Government of Zimbabwe

Ministry of Environment, Climate, Tourism and Hospitality Industry

Background Report on National Policy Priorities, Initiatives and Institutions Relevant for Climate Change Capacity Development in Zimbabwe

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1. INTRODUCTION

Climate change is a salient global issue affecting all countries regardless of developmental status. Despite the media coverage and numerous online debates on the issue of climate change, sharing of sound knowledge and adaptation strategies remains a major priority. Zimbabwe has not been spared by the climate change phenomenon which is manifesting itself in the form of increases in extreme weather events and changes in the weather patterns. The frequency of and magnitude droughts, floods, heatwaves and erratic rainfall patterns has noticeably increased. Many of these weather events have led to loss of both human and animal lives. Climate change is threat to the first basic human right which is the right to life.

Zimbabwe has not changed much of its age old practices when it comes to the management of sectors such as agriculture, water resources and mining. However, the status quo is no longer sustainable and new methods of management have to be introduced. The rural communities of Zimbabwe mainly depend on rain fed agriculture and water resources, climate change is making productivity more difficult and food insecurity is a constant problem. The solutions to these problems are likely to be more effective if there is a contribution to them by those experiencing first-hand the devastating effects of climate change using strategies they think are best suited to their own settings. It has become of utmost importance that the Zimbabwean population knows more about climate change, the potential challenges it presents, how to adapt to it as well contribute to its mitigation.

1.1 The Global Context

The United Nations Framework Convention on Climate Change (UNFCCC) (1992) sets practical principles to guide responsible and fair international action on climate change. The convention recognises that the causes of the climate change challenge are mainly anthropogenic. Human beings are the cause, main victims and also possibly the solution to the climate change challenge. Therefore it is important to teach the global human resource the causes, effects and solutions to climate change.

The UNFCCC, through its Article 6 on Education, Training and Awareness, the Kyoto Protocol, through its Article 10 (e) and the Paris Agreement in its Article 12 call on

governments to educate, empower and engage all stakeholders and major groups on policies relating to climate change. Article 6 of the UNFCCC provides that in carrying out their commitments under Article 4 of the Convention, Parties shall:

(a) Promote and facilitate at the national and, as appropriate, sub-regional and regional levels, and in accordance with national laws and regulations, and within their respective capacities:

i. The development and implementation of educational and public awareness programmes on climate change and its effects;
ii. Public access to information on climate change and its effects;
iii. Public participation in addressing climate change and its effects and developing adequate responses; and
iv. Training of scientific, technical and managerial personnel.

(b) Cooperate in and promote, at the international level, and, where appropriate, using existing bodies:

i. The development and exchange of educational and public awareness material on climate change and its effects; and
ii. The development and implementation of education and training programmes, including the strengthening of national institutions and the exchange or secondment of personnel to train experts in the field of climate change, in particular for developing countries.

However, it was observed that different economies, societies and systems have different capacities to undertake what is expected of them. As a result at the Seventh Conference of the Parties (COP 7) to the UNFCCC in 2001, observed that without addressing the capacity problem especially in the developing world, the attainment of the objective of the Convention will be delayed. A Comprehensive Capacity Building Framework (CBF) was therefore adopted to help in implementing the Convention.

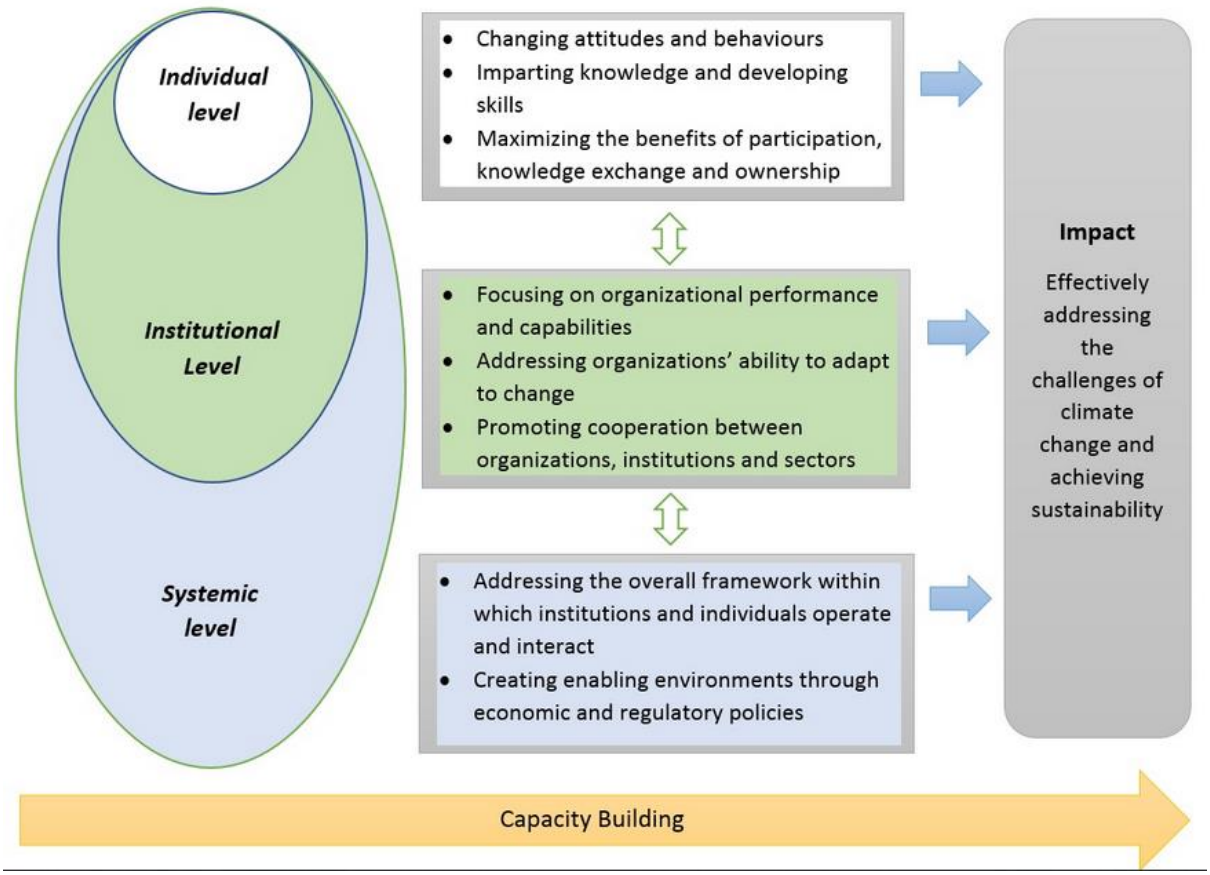

Figure 1: Levels of Capacity Building Activities (UNFCCC Capacity Building Portal)

In New Delhi, 2002, the 8th Conference of Parties (COP 8) Parties adopted the New Delhi Work Programme (2002-2007) – to serve as a flexible framework for country-driven action on Article 6 of the Convention in addressing the specific needs and circumstances of Parties, and reflecting their national priorities and initiatives. In 2007, COP 13 (in Bali) amended the New Delhi Work programme and extended it for five years (2007-2012) and requested that regional workshops be organized by the UNFCCC secretariat as part of the review of the work programme, and to share lessons learned and best practices. In Doha, 2012, COP 18 adopted the eight-year Doha Work Programme on Article 6 of the UNFCCC (2012-2020). This programme invites Parties to designate and provide support, including technical and financial support, and access to information and materials to a National Focal Point for Article 6 of the UNFCCC. COP 20 in Lima, December 2014 adopted the "Lima Ministerial Declaration on Education and Awareness-raising", reaffirming the importance of Article 6 of the UNFCCC in meeting its ultimate objectives and in promoting climate resilient sustainable development.

1.1.1 Action for Climate Empowerment (ACE)

In June 2015, at the 3rd annual dialogue on Article 6 in Bonn, it was decided that efforts related to the implementation of Article 6 would be referred to as Action for Climate Empowerment (ACE). COP 20. In 2015 at COP 21 (Paris) governments agreed to cooperate in taking measures, as appropriate, to enhance climate change-related education, training, public awareness, public participation and public access to information, recognizing the importance of these steps to enhance actions under the Paris Agreement. In 2016, the 4th annual dialogue on ACE was held in Bonn and the intermediate review of the Doha Work Programme was completed. The final review of the Doha Work Programme will be carried out in 2020.

The Doha work programme provides a set of guiding principles and priority areas that has served as a flexible framework for country-driven action addressing the six elements of Article 6 of the Convention: education, training, public awareness, public participation, public access to information and international cooperation. Governments and non-Party stakeholders have implemented numerous ACE projects and initiatives at the local, national, regional and international level. Furthermore, ACE has been integrated into global agendas: in Article 12 of the Paris Agreement, Sustainable Development Goal 13 and the 2018 Katowice Climate Package.

1.1.2 Sustainable Development Goals (SDGs)

At the United Nations Sustainable Development Summit on 25 September 2015, world leaders adopted the 2030 Agenda for Sustainable Development, which includes a set of 17 Sustainable Development Goals (SDGs) and 169 associated targets to end poverty, inequality and injustice, and tackle climate change by 2030. Three of the 17 goals and two associated targets have particular relevance for ACE:

- **Goal 4: Quality Education**: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, and particularly Target 4.7: "By 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development."

- **Goal 13: Climate Action**: Take urgent action to combat climate change and its impacts, and particularly Target 13.3: "Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning."
- **Goal 16: Promote just, peaceful and inclusive societies**, and particularly Target 16.10: "Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements" and Target 16.7: "Ensure responsive, inclusive, participatory and representative decision-making at all levels."

1.2 Action by African States towards climate change learning

The Heads of State and Government of the African Union, at a meeting at the 8thOrdinary Session of the African Union General Assembly in Addis Ababa in 2007 7, adopted the African Union's Declaration on Climate Change and Development in Africa (ClimDev-Africa). The Declaration called on the African Union Member States to (i) ratify the Kyoto Protocol; (ii) participate in the UNFCCC processes; (iii) enhance capacity building , (iv) investment in efficient data collection and early warning systems; (v) integration of adaptation strategies into country policies; (vi) awareness raising ; (vii) strengthening the cooperation between national meteorological offices, hydrological centres and regional economic communities (RECS); (viii) strengthen research, especially in renewables, forestry and agriculture to increase resilience; (ix) transfer technologies; (x) put pressure on developed countries on the 'polluter pays' principle seeking deeper greenhouse gas emission cuts.

The ClimDev-Africa's African Climate Policy Centre (ACPC) was established at the UNECA Headquarters in Addis Ababa in 2010, was developed as a capacity building programme to enhance the capacity development of African Institutions and individuals in relation to climate change policy analysis. The specific objectives of the programme are to: Build solid climate change knowledge based on facts and scientific evidence;

- Promote climate change education, research and innovation;
- Build the capacity of key stakeholders to become active participants in the response to climate change through training;

- Build the capacity of young Africans with fellowship programmes by engaging university students and academics;
- Enhance climate change research capacity in African universities and research institutions by offering research grants, supporting programme development and mainstreaming climate change related university curricula;
- Build capacity and increase the awareness of African policy makers such as government officials, parliamentarians, negotiators, and regional economic commissions through direct short term training, seminars and roundtables;
- Provide tailor-made climate change training programmes for journalists and media professionals;
- Develop innovative programmes and initiatives such as national and regional networks, communities of practice and an African panel on climate change; support national panels so that knowledge generation in Africa is enhanced, and relevant platforms are developed and owned by Africans.

The expected achievements of the programme were :

- Improved capacity at national and regional level in research, analysis, formulation of policy to monitor and evaluate the impact of climate change on African development;
- Improved research capacity of selected African universities to address climate change;
- Increased awareness of policy-makers, legislators and other selected stakeholders on climate change risks and their impact on socio-economic development;
- Increased availability and more efficient utilisation of climate information and knowledge resources in support of Africa's development;
- Strengthened collaboration and networking for more efficient climate change information, knowledge and services sharing, and programme implementation.

1.3 The National Context

Zimbabwe having ratified the UNFCCC, Kyoto Protocol and the Paris Agreement and is obliged to make its contribution to the global efforts to curb climate change and its effects. According to the Zimbabwe's conditional Nationally Determined Contribution (NDC), energy and agriculture sectors produce more greenhouse gas emissions than all other sectors. In the

NDC, Zimbabwe pledged to reduce energy-related emissions by 33% per capita below the projected business as usual by 2030 and also to make the agriculture sector climate-resilient. The NDC is conditional to positive flow of finance from developed country Parties, technology transfer and capacity building. The two sectors identified in the country's NDC support every other means of production, therefore it rests on everyone to do their part in helping in taking action against climate change.

The mandate to handle climate change issues falls with the Climate Change Management Department under the Ministry of Environment, Climate, Tourism and Hospitality Industry. This does not mean that other ministries cannot contribute or be involved in climate change learning activities. The ministry of education recognised this and incorporated climate change education into the new curriculum, recognising it as a cross cutting issue. The Ministries responsible for Agriculture, Gender, Local Government and Energy also take part in climate programming and have to some extent included the matter in their new or draft policy frameworks. .

The country's overarching policy instrument on climate change is the 2017 National Climate Policy aided by the 2014 National Climate Change Response Strategy. The Government is currently working of the development of a Climate Change Bill to help in operationalising the Policy, finalising a Low Emission Developemnt Strategy (LEDS) with mid-century projections in line with the Paris Agreement as well as developing a National Adaptation Plan.

The Zimbabwe Climate Change Technical Assistance program (ZIM-CLIM) was a USD$1.5 million component of the Zimbabwe Reconstruction Fund (ZIMREF) which was being implemented by the World Bank. The goal of ZIM-CLIM was to mainstream climate change considerations in the planning and management of priority sectors, notably agriculture, forestry and water/energy infrastructure. ZIM-CLIM supported the country to develop an NDC Implementation Framework which provides a practical plan for achieving the NDC targets focused on the energy sector. The programme also managed to build capacity of national institutions to mobilize climate finance. The Technical Assistance also supported analytical work on vulnerability of forestry resources and development of climate smart irrigation guidelines.

To complement World Bank's efforts, the Government of Zimbabwe with support from UNDP, initiated the development of an economy-wide Low Emission Development Strategy (LEDS) and the Monitoring, Reporting and Verification (MRV) system to help in meeting the country's emissions reduction target. The LEDS document is a very important document in the NDC work and complements the NDC Implementation Framework developed under the World Bank Technical Assistance. The two documents will support Zimbabwe in implementing its emission reduction targets in the current NDC – and in updating and enhancing Zimbabwe's NDC from being focused on the energy sector to become economy wide. The Low Emission Development Strategy shows that the majority of the prioritized mitigation actions make good business and investment sense.

The country mobilised funds from the Green Climate Fund (GCF) to build capacity to advance national adaptation planning process in Zimbabwe. The resources will see development of a National Adaptation Plan that will mainstream climate change adaptation towards climate resilience through: i) Strengthening technical and institutional capacity; ii) Efficient collection and dissemination of climate information, iii) Appropriate mobilisation of financial and technical resources, and iv) Effective monitoring and reviewing. The project with UN Environment as a delivery partner and Climate Change Management Department as an executing entity will be implemented from 2019 to 2021.

Through the Climate Change Management Department the country communicates all national climate change programmes as well as biennial update reports (BURs) containing updates of national greenhouse gas inventories, mitigation actions, needs and support received. Currently development of the Fourth National Communications and the First Biennial Update Report (BUR) is underway. Under the National Communications there is the Education, Awareness and Training component which looks at climate change education, training and awareness initiatives.

In 2006 Zimbabwe embarked on a National Capacity Self-Assessment for Climate change programme through the then Ministry of Environment and Tourism. Under capacity for communication, education and public awareness it was stated that attendance of conventions was limited there is limited sharing of information between stakeholders. This was attributed to poor information and communication technology infrastructure and an under developed ability to use the information provided.

A key recommendation drawn from the assessment was that there should be an enhancement of the capacity to share climate change experiences and practices. This implies that there is a need to promote communication on climate change between communities. There has to be inter-departmental coordination to ensure that climate change information reaches the broad audience that it should. Another recommendation made was that public participation and access to information on activities related to addressing climate change, land degradation and biodiversity loss has to be increased.

Public awareness without sufficient education and training is inadequate. If Zimbabwe seeks to increase the sharing of climate change information, it must be incorporated into formal and informal education. Media personnel, educators, extension workers must be educated on climate change dynamics so that they can reach and teach a larger portion of the population. Stakeholders such as policy makers must be continually trained to keep them in touch with new information and climate change trends. Research and tertiary institutions must take on a more active role in climate change learning and strengthen research, innovation and technology.

In March 2019 parts of Zimbabwe were hit by the devastating Tropical Cyclone Idai. Warnings were given for people to vacate but because in the past cyclones that hit were not highly destructive, people chose to stay. This is a clear indication of how the climate is changing and it is no longer business as usual. The communities therefore need to be well informed in order for lives to be preserved. The success of climate change learning, education and public awareness is anchored on the ability of the country to implement enabling policies, institutional arrangements and availing funding to climate change learning efforts.

1.4 The Challenge

In Zimbabwe's Third National Communications to the UNFCCC, it was observed that efforts to make the public aware of climate change are extensive and the vast majority knows about its existence. However, there is a generalisation of climate change knowledge which is not taking into account cause, effect and possible solutions. The frequency of the awareness exercises seems to be low and this has been attributed to lack of funding for such activities.

There is a gap in communication between the various stakeholders of climate change including ministries, educational institutions, industry, commerce and members of the general public.

A knowledgeable population that is able to critically assess situations and think of solutions which are economic is important to Zimbabwe's climate change mainstreaming agenda. Indigenous knowledge systems have merit to them and those with the scientific expertise must be able to interact with and exchange information with other stakeholders. Climate change action is everyone's responsibility and as such everyone must be fully equipped to do their part.

1.5 The Rationale Zimbabwe's Participation in the UN CC: Learn Initiative

The "One UN Climate Change Learning Partnership" (UN CC: Learn) is a collaborative initiative of more than 30 multilateral organizations supporting countries to design and implement systematic, recurrent and results-oriented climate change learning. It was launched at the 2009 Copenhagen Climate Change Summit with the main objective of supporting countries in developing and implementing national climate change learning strategies.
There is no better way to protect citizens from climate change than to equip them with information on how to adapt to and mitigate climate change impacts. Zimbabwe as a developing nation needs to strike a balance between speedy development and sustainability of that development.

Zimbabwe consists of a very young population, because of that, ensuring the future generation still benefits from the climate is of utmost importance. The growing population will demand more from the natural resources of the country, whose use, if not controlled will result in aggravated climate change effects. To sustain livelihoods it is important that the country mitigates climate change and also puts in place adaptation strategies which can be enabled through increasing awareness and continuous learning. The UN CC: Learn principles of developing a climate change learning strategy include:

I. Integrating climate change learning within national and sectoral plans.
II. Integrating climate change learning into existing projects and programme designs.
III. Achieving multi-sectoral and stakeholder collaboration
IV. Incorporating gender issues and responding to the needs of the labour market.
V. Strengthening existing education and training systems thereby fostering results.
VI. Ensure sustainability, starting projects and strengthening existing ones.

The UN CC: Learn initiative makes it easier for Zimbabwe to honour its obligations embedded in Articles 6, 10 and 12 respectively of the Climate Change Convention. It breaks down the obligations and also gives guidance on the areas to look in to in order to achieve the increase in climate change awareness.

The Ministry given the role of dealing with climate change, does not mean that it is the sole custodian of the climate change related issues nor the issues that arise from it. Everyone in the country gets affected by erratic rainfall patterns, heatwaves, droughts and floods. These climate change triggered extreme weather events are non-selective in whom they affect. Therefore, every individual in the country must at some point know about climate change problems, the role they can play to change the course of events triggered by climate change, despite the sector they may be in. UN CC: Learn is an excellent guiding initiative to allow Zimbabwe to achieve climate change literacy.

The climate change learning strategy is important in that in order to make progress on many fronts including development and transfer of green technologies, greenhouse gas emissions reductions, and the establishment of effective policies. However, education, training, and awareness creation are equally of importance to create an informed and knowledgeable workforce. With Zimbabwe already having begun implementation of the Nationally Determined Contributions and the National Adaptation Plan that are multi-sectoral in nature. It is imperative that there is strengthening of capacities in the various sectors and the learning strategy will provide the much needed backbone in terms of learning systems that are appropriate for the achievement of the object of these initiatives. There is also need to come up with learning strategies that will make the citizenry able to articulate what the NDCs and the NAPs have provisions for at all levels from the national to the sub-national level in Zimbabwe.

2. OVERVIEW OF ZIMBABWE'S EDUCATION SYSTEM AND THE NATIONAL CLIMATE CHANGE LEARNING FRAMEWORK

Zimbabwe's education system consists of four years of Infant Education (Early Childhood Development (ECD) A and B, Grade 1 and 2), five years of junior education (Grade 3 to 7) and six years of secondary education (Forms 1-4 and form 5-6). Zimbabwe's current education curriculum framework which was implemented in 2017 recognises climate change issues as cross cutting themes and priority concepts. Climate change in the curriculum is noted as a key issue that should be taught at all learning levels from Infant through to Secondary school level and in all Learning Areas.

Early learners are taught climate change issues in their local/mother tongue and the education has to be based on the appropriateness of the material, content and the experiences of the learners. Appropriate context would be having the learners have some grasp of disaster and risk management in Maths and Science and in Science and Technology Learning Areas for example what to do during a heat wave. Junior school learners are taught about sustainable agricultural practices and climate change management based on their immediate experiences.

At secondary level the complex issues to do with climate change can then be introduced. Geography and agriculture are the main subjects stated as the key subjects where climate change can be discussed. It is still referred to as a cross cutting issue, meaning that the educators in all subjects must have some working knowledge of climate change and its impacts on the particular field of study.

There is no specific subject on climate change but it is a component of other main subjects such as Science and Technology and Agriculture at primary school and as a component in Learning areas such as Geography, Agriculture, Crop Science, Design and Textile Technology and Design and Food Technology at secondary school level. The syllabi content development is spiral, that is, incremental in depth and breadth as we go up to high learning levels (i.e. from primary to secondary).Climate change being referred to as a cross cutting issue presents a peculiar challenge, that is that teachers across the board must be able to relate climate change and its effects to their subject material. As an example, a teacher in business studies must be able to relate the causes and effects of climate change to business performance. In teacher training there is still a gap in specific training on delivery of climate change issues to learners,

those that have knowledge of climate change have gained it as a result of having taken modules that have aspects of climate change and own personal reading. Training of teachers to be able to teach climate change issues as an integral part of all subjects thus becomes a priority that the Ministry of education and tertiary institutions that focus on teacher education should look into and initiate a review of the teacher training curricula.

The Ministry of Higher and Tertiary Education is responsible for the education system and details at tertiary level. It is at this level that educators and those ready to go into industry are trained. Research work on climate change is also mainly done at these institutions. There needs to be collaboration between primary and secondary school stakeholders and tertiary institution stakeholders. This is the multi-sectoral collaboration that is recommended by the UN CC:Learn initiative.

3. POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK ON CLIMATE CHANGE.

Climate change is a relatively new governance area in which policy and practice tend to precede theory or advance simultaneously. Establishing effective policy, legal and institutional frameworks is crucial to its management. Zimbabwe has an array of policies, legal and institutional framework that are central to the achievement of the country's vision of making the country "A climate resilient and low carbon Zimbabwe." The imminent threat on the livelihoods of the country's population caused by climate change, calls for the government to come up with policies to respond to climate change and also to ensure the public is aware and ready to act on it. The constitution has provisions for environmental rights, including the right to:

a) An environment that is not harmful to health or wellbeing.
b) An environment protected for the benefit of present and future generations, through reasonable and other measures that;
    i. Prevent pollution and ecological degradation
    ii. Promote conservation
    iii. Secure ecologically sustainable development and use of natural resources while promoting economic and social development.

These constitutional provisions can play a pivotal role in in promoting climate change mitigation and adaptation. The Zimbabwean Government has come up with several policies to do address this need.

3.1 Nationally Determined Contribution

The 19th COP meeting held in Warsaw, Poland in 2013 came up with decision 1/CP.19 which invited all parties to the UNFCCC to "initiate or intensify domestic preparations of their **Intended Nationally Determined Contributions (INDCs)**" well in advance of the 21st COP held in Paris, France in 2015, in preparation for the adoption of the Paris Agreement.

INDCs forms the basis of post-2020 global emissions reduction commitments as included in the agreement. The climate actions communicated in INDCs largely determine whether the world achieves the long term goals of the Paris Agreement: "*To hold the increase in global*

average temperature to well below 2^{o}C above pre-industrial levels and pursue efforts to limit temperature increase to 1.5^{o}C above pre-industrial levels and to achieve net zero emissions in the second half of the 21st century." Zimbabwe's INDC became its Nationally Determined Contribution (NDC) when it signed and ratifies the Paris Agreement in 2016.

The Government of Zimbabwe communicated its Intended Nationally Determined Contribution (INDC) to the UNFCCC in 2015 including conditions such as provision of financial and technical support for implementation of mitigation actions. The country's main climate change thrust is adaptation and poverty reduction. However, strategically beneficial mitigation actions present a good opportunity for reducing greenhouse gas emissions and at the same time enhancing socio-economic growth and improving livelihoods. The energy sector produces more emissions in comparison with other sectors therefore mitigation focus of Zimbabwe's NDC is largely on this sector. The emission reduction target for Zimbabwe is **33% below the projected Business as Usual** energy emissions per capita by 2030. Emission reductions are targeted at greenhouse gases CO_2, CH_4 and NO_2. The target is to achieved through actions such as energy efficiency improvement, increasing hydro in the energy mix, promoting renewable energy and implementation of REDD+ activities. The NDC also presents an adaptation contribution which seeks to upscale adaptation actions to enhance resilience of all sensitive socio-economic sectors among them agriculture and water resources. Some of the suggested activities under the adaptation component of the NDC include promoting adapted crop and livestock development and climate smart agricultural practices; building resilience in managing climate related disaster risks; and strengthening management of water resources and irrigation in the face of climate change.

In order to meet the mitigation target as set out in the NDC, every member of the Zimbabwean population needs to be making their contribution to climate change mitigation and put in place recommended mitigation actions. To build the capacity of the citizens to play their role in climate change mitigation and adaptation, it is fundamental that people know and understand climate change.

The actions, gaps and barriers that needs to be addressed in order to achieve the NDCs included the following:

- Inadequate institutional and technological capacity to maximize germ-plasm of adapted crops and livestock

- Lack of knowledge and skills for intensive production practices
- Lack of mechanization technologies for climate smart production systems
- Inadequate research and extension
- Lack of financial resources
- Inadequate training of farmers
- Fragmented implementation of climate smart strategies
- Building resilience in managing climate related disaster (drought, hail, violent storms/wings, frost heat waves, erratic rainfall and floods) risks
- Inadequate institutional capacity for providing timely early warning systems
- Insufficient capacity for grain storage facilities
- Insufficient support services for index insurance
- Incoherent institutional frameworks (policies) to coordinate disaster risk reduction
- Lack of financial resources
- Strengthening management of water resources and irrigation in the face of climate change
- Inadequate infrastructure and technology for irrigation as well as institutional capacity for managing water resources
- Lack of knowledge, skills and technologies for improving water use efficiency in agriculture

The project developed an implementation plan that translated into a results-based framework of the needs outlined by more than ten Ministries and diverse Government institutions of Zimbabwe and was conducted through intensive consultation with Government, development partners, civil society, and private sector. The plan identifies specific areas defined by the government for the implementation of its Nationally Determined Contribution (NDC) under the Paris Agreement, and outlines outputs for a three year period.

3.2 National Capacity Self-assessment for Climate Change (2006)

The NCSA split the constraints observed for climate change learning into three categories namely, systemic, institutional and individual level capacity constraints. At the systemic level Zimbabwe still engages a “command and control” approach to climate change issues. A system

of incentives and penalties is suggested as the best solution to increasing climate change awareness and adaptation strategies. Institutions' capacity to formulate evidence based policies, policy analysis and implementation is underscored as an immediate need. A need to facilitate acquisition and adaptation of technologies is pointed out. It is difficult to adapt and progress if only old methods are being utilised.

The need to coordinate across conventions is pointed out in the NCSA document as this would allow for dissemination of information across all stakeholders. Communication is key to climate change learning. Without communication, information remains centralised and may eventually be rendered useless. It is with this in mind that effective information dissemination on best climate practices is suggested.

At the institutional level, one of the gaps identified during the National Capacity Self-Assessment are a need to develop an institution devoted specifically to climate change studies. Another recognised constraint is that of increasing the capacity to package and disseminate climate change information. This means that personnel to manage these duties and would have to be trained and assessed. Improved technical capacity in environmental monitoring and reporting would improve the understanding of climate change significantly in Zimbabwe. Information and communication technology would also need to be improved to allow improved access to information. Integrated projects are also suggested as a means to improve involvement and therefore information access in climate change studies.

At the personal level it is stated that it is important for individuals to develop climate literacy skills in order to be able to negotiate on international climate change platforms. Diplomatic skills are listed as an important skill set. Individuals also need to be able to manage projects and be able to utilise GIS and remote sensing technologies to increases sources of climate change information. Personnel in charge of awareness programmes need to be equipped with knowledge on participatory approaches to learning. They must also possess sound research skills on climate change.

3.3 National Climate Change Response Strategy (2014)

The vision of National Climate Change Response Strategy (NCCRS) is to create a climate change resilient nation while its mission is to ensure sustainable development and a climate

proofed economy through engaging all stakeholders recognizing the vulnerable nature of Zimbabwe's natural resources and society. Its goal is to mainstream climate change adaptation and mitigation strategies in economic and social development at national and sectoral levels through multi-stakeholder engagement. Some of the strategic objectives of the NCCRS are to;

- Mainstream climate change in all the key sectors of the economy.
- Develop climate proofed and environmentally sustainable transport systems that are less carbon intense.
- Promote sustainable development, management and utilization of water resources under changing climatic conditions.
- Address climate change through evidence-based research, technology development and transfer.
- Develop an effective climate change communication information management and communication system that facilitates access by all stakeholder groups.
- Strengthen and mainstream climate change in all education curricula.

In addressing the need for climate change education, communication and awareness it is pointed out that Zimbabwe needs to enhance the teaching and learning of climate change in both formal and informal settings. It is also important to provide relevant training on climate change issues to educators and practitioners working with communities. Other issues raised included incorporation of indigenous knowledge system and encouraging sharing of climate change information and networking at local regional and international levels.

The then Ministry of Environment, Water and Climate engaged the Ministry of Primary and Secondary education in 2014 lobbying for the enhanced learning of climate change issues at all education levels. However, a major setback identified was the lack of expertise amongst educators and practitioners. To increase public awareness the strategy suggests engaging public figures to use their platforms of influence to spread the message on climate change. This includes musicians, government officials and church leaders. The production of pamphlets translated to native languages, television, road and radio shows are also suggested as possible avenues of increasing awareness. Out of school and vulnerable youth such as those living with disabilities, would best be reached through their relevant associations.

There is a need to come up with climate change learning solutions that have continuity and to depend less on once off events. Communities must be empowered to identify and proffer solutions to their climate change problems.

3.4 National Climate Policy, 2017

The vision of the Policy is "A climate resilient and low carbon Zimbabwe." The objective of the Policy is to guide climate change management in the country, enhance the national adaptation capacity, scale up mitigation actions, facilitate domestication of global policies and ensure compliance to the global mechanisms. The national climate policy puts emphasis on response which is knowledge and evidence based whilst also incorporating indigenous knowledge system, culture and science. Appealing to the cultural norms of communities will allow the information to be more willingly consumed by the target communities. However, this presents a new need for the training of individuals who understand the cultures and norms of target communities in order to allow good communication flow.

With regards to education, the policy stipulates that an education curriculum that mainstreams education has to be developed in order to scale up a child's right to education to learn and protect the environment. It also states a requirement to incorporate climate knowledge in developing resilient infrastructure and develop climate sensitive development and legislation. To achieve this policy makers and legislators must have a background knowledge in climate change. Local authorities have to be aware of climate change issues in order to plan and budget for public awareness and development. The increase in online programmes demands that Zimbabwe keep up with the times and have some online climate change education programmes.

To increase public awareness and communication there needs to be a development of climate change extension services, mainly targeting the rural communities. Meteorological and agro-meteorological information has to be simplified and communicated to the farming communities that would benefit from it. Formal and informal learning institutions may be involved in activities that promote climate responsible behaviour and they should be supported by the government. Media practitioners also have to be educated and trained to enhance their ability to communicate. To ensure continuity of climate change information, it is important to design community based climate information management systems. Community involvement gives a

sense of ownership of the programme and would ensure it runs beyond the involvement of external parties.

Indigenous knowledge systems have to be given the relevant merit they are due and must be incorporated into climate change learning programmes. The knowledge coming from the communities directly experiencing climate change has to be documented in order to complement the available scientific knowledge. Respect for the communities and their existent systems would allow a greater impact to be made. The indigenous knowledge systems have to be mainstreamed, this includes indigenous technology, skills and practices relevant to responding to climate change at local levels. The meteorological department and other local institutions would have to work together in order to upscale provision and utilisation of location specific climate products.

3.5 Zimbabwe National Agriculture Policy Framework (2018-2030)

The National Agriculture Policy Framework (NAPF) was developed in the context of capturing a different set of both domestic and global development circumstances. Zimbabwe is signatory to various national, regional and international agreements and frameworks which focused on or are relevant to the agriculture sector. The NAPF incorporates an array of development intentions, targets, principles and values of key global and regional and national initiatives. At national level, the framework links to national development results and outcomes articulated in the National Development Plan 2030, Zimbabwe Agricultural Investment Plan (ZAIP) 2017-2021, National Climate Policy and Agricultural Gender Policy among others. At the continental level, Vision 2063 for Africa, which finds practical expression through continental initiatives like Feed Africa that are funded through the African Development Bank, the European Union, the World Bank related Foundations; represent veritable sources of investments to make the achievement of Zimbabwe's NAPF a reality. Whilst CAADP still remains a reference point, the Millennium Development Goals (MDGs)have since been replaced by a more ambitious set of global development intentions and targets under the rubric of Agenda 2030 for Sustainable Development; whose achievements in the agricultural sector is expected to contribute to sustainable development. It is particularly noteworthy that, beyond the 17 Sustainable Development Goals, the global compacts on Financing Mechanisms for the SDGs and the Paris Declaration on Climate Change call on member states to explore additional mechanisms to

enhance the flow of investments, including climate funds, to support inclusive, sustainable and green growth and development. This includes the mobilisation of climate compliant funds to support smart agriculture.

The NAPF has a number of guiding principles and strategic objectives and pillars. Of note are Pillar 1 on Food and Nutrition Security which notes that climate-resilient agricultural practices are inadequately used; especially low-cost, climate-smart technologies

The section on Agricultural Knowledge, Technology and Innovation System has as a policy statement the need to increase investment in agricultural research and development, technology and extension. It notes the following challenges faced by the sector: (i) Inadequate funding for key drivers of agricultural productivity and growth including: a) research and development; b) extension services, agricultural education and farmer training; c) irrigation and mechanisation development; and d) rural feed roads. (ii) Poor linkages in research-extension-farmer-private sector in terms of extension message delivery, appropriate dissemination approaches and research prioritisation. (iii) Inadequate skilled manpower, practical agricultural training and coherence between curricula and industry needs

It states that there is need to develop and promote an efficient agricultural knowledge, technology, innovation and communication (exchange and dissemination) system as a response to the gaps and needs identified above.

On Sustainable [Green] Agriculture, the NAPF states that there is need to improve farmer resilience to climate shocks. And the gaps that were identified included the following; limited capacity to generate, disseminate, and understand information on climate change, emerging pests and diseases. Lack of timeliness in early warning information generation and dissemination, and limited adoption of efficient agricultural practices.

The response initiatives that would be undertaken to achieve resilience by farmers included the following; increase finance flows towards early warning, rapid response systems, extension and Research & Development, increase finance flows towards extension and Research & Development.

3.6 Transitional Stabilisation Programme (2018 -2020)

The purpose of this programme is to map Zimbabwe's developmental plan. One of the issues addressed by this policy is environmental management and it touches on the countries goals with regards to climate and sustainable development.

In the section addressing environmental management the policy hints on the inclusion of communities in the preservation of biodiversity, prevention of veld fires, exercises of drought mitigation and climate smart agriculture. The role of traditional leadership and local rural councils is important, this therefore means that it is important to educate the local leadership and their communities on climate change issues. Local authorities play a pivotal role in the planning of developmental projects in their areas. Government states in this programme that in all areas where land development is proposed, conservation plans will be integrated with overall land use plans to attain development that is environmentally sustainable.

The government will integrate mitigation measures into national policies, strategies and planning strengthen resilience and adaptive capacity to climate related hazards and natural disasters. The key issues in the policies will be improving education and awareness of climate change issues and also raising human and institutional capacity on climate change mitigation. Government also seeks to include marginalised and vulnerable groups by promoting mechanisms to plan for and manage climate change related impacts. What better way is there to equip such groups than to educate them and empower them to develop adaptation strategies that suit their situations?

3.7 Environmental Management Act (Chapter 20:24)

The Environmental Management Act; Chapter 20:24 is an act that provides for the sustainable management natural resources and protection of the environment; the prevention of pollution and environmental degradation; the preparation of a National Environmental Plan and other plans for the management and protection of the environment. There are a number of provisions in the act and for those that are specific to Climate Change Learning are noted here within.

Section 4 (1) (b) of the EMA provides for the right of access to environmental information which was influenced by Principle 10 of the 1992 Rio Declaration on Environment and Development. Principle 10 encourages States to ensure that individuals have appropriate access

to information concerning the environment that is held by public authorities and the opportunity to participate in decision-making processes. The right of access to information is also a constitutional right under section 62 of the constitution which entitles any person to have access to any information held by the State. The Environmental Management Agency is thus mandated to promote public environmental education and awareness, environmental awareness and the sharing of knowledge in order to increase the capacity of communities to address environmental issues and engender values, attitudes, skills and behaviour consistent with environmental management.

Section 4 (1) (c) of the EMA provides for participation in the "implementation of the promulgation of reasonable legislative, policy and other measures". Public participation principles are further promoted under the EMA through environmental education, environmental awareness and the sharing of knowledge and experience with the objective of increasing the capacity of communities to address environmental issues and engender values, attitudes, skills and behaviour consistent with environmental management, whilst, section 5 (1) (e)of the Act affirms the duty of the Minister to co-ordinate the promotion of public awareness and education on environmental management.

3.8 The National Environmental Policy and Strategies, 2009

The National Environmental Policy and Strategies of Zimbabwe of 2009 has a number of provisions that are key to the Climate Change Learning Initiative in Zimbabwe. In the Policy objective it has as one of the objectives a provision for" The Promotion of public participation and a sense of responsibility for the environment through environmental education and awareness, and by promoting environmentally sustainable lifestyles." It also has one that provides for; "Establishing and supporting effective institutional framework, committed to sustainable development and able to collate and manage environmental information."

The objectives of the Policy are well suited to further the Climate Change Learning thrust. These are supported by key policy principles and amongst them one that provides for "Environmental Education, environmental awareness and the sharing of knowledge and experience must be promoted in order to increase the capacity of the community to address environmental issues and engender values, attitudes, skills and behaviour consistent with sustainable environmental management.

On the sectoral thematic areas it has under the social issues pertaining to the environment a section that deals with environmental education that underscores the need for strengthening education so as to have a well knowledgeable and informed public on environmental issues as being essential for environmental conservation and management. It has a number of strategic directions that the Government of Zimbabwe working with its strategic partners undertook to achieve as listed below:

- Improve effectiveness of existing environmental education programmes by promoting the inclusion of both scientific and indigenous knowledge and practices in formal, informal and non-formal teaching, learning, training and extension programmes;
- Integrate relevant environmental issues into the national curriculum at all levels;
- Continue to support educational programmes to increase environmental awareness and public involvement, especially among the disadvantaged and less literate groups;
- Encourage and support capacity building and training programmes to enhance the skills and understanding of education personnel on environmental issues;
- Provide incentives for institutions engaging in environmental awareness and education;
- Establish monitoring and evaluation mechanisms to ensure the relevance and effectiveness of environmental education programmes.

It notes the importance of Indigenous Technical Knowledge and traditional practices as having a valuable contribution to management and sustainable use of natural resources which has a bearing on adaptation by communities in a changing climate. The guiding principles that are provided for to enable the achievement of this are:

- Promote wider application of indigenous knowledge and practice in managing and using natural resources sustainably, particularly where these are integral to local culture;
- Encourage the documentation, dissemination and use of indigenous technical knowledge on management and sustainable use of natural resources.

The Policy has provisions for capacity building in light of environmental resources management. The capacity building having to be reflects at all levels of development that is from national to sub-national all the way down to local level. The capacity development intended was to go beyond the normal education and awareness but was to also include

empowering communities and individuals to act. Some of the provisions in the strategic directions included:

- Maintaining adequate capacity to identify and evaluate emerging environmental issues and to provide the necessary information, advice and guidance on appropriate responses for improved environmental management;
- Raise public awareness and understanding of the essential linkages between development and the environment to promote effective individual and community participation in environmental management and governance;
- Encourage all interested-and –affected parties to develop the necessary understanding, skill and capacity for them to participate effectively in environmental decision-making.
- Strengthen cooperation among the public and private sectors and civil society, to share information and use the best available scientific and local knowledge for environmental management and protection.
- Support research and improve the monitoring and testing capabilities and facilities of national institutions to ensure effective and consistent monitoring of environmental quality, resource use, and environmental conditions and trends in the country.

3.9 Meteorological Services Act

The Meteorological act has provision for education, training and capacity building in issues related to climate change which are essential for strengthening Climate Change Learning in Zimbabwe through the Climate Change Learning Strategy. The provisions in the act are as follows:

- Collection, processing, dissemination, control and quality of archive data;
- Training of meteorological personnel;
- Educational programmes, awareness camapaigns

3.10 Low Greenhouse Gas Emission Development Strategy (LEDS) 2020-2050

The Government of Zimbabwe (GoZ) developed the Long-term Low Greenhouse Gas Emission Development Strategy (LEDS), for the period 2020-2050, in response to the global climate change crisis. The LEDS development process involved all key government ministries, departments and state-owned enterprises, as well as private sector, Civil Society Organisations

and, women and youth organisations. The LEDS development built on several existing government policies and strategies, most notably the ‘Zimbabwe NDC Implementation Framework and the Zimbabwe Third National Communication (TNC). The country's Vision 2030 for Zimbabwe to attain middle income status will be shaped by the country's LEDS. The LEDS has three main elements: 1) Climate change mitigation analysis and recommended projects; 2) LEDS Financing framework; and 3) LEDS Measurement Reporting and Verification (MRV) framework.

4. OVERVIEW OF THE COUNTRY'S NATIONAL COMMUNICATIONS TO THE UNFCCC

4.1 Zimbabwe's First National Communication (1998)

In the first communication of 1998 it is stated that climate change awareness is relatively high in Zimbabwe. However, there is still a need to reach more members of the population. Suggested solutions include popularising the use of renewable energy sources such as solar. This communication does not put much emphasis on indigenous knowledge systems. The most notable element of this communication is that the awareness projects done were under the banner of international organisations, beyond those particular projects there is no talk of continuity. This was attributed to financial incapacity to run the projects and to switch to clean technology.

4.2 Zimbabwe's Second National Communication (2012)

The second communication explored a number of important issues in terms of increasing knowledge and awareness on climate change in Zimbabwe. It look at three main aspects and these were: the status of climate change courses in the education system, public participation in knowledge exchange and awareness raising and proposed a climate change communication strategy.

In the education sector through the then Ministry of Education, Sports, Arts and Culture there began the integration of climate change into the school curriculum after recommendations from the Presidential Commission of Inquiry into Education and Training. The commission recommended the integration of environmental education into the curriculum in line with one of the country's national goals which states that: *"To make sustainable development a national priority, to take a proactive role in environmental issues and to respond to environmental challenges facing Zimbabwe at the personal, local, national, regional and global levels through education and communication."* The Ministry of Education, Sports, arts and Culture began developing materials on climate change through the Curriculum Development Unit and this was to be incorporated into school curriculum from ECD level all the way up to 'A'-Level. The integration was viewed as holistic as it looks at aspects that included the following:

- Establishment of climate change parameters or issues in Zimbabwe in relation to the education system.

- Conducting curriculum audits in terms of content and process of climate change.
- Convening platforms for integration of climate change into the school curriculum.
- Conducting in-service training for educators on integrated climate change curriculum.
- Identification of training need for teachers.
- Identification and training of a core team of trainers to conduct the in-service training at provincial and district level until saturation levels are reached and critical mass is achieved to be able to deliver climate change education.

The tertiary level which consists of teacher training colleges, agricultural colleges, polytechnics and universities was also analysed and it was discovered that there was need to increase the depth of climate change issues in their curriculum. The teacher training and agricultural colleges covered climate change as part of carrier subjects which are taught at primary and secondary school levels and the course content was not broad enough and needed enhancement, this manifested as weakness in the school curriculum.

At university level the situation was different in that every university has its own policy on subjects to be offered and there was no standard or defined curriculum as in the case of primary and secondary sectors. Not all subjects offered as carrier subjects at primary and secondary levels are reflected or offered in the university system in Zimbabwe. An evaluation was needed to establish the status of courses on climate change offered at these institutions. The analysis was to provide a basis for programming that ensured that climate change was fully mainstreamed into the tertiary education sector.

The then Climate Change office, now Climate Change Management Department carried out information exchange and awareness workshops which suggested empowering office bearers in various sectors with materials that helped increase their awareness, develop awareness materials in vernacular., use other forms of communication such as drama, poetry, essay writing competitions, use media such as newspapers, radios and television amongst others.

4.3 Zimbabwe's Third National Communication (2016)

The third communication reiterates the need to further incorporate climate change education into the curriculum from pre-school to tertiary level. A participatory approach is projected to

have better results in the production and dissemination of information. Co-curricular activities such as sports, clubs, games and cultural activities must also infuse climate change learning activities.

When addressing public participation, knowledge exchange and awareness raising it is stated that efforts to have centres for climate change studies are underway. One such piece of infrastructure mentioned in the report is the Centre of Excellency for Climate change at the University of Zimbabwe. Competitions in drama, essay writing, painting, quiz and poetry are being used to engage and incentivise climate change knowledge for young people. Workshops have been held at major cities and this is commendable, however, the population that depends on rain-fed agriculture and is mostly affected by climate change is the rural population.

There is some improvement in attempting to reach rural communities as shown by involving traditional leaders. Use of media such as television and radio continues to be an avenue to reach the public. Sector specific communication is however required in order to increase effectiveness in reaching a larger portion of the population and trying to make the information relatable.

The gaps identified for primary and secondary education include lack of monitoring and evaluation of climate change learning subjects. This calls for in-service training for teachers and curriculum audits. The tertiary education level has a complete lack of a coherent curriculum on climate change education. A situational analysis of courses that are offered is needed and also standardisation of courses on climate change across universities. Technical and agricultural colleges lack members of staff that have adequate qualifications to teach climate change issues. Where the teaching staff is qualified, the equipment is outdated and there are no financial resources to acquire new equipment and constantly train trainers.

There is lack of expertise in packaging climate change information to suit the general public. The information required to formulate messages targeting various communities to inspire behavioural change is limited. Coordination between stakeholders is normally short-lived lasting only for the duration of a specific programme. There is a need to create sustainable coordination and communication among relevant stakeholders. Involvement of traditional leaders and local authorities is limited and this results in lack of documentation of indigenous knowledge systems on climate change and adaptation strategies.

Zimbabwe still has quite a long way to go before climate change education, learning and awareness reaches the desired levels. Individuals within communities should be able to effectively look at climate change causes, effects and be able to come up with sustainable solutions which apply to their situation.

5. CURRENT INITIATIVES

The Government of Zimbabwe is aware of the need to engage with the general public and make them aware of climate change and has initiated and supported various awareness programmes. This coupled with an increase in climate related events and disasters in recent years, leading loss of lives, property and a decline in the economic gains made by the country and destruction to critical infrastructure. There is need for efforts towards increasing the resilience of community in the face of an ever changing climate. To achieve this there is need to increase the people's level of knowledge and awareness of disasters and their prevention or reduction of their incidence and impact. This is done through making all stakeholders understand the impacts of certain activities they carry out on the climate and its resultant effect on their livelihood.

As a result one needs not to over emphasise the importance of education, public awareness and training for sustainable development as central natural resources and environmental management as well as development planning. There is therefore need to educate the community (which includes farmers, government agencies and their employees, private sectors and civil society) on appropriate adaptation strategies that help protect them from impacts of climate change. Stakeholders in climate sensitive sectors such as farmers need to be educated on innovative adaptation strategies they can adopt use to secure their livelihoods and enhances their resilience capacities in the case of recurrent climate related disasters. Zimbabwe has already began implementing some initiatives that are being done in an effort to achieve the above mentioned. Some of the initiatives are outlined below.

5.1 Climate Smart Agriculture Manual (2017)

Climate-smart Agriculture is defined by the Food and Agriculture Organization (FAO) as agriculture that sustainably increases productivity, enhances the resilience of livelihoods and ecosystems, reduces and/or removes greenhouse gases (GHGs) and enhances the achievement of national food security and development goals. The ravages of climate change and variability on agricultural production made it imperative for the government to call for the introduction of CSA practices into the tertiary education curriculum and agricultural extension advisory services. With support from the Climate Technology Centre and Network (CTCN), which is the technology arm of the UNFCCC, the Government developed a Climate Smart Agricultural

Manual for Agricultural Training Institutions in Zimbabwe. The manual is helping in promoting climate- and environmentally- friendly ways of farming. Currently training of trainers programmes are being done in all agriculture colleges in Zimbabwe.

Higher and tertiary education institutions would assist the promotion of climate smart agriculture through research and also develop, network and build technological and knowledge capacity. There is a need to mend the communication disconnect among the policy makers, researchers and farmers. This makes the transfer of climate change knowledge limited amongst stakeholders dealing with climate change issues. The manual came as a component of the national climate change response strategy and the nationally determined contribution. It states that it is important to mainstream the subject of climate change and adaptation to it to co-operatives to strengthen weather and climate information dissemination. Farmer capacity building should involve participation in learning programmes and farmer field schools at district level to encourage peer information exchange. Extension workers need to be trained in weather and climate issues.

5.2 Climate Change Adaptation

The training manual on Climate Change Adaptation was produced in 2019 as a part of the country's national adaptation planning process. The objectives of the training manual are to provide:

- Conceptual grounding in climate change vocabulary, concepts and impacts on various aspects of the environment.
- Guidance on developing climate change adaptation and resilience policies.
- An overview of tools, methods and processes to identify vulnerabilities, prioritize adaptation options and mainstream actions in development planning.
- Examples of how to mainstream climate change adaptation into development plans and processes.

The manual addresses a key issue that is having a multi-sectoral approach to climate change issues. The target groups that can use the manual are drawn from across many sectors of the economy. However, a key thing to note is that the manual is meant mainly for the training of policy makers and other decision makers at national, provincial and district level. This addresses the need to have leadership who can negotiate and interact at regional and

international platforms thereby allowing Zimbabwe to have sound adaptive policies that suit international standards. The manual and the lessons to be drawn from it are complex and it would best be used to educate people who have a basic knowledge of climate change. The main short fall is that it does not address the need to educate the normal citizen. It has to be noted that the educating the decision makers is a commendable step in the right direction.

The country managed to mobilise funds from the Green Climate Fund to develop an Adaptation Plan that will help in mainstreaming climate change adaptation into relevant new and existing policies, programmes and activities, in particular development planning processes and strategies, within all relevant sectors and at different levels, as appropriate. The plan will strengthen adaptation readiness of the country and create an enabling environment for concrete adaptation investment projects. Climate change adaptation will be mainstreamed/ integrated

5.3 SDGs Implementation in Zimbabwe

The 2030 Agenda for Sustainable Development was adopted at the United Nations Summit held in 2015. This Agenda is a plan of action for the world and its people and for prosperity. This plan is implemented by all countries and all stakeholders, acting in collaborative partnerships. The 2030 Agenda for Sustainable Development came up with 17 Sustainable Development Goals (SDGs) and 169 targets which demonstrate the scale and ambition of the universal Agenda. The SDGs are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental. The goals and targets are to stimulate action over a 15-year period (2016-2030) in areas of critical importance for humanity and the planet.

The 17 Sustainable Development Goals

Zimbabwe's vision, as articulated in the country's economic blueprint, Transitional Stabilisation Programme (TSP) is centred on economic recovery and inclusive growth that leads to economic empowerment of its citizens to reduce poverty levels. Accordingly, Zimbabwe desires to see an empowered society in a rapidly growing economy that is delicately balanced with equity. TSP guides the country's strategies along the path to achieving the Post-2015 Development Agenda.

The Government of Zimbabwe is implementing all the SDGs but priority is being given to the implementation of 10 focus goals. The prioritization was guided by the vision, the need to focus on enabling goals and resources availability. The SDGs have been integrated into the national policies, strategies and plans for ease of implementation and ensuring synergies. The Ministry of Public Service, Labour and Social Welfare is coordinating the implementation of the SDGs in Zimbabwe. Focal persons have been assigned in each line Ministry to lead the implementation at Ministry level.

Implementation of policies, projects, and programmes on the SDGs is currently under way in the country with Government working in collaboration with development partners, the civil

society, the private sector and other stakeholders. SDG Working Groups have been formed and these were tasked to incorporate the SDGs, the targets and the monitoring and evaluation modalities into their work-plans and budgets. Line ministries have identified and selected applicable, measurable and implementable targets and indicators that they will implement and monitor progress thereof.

5.4 UNDP, Climate Change & Resilience

UNDP has supported the Government in developing a costed action plan on mitigation and adaptation through the national climate change response strategy. Evidence from the assessment of development results shows that UNDP has a track record for this work, and donors and government are interested in seeing UNDP continue to lead in climate change work. UNDP is supporting the Government in implementing quite a number of climate change projects (such as Supporting Enhanced Climate Action and the Support Towards Implementing Zimbabwe's Nationally Determined Contributions), the Sustainable Energy for All Initiative (known as 'SE4All') and the Renewable Energy Policy.

5.5 UNICEF, Child Friendly Climate Change Handbook, 2017

The Children and Climate Change in Zimbabwe study of 2013 highlighted the gap in learning on the subject of climate change. Many children who participated in the study could identify changes in their climate but lacked the knowledge on what to do about it. Thus they were powerless to change their circumstances. The country also underwent a curriculum review process during the same period where the Primary and Secondary School curriculum was changed for the first time since independence. The new curriculum is more holistic and thus climate change and the environment take prominence as they affect the wellbeing of children in many ways. This therefore presented opportunity to develop resources for children on various topics previously limited in the curriculum including climate change. The Climate Change Handbook is about building a culture of environmental stewardship from an early age. In this way it is aligned to the new curriculum which focuses on developing Learner Exit Profiles by developing different skill sets and attitudes through learning. UNICEF aimed to make children able to use this handbook to help them learn more about climate change, hoping that they will also be encouraged to share the information and take action together with their communities to keep our environment clean, safe and healthy. Our Changing Climate: A Child-

Friendly Climate Change Handbook was developed with the participation of children through pretest exercises. It was developed to be fun and engaging yet highly informative. The book has been approved by the Ministry of Primary and Secondary Education as additional teaching and learning resource, under the subject environmental studies. The Child Friendly Climate Change Handbook book is appropriate for use by Grade 6 to 7 learners.

5.6 Child Friendly Climate Policy (2017)

The Government of Zimbabwe in collaboration with UNICEF in the development of the Child Friendly Climate Policy which simplifies the National Climate Policy for children in later years of primary school education and early secondary school. The child friendly policy is yet to be widely distributed to all primary and secondary educational institutions.

5.7 Traditional climate forecasting in Munyawiri ward, Domboshawa by ZERO

In Munyawiri Ward 1 in Domboshava, farmers use knowledge of weather systems such as rainfall, thunderstorms, windstorms and sunshine to prepare for the agricultural season. The method most relied upon is gauging the timing, intensity and duration of cold temperatures during the winter (May to July). A very cold winter is said to lead to a good rainy season. Elderly male farmers use natural occurrences such as the appearance of certain birds, mating of certain animals and flowering of certain plants to forecast weather trends. The abundance of certain wild fruits indicates the quantity of rain expected. The elevation at which birds build nests during the dry season is also important: if nests are built close to the ground, then rains will be poor; when they are high up, good rains can be expected. Traditional coping mechanisms in the face of climate hazards include growing drought-resistant crops, harvesting rainwater off roofs and diversification of livelihood activities away from agriculture. Traditional leaders advocate time-honoured resource management practices, including protection of riverine vegetation and forests and prevention of wildfires. Unfortunately in this community, many no longer respect the traditional leaders and ignore their policies. In order to build resilience, Zimbabwean communities will have to develop new approaches to protecting communal resources and mobilising community support for climate change adaptation strategies.

5.8 Reduced Emissions from Deforestation and Forest Degradation (REDD+) in Zimbabwe

The Government of Zimbabwe with support from the UN-REDD Programme carried out a Country Needs Assess to implement the REDD+ programme in Zimbabwe. The purpose of the country needs assessment was to address impacts of climate change and assist communities that depend on forests for their livelihoods. The assessment had a number of outputs, the first output was on the managerial capacity noting the need to enhance technical expertise to fully comply with international requirements and follow emerging global discourse and trends on REDD+ Monitoring Reporting and Verification Systems. The was also need to improve on the operational level capacity especially in the REDD+ Focal Point (Forestry Commission) leveraging on the already existing capacity in tertiary institutions, research organizations, Non-Governmental Organizations, and private Sector.

Zimbabwe begun building capacity to exploit opportunities from conserving its 15.6 million hectares of forests to limit emissions, create income and improve livelihoods. Carbon Green Africa in partnership with South Pole Carbon Asset Management has implemented an ambitious private REDD+ project covering 750,000 ha of forest in Binga, Mbire, Nyaminyami and Hurungwe. The project aims to prevent the emission of 52 million tonnes of CO2 into the atmosphere in 30 years. In return the communities involved are meant to benefit from

- Support for conservation agriculture
- Sustainable honey production and links to markets
- Education and awareness campaigns
- Fire prevention programmes
- Alternative, low-emission brick-making production methods

5.9 Zimbabwe Domestic Biogas Programme

Zimbabwe has vast renewable energy resources like solar, hydro, biomass and to a limited extent, wind and geothermal, that to date have largely remained unexploited. The majority of the population especially in rural areas, has no access to basic energy services with the energy supply-demand gap continuing to widen. The Government of Zimbabwe, non-governmental organizations (NGOs) and the private sector have supported the development of renewable energy since 1980. A number of programmes have been implemented to promote the adoption of renewable energy technologies such as National Energy Policy, Sustainable Energy for All

(SE4ALL), The National Biogas Programme, Rural Electrification (using solar mini-grids), Nationally Determined Contributions (NDCs), Renewables Readiness Assessment (RRA), Climate Policy among others. Over the years renewable energy has become competitive and is achieving grid parity globally. Therefore, it is an opportune time to exploit the huge renewable energy potential to meet Zimbabwe's growing energy demand, achieve universal energy access and secure the country's long term energy needs in a sustainable manner.

This National Renewable Energy Policy was developed by the Ministry of Energy and Power Development to promote and drive investment into the sector by overcoming a number of barriers that currently exist in the energy sector. It also aims to improve the livelihood of the rural population by providing access to reliable energy through off-grid solutions, and thus creating opportunities which did not exist before.

One of the renewable energy projects implemented by Ministry of Energy and Power Development, in collaboration with the Ministry of Agriculture, Mechanisation and Irrigation Development, the Rural Electrification Agency, the Netherlands Development Organisation (SNV) and Humanist Institute for Cooperation (HIVOS) was the promotion of domestic biogas digesters. The aim is to provide sustainable, clean and reliable energy for cooking and lighting in 67 000 households. The project was rolled out in 2015 and used a market-driven approach in promoting and disseminating biogas technology. Biogas is a mixture mainly made up of methane and carbon dioxide. It is created as a by-product when organic material decomposes in airless conditions. A basic biogas digester consists of a tank in which organic material such as cow dung is mixed with water and fermented to produce methane that can be used as fuel for cooking and lighting. The digested slurry of dung and water is pushed out of one end of the digester and can be used as high-quality fertiliser. Biogas burns with minimal carbon dioxide emission and uses products that are readily available locally.

5.10 Green enterPRIZE Innovation & Development in Zimbabwe (2017 - 2020), International Labour Organization, Office for Zimbabwe and Namibia

The project was developed seeking to contribute to solving a series of inter-related development problems, such as high levels of youth employment, low levels of formal and growth oriented entrepreneurship and unsustainable production processes of SMEs in Zimbabwe. The causes of these problems stem from, among other things, historical gender

inequality where women, and especially young women, do not have access to equal technical skills and entrepreneurship development opportunities. In addition, the current education system does not produce work ready graduates and neither graduates with entrepreneurial skills and competencies, which results in both young men and women struggling to find employment as well as struggling to start their own businesses. In addition, an inadequate legal and regulatory green economy framework means that enterprises, first of all, lack incentives to move towards sustainable operations and, secondly, lack awareness about opportunities in the green economy wherefore many firms continue to source unsustainable inputs and continue to pollute water and air.

Against this background, the proposed project seeks to support to green and growth oriented male and female owned small and medium sized enterprises (SMEs) stimulate the market for green products and services through expansion of access to skills for green jobs and through the greening of existing enterprises. The ultimate goal is the creation of green and decent jobs for women and men, and especially young women and men, through sustainable enterprises. The "sustainable and inclusive growth, productivity and jobs" equation is what all governments are trying to solve in an era of climate change and ecological overshoot with over-exploitation of the Earth's natural resources.

The project strategy seeks to, firstly, support young men and women to access skills to increase their employability and economic participation in the green economy; secondly, to stimulate interest in the green economy and demand for green products and services from emerging and new growth oriented green enterprises with subsequent provision of financial and technical assistance to these firms; and, thirdly to provide technical assistance to existing firms in selected sectors assisting SMEs in greening their business and manufacturing processes through an in-business training and consulting programme that increases productivity and improves cleaner production processes and working conditions.

The project will directly support 3'000 in-school male and female in-school youth, in at least 20 training institutions in acquiring green technical skills, support the development of 75 green and growth oriented SMEs through an enterprise challenge fund, and support another 75 existing SMEs in selected sectors, plus another 500 emerging and new SMEs, who apply to the challenge fund, but don't win prizes, and therefore instead will have access to green business management training. The goal is to create at least 2'000 green jobs of which 1'000 is from the

Technical, Vocational Education and Training Institutions (TVET) component and 1'000 is through the challenge fund. In addition, another 1'000 existing jobs in existing SMEs and large enterprises will be improved through the provision of sustainable and responsible green training to firms in selected sectors.

5.11 The NDC Partnership

The NDC Partnership is a coalition of more than 150 countries and Institutions committed to support with technical and financial resources the implementation of ambitious NDCs. Zimbabwe joined the NDC Partnership in 2016 and in 2019 has started the in-country engagement process to prepare a detailed three-year plan to implement its NDC. In Zimbabwe's first Nationally Determined Contribution (NDC) the country pledged to reduce energy-related emissions by 33% per capita below the projected Business-As-Usual by 2030 while reducing vulnerabilities and strengthening resilience to climate change. Zimbabwe has applied for the second NDC applied to the NDC Partnership CAEP initiative to enhance its NDC, broadening its sectoral coverage, strengthening adaptation components, and aligning its content to the Low Emission Development Strategy while designing mechanisms for fast tracking climate actions such as the Climate Public and Institutional Review (CPEIR), Investment Plans, and the mainstreaming of the reviewed NDCs into National and Sub-national Planning and Budgeting.

The Government of Zimbabwe has set-up a policy and institutional framework for effective NDC implementation, creating the foundation for coordinated and collaborative actions. The country has enacted several policies and strategies such as the National Climate Policy; the National Climate Change Response Strategy; the National Environmental Policy and Strategy; and, more recently, the NDC Implementation Framework and the 2050 Low Emission Development Strategy.

A High-Level NDC Steering-Committee has been established and is constituted of Permanent Secretaries from all Government Ministries. This Committee is chaired by the Office of President and Cabinet (OPC). Additionally, the Government has established NDC technical sub-committees consisting of stakeholders responsible for the sectoral actions highlighted in the country's NDC. The sub-committees include Mitigation; Adaptation; and cross-cutting issues such as legal frameworks, transparency, and means of implementation.

Under this framework, the collaboration with the NDC Partnership has been important to strengthening coordinated and collaborative efforts to advance the climate and development agenda. The process coordinated by the Climate Change Management Department and the Ministry of Finance has engaged more than 15 Government Institutions and 27 partners in the design and implementation of a unified results-based framework for Climate Action or Partnership Plan. Each Government Institution unpacked the content of the Partnership Plan pertaining to its mandate through an iterative process, ensuring ownership and alignment with sectoral priorities and existing initiatives. This process was done through multi-stakeholder gatherings where representatives from the civil society, development partners, and private sector provided their contributions and inputs for effective and transformational actions that will bring about the necessary changes to achieve Zimbabwe's NDC. Zimbabwe's Development partners were engaged throughout the process and more than 27 partners have indicated their contribution to the different areas of the Plan.

The Government will launch this Plan and further engage national actors and international partners for the coordinated implementation of the plan. At national level coordination will be through the Climate Change Management Department, supported by the UNDP, to support the coordination for the implementation of the Plan. Some of the areas where the Climate Change Management Department sees important support that the Partnership could provide:

- Strengthen the engagement and increase the capacities of the Ministry of Finance and Economic Development to mainstream climate into planning and budgeting processes;
- Increase capacities to access and manage financial resources for climate action, including elaboration of pipelines of bankable projects and mechanisms to mobilize climate finance such as a National Climate Change Fund;
- Strengthen the regulatory framework in the country through the elaboration of a Climate Change Act;
- Mainstream the results of the LEDS and the reviewed NDC into sectoral planning;

The focus of the NDC partnership creates a good platform for a vast array of learning opportunities that will ensure that the country is able to embed Climate Change in its development planning and have this cascade down the levels from the National level all the way down to the local level.

5.12 National Adaptation Planning Project 2019-2021

In 2019 Zimbabwe commenced the formulation of its National Adaptation Plan with support from the Green Climate Fund. The process will include critical background studies in the economics of adaptation, generation of climate scenarios, national and local government capacity building and adaptation options. At the COP25 parties requested the Adaptation Committee, through its task force on national adaptation plans, and the Least Developed Countries Expert Group to continue to include in their reports information on the gaps and needs related to the process to formulate and implement national adaptation plans and on how to address them. Delivery partners of the Green Climate Fund Readiness and Preparatory Support Programme for the formulation of national adaptation plans were invited to strengthen efforts to support developing country Parties with the goal of expediting the submission of readiness proposals to the Green Climate Fund. Zimbabwe and the Africa Group continued with the call for increased efforts by the multilateral funding mechanism to ensure that climate change adaptation is treated at par with mitigation. The National Adaptation Plan for Zimbabwe will ensure that climate change is mainstreamed in development planning within the framework of devolution.

5.13 Youth Climate Dialogue between Zimbabwe and China, 2019

UNDP Zimbabwe, UNITAR, Zimbabwe Youth for Peace, Zimbabwe Youth Council and the Government of Zimbabwe jointly organised the first Youth Climate Dialogue between Zimbabwe and China on the 19th of December, 2019. This event was conducted online and hosted at the United Nations Information Centre in Harare. Twenty- five youths from Zimbabwe joined their peers from the Ocean University of China in the online Youth Climate Dialogue. The Zimbabwean participants were drawn from various youth organisations, government ministries and universities which are actively involved in accelerating climate action.

As youth become increasingly aware of the challenges and opportunities in transitioning to a low carbon growth, many are joining the global dialogue sharing ideas and solutions to tackle Climate Change. In this inaugural Youth Climate Dialogue, students from China explored the economic implications of climate change for emerging and developing economies, whilst the representatives from Zimbabwe presented strategic interventions and policies which have been developed to address climate change in Zimbabwe.

6. STAKEHOLDER ANALYSIS

For the success of any process involving key stakeholders early in the Strategy process is important in strengthening the effectiveness of implementation later on, down the road. To ensure that key actors within and outside of government know about and have the opportunity to contribute to the Strategy, a **Stakeholder Analysis** has been prepared. The analysis identifies relevant institutions and organizations, and will briefly lists their climate change initiatives, programmes and activities relevant to (or requiring) capacity development. It will indicate the potential interest of different organizations in capacity development (i.e. recipient of training, delivery of learning activities, etc.), as an input to the systematic capacity assessment which will take place later in the process.

National actors to take into account include:

- ***National climate change institutions*:**

  Ministry of Environment, Climate, Tourism and Hospitality Industry.

Role: The Climate Change Management Department is housed in this Ministry and has the mandate to coordinate all climate change related initiatives in Zimbabwe. They will play the leading role in the development of the Strategy. Other relevant Departments in the Ministry include Environment and Natural Resources and Meteorological Services.

- ***Finance and Planning Authorities*:**

  i. Ministry of Finance and Economic Development

Role: The Ministry of Finance and Economic Development being the chief financial planner of the government needs to be on-board from the beginning as there play a central role in resource mobilization for the implementation of the strategy once it has been developed.

- ***Education Ministries*:**

  i. Ministry of Primary and Secondary Education
  ii. Ministry of Higher and Tertiary, Science and Technology Development

Role: The two education ministries are very central to the implementation of the strategy and hence play a key role in its development. They are custodians for the countries education and learning strategies, hence they will give good grounding for the Climate Change Learning Strategy.

- ***Education and training institutions*:**

i. National University of Science and Technology
ii. Bindura University of Science Education
iii. Midlands State University
iv. Lupane State University
v. University of Zimbabwe
vi. Chinhoyi University of Technology
vii. Marondera University of Agricultural Science and Technology
viii. Zimbabwe Open University
ix. Catholic University
x. Ezekiel Guti Bindura University
xi. Mkoba Teachers Colllege
xii. Mlezu Agricultural College
xiii. Esigodini Agricultural College

Role: The institutions are responsible for producing the country's workforce and also are key partners in delivery of the strategy once it has been developed. Some of their work is important for surfacing evidence and knowledge of the trajectory that climate change response should take hence they are important for making the strategy an organic living document that evolves.

- ***Sectoral Ministries related to fostering a green economy and climate resilience*:**

i. Ministry of Public Service, Labour and Social Welfare
ii. Ministry of Energy and Power Development
iii. Ministry of Women Affairs, Gender and Community Development
iv. Ministry of Environment, Climate, Tourism and Hospitality Industry
v. Ministry of Local Government
vi. Ministry of Health and Child Care
vii. Ministry of Agriculture
    - Department of Farmer Education and Training
    - Agritex

Role: Sectoral ministries provide the much needed information that ensures the alignment of the strategy to their capacity development plans in the development stages. During

implementation of the strategy there are key in driving the integration of climate change learning into their learning and capacity building plans.

- ***Parastatals***

  i. Infrastructure Development Bank of Zimbabwe
  ii. Environmental Management Agency
  iii. Forestry Commission
  iv. Zimbabwe National Water Authority (ZINWA)

Role: These are important in the development and implementation of the strategy as they provide important information that leads to development of a strategy that meets the needs of the stakeholders. They are also important players in the implementation of the strategy as they already have programmes that deliver education and learning.

- ***Sub-national and local governments:***

  i. Harare City Council
  ii. Bulawayo City Council
  iii. Mutare City Council
  iv. Masvingo City Council
  v. Gweru City Council
  vi. Kariba Town Council
  vii. Bindura Town Council
  viii. Chinhoyi Town Council
  ix. Victoria Falls Town Coucil
  x. Beitbridge Town Council

Role: These form the interface with the communities and are a good conduit to ensure that the actions in the Strategy reach the lowest level and target especially the most vulnerable in the community whose absorptive and adaptive capacities needs to be enhanced and light of climate change impacts to help protect their development gains.

- ***NGOs/CSOs, grassroots and faith-based organizations:***

    i. *Zimbabwe Climate Change Coalition*
    ii. *Action 24*
    iii. *Africa Youth Initiative on Climate Change Zimbabwe*
    iv. *SNV Zimbabwe*
    v. *SAFIRE*
    vi. *Mukuvisi Woodlands – Eco-schools Programme*
    vii. *MIET Africa*
    viii. *Zimbabwe Youth Council*
    ix. *Evangelical Fellowship of Zimbabwe*
    x. *Zimbabwe Council of Churches*

    Role: These organizations are the doorway to the communities and have access to the basics of community organization. They are important for their ability to pull people together and bring climate change issue to their attention and foster responsibility for action. They are the best platform for reaching various grouping in the community such as women' groups, youth organizations and are important in the crafting to appropriate learning activities that can be adopted for use in knowledge transfer to the community in ways that they understand that is not too technical.

- ***Business associations, private sector networks and trade unions:***

    i. *Business Council for Sustainable Development Zimbabwe*
    ii. *Zimbabwe Tourism Authority*
    iii. *Zimbabwe Chamber of Mines*
    iv. *Confederation of Zimbabwe Industries*

    Role: The advent of the green-economy that is climate proof is premised on the active involvement of this group of stakeholders. The inclusion of the private sector and business community is important for the refining of the strategy to target future workforce that is coming out of the formal training institutions as well as those that are already on the job for the country to be able to achieve a level of being climate proofed and develop in a sustainable manner.

- ***Media:***

    i. The Herald
    ii. Manica Post
    iii. Kwayedza
    iv. Khuluma FM
    v. National FM
    vi. StarFM
    vii. Skyzmetro
    viii. ZiFM
    ix. 98.4 FM
    x. The Chronicle
    xi. Central Radio FM
    xii. ZBCTV

Role: The media are important as they are able to raise awareness on the existence of the Climate Change Learning strategy and its actions targeting various audince and sectors.

- ***Development partners (including UN organizations and UN Country Teams; multi-lateral and regional development banks; bilateral partners):***

    i. The World Bank
    ii. UNDP
    iii. UNESCO (Regional Office for Southern Africa)
    iv. UNICEF
    v. UN Resident Coordinator's Office
    vi. WFP
    vii. FAO
    viii. ILO
    ix. UNITAR/UN CC: Learn Secretariat
    x. Konrad Adenauer Stiftung (KAS)
    xi. The World Bank

Role: The development partners are key in that they form an important support structure in the development of the strategy, based on their wealth of experience and networks in different

regions of the world they help sharpen the focus of the strategy during development. In the implementation phase the development partners are key in that they are able to take up certain learning activities and embed them in the development programmes and guaranteeing that the learning strategy has a wider coverage and reaches a wider audiences.

- **Traditional Leadership**

Role: Traditional Leaders are very important in the mobilisation of rural communities to adopt appropriate climate change mitigation and adaptation practices in Zimbabwe. Given its complexity and uniqueness, external intervention through government and non-governmental agents alone can hardly foster climate change adaptation particularly at local levels within communities. Traditional leaders, who have for a long time been useful in the governance of people in various rural communities, can play a supportive role in climate change adaptation. Traditional leaders do not only serve as governance authorities but also know the traditional strategies of combating the negative effects of climate change.

7. CONCLUSION

The background report shows that there has been good progress in mainstreaming climate change in the Zimbabwe. There has also been substantial investment and support by development partners in both the areas of climate change adaptation and mitigation across most sectors and climate change management structures in the country. The levels of knowledge and skill for climate change mitigation or climate science is generally inadequate across all levels. Climate change being a new science and phenomenon there is low capacity, skill and knowledge as most of the aspects are very scientific and technical. Hence to be able to gain ground in adaptation and mitigation there is need to come up with a learning strategy that ensures a simplified information and enables better delivery to all stakeholders. The development of comprehensive environmental and climate change policies and legislation is the first step in the process and demonstrated the commitment and political will of from political leadership to ensure the implementation of Zimbabwe's climate change policy, strategy and action plans.

There is weak climate change integration in strategic plans and policies and this has hampered leadership commitment to climate change resource mobilisation from the private sector as well the fiscus through the national budget. The climate change learning strategy is a good opportunity to attend to and begin integrating climate change considerations into strategic development plans and policies to ensure that climate change initiatives are reflected and have resources allocated in the government's national budget and planning. This report also noted the limited efforts to ensure capacity building in skill and knowledge on climate change science in government and other key sectors of the economy and the few initiatives that are current and on-going are mostly funded by the development partners and non-governmental organizations with very few that are government supported. The need for training in the formal, non-formal and informal sectors is of paramount importance as improving the training interventions contributes to improved delivery of development outputs and gains in the climate change paradigm.

In order to achieve good progress in driving the country's climate change agenda there is need to come up with very clear and comprehensive training programmes and intervention to address climate change training capacity gaps that have been identified in the various sectors. It is also

important to develop the most appropriate package of interventions that have full funding and with a comprehensive resources mobilization strategy. The package should include both targeted short and long term training, as well as strengthening the capacity of institutions that already offer training to the country's citizenry on climate change. To achieve the desired climate change learning outcomes there is need for a strategic approach to capacity building that combined both theoretical and practical learning methods.

8. RECOMMENDATIONS

The following are the recommendations that have been made cognisant of the fact that education, training and capacity building are pillars that support learning which translates to knowledge transfer with ultimately leads to behaviour change thereby influencing behaviour change. Behaviour change is very important in driving climate change mitigation and adaptation which are important for the achievement of sustainable development, growth and resilience of Zimbabwean communities:

1. Climate change must be fully integrated in the country's education curriculum from primary school through tertiary education (with focus being most put into teacher education, as teachers are the main frontline for passing knowledge that affects the behaviour of society.)

2. It is important to note the need for strengthening the capacity and skill for professional staff in the civil service and private sector, thus funds must be mobilized to provide short courses and workshops to build their capacity at the civil service training centre such as the Public Service training Centres in Provinces or at Polytechnics and Universities for more specialized training.

3. As part of the Learning Strategy there is the need to develop a comprehensive and focused training plan to be able to address climate change knowledge and skill gaps at all levels from national to sub-national level.

4. There is need to come up with climate change champions in all sectors and at all levels especially in communities and fully supported and their capacity developed in order to have role models in each sector and at every level of national development.

5. Climate change programmes for training and capacity building must be designed so at to be appropriate to target audience and speaking fully to the impacts and or the relationship between climate change and climate sensitive sectors and operations such

as agriculture, health, water, land use, natural resources, waste management, energy, gender and business.

6. Development of training programmes and short courses targeted at stakeholders such as media and NGOs on climate change to broaden their understanding the concept of climate change and improve their reporting skills and ensure that they are able to report well balanced and factual stories, which then strategically positions them as advocates that help push the country's climate change agenda

7. The Climate Change Management Department in collaboration with agencies such as EMA and NGOs and CSOs and other relevant institutions such as schools and the media must come up with a comprehensive strategy on climate change to help increase awareness of climate change at national, provincial, district, and local level.

8. Carry out regular and scheduled refresher courses publics services officials, decision makers in both the public and private sector so as to keep them informed on current and emerging issues on climate change that pertain to their specific sectors.

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