Proceedings of the 2<sup>nd</sup> National Stakeholders Consultation and Review of Draft Climate-Smart Agriculture Manual for Agricultural Education in Zimbabwe Workshop held at Cresta Oasis Hotel, Harare, Zimbabwe, on December 15, 2016

"If you want to go quickly, go alone, if you want to go further, go together" - African Proverb

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#### Disclaimer

This Workshop Report is a project output in the Technical Assistance provided by the Climate Technology Centre and Network (CTCN) to the Government of Zimbabwe in particular: Ministry of Environment, Water and Climate (National Designated Entity) and Ministry of Agriculture, Mechanisation and Irrigation Development, as well as the Request Proponent (Green Impact Trust). The views and conclusions herein are those of the authors, and should not be taken to correspond to the policies, procedures, opinions, and views of CTCN, UNEP – DTU Partnership, or Government of Zimbabwe.

#### **Executive Summary**

The overall objective of the Second Climate-Smart Agriculture Manual for Agriculture Education Workshop was to gather critical feedback on the draft chapters in the climate-smart agriculture manual by the recruited consultants. The Workshop also sought to lay the foundation for subsequent work on the climate-smart agriculture strategy and policy framework, specific activities described in the Climate Technology Centre and Network (CTCN) Technical Assistance Response Plan. The Second National Workshop albeit the first in a series of the formal review process is not the last activity as the review process will continue in early 2017 to include further adjustments within the chapters, stakeholder and technical validation, and final approval by the Government of Zimbabwe of the completed climate-smart agriculture manual.

CTCN generously funded the Second National Workshop in close partnership with its Lead Implementer, the United Nations Environment Programme – Technical University of Denmark Partnership (UNEP-DTU Partnership). *All* of the activities detailed in the Technical Assistance Response Plan are, and have been implemented with the full support of the Government of Zimbabwe represented by the Ministry of Environment, Water and Climate (National Designated Entity, CTCN) and the Ministry of Agriculture, Mechanisation and Irrigation Development, and the Request Proponent (Green Impact Trust).

The participants who attended the Second National Workshop were from various backgrounds such as climate change, agriculture, and food security. They clearly expressed their doubts, appreciation, and suggestions in the ten presented chapters by the recruited consultants. The chapters were put into four groups namely: Productive sector, Environment, Cross-cutting Issues/policy, and Systems Thinking. The consultants openly received both positive and negative criticism, and subsequently indicated their resolve to revise the chapters. The Workshop also set the precedence for possible partnership with other local and international funded programmes in the country, much of which hinges of the completed climate-smart agriculture manual. Participants recommended for the work ahead paying attention to the requirement that the completed manual should be as practical and relevant as possible primarily to Diploma students in agricultural colleges.

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We are sincerely grateful to the Principals and Heads of Sections at the Colleges of Agriculture under the Ministry of Agriculture, Mechanization and Irrigation Development, and all the participants who attended the Second National Workshop. We are truly grateful for the work that they do in climate change, agriculture, and food security in Zimbabwe.

We thank Todd Ngara (PhD) for his guidance and leadership in the implementation of the Technical Assistance on Developing a Climate-Smart Agriculture Manual for Agriculture Education in Zimbabwe. He made it possible to follow through the activities outlined in the Climate Technology Centre and Network Technical Assistance Response Plan.

Additional thanks to Temba Nkomozepi (PhD) for accepting the one-day task to record the Minutes of the Workshop. His written Minutes inform the content of this Final Report.

We are indebted to the Management and Team at Cresta Oasis especially Ms. Tendai Maposa (Senior Functions Co-ordinator) for her kind assistance in our preparations and execution of the Second National Workshop. Lastly, thank you to all who made the day a success.

# List of Acronyms and Abbreviations

AGRITEX	Department of Agricultural and Technical Extension Services		
СА	Conservation Agriculture		
CSA	Climate-Smart Agriculture		
CTCN	Climate Technology Centre and Network		
DTU	Technical University of Denmark		
FAO	Food and Agriculture Organisation of the United Nations		
GHG	Greenhouse Gas		
MoAMID	Ministry of Agriculture, Mechanisation and Irrigation Development		
MoEWC	Ministry of Environment, Water and Climate		
NDE	National Designated Entity		
PhD	Doctor of Philosophy		
PPP	Public-Private Partnership		
SC	Supply Chain		
ТА	Technical Assistance		
UNEP	United Nations Environment Programme		
UNFCCC	United Nations Framework Convention on Climate Change		
VC	Value Chain		

# **List of Tables**

Table 1: Summary of all Presentations	5 – 9

#### Annexes

Annex 1: Workshop Programme	14
Annex 2: List of Participants	15
Annex 3: Opening Speech by Mr. Moffat Nyamangara, Director, Department of	17
Agricultural Education and Farmer Training, Ministry of Agriculture, Mechanization and	
Irrigation Development	
Annex 4: Opening Speech by Mr. Washington Zhakata, Director, Climate Change	19
Management Department, Ministry of Environment, Water and Climate	
Annex 5: Press Release	21
Annex 6: Other Media Coverage	23
Annex 7: Call for Expression of Interest	24

## **Table of Contents**

Recommended Citationii
Executive Summaryiii
About the Authorsiv
Acknowledgementsvi
List of Acronyms and Abbreviationsvii
List of Tables
Annexesix
Table of Contentsx
Chapter 11
Introduction1
Project Overview1
Workshop Format and Agenda
Main Objectives of the Workshop2
Expected Outcomes
Participants2
Organization of the Report
Chapter 2
Opening Ceremony
Presentation of Draft Chapters by Consultants
Chapter 310
Discussions and Emerging Issues
Questions, Responses, and Comments from the Participants11
Post-workshop handling of chapter comments and feedback
Chapter 4
Conclusions
Annexes
Annex 1: Draft Workshop Programme14
Annex 2: List of Participants

Annex 3: Opening Speech by Mr. Moffat Nyamangara, Director, Department of Agricultural Educ	ation
and Farmer Training, Ministry of Agriculture, Mechanization and Irrigation Development	17
Annex 4: Opening Speech by Mr. Washington Zhakata, Director, Climate Change Management	
Department, Ministry of Environment, Water and Climate - read by Mr. Elisha N. Moyo	19
Annex 5: Press Release	21
Annex 6: Other Media and Related Coverage	23
Annex 7: Call for Expression of Interest	24

#### **Chapter 1**

#### Introduction

This report gives a detailed account of the Second National Stakeholders Consultation and Review of Draft Climate-Smart Agriculture (CSA) manual for Agriculture Education in Zimbabwe under the United Nations Framework Convention on Climate Change (UNFCCC) Climate Technology Centre and Network (CTCN) Technical Assistance (TA) to Zimbabwe.

#### **Project Overview**

CTCN supports developing countries to develop and adopt climate technologies aimed at reducing the impacts of climate change and variability. The Request Proponent – Green Impact Trust – through the National Designated Entity – Ministry of Environment, Water and Climate – made a request for TA to CTCN on addressing curriculum gaps in agricultural education and extension. This led to the crafting of CTCN TA Response Plan which serves as the foundation of all activities implemented and approved by the Government of Zimbabwe. The Government of Zimbabwe is ably represented by the Ministry of Environment, Water and Climate, and the Ministry of Agriculture, Mechanization and Irrigation Development.

The main problem identified in the request to CTCN was the knowledge and technical gaps in the agriculture (extension) curriculum for use by professionals and practitioners. The solution suggested was to design a CSA manual for Agriculture Education in Zimbabwe which would be used by university level and professional level practitioners. The completed and approved CSA manual should indentify with the national vision and guiding principles as outlined in various national strategies and documents which are "to strengthen the capacity to generate new forms of empirical knowledge, technologies and agricultural support services that meet emerging research and development challenges arising from increased climate change and variability."

The First National Stakeholders Consultation Workshop on the Development of a CSA manual was held at Mandel Training Centre, Marlborough, Harare, on the 26th July 2016. A total of 55 participants representing various stakeholders attended the event. This First National Stakeholders Workshop generated select ten themes which now constitute the draft CSA manual for Zimbabwe.

Soon after the First National Workshop, national and foreign consultants were recruited to draft the individual chapters in the CSA manual. The writing process took place during mid-September to mid-November, 2016. The concluded CSA manual chapters are now formally being reviewed chiefly through the Second National Stakeholders Workshop, and other subsequent processes. The reason to have a lengthy review process is to ensure that the local and outside experience in research and development is taken into consideration, and to have the Government of Zimbabwe provide the much-needed guidance and approval of the completed manual. The 2nd National Stakeholders Consultation Review Workshop in is line with the review processes, to ensure a robust and quality product for beneficiaries in climate change and agriculture education in Zimbabwe. Therefore, the main objective of the one-day workshop was to focus on the draft CSA manual chapters and solicit for critical input which guides the development of a CSA Policy and Strategy or Framework in Zimbabwe.

#### Workshop Format and Agenda

#### Main Objectives of the Workshop

- Review of the draft CSA manual chapters as prepared by recruited consultants.
- Gather critical comments and feedback (orally and in writing) from stakeholders to incorporate in the final draft version of the CSA manual.

#### **Expected Outcomes**

- Stakeholder feedback and criticism of the various aspects within the CSA manual chapters.
- Set into motion processes leading to the development of a CSA Strategy and Policy Framework.

#### Participants

The Second National Climate-Smart Agriculture Workshop brought together experts from Government of Zimbabwe, Academia, Research, Private Sector, Farmer Organizations, Development Partners, Civil Society, Traditional Leaders, Intergovernmental Organizations, and other Organizations, all who work in the fields such as food, agriculture, water, energy, meteorology, climate change, social sciences, science and technology, and education.

#### **Organization of the Report**

The Report is organised as four chapters. *Chapter 1* gives the details about the Opening Ceremony of the Workshop. *Chapter 2* highlights the Author presentations and the main key points in the session. *Chapter 3* introduces the various discussions and emerging issues as identified throughout the one-day Workshop. *Chapter 4* gives the conclusions of the Workshop.

#### **Chapter 2**

#### **Opening Ceremony**

# **Session Facilitator:** *Mr. Kudzai Ndidzano, Climate Change Scientist, Climate Change Management Department, Ministry of Environment, Water and Climate*

The Workshop was opened at around 09:00hrs by Mr. Kudzai Ndidzano, a Climate Change Scientist from the Climate Change Management Department in the Ministry of Environment, Water and Climate. He introduced participants to the purpose of the workshop, and the progress that was achieved to date in the process to develop a CSA manual for Agriculture Education in Zimbabwe.

#### **United Nations Environment Programme – Technical University of Denmark Partnership** (UNEP – DTU Partnership): Dr. Todd Ngara

He reiterated the purpose of the second Workshop as an opportunity to hear from the work done by the recruited consultants and provide feedback on the aspects that would be presented on the day. He acknowledged the cordial working relationship with all stakeholders in the country in order to make the project a success. He also made the following observations:

- CSA is not an entirely new agricultural system.
- Key messages have to be put across clearly in each of the chapters in the manual.
- The strategic options need to be scrutinized in chapters of the manual.
- CSA is a win-win approach with multiple benefits.

#### Solidarity Statement, United Kingdom Department for International Development –funded Programme VUNA: Mr. Sydney Zharare

Mr. Zharare gave a solidarity message, noting the immense opportunity provided by the Technical Assistance provided to Zimbabwe by CTCN, and the possibilities that VUNA could also explore in up scaling the conservation agriculture to a climate-smart agriculture framework. He introduced participants to the work and existence of VUNA in Zimbabwe, Malawi, Tanzania, and South Africa. He also expressed his interest to work with the various stakeholders involved in the development of the climate smart agriculture manual including the Ministry of Environment, Water and Climate.

#### **Opening Speech, Director, Department of Agricultural Education and Farmer Training, Ministry of Agriculture, Mechanisation and Irrigation Development:** *Mr. Moffat Nyamangara*

Mr. Nyamangara introduced the 8 agricultural colleges in Zimbabwe namely Esigodini, Mulezu, Rio Tinto, Chibhero, Mazowe Veterinary College, Gwebi, Kushinga Phikelela and Shamva as

the key users of this manual. He expressed his gratitude to CTCN for the Technical Assistance. He noted the gaps in the curriculum, and the role that will be played by the CSA manual. He stressed that the colleges of agriculture were the backbone of extension services in Zimbabwe, and so, any programmes targeted at them was welcomed by the government. Finally he articulated his interest in learning from the authors and advised the participants that the workshop was a chance to contribute to the chapters of the manual/draft chapters with courtesy and civility and appreciation of authors.

#### **Opening Speech, Director, Climate Change Management Department, Ministry of Environment, Water and Climate:** *Mr. Washington Zhakata (read on his behalf by Mr. Elisha N. Moyo)*

The speech stressed a number of pertinent issues in the work supported by CTCN in Zimbabwe. First, the speech noted the many good proposals that have been forwarded to CTCN, and that the agriculture sector was the first proposal to CTCN. It was noted during the speech that to achieve food security, the agriculture sector should be responsive to the changes in the climate. There was also indicated the need for transformation in the management of natural resources. In the speech, the significance of mitigation sinks was outlined as well as the need to use less water and energy in any large operations. Mr. Moyo quipped that "scientifically it was possible to produce diamonds from coal but that this was an expensive process rendering it unsuitable". He reiterated that CSA adoption has to be supported by policies and institutions (mechanisms) that would make it work for the country. For this to happen, strategies such as the Zimbabwe Agriculture Investments Plan had to be used. He continued that the Green Climate Fund seeks for transformative proposals and the country had a chance to tap into such funding mechanisms. Hence, as he shared with participants, it was vital to take the work on the CSA manual seriously and to forward to ensure that it achieved significance. Mr. Moyo encouraged participants to put thorough thinking into the drafts that would be shared by the Authors, and to provide useful input.

He specifically indicated that each chapter had to be transformative and sensitive to the country's national values and aspirations. The work by the Authors had to be in tune with the UNFCCC. It had to have a "catalytic effect", and take cognizance that climate change was a cross-cutting issue. The speech also recognised the work of the Request Proponent – Green Impact Trust - and the Government Ministries. This was clearly, as he said an example/display of a Public-Private-Partnership (PPP). The PPP needed to be strengthened. He concluded by highlighting that the President of Zimbabwe had showed commitment at the highest level through the signing of the Paris Agreement. It was left for each participant to put this "commitment into action."

NB: Subsequent group sessions were facilitated by the National Coordinator: Mr. Raymond E. Zvavanyange and the Deputy Director, Department of Agricultural Education and Farmer Training, Ministry of Agriculture Mechanization and Irrigation Development: Mr. Francis B. Vengai

# **Presentation of Draft Chapters by Consultants**

# Table 1: Summary of all Presentations

Theme Category	Presentation and Speaker	Key Points	
Productive sectors	Crop Production <i>Cathrine Ziyomo (PhD)</i>	<ul> <li>Agro ecological zones are used to determine crop water requirements.</li> <li>Reclassify the agro-ecological zones to match the new climate regimes.</li> <li>More frequent droughts in the past 10 years have greatly reduced maize yields.</li> <li>Breeding efforts hampered by the complexity of timing, duration and intensity of drought stress (countermeasures required).</li> <li>Traditional flood-proof building designs, temporary migration, and dual-season cropping are flood-coping measures adopted by communities in Muzarabani District of Zimbabwe.</li> <li>Crop diversity will be one of the assets to adapt against the effects of climate change.</li> <li>Drought Tolerant Maize for Africa initiative between CIMMYT and International Institute of Tropical Agriculture has released 160 varieties between 2007 and 2013.</li> <li>Role of the Department of Agricultural, Technical and Extension Services (AGRITEX) officers in knowledge sharing.</li> <li>Role of tertiary and institutions of higher learning in promoting climate smart practices.</li> </ul>	
Productive sectors	<ul> <li>Importance of a gendered perspective approach.</li> <li>Livestock and Rangeland Management</li> <li>Livestock are assets (stock) which are alive.</li> <li>Livestock requires conducive environment (e.g. nutriprotection, rangelands, breeding and general good m</li> <li>The above-mentioned environmental factors are proristressors (i) low or short duration, unpredictable precisions from lipstone temperatures, (iii) unexpected disease pandemics.</li> <li>The overall direct Greenhouse Gas emissions from lipstone temperatures for the overall direct Greenhouse Gas emissions from lipstone temperatures.</li> </ul>		

		<ul> <li>production constitute some 80% of total global agriculture emissions.</li> <li>Productivity stresses numbers, but also need to consider biological efficiency and economics.</li> <li>Technical information passes through the extension officers.</li> <li>Higher and tertiary institutions have an important role to play in climate-smart agriculture, and in changing the mindsets of students.</li> <li>There are specific features that suit indigenous and exotic animal breeds to deal with changes in climate.</li> </ul>
Productive sectors	Fisheries and Aquaculture	• The environment is the most valued natural asset.
		• He stressed the importance of water resources.
	<b>Professor Marxwell Barson</b> ( <b>PhD</b> ) and Mr. Nyasha	• Opportunities for fish farming exist but the temperatures have to be right $(\sim 22^{\circ}\text{C} - 30^{\circ}\text{C})$ .
	Mabika	• Demand for fish as a source of protein and advances in technology have led to fishing practices that are depleting the fishery resources.
		• Basics are needed by students in fisheries and aquaculture.
		• Introduced an example of a CSA practice - <i>Recirculation Aquaculture Systems</i> as it reduces costs and water use.
		<ul> <li>Prospective fish entrepreneurs need specialised equipment for fish and suitable conditions.</li> </ul>
		• There are also biosecurity issues and legislative controls in fisheries and aquaculture.
		• Community (conservation) farming is another form of controlled fish farming and harvest.
Productive sectors	Forestry and Agroforestry	• Forests and trees are important for human wellbeing as they provide them with goods and services.
	Lizzie Mujuru (PhD)	• A significant majority of the local communities sustain their livelihoods by direct use of the forest ecosystem goods and services for household consumption, including food, fuel wood and medicinal purposes.
		• Forests also generate income from the trade of both timber and non- timber forest products.
		• Forests support Sustainable Development Goal 5.
		• Any definition of agroforestry has to be <i>Intentional, Intensive,</i>

		Interactive, and Intergrated.
		• The forests and woodlands in Zimbabwe are home to a large number of species of flora and fauna and they preserve national watersheds.
Environment	Soil and Water Management	<ul> <li>Soil is a core component of the production system.</li> <li>Condition of the soil determines infiltration, water storage and water</li> </ul>
	Todd Ngara (PhD)	available to crops, runoff, soil carbon and nutrients.
		• Soil management practices enhance soil structure, increasing infiltration of rainfall, retaining water to meet plant needs and reduce runoff.
		• Investing in soil and water management leads to various outcomes, including more available water for crops, increased soil production potential, more resilient landscapes and enhanced productivity.
		<ul> <li>Irrigation is practiced on less than 20% of all agricultural land.</li> <li>Irrigated crops include maize, wheat, and horticultural crops.</li> </ul>
		<ul> <li>Infigated crops include maize, wheat, and norticultural crops.</li> <li>In the current environment of water scarcity, water use efficiency needs to be increased substantially for irrigation to be effective as an adaptive strategy.</li> </ul>
Environment	Energy Management	• Agriculture is second major GHG emitting sector after Energy.
	Mr. Benson Zeyi, Mr. Julius	• High dependence on fossil fuels worldwide.
	Madzore, and Raul Polato (PhD)	<ul> <li>Fossil fuels used by small to large scale commercial farming systems</li> <li>Clean energies (small hydro, biomass and forestry waste) supply 5% of national needs (<i>MoEPD</i>, 2016a)</li> </ul>
		• National electrification rate is about 40%.
		• Little penetration of other forms of energy such as LPG, Gel, Charcoal and solar (PV and thermal), biogas, wind and small hydro power
		<ul> <li>Demand for electricity is greater than supply.</li> <li>Agriculture sector has potential to save 12% (58.75GWh/year) through energy efficiency and energy conservation measures (<i>ZERA</i>, 2015).</li> </ul>
Environment	Climate Information Services	<ul> <li>Seasonal and weather forecast are generated for intended end users and to meet the needs of the communities.</li> </ul>
	Ms. Dorah Mwenye	• Climate information is a valuable resource for <b>decision-making</b> and
		planning for adaptation and resilience.
		• Climate information is useful when <b>different knowledge sources</b> are

Cross-cutting issues/Policy	Gender and Social Inclusion Sophia Huyer (PhD) and Mary Nyasimi (PhD) (Delivered by Ms. Abby T. Mgugu Mhene)	<ul> <li>combined and "translated" to relate to local livelihoods, contexts, and experiences.</li> <li>Effective communication is essential in making climate information useable in different contexts.</li> <li>Uncertainty is not a problem to be solved; it can be understood, managed and used to inform adaptation decisions, early warning, and risk management.</li> <li>Long-term resilient development will depend on climate information services that are accessible and relevant to those who need it.</li> <li>Enabling national and local plans, policies, and investment are needed to support the realization of effective climate information services.</li> <li>Social inclusion is a process that rebalances power relations and ensures equal rights and opportunities as well as respect for individuals that would allow them to participate in the transformation of their lives and economies.</li> <li>Social-cultural practices shape how women and men deal with the impacts of climate change.</li> <li>Women farmers are particularly vulnerable to impacts of climate change due to their limited capacity to invest or manage risk.</li> <li>Women are contributing to food production and security in a changing climate and reports show that increasing women's access to agricultural resources as men, can increase yields by 20–30% (FAO, 2011).</li> <li>Women should have access to CSA technologies and practices</li> <li>CSA practices has the potential of altering women's and youth equal access to and use of resources, climate services, credit and markets.</li> <li>There is need to strengthen and enhance the capacity of local and national institutions to support the implementation of gender transformative climate-smart agriculture practices.</li> </ul>
Cross-cutting issues / Policy	Institutional Arrangements and Policy Engagement <i>Ms. Juliet Gwenzi</i>	<ul> <li>Policy and institutional arrangements need a paradigm shift to allow creation of synergies that focus on and champion the components of CSA without creating bottlenecks.</li> <li>No stand alone legislation dealing with climate change.</li> </ul>

		<ul> <li>Successful CSA will require institutional support, experimentation, and innovation at all levels from local to global.</li> <li>Any policy formulation or improvement should consider existing programs and plans and the coherence and integration between agricultural development and processes that achieve sustainable food security.</li> <li>Policy instruments for CSA should be inclusive and support growth, provide a framework for access to markets and knowledge sharing locally and globally.</li> </ul>
Systems Thinking	Landscape Management and Value Chains <i>Todd Ngara (PhD)</i> ( <i>Delivered by Mr. Raymond</i> <i>E. Zvavanyange</i> )	<ul> <li>Most systems depend on and interact with each other, changes in one affects the other positively or negatively.</li> <li>Look at systems in a holistic manner taking cognizance of interrelated parts at various levels (local, regional, national) in planning, designing, implementing and Monitoring and Evaluation in both short and long term time horizons (Systems Thinking).</li> <li>The approach resonates with the concept of sustainability as defined in Brundtland Commission.</li> <li>Land is critical for production of various goods and services for well being of the human race.</li> <li>There are competing needs, wants and view points on land ressource by various stakeholders (land/soil, water, agroforestry, watershed, fisheries, forest, housing and agriculture).</li> <li>Supply Chain (SC) or Value Chain (VC) refers to vertical sequence of events resulting in production, delivery, consumption, maintenance and eventual disposal of goods and services</li> <li>SC or VC seeks to leverage the resources and skills of diverse companies in the supply chain to deliver exceptional value (goods and services) to the end customer.</li> </ul>

#### **Chapter 3**

#### **Discussions and Emerging Issues**

Participants raised valid issues and questions throughout the morning and afternoon sessions of the Workshop. The issues ranged from ensuring that the CSA manual would not just be another textbook aimed at colleges of agriculture but rather a practical source of information. The manual was not supposed to be confined to theory about CSA concepts but equally extend to practical information for use by students in colleges of agriculture.

Responding to the question posed after the Fisheries and Aquaculture presentation, Professor Barson noted that the extent of knowledge is diverse and is at different levels. There was need to borrow from other regions. He continued that perhaps the Terms of Reference were not that clear in spelling out the target population and the extent to which the manual would need to be contextualized. Participants concurred that it was important for the country to come up with its own position on adaptation and mitigation issues in climate change. The country can do better in implementation of specific adaptation and mitigation actions.

Dr. Ngara stressed that not all the three pillars of CSA can be satisfied in a national context in Zimbabwe. He urged participants to take cognizance of this fact, and explore the possibilities of contextualizing the CSA definition within the context of Zimbabwe. Dr. Ngara also highlighted that many of the risks that Zimbabwe, same as African countries face as a result of climate change are clearly indicated in the Intergovernmental Panel on Climate Change Reports, especially Assessment Report 4 and 5.

Participants noted that it was important to have a background to precede the Chapter themes on climate and related issues. This background would set the scene for the chapters in the CSA manual. Dr. Ngara revealed that CTCN had taken note of this requirement, and was in the process of preparing an introductory chapter.

Participants stressed that knowledge is what is important for any reader of the CSA Manual, and that this needed to be taken into consideration. This knowledge would also include technologies that were used by smallholder farmers, other forms of knowledge such as indigenous knowledge, and the need for documentation of such practices. An example of a technology raised by the participants during the discussion on the Energy Management presentation was the "tsotso stove" (three-stone stove). This technology, participants felt, needed attention and documentation so that future generations could learn from it. Other technologies mentioned in response to Author presentations were the "infiltration pits" used in water conservation.

Participants highlighted the need to have the work on CSA manual complement that which was done on the CA/CSA up scaling Strategy and Framework. This is part of the on-going work by the Ministry of Agriculture, Mechanisation and Irrigation Development. Participants felt that the two processes should "speak to each other".

It was also revealed during the discussions that the chapter on Landscape Management and Value Chain brings in a systems perspective. The chapter assists in weaving some and (or) all of the issues raised in the other chapters into a coherent story. It was also felt by participants that in addition to this observation, there was a need to tighten the transition from each chapter to the next t ensures flow of the themes, and overall presentation of the CSA manual.

The Director, Agricultural Education and Farmer Training, Mr. Nyamangara stressed that the CSA manual had to be simplistic and aid the students to understand the basics of CSA. He challenged participants to address the issue of the student getting not only academic but practical skills as well. The key recipients, as revealed by the Director, are students at the Diploma level in colleges of agriculture.

#### Questions, Responses, and Comments from the Participants

Question: Is it an attainable mitigation strategy to advise farmers (poor) to buy feed?

Response: There was a need to do away with the mentality that farmers cannot do this or that. In addition, organizations such as the Food and Agriculture Organisation have assisted farmers to buy \$14/bag feed at a subsidized price of \$7.

Supplementary question: Is it sustainable when donors are involved?

Response: The dependency syndrome is something that should be dealt with.

Question: Can you please educate us on the Eucalyptus, it uses a lot of water and is exotic.

Response: There is previous research that has shown that generally for eucalyptus, the rate of growth corresponds to the water uptake.

Comment: Each of the chapters should address the key issues in agriculture in the country such as tobacco farming, veld fires, and gold mining in agricultural lands.

Comment: There should be more focus on practices. Each CSA practice should be clearly articulated: where it works and how it works, as areas differ. What works in one area may not work in another area.

Comment: The CSA manual should not be about theory, but should present practical skills for the students.

Comment: Authors should explain the risk with trends and specific locations. The CSA practices should be specific, focused and deliberate.

Concern: There are limited case studies of CSA in Zimbabwe.

Comment: Zimbabwe needs to balance its efforts on adaptation and mitigation. Both are important in the climate change discourse.

Comment: The definition of CSA should be contextualized for Zimbabwe.

Comment: There is room for the CSA manual to take any form: manual, module, reference, and guide. It did not possess a solid structure as of now.

Comment: Authors to minimize recommendations to do with "more research needed". Authors were also advised to focus on promoting key practices.

Comment: It was shown from one participant that shorter season varieties would yield more than longer yielding varieties. The presentation showed that it would be advisable for farmers to have 3 or more maturity ranges of varieties. A suggestion was put forth to the crop production chapter to involve the selection of varieties, cultivars and plant species.

Question: "It seems there is no framework from the ministry (Government), where does the manual get its support?"

Response: The government of Zimbabwe was in the process of expanding the conservation agriculture framework into a CSA framework.

Question: How does genetic engineering fits into the climate change (adaptation) response strategies?

Response: Genetic engineering is included in bio-technology but is still challenged by issues of funding.

Comment: We should also look into our own production of greenhouse gases (GHG). In an agro-based economy, cattle are a huge emitter of GHGs.

Comment: On issues to do with gender, processing some crops is a challenge mainly for women. We should look into options for mechanisation.

Comment: There is a lack of policy/policies on renewable energy despite there being many non-renewable energy policies that mention energy issues.

Suggestion: There is a need to have an agro-climatology chapter.

#### Post-workshop handling of chapter comments and feedback

Specific comments on the chapters in the CSA manual will be addressed in a separate brief report, a compilation of which is done by the partners in the project.

#### **Chapter 4**

#### Conclusions

The Workshop participants emphasized the need for the CSA manual to be practical-oriented and be usable by the primary targeted audience: students in colleges of agriculture, as well as the diverse range of audiences from other backgrounds. The Workshop observed that the CSA manual would need to add new knowledge and information to what is currently available to students and practitioners.

By bringing together experts in climate change, agriculture, and food security the workshop in a rare of insight unearthed the fact that the CSA manual could take any form and structure, as deemed appropriate by the participants. There is no doubt that the CSA manual would have elements of a reference guide, manual, handbook, and resource book.

The Second National Climate-Smart Agriculture manual Workshop unearthed the breadth and depth of issues in the disciplines of climate change, agriculture, and food security, as shared by the Authors. The issues are important to the economy of Zimbabwe. Furthermore, it was shown in the Report that there were policy considerations and implications in each of the ten chapters presented. Policy issues raised need to be packaged by the Authors for forwarding to targeted audiences.

#### Annexes

## Annex 1: Draft Workshop Programme

Time	Agenda Item	Speaker/ Remarks	
08:00-08:30	Registration		
08:30-08:45	Welcome Remarks - NDE	Welcome and brief description of project and objectives	
		of the Workshop	
08:45-08:55	Opening Remarks	Representative of UDP/CTCN	
08:55-09:00	Solidarity Message	Representative from DFID-funded programme – VUNA	
09:00-09:10	Opening Speech	Director, Department of Agricultural Education and	
		Farmer Training (Ministry of Agriculture, Mechanization	
		and Irrigation Development)	
09:10-09:45	Opening Speech	Director, Climate Change Management Department	
		(Ministry of Environment, Water and Climate	
09:25-09:45	TEA BREAK		
		nternational Experts on Draft CSA Manual Chapter	
09:45-10:00	Practices	Soil and Water Management	
10:00-10:15		Crop Production	
10:15-10:45	Discussion		
10:45-11:00	Practices	Livestock and Rangeland Management	
11:00-11:15		Sustainable Forest Management and Agroforestry	
11:15-11:45	Discussion		
11:45-12:00	Practices	Fisheries and Aquaculture	
12:00-12:15	Discussion		
12:15-12:30	TEA BREAK		
12:30-12:45	Practices	Energy Management	
12:45-13:00	Discussion		
13:00-14:00	LUNCH		
14:00-14:15	Systems Approaches	Landscape Management and Value Chains	
14:15-14:30	Discussion		
14:30-14:45	Enabling Environment	Gender and Social Inclusion	
14:45-15:00	Discussion		
15:00-15:30	Enabling Environment	Climate Information Services	
15:30-15:45		Institutional Arrangements and Policy Engagement	
15:45-16:15	Discussion		
16:15-16:30	Summary and Next Steps	Way forward in the implementation of project (UDP with	
		support from NDE, GIT, and MoAMID)	
16:30-17:00	Closing Remarks	Director, Climate Change Management Department	
<b>F</b>	LINECCO OTON, NDE, M.	(Ministry of Environment, Water and Climate)	

Facilitators: UNFCCC-CTCN; NDE; MoAMID; Green Impact Trust; and National Coordinator

## Annex 2: List of Participants

#	Name	Organisation	Position
1	Moffat Nyamangara	Department of Agriculture Education & Farmer Training, MoAMID	Director
2	Francis B. Vengai	Department of Agriculture Education & Farmer Training, MoAMID	Deputy Director
3	Lovemore Vambe	Department of Agriculture Education & Farmer Training, MoAMID	Chief Agriculture Education Officer
4	Kudzai Ndidzano	Climate Change Management Department, MoEWC	Climate Change Scientist
5	Elisha N. Moyo	Climate Change Management Department, MoEWC	Principal Climate Change Scientist
6	Emily F. Matingo	Climate Change Management Department, MoEWC	Climate Change Scientist
7	Tinashe Dhlakamah	Climate Change Management Department, MoEWC	Intern
8	Tatenda Mutasa	Climate Change Management Department, MoEWC	Climate Change Scientist
9	Ephrame Havazvidi (PhD)	SEED Company Group	Senior Group Research Consultant
10	Todd Ngara (PhD)	CTCN – UDP	Scientist
11	Desire Nemashakwe	Green Impact Trust	Director
12	Dorah Mwenye	Department of Agricultural and Technical Extension Services, MoAMID	Agronomist
13	Manyewu Mutamba (PhD)	Genesis Analytics	Head of Climate Change
14	Sydney Zharare	VUNA – Zimbabwe	Country Representative
	George Wamukoya	VUNA	Policy Advisor
15	Jeremiah Tevera	Zimbabwe Commercial Farmers Union	Director
16	Philip Mushayi	Chibhero College of Agriculture, MoAMID	Principal
17	Clemence T. Sakala	Department of Agriculture Education & Farmer Training, MoAMID	Chief Agriculture Education Officer
18	Temba Nkomozepi (PhD)	Self-Employed	Agricultural Consultant
	Simba Muchena	Zimbabwe Farmers Union	Crops Officer
19	Lungowe Sepo Marongwe	Department of Agricultural and Technical Extension Services, MoAMID	Conservation Agriculture Specialist

20	Johnson Mushandu	Shamva Agriculture College	Vice Principal
21	Jeffrey Jinya	Gwebi College of Agriculture	Lecturer
22	Nyaradzai Madzime	Mlezu College of Agriculture Principal	
23	Priscilla Rudzingi	Mlezu College of Agriculture	Lecturer
24	Never Zifodya	Rio Tinto Agricultural College   Lecturer	
25	Lawrence Gweshe	Chibhero College of Agriculture Lecturer	
26	Nhamo Dapi	Cluster Agriculture Development Services Monitoring & Evaluation Office	
27	Never Mujere	Department of Geography – University of Zimbabwe	Lecturer
28	Tawanda Chinogwenya	CEMA	Project Officer
29	Pardon Njerere	Department of Economics & Markets, MoAMID	Economist
30	Irvin D.T. Mpofu (PhD)	Chinhoyi University of Technology	Professor
31	Walter Svinurai	University of Zimbabwe – Marondera College of Agricultural	Lecturer
		Sciences and Technology	
32	Lizzie Mujuru (PhD)	Bindura University of Science Education	Lecturer
33	Cathrine Ziyomo (PhD)	Pioneer Overseas Corporation	Molecular Breeding Scientist
34	Marxwell Barson (PhD)	University of Zimbabwe	Professor
35	Abby T. Mgugu Mhene	WARESA	Director
36	Benson Zeyi	Scientific and Industrial Research and Development Centre	Research Scientist
37	Julius Madzore	Bees Consultancy	Energy Consultant
38	Juliet Gwenzi	University of Zimbabwe – Department of Physics	Consultant
39	Lindsay Mushamba	Agric Seeds	Agricultural & Rural
			Development Consultant
40	Talent Gore	Herald	Reporter
41	Ndaah Kamuruko	Environmental Management Agency	Climate Change Officer
42	Jeremiah Mushosho	UNICEF	Climate Change Assistant
43	Raymond E. Zvavanyange	UNEP DTU Partnership	National Coordinator

# Annex 3: Opening Speech by Mr. Moffat Nyamangara, Director, Department of Agricultural Education and Farmer Training, Ministry of Agriculture, Mechanization and Irrigation Development

Director of Ceremonies Dr. Todd Ngara, Lead Implementer, United Nations Environment Programme – Technical University of Denmark Partnership Directors and Heads of Departments, Government of Zimbabwe Distinguished Participants Ladies and Gentlemen

It gives me great delight to welcome you all to the 2<sup>nd</sup> National Stakeholders Consultation and Review of Draft Climate-Smart Agriculture manual for Agriculture Education in Zimbabwe here at Cresta Oasis, Harare, Zimbabwe, jointly organised by our Ministry [Agriculture, Mechanisation and Irrigation Development], the Ministry of Environment, Water and Climate, and Green Impact Trust, with the support of the Climate Technology Centre and Network.

Climate Technology Centre and Network was generous enough to approve Zimbabwe's request for Technical Assistance to develop a Climate-Smart Agriculture manual to address curriculum gaps, agriculture extension challenges, and other issues related to practitioners in agriculture and climate change. With this in mind, the Technical Assistance has seen the three aforementioned local partners working closely with the Lead Implementer, United Nations Environment Programme – Technical University of Denmark Partnership under the guidance of Dr. Todd Ngara. We recognize as Government of Zimbabwe Dr. Todd Ngara's guidance and communication with all stakeholders in implementing the Technical Assistance, and most importantly for leading the efforts which brings the Authors of the draft Climate-Smart Agriculture manual to today's *Workshop*.

Climate Technology Centre and Network's Technical Assistance has also challenged our Ministry to honestly look into our service delivery. Many programmes and activities carried out in agricultural extension (rural advisory services) and even the state of agriculture and climate change in the country have mirrored a struggling service, and one that is not in tune with regional and international developments. This is indeed an uncomfortable position to be in as a Ministry, and as a Government. We are very much aware of this, and seek to change this narrative. I believe this is an opportunity for all of us here to share from what we know, the work done by our institutions, the work done by our partners, and the vision that we want in climate-smart agriculture issues in Zimbabwe.

The Ministry of Agriculture, Mechanisation and Irrigation Development agrees with the Food and Agriculture Organisation (FAO) of the United Nations' observations that "…collective efforts are required to tackle climate change and promote socio-economic development."<sup>1</sup> Some weeks ago, world leaders and our very own Head of State and Government, His Excellency President Robert Gabriel Mugabe took part in the meetings of the Conference of Parties in

<sup>&</sup>lt;sup>1</sup> Food and Agriculture Organisation of the United Nations (2016). Food security and climate benefits through Nationally Appropriate Mitigation Actions in Agriculture. Rome: FAO.

Marrakech, Morrocco. This shows the importance with which our Government puts on climate change issues. Our Government and Ministry respectively, is committed to ensure that the country has measures and systems in place for increasing agricultural productivity, adaptation (resilience), and mitigation and/or carbon sequestration, the three pillars of climate-smart agriculture as defined by FAO.

Our Ministry also believes that collective actions will indeed harness the abilities, potentials, and creativity of our young people and especially prepare our students who are the workforce of the future. We need to equip them with practical knowledge and skills, excite them as will be shared in the case studies on Climate-Smart Agriculture from other countries by our Distinguished Authors, and actively engage them in policy and decision-making in agriculture and climate change.

Today's *Workshop* seeks to give all of us as participants a chance to contribute directly into the CSA manual development. The review process will proceed beyond today's *Workshop* and it is expected that your contributions shape the further development of the drafts after this *Workshop*. Therefore, your criticism and input to the draft Chapters is welcome. I encourage you to observe courtesy and civility as we get into the sessions, and know that we are all learners. When it is time for others to speak do let them speak, and vice versa. We seek to take away something positive at the end of the day that will help us as a country to have in place and use for many generations to come a Climate-Smart Agriculture manual for Agriculture Education. That is the sole purpose of our meeting today.

I wish to acknowledge the input of Authors of the draft Climate-Smart Agriculture manual, colleagues, development partners, and the organizers of this event for allowing Zimbabwe to move with the times in terms of global development. **"No one should be left behind"** in the post-2015 global development agenda. We are in full support as a Ministry of work that makes us better, work that challenges us to dream as a Ministry, work that honors our frontline cadres in farming communities, colleges and universities in the country, work that brings out the best of scientific and technical expertise/knowledge from our national agricultural research organisations, and work that fosters equal partnership as led by the Climate Technology Centre and Network and implementing partners. That is what will make our collective efforts reap benefits for our clientele – smallholder farmers, agriculture extension officers, practitioners and scholars – and contribute to sustainable social and economic development in Zimbabwe.

We are all connected through human interactions and our work. For the former, is why we had to meet today, and will continue to meet as circumstances deem necessary. For the latter, what we do here in this *Workshop* room and in Zimbabwe to address issues in agriculture and climate change is very important in the grand scheme of things because we only have one Earth, and it is "fragile". What we will share and discuss in today's *Workshop* informs our Government and stakeholders throughout the country and in distant places. I urge you all to take a deep interest in the deliberations in today's programme. You are all important in this review process.

Welcome again.

Thank you.

#### Annex 4: Opening Speech by Mr. Washington Zhakata, Director, Climate Change Management Department, Ministry of Environment, Water and Climate – read by Mr. Elisha N. Moyo

Master of Ceremonies Dr. Todd Ngara, Lead Implementer, United Nations Environment Programme – Technical University of Denmark Partnership Government of Zimbabwe Officials Distinguished Participants Ladies and Gentlemen

I am pleased to welcome you all to the 2<sup>nd</sup> National Stakeholders Consultation and Review of Draft Climate-Smart Agriculture manual for Agriculture Education in Zimbabwe here at Cresta Oasis, Harare, Zimbabwe, co-organised by Government of Zimbabwe Ministries and Green Impact Trust, and the Climate Technology Centre and Network.

Some of you will recall that in June 2016 we met for the very first Workshop that set the pace of activities aimed at crafting a Climate-Smart Agriculture manual for Agriculture Education in Zimbabwe. We as the Ministry [Environment, Water and Climate] are appreciative of the on-going efforts that our counterparts in Ministry [Agriculture, Mechanisation and Irrigation Development] have brought to this national assignment, which when complete is our collective action, as the Government and people of Zimbabwe.

Our Ministry is cognisant of the rapid actions required in order to address the challenges linked to climate change and variability. We have over the past few years made strides in doing this through our National Climate Change Response Strategy, draft National Climate Policy, National Forestry Policy, and Intended Nationally Determined Contributions, to name just a few actions. We are in tandem with our Government's vision of a "climate-resilient economy", and will endeavor to provide the latest and up-to-date technical, administrative and financial support, where we can to all partners in Zimbabwe.

We are thankful as well to the Climate Technology Centre and Network, here represented through the Lead Implementer, Dr. Todd Ngara, of the United Nations Environment Programme – Technical University of Denmark Partnership. As our respected colleague in the field of agriculture and climate change [outside Government and a Zimbabwean] Todd has done exceedingly well in working with all of us in Government and Ministries so that our country ranks among the first in transformative change under "climate action", a key Sustainable Development Goal.

Let me briefly; share with you some of the national and international frameworks/programmes/activities that we currently support as Government and Ministry, respectively:

- Speeding up the processes surrounding the ratification of the 2015 Paris Agreement in Zimbabwe;
- Setting up of the National Green Climate Fund;

- Increasing climate education, awareness and communication in line with the provisions set forth in the National Climate Change Response Strategy;
- Moving from the Intended Nationally Determined Contributions to the Nationally Determined Contributions;
- Working closely with our counterparts from meteorology, agriculture, forestry, water, and energy; and
- Supporting the work aimed at building resilience among smallholder farmers, research and practitioner communities, and citizens (e.g. Department of International Development funded-programme VUNA).

As you can see, some of our work is being addressed in the work that the recruited Authors addressed in their draft Climate-Smart Agriculture manual chapters. We stand united with all of you in your individual actions in your respective organisations in building a strong and resilient Zimbabwe which is prosperous and healthy.

Let me emphasize that you are welcome at our offices should you have something you feel we can improve on in our efforts in climate change. The work of our predecessors in the Government and Ministry respectively is what brought into existence the Ministry, and so we should keep that mandate and legacy alive. I wish you fruitful discussions and that your time here with be worth the wait.

Thank you.

**Annex 5: Press Release** 

#### FOR IMMEDIATE RELEASE

December 15, 2016

#### ZIMBABWE ADVANCES IN DEVELOPING A CLIMATE-SMART AGRICULTURE MANUAL FOR AGRICULTURE EDUCATION

*Review of Chapters in the Draft Climate-Smart Agriculture Manual Underway* (Harare, 10:00hrs)

Climate-smart agriculture (CSA), a new approach to development, can assist Zimbabwe in addressing the challenges as a result of climate change and variability. It is embraced by many governments throughout the world, including the Government of Zimbabwe. Today the 2<sup>nd</sup> National Stakeholders Consultation and Review of Draft Climate-Smart Agriculture Manual for Agriculture Education in Zimbabwe Workshop in is line with the Technical Assistance (TA) provided to Zimbabwe by the Climate Technology Centre and Network (CTCN) and its implementing partner, United Nations Environment Programme – Technical University of Denmark Partnership (UNEP – DTU Partnership).

Earlier, a Response Plan was created which would serve as the basis for all activities supported through CTCN, following Zimbabwe's request for TA by the Request Proponent (Green Impact Trust) through the National Designated Entity (Ministry of Environment, Water and Climate) to CTCN. The main challenge identified in the proposal to CTCN was the gaps in the agriculture (extension) curriculum for use by professionals and practitioners.

A set of activities was set into motion towards the crafting of a CSA Manual for Agriculture Education in Zimbabwe. The CSA Manual builds on the foundation stressed in national strategies and documents which is "to strengthen the capacity to generate new forms of empirical knowledge, technologies and agricultural support services that meet emerging research and development challenges arising from increased climate change and variability."

The *1st National Stakeholders Consultation Workshop on the Development of a CSA Manual* was successfully held on the 26th July 2016, in which 55 participants representing Government, Local Authorities, Private Sector, Parastatals, Farmers Organizations and Associations, Academia, Research Institutions, Smallholder Farmers, Civil Society Organisations, and Extension Officials attended the event. The *Workshop* process resulted in a select ten (10) Themes which would constitute the CSA Manual for Zimbabwe. Soon after, a mix of national and foreign consultants per CSA Manual Chapter was recruited to draft the individual CSA Manual Chapters from mid-September to mid-November, 2016, for inclusion into the Final CSA Manual. The submitted CSA Manual Chapters by authors are presently undergoing a series of reviews to ensure that the local and outside experiences in research and development are taken into consideration.

The main objective of the  $2^{nd}$  Workshop is to ensure all criticism and stakeholders comments and (or) input is received to incorporate into the draft CSA Manual, and to set into motion processes that will guide the development of a CSA Strategy and Framework in Zimbabwe.

For further press information, please contact the National Coordinator: Mr. Raymond E. Zvavanyange, Mobile: +263 773 294 239, Email: zvavanyanger3@gmail.com

###END###

#### Annex 6: Other Media and Related Coverage

Date	Source (Hyperlinked)	
19 December 2016	Zimbabwe Advances in Developing a Climate-Smart Agriculture Manual	
	for Education (Rural Reporters)	
30 November 2016	What are the key issues in gender-sensitive climate-smart agriculture?	
	(Rural Reporters)	
25 November 2016	Climate change education, awareness and communication as bedrock to a	
	climate-resilient Zimbabwe (Rural Reporters)	
07 – 18 November	18 November Report on the Twenty-Second Conference of Parties to the United Nations	
2016	Framework Convention on Climate Change (COP 22), Marrakesh,	
	Morocco (Ministry of Environment, Water and Climate)	
15 August 2016	Pitfalls of communicating climate change awareness information in	
	Zimbabwe (Newsday Zimbabwe)	
26 July 2016	Report on the First National Stakeholder Consultation Workshop on	
	Development of a Climate-Smart Agriculture Manual for Agriculture	
	Education in Zimbabwe (Southern African Agricultural Information and	
	Knowledge System)	

#### **Annex 7: Call for Expression of Interest**

#### MINISTRY OF ENVIRONMENT, WATER AND CLIMATE

#### Developing a Climate-Smart Agriculture (CSA) Manual for Professional Level and University Level Agricultural Education in Zimbabwe

#### Country: Zimbabwe

Programme: Climate Technology Centre and Network Technical Assistance

# **Project:** Developing a Climate-Smart Agriculture Manual for University level and Professional Level Agriculture Education in Zimbabwe

**Partners:** Ministry of Agriculture, Mechanization and Irrigation Development (MoAMID); Ministry of Environment, Water and Climate, (CTCN National Designated Entity- NDE); Green Impact Trust (Request Proponent), Climate Technology Centre and Network (CTCN); and United Nations Environment Programme – Technical University of Denmark - Partnership (UDP) (Lead Implementing Partner).

#### Background

The Ministry of Environment, Water and Climate as the Designated National Entity (NDE) for United Nations Framework Convention on Climate Change (UNFCCC) Technology Mechanism, requested for technical assistance to develop a Climate-Smart Agriculture Manual for Professional-Level and University-Level Agricultural Education in Zimbabwe. This collaborative initiative also involves (MAMID as the co-custodian of the CSA Manual); and Green Impact Trust (as the Request proponent) and the UDP as the Lead Implementer who will run for 10 months. It will also provide training to agriculture (extension) workers in the form of Training-of-Trainers after the launch of the CSA Manual.

The Project seeks to engage the services of local, national, regional and/or international experts in developing the following CSA Manual Chapters:

Category	Chapter
Practices	- Soil and Water Management
	- Crop Production
	- Livestock and Rangeland Management
	- Sustainable Forestry Management and Agroforestry
	- Fisheries and Aquaculture
	- Energy Management
System Approaches	- Landscape Management and Value Chains
Enabling Environments	- Climate Information Services
	- Gender and Social Inclusion
	- Institutional Arrangements and Policy Engagement

#### **Specifics of Assignment**

Develop abovementioned themes into full-length Chapters for inclusion into the CSA Manual which will be used by Country Partners to improve agriculture education and extension in the face of climate change. The expected Chapter length is approximately 8-10 pages typed in Roman Times Numeral, 12 Font Size; Line Spacing of 1.5; excluding references, tables and graphs, and images. This consultancy is on desk study basis. Consultants will sign contracts with the UNEP-Technical University of Denmark- Partnership (UDP). Selected consultants will be briefed of contract details upon signing.

#### **Objective of the Consultancy**

This consultancy seeks to develop the above-mentioned themes into full-length chapters for inclusion into the CSA Manual.

#### Suggested Tasks under the Consultancy

- Identify and document innovations in CSA that are Zimbabwe-specific.
- Ensure the theme is abreast with latest scientific and technical knowledge concerning CSA practices and technologies worldwide but focusing more on regional successes.
- Consult Country Partners, where necessary, to get more input for the assignment.
- Ensure sustainability is clearly expressed in the chapter, in light of the various frameworks national, regional, and global such as Comprehensive Africa Agriculture Development Programme, Zimbabwe National Climate Change Response Strategy, Zimbabwe Climate Policy, Zimbabwe Agriculture Investment Plan, Zimbabwe Agenda for Sustainable Socio-Economic Transformation, Paris Agreement of 2015, and Sustainable Development Goals.
- Work closely with the Lead Implementer, NDE and main Beneficiaries to ensure that the exercise is robust and completed within the required time frame.
- Regular Telephone and Skype calls with the Lead Implementer, UNEP–DTU-Partnership as and when necessary.
- Briefing of Government of Zimbabwe and stakeholders of the key findings and takeaway messages during the second stakeholder workshop.

#### Deliverables

- Outline of the Chapter within two weeks of signing the contract
- Authors should submit complete first drafts within two months from the date of signing the contract though they are at liberty to submit the chapters before that time when they are through with the chapters.
- Final Chapters two weeks after incorporating comments from the stakeholders during the second workshop.

#### **Qualification and Experience Required**

- Postgraduate qualification (or equivalent experience) in food, agriculture, climate change, development studies, environment, research and policy, or related fields.
- At least 5 years practical experience working in natural resources, agriculture, environment or development fields
- Previous experience/publications relating to CSA some of which in Southern Africa will be considered a major advantage.
- An understanding of the current debates around research, evidence and policy concerning climate change and agriculture.
- Excellent research and writing skills.
- Strong interpersonal and communication skills including experience of working with people from diverse cultures and backgrounds.

#### Timeframe

The timeframe for this consultancy will be 8 weeks from the date of the signing of the contract 26 September 2016 to 25 November 2016 though it is not **necessary for consultants to wait for two months to submit the first drafts**. This duration is inclusive of the time required for all work including feedback and clarifications from the Lead Implementer, debriefing of Country Partners, and submission of the draft report for the second stakeholder workshop. Interested consultants are required to submit their expressions of interest by **16 September 2016**. Lines of Communication

The Lead Implementer – UNEP – DTU – Partnership will communicate with each of the Consultants as the first point of contact. However, the NDE, Request Proponent, and National Coordinator will facilitate the work of the Consultants through liaison with each of Country Partners as deemed necessary, during recruitment and selection, chapter writing, review, editing, and completion of the assignment within the required time period.

#### **Application Submission Procedures and Deadlines**

Applicants should:

- (a) Submit a brief proposal detailing the proposed approach. This brief should indicate how a potential consultant intends to treat the topic. It should be noted that this brief should serve as a **selling point for the consultant** i.e. convincing the selection panel that he or she is the best candidate who understands the definition of CSA and its relevance to Zimbabwe in the face of climate change. The thrust of the brief should flesh out the consultant's understanding of climate smart agriculture as opposed to traditional agriculture. The selection panel will base their selection on this brief among other attributes. (3 pages max.)
- (b) Abridged CV of the potential consultant (3 pages max.);

#### Submission through email:

Address your application to Dr. Todd Ngara (Lead Implementer, UNEP – DTU Partnership, todn@dtu.dk) with a copy to the following: Raymond E. Zvavanyange (National Coordinator, zvavanyanger3@gmail.com; and Desire Nemashakwe (Request Proponent, Green Impact Trust, greenimpactt@gmail.com; Elisha N. Moyo (on behalf of NDE, enmoyo@gmail.com), and Lovemore Vambe (on behalf of Ministry of Agriculture, Mechanisation and Irrigation Development, vambelovemoore@gmail.com).

#### **Additional Information**

A web link with the project document (<u>https://www.ctc-n.org/technical-</u> <u>assistance/projects/developing-climate-smart-agriculture-manual-agriculture-education</u>).