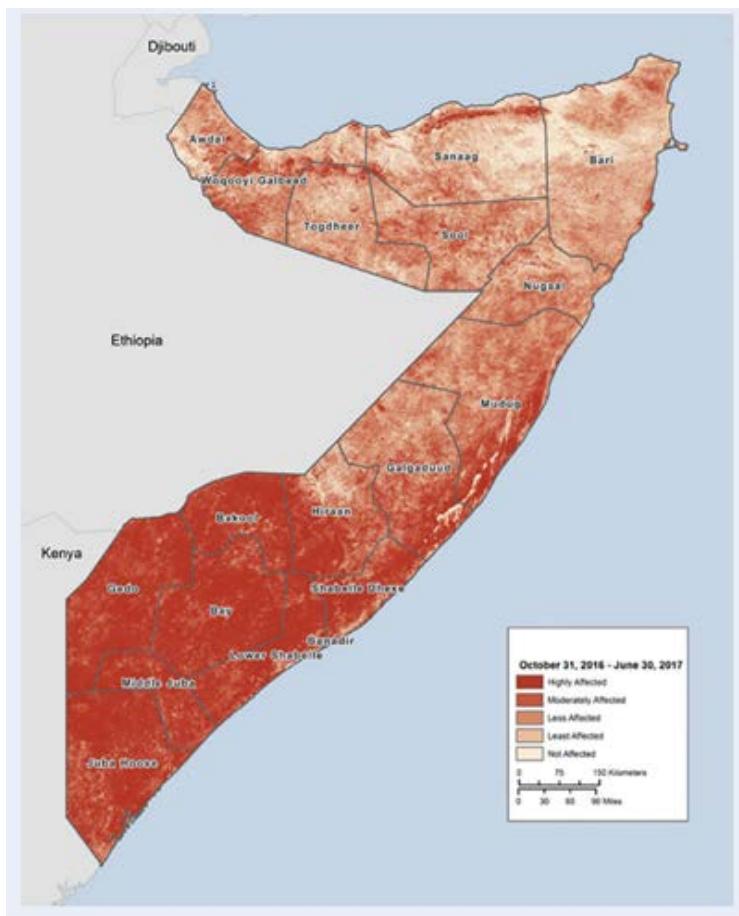
⁷ Government of Somalia (2018), Somalia Recovery And Resilience Framework.

⁸ Bremer, K. (2021), Analyzing trends in water consumption and bio-mass production of irrigated and rain-fed cropland in Somalia using WAPOR. Wageningen, MetaMeta.

⁹ Bremer, K. (2021), Analyzing trends in water consumption and bio-mass production of irrigated and rain-fed cropland in Somalia using WAPOR. Wageningen, MetaMeta.

productivity (crop per drop). A similar pattern emerges from the rain-fed areas. This may be largely explained by relatively favorable climate trends for regular crop production (temperature and wind). It appears that the climate effects in Somalia are particularly felt through episodic drought and flood events. See annex 1 for detailed information.

- Planned hydropower upstream development in Ethiopia may in the future affect the flows of the major rivers in Somalia, i.e. the Juba and Shebelle. In principle such development could regulate flows, but there is no transboundary cooperation between the two countries¹⁰. In recent years there has been increased flooding of the Juba and Shebelle rivers in Somalia without this being productively used.
- Overuse of groundwater is reported from the northern and central parts of Somalia, accelerated by increase in solar pumps that reduce the costs of groundwater pumping.



World Bank publication: indication of drought (dark red=highly affected)¹¹

¹⁰ Elmi Mohammed (2013)

¹¹ World Bank Group (2018). Somalia drought impact and needs assessment: synthesis report. World Bank: Washington D.C.

The repeated episodic climate shocks of the last ten years have had pronounced social consequences:

- They have led to large food insecurity with the repeated spectre of famine amongst certain groups. These could only be partially averted with massive efforts of humanitarian organizations.
- The shocks led to a setback in economic position of a large part of Somalia's most vulnerable population, such as loss of livestock and widespread poverty. It has also undermined the pastoralist economies.
- Aid, in particular food aid and food imports have become an important part of the economy. National food production only meets 25% of needs.

The climate vulnerability combined with the state of conflict that Somalia is in has also changed the fabric of society, which is demonstrated by:

- Continued dependence on external aid, with a large role of external aid organizations and the agent companies that deliver the aid on behalf of these.
- Change in access to land and water: reports of land grabbing through distress sales to rich business parties after drought events.
- Conflict over resources: water, land and grazing rights. Instability restricts internal pastoralist movement and has made movement in search of pastures more problematic¹².
- The risk of the downward spiral, where environmental degradation and climate change are leading to degradation of livelihoods, displacement, unsustainable urbanization, and land conflict. In the absence of government capacity, these shocks require frequent humanitarian intervention, further weakening institutions and markets, and increasing the vulnerability of the citizens.

2.2 Political Economic Constraints on Climate Change Adaptation

As paragraph 2.1. clearly shows, the impacts of climate change are likely to have significant consequences for the livelihoods of the Somali population. The risks posed by changing climatic conditions are widely recognized and to a considerable degree already felt by the Somali population as droughts, floods and other events destroy livelihoods, displace parts of the population and increasingly strain communities' resilience.¹³ Food security amongst many groups has declined, and fluctuating livestock prices related to unpredictable periods of drought necessitate pastoralists to maintain increasingly large herds putting further pressures on limited resources.¹⁴ Coupled with the development of several urban economies,

¹² World Bank (2020), Somalia Country Environmental Analysis: Diagnostic study on trends and threats for environmental and natural resources challenges. World Bank: Washington DC.

¹³ Intergovernmental Panel on Climate Change (IPCC). 2007. AR4 Climate Change 2007: Synthesis Report, contribution of working groups I, II, and III to the fourth assessment report of the intergovernmental panel on climate change (core writing team, Pachauri, R.K. and Reisinger, A. (eds)), Geneva: IPCC.; Ogallo, L. et al. 2018. 'Climate Change Projections and the Associated Potential Impacts for Somalia', American Journal of Climate Change (7), p. 153–170.

¹⁴ Humanitarian Data Exchange. 'ReliefWeb Crisis Figures Data: Historical Figures', <https://data.humdata.org/dataset/reliefweb-crisis-figures/resource/53297c49-a715-498f-8f33-723374f29156> (Accessed 30 June 2020).

cities have grown rapidly leading to a considerable rise in urban poverty, but also to a degree of transformation in traditional clan-based support networks in face of rising inequality.¹⁵

Although current and future risks of the impact of climate change are thus well recognized, the topic has had limited political salience. The Federal Government of Somalia (FGS) considers climate change through its negative impact on the Somali economy. Weakening economic performance is viewed as driving conflict, inhibiting institutional development, security and justice improvements, thus entrenching low development.¹⁶ This has meant that government efforts have focused on improving resilience and disaster response measures, and to some extent on improvements in agriculture, fisheries and nutrition.¹⁷ Yet, the FGS, the Somaliland government and the regional governments have largely failed to initiate sufficiently impactful initiatives to tackle climate change induced impacts both short and long term. In practice, only a fraction of FGS expenditures was spent on the climate adaptation relevant policy areas of economic and social policy (9.0% and 1.1% of expenditures respectively), compared to for instance 37.0% of FGS expenditures on security services (actual expenditure 2019).¹⁸ This reflects a prioritization, to some degree in line with domestic public opinion, which appears to prioritize improvements in security, governance and economic enablers as a means to poverty alleviation (note however that improved water management is cited as second highest priority intervention). See also poverty drivers¹⁹ and priority interventions for poverty alleviation according to FGS stakeholder consultation²⁰

The role of Somali state institutions in responding to climate change is in most cases marginal. On the one hand, the financial position of the Somali state institutions themselves is barely impacted by climate disasters providing little salience to the problem from a revenue or policy perspective. As the state mostly relies on revenue derived from import/export taxes, donor aid and (air)port service fees, the significance of variation in its domestic resource bases that might affect tax income and other revenue sources is extremely limited.²¹ On the other hand, it should be noted that most Somali state institutions play a very limited role in key policy areas related to climate adaptation. Lacking virtually any form of national social safety arrangements and weak governmental disaster response capacity, Somalis have mostly relied on their (sub)clan, diaspora contacts, corporate social responsibility programs or humanitarian assistance.²² Additionally, the lack of a developed and reliable land-registration system has left most of the Somali population to rely on dated

¹⁵ Meester, J., Uzelac, A., & Elder, C. (2019). Transnational capital in Somalia: Blue Desert Strategy, The Hague: Clingendael.

¹⁶ Federal Republic of Somalia. Ministry of Planning, Investment and Economic Development. 2019. *National Development Policy 2020 to 2024: The Path to a Just, Stable and Prosperous Somalia*; consolidated draft National Development Policy 9 2020–2024, Figure 19.

¹⁷ Federal Republic of Somalia. Ministry of Planning, Investment and Economic Development. 2019. *National Development Policy 2020 to 2024: The Path to a Just, Stable and Prosperous Somalia*; consolidated draft National Development Policy 9 2020–2024, p.193–209.

¹⁸ Federal Government of Somalia – Office of the Accountant General, 2019. Government Quarterly Financial Report: Quarter Four 2019.

¹⁹ Federal Republic of Somalia. Ministry of Planning, Investment and Economic Development. 2019. *National Development Policy 2020 to 2024: The Path to a Just, Stable and Prosperous Somalia*; consolidated draft National Development Policy 9 2019–2024, Figure 9.

²⁰ Federal Republic of Somalia. Ministry of Planning, Investment and Economic Development. 2019. *National Development Policy 2020 to 2024: The Path to a Just, Stable and Prosperous Somalia*; consolidated draft National Development Policy 9 2019–2024, Figure 12.

²¹ Federal Government of Somalia. Ministry of Finance. 2019. *2020 Fiscal Year Budget Act No.00015/2020*. Retrieved from <https://mof.gov.so/publication/appropriation-act-2020-budget>; Abshir, S., Abdirahman,K. and Stogdon, H.

2020. Tax and the State in Somalia: Understanding domestic revenue mobilization. *Rift Valley Institute*, p. 2

²² Meester, J., Uzelac, A., & Elder, C. (2019). Transnational capital in Somalia: Blue Desert Strategy. The Hague: Clingendael.

private contracts, clan elder mediation or Al-Shabaab courts to regulate and adjudicate ownership of land and real-estate.²³ This has not only weakened state legitimacy in land governance issues, the lack of land-registration also hampers attempts to establish formal natural resource governance arrangement. On top of that, where resource governance arrangements are set up, the weak formal justice capacity hampers the effective resolution of resource-driven conflicts. At the same time traditional mechanism to manage resources, based on local rules and dispute settlement, though still intact, have also been affected by the conflict dynamics, the larger pressure on the resource base and recurrent disaster years.

The state's role in climate change adaptation is further hampered by its tenuous authority in many areas of the country in face of the Al-Shabaab insurgency. Especially in the most-resource rich areas, between the Shabelle and Juba river, where most of the country's agricultural production is concentrated, conflict and instability remain high.²⁴ The occurrence of conflict in especially these areas is not a coincidence, but reflects the role that access to resources (mostly land and other "stationary resources")²⁵ plays in clan-power dynamics.²⁶ As such, control over resources plays a role in the political economic process underpinning the reconstruction of the Somali state and its institutions, making the idea of state intervention in resource governance problematic.²⁷

Besides weak governance capacity and political contestation in resource rich areas, there are also significant domestic corporate interests in climate adaptation. Over the past three decades, a range of major corporate conglomerates with diversified business interests in a range of sectors have developed within Somalia.²⁸ Such large corporate actors have played a major role the population's resilience to climate change impacts.²⁹ On the one hand, they have made significant contributions to drought relief, emergency responses and funded government action through their corporate social responsibility programs, made significant zakat-based contributions to groups and individuals, and have played key roles in the distribution of humanitarian aid and diaspora support funds in affected areas.³⁰ On the other hand, these corporations and traders also hold dominant positions in the importation of food and other commodities and have been acquiring significant tracts of agricultural land which they frequently switch to use for cash-crops exports.³¹ As influential stakeholders in governance, through clientelist networks and funding arrangements, these companies' drive

²³ Rift Valley Institute. 2017. 'Land Matters in Mogadishu: Settlement, ownership and displacement', *Rift Valley Institute and Heritage Institute for Policy Studies*.

²⁴ Webersik, C. 2008. 'Wars over Resource?: Evidence from Somalia', *Environment, Science and Policy for Sustainable Development*, 50(3), p. 46–58

²⁵ Stationary resources include agricultural lands growing export crops, water sources, trade routes (taxation), ports and airfields (export levies), and state institutions granting access to aid flows.

²⁶ Webersik, C. (2008) Wars over Resource?: Evidence from Somalia. *Environment, Science and Policy for Sustainable Development*, 50(3), p. 46–58; note that part of Al Shabaab's funding is suspected to be derived from the charcoal trade.

²⁷ For an excellent exploration of the political economic role of food aid, Al-Shabaab, corporate interests and marginalization, see Jaspars, S., Adan, G. M., & Majid, N. (2019). Food and power in Somalia: business as usual? A scoping study on the political economy of food following shifts in food assistance and in governance. London. LSE.

²⁸ Meester, J., Uzelac, A., & Elder, C. (2019). Transnational capital in Somalia. The Hague: Clingendael, p. 29–48/

²⁹ Meester, J., Claes, J. Elder, C. & Lanfranchi, G. (2020) 'COVID-19 and the Somali Private Sector: A Political Economic Perspective on the Pandemic'. The Hague: Clingendael.

³⁰ Meester, J., Uzelac, A., & Elder, C. (2019). Transnational capital in Somalia. The Hague: Clingendael, p. 38.

³¹ Meester, J., Claes, J. Elder, C. & Lanfranchi, G. (2020) 'COVID-19 and the Somali Private Sector: A Political Economic Perspective on the Pandemic'. The Hague: Clingendael; Jaspars, S., Adan, G. M., & Majid, N. (2019). Food and power in Somalia: business as usual? A scoping study on the political economy of food following shifts in food assistance and in governance. London. LSE.

to avoid commercially harmful regulation leads to further stagnation in climate adaptive action.

The resulting political settlement is largely stagnant when it comes to climate action, as “*Aid organisations, business, and government – and possibly Al-Shabaab – all benefit from the status quo of continued aid flows into government-held urban areas [...] The displaced have become not only a way of maintaining aid but also a business opportunity and a political tool. Gatekeepers or entrepreneurs set up displaced camps as a way of attracting aid and increasing the value of land.*”³² Periods of drought induced displacement play an important role in this dynamic. This arrangement entrenches power amongst several stakeholders, as well as the marginalization of specific groups and facilitates the redistribution of land and other resources towards politically more powerful groups. This political settlement is unlikely to change without reform in the domestic market structures and aid market structures that underpin it.

Besides this pessimistic outlook, it should be noted that several sectors and areas stand out as positive exceptions. Somalia’s pastoralist tradition is strongly based around principles related to adapting to a harsh climate. As such, traditional clan elder mediation and norms arising from the economically significant and culturally influential pastoral herding sector may provide strong practices to build upon.³³ Examples of environmentally sustainable development also exist in other economic sectors, such as potentially frankincense production in the Bari and Sanaag regions.³⁴ Additionally, it should be noted that the situation in Somalia’s resource poor areas may be more positive as well, as is highlighted by the relative peace and stability in Somaliland and Puntland.³⁵

2.3 MACS analysis

The “Multi–Annual Country Strategy 2019–2022: Somalia” incorporates climate change related considerations in both its analysis and programming. Its analysis builds upon the recognition of the climate and conflict interaction reflected in United Nations Security Council resolution 2408 (on the destabilizing role of climate change in Somalia) following Minister Kaag’s speech at the security council regarding the mutually reinforcing relation between hunger and conflict (2018). The MACS recognizes droughts and insecurity as the major shocks to livelihoods in Somalia, directly affecting food security and poverty. In line with Somalia’s National Development Program and programming of other major donors, the Netherlands focusses its efforts thus on building household resilience to such shocks, in order to avoid future humanitarian disasters and food insecurity, specifically focusing on women and minority groups. Additionally, the Netherlands aims to address water resource management in order to reduce the impact of flooding in South Somalia on livelihoods. Programming on resilience was planned to take place through the FNS–REPRO program. Water resource management was meant to be tackled in collaboration with the World Bank,

³² Jaspars, S., Adan, G. M., & Majid, N. 2019. Food and power in Somalia: business as usual? A scoping study on the political economy of food following shifts in food assistance and in governance, London. LSE, p. Iv,

³³ Webersik, C. 2008. ‘Wars over Resource?: Evidence from Somalia’, *Environment, Science and Policy for Sustainable Development*, 50(3), p. 56

³⁴ Interview with a Somali Businessman, Dubai, December 2018.

³⁵ Webersik, C. 2008. Wars over Resource?: Evidence from Somalia. *Environment, Science and Policy for Sustainable Development*, 50(3), p. 50

but the current status is not clear. Drinking water supply programs were envisaged with the United Nations Children's Emergency Fund and The Netherlands Enterprise Agency (RVO).

The approach taken in the MACS is synergistic with the approaches taken by other donors and the drive from the FGS, in its focus on livelihoods. This improves the scope for collaboration with likeminded donors, which is necessary given the modest financial commitment of the Netherlands towards tackling climate in Somalia in face of a wide range of constraints stemming from poor governance and insecurity. The embassy's approach to actively seek out collaboration with other organizations, for instance the joint climate change assessment with the World Bank, allows the embassy to influence larger programming efforts and achieve programming synergy with other donors. Furthermore, the embassy's overarching approach, through its problem-driven iterative approach and grassroots focus, is well suited to drive results in a highly fragile context without credible host state partners. The embassy's focus on ongoing learning, and the risk tolerance implicit in it, are other key elements to effective implementation in a difficult context such as Somalia.

The MACS thus presents a range of pragmatic choices conducive to successful implementation in Fragile Conflict Affected Situations, yet the climate-specific interventions presented in the document take a technical approach to climate change adaptation. Although the focus on livelihoods makes sense from a humanitarian-development nexus perspective (as it reduces the chances of individuals requiring emergency aid), basing support on individual vulnerability indicators ignores the systematic patterns of marginalization that drive groups of people into destitution in the longer term. Similar concerns arise with interventions aiming at increasing farm yields, as they risk ignoring the power dynamics in the wider agricultural value chain in which such farms operate. Although interventions may still lead to considerable results when working with advantaged groups in relatively stable areas (as FNS REPRO does by focusing on livestock fodder/feed in Somaliland), they miss opportunities by not engaging the systematic drivers of exclusion driving weakening livelihoods of those worst affected by climate change impacts. The interventions aimed at flooding in the riverine areas presented in the MACS are likely to be more effective at reaching the most climate vulnerable groups, but do not elaborate on how they will deal with the complex stakeholder environment encountered in this area. As such, both interventions risk having a limited impact at addressing the social consequences of climate change.

Interestingly, the section on sustainable trade and investment in the MACS takes a more elaborate approach towards the political economic constraints on economic growth. This section specifies a three stage conflict-sensitivity approach, and through its focus on stimulating SME's interventions is actively engaging with the stakeholder constellation that is reinforcing current exclusionary dynamics. It should hence be noted that through such private sector development work the Dutch efforts may be indirectly contributing to both addressing problematic aspects of the political economy of Somalia, as well as providing opportunities for livelihood diversification. Both aspects may be significant in addressing the social consequences of climate change.

In summary, the MACS offers a good analysis of the precarious political situation in Somalia, encapsulated in different scenarios for the country – none of which is very rosy. The local political context sets the boundaries for what is possible in the different parts of the country and what supports the development of the social contract. Climate change related considerations are prominent in the MACS, though there is not much evidence of what is

being implemented in practice. They are also as yet not strongly linked to the activities in support of building the social contract.

As Somalia is the most vulnerable and least prepared country for climate change, there is a case for a more comprehensive country wide effort to address climate resilience, particularly as it is closely linked to poverty and conflict. It appears that at present there is no such unified attempt, nor is there a single forceful organization that is taking a leadership position on this. There is a need to develop and implement a systematic approach to climate resilience and sustainable resource management within the politically fragile context of Somalia and to see how activities in strengthening climate resilience feed into state building, trust and governance within realistic expectations.

2.4 Way forward

As highlighted in the analysis above, climate change forms a considerable challenge to development in Somalia. Its impact is likely to affect a wide range of livelihoods as well as food security, but is also interwoven with conflict dynamics through the political economy of the state building process, patterns of marginalization and the acquisition of agricultural land. The impact of climate change comes on the back of a resource system that is degraded.

Although a wide range of interventions could be considered to mitigate climate change impacts, increase resilience and/or improve agricultural yields, it should be kept in mind that it is not a mere lack of technical solutions that is holding back climate adaptation in Somalia. The Somalia Drought and Impact Needs Assessment Report³⁶ (2017) recommends to give priority to the rehabilitation of the country's important vegetative resources. This may be done by low-cost land restoration and water retention techniques, such as farmer-managed natural regeneration, integrated soil fertility management systems for dryland, flood water spreading, road-based water harvesting, planting of native grasses and rangeland management. What is required is to strengthen local resource management governance, making use of the traditional mechanism of *xeer* and *ghutra*. This has been stimulated in some areas with good results, but is not part of an overall systemic effort.

As a high level examination of the political economy of Somalia illustrates, the lack of action on climate change adaptation instead relates to the limited reform possibilities given the current stakeholder constellation. For meaningful action to take place, the political context provides limits to what can be achieved, which may also require reform in the domestic market structures and aid market structures that maintain this political settlement. This relates closely to the MACS focus on improving the social contract across a range of policy areas.

Taking into account both the technical opportunities, the political constraints and the focus of the MACS, in relation to different kinds of interventions, the following opportunities could provide viable ways forward.

³⁶ <https://www.gfdrr.org/en/publication/somalia-drought-impact-and-needs-assessment-volume-i>

2.4.1 Private sector responsibility

The private sector is an influential actor in relation to the social implications of climate change. Not only does it provide emergency relief and support development initiatives, it also plays a key role in the market structures and aid economy driving patterns of exclusion creating vulnerabilities to climate change's impacts. While in some cases the private sector may play a conservative or negative role, it should be noted that private sector actors have taken initiatives towards increasing sustainable development in several sectors.

- Initial impressions suggest that positive effects mostly occur in more developed and competitive sectors (where long term sustainable production becomes relevant), and less so in underserved or monopolized markets. As such, value chain initiatives supporting the maturation of different sectors could be leveraged to drive an interest in sustainable development. The private sector plays a large role in value chains in the products that are the heart of resource management and climate change adaptation: frankincense, charcoal, fodder/hay and livestock for instance,
- A range of private actors play a more conservative role in Somalia's political economy, at times externalizing significant environmental and social costs. Such actors are frequently entrenched in governance, and actively involved in the aid economy. Raising awareness amongst the donor community of the stakeholder constellation inhibiting climate adaptation, and their relation to aid flows, may provide entry points for more effective interventions towards climate adaptation.

2.4.2 Local resource governance

The traditional local institutions have been marginalized over time and have suffered from clan based conflicts, creating more flashpoints and general atmosphere of conflict. At the same time several project based attempts to revive and modernize local resource management mechanisms have created visible local successes. While aiming to restore confidence in the state, it may be useful to connect the strengthening of local institutions to the state functioning and to improve the social contract in the different parts of the country.

- An important activity could be to include in the Security and Rule of Law program, an effort to systematically improve local land and water tenure, recognizing and reinforcing local governance. This may work together with the multiple initiatives in resource management and local democracy, bringing in a strong and systemic focus on reinforcing and enabling local systems for resource management and linking them to overall functioning of, and restoration of confidence in the state.
- Better resource management can be promoted, based on local successes in Somalia and good practices in other dry lowland areas in the Horn. There are many opportunities not applied systematically that within the context of local resource governance can reduce the vulnerability to climate shocks of a large part of the population, such as intensive rangeland management, systematic water harvesting using roads and other methods, flood water harvesting through water spreading weirs and spate irrigation systems, local groundwater management, locally managed natural revegetation (e.g. native grasses).

2.4.3 Implementation modalities

A main question to be addressed is how this could take shape and how the program of the Embassy could be steered to reduce social consequences of climate change.

- **A patchwork approach may be most feasible**, where in different situations within the country local resource governance is strengthened. Good experiences could be cascaded from relatively secure and accessible regions of the country to areas that are less easy to reach. Different approaches may be followed in different areas, depending on the political opportunities: working with humanitarian organization where they are operational to include climate resilience building; providing support to environmental justice with local organizations, where this is possible, similar to the current Access to Justice program; working with private operators to organize safe sourcing and create job opportunities to diversify the economy and reduce reliance on the most climate exposed sectors, such as livestock keeping.
- **Integration into other policy fields such as governance and humanitarian needs is a second pathway:** Somalia's severe vulnerability to climate change impacts coupled with its poor capability to adapt affects a range of policy areas beyond the traditional climate adaptation policies focusing on for instance water management, agriculture and pastoralism. A significant part of humanitarian needs are driven by recurring droughts, economic development opening up alternative (non-agricultural) livelihoods may form an important support to food security, while governance and access to justice approaches may be critical to inclusive implementation of climate adaptation efforts. Additionally, these policy fields are subject to similar political economic constraints. As such, efforts to address the social consequences/impacts of climate change to the social contract in Somalia should not neglect the interrelation with these policy fields and could consider through which impact pathways the biggest impact can be realized. Further synergies could potentially be achieved by aligning conflict sensitivity approaches across these policy fields.

Annex 1: ET tables

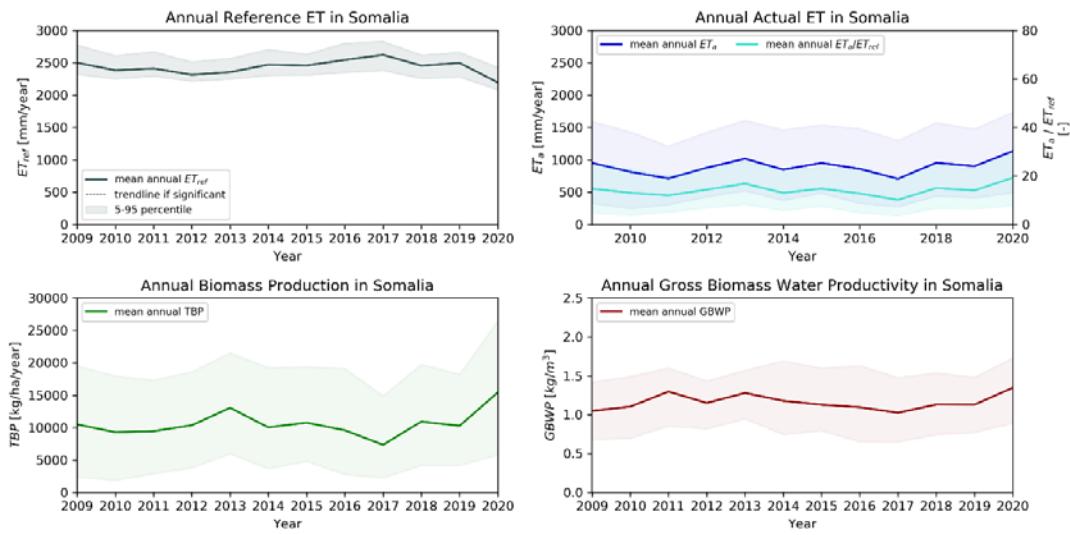


Figure 1: Trends in actual ET (water consumption), biomass production, water productivity and annual reference ET (atmospheric water demand) for irrigated areas in Somalia 2009–2020 (Bremer 2021)

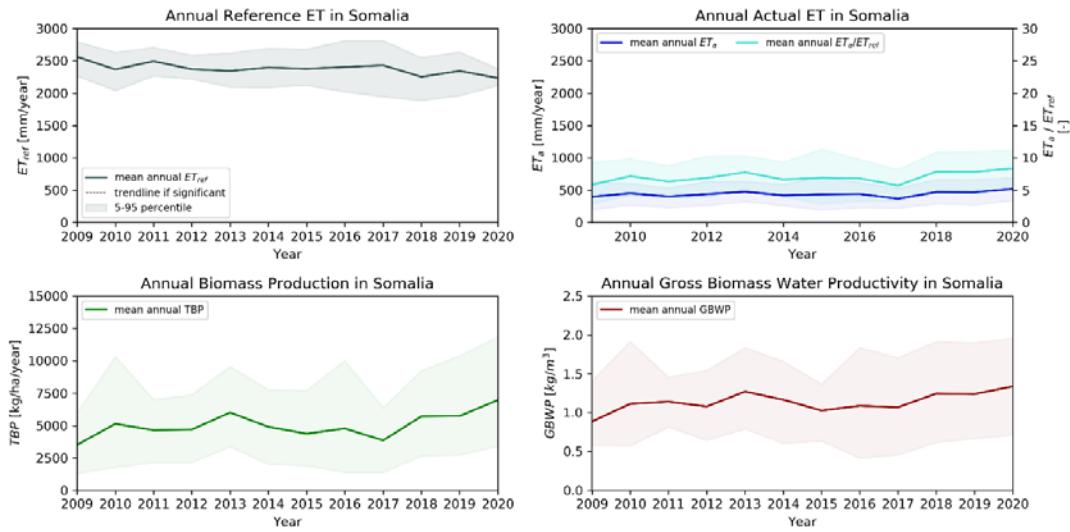


Figure 2: Trends in actual ET (water consumption), biomass production, water productivity and atmospheric water demand for rainfed areas in Somalia 2009–2020 (Bremer 2021)

Annex 2: Overview of documents assessed

From the Ministry of Foreign Affairs, Kingdom of the Netherlands:

Activity Appraisal Documents

- *Access to Justice Somaliland* 1 January 2021 – 31 March 2026
- *Lab-Integrity Icon Somaliland* 1 January 2021 – 31 December 2026
- *Center for Youth Wellness, Employment & Excellence (CY-WEE)* 1 December 2020 – 31 March 2022
- *Improving the social contract through inclusive and transparent Disaster Risk Management at local level* 1 January 2021 – 31 December 2026
- *Dutch Relief Alliance Somalia Joint Response 2019–2021* 2 October – 31 December 2021
- *Food and Nutrition Security Resilience Programme (FNS–REPRO): Building food system resilience in protracted crises* 1 August 2019 – 31 July 2023
- *Future DRA Local Response with Nexus Somalia* 1 January 2021 – 31 December 2021
- *Leveraging the strength of women in peace-building by promoting safe and sustainable integration of women formerly associated with al-Shabaab* 1 January 2021 – 30 June 2022
- *UN Joint Justice Programme, falling under the UN Multi Partner Trust Fund Rule of Law Window* 1 December 2018 – 31 December 2020
- *UN Joint Programme for Local Governance and Decentralised Service Delivery, Phase III* 1 July 2018 – 31 December 2023
- *Miisaan: Social Cohesion and Legitimate Governance Through Transitional Justice* 1 March 2021 – 31 March 2026
- *United Nations Office on Drugs and Crime (UNODC) Mogadishu Prison and Court Complex (MPCC)* 1 November 2017 – 31 December 2019
- *Community Dialogue on Market Needs, Jobs and Skills through Technology -Pilot Project* 1 December 2020 – 31 March 2022
- *Somali Agripreneurship Project* 1 December 2020 – 31 March 2022
- *Somalia Stability Fund phase II* 1 September 2017 – 31 December 2021
- *Somaliland Development Fund phase II* 13 September 2018 – 31 December 2023
- *Contribution to the Afghanistan, DRC, Somalia, South Sudan and Sudan Humanitarian Funds* 1 January 2020 – 31 December 2020
- *Youth Economic Empowerment and Leadership by promoting economic and equal opportunities for by displacement affected communities (DACs)* 1 December 2020 – 31 March 2022
- *BEMO Corona – Covid-19: Contribution to the CAR, Somalia and South Sudan Humanitarian Funds for additional needs due to Covid-19* 1 January 2020 – 31 December 2020
- *BEMO- Connecting Diaspora for Development (CD4D 2) Through Knowledge Transfer and Entrepreneurship* 1 July 2019 – 31 December 2022
- *BEMO -Building a stable and peaceful Africa* 1 December 2017 – 31 December 2021
- *Multi-annual Country Strategy 2019 to 2022 Somalia* (March 2016)
- *Non-ODA Activity Appraisal Document – Preventing and Countering Violent Extremism in Somalia’s Newly Recovered Areas* 1 November 2019 – 30 June 2021

Annex 3: DSU Assessment framework for Sustainability Analysis – checklist

	GOVERNANCE	PROFIT	PEOPLE	PLANET
1. Political economy				
1. Political framing and relevance of theme – <i>How important is sustainable development in the political agenda / arena?</i>				
2. Natural resources management (NRM) arrangements and responsibilities, including land-use planning – <i>What is the quality and implementation of arrangements of land use planning and NRM?</i>				
3. Environmental economic and commercial costs & benefits – <i>Are costs of unsustainable development known and taken into consideration?</i>				
2. Policy culture & Representation				
4. Primary processes implementer – <i>Are sustainable development considerations part of the core processes of the implementer?</i>				
5. Representation in decision-making – <i>Are stakeholders part of planning and decision-making</i>				
6. Accountability and transparency – <i>As to sustainable development</i>				
7. Business interests (NL and locally) – <i>Are consequences and opportunities of sustainable development of the private sector known and included?</i>				
3. Rule of Law				
8. Law enforcement and corruption				
9. Contract security				
4. Organisational dimensions – see Appendix to this table (below)				
5. Economic				
10. Economic rationale national budgets – <i>Are the consequences of (un)sustainable development for national budgets known?</i>				
11. Raw materials (continuity of supply, efficient use and production, energy supply)				
12. Business development services including appropriate technological innovation (RD&D)				
13. Sustainable trade				
6. Social				
14. Demographic trends				
15. Employment, wages and decent work				
16. Land rights and security of tenure				
17. Households vulnerability (including income, food security and health)				
18. Mechanisms for equitable benefit sharing, taxes, fiscal system				
19. Gender				
20. Cultural aspects				
7. Environment and climate				
21. Climate change				
22. Vulnerable and protected areas				
23. Land and soil resources				
24. Water resources				
25. Ecosystem services				
26. Forestry resources				
27. Energy resources				
28. Environmental health				

GOVERNANCE
4. Organizational dimensions
29. Mandate and vision
30. Structure and management practices
31. Human resources
32. Financial resources
33. Service delivery
34. External relations and advocacy
35. Participation
36. Institutional monitoring
37. Institutional learning

Annex 4: MACS Somalia – Sustainability Assessment

Purpose: Assessing the level of sustainable development of projects, programmes or policies. The framework has been developed for application of the DGIS portfolio of policies, programmes and projects (PPPs') in the food and water sector, but experience has proven that the framework is in principle applicable for all PPPs and all sectors.

Structure: Key sustainability issues are organised under the headings Governance, Profit, People and Planet. Assessment criteria are provided for each issue, at two levels of abstractness.

Legend:

- a. Relevance: + = relevant, - = not relevant
- b. Coverage: + = covered, - = not covered
- c. Opportunities: + opp have been identified , - = opp are not relevant

	Category	1. Is the issue relevant for the MACS?	2. What is the current context concerning this criterion?	3. Does the MACS take this criterion into account?	4. Are there opportunities to contribute to (or to strengthen) the integration of this criterion in the next MACS after 2022?
	1. Political economy				

	1. Political framing and relevance of theme – How important is sustainable development in the political agenda / arena?	+	The Netherlands has pushed the importance of Climate change for peace & stability in Somalia (eg. at the Security Council in resolution 2408), but Somali politics has largely ignored the issue. This is a reflection of the lacking social contract between state and society identified in the MACS. Instead, private Somali companies are primary responders, earning significant credentials and social trust.	+ -	Important, but not recognized, addressed or recognized as a driving force of political contestation. Sustainable development features in NDP 9, framing the request for ODA for resilience, agriculture, fisheries and nutrition. However, the FGOS has little authority outside of Mogadishu, spends most of its budget on security, and is rarely an important development partner. Influential stakeholders have not cared much about the topic. Import dependence / the lack domestic production coupled with low emissions limits sustainability concerns. Where they do matter (diesel-based electricity generation, agriculture, charcoal trade, etc.), the topic is neglected. However, flood/drought induced IDPs do lead to significant tensions which	+ -	The MACS recognizes the importance of climate to part of the economic backbone of Somalia (pastoralism and agriculture). It recognizes knowledge & innovation and land governance as crucial enablers to improved sustainability, and couples humanitarian aid and agricultural development to boost resilience. It however ignores the political factors that are driving exclusion & weak resilience. It also largely bypasses the national political arena, which is understandable given the low salience and state capacity, but thereby ignores the weak social contract problem identified.	+	Broaden the discussion past resilience in order to effectively address marginalization, SRoL and the social contract.
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					<p>factor in salient political issues but mostly ignore the cause of displacement. Humanitarian aid delivered to these beneficiaries largely passes through the hands of a few powerful economic actors, bolstering their position and wide influence in the market in Somalia. Al Shabaab has also been known to recruit from IDPs and neglected agricultural clans.</p>			
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	2. Natural resources management (NRM) arrangements and responsibilities, including land-use planning – What is the quality and implementation of arrangements for land use planning and NRM?	+ -	Disagreements over land and resource ownership are drivers of conflict. The central state has virtually no role in the matter however.	-	NRM is a major driver of conflict, with frequent clashes over water and land-use. The state plays virtually no role in this, deriving its revenues and focusing its attention on international trade. While no land-use planning is done, NRM is largely left to traditional systems. Disputes are settled through clan elders' mediation, Al-Shabaab courts but also erupt in conflict.	+	Improved land governance is included as an enabler in the FNS REPRO program. Capacity building amongst courts is an important longer term investment in this regard, in order to weaken reliance on AS courts. Traditional ownership-considerations of water are not made explicit however.	Risk: water ownership...
	3. Environmental economic and commercial costs & benefits – Are costs of unsustainable development known and taken into consideration?	+	The costs of unsustainable development are high in certain areas, and recognized in the MACS explicitly.	+ -	The way of dealing with the costs of unsustainable development varies. In several sectors (notably pastoralism), advanced norms have developed on resource use, but are under pressure. Water and land-use are highly politicized topics, although from the point of view of their division, not their sustainability. While the impact of climate change on	+ -	The MACS hopes to address the costs of unsustainable development through FNS-REPRO: focusing on humanitarian aid and resilience. This is likely highly geared towards disaster response and subsistence livelihoods. This covers a large impact on the population, but leaves a lot of the economic costs in	

					especially water is recognized and influential, virtually no initiatives to adapt have been developed. CO2 emissions are largely neglected, as CO2 emissions in Somalia are extremely low, placing climate change outside of the sphere of influence of Somalia.		higher markets segments uncovered (crop exports, cattle exports, etc.)		
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2. Policy culture & Representation									
	4. Primary processes implementer – Are sustainable development considerations part of the core processes of the implementer?								
		+ –	The MACS explicitly addresses the weakness of the central government, noting local and regional institutions as the location with the most impact on citizens lives (and thereby the	-	Besides pastoral stakeholders, sustainability is considerations are largely absent from formal policy making (formal recognition in policy documents exists, but has little relevance on in practice). In most economic sectors, norms regarding sustainability are largely absent (although positive exceptions do exist).	+ –	The MACS seeks to create space for flexibility and high risk tolerance. This is exceptional in most programming, and essential to effective programming in FCAS. The PDIA and acceptance of the failure of projects creates space to engage on key projects, although it relies on citizens agenizing sustainability concerns	+	Guard high flexibility approach and high risk acceptance.

			livelihood impacts affecting many citizens to arise prominently.		etc.) are frequently not included in decision making.			
	6. Accountability and transparency – As to sustainable development			-	Besides notable exceptions in several economic sectors, where sustainability norms exist, sustainability considerations are not known, monitored nor salient. This prevents accountability on these issues.	+ -	The MACS seeks to relate to citizens as closely as possible, focusing on lower level institutions and initiatives. This likely improves accountability, although transparency is not explicitly addressed.	
	7. Business interests (NL and locally) – Are consequences and opportunities of sustainable development of the private sector known and included?			+	There are major local business interests interwoven with sustainable development, as large financial providers channel disaster aid, provide emergency relief services, channel diaspora donations and remittances, but are also major stakeholders in	+ -	Water and land-use are salient and known topics, CO2 emissions are low and not salient. Formal governance over the private sector is largely absent. In some sectors, informal norms regarding land and water use have arisen and are enforced by participants. CO2	- The Netherlands is strongly engaged with the NL business community. While receptive to sustainable development, the topic is not a priority. Major local incentives are not considered.

					affected areas where they are likely expanding their portfolio of holdings.		neutral projects (such as solar energy) are at times implemented, but mostly out of necessity or funder criteria, rather than ambition for reduce emissions.		
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3. Rule of Law									
	8. Law enforcement and corruption				+ Poor law enforcement and high corruption undermine the social contract the MACS seeks to reinforce, and creates opportunities for AS.	-	Formal law enforcement is weak, and corruption abundant. Also notable is the inability of governments to provide lighting at night, further reducing RoL after dark. Informal norms and traditional authorities (Xeer) have provided some degree of informal law enforcement, and in some areas and sectors Al Shabaab enforces rigid Sharia based laws.	+	The Netherlands is making SRoL on the local level a key priority. Although highly challenging, it seeks to support access to justice in difficult areas and in areas reclaimed from AS.

	9. Contract security			+	Poor contract security in national courts bolsters the social relevance of AS courts.	+	Generally noted as high, but frequently reliant on Al Shabaab courts' enforcement. AS courts may be used to enforce contracts in areas with limited/no overt AS presence (e.g. where other civil AS proclaimed laws are not enforced).	+ -	Dutch efforts in justice improvements will support improved contract security through civil courts. Current services have a long way to go however until they rival AS courts reliability, speed and enforcement.
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4. Organisational dimensions									
	29. Mandate and vision								
					The questions underneath the 'organizational dimension' relate more to specific organizations. However, in taking the Somali State as a whole, a clear unified forward looking but realistic vision on resource management, climate resilience, state building and a stronger social contract is missing.				

	30. Structure and management practices				At present – as with other part of Somalia's socio-economy, institutions are fragmented and isolated. There is no overall institutional model, nor understanding how all would to be linked. Managing natural resources, reducing climate impact and environmental management are not in the government's remit and also elsewhere seem to 'fall in the cracks'			
	31. Human resources							
	32. Financial resources				As explained elsewhere the sectors most relevant for climate resilience are out of the purview of the public finance – either on the revenue or the expenditure side			
	33. Service delivery							

	34. External relations and advocacy							
	35. Participation							
	36. Institutional monitoring							
	37. Institutional learning							

PROFIT	5. Economic						
	10. Economic rationale national budgets – Are the consequences of (un)sustainable development for national budgets known?					+	Government budget relies heavily on import/export levies, and barely on domestic taxation. Most expenditure focus on security. As such, government budgets are barely effected by unsustainable development. Political finance (stakeholders political budgets) are affected by unsustainable development, and lobby aggressively for their interests. For some this means a degree of sustainability, while

							other profit from more unsustainable models.		
	11. Raw materials (continuity of supply, efficient use and production, energy supply)					-	Virtually all goods in Somalia are imported. Larger scale agriculture is generally focused on cash crops for export, while food is imported. Energy is highly overpriced due to natural monopolies. Concerns over raw materials and efficiency are hence not salient, although concerns over the current economic model's vulnerabilities may be rising.		
	12. Business development services including appropriate technological innovation (RD&D)					-	Businesses are largely focused on engaging underserved market segments, and import the technology and know-how to do so. Sustainability considerations do not		

							rank high, and limited R&D is conducted domestically.		
	13. Sustainable trade					-	There is little concern from consumers around sustainable goods, nor is there amongst exporting producers. Financial sustainability concerns are very salient in the economic sector, although this relates to liquidity, not environmental concerns.		

PEOPLE	6. Social								
	14. Demographic trends						Somalia has an estimated population growth of 2.3% and a large youth bulge. One may not expect the pressure on the (weakening) pastoral and agricultural resource base to reduce. There is a need to create employment in a diversified and urbanizing economy.		

	<p>15. Employment, wages and decent work</p>				+	<p>Somalia is growing economically, leading to increasing employment opportunities and wages. Yet, unemployment remains prevalent. Public sector wages are far lower than private sector wages, creating moral hazard. Besides that, generational gaps can be significant, as are diaspora contacts. Minor-clans are frequently employed in exploitative conditions in the agricultural zones, although work pressure in most other sectors is rarely noted as high (wages remain low in non-urban jobs however).</p>		
	<p>16. Land rights and security of tenure</p>				+ -	<p>Land rights are murky following the civil war, as ownership is frequently unclear. Those with a claim have reasonable ability to maintain it, mostly</p>		

					<p>through elder mediation or Al Shabaab courts. Although conflicts regarding property abound, once solved rights are reasonably protected (although there is no central system/registry, and property may be communal according to Xeer law). However, structural patterns of inequality render a significant segments of the population vulnerable to various types shocks to livelihoods, frequently forcing them to sell off assets at poor rates or to displace to urban areas in search of aid.</p>	
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	<p>17. Households vulnerability (including income, food security and health)</p>				-	<p>Structural inequalities and a lack of governmental social support render large parts of the community highly vulnerable. The economic insecurity is related to Although clan structures provide some safety net, changing economic and social patterns have reduced the relevance of clans and increased vertical inequality.</p>		
	<p>18. Mechanisms for equitable benefit sharing, taxes, fiscal system</p>				+ -	<p>The formal government provides very limited benefit sharing measures, and reaches very few beneficiaries. Most of the population is reliant on informal clan ties and Xeer principles, according to which wealthy group members are expected share their wealth amongst less well off members. Although this system</p>		

					<p>may provide reasonable security for some groups, benefits are at a relatively low level and do not reach marginalized groups. Corporate sectors implement significant redistribution themselves, through the Zakat and CSR budgets. CSR budgets are frequently used to implement development projects in communities, but are frequently targeted with a lobbying motivation, hence targeting especially politically or economically influential communities and areas.</p>	
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	19. Gender				-	Women are frequently the main income source for families, disproportionately receive remittances, can be influential socially, and in local political matters. Gender roles are highly traditional however, leading to mutilation, unequal access to finance, relegation to petty trade sectors and limited formal representation.	
	20. Cultural aspects				-	The country is fast urbanizing but urban poverty is widespread, there is a tendency that in the process the strong and unifying cultural identity is lost.	Local dispute mechanism are an important part of cultural identity and could be revitalized.

PLANET	7. Environment and climate
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	21. Climate change	+	As Somalia is the country with the highest score in climate vulnerability and as the increasingly frequent floods and droughts have impoverished a large part of the population the issue is highly relevant.	Somalia is at the brunt of climate change – to the extent that the recurrent crises have changed the constellation of society. The impact of climate change are amplified by a steadily weakening natural resource base.	+/-	The MACS makes much reference to climate change. In the programming the link is not fully made and the centrality to climate resilience to business development and the building of a social contract can be developed.	+	A stronger emphasis on local governance and resource tenure and on integrating climate resilience in the private sector development, within a broader political development vision would be welcome.
	22. Vulnerable and protected areas	+	A main area of concern are the Inland fishing grounds that are heavily exploited by foreign fleets. Inland nature reserves have in the years of conflict	There appears to be limited concerted effort to regulate access to the coastal waters, with the exception of FAO initiatives.		There is not explicit recognition in the MACS – though it could be linked to the Bleu Economy thrust	-	By focusing on coastal water in the bilateral program there is a risk of diluting the focus in what is a modestly financed program

			completely disappeared						
	23. Land and soil resources	+	There is considerable land degradation as with the extensive gullyling in the North East. This gravely undermines the rural economy and the ability to deal with climate shocks.	+	There are many humanitarian programs which provide the opportunity to link basic support with creating better land and soil assets.	-	The MACS proposes to make a stronger link between climate adaptation and resource management and humanitarian aid: there appears to be a large opportunity to streamline efforts here.	+	There is scope to add stronger Rule of Law activities to land management, in particular by working on land tenure.
	24. Water resources	+	Droughts and floods have increasing impact in the country, with destabilizing effects on livelihood as in no other place. Including the management of land and	+	The special analysis undertaken with WAPOR indicated that water use and related production is in increasing, suggesting that water management can contribute to reviving rural economies.		The MACS mention the plan to field a mission to develop a water program but this appears not to have happened	+	There is considerable scope to take an active role in developing a water agenda, in particular with central attention in strengthened local governance as part of strengthening the social contract. Areas of attention are the better use of short terms floods,

			water resources and the related strengthening of local governance is a main factor in stability and a new social contract.					water harvesting and groundwater management in critical areas.	
	25. Ecosystem services								
	26. Forestry resources	+	Forestry stands have been exploited without adequate attention for rejuvenation, undermining future economic development. . Particularly the acacia charcoal trade served as a source of taxation	+	There are several options to make forestry development and management serve the rural economy and contribute to stability. Important agendas are the control/utilization of the invasive <i>prosopis juliflora</i> , the local managed revegetation and the development sustainable value chains.	-	There is no explicit reference to forestry in the MACS, but in the context of increasing climate resilience, the development of sustainable value chains and improved traditional governance there are argument to increase attention to forestry as with other natural resources.	+	As part of improving local resource management, more attention to forestry resources including the control of invasive species and locally management natural revegetation may have wider application.

			for Al Shabaab.						
	27. Energy resources	+	Somalia has a largely unused potential for the exploration of oil and gas. In the current state of political instability such exploration and exploitation may not be feasible, yet this sector has the potential to contribute to the economy but also function to	-	In the current situation of an extremely weak state, it is hard to see how the exploitation of natural energy sources would contribute to the wider development of the country.	-	No it does not	-	This may be beyond the reasonable span of the program.

			embody a 'resource curse'						
	28. Environmental health	+	There are many pressing issues related to natural resource management – many of these are probably more basic than the risk of pollution.	+	A main concern has been the dumping of imported toxic waste in Somalia. This problem appears to have been addressed, though vigilance is required.	-	No it does not	+	There may be a need as part of the diplomatic engagement and the Blue Economy programs to be alert to this phenomena, and in particular when there is a link to European Union to become active.