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Attention:
Directorate: Climate Change and Disaster Management
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BIOWATCH SA COMMENTS ON THE DRAFT CLIMATE SMART AGRICULTURE STRATEGIC FRAMEWORK FOR AGRICULTURE, FORESTRY AND FISHERIES (NOTICE 428 OF 2018)

Thank you for the opportunity to comment on the Draft Climate Smart Strategic Framework for agriculture, forestry and fisheries, dated 3 August 2018.

Our submission follows below and consists of:

1. Introduction to Biowatch South Africa
2. Comments on the Draft Climate Smart Strategic Framework

Yours sincerely

Rose Williams

Rose Williams
Director

1. Biowatch South Africa

Biowatch is a non-governmental organisation established in 1999, which strives for social and environmental justice within the context of food sovereignty. Biowatch works to challenge unsustainable agricultural practices and to advocate for agroecology as an ecologically viable alternative that safeguards people and land. This includes supporting smallholder farmers; working with civil society to create joint understanding and action; and constructively engaging with government in implementing policies and practices that promote, facilitate and actively support agroecology and farmers' rights. We have a long track record of working on policy issues concerning agriculture, biodiversity and indigenous knowledge systems.

2. Comments on the Draft Climate Smart Strategic Framework (CSSF)

General Comments

Climate change without a doubt is proceeding rapidly and may even exceed the pace predicted by climate scientists due to intersecting conditions and feedback loops. The Draft CSSF acknowledges the serious threat that global climate change poses for all levels of society, and the high-risk South Africa finds itself in as a consequence of our geographic location and our high levels of poverty. These risks include damage to our society and economy arising from infrastructure loss but more importantly serious short and long-term threats to health, water reserves, biodiversity and food security. South Africa needs to respond rapidly and decisively by readying ourselves for these threats but also doing everything we can to minimise climate change impacts.

Critique of 'climate smart'

In this regard, Biowatch would like to note our concern that reducing our contribution to and adapting to climate change in the food system has been framed under the ambit of 'climate-smart' agriculture. It cannot be ignored that this concept of climate-smart' agriculture (CSA) has its beginnings in promoting? carbon finance for carbon sequestration in Africa's soils, and is heavily influenced by the multinational corporations and northern countries in structures such as the Global Alliance for Climate-Smart Agriculture. CSA can be a guise for more business as usual: more chemical fertilisers and pesticides, more industrial plantation farming; more GMOs, more deforestation, more international speculation and trading in food.

CSA should not enable any of the above, and should ensure that it is instead supportive of low carbon footprint agriculture, local food systems, farmer led seed systems, biodiversity, low water consumption, no toxins etc. CSA should not become another opportunity for the corporate sector to position themselves as the solution to the food and climate crisis. A transformative approach to agriculture is needed in the face of the calamity of climate change.

For more detail of our critique, please find attached the Biowatch fact sheet on "Climate Smart Agriculture and why we say NO!"

Notwithstanding these concerns, no other strategic framework exists to address climate impacts in the agriculture and forestry sectors, and we are therefore commenting on that basis.

Mitigation

Although the CSSF notes the need to both mitigate and adapt to climate change, the strategy underplays the importance of mitigation in the agricultural sector.

The leading role that the current conventional/industrialised agriculture system plays in driving climate change is a glaring omission in the document. The National Climate Change Response White Paper (NCCR) gives the contribution of agriculture to climate change at 14% of global emissions. Since this averages emissions including those from low impact traditional agriculture, the contribution of industrial agriculture is far greater. Also, this 14% only accounts for on farm emissions and not the emissions in other sectors that result from the global industrial agriculture system which includes land clearing of virgin forests and grasslands, transport, processing and retail, refrigeration needed to distribute produce and processed foods globally, and methane emissions from waste. It is calculated that this industrialised food system actually constitutes approximately 50% of global emissions. [1]

Lack of acknowledgment of the major role of conventional agriculture in GHG emissions

This lack of acknowledgement of the role of conventional agriculture permeates the strategy framework, which therefore fails to grapple with the urgency of radically transforming the current agricultural system into one which can sustain humanity into the future.

Examples of this in the CSSF include section 6.1 on the policy environment which focuses on adaptation and specifically notes the smallholder sector. Although it is correct to prioritise the most vulnerable producers and fishers, the large commercial producers need to be held to account for their large contribution to the problem. Several sections also presuppose technological solutions that are corporate-driven, instead of allowing a bottom-up approach to transforming production for climate mitigation and adaptation.

Where the Draft CSSF mentions climate change mitigation the measures that are suggested do not address the main food system drivers of climate change – in particular the conversion of natural ecosystems to industrial monocultures; the trade in commodities aimed at export markets where agricultural produce is transported around the globe, often several times before the final food product reaches the consumer; and the consequent need for refrigeration, packaging and processing. Although the use of renewable energy is supported wherever possible, the following measures raise concerns:

- Carbon capture (page 5) – carbon capture shouldn't be a project on its own but is rather the natural consequence of restoring the health and vitality of soils through the cycling of organic wastes in the agro-ecosystem.

- Securing forests, re/planting trees, and afforestation (p5, p29, p51, p60) – only small pockets of indigenous forest are found naturally in South Africa, with much of the natural vegetation being the biodiverse and carbon rich grasslands. Climate mitigation should aim at conserving and rehabilitating these indigenous ecosystems, rather than focusing on tree planting. We also note that plantations of gum and pine are not forests and have negative impacts in terms of the depletion of scarce water resources that far outweigh their short-term carbon sequestration benefits.

Biowatch supports the important recognition of indigenous knowledge and production practice in the formulation and implementation of mitigation and adaptation strategies, research, policy and programmes (p5, p28, p31, p42). The extension service also needs re-skilling to be supportive of this approach.

[1] GRAIN. September 2011. *Food and climate change: the forgotten link*. Against the Grain. Accessed: http://www.grain.org/article/entries/4357- food-and-climate-change-the-forgotten-link

Challenges with document – layout, structure, editing

In general, the document organisation is difficult to follow. There needs to be greater coherence in each sector so that it is easy to follow what is being proposed, for example, it would help to separate the land related challenges from the fishing sector. There are also two sections numbered 5.1, section 6.2.4 is incorrectly numbered as 3.2.6. and there are some repetitions of text.

Comments on the text

5.1 Vision statement

A vision is an aspirational statement of what one wants to achieve in the future. Thus, this vision should extend beyond climate resilience and strive to reduce South Africa's contribution to climate change in the agriculture, forestry and fisheries sectors. Higher productivity needs to take place within the capacity of our natural systems to support and sustain this growth. Rephrase:

~~"A~~ Socially inclusive, climate resilient and sustainable Agriculture, Forestry and Fisheries sectors attaining high productivity ***within ecological limits*** for national food and nutrition security ***into the future*** through climate-smart practices."

5.2 Strategic objectives

Objective II: there are many other policies in other sectors of AFF that are already focused on increasing productivity and growth. Although a framework aimed at mitigating and adapting to climate change in the agricultural sector should dovetail with these objectives, inclusion in this framework should deal with issues of balance between increasing growth/productivity against ecological limits – and the changing climate in particular.

Objective IV: this objective deals with mitigating climate change, however, the framing of this objective towards emissions reductions through resource efficiency neglects a wide range of opportunities to avoid emissions entirely – such as localising production and consumption to avoid transport, and even sequester carbon by transitioning to ecological agricultural practices that restore soils and ecosystem health.

5.3 Guiding principles

Several of the guiding principles are very cryptic allowing wide room for interpretation and could be made more explicit. In particular: integration, sustainability – can this specifically include ***ecological*** potentials, stresses and limits so that this is not just interpreted in economic terms.

6. IMPLEMENTATION OF THE CSA STRATEGIC FRAMEWORK PRIORITY PROGRAMMES

6.1 Output 1: An Enabling and Coordinated Policy Environment

In addition to the omission of mitigation of carbon emissions in the commercial/industrial sector this section doesn't discuss how conflicting interests will be resolved – for example the expansion of timber plantations, sugar estates, and mining that negatively impact on health of the land and soil; and the availability and quality of water. These impacts to land and water compromise the ability of smallholders adjacent to these developments to sustain crops and livestock.

6.1.3 Integrate CSA into existing Agriculture, Forestry and Fisheries sector policies and identify, design and implement CSA programmes

In the first paragraph, bullet one should read:
Encouraging ***climate mitigative and*** adaptive crop, forestry and fisheries development and farming practices.
The 4th bullet – conservation agriculture: is only one form of the possible agricultural interventions that contribute to climate resilience and only in a limited way in that it only deals with soil disturbance. This bullet should be changed to "forms of ecological and sustainable agriculture".

6.1.4 Focus on food, water and energy nexus

Biowatch supports that these 3 important areas are brought together, however, this section provides little guidance on how this will be done.

6.1.5 Promulgate and implement policy

Biowatch supports the principle of centralising farmers (and fishers) in policy and implementation. However, farmers cannot promulgate and implement policy – the paragraph in this section would be better situated in the next section 6.1.6 on involving stakeholders.
Centralising the role and participation of producers could be included as a guiding principle.

6.1.6 Involve stakeholders in policy processes

See above. In regard to the involvement of diverse stakeholders the Department will need to ensure that the majority of producers – smallholder farmers and fishers – are able to participate in an equitable way that balances the already undue influence of multinational corporations and large commercial organisations like GRAIN SA in the policy making arena.

6.2.1 Build and leverage partnerships that act as effective CSA mainstreaming entry points and drivers

Table 3 –

- DST: research and innovation shouldn't only look at new technologies; if DST is the lead partner in food and climate research an effort needs to be made to include other ways of knowing and types of knowledge with a bottom up approach in the research agenda.
- Farmers, foresters and fishers: the role of producers in feeding back into policy and research processes is not noted despite the earlier intent of 6.1.5
- The role of civil society organisations – especially in introducing more sustainable productions methods - is omitted.

6.2.4 (incorrectly numbered as 3.2.6) **Build the Capacity of CSA Institutions and Partners**
Bullet point on scientists – scientists trained in new disciplines are also needed in agriculture and forestry, especially in ecological and indigenous knowledge-based methods of production.

Government officials – the second last bullet should include 'responsiveness' as climate change is rapidly developing and its impacts are sudden requiring government to be more flexible and quicker in its response.
The last bullet could be included in the second last bullet and expanded to agriculture and forestry where there is also a need for timely assessments and early warning systems in relation to extreme

weather, water resources, fire, land conditions, and changing areas for crop production and pest incidence.

A major area for capacity building that is omitted is the issue of extension services to rural communities, and the training of extension officers, who are largely not equipped to advise communities on climate resilient, ecological practices and often undermine farmers who chose to use ecological and traditional agricultural practices.

6.3 Output 3: Increased investment in research and an expanded CSA Knowledge Base

Coordinated data sets on climate change under this framework should also link with the information hub being created under the national Food and Nutrition Security Project, which is already underway.

6.3.1 Create and establish a unified and strategic approach and mechanism to CSA research that would support the preparation and implementation of high quality CSA policies, programmes, and projects within the Agriculture, Forestry and Fisheries sectors

Research should focus on ecological production interventions, based on traditional knowledge, and appropriate technologies that enable self-reliance amongst producers and not indebtedness. The research agenda should be set by producers in a participatory process so that research meets farmer needs and not the interests of multinational corporations.

6.3.2 Encourage and enable private as well as public sector R&D efforts focusing on the development of short-term and long-term innovative technologies

Biowatch is concerned that in saying there is "limited use of agricultural inputs by smallholder producers" in the context of R&D, that smallholders will be targeted for new technologies from the private sector. Government should not facilitate dependence, and consequent indebtedness, on private sector inputs. The focus should rather be on public sector research that supports producers to better use the resources that they have.

6.3.3 Support efforts and programmes

Bullet 3: as per the above concerns public money shouldn't provide incentives/subsidies to already well-endowed corporate funded research to create technology products for their profit under the guise of being climate smart. For example, co-funding under the public-private partnership model under the National Agricultural Research Fund. Because corporations can finance research, they are advantaged over civil society or academic institutions that may have research agendas that provide greater public benefit.

6.3.4 Spearhead the identification of CSA Research Priority programmes

This section appears to have several pre-determined research priorities that benefit vested commercial interests instead of being open to a participatory approach where producers determine the research needs that will support a transition to more climate appropriate and adaptive practices.

a. Site-specific nutrient management and balanced application

The framing of this research area concludes a specific 'solution' that continues with the very practices that are part of the climate problem instead of opening up the research agenda for genuine innovation in relation to climate change. This section should be retitled "soil fertility and regeneration" so that a wide range of other more appropriate practices than synthetic fertiliser application can be researched, for example inter-cropping, fertilising crops and trees, appropriate sources of organic material for composting, composting applications and techniques, harnessing and distributing organic waste streams for production, etc.

b. Water-harvesting and use management

Water harvesting and storage must also take job-creation, longevity, maintenance, health and environmental impact into account, and not just cost.

d. Food value-chain

Breeding and screening (in the last sentence) of new crops and breeds as described has more to do with production than the value chain, and again is pre-disposed to technologies being promoted by corporate interests.

If climate change mitigation and adaptation is an objective the focus should be on how to localise production and consumption and shorten the value chains. For example, appropriate low-cost, renewable-energy powered technologies for local and micro-processing, storage, and transport linked to local markets of culturally appropriate food products.

e. New livestock and fish breeds

Why is this framework promoting novel livestock, and especially fish where their impact may not be fully understood? There is also a large diversity of existing and indigenous breeds that are adapted to local conditions and are resilient. Also, what does it mean to have new breeds for farming practices that reduce GHG emissions? Is there really a need for new breeds or are the skills in animal husbandry and training missing?

The 3 bullet points under point d are not all related to new species but should go in a separate point relating to research in fisheries on the impact of climate change.

f. agroforestry

Last bullet – Biowatch strongly objects to the promotion of carbon payments in any part of this framework (also mentioned as a funding source on page 62, page 64). The carbon market allows the wealthy to continue polluting, delaying necessary urgent action to reduce their emissions.

6.3.5 Support research into indigenous knowledge systems with the following objectives

In addition to research into existing traditional knowledge and practices, further research can complement and add to traditional knowledge – for example, beneficial inter-crops using traditional crops appropriate in different areas, grain storage etc.

6.3.6 Work with relevant DAFF directorates to enhance the capacity of Extension and Advisory Services to understand, communicate and implement a CSA Focused Technology Diffusion Innovation System

This section should be a stand-alone section, instead of being under research. Extension needs to be more responsive generally to the needs of rural communities, through farmer centred approaches. However, this process is still guided by the extension officer as the trainer, and will be of little use if the extension officer isn't first re-skilled in facilitation as well as appropriate ecological methods of production in support of traditional knowledge.

Current conservation agriculture approaches are being used to expand the market for herbicides, fertiliser and GM seeds into systems that are already sustainable and just need support to re-kindle skills that have and are being lost through disenfranchisement from the land and lack of validation of indigenous knowledge.

6.4.1
This heading should be changed to 'Support initiatives that fast track and consolidate CSA initiatives ***in the fishing sector***.'

6.4.2 Support initiatives that increase productivity through the adoption of improved adaptive technologies

Points b and c pre-empt and push an industrial agriculture agenda that may not be in the best interests of farmer resilience and independence as these come at a cost and reduce the diversity needed for climate resilience. There are sufficient crop varieties and resources to increase soil fertility if a different approach is taken.

6.4.3 Increase productivity of livestock enterprises through adoption of improved adaptive practices

Similar concerns apply to the livestock sector – the focus should include restoring hardy local breeds, and increasing the skills of farmers to maintain animal health through appropriate stocking, care of animals, awareness of hazards in the environment (such as poor waste management), awareness of the impact of pesticides on crop residues for animal health, and better nutrition. Available fodder (c.) can be improved through diversifying and inter-cropping production.

Nowhere in the framework are the severe climate impacts of the commercial production of meat, dairy products and eggs addressed, which are well documented internationally. Where are the strategies to dismantle cruel factory-farming and feed-lot systems, which require global transport of feed grains, live animals and animal products; the concentration and dumping of animal wastes which create harmful methane emissions and lose the opportunity to recycle nutrients. Consumers and farmers need communication and education concerning the integration of livestock in more diverse and healthy diets and production systems.

6.4.5 Support efforts and encourage initiatives that increase area under efficient renewable energy powered irrigation

Biowatch supports the development of appropriate irrigation technology that reduces fossil fuel use through renewable energy. However, we question the objective under this point of expanding smallholder irrigation without framing this increase within a review of water rights allocation between smallholder and commercial farmers, rural communities and other developments such as mining so that water is used equitably. The right to adequate water for drinking and subsistence must be upheld and given priority. Government delivery schemes that provide water storage tanks on condition that the water collected is only used for agriculture are farcical when communities have no supply of drinking water.

Any technologies (for water irrigation and pumping, energy generation, cooling or transport) that are introduced must include training of communities in their maintenance. No technologies should be

introduced that cannot be maintained at local community level because parts are unavailable or beyond the economic reach of farmers. This should be included as a principle applying to all sections.

6.4.6 Support programmes that improve water resource use efficiency of existing irrigation systems

Expansion of irrigation also must more importantly look at efficiency of water use, especially in the wasteful commercial sector, but also in new irrigation. This goes beyond improving irrigation technology but must also look at soil fertility and conservation practices – soil is a far more efficient store of water than dams, as well as an array of simple methods and technologies for capturing water run-off for groundwater recharge. Groundwater recharge is also an issue that goes beyond farm and rural boundaries but should be a prerequisite in town and city planning as well.

6.4.7 Work with relevant stakeholders to increase the number of smallholder farmers that adopt climate smart soil management technologies and practices

We agree that smallholders are a priority to ensure healthy living soil to ensure food security and water and soil conservation. However, commercial farmers should also switch to better soil management practices as their impact on the climate and water reserves is far greater.
Perhaps a more punitive approach could be used for the commercial sector, while government funds are spent on skilling smallholders.

The text in this section doesn't deal with soil management and is a copy of the points under 6.7.1 on page 65 – where these fit more appropriately.

We request that when this section is written that soil management practices that are promoted revolve around restoring the vitality of the soil through ecological farming practices and organic resources and NOT the use of fertilisers and mechanisation, which deaden soils even in small amounts, and the use of GMOs and herbicides. Although some argue that these technologies enable a transition to better practices in the commercial sector, it is not acceptable to introduce these inputs as part of a technology and extension support package to smallholders who are not currently using these – as is happening with 'conservation agriculture' programmes.

6.4.8 Encourage and support the design and up-scaling of existing CSA women and youth focused programmes and projects along the whole Agriculture, Forestry and Fisheries sector value chain

While the youth and women are important targets, the issue of integrating and providing support for women and youth should be mainstreamed in all agricultural production and fisheries policies which should have the transformation to more ecological production as their base.

6.4.10 Strengthening and up-scaling collaboration with existing relevant flagship DEA and DAFF programmes to enhance integration of CSA practices in conservation and rehabilitation of water catchment areas and contribute towards increasing tree cover

As noted earlier, many of South Africa's water catchments were not forest but grassland. The focus must be on restoring the ecological system in catchment areas and in many instances **removing** alien and invasive trees and commercial plantations.

Point d. should add "Promoting …. Sediment loads to the banks ***and prevent reduced streamflow***".

Point h. using a business model approach to ecosystem management could be detrimental if these payments cannot be sustained.

Point l. Conservation of water shouldn't only be left to the private sector, which will generally be more concerned about profits. Community water resource management may be more effective as communities have a vested interest in maintaining their water resources.

6.4.11 Encourage the adoption of best practices such as those identified in the FAO Code of Conduct for Responsible Fisheries (CCRF) (FAO, 1995) and the ecosystem approach to fisheries (EAF)/ ecosystem approach to aquaculture (EAA)

This section would read better if joined with 6.4.1

Points d. and e. - it is not clear how these points relate to climate change issues, and perhaps these should be included in other fishing related policies and programmes.

6.4.13 Work for the Agriculture, Forestry and Fisheries to increase investment in integrated production systems

All producers should be encouraged to diversify and integrate production. Biowatch supports assisting smallholders if this means that they will be encouraged to develop integrated and diverse small-scale polycultural systems for diverse nutrition and income, and to weather failures resulting from changing commodity prices, production failures or disasters. Large-scale farms where there is a main crop and one or two inter-crops or rotations are still monocultures.

Point c: agroforestry practices are not suited to all areas, and the aim should rather be to focus on increasing diversity and integration appropriate to the local biome, climate and culture.

6.4.14 Encourage and support the development and introduction of new products and processes across the Agriculture, Forestry and Fisheries value chain and minimize high post-harvest losses

What are 'poignant' challenges? (line 5)

Biowatch is concerned that this section is still conceptualising a business as usual model, albeit with new products in mind.

In properly analysing the climate, as well as social and other environmental impacts of the current food system, it is clear that the linear model of: inputs – production –global marketing and distribution, is deeply flawed and damaging.

This section should focus on how to create circular production economies at the most local level possible: local production, value-adding and consumption with minimal transport, and import substitution. The last 4 bullets under point c. as well as point d. all refer. There is a large market in South Africa that is mis-spending on food products that are expensive, unhealthy and carbon intensive – how can this spending power be re-focused? What local interest can be generated in crops and foods that are suited to our production challenges, that can create local markets for nutritious and culturally appropriate food cultures instead of western commodity crops that have been transported long distances?

Point b, last 2 bullets don't make sense here and should be moved to other sections.

Point d. last bullet – what are 'non-traditional agricultural commodities'? Does this mean non-conventional commodities in the commercial sector?

Point e. – how does this section relate to a climate resilience strategy?

Point f.:
Bullet one – add "and appropriate technology that avoids or reduces fossil energy consumption".
Bullet five – add and develop more localised markets.

Point g: again, this section needs to be changed to emphasise appropriate local level processing and storage for sale primarily in the area of production and using low-energy technologies.

Point h: this point should include developing skills in soil health, harvesting methods and storage technologies which all impact on the quality of produce and its ability to withstand pest infestation in the field and in storage.

Point i: there is duplication – rephrase.

6.5.1 Develop and roll-out a CSA mainstreaming communication strategy

Last paragraph on p60 – there are many food system issues that need greater awareness from consumers and producers - these could include buying seasonal food products, avoiding processed food, supporting local growers, joining participatory guarantee systems for ecologically grown local food etc – tree planting exhibits as the only suggestion here shows little understanding of food system climate impacts.

6.6.5 National and international funding mechanisms

International climate finance – plantations are not forests, and should be excluded from REDD+

Carbon markets – Biowatch strongly objects to the use of carbon market finance, allowing wealthy nations to continue damaging the climate.

6.7.1 Support and work for the introduction of policies that formulate financial incentives at the level of the individual farmer

Private investment in climate proofing should be on the principle that this will not trap farmers into debt for technological inputs, where farmers could improve their own resources through appropriate and participatory extension and public research.

Equally loans for CSA should be focused on appropriate technology that reduces and avoids industrial farming inputs and practices.

Bullet point on disincentives for high fuel consumption, tax breaks for low carbon production, higher taxes for carbon intensive production and promotion of 'CSA' products – Biowatch supports these aims. The criteria and the mechanisms for monitoring and verification of these need more detail.

Bullet 9 – "taxes and tariffs" doesn't make sense as it doesn't make any proposal.

Bullet 10 – this should read “removal of taxes that favour activities with a ***low*** carbon footprint” (not high).

7. MONITORING AND EVALUATION

It is very important that the indicators for the M&E system focus on climate change – or are qualified by climate impact, and other sustainability indicators – such as in the case where increased production is a goal.

8. COORDINATION OF CSA AND INSTITUTIONAL ARRANGEMENTS

This should avoid duplication – for example how will this relate to the institutional arrangements envisaged in the National Climate Change Bill or in the Food and Nutrition Security Programme?

Coordination as described in this section appears very top-down – how will the voices of farmers/producers on the ground be included and facilitated?

8.1 Roles and responsibilities

We think that the following roles or actors are missing in the table on roles and responsibilities:

- Farmer and CSO input in setting the research agenda,
- Farmer organisations that should be included in addition to AGRISA,
- CSOs/NGOs role in feeding into policy and research processes – they do not only work on the ground; policy and research must also be influenced from the ground up.