Agenda Item 3
For Discussion
Issued: 22 February 2022

Initiative Design Team responses to the ISDC-mediated review of Initiative proposals Part 1: First 19 initiatives

Purpose

This document sets out responses from the Initiative Design Teams on how learnings from the external review of the initial set of 19 CGIAR Initiative Proposals, as moderated by CGIAR's Independent Science for Development Council, are being taken up.

Action Requested

The System Council is requested to consider this material as input to its deliberations during Agenda Item 3 (Leveraging advice and learning from results) during its 15th meeting.

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Initiative Design Team responses to the ISDC-mediated review of Initiative proposals

Part 1: First 19 initiatives

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Systems Transformation (ST)

INIT23: ClimBeR: Building Systemic Resilience Against Climate Variability and Extremes.	
ISDC recommendation	**ClimBeR responses**
Why didn't the Initiative select other countries such as **Malawi or Tanzania**, which are facing equally (or more) urgent climate and security issues?	Malawi and Tanzania were not selected because, despite having a high level of climate vulnerability (Climate Vulnerability Index), the risk of fragility (Fragility States Index), conflicts and violence (Global Peace Index) and socio-economic vulnerabilities (INFORM RISK), that can be exacerbated by both climate and security risks are significantly lower than other selected countries (such as Kenya and Zambia). This suggests that despite increasing climate risks affecting existing socio-economic root causes of fragility and conflict, Malawi and Tanzania perform relatively better than other countries in the region. At a practical level, and since the beginning of January 2022, we have further populated a database of previous programs and key local partners in each of the six ClimBeR's focal countries. At the same time, we acknowledge that the countries selected are different in terms of capacities and environmental policies and that each country needs different sets of interventions that consider specific production-systems.
Gender diversity of the research team is discussed in the proposal, but there is limited discussion of how the Initiative will ensure that its partners do the same, and **youth outcomes** are not as well detailed.	ClimBer's emphasis on encouraging individual and collective reflection of **gender** and social norms dovetails with what O'Brien (2018) terms the 'personal' sphere of transformation, one that: "*represents the subjective beliefs, values, worldviews and paradigms that influence how people perceive, define or constitute systems and structures, as well as their behaviors and practices*" (see O'Brien K. 2018. Is the 1.5°C target possible? Exploring the three spheres of transformation. *Curr Opin Environ Sustain* **31**: 153–60). It is largely through this personal sphere of transformation that ClimBeR will foster more inclusive gender and social norms among/within the initiative's partners. The ISDC noted the ClimBeR's proposal did not specifically mention **youth**. We acknowledge this but would like to reassure the ISDC that youth is a key target group. ClimBeR's emphasis on gender and social equity was a conscious decision to go beyond gender and youth *per se*. Social equity is concerned with fairness and justice in how people are treated in society, and it is multi-dimensional and relates to both processes and outcomes. Our gender and social equity framework includes gender, youth and other categories of often marginalized groups. Our rationale is based on Araos et al, 2021 (Equity in human adaptation-related responses: A systematic global review. *One Earth* **4**: 1454–67) who identify "*eight social categories commonly understood to experience marginalization*

	and vulnerability to climate impacts (low-income groups, women, Indigenous peoples, elderly or young people, ethnic and racial minorities, and individuals with disabilities)".
The **capacity development plan** for partners could be improved to feature more in-country-based capacity building for researchers as opposed to relying on external universities to train PhD students.	On-going conversations with these partners include the issue (highlighted by the ISDC) of **capacity development plans** for partners including PhD students from in-country universities. For example, one of our key partners is The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), a consortium of **126 African universities operating within 38 countries** spanning the African continent.
The outside CGIAR leverage is limited to big centers and networks and **national and local partners** are not appearing to be a strong focus in this proposal. More stakes and places for local partners is needed, while at the same time promoting cross-country learning and partnerships.	**Local partners** are fundamental in ClimBeR's Theory of Change and, even though, we have already started engaging with some of them, during the inception phase we will continue detailed conversations in relation to co-designing innovation packages with local partners.
There is **limited detail on the budget** spending within each work package, e.g., how much will be spent on capacity building and partnership development or be invested into the innovations	In relation to budget spending by work package (WP): **WP1** budget integrates research, implementation, scaling and final impacts. The budget considers opportunities emerging from a close collaborating with CGIAR Regional Initiatives in field implementation and scaling of ClimBeR's innovation packages. The research team and partners constitute an interdisciplinary team including experts in agricultural insurance, remote sensing, agronomy, farming-system, and nutrition. The team will provide cutting-edge research in ClimBeR's focus countries and regions, while also integrating research findings into policy dialogues and developments (e.g., the budgeted workshops and outreach conferences), as well as the design and implementation of climate-smart innovations, agricultural risk management solutions and agro-climatic services. **WP2** budget considers three research areas to generate evidence and support programming and policy for agriculture climate security. Across these research areas the main key positions are senior economist, climate scientists, and thematic analysts. The latter include qualitative and quantitative expertise to delve into specific research needs by country and topic. To ensure a close management of the activities, most of these positions will be located in focal countries. In each country, we will conduct stakeholders' consultations to inform research implementation and design of the Climate Security Observatory. **WP3** budget supports a senior team leader in each of its countries and an assistant to support WP management and interactions beyond WP3. Each country team will be linked

	to a stage in the development of the WP3 overall methodology. Funding for the country teams will leverage previous work (e.g., the Zambia and Guatemala work have had elements of prior funding that mean that they can deliver policy pathways with a relatively small fraction of the budget). The money allocated to workshops, travel and conferences underpins the 2024 target of policymakers using WP3 products. **WP4** budget includes the cost of research staff, the development of the AWARE platform, and partners' fieldwork. The WP will hire an agricultural expert, a governance and policy institutional expert, a risk management specialist, a digital innovation specialist and software developers. The research team includes CGIAR staff and experts from different countries to develop, validate and implement the framework. The partners will assist in conducting dialogues with institutions and stakeholders to operationalize the platform through a bottom-up transformative governance approach. **Climate finance** is a cross-cutting theme funding positions including a team leader, a senior climate finance expert, and qualitative and quantitative analysts. This budget supports the development of financial instruments accounting for both climate and insecurity risks linked to all four WPs. **Gender and social equity** is another cross-cutting theme. ClimBeR will support researchers and practitioners to integrate the three domains of gender and social equity issues, environmental quality and protection, and technological innovations. ClimBeR will use an already-developed Gender and Social Equity Framework to guide research across the WPs. The team includes three gender and social equity specialists well versed in current debates about societal transformation. The team will receive and impart capacity strengthening in methodologies to analyze power relationships and their implications for building climate resilience and identifying strategies to promote greater gender and social equity. For **scaling**, ClimBeR will allocate resources to implement the Innovation Packages and Scaling Readiness Plan with dedicated activities and deliverables.

INIT27: National Policies and Strategies for Food, Land and Water Systems Transformation (NPS)	
ISDC recommendation	**NPS responses**
Saying that NPS will "**codesign**" national policy with elected governments (work package 1) seems like overreach and could be misinterpreted. Recommendation: revise to accurately reflect NPS' role in providing technical support.	The initiative would not be seeking to assume a 'policy making' identify in and of itself, but rather to help support processes in which policy is constructed from many diverse sources and actor-stakeholder networks. Our scientific argument for this would be that a greater range of evidence, voice and experience would support policy coherence as well as capacity for effective implementation. We would remain technical and scientific in our policy support role and use the range of capacity development and engagement activities with other policy actors and think tanks (for example) to build a range of best practice examples that can then be shared more widely via WP4 and the Community of Policy Practice (and sub-communities). The point about caution in use of the term 'co-design' is well-taken.
Not taking the time to get **buy-in from diverse stakeholders** carries real reputational risks. Recommendation: follow up with non-respondents to the Stakeholder Consultation to gain a better understanding of demand and potential revisions needed to reflect a more inclusive, demand-driven approach.	We agree that further engagement could have been achieved. At the same time, we were wary of over-constructing expectation, given the funding uncertainty. We certainly will establish a far broader, and more deliberative, stakeholder-driven process in the inception period, including directly reaching out to and engaging with policy actors with whom we did not receive responses. Building a solid (and balanced) base of engaged and committed policy actors from government, civil society and the private sector will be a singular priority.
CGIAR modeling capacities are well-respected, but the new challenges of **modeling impacts and trade-offs** across multiple sectors are beyond what CGIAR has done in the past. Recommendation: Explain how modeling efforts/partnerships will be strengthened (work package 2).	This is a challenge we should have made more explicit within the proposal. Our thinking on this is precisely to build on the strengths of the CGIAR as opposed to more disparate centre-based approaches (and models) with, for example, establishment of careful integration of modelling approaches combining economic impact assessment of different policy choices with, for example, water accounting at basin level, thereby linking economic modelling with physical modelling and examining the political economy of trade-offs and choices between sectors and policy constituencies (e.g. the elements of food systems from producers and traders, to consumers and regulators, for example).

The proposal focuses almost entirely on the development and refinement of policy analysis methods/tools with government and external think tanks. Although NPS outcomes and impacts all rely on successful policy implementation by government with engaged stakeholders, the Initiative does not deal with the links between policy development and implementation strategies, programs, and plans. Recommendation: **Clarify how NPS research methodology, methods, and activities will address critical implementation and operational themes**, including government implementation capacity and effective stakeholder/partner engagement (work package 1/3).	We understand the question posed and the challenge this raises, however we would argue that our explicit focus on the **political economy of policy (**from construction through to implementation and impact assessment) does tackle this issue, in part at least. This ranges from the challenges of capacity constraints in government (and civil society for that matter) and the complexities of stakeholder engagement where, for instance, there are contending policy narratives and issues of policy engagement and ownership.
The success of the project resides on **hefty assumptions** that make the proposal risky: governments demand this; citizens are not troubled by the CGIAR's involvement in domestic policy creation; governments' priorities and interests align with CGIAR efforts, etc. It will be important to clarify the outcomes that can reasonably be delivered by NPS vs outcomes/impacts that NPS can contribute to, in collaboration (that is encouraged and facilitated) with other partners.	We agree the **assumptions** are considerable. That said, we are not entering policy environments as 'newbies' but rather established research organisations with long-term links to government, civil society and the private sector in chosen countries. For that reason, we have constructed our focus areas at country level (in the six initial countries) based on these linkages and established contacts. In all cases we see ourselves as contributors to policy outcomes, helping to nurture more robust policy, more coherence across sectors and, ultimately, better approaches to understanding what has worked well (or not) and for the benefit (or cost) of which constituencies.

INIT28: NEXUS Gains—Realizing Multiple Benefits Across Water, Energy, Food and Ecosystems (Forests, Biodiversity)	
ISDC recommendation	**NEXUS responses**
Revisit assumptions that users' access to **data and tools will result in uptake**, which is not supported by social science evidence; greater reference to scientific literature on motivation theory and environmental psychology could address this.	We did not assume "that users' access to data and tools will result in uptake," but we agree that there would be **limited causality between data/tool availability and their use.** We will pay explicit attention to the factors affecting adoption and behavior change, and we expect that our strong and continued engagement with partners and co-design/co-development of (demand-driven) innovations with research and boundary partners will further contribute to uptake.
Second, [...] **Political economy and administrative concerns** deserve more emphasis in work package and overall design, assumptions, and risk assessments. Systematic attention in Initiative design (and budgeting) to political economy research needs and methods (including law, anthropology, sociology) and public administration research partnerships and capacities (including mediation and organizational design) could help address this.	**Political economy assessments** will be undertaken in all target basins. We aim to understand how current decisions on WEFE systems are made and how envisaged innovations (e.g., DSS for water productivity) can be co-developed and introduced to achieve maximum uptake and impact. A key question is: How can institutions be harmonized, policies and incentives be formulated, and innovations be co-designed and implemented to optimize basin-level WEFE resources management for cross-sectoral benefits and enhanced climate resilience? Political economy elements are explicit in WP 2 and WP 4 and embedded in many other activities in a cross-cutting fashion. We have developed a position announcement to add a part-time political scientist to focus on these questions.
The proposal does not describe the **institutional arrangements** that will be required for **effective transboundary actions**. It would be helpful if the proposal provided more concrete detail on the institutional arrangements and agreements that are necessary for improved management of the international watersheds.	We will further strengthen methods and science-policy engagement focused on **transboundary basins**. It was part of the conceptualization, particularly of work packages 1, 2 and 4, but not explicit enough in the proposal. We plan to reinforce cross-work package linkages (i.e., WP 4 on Nexus Governance links) and **work with regional/transboundary organizations** (e.g., river basin organizations, development finance institutions), which will require a basin/context-specific approach with cross-learning. This will be aided by the fact that three of the five proposed work package leads have a strong background in institutions, transboundary water governance, and science-policy engagement at the transboundary level, respectively.

Third, [...] with a particular need for more explicit attention to **soil resources (**for example how agrobiodiversity—as measured by the Agrobiodiversity Index—affects soil quality and land productivity) **and to climate** as an overall driver of change a	All **water research** is inherently climate research as the hydrological cycle is driven by the climate and climate change implies water change. Similarly, energy and food futures are interlinked, and have a direct impact on climate and vice versa. As such, **climate change** is implicit in all the work we do. To address this comment more directly we plan to develop a White Paper that describes how NEXUS Gains contributes to **climate adaptation and mitigation**, with our partner CGIAR Initiatives and other key partners. We also agree that soil-water interactions are critical and could be further strengthened in the proposal, and these will be considered in the implementation of the Initiative; in particular to the extent that soils are central to Water-Energy-Food-Ecosystem health processes.
Fourth, [...] the ToC (and proposal) is not specific about those **farm-level technologies and practices**. Consultation, participation, and co-creation of programs and project outcomes involving researchers with farmers, other local innovators and entrepreneurs, and other end users need to be included in work package design and budgeting	The **key practices** that are already explicitly stated include energy technologies, including solar irrigation, and scaling of these, as well as cross-sectoral institutions to better manage trade-offs and synergies across water, energy, food and ecosystem health goals and interventions from farm to basin scale (WP2, WP3).
Finally, while work package 5 seems well-designed, **gender inclusion** needs to be a cross-cutting element across the work packages and the Initiative as a whole	We appreciate the strong support from the reviewers for our work on **gender, youth and social inclusion**. To better clarify the way these will be carefully embedded across the Initiative and the specific work we will do in this area, we plan to develop a deliberate GYI strategy during the first 5 months of operations that will bring together how women's empowerment, youth and other inequities in WEFE systems that will be addressed in NEXUS Gains. Two of the work package leaders are experienced **gender scientists**, who will oversee the development of this strategy and ensure that gender, **youth and inclusion** are intentionally and consistently addressed throughout the implementation of the Initiative.

INIT29: Rethinking Food Markets and Value Chains for Inclusion and Sustainability	
ISDC recommendation	**Food Markets & VC response**
The Initiative puts a high priority on collecting information and making it available to stakeholders and decision-makers. This assumes that effective interventions will soon be available. Even if this were true, three years is too short for meaningful impact at scale of such interventions. The Initiative team should consider **laying the foundation for follow-up impact assessment** at appropriate horizons beyond three years.	This point is well taken and agreeable. In the write-up of the proposal, we did not make sufficiently clear that we do not expect achieving impact at scale after three years, but rather by 2030. When revising the outcome statements this will be clarified as well as making clear how the Initiative will prepare the ground for follow-up **impact assessment** at appropriate time horizons beyond three years.
The specific challenges of **reaching women** should be addressed in greater depth. It is necessary to clarify who the **targeted women** are (married women or female heads of household), to elucidate how the Initiative will adapt to social contexts to achieve inclusion and specify the channels through which inclusion will be achieved.	This is a valid point. While discussed at length during the design process, insufficient detail was provided in the proposal document on how to promote **women's engagement** (and that of youth for that matter) through appropriate inclusive business models and value chain arrangements tailored to the social and value-chain contexts targeted by the Initiative. We will make sure this is explicitly spelled out in detail in the operational plan for the Initiative.
Define more specific and relevant **impact indicators**	The **impact indicators** as defined in the proposal closely followed those of the CGIAR Impact Areas. However, we fully agree that this is insufficient to adequately monitor the impacts of the specific innovations and interventions to be research by this Initiative and we will define a more refined metrics as part of the M&E framework of the operational plan of the initiative.

Clarifying hypotheses on **market structure, (speed of) adoption or adaptation of technologies, ability to reach women** (depending on the social context), and **environmental impacts**, would help strengthen the risk framework. As it stands, the risk framework seems overly optimistic, in particular for the first three risks that are listed.	This is a very valid point. The related risks are meant to be reflected in the second and third risk identified in the table in Section 7.3 of the proposal, but we will seek to give these bigger weights, as well as make sure that in the design of pilot interventions, partner engagement and scaling-readiness analysis these risks are more properly weighed and taken on board.
Include **postharvest scientists, agronomists, and/or food scientists** in the core team	We have already started picking up on this, including through engagement with innovation partners, such as Wageningen University Research.

INIT30: Sustainable Healthy Diets through Food Systems Transformation (SHiFT)	
ISDC recommendation	**SHIFT responses**
Absence of focus on **sustainability**.	Our initiative plans to focus on **sustainability** mostly from the perspective of consumers and will aim to: a) understand the sustainability of current dietary patterns in LMICs (where information is lacking); and b) document consumer knowledge, attitudes, and interest to learn about the sustainability of the foods they consume and to modify their dietary choices to reduce their environmental footprint. This will allow opening discussions in focus countries about potential innovations to shift consumer demand toward both healthier and more sustainable diets. To support this effort, we will also continue our work with global and national partners on promoting the incorporation of sustainability issues in National Food Based Dietary Guidelines.
Lack of a clear articulation of **value added and comparative advantage**: This field has witnessed a burgeoning global body of work. The proposal is silent on how it builds on this work and what comparative advantage CGIAR has.	The value added of the proposed SHiFT work can be summarized as follows: a) ***Start from the perspective of the consumer*** **-** SHiFT will examine food systems, starting with the consumer perspective, in contrast to many other One CGIAR Initiatives that start with (or focus mostly on) the supply-side. The unique focus of the initiative is to identify innovations in food environments and at the consumer level to move demand toward sustainable healthy diets, thereby directly contributing to improved nutrition and health, especially for marginalized populations. b) ***Fill important evidence gaps –*** The ability of food systems to shift consumption toward sustainable healthy diets is impeded by the absence of accessible science-based evidence and practical tools for decision-making. The knowledge gaps SHiFT plans to address include the limited global, national, and sub-national evidence on: 1) the drivers of food choices at the individual, household, community, and food environment level across different contexts; 2) the constraints faced by MSMEs and the informal sector to deliver affordable sustainable nutritious foods for marginalized consumers; 3) the power and governance dynamics in food systems that prevent action and positive transformation toward sustainable healthy diets; 4) and the trade-offs in goals, outcomes and incentives of different actors that impede successful food systems transformation. Added to these constraints in food systems analyses is the absence of easy-to use valid tools, metrics, and analytic methods to assess food systems, food environments, and consumer behavior and to quantify and address trade-offs inherent in food systems transformation; and the lack of rigorous evidence on the effectiveness and cost of food system innovations that address these trade-

	offs. With its 5 WPs and partners, SHiFT will address all these identified evidence gaps. c) ***Conduct rigorous science in response to development partner needs*** **-** SHiFT will conduct high-quality nutritional and social science research informed by its close engagement with country, regional, and international development partners. To identify research needs and priorities, we will build on the successful model developed for A4NH FSHD work, which focused on improving diets in LMICs through a food systems approach. The FSHD team successfully built long-term partnerships to identify country-specific food systems research questions and feed results into relevant policy-making processes. SHiFT is guaranteed a running start by building on the partnerships developed by the A4NH FSHD team and the lessons learned from this work. SHiFT brings together a unique multidisciplinary team drawn from One CGIAR and key non-One CGIAR research partners with deep expertise covering different aspects of the food system such as nutrition and health outcomes, consumer behavior, development economics, food safety, gender, inclusion and equitable development, political economy, and policy. Participating key institutions are IFPRI, ABC, ILRI, CIP, WorldFish, Wageningen University & Research, CIRAD-IRD-INRAE, and the World Vegetable Center as well as critical national innovation partners and we also plan to work with GAIN and members of the Agriculture for Nutrition and Health Academy hosted by the London School of Hygiene and Tropical Medicine and its partners. In close collaboration with its partners, the SHiFT team has the capacity needed to develop tailored, evidence-based insights to support healthier and sustainable dietary choices. We will build on the successful A4NH research-for-development country platforms already set up in Ethiopia, Vietnam, and Bangladesh and on work by partners in Benin and India.

WP1 disproportionate budget.	The point related to the disproportionate budget allocated to WP1 is valid and needs clarification. Because of the very basic budget template offered to describe initiative budgets – which did not allow a line item for data collection costs – we included the estimated $2.5M per year budget item in WP1, although this funding is meant to cover data collection across all WPs. This gave the wrong impression that WP1 was disproportionately expensive. The plan is that these funds will be used for all data collection needs to address the initiative research questions in WP1-WP5, including household consumption and dietary assessment surveys, food environment characterization, policy baselines and diagnostics, political economy, governance and trade-off analysis, and rigorous evaluations of promising and possibly scalable innovations with implementing partners.
R1: **Clarify WP 1's value added** in light of past and ongoing work and existing data in the rest of the world. Explain how dietary gaps will be identified and prioritized by characterizing food environments that is innovative, different, or more effective than what is already being done. Consider reallocating some of the work package 1 towards other areas.	WP1's main aim is to respond to the utter lack of data on **dietary patterns and food consumption** among marginalized populations in LMICs and the lack of understanding of the **drivers of food choices at the individual**, household, community, and food environment level. This information is critical for decision-makers to support the design, targeting and implementation of innovations and policies to shift dietary patterns towards healthier choices. The literature abounds on conceptual frameworks and hypotheses regarding the mechanisms underlying food environment and consumer dynamics, demand for and access to healthy diets, and nutrition and health outcomes, but rigorous, empirical evidence among LMIC populations are extremely scant. Existing LMIC data are incomplete, non-representative, and often anecdotal as they come from small (qualitative) case studies. The absence of data is partially driven by the lack of valid tools, measures, and analytic approaches that allow for meaningful data collection, interpretation, comparisons, and dissemination of the findings. This WP will fill this gap by carefully analyzing the role of individual, household, and food environment drivers in shaping demand for both nutritious and unhealthy foods; will develop or validate existing tools, methods, and metrics to facilitate the widespread use of these assessment; and will identify (through rigorous evaluations) tailored innovations and policy responses that meet consumer needs and support them in achieving sustainable healthy diets and improved nutrition and health outcomes. Work under WP1 will not just be descriptive. Once context-specific promising innovations have been identified, they will be rigorously evaluated to understand if they work, how they work, at what cost, and what are the key elements for successful scale up of innovations – all essential inputs to guide policymaking and to feed into the work on addressing trade-offs (WP4) and identifying successful national food system transformation pathways (WP5). Evidence on successful innovations

	will be largely disseminated and WPs 3-5 will support countries in adapting and implementing these innovations.
R2: **Better justification of unfocused WP2** (covers a very broad landscape, and the pathways to impact are risky and unclear).	The review asks for a better justification of WP2 to clarify its focus. We plan to limit our study either to MSMEs working within the food environment or MSMEs that directly supply food to the food environment. The work package will focus on MSMEs that seek to grow in areas that are underrepresented in a healthy diet and can be more sustainably produced, rather than covering all potential sustainable nutritious foods. In early stages of food systems transformation, MSMEs tend to dominate the food environments of the poor, but with a level playing field, we suspect certain MSMEs will grow and consolidate markets as has occurred in countries with more modern food systems. It is important to study the factors that could support MSMEs in delivering sustainable nutritious foods to face a level playing field in terms of policy; here, linkages with WP3 and WP5 are crucial. We envision scaling to occur through growth out of the MSME category for certain firms and/or replication of successful models by other firms.
Specific **value added by WP2**	a) ***The promise MSMEs hold for food systems transformation and current evidence*** - Existing global evidence on the way food is sold focuses heavily on modern market channels and specifically supermarkets. This work, exemplified by Reardon and others, focuses on the emergence and growth of supermarkets and modern channels but leaves key gaps: (1) modern supermarkets have yet to fully penetrate the food environments of the poor at the micro scale so their relative weight / importance remains muted for our population of interest; (2) supermarket wallet share for low-income families skews towards processed foods and household goods while the market for perishables – a key elements of sustainable healthy diets – remains much more competitive and less understood; and (3) previous work examines the impact of supermarkets on food production (e.g. inclusion / exclusion of farm households) but there is relatively little focus on consumer and dietary impacts specifically for low-income non-farm households. SHiFT's WP2 focuses on informal markets and MSMEs to understand key market channels and retail outlets that supply components of healthy sustainable diets to low-income consumer food environments, the actors responsible for the preparation and sale of these foods, the economic impact of these actors and their interplay with consumer decision-making and diets. We will identify and robustly test innovations to assess the potential and limitations of SMEs for food system transformation. This builds on, expands, and complements the analysis of distinct pieces of these systems that have been conducted to date.

	b) ***The kinds of products and parts of the value chain the SHiFT work will focus*** on - SHiFT is focused on promoting the consumption of sustainable healthy diets. We will study the channels that could potentially provide these foods in affordable, accessible, and safe ways to low-income consumers. Many of these products are highly perishable (e.g., vegetables, fruits, dairy, and appropriate animal source foods) and reach low-income consumers via informal channels. This work focuses primarily on innovations in wholesale and retail nodes of the food system with potential insights for processing, storage, value addition and retail practices. Upstream effects on cropping decisions based on demand signaling may exist but tracking these in detail is beyond the scope of our first phase of work. c) ***The theory of change for scale*** - WP2 focuses principally on firm level constraints, opportunities, and incentives to deliver healthy sustainable diets, employment and income. This firm level work combines with WP3 on the political economy of food systems to identify and engage key actors and policies at a systemic level. This includes collaboration with wholesale market, food SME, and vendor associations and networks to ensure their capacity to translate firm level results into systemic interventions via improved public policies, financial instruments, infrastructure programs and capacity development. We envision activities flowing from the micro to macro scales from WP1 through WP5 which is where final outcomes including scaling will be delivered
R3: Greater **alignment with other initiatives**	SHiFT has explored areas of collaboration with several other global and regional initiatives – some of this work has been continued after submission of the proposal in September 2021. For global initiatives, we will consolidate working relationships with initiatives that contribute to a 'whole of diet' approach including those working on animal sourced foods (SAPLING and Resilient Aquatic Food Systems) as well as those focused on sustainability and climate resilience at the farm and landscape level (ClimBeR, Mitigate+). At the regional level, beyond South Asia (TAFSSA), we have identified areas of collaborative with the Eastern and Southern Africa (U2) and Latin America (ResiliLAC) RIIs. As part of WP5, we will further develop connections to existing relevant networks in target countries with the goal of adding value and contributing to existing activities and capacity development, especially those led by national and regional partners and their networks. These linkages will be further developed during the inception phase of the program.

INIT31: Transformational Agroecology Across Food, Land and Water Systems	
ISDC recommendation	Transformational AE response
The **term "agroecology"** could be replaced here by "climate smart" or "conservation agriculture" and this proposal would look exactly as many others that were written and conducted by CGIAR scientists in the past. And this is perhaps the main weakness of this Initiative.	We do not agree with this comment, since the proposal incorporates as its core element a **co-creation process** (also central for Agroecology itself), which is part of an inclusive process where different types of knowledge are combined to deliver innovations that are relevant for the specific context. Therefore, this proposal does not replicate "the classical CGIAR model of knowledge generation and transfer…", framed on consultations and knowledge transfer alone. Similar to other agroecology initiatives it encompasses a co-creation process facilitated through the establishment of so called Agroecological Living Labs – ALL in each territorial food system. As explained in the proposal, WP1 will facilitate in each ALL, *"interactions among FSAs, bringing together small-scale farmers (across gender, generation, and ethnicity) with researchers and others (i.e., extension services, NGOs, private sector, policymakers, funders and investors) in specific territories. Together, they will **equitably co-design context-specific agroecological innovations** — technologies (WP1), institutional arrangements (WP4), business models (WP3) — combining science-based learning with local knowledge and creating the social conditions that favor AE transition."* The AE- I seeks to ensure that the institutional and technological innovations are the result of a co-design process tailored to each context. The graph below, presented in many meetings with donors and part of the preconcept note of this Initiative, shows the central role of co-creation in this Initiative. As for the first point, the reviewer is suggesting that even by substituting agroecology with CSA or Conservation Agriculture, the proposal could still be the same following the business as usual CGIAR modalities. This is demonstrably not the case, since both CSA and CA focuses on agronomic practices, whereas the proposal is addressing innovations (not agronomic practices alone) for the whole system transformation. As per the Glossary included in the Initiative proposal, we have adopted the following concept of Agroecology: "***Agroecology*** *encompasses the science, practice, and social aspects of working towards transformation to sustainable and equitable food systems, from production through to consumption. Agroecology emphasizes use of biodiversity, natural processes, and recycling to reduce impact of environmentally-disruptive inputs and increase resilience of farming systems, the co-creation of knowledge with local stakeholders to ensure culturally relevant innovation, and responsible and inclusive*

	governance of natural resources. Agroecology recognizes the importance of agency for all actors involved in food systems and of connecting producers and consumers to ensure that methods of production and processing match consumer expectations[i]".
The **selection of sites** seems to have included some form of "consultation" with stakeholders (cf. annexes), but this is not enough to be considered a **co-construction with local communities and organizations**, which are not part of the proposal (organizations that do exist in most of the target countries proposed, but do not appear in the appendices).	Here we also beg to differ, considering that AE-I's **site prioritization** was determined, among other criteria, by its value adding potential to ongoing efforts regarding agroecological transitions. This includes the potential synergies with past and ongoing agroecology projects and programmes, and the Initiative's alignment with context-specific priorities which were jointly identified with each territory's local communities, the private sector, policy makers and by NARS, among other stakeholders and potential partners. For this, the Initiative conducted consultations at the subnational level precisely, to capture the interest and priorities of local actors who are key for achieving the proposal outcomes. In consequence, many of the selected sites are, as the reviewer proposes, where other agroecology projects and programs have planted those "seeds of agroecology" and on from which the research to be conducted in AE-I can contribute. The existing projects and initiatives are implemented with local actors including farmers and policy makers. The IDT engaged directly with representatives of these projects to validate the focus of the AE-I and to ensure that it will add value. Some of the actors mentioned were even part of the IDT. The conversations with all these projects were key for the final selection of sites within the selected countries. As explicitly mentioned in the proposal, these projects include specifically: • **GIZ** supported projects (i.e., ProSoil, the Knowledge Center for Organic Agriculture in Africa (KCOA), Supporting Agroecological Transformations in India (SuATI), the Biodiversity and Ecosystem Services in Agricultural Landscapes project, and the Kenyan Intersectoral Forum on Agrobiodiversity and Agroecology (ISFAA)). • **Biovision** projects in agroecology, especially in Kenya. • **GRET** (Groupe de Recherches et d'Echanges Technologiques) which is implementing projects to evaluate agroecological transitions. We specifically engaged with them for their work in Lao PDR. • The **EU TRANSITIONS** project funded by EU-INTPA, and that focuses in metrics, digital solutions and private sector engagement as avenues to support agroecological transitions • The Transformative Partnership Platform on Agroecology, which the CGIAR also contributes to. Our initiative embraces the agroecology TPP that has civil society

	organizations amongst its members and on its steering committee. The TPP is very well connected to social movements as are the projects at the proposed living labs, The TPP is incubating the coalition to transform food systems through agroecology that emerged from the UNFSS and is already signed up to by 27 countries and 35 organizations including FAO, IFAD, UNEP and UNDP, Indigenous Peoples and Federations of Farmer Associations.
It is questionable to what extent such an approach—and such a consortium—could be able to deliver results (foster innovations) in the realm of agroecology, where even the **applicability and pertinence of the ToC model is questionable**.	During the design process, the IDT discussed potential limitations of this classic **ToC approach**. For this reason, AE-I has foreseen an adaptive management approach that is reflected in flowing paragraph of Section 6.2: "MELIA team and WP5 team, will formally review AE-I progress against the Initiative ToC every six months, to assess how proposed outputs are contributing towards proposed outcomes, and to determine to what extent assumptions behind the initiative's ToC are confirmed or rejected by the behavioral change results from WP5. This information will be used to adapt the application of WP activities in a way that effectively targets determinants and drivers of behavioral change in key actors to achieve the desired outcomes (i.e. farmers, business model partners, and policymakers)".
There is little proven or **recognizable experience on agroecology** in the consortium of this Initiative. The authors do not seem to have fully understood the emic essence of the bottom-up, co-innovation approaches used in agroecology Simply proclaiming that the CGIAR would act as an honest broker to bridge these contentions is insufficient, particularly when CGIAR scientists have not yet established their **credibility in the domain of agroecology.** Weakness 2: There is evidence that the consortium **lacks knowledge and expertise on agroecology**. A literature search on most of the authors of this Initiative confirms that.	We would like to draw attention to the compendium of knowledge and research on agroecology generated by CGIAR Research Centers, CIRAD, INRAE, IRD, and about 70 partners. This includes examples of processes carried out for the co-creation of knowledge with farmers in relation to a series of transition levels on a gradient of incremental transformational change. Furthermore, this publication highlights the multidisciplinary capacity of CGIAR. **However, we recognize the need for greater integration and strengthening of these capacities in CGIAR to apply and produce scientific evidence in relation specifically to agroecological transitions.** The AE-I will contribute to building these capacities (see below). From our perspective, **CGIAR as a research organization, should use its capacity and network to empirically test and assess different agricultural approaches**, and to facilitate the dialogue with diverse stakeholders about the positive and negative effects of diverse approaches, their synergies and tradeoffs. **Only by implementing different initiatives with different approaches, will CGIAR be able to fulfill this vision.** The reviewer asserts that CGIAR has no comparative advantage in agroecology but does not make reference to the Agropolis dossier cited in the proposal (with a hyperlink to it) that collates agroecology research across the French Research Institutions and the CGIAR. This involves **500 scientists** from these institutions, as well as national partner institutions in Africa, Asia and Latin America, many embedded in agroecological transitions with

	governments and social movements. Living Labs, with these scientists as members, are already active in agroecological transitions.
Weakness 3: Overlap and **lack of coherence between the approaches followed by the different work packages**. These sections read as if they were written by different teams independently.	**WPs were not developed as independent components**, nor by a single team or organization, but rather they were designed as interlinked components cognizant of the need for integrated solutions for systems transformation. Moreover, they were built collectively with all IDT members and informed by inputs from the stakeholder consultations. The initiative's team envisions that all WPs interact and are linked to each other in all the territories embraced by the living labs. More space for detail in the WP description section would have allowed for more clarity on the intersections and differences between WPs. For example, to explain the differences between what research questions will be answered and how, per work package. For instance, WP1 is about a participatory understanding of appropriate metrics (that will be developed and measured in WP2) to ensure that a holistic assessment is in place and is relevant to the priorities of each territorial food system targeted by each living lab. Moreover, WP1 will be the one that facilitates and coordinates activities in each living lab (territorial food system), facilitates dialogue for institutional innovation (WP3 & WP4), and enables co-design and participatory evaluation of AE practices. WP3 and WP4 focus on institutional innovations, which will follow a transdisciplinary process coordinated with WP1. Lastly, WP5 emphasizes research on behavioral change drivers and mechanisms, which is something not investigated in WP1, and is a nascent topic in CGIAR. So, WP5 will provide feedback to WP1 on evidence about how to engage with different stakeholders to achieve the desired outcomes. During the inception phase of the proposal, the implementation team will develop a detailed work plan and methodological approach in each site in conjunction with local partners. This work plan will provide more details of WPs and connections between them.
This would require **capacity building** throughout the organization involving the highest levels of governance (see later).	We agree that AE-I's **capacity development** plan should "include development of early career researchers and partner staff, support/empowerment for under-represented stakeholders, and building partner networks", which we believe should also involve senior scientists. We tried to convey this in the proposal with "supporting training to researchers, authorities and farmers organizations on what investors need to make decisions in sustainable agriculture". The initiative has allocated budget for this purpose, which should have been stated more explicitly in the proposal, i.e., regarding our intention of developing capacity among the variety of actors that include the consortium's senior scientists. We will develop a detailed capacity development plan that will reflect this during the start of the implementation phase.

In building the proposal, it would have been more useful to **select case studies** (countries/regions) where seeds of agroecological innovations—both technical and organizational—are already in place, so that the CGIAR researchers learn about agroecology and its approach before attempting to "promote" it.	Here we also beg to differ, considering that AE-I's site prioritization was determined, among other criteria, by its value adding potential to ongoing efforts regarding agroecological transitions. This includes the potential synergies with past and ongoing agroecology projects and programmes, and the Initiative's alignment with context-specific priorities which were jointly identified with each territory's local communities, the private sector, policy makers and by NARS, among other stakeholders and potential partners. For this, the Initiative conducted consultations at the subnational level precisely, to capture the interest and priorities of local actors who are key for achieving the proposal outcomes.
Weakness 1: **No real co-construction process.** "Consulting" stakeholders is not enough to state that this proposal was co-constructed with relevant actors—a prerequisite of any transformational process, and one to be expected at the start of any agroecological transition.	We appreciate the reviewer highlighting this critical aspect of agroecology but beg to differ with the perception that we did not do enough. Of course, there is always more that could be done but – given the timeframe for the development of the proposal – we feel that we made a great **effort to reach out to relevant actors and seek their input**. As described in Annex 1 and Annex 3, AE-I's stakeholder consultation process was carried out to explore and validate the demand and interests of national and local actors to advance towards agroecological transitions in each targeted site. International organizations were indeed involved, but the representatives of the organizations are staff based and working on the ground in agroecology in the targeted territories. In addition, AE-I's structured consultation and prioritization process was supported with semi-structured interviews, meetings and previous local consultations (recently carried out by other AE initiatives) that helped identify the challenges shaping the potential for each site's agroecological transition. Such contextual realities were captured in the hypotheses and components that defined AE-I's versatile work packages. WP3, for instance, is divided into two components: i) business models and ii) financial strategies, to reflect the different priorities and needs identified for each target site (e.g., financial strategies were highlighted in some but not all sites and vice versa). As made clear in the proposal we will continue to work closely with a wide range of actors in each of the living labs, throughout the implementation of AE-I, providing ample opportunity for co-design of specific initiative activities.
Need for **inception phases** particularly for new Initiatives that are outside of the CGIAR's core competencies and not yet part of their comparative advantage.	We appreciate the recommendation of establishing national project boards or technical steering committees, as well as regular project review involving the implementing partners and other key actors and stakeholders. **We will incorporate this suggestion during the Initiative's inception phase.**

Hence, a **two-stage project proposal is recommended**, which comprises (i) a learning and capacity development phase for CGIAR scientists to experience and learn from agroecological approaches in countries/regions where transitions are well underway, followed by (ii) a phase of codesign and implementation of an Initiative together with its new partners worldwide, with the historical CGIAR partners and with the rural communities and other stakeholders in the proposed target regions (which may even be different than the ones proposed in this first version). Building two-stage Initiative is contemplated in this process as explained in the companion document	We fully accept the premise that we need to further build capacity and we plan to do this through the duration of the AE-I, including through interaction with other agroecology projects and programmes in the Global South. However, **we reject the need for a two-phase project implementation.** This Initiative had, like others, a preliminary design phase that started in 2019 with a group that brought together agroecology experts from inside and outside the CGIAR. During the preliminary design phase, potential countries for implementation were discussed based on current agroecology related efforts, local engagements, and research needs in Agroecology. Hence, the Initiative has been under discussion for more than 2 years and is ready to start full implementation. It is an ambitious program that is intended to achieve impact rapidly (less than 3 years). Additional delays will undermine the possibility of achieving such impacts. What's more, further delays will result in the CGIAR "falling behind" in relation to agroecological approaches recently supported by the UNFSS. We firmly believe that the CGIAR needs to enrich its research agenda with the different approaches that the current initiatives can deliver and this unprecedented moment in the CGIAR seems to be the right moment for the AE-I to contribute to this.

INIT32: MItigation and Transformation Initiative for GHG Reductions of Agrifood Systems RelaTed Emissions (MITIGATE+)	
ISDC recommendation	MITIGATE+ responses
Additional details—both metrics and methods—would help articulate specifics of the scope and size of the intended deliverables. Addition of **quantifiable metrics** that are SMART (specific, measurable, achievable, realistic, and time-bound) would help make the proposal more explicit and convincing.	We think there is some confusion. **SMART** typically refers to goals, while the metrics that we need to develop are related to performance indicators [...] SMART goals are appropriate for reaching well-defined targets in steady-state (controllable) situations, where the targets are realistic and within our control. Our research program is designed to help countries set and meet aspirational goals that they have set, and that they have recently reiterated continued need for support in achieving. We will apply SMART goals to annual work planning. On the question of **KPI metrics**, the results framework provides guidance on the nature of the metrics that we will use. We agree that more work needs to go into these and we will address this in our Year 1 Work Plan. Additional metrics and targets need to be developed through stakeholder consultation processes, particularly associated with WP3. The initiative will engage a full-time MELIA coordinator to develop and implement our MELIA program with WP Leaders, the Gender Specialist, and the Initiative co-leaders
Further details on the Management Plan are required, including **interdependencies with other Initiatives**.	We agree with the comment. We do not want to put all of the blame for the shortcomings of the proposal on the format, but the 250-word limit for this section was particularly constraining. Despite this constraint, we share the view that there was inadequate consultation and planning for cross-initiatives and with the comments on the CD related to the need for greater internal coherence, we expect that a process to build better **cross-initiative linkages and mechanisms** to cover the interdependencies will be undertaken as Initiatives develop POWBs.
This specifically includes the need for **baselining** (initial) information that is critical to enable accurate quantification of MITIGATE+ activities.	With respect to our emission reduction mission, national communications to the UNFCCC that cover national circumstances, GHG inventories, adaptation goals, safeguards, and financial needs serve as important **baseline information**. This information is being updated on a biennial basis by countries. Baselines for some of the other key dimensions of the initiative exist in other national reports that are produced less frequently. Specific sub-national baselines relevant to the Living Labs will be generated with stakeholders during year 1.

The capacity of the **countries involved** (governance and effectiveness) and criteria for their selection also needs to be more clearly annunciated.	The capacity of the **countries involved** (governance and effectiveness) and criteria for their selection also needs to be more clearly annunciated: The World Bank has been publishing six composite indicators representing different dimensions of governance for over 200 countries since 1996: Voice and accountability, Political stability and absence of violence/terrorism, Government effectiveness, Regulatory quality, Rule of law, and Control of corruption. In Table 1, where we presented prioritization criteria, we used the Governance effectiveness indicator; however, we note that the six composite measures of governance are strongly positively correlated across countries. Having worked in these countries for decades, CGIAR staff have valuable knowledge about the capacity of the countries involved and their willingness/openness to engage as well. Assessment by IDT members and their extended networks in the countries were also considered during the country selection process.
On the mitigation approaches and innovations proposed: while the potential for carbon mitigation together with food security and climate smart farming are well considered, **there is little evidence of consideration of other co-benefits and trade-offs that will result from innovations developed in MITIGATE+**.	Indeed, we privileged the GHG emission benefits as the Initiative that has principal responsibility for the emission reduction and net negative GHGE goals of One-CG.
The proposal should aim to include a process and metrics for identification of **positive co-benefits and adverse trade-offs** (e.g., on environmental stewardship, biodiversity, inclusion of marginalized demographics, etc.) arising from MITIGATE+. T	We mentioned analysis of synergies and tradeoffs the science section of each of the WPs, but details were not provided.

The proposal regularly mentions "reducing food systems emissions" but this is only half the equation: this reduction must occur **without having detrimental effects on food security, the environment, gender diversity of end-users** etc. Consistent with SMART, demonstration of reduced emissions should be a minimum standard and some efforts should be made where possible to show co-benefits arising from mitigation options implemented.	We recognize that emission reductions must be achieved without compromising food security and we made repeated references to Article 2.1 of the Paris Agreement that states this clearly. We will provide more detail on synergies and tradeoffs in the year 1 Work Plan and integrate indicators into our MELIA plan.

Resilient Agrifood Systems (RAFS)

INIT7: Protecting Human Health through a One Health Approach	
ISDC recommendation	One Health response
Articulate a better strategy to identify **partners** and to specify their roles/ToRs, including other CGIAR research projects	**External partners:** the CGIAR has conducted over 15 years of research on zoonoses, food safety, AMR, and safe use of wastewater. We have developed strong relationships with national and other partners during this time and will build on these partnerships to deliver research that positioned for immediate impact. Space did not permit a full description of these partnerships. One area that we will strengthen is partnerships with the private sector. Historically One Health has had limited engagement with the private sector – it has been focused on public sector institutions. Our initial discussion with potential private sector partners has been positive and we will work to build these links. **Synergies with other CGIAR research:** The synergies with other parts of the CGIAR portfolio were perhaps not articulated fully. The One Health, SAPLING, LCSR and Resilient Cities initiatives will use common set of tools and indicators to measure common outcomes such as animal health, women's roles in livestock systems, and consumer demand for safe food. Several researchers work across these initiatives, ensuring that the many synergies among them are leveraged. One Health is co-located with SAPLING in Ethiopia, Kenya, Uganda, and Vietnam, with LCSR in Ethiopia, India, and Uganda, and with Resilient Cities in Kenya, Ethiopia, Bangladesh. We will collaborate with Resilient Cities to develop and test interventions to improve food safety in urban environments. Our work on consumer demand for safe food will complement research on mycotoxin control under the initiative on Plant Health initiative; study plans and results will be shared accordingly. The operational mechanisms for these synergies and linkages will be further refined during the inception phase.
Be **more specific/focused regarding zoonoses, EIDs/pathogens** and to be studied, lab procedures, and especially biosafety & biosecurity	Rather than focusing on specific diseases, we will take a **systems approach** to the control of zoonotic diseases, food safety and AMR, and the role of water as a pathway of transmission. Laboratory procedures, biosafety, and biosecurity procedures will comply with CGIAR standards, including approval by ILRI's Institutional Biosafety Committee as well as Institutional Animal Care and Use Committee and Institutional Research Ethics Committees.

More clearly articulate the CGIAR role/comparative advantage in **newer areas of research in WP 3 and WP 4**	**WP 4 (Water)** will build on IWMI's 20 years of experience in the safe use of polluted water in food production and development of Resource Recovery and Reuse (RRR) of waste within the Water, Land & Ecosystem CRP. We will build on IWMI's ongoing work within the CGIAR AMR hub on the transport and fate of waterborne antimicrobial resistance. AMR research has featured in at least three CRPs, namely Livestock (FP2 Livestock Health), A4NH (FP5 Improving Human Health) and FISH. The CGIAR is uniquely positioned to address AMR risks to human health arising from agricultural practices in LMICs. Our proposed research builds on evidence and partnerships developed under the CRPs and bilateral projects, and fills gaps identified through this work, e.g. economic and social incentives for more rational AMU amongst small scale, semi intensive farmers. We will take the required One Health approach involving animal, environment and human health through within-CGIAR and external collaborations, for example with London School of Hygiene and Tropical Medicine **WP 3 (AMR):** Aligning with stakeholder demand as expressed during consultations for this initiative, we will prioritise 3 areas where the CGIAR has developed a track record and has comparative advantage, namely: 1) cost-benefit analyses for replacement of antibiotic growth promoters with biosecurity measures in an LMIC context; 2) developing and making the case for potential policy interventions regarding antimicrobial drug quality and labelling, and 3) environmental transmission, with a focus on the fate of antibiotic residues and antibiotic resistant bacteria in livestock manure and their effects on greenhouse gas emissions and nutrient cycling.
Provide a plan for **capacity development of early career** researchers in partner organizations	We will, as in previous CGIAR projects, develop scientific capacity at all levels: from interns through to MSc and PhD early career researchers, both through direct employment and student fellowships and through research collaborations. As part of the research team, students and early career researchers will be empowered to make decisions regarding questions to be answered and methods to be used, and closely mentored by senior scientists. Graduate fellows at ILRI will attend short courses and training on research methods, data analysis, scientific writing, and soft skills for researchers. In addition, we will, through the collaborative development of interventions with public veterinary and health services in focus countries, build public sector capacity to address One Health challenges. This will build on our experience developing and deploying a program to build the capacity building of para-veterinarians and clinical officers in a One Health context through ZooLinK, and aligns with OIE priorities through the Performance of Veterinary Services (PVS) Pathway. This will build also on the HORN project (One Health regional network for the Horn of Africa) that strengthened the ability of individuals and organizations to undertake basic and applied research in One Health. The One Health Research, Education and Outreach Centre in Africa (OHRECA) funded by BMZ (2020-2025) that aims to improve the health of humans, animals and ecosystems through capacity building, strengthening of local, regional and global networks and provision of evidence-based policy advice on One Health in sub-Saharan Africa will be leveraged to support capacity in One Health of early career researchers in

	particular through PhD training program. A new One Health project "Capacitating One Health in Eastern and Southern Africa" (COHESA) 2022-2026, funded by European Commission Organisation of African, Caribbean and Pacific States (OACPS) Research and Innovation Program, focuses on One Health capacity building and will be leveraged to strengthen capacity of 11 countries in Eastern and Southern Africa including 3 countries Ethiopia, Kenya, and Uganda that are part of One Health initiative. Similarly, in Vietnam and India, we will leverage the capacity in One Health (in food safety) for young researchers through projects i) Market-based approaches to improving the safety of pork in Vietnam (SafePORK), the Safe Food for Growth (SAFEGRO) and Assam Agribusiness and Rural Transformation Project (APPART) funded by ACIAR, Canada DFAT and World Bank.
Articulate a **plan for project management** that provides clear lines of authority	At the start of each year, Work Package (WP) leads will be required submit proposed deliverables with corresponding high level research protocol and budget to the Initiative Lead and Deputy Lead, whose approval will be required prior to initiation of activities, and who will ensure that activities across work packages are well-aligned and synergistic both within the Initiative and with other CGIAR Initiatives. Progress updates on activities will be submitted quarterly by WP leads and discussed during quarterly meetings of WP leads and initiative leadership, as described in section 7.1 of the proposal.

INIT11: Excellence in Agronomy for Sustainable Intensification and Climate Change Adaptation (EiA)	
ISDC recommendation	EiA responses
Given the complexities of EiA's structure, activities, outputs, and impacts, however, it is not always clear what EiA hopes to achieve. A simple example of a "**Use Case** and a Minimum Viable Product" might be helpful to the reader to conceptualize this approach.	Some exemplary Use cases and their respective MVP were attached to the proposal [https://bit.ly/3trh70R]. A generic workflow for each Use Case was also attached [https://bit.ly/39LAUz2]. That said we recognize the large number of attachments submitted with the proposal and we understood that the review process was not obliged to go through the various annexes.
Improvement to the **Risk Assessment** is needed.	The Use Case model and its underlying due diligence processes are expected to address many of the risks associated with partner performance uptake of agronomic solutions. Besides the demand partner, which directly engages with large number of smallholder farmers of intermediary organizations, other service providers (eg, access to inputs, finance) are also meant to be engaged in particular Use Case, based on Scaling Readiness evaluations.
Greater consideration there and elsewhere in the proposal on how the **environment, socio-economics constraints and policies** might impact the adoption of innovations is warranted.	Through its prioritization process, EiA has prioritized countries x farming systems where there is a need for agronomic interventions and where the enabling conditions for the uptake of agronomic solutions are favorable, thus minimizing the risk for unfavorable policies to limit the uptake of such solutions. Furthermore, all Use Cases, which form the basis for our scaling activities, are set up to engage the necessary services to facilitate the uptake of agronomic solutions at scale. During the solution development and validation processes, the agronomic gain KPI framework will be used to assess progress and this framework includes aspects of profitability. Use Cases will be submitted to segmentation to understand the farmer profiles a specific Use Case is interacting with, allowing for integration of socio-economic limitations into the agronomic solution package. Ultimately, through a stage-gating process related to the Use Cases, decisions will be made on the viability of a particular solution, including decisions to discontinue a particular Use Case because of constraints that can't be overcome through our interventions. In summary, EiA has tried to address potential constraints at the Use Case design stage and will collect the necessary evidence to take decisions on the viability of specific agronomic solutions, prioritized by such Use Case

Information on the agrotyping platform is lacking.	The plan is to take time in 2022 to conceptualize this properly before operationalizing such platforms. During then discussion in preparation for the proposal, we felt that having such platform could be a good idea, but many questions require extra thought and specific answers before we start investing in such activity.
Sustainable Intensification was lost in the work packages.	Sustainable Intensification (SI) usually refers to (i) enhanced productivity, (ii) retention of critical ecosystem services, and (iii) resilience to shocks and stresses. The agronomic gain KPI framework addresses each of these aspects explicitly and the intention is for all Use Cases to address all of the KPIs (or at least not to create negative impacts on some of the KPIs). As such, SI is the ultimate goals of all Use cases. We do agree that this could have been explained better in the text.
Plans for capacity building of NARES on data platforms and tools needs elaboration.	This is correct and we are planning to elaborate this during Q1 of 2022. We have implemented a NARS survey [https://bit.ly/3zKrUF9] and plan to use this as input into the planning.

INIT13: Plant Health and Rapid Response to Protect Food Security and Livelihoods	
ISDC recommendation	Plant health responses
Further clarity is needed on the **priority setting process**.	As elaborated in the proposal document, an initial list of pest and disease (P&D) priorities, plant health innovations to effectively tackle the same, and the strategic plan across the five specific Work Packages, were shared and feedback received through two major channels: (i) interactions with national/regional stakeholders, for better alignment of the priorities with the national/regional needs/interests; and (ii) direct consultations/discussions with key demand, innovation and scaling partners (during August-Sept 2021) and seeking their views on the PHI R4D strategy and the potential for scaling innovations. Rigorous prioritization of P&D to be targeted under PHI-WP3 in Phase 1 (2022-2024) was undertaken through an iterative process, and based on several factors, including a) nature of the threat (established, persistent/sporadic, emerging); b) documented economic impact of the pest/disease in the CGIAR target regions; c) whether the threat can be effectively addressed through breeding (host plant resistance) or agronomic management alone or would require integrated approaches (i.e., by combining, as appropriate, host plant resistance, biological control, agroecological management, environmentally safer pesticides, etc.) for effective and sustainable management – if it is latter, the pest/disease is considered under PHI; if it is former, the threat needs to be addressed as part of complementary Initiatives (Accelerated Breeding Initiative or Excellence-in-Agronomy); d) comparative advantage and track record of CGIAR and partners in addressing the pest/disease; and e) stage of the innovation or innovation package (i.e., whether already under scaling or under piloting or still under development).
The **scaling readiness plan** needs to be articulated.	PHI will build on the experience of RTB-WUR **scaling readiness approaches** developed for diseases, such as BXW (Banana Xanthomonas Wilt) control, and A4NH scaling approaches for mycotoxin management technologies. The PHI-WP3 and WP4 teams have selected specific innovations that are scaling-ready as model cases for Phase 1 (2022-2024), as mentioned in the proposal. Further, PHI will form an interdisciplinary scaling readiness focal team to study the complex scaling landscape and provide appropriate recommendations and action plans for improving scaling through regular monitoring meetings. Joint learning from model cases will be used in the design and implementation of scaling readiness plans for other plant health innovations. The science-to-scale commercialization process, based on learning from the CRP era, will enable PHI to tackle the challenge of effectively getting public sector scientific breakthroughs/innovations to the farming communities at scale through public-private partnerships. Briefly, this process is divided in five phases: Phase 1: Innovate and Develop, as a prerequisite for scaling; Phase 2: Assess Market; Phase 3: Select Investor(s) and Structure the Business Relationship; Phase 4: Implement the Business

	Development Strategy; Phase 5: Learn, Adapt, and Scale. More details on this strategy can be found here: https://a4nh.cgiar.org/files/2020/08/StrategicBrief_2020_A4NH_Aflasafe_web-1.pdf.
Further clarity is needed on the **prioritized innovations** from the CRP era to truly assess effectiveness.	The Challenge Statement (Section 2.1) is expected to highlight the **key challenges** related to plant health management, while the Comparative Advantage (Section 2.5) indicates how the Initiative is built on substantial body of relevant research already undertaken by the CRPs on the surveillance systems, IPDM and aflatoxin management. We have highlighted the following points in the Comparative Advantage section with relevant references. • CGIAR is the global leader in management of several major plant health threats through its impactful R4D on pests, diseases, mycotoxins, and weeds. The collaborative networks/alliances/consortia coordinated by CGIAR, leveraging advances made through the CRPs – e.g., RTB Alliance on Banana Bunchy Top Disease Control in Africa (RTB Cluster BA3.4), Banana bacterial and fungal diseases (RTB Cluster BA3.2), pest risk assessment (RTB Cluster CC3.1), MusaNet; CRP MAIZE-led FAW R4D International Consortium, and the MLN Phytosanitary Community of Practice; CRP A4NH Cluster on mycotoxin management; Genebank Platform's network of Germplasm Health Units etc. – make crucial contributions to characterization, diagnostics, monitoring, surveillance, epidemiology, participatory experimentation, integrated management of existing and emerging pests and diseases, capacity strengthening of partners, knowledge/technology transfer, etc. • CGIAR and innovation partners have excellent expertise and a strong track-record in developing and deploying impactful innovations, including host plant resistance, biological control, biopesticides, agro- ecological approaches etc. for sustainable plant health management. • The network of CGIAR Germplasm Health Units (leveraging from the Genebank Platform GHU module) across the tropical LMICs provides phytosanitary services for major food crops (e.g., cassava, banana, maize, wheat, rice, potato, feed legumes, etc.), supports production of clean seed/planting materials, and strengthens technical expertise of local institutions, including National Plant Protection Organizations (NPPOs). CGIAR Plant Health R4D teams will continue to implement PHI-WP3 and WP4, which are indeed based on the success stories and lessons learned during the CRP era, including RICE, MAIZE, WHEAT, RTB, GLDC, and A4NH. For example, WP4 is a continuation of the A4NH-FP3 Cluster of Activities on Aflatoxin Control, with expansion to countries/crops lacking effective mycotoxin management programs during the CRP era

Further clarity is needed on the **youth strategy**	The PHI team has extensively reviewed literature related to youth, agriculture, and plant health, and identified some key learnings and research gaps, based on which priority setting and strategies for effective engagement of youth in PHI are developed (https://bit.ly/3GsgTMe). PHI team will ensure youth inclusion through: 1) surveillance and detection by digital technologies, and young Plant Doctors (WP1& WP2); 2) creating opportunities for more gainful employment and business activities for young women and men in small- and medium-size enterprises (SMEs) in Aflasafe value chains (WP4); and 3) capacity development for young scientists of international and national institutions with a target of at least 30% young scientists (WP1- WP5); and 5) investigating constraints in effective engagement of youth in crop protection, and propose youth-sensitive designs to incentivize uptake of plant health innovations (WP1-WP5).

Linkages with One Health and MITIGATE+ should be sought.	We agree with the ISDC reviewers that the One Health Initiative (OHI) and the Plant Health Initiative (PHI) should be closely linked, particularly regarding PHI-WP4 on mitigating mycotoxin contamination. There were several attempts from the PHI team to establish strong collaboration with OHI on this aspect, but these were not quite successful. • On 7th Sept 2021, OHI leadership team (Vivian Hoffmann, Hung Nguyen) and PHI-WP4 leadership team (Ranajit Bandyopadhyay, Alejandro Ortega-Beltran) – the four of them were earlier part of A4NH – met virtually to discuss the complementarities and potential synergies between PHI and OHI. The significance of mycotoxin mitigation in OHI was discussed, particularly contamination of milk. with aflatoxins, as there are strong opportunities for interface between PHI and OHI in this area. The OHI team mentioned that mycotoxins, including aflatoxins, will NOT be a priority for OHI and that due to limited funds/resources, OHI would focus on other aspects of food safety, particularly on zoonotic diseases, and antimicrobial resistance (AMR). The OHI team suggested that there could be potential linkages with PHI-WP1 on mycotoxin surveillance approaches. Regardless of mycotoxins being left outside of OHI, the PHI team is strongly committed to conduct work on mycotoxin mitigation as this would also benefit the One Health concept. • On 14th Sept 2021, the PHI team (Alejandro and Ranajit) met with Jana Kholova (ICRISAT) and Arshnee Moodley (ILRI; AMR CGIAR lead) to discuss the AfriFARM project, which has a component on the use of aflatoxin-reduced crops as poultry feed in Nigeria. Farmers using Aflasafe and other mycotoxin management practices will be linked with feed producers seeking aflatoxin-reduced crops. Research was also envisaged on the impact of aflatoxin on gut health of poultry. Farmers and their families will benefit from production of aflatoxin-safe maize for their own consumption; will obtain higher income when selling part of their safe maize to aflatoxin-conscious buyers; poultry producers will benefit by using safe feeds that reduce both mortality and feed conversion ratio and increase their profits; birds will have reduced mycotoxin exposure; and consumers of poultry products will have reduced exposure to mycotoxins. Influence of aflatoxin-reduced feeds on other poultry health aspects, such as AMR and vaccine effectiveness, will be assessed. Such type of interaction was expected to happen between the PHI and OHI. PHI continues to be open to explore collaboration, synergies, and complementarities with OHI. • Potential synergies and complementarities with MITIGATE+, especially in relation to IPDM outcomes and climate change, will be explored during the inception phase of the Initiatives.

INIT17: Sustainable Animal Productivity for Livelihoods, Nutrition and Gender Inclusion (SAPLING)	
ISDC recommendation	SAPLING responses
Weakness 1—No articulation of the **promising technologies for use to drive sustainable productivity** or how such innovations would be scaled up and sustained	SAPLING builds on decades for applied livestock for development, yet details of the innovations could not be included in the proposal due to word limit. The list of innovations was provided as an annex, although we appreciate that reviewers may not have read all annexes. The annex is provided here as a Google Excel document, with the last column providing the current stage of 'readiness to scale'.
Weakness 2—Weak **alignment with target countries'** priorities, regional and other CGIAR Initiatives and weak focus on equitable partnerships with national and regional institutes and scientists	Stakeholders in six of the seven countries were consulted during the preparation of the proposal, asking specific feedbacks on the proposal while at the same time not raising excessive expectations given the uncertainties. In Kenya, the IDT did not conduct a specific consultation to articulate the country priorities because the ILRI team is leading a participatory process of developing a Livestock Master Plan with the State Dept of Livestock which provided excellent inputs for defining priorities for Kenya. One of the first task of the SAPLING team will be to adjust the countries Theory of Change with and by the relevant stakeholders, to ensure that the priorities are aligned and equitable partnerships with national scientists. The weakness on link with other Initiatives is well noted and synergies will now be identified during the inception phase. While discussions on synergies with other global initiatives (livestock or not livestock-based) are well advanced, yet not materialized in detail in the proposal because of space limit. Discussions have already started on linkages with the Regional Integrated Initiatives.
Weakness 3—**Capacity development plan**	This is a very important point and the suggestion of embedding capacity development plans in the country theory of change will be explored. Again, for reasons of space limit, we did not expand on the important achievement we built in the Livestock CRP priority countries building strong hubs for knowledge creation and dissemination which will be further supported and expanded in SAPLING. Discussion on a collaboration with SLU regarding institutional capacity enhancement for veterinary services in the SAPLING target countries has started.

INIT34: Livestock, Climate and System Resilience (LCSR)	
ISDC recommendation	LCSR responses
W 1: **Justified and transparent costs** (section 14) were not provided, which appears to be the way the proposal template was designed rather than an omission from the Initiative proponents.	This was indeed a shortcoming of the budget template
W 2: **Capacity building** (section 12) is disappointing. The main shortfall is the absence of specific targets that include both quantity and quality indicators.	In terms of the **capacity building targets**, our apologies that we did not realize targets were necessary. The lead center, ILRI, is based in Kenya and has a very strong record of attracting PhD students from East Africa, with limited success in West Africa, despite our continued efforts. The PhD students we currently have enrolled with us are predominately female and African and we will build on this past record. Regarding partner capacity, we agree that this is important but perhaps did not emphasise it enough. However, the LCSR team has extensive experience training partners in areas such as MRV for livestock, measurement of GHG emissions from livestock, rangeland management and restoration, dissemination of climate information services and climate smart agricultural practices. In relation to skills across the project team, we do have a good sense of the skills that we need, but again may not have described this in detail.
W 3: **Research management, scientific oversight, and governance**. The reviewers were disappointed with the level of commitment to local level engagement in management, governance, and scientific oversight.	We fully agree that this is crucial to the success of the initiative. However, we really did not want to make false promises to local actors, without clarity on a budget. The LCSR team has a wide range of experience working with local actors across different regions of the world to co-produce knowledge and agree on governance arrangements. We will build on that experience during the inception phase to put in place robust partnership arrangements including engagement in management, governance and scientific oversight.

Genetic Innovations (GI)

INIT1: Accelerated Breeding (ABI): Meeting Farmers' Needs with Nutritious, Climate-Resilient Crops	
ISDC recommendation for	ABI responses
The rationale for the **allocation of budget** to work packages, crops, regions, and countries	Fully accept there was insufficient budget detail provided – we simply followed the guidance. Budget allocation will be based on projection of benefit/impact. A budget narrative has been developed and is available upon request.
The science to be applied to the **plant breeding programs**—particularly in allele discovery, genomic selection, gene editing (see Weaknesses section for details below)	I. Lack of **deep and detailed scientific knowledge and planning** is due to the word limits prescribed. II. **Gene editing** is out of scope for ABI. There is a dedicated initiative yet to come which will cover gene editing. We do however consider the logistics of managing edits in the breeding pipeline given a heterogeneous landscape of acceptance and legislation of the technology. III. ACCELERATE is about developing varieties and increasing rate of genetic gain. **Genomics** will be an important tool for achieving this but just that. If the proposal reads like the goal of ACCELERATE is to evaluate genomic selection, then we'll take this feedback on and be careful about how we frame and present this work package going forward. IV. **Training** was covered in a separate section but with strict word limits. We totally agree, training is going to be critically important, but this will primarily be provided by N4ETTSS. We called out alignment with N4ETTSS, but I agree it can be useful to be more explicit. Given the importance of skills building to achieving the ambitious agenda this will be reviewed with N4ETTSS to ensure that the necessary capacity development is planned and funded.
Plans for **training staff** in the breeding programs	ABI is moving away from a model where the breeder does everything. Much of the application of say **genomic selection** for example is performed by the quantitative genetics and biometrics teams at N4ETTSS. This approach also supports gender balance in the team. **Training** is a means to an end for CGIAR, not an end in itself (like say a university). For this reason, approaches like fellowships, placements, secondments and visits were not explicitly called out within limited words available. However, this is a good idea and we can incorporate such things into our plans going forward.
Greater details are also required regarding the definition of **contracted outcomes**	Link between innovations, innovation packages and outcomes to be made more clearly.

INIT3: Conservation and Use of Genetic Resources (Genebanks) Initiative	
ISDC recommendation	Genebanks response
Focal **research problem** needs to be clearly stated	Please note that we had difficulty trying to fit the Genebanks to the provided template and the review clearly illustrated that. We are concerned about the implications of this down the road if Genebanks, being primarily services initiative, will be subject to standardized evaluations developed for research initiatives. **Research problems for WP 2 and WP 3** are described in full detail through tables on pp 18 for WP 3 and table on pp 21-22 for WP 4, respectively. **WP2**: Research activities can be divided into four key areas: seed quality management, cryobanking, germplasm health, and genetic resources policy. Although the CGIAR genebanks have made many advances in daily operations under the Genebank Platform, further innovations are needed to improve efficiency and effectiveness in conservation protocols and take better advantage of synergies across genebanks and crops being kept. (see pp 18). A detailed list of suggested WP2-related activities will be fully described in the inception phase **WP3**: Much of the value in genebank collections maintained under WP 1 exists in the under-utilized genetic variation for important traits, particularly for traits providing climate resilience to biotic and abiotic stresses. Breeding programs are establishing a trait development pipeline under the Accelerated Breeding Initiative to ensure high-quality reliable outputs (genes, markers) for the breeding process. WP 3 aims to connect with and enable this pipeline by generating value-added information and resources to relieve bottlenecks typically encountered by users. The improved usability will result in more targeted, reliable, cheaper trait development products, producing flow-on effects in more trait demand from breeding programs and thereby more frequent investigation of genebank material (see pp 21-22). In other words, the Return on Investments made by donors on OneCGIAR genebanks will be increased. A detailed list of suggested WP3-related activities will be described in the inception phase
The **objective** needs to be clearly stated (conservation obligation and support for CGIAR research)	This recommendation will be fully addressed during the inception phase

Several of the specific research questions in the work packages need **rephrasing**	The specific research activities will be described with more details and key questions will be rephrased for a clear understanding of the research questions in the inception document.
Many sections of the proposal lack sufficient detail or clarity to enable the proposal to be evaluated. For example, the research methods and budget. Gantt charts describing the **planned activities,** their **geographical** and **crop foci, time frames, and resource requirements** (by budget line type) are required to enable justification of any investment	Here reviewers are addressing the key question of the detailed research methods linked to the corresponding budget. In the context of this proposal/initiative, Table 10.1 pp 54 describes broadly the budget allocation by WP for a three-year period. A more detailed document is being prepared and will be presented in the inception aligned with planned activities, their geographical and crop foci, time frames, and resource requirements by budget line type.
Use of open and **competitive funding** mechanism would improve quality of proposals through removal of assumptions of continued on-going funding	As Genebanks activities will focus on innovative methods applied to molecular or trait characterization, genome studies, allele mining, generation of pre-breeding lines (RILs, MAGICs, etc), a few well-selected research topics could be proposed by Genebanks through competitive partnering and funding with R4D institute of ex (under WP3), in addition to the main ongoing funding. In addition, research on genomic prediction encompassing both genotypes kept at genebank and genotypes from breeding programs would further increase the value derived from genebanks.
Involvement of **social scientist/s** within the team	Will be addressed in inception phase. Inputs of social scientists always welcome where relevant, particularly in priority setting and impact assessment. However, it may work better for Genebanks to rely on social scientists positioned in partner initiatives since it is the regional and specific RAFs initiatives that might best target the use of diversity in the collections.

Involvement of a **wider range of stakeholders,** particularly: i. in trait selection and related systems to support increased use of One CGIAR Genebanks; ii. for addressing policy and governance-related challenges around genetic resources; and iii. for meaningful MEL and the necessary associated redirection and changes needed to the work	Stakeholders' involvement will be addressed in inception phase. i). Trait selection will be carried out fully in coordination with ABI as stated. ii). Policy work always involves wide range of stakeholders under Treaty, CBD and beyond. iii). For MEL(IA) Genebanks has a proven track record in managing indicators and targets well-described such as **Availability** (% collection which is clean, viable, in sufficient seed number to be made immediately available for international distribution), **Safety duplication** (% collection which is held in long term storage conditions in two locations and also in the Svalbard Global Seed Vault or for clonal crops or % collection in vitro in two locations), **Data availability** (% collection with minimum passport and characterization data available online), **diversity use** (% collection disseminated over 10 year period) and **quantity use** (number of samples disseminated/year as a proportion of the total collection size). In addition, the Genebanks **Quality Management Systems** (QMS) has proved to be a useful mechanism implemented during the last 10 years for raising standards of operation. It is broadly shared with further partners and provides a strong message of transparency to the community of existing and potential genebank users, partners, and national genebanks.
Greater details of **planned partner and stakeholder** engagement processes and roles to ensure their active (as opposed to passive) participation and ownership	More, and wider detailed stakeholder consultation processes and planning for collaborations are expected to be presented during the inception phase. **External partners** with expertise in WP2 (seed quality management, cryobanking, germplasm health, and genetic resources policy) and WP3 activities (mostly pre-breeding related) will be identified to actively collaborate with Genebanks. **Internally**, Genebanks will link closely to the other Genetic Innovation (GI) initiatives, including Market Intelligence and Product Profiling; Network 4 Enabling Tools, Technologies, and Shared Services (N4ETTSS); Accelerated Breeding (ABI); Delivering Genetic Gains in Farmers' Fields (SeEdQUAL). Examples of the expected flows of information, knowledge, and products between the different Initiatives will enable a deeper understanding of the expected relationships.
More prominent recognition of role and reach of **national genebanks,** and opportunities for partnerships with them beyond the already positive plans in work package 4	This recommendation is agreed to be addressed in inception phase. In this proposal, key innovation partners are the Crop Trust, ISTA, Aarhus University, Open University in the UK, Secretariats of the Plant Treaty and CGRFA, UN FAO Plant Protection Division, IPPC, ISF, AVRDC, SPGRC, **the national genebanks of Kenya, Ethiopia, Ghana, Malawi, Nigeria,** and crop networks (see WP 4). More detail on role and interaction with national and regional genebanks will be developed in WP4 and addressed in inception phase

Identify opportunities for greater promotion of and **support for biodiversity**	Will be addressed in inception phase. Should consider specific crops or instances for promoting more direct use from genebanks. Diversity is an important element of resilience. The Genebanks will support messaging and action around the importance of diversity in fields and diets.
Focal **research problem** needs to be clearly stated	Research problems for WP 2 and WP 3 are described in full detail through tables on pp 18 for WP 3 and table on pp 21-22 for WP 4, respectively. **WP2**: Research activities can be divided into four key areas: seed quality management, cryobanking, germplasm health, and genetic resources policy. Although the CGIAR genebanks have made many advances in daily operations under the Genebank Platform, further innovations are needed to improve efficiency and effectiveness in conservation protocols and take better advantage of synergies across genebanks and crops being kept. (see pp 18). A detailed list of suggested WP2-related activities will be fully described in the inception phase **WP3**: Much of the value in genebank collections maintained under WP 1 exists in the under-utilized genetic variation for important traits, particularly for traits providing climate resilience to biotic and abiotic stresses. Breeding programs are establishing a trait development pipeline under the Accelerated Breeding Initiative to ensure high-quality reliable outputs (genes, markers) for the breeding process. WP 3 aims to connect with and enable this pipeline by generating value-added information and resources to relieve bottlenecks typically encountered by users. The improved usability will result in more targeted, reliable, cheaper trait development products, producing flow-on effects in more trait demand from breeding programs and thereby more frequent investigation of genebank material (see pp 21-22). In other words, the Return on Investments made by donors on OneCGIAR genebanks will be increased. A detailed list of suggested WP3-related activities will be described in the inception phase

INIT4: Network 4 Enabling Tools, Technologies, and Shared Services (N4ETTSS)	
ISDC recommendation	N4ETTSS responses
The **budget** (although this seems to be a common weakness across Initiatives). A detailed budget justification should be provided as it is difficult to address the criteria on transparent costing and the linkage to expected research for development results.	We are working on a more detailed budget template provided by the system council that has allocations to Center. As we work with the affiliated staff to GI to fill positions, we expect re-alignment of some of the inevitable variances. Plan to align closely with CtEH investment plans so N4ETTSS contributes to sustainability of CtEH investments
Data management and partnerships. The way the use of metadata is planned requires clarity, in particular, how it will be standardized and searchable.	EiB Module 5 is starting the data governance network for breeding data, with expressly this goal, in 2022. We will also participate in a broader Data Task Force lea by Big Data Platform
Human resources and **capacity development**. The proposal includes a brief statement about capacity development within project teams, partners, and stakeholders although it would be helpful to describe training for partners and stakeholders a little more explicitly. In addition, in table 9.1, the size of the teams should be provided.	Agreed! We will provide explicit opportunities and training on various change management topics, both on a general level, and also specialized training for people interested in expanding their professional skillset in operations (process management, project management etc). On a scientific/technical level, a key function of "modernization facilitators" is to connect NARES scientists to capacity development in CGIAR and to begin the process of aligning Excellence in Breeding activities to the Initiative
This proposal seems **very CGIAR-focused,** and partnerships are assumed, but a clear plan to identify, build and cultivate them in the document is missing. What incentives and processes would be in place to establish and manage innovative partnerships	ABI takes the lead in the development of partnerships with NARES, which N4ETTSS will fully support. We also propose two governing bodies - a Technical Advisory Committee and Project Advisory Committee

INIT5: Market Intelligence and Product Profiling	
ISDC recommendation	MIPP responses
AR1: The Initiative should consider the **biological constraints** (genetic and physiological variations) of each of the targeted crops that may render impossible the development of breeding products. These constraints are known by breeders and agronomists—make sure they are included in a feedback loop in work package 2. Weakness 1: Criterion 4a (work package 2). The review team thinks that this Initiative ignores the biological constraints (that may vary among crops) that may impede the relevance of a product profile. The more complex a product profile, the more difficult it will be to implement it in a breeding program with the objective of combining many traits into a single genotype. These constraints (mainly genetic and physiological) should be systematically interrogated in work package 1.	The team has carefully considered biological constraints in the theory of change of WP2. Indeed, considering biological constraints comes down to assessing feasibility ("breedability") of the products defined by the product profiles. Feasibility is captured through the supply function and WP2 aims to confront the demand with the supply function to ensure that product profiles are realistic and can be bred in a cost-effective manner. This is exactly the reason why ABI WP1 and MIPPI WP2 insist on forming and empowering regional, transdisciplinary CGIAR-NARES-SME teams in co-design of product profiles. Through direct involvement of breeders and other biophysical scientists (e.g., plant health) in the design of product profiles, we can better confront the demand function (from market intelligence) with the supply function (from breeders, plant health scientists, etc.). Finally, in the Innovation Packages and Scaling Readiness Plan (Section 4, p. 31), we make reference to two novel methodologies that enable confronting the demand with the supply function by explicitly incorporating "breedability" into the product profile: building on Digital Product Profiling and 1000minds Decision-Making and Conjoint Analysis.
Also, it would be good as well to keep in mind that customers do not always know what they want beforehand, so use judgement and other information to **make sure the product profiles are right.** This Initiative could also benefit from the implementation of a feedback loop in work package 2.	We agree and this is the reason why we developed WP3, which explores what other behavioral conditions need to be in place for adoption. Maybe farmers and consumers need to be informed about the novel product (for which preferences did not yet exist, e.g., biofortified or low-glycemic index crops), before they can develop and express preferences and demand for these products. WP3 enables testing these behavioral conditions that go beyond the product profile. WP2 is strongly connected to WP1 and WP3 through feedback loops. WP1 provides the building blocks of forward-looking market intelligence, while WP2 feeds back information to WP1 on what kind of market intelligence to look for. WP3 looks beyond the product profile and feeds back information to WP2 that is relevant for product profile design. During the inception phase we will make sure that the process and interactions across WP are laid out in more detail.

Weakness 2: Criterion 12 (Capacity development #9.3). The Initiative states that **capacity building** will be conducted through the G×I Learning Alliance, but this is one of the least clear and least persuasive sections. It does not seem as well thought out and supported as the other sections. Although there's a list of training activities provided (e.g., workshops, conferences, etc.), there is no clearly mapped training framework on how the project will build capacity and where, it seems to more assume it will happen among the collaborators through the identified training platforms.	We fully agree that the capacity building plan can be further developed, and we will ensure a convincing plan is developed at the onset of the Initiative.
Weakness 3: Criterion 14. The Budget! All reviewers had a problem with the **budget**. These problems included that it was not clearly enough described to make any assessment as to its strength. One cannot judge its relevance if the costs are not detailed. AR3: A detailed **budget breakdown and justification** should be provided in the proposal.	We agree. A detailed budget narrative is being developed with a clear rationale for the overall budget and its distribution among work packages.
Open Data & Open Access protocols and plans are vague, including descriptions of meta-data. More information about what is envisaged and how it will be achieved would improve the proposal.	Details on protocols for open data and open access and descriptions of meta-data will be developed by the "Harnessing Digital Technologies for Timely Decision-Making across Food, Water and Land Systems" initiative. Outputs from WP5 (Enabling Digital Platforms and Services for R&D Practitioners) this initiative includes the development of fit-for-purpose data platforms and information services where the Market Intelligence Initiative is one of the users.
There is a **need for impact focused metrics.**	The Initiative aims to deliver across CGIAR's five impact areas, working closely with the other GI Initiatives. The mechanism of the product profiles will be key to setting a multi-benefit multi-impact approach for all of CGIAR's genetic improvement work. The Initiative will measure and report on progress along its theory of change, with metrics of outputs and outcomes towards SDG-related impacts.

INIT6: Delivering Genetic Gains in Farmers' Fields (SeEdQUAL)	
ISDC recommendation	SeEdQUAL responses
More details of management structures, risk mitigation, and an explanation and justification of the **budget** would clarify the proposal.	A detailed activity level budget is now available and developed according to system office guidelines and validated by the SO designated IDT Finance Officer. Staff costs were driven by the average cost per grade using center-specific costs (including the relevant center-specific RSP costs). Other (operational) costs were based on equivalent IRRI costs for simplicity. Estimates for some external partner costs were included. A projected total of 245 existing and proposed personnel will be actively participating in the initiative with the majority of the CGIAR personnel located in SSA (51% of proposed total including 38% female staff) followed by Asia (36% proposed total with 28% of female staff) with the remainder in other regions including LAC. Crop-archetype specific activities (work packages 1-3) are allocated 67.59% of the budget. Workpackage 1 (cereal crops encompassing large geographical production regions in SSA, Asia and LAC) have a budget of 35.72%. Work package 2, focused on common beans, cowpeas and soybean and focused mainly on countries in SSA has an allocated budget of 16.57%. Work package 3 consisting of roots and tuber crops and banana (potato, sweet potato, banana, cassava and yam) mainly focusing mainly in SSA and some parts of Asia has a budget of 15.30%. WPs 4,5 & 6 cover cross-cutting aspects including capacity building for NARs, SMEs and farmer-based seed delivery partners, tools, context and evidence-based policy, gender, youth research. Cross cutting packages 5 & 6 will focus on limited number of specific countries in Africa, Asia and LAC . Work packages 4, 5 and 6 budgets allocated are 10.37%, 10.59% and 11.26% respectively. Overall the budget for crosscutting activities represent 32.22% of the total. WP 4 also includes the costs of inception, annual planning meetings (with participation from stakeholders from ABI, MIPP and NARs partners), scaling readiness, reporting and initiative management (including lead and co-lead costs). Costs for WP leads and co-leads are included within the respective WP budgets. As a globally relevant proposed initiative SeEdQUAL will support the crops in the 3 crop archetypes in mainly Africa, Asia and LAC countries to support the product advancement for newly developed products developed by the Accelerated Breeding Initiative (ABI) in line with market intelligence and product profiles. Seed activities will support product advancement through on farm testing (OFT) for identification of “best-fit”, comparative demonstration with released varieties in partnership with NARS partners to increase farmer knowledge and choices of “best-fit” varieties for faster uptake, capacity building

	support for high quality early generation seed (EGS) in suitable regions and geographies. It is proposed that initially, and based on budget availability and products available, a few countries will be targeted for product advancement and based on the lessons learned, and evidence collected, an expansion of activities plan will be developed. The proposed expansion countries, based on those identified by WP leaders during proposal development, include (depending on the products available annually for each crop, SSA, (Tanzania, Kenya, Uganda, Rwanda, Ethiopia, Burundi, DRC, Cameroon, Malawi, Mozambique, Madagascar, Zambia, South Africa; Zimbabwe, Lesotho and eSwatini, Asia Cote d'Ivoire, Togo, Benin, Nigeria, Ghana, South Asia (India, Nepal Bangladesh, Pakistan Bhutan and Sri Lanka) South East Asia (Cambodia, Myanmar, Vietnam, Indonesia, Lao PDR, Thailand and Philippines), and LAC (Mexico, Peru, Ecuador). NARs, farmers, farmer-based seed multipliers, SMEs and CGIAR partners in these product advancement target countries will be engaged for training and capacity building activities to upskill and increase capacity to conduct activities that benefit the national seed systems. Such product advancement coupled with capacity building activities are expected to benefit NARS for deployment of varieties for genetic gain on farmers' fields in an effective manner. The final country prioritization process and budget allocation at the regional and country level will happen early in the initiative inception phase in line with the G.I. strategy and the prioritization principles given below in Section 3.
Seed delivery support to **disadvantaged farmers** is unclear and there is little indication of different approaches that will be deployed to reach these unreached groups. The **outcomes for gender and youth** could be presented more clearly and should go beyond the stated focus.	Additional activities and partnerships will be included in WP6 that specifically address the "last mile" issue (including the VBA model). Seed delivery support to disadvantaged farmers is unclear and there is little indication of different approaches that will be deployed to reach these unreached groups. While we have a suite of approaches that we would deploy, each of those will be refined to be context-specific and in a participatory manner with the stakeholders who would be part of this action research. Evidence reveals that: • The informal sector/farmer-managed or farmer-led systems are important for reaching the unreached groups. These systems are able to provide quality seed of preferred crops and varieties required by the disadvantaged groups locally. • Community seed banks would be an important mechanism, so would be NGOs whose target groups specifically include the poorest of the poor and women, in most contexts. • Information and seed flows often follow the same channels. Provision of information to these groups to raise awareness regarding new germ plasm and availability of quality seed is important. Participatory approaches like field demonstrations and varietal/crop cafeterias etc have proven to be effective in this context and also provide avenues for

	acquiring or exchange of seed. Other key sources include local grain stockists, social and religious groups, collectives like farmer producer organizations and self-help groups, mobile seed shops. Presentations and promotions in local markets are another channel. • To overcome the challenges like affordability, small packages and local 'mom and pop stores' will be employed. While subsidies and vouchers are effective, there is a concern that they enhance dependency and create artificial markets. • The hypothesis that women seed producers are able to reach out better to women seed users will also be tested. • What is as important as providing the seed, is to ensure that the disadvantaged groups have the knowledge, skills and other resources needed to use this seed and benefit from it. Training/capacity development activities are included as a part of this. **WP6** will undertake a systematic review at the outset on what works and what does not in providing inclusive access to seed. This knowledge in combination with multi-stakeholder consultations in different contexts will help refine the strategies/approaches to be tested per context (indicated in the Science Table on Page 37 of the proposal). A research question on this is included in WP1 (Table on page 17), WP2 (Table on page 21), WP 3 (Table on page 25) and will be refined and adapted in the light of this review. **WP5** will complement this work with an explicit emphasis on policy options to reach disadvantaged farmers. Policy approaches include a wide range of mechanisms related to public investment priorities and regulatory systems that can impact different types of farmers differently. Examples include "smart" input delivery systems, credit-linked extension, crop/index insurance products, SMS-based seed quality e-verification systems, streamlined varietal release procedures, and other policy-based instruments to accelerate varietal turnover and deepen demand for quality seeds. Each of these instruments requires that attention be given to the pathways through which they affect specific sub-groups such as women farmers, youth farmers, or other groups that may be socially or economically marginalized or otherwise vulnerable and these approached will be made more explicit and emphasized during the development of the initiative plan of work and budget.
Farmers should be seed-business partners, not "beneficiaries." Farmer involvement is not explicit enough.	IDT f& WP Leads for several crops already have identified smallholder partners with a comparative advantage in this area. More will be identified.

Instead of promoting "few in-demand varieties," CGIAR should **foster "best-fit" variety portfolios** serving diverse farming contexts	IDT & WP leads have identified "best fit" varieties for which sufficient quantities of foundation seed exists from CGIAR and existing NARS partners, to be able to test models at scale from 2022 onwards. Key focus will be on improving EGS availability of farmer preferred "best fit" varieties to community-based seed multipliers and NGO development partners.
Proposal is **over ambitious** and does not address risks such as ABI not able to supply varieties to meet farmers' needs.	Benefits were developed together at the GI level We are planning for initiatives that run until 2030. We do not expect to have all the listed results in all geographies and crops at the same time, but to select cases per country/crop for delivery of seed through partners, and to do the testing of models.
The role of farmer-based seed production is not sufficiently considered as a major entry/ intervention. The integration of **formal and informal seed system** for the improvement of access to farmers' preferred crops and varieties is not sufficiently considered.	We agree that these aspects were not given due attention or explicitly explained in the proposal. Although seed businesses are included in WP3 (table on page 25 on business models), WP5 (in key outputs in the table on page 33 – policy, investment and regulatory options to promote formal and informal seed system integration, support women and youth engagement and entrepreneurship, last question in the table on page 33). Additionally, WP6 in the WP main focus on page 37 highlights the coordination and synergies between the formal and informal sectors. These specific research question and planned outputs on approaches for promoting coordination and synergies between the two sectors will be expanded through further activities and partnerships to develop a more inclusive narrative. Formal and informal seed systems integration is central to the Initiative's Theory of Change and for example, many of the policy and regulatory options to be explored under WP5 are designed to create opportunities for greater participation of informal seed actors in the formal system, and for more commercial seed actors to engage in informal seed systems. Examples to be re-emphasized and further developed include planned research and evaluation on: seed quality regulations that introduce farmer-focused standards to allow cooperatives and entrepreneurs to scale-up their seed production activities to support new communities and markets; variety release procedures that recognize and valorize farmer varieties; and capacity development programs targeted to women and youth entrepreneurs. Additional activities will be described in the plan of work and budget to be developed to include aspects that improve outcomes for gender and youth through equitable seed systems including farmer-based seed systems. In particular a greater emphasis will be placed on achieving these outcomes through engaging a wider range of public and private sector research and development actors and using socially-inclusive and gender-transformative strategies to enhance inclusive access to seed,

	improving synergies between formal and informal systems so that women and men from vulnerable and disadvantaged socio-economic groups will be able to use affordable and good quality seed of the crops and varieties they prefer accessed timely through convenient delivery channels to enhance their crop productivity and, consequently contribute to their food security, resilient livelihoods and incomes. Due to enhanced awareness and access to information on new varieties and seeds, they will be able to demand and source seed as required. As these groups have traditionally relied on informal sources, the co-ordination between formal and informal systems will be enhanced to improve their access to seed of more diverse crops and varieties. This strategy will also enable these communities to better respond to changing climatic conditions as also pointed out by the ISDC review. Women have traditionally played a central role in community-based or farmer-managed seeds systems. Better Linking them to the capacity development and engagement activities of the initiative (women and youth in seed production and marketing individually or through their collectives) will lead to their economic empowerment and consequently better livelihoods and better social status, seed-confidence and self-esteem. Women have traditionally played a central role in community-based or farmer-managed seeds systems. Linking these to the formal systems and seed supply chains can enhance their visibility, economic returns and empowerment. All this will be supported by a gender-responsive seed policy and enabling environment. Lastly additional partnerships will be sought or strengthened to enhance our capability to better integrate formal and Informal (farmer-based) seed systems. The existing relationship with the CDI team at Wageningen University will be strengthened to apply their knowledge and experience in integrated seed sector development and links will be sought with the allied seed sector development projects with a comparative advantage in this area such as the important USAID funded and CRS led S34D project. The well regarded CGIAR-led Seed System Community of Excellence, which has championed the importance of an integrated approach, and empathizing the importance of farmer based seeds systems and farmers rights will be given the role of guiding the initiative in developing actionable interventions that promote equity and inclusive access to seed. To this end, discussions have already started with GIZ to assist them in advising a future BMZ policy towards investing in seed sector development.

Weakness 3: **Projection of Benefits**—No discussion of trade-offs across Impact Areas given in 2.7, although some synergies are mentioned.	The projected benefits presented in the proposal represent an early estimate for the "delta" in the enhanced adoption of quality seeds of new varieties arising from new investment in market intelligence, breeding, breeding services and seed delivery and not simply the SeEdQUAL investment, calculated for key crops across the whole existing CGIAR crop and country portfolio, and channeled through and achieved by SeEdQUAL's extensive delivery partners. It was not made clear in the proposal that the initiative will seek to improve adoption arising from the extensive existing portfolio of seed delivery related activities across the whole of the existing CGIAR crop and country portfolio. Thus year 1 activities will commence by identifying existing "best fit" varieties for which sufficient quantities of foundation seed exists from CGIAR and existing NARS partners, to be able to test innovation models at scale from 2022 onwards (includes for example 20 promising rice varieties identified in 2021 through extensive on-farm testing in four market segments). Year one activities will commence based on existing seed capacity seed produced in 2021 and available for planting in 2022. As an example, the foundation seed company and SeEdQUAL partner *Qualibasics* will have 184 MT of maize, bean and soy foundation seed available in 2022. Predominantly CGIAR-bred and carrying drought, heat, low-N and disease resistance, certified seed produced from this seed will be sufficient to plant 1.1 MM ha (to be planted by more than 2 MM small-holder farmers) working through 58 further seed multipliers in 12 target countries. The initiative will seek to engage with further such entities in both SSA and Asia. The review is correct that 2022 represents an inception year and where benefits accruing from the proposed seed delivery innovations cannot begin to accrue until the following year and thus the three-year investment not realized until 2025. This will be made clearer in results tables to be developed and agreed during the development of plan and work and budgets during Q1 year 1. More detailed estimates of projected benefits will also be calculated based on the detailed plan of work and budget (included the proposed extended initiative partnership approach) and made available during 2022 and the underlying assumptions better presented.

Regional Integrated Initiatives (RII)

INIT20: Transforming Agrifood Systems in South Asia (TAFSSA)	
ISDC recommendation	TAFSSA responses
The review team is of the view that the ToC of the proposal needs to be strengthened for the Initiative to make meaningful impact in the domain of AR4D. As it stands the proposal fails to serve as an **integrator of other Initiatives' outputs and outcomes** within a specific geographical and socio-economic setting.	We agree that integration is paramount. As indicated in the proposal TAFSSA's Design Team consulted with all 21 CGIAR Initiatives planning research and partnerships in South Asia. Explicit Work Package (WP) to WP output links between TAFSSA and 15 Global Initiatives are clarified in TAFSSA's Theories of Change (ToCs) and impact pathways. TAFSSA's high level of integration has been quantified through network analyses conducted by CGIAR's System Management Office and highlighted as a key example of cross-Initiative collaboration; Furthermore, this integration is also evident in TAFSSA's Scaling Readiness Plan Annexures. Opportunities for further strengthening synergies will be explored in detail during the Initiative inception phase in the first quarter of 2022, during which all Initiatives working in South Asia will be refined to assure coordinated and integration of research across specific geographies including socio-ecological, socio-economic, and institutional and policy contexts.
We recommend an **improved definition of who is being targeted** by this Initiative, particularly in relation to gender.	We agree and have systematically considered gender and social inclusion (GESI) from the design stage forward to most tackle GESI challenges in each Work Package (WP). GESI issues related to intra-household and across-community access to technologies, markets, and products will be addressed in all WPs, with work plans refined in a context- sensitive manner during inception. WP1, for example, focuses on collaborative data generation and sharing and emphasizes gender- and socio-cultural group disaggregated data collection. These data will form an evidence base for remaining research in WPs 2-5. As detailed in the proposal, WPs 2, 3 and 4 also specifically target women and girls, expecting and young mothers, and women's groups as key beneficiaries
It would be helpful if **capacity development activities were embedded in a CGIAR network of national/regional partners** with top priority being given to training aspiring women professionals on how to generate and work with innovative new methods of participatory research and learning.	All of TAFSSA's WPs are designed to support capacity development of CGIAR and national and regional partners. While agronomic and economic research capacity is high among national and regional partners in South Asia, systematic efforts to raise capacity on GESI analysis is lacking. TAFSSA responds by prioritizing GESI capacity development through formal trainings and through the day-to-day interactions of TAFSSA's nationally embedded scientists with partners. Co-designed with 535 people, TAFSSA emphasizes participatory research design and co-learning with national scientists as a primary plank for capacity development.

We propose the **interlinkages between ToCs** for work packages be strengthened.	TAFSSA's WP ToCs are designed to reflect each stage of South Asia's agri-food system from production (WP2), post-harvest marketing and food retailing (WP3) and consumption (WP4), with WP1 generating the evidence-base to support research in subsequent WPs, and WP5 addressing climate adaptation and the environmental consequences of agri-food systems. We will research specific food products/groups crucial for culturally appropriate and sustainable healthy diets from production to consumption across WPs. TAFSSA's WP design also opens opportunities for global Initiatives to 'plug-into' relevant portions of our agri-food systems research, while also providing access to TAFSSA's rich national and regional partner network. TAFSSA's ToCs, WP interconnectedness, and cross-Initiative linkages that will generate increased CGIAR research efficiency will be strengthened during the inception phase.
We recommend an environment scan of the extensive current/**ongoing work on diets, food environments, food prices and cost of diets** to ensure that this Initiative is not spending time/ resources repeating similar analyses.	As detailed in the WP methods sections of TAFSSA proposal, formal literature scoping and/or systematic reviews are integral to WPs 1, 3, 4 and 5. We are indeed aware that there is an extensive international literature on food environments, prices, and diets. But while a handful of studies on these topics have focused on one or more countries in South Asia, few take an integrated regional, cultural, and political perspective as proposed by TAFSSA. We anticipate TAFSSA's to fill this gap through comparative research that aims to advance the field through regional synthesis and coordination by means of learning platforms that bring together existing but disparate efforts.
We recommend the composition of the team be adapted **to include at least one scientist with experience in institutional analysis and policy engagement** within an AR4D context.	TAFSSA's core Initiative Design team includes scientists with regional expertise institutions and policy analysis and engagement. TAFSSA's Human Resources Plan (Proposal Section 9) further details additional needed competencies in these areas, which have been adequately budgeted for

INIT21: Ukama Ustawi: Diversification for Resilient Agribusiness Ecosystems in East and Southern Africa (ESA)	
ISDC recommendation	Ukama Ustawi responses
There is little evidence of how the **lessons of past CGIAR work** have been accounted for	The proposal builds on previous projects and its lessons. One of the key learning points has been that linear technology extension approaches do not work and more holistic community-based approaches that involve community-based adaptation and technological co-creation with target audiences is required. Although UU builds on previous projects it also never intended to completely "re-invent the wheel". It aims to make use of existing technologies, solutions, approaches and practices and bring them to scale. That's why there is a strong emphasis on enablers (agri-business environment), digital advisory (WP2) governance (WP4) and scaling (WP6).
This is reinforced by a lack of description of **forward-looking research** to bring new ideas to the fore, leaving the impression of an information gathering exercise	Our view on forward-looking research is to advance the science and practice of scaling, by ensuring that the good work the CGIAR has done for decades is scaled. We will do this by building climate resilience of millions more small holder farmers in the ESA region through farm-level SI/diversification practices, and improved access to climate information services (CIS) and CSA. In addition, conducting research to support the agribusiness ecosystem, a relatively new area for the CGIAR, is where we see great potential for forward momentum. Our intention to use water accounting methods in WP 4, will help advance the science on understanding basin/landscape-level water availability for large-scale diversification efforts. This, coupled with integrated modelling, will advance the science of understanding how diversification efforts are impacted by inter-regional trade through cross-border value chains and the African Continental Free Trade Area (AfCFTA). This is also the demand on the ground.
The strong primary focus on **one SDG (SDG1) risks** creating trade-offs between SDGs	We disagree with the reviewers view that only SDG 1 is prioritized under UU. Certainly SDG 1 and poverty alleviation needs to be prioritized in a region as socially unequal as ESA. However, as noted in other sections of the proposal, UU is targeted to address seven key SDG goals: 1, 2, 5, 6, 8, 11, and 13.
The **ToC** should engage with the narrative of the roles of agriculture in economic development	This is well noted and agreed. If not explicit enough, every attempt will be made to engage more robustly with this.

The **work packages** are disciplinary in focus and should be reorganized to ensure multi/cross/interdisciplinary research especially important for a regional integration Initiative	The ISDC reviewers noted that the current arrangement of WPs appears to be designed in silos. The UU design team has developed the different work packages collaboratively and feels strongly that integration between work packages has been addressed as it is critical for the success of the initiative. a). To make this more explicit: In the proposal, the current integration between WPs can be summarised as follows: i. WP 1 and WP 2 provide the scientific research in SI/Diversification and agricultural risk management. ii. These WPs are supported by 3 cross-cutting WPs (4, 5 and 6). iii. The IDT and WP Leads will consider the possibility of adding an additional overarching WP on capacity strengthening. iv. All of which feed into WP 3 supporting the agribusiness ecosystem through enterprise development, acceleration, multi-stakeholder dialogue platforms and technical assistance. b). During the inception phase, the WP Leads, IDT with our partners will revisit the WPs to ensure better integration. c). Our scaling studies - cutting across the WPs – will be the first stage towards an effective portfolio management of innovations across the initiative. They will provide us with insights of how different innovation from UU, and others from the CGIAR portfolio in the region, can come together to deliver impact. We will periodically conduct internal stage-gating reviews that ensure we do not slip into working in silos and focus on our journey towards impact. d). Each work package description includes a section in a table indicating "To what other WP's outcomes this WP contributes to" which shows a high level of connection between the work packages.
It is necessary to **de-risk adoption of the proposed interventions** in work package 1 through better integration with the other work packages. This includes attention to land issues	This is well noted. Sustainable land management will be integrated more concretely into WP1 and WP3, particularly as we increase emphasis on livestock, its management and value chains. In addition, land tenure and governance aspects will be better incorporated into WP 4.

The leaders should consider using elements of **behavioral economics** where appropriate (work package 1)	Indeed, technology adoption is often dependent on a change in behavior and behavioral economics and other social science methods (e.g. qualitative research in surveys and focus group discussions) will be used to enable change. This is the primary reason why the WP1 team will also include social scientists and agriculture economists with specific knowledge and skill sets to support this research area, not only agronomists. Besides WP 1 it will also form a key part of understanding scaling dynamics in WP 6.
There is little mention of **capacity building** in general, or specifically in terms of engagement with **NARES**	ISDC reviewers placed a strong emphasis on the need for involvement of NARES. As part of the extensive UU participatory process with over 660 stakeholders from 14 ESA countries, the NARES were indeed recognized as an important partner. This is reflected in several WPs (WP1, WP2, WP4, and WP5, with significant budget allocations) including a partnership with the two sub-regional NARES networks, CCARDESA and ASARECA. However, UU is also oriented toward the role of the private sector, other research institutions (for example AWARD) and new ways of funding/partnering with non-traditional financial and entrepreneurial stakeholders. Partners and stakeholder consulted believe this approach is needed to turn things around in the ESA region. Our scaling activities will also enhance capacities of many actors in the region, both public and private.
While **gender and youth** are recognized as important elements, much needs to be done to clarify how research is to address that aspect fully	Gender and youth empowerment and engagement are recognized as important elements in UU with a dedicated work package, however we are working to refine and elevate the GESI research overall. Our focus is on marginalized women and youth working in targeted value chains, women and youth-owned agribusinesses and women policy change agents. We have highlighted on p8, that in terms of gender – local actors like AWARD, identify "key gender gaps in productivity, wages and entrepreneurial opportunities" ... and our focus is to tackle systemic, structural barriers to transformative change, by addressing the "social inequality that hinders equitable growth; tensions over owning or using scarce resources; and challenges to collaborative governance". This also addresses the comment on the inattention to land ownership (p72) or to policies and institutions (p72). The reviewers noted too much emphasis on inclusive agribusiness and not enough emphasis of gender and youth in WP 1 (Diversify and Intensify) and WP 2 (Digitalize and De-risk). During implementation WP 5 Include and Empower will be adjusted to work across all other work packages with a specific emphasis on gender and youth in WP 1 and WP 2.
Issues related to **ethical and equitable research practices** are not addressed in either the code or the proposal	We applied the standard ethics and research governance protocol applicable to all proposals. During the implementation of the Initiative, we will apply the emerging CGIAR policies and guidelines on ethical research and partnerships, particularly those related to working with the private sector.

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[i] HLPE. 2019. Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome.