

Outcomes for Children

ACKNOWLEDGEMENTS

This document was developed by World Vision, with contributions from: Alemneh Dejene, Angeline Munzara, Carolyn Kabore, Charlotte Sterrett, Jason Garrett, John Ivaska, Judy Ho, Katherine Shaw, Margarettha Siregar, Nirvana Pradhan, Rob Kelly, Samuel Diarra, Shane Quinn, Sarah Hendker, Sarah McKenzie, Sarah Onduko, Simon Wittich, Tendai Chigavazira and Yukiko Yamada Morovic.

World Vision is a Christian relief, development, and advocacy organisation dedicated to working with children, families, and communities to overcome poverty and injustice. Inspired by our Christian values, we are dedicated to working with the world's most vulnerable people. We serve all people regardless of religion, race, ethnicity or gender.

Copyright © 2022 by World Vision International. All rights reserved. No portion of this publication may be reproduced in any form, except for brief excerpts in reviews, without prior permission of the publisher.

For further information about this publication please contact: Yukiko Yamada Morovic, Technical Director, External Engagement and Programming, Livelihoods - Yukiko Yamada_Morovic@wvi.org

CONTENTS

1. INTRODUCTION	4
1.1. Study approach	5
2. CHILD-FOCUSED ENVIRONMENT AND CLIMATE ACTION PROGRAMMING	6
3. WORLD VISION'S KEY AREAS OF ENVIRONMENT AND CLIMATE ACTION	10
3.1. Overview	10
3.2. Natural resource management	11
3.3. Agroforestry and Farmer Managed Natural Regeneration	13
3.4. Climate-smart agriculture	14
3.5. Community-based disaster risk management	17
3.6. Integrated water resource management	19
3.7. Climate empowerment – environment and climate education	20
3.8. Waste management	22
3.9. Energy-efficient technologies	24
4. CONCLUSIONS AND RECOMMENDATIONS	25

1. INTRODUCTION

Climate change is a key driver of extreme poverty, inequality and child vulnerability, and it impedes the realisation of children's rights as enshrined in the United Nations Convention on the Rights of the Child. As children's unique development needs mean they are especially vulnerable to climate change impacts, the climate crisis risks reversing 25 years of gains made in child health and reduced child mortality. Rising global temperatures are diminishing agricultural yields and increasing both the frequency and intensity of extreme weather events such as floods, droughts and storms, risking lives and livelihoods and disrupting education, while increasing hunger and malnutrition.

World Vision has a long history of implementing programmes that address the impacts and causes of climate change, and deliver positive outcomes for vulnerable communities and the natural environment. World Vision acknowledges that to effectively address the climate crisis and

improve the well-being of children, we must take concurrent actions to end global poverty and inequality, support at-risk communities to build resilience, and reduce global climate and environmental impact.

Recognising climate change as a key accelerator of extreme child vulnerability, in 2021, World Vision undertook a review of our programmes to identify and provide evidence for how they are addressing environment and climate issues while making positive contributions to child well-being. This report presents the results of that review, describing the different areas of work and highlighting examples of environment and climate action in our field programmes. We identified promising practices and make recommendations that are relevant for our own organisation and other agencies working towards a climate-safe future for children.

Key international instruments underpinning World Vision's climate action

A number of key international climate change and development frameworks, policy instruments, and strategies are inextricably linked. These instruments are fundamental to tackling the climate crisis and ensuring children's rights to a healthy, safe and sustainable environment and future.

- UN Convention on the Rights of the Child (UN CRC): While children have a right to a healthy environment, climate change threatens their survival and development, undermining the full and effective enjoyment of their rights, as outlined in this convention.
- Paris Agreement: This agreement of the UN Framework Convention on Climate Change (UNFCCC) deals with climate change mitigation, adaptation and finance, and aims to strengthen the global response to the threat of climate change by keeping global temperature rise this century well below 2°C and as close to 1.5°C as possible above pre-industrial levels.
- UN 2030 Agenda for Sustainable Development: Action to combat climate change is a specific priority in the Sustainable Development Goals (SDGs, including SDG13 Climate Action) and intrinsically linked to the achievement of all 16 other goals.
- Sendai Framework for Disaster Risk Reduction (2015–2030): This framework is a roadmap to make communities safer and more resilient to disaster with the aim of reducing disaster risks and loss of lives, livelihoods and health.
- **UN Decade on Ecosystem Restoration 2021–2030:** This strategy accelerates existing global restoration goals, such as the Bonn Challenge, which aims to restore 350 million hectares of degraded ecosystems by 2030.

1.1. Study approach

This study was based on a desktop review of World Vision's project design and reporting documents. We identified projects that address environment- and climate-related issues by considering the objectives, indicators and descriptive content in project planning. Coding and analysing the project indicators and output objectives allowed us to identify environment and climate action themes, understand the nature of the climate action, and record the number and locations of projects undertaking the work. This exercise identified over 1,100 World Vision projects in 45 countries addressing environment and climate issues.

It was beyond the scope of the study to undertake detailed analyses of this large number of projects. Therefore, World Vision conducted more in-depth qualitative analysis in a select number of projects which were intentionally chosen to reflect geographic and contextual diversity of environment and climate action programming. These cases were reviewed in detail based on resources that could be collected at the time, such as design documents, proposals, narrative reports and technical documents. The results presented here highlight the value and diversity of World Vision's contributions to supporting vulnerable communities in the key areas of environment and climate action and also reveal some areas of improvement for our organisation and our partners.



2. CHILD-FOCUSED ENVIRONMENT AND CLIMATE ACTION PROGRAMMING

As a child-focused agency, World Vision's programmes aim to change the lives of the world's most vulnerable girls and boys. The natural environment and climate change directly influence children's well-being by playing significant roles in food and nutrition; water, sanitation and hygiene (WASH); disease and immunity; physical and

mental development; and hope and security. World Vision aims to deliver sustainable development outcomes for children, families and communities through our programme approaches that build their resilience and improve climate change mitigation and adaptation.

Based on the findings from projects identified in this study, World Vision's work addresses eight distinct areas of environment and climate action:



Natural resource management (NRM)



Agroforestry and Farmer Managed Natural Regeneration (FMNR)



Climate-smart agriculture (conservation agriculture/agroecological approaches)



Community-based disaster risk management



Integrated water resource management



Climate empowerment through environment and climate change education



Waste management



Energy-efficient technologies

Some of these categories are interconnected and overlapping, and some projects address multiple aspects of environment and climate work. In this study, the areas of action assigned to each project were based mainly on project impact objectives and outcomes. Table 1 offers some examples of the ways in which different interventions from World Vision programmes generate desired change over time and ultimately improve outcomes for children, aligned with the Sustainable Development Goals (SDG).

Table 1: World Vision's climate action contributing to child well-being objectivesiii

Areas of action	Climate change impact to address	Intervention examples	Short-term change (1 year)	Long-term change (after 2 years)	Our's Child well-being objectives	SDG										
Environment and natural resource management (Climate change mitigation + adaptation)	- Drought - Land degradation - Food insecurity - Water scarcity - Flooding	Infiltration trench maintenance and establishment; dead and graded contours establishment Stone bunds establishment; gully reclamation	Improved groundwater holding capacity; more water available for agriculture Enhanced soil cover; reduced soil erosion Improved	Improved soil fertility, crop production and productivity; improved access to food Better land productivity Improved crop	Children are well-nourished. Girls and boys are cared for, protected, and participating. Children have hope and vision for the future. Community is resilient to shocks and disasters.	are well- nourished. Girls and boys are cared for, protected, and participating. Children have	are well- nourished. Girls and boys are cared for, protected, and participating. Children have	are well- nourished. Girls and boys are cared for, protected, and participating. Children have	are well- nourished. Girls and boys are cared for, protected, and participating. Children have	are well- nourished. Girls and boys are cared for, protected, and participating. Children have	are well- nourished. Girls and boys are cared for, protected, and participating. Children have	are well- nourished. Girls and boys are cared for, protected, and participating. Children have	are well- nourished. Girls and boys are cared for, protected, and participating. Children have	are well- nourished. Girls and boys are cared for, protected, and participating. Children have	are well- nourished. Girls and boys are cared for, protected, and participating. Children have	1 MO POVERTY THE POVERTY 2 ZERO HINDER COLUMNITY 3 GOODING ALTH AND WILLISH NO
Agroforestry and Farmer- Managed Natural Regeneration (FMNR)	- Land degradation - Food insecurity - Water scarcity - Flooding	indigenous trees; enrichment tree-planting; woodlots tree-planting; community- generated by-laws	ground cover; reduced soil erosion; reduced flooding	production and productivity; improved access to food		6 CLEAN NATE AND SANITATION OF CLEAN ENERGY COMMONING AND PRODUCTION OF CLEAN ENERGY COMMONING AND PRODUCTION OF CLEAN ENERGY COMMONING COMMONING COMMONING COMMONING COMMONING COMMONING COMMONING COMMONING COMMONING COMM										
Climate-smart agriculture	 Drought Land degradation Food insecurity Water scarcity Flooding 	Drought tolerant crops and livestock Compost/biochar establishment	due to climate impact Improved access to nutrients;	More sustainable crop and livestock production High yields from diversified crops; increased soil		13 CLIMATE ACTION 15 UTE ON LAND										
(Sustainable intensification, adaptation + mitigation)	- Flooding	Nutrition/kitchen/ home gardens establishment	increase in productivity Use of household resources to grow leafy vegetables and more nutrient-dense foods	health; greater soil carbon storage Improved food and nutrition security, especially for children; support incomes of women through market sales			16 AND THOSE MESTITUTIONS SET TO THE GALS 17 PARTNESSINGS FOR THE GALS									
		Practice of conservation agriculture farming	Increased water-holding capacity; increased soil fertility; improved crop yields	Improved access to food; improved resilience to shocks												

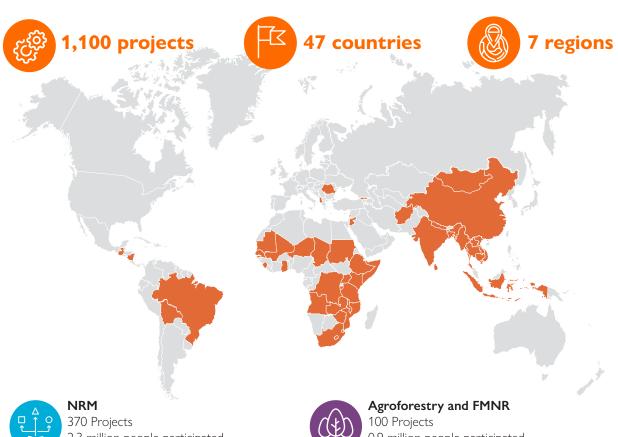
Areas of action	Climate change impact to address	Intervention examples	Short-term change (1 year)	Long-term change (after 2 years)	Our's Child well-being objectives	SDG		
Community-based disaster risk management - Disaster impacts - Water scarcity - Food insecurity - Flooding	impacts - Water scarcity - Food insecurity	Child-focused disaster risk management planning and awareness- raising at school/ community	Improved knowledge and awareness	Improved response mechanisms; improved resilience to shocks and disasters	is resilient to shocks and disasters. Girls and boys are cared for, protected, and	is resilient to shocks and disasters. Girls and boys are	is resilient to shocks and disasters. Girls and boys are	5 GENER FRANKE F
		Training in disaster preparedness, disaster risk reduction and disaster management	Improved knowledge and awareness	Improved response mechanisms; improved resilience to shocks and disasters		NSTITUTIONS ** ** ** ** ** ** ** ** **		
		Development of hazard risk reduction plans, strategies and policies, anticipatory action, and disaster preparedness and contingency plans	Risk mitigation measures in place	Improved response mechanisms; improved resilience to shocks and disasters				
Water resource management (Sanitation promotion and hygiene improvement)	- Water scarcity - Water contamination - Vector and diarrheal disease - Increased disease prevalence	Rehabilitation/ con-struction of water infrastructures (boreholes, wells, water reservoirs, water harvesting)	Increase in access to water for households and animals; surplus water used to support production; improved water quality; reduced diarrheal diseases, and water-related diseases	Improved health, hygiene and environment; improved production and productivity	Community has access to safe water, sanitation and hygiene. Children are well- nourished.	3 GOOD HEATH NAME OF THE PARTY		
		Construction/ maintenance of check dams and sand dams, including gabions to protect watercourse	Reduced siltation of dams; water- holding capacity of dams maintained	Water available for longer periods; higher water table near sand dams improves water access; improved crop and livestock production and productivity				

Areas of action	Climate change impact to address	Intervention examples	Short-term change (1 year)	Long-term change (after 2 years)	Our's Child well-being objectives	SDG
Climate empowerment – environmental	Disaster impactsDisplacementLoss of livelihoods	Livelihood-based trainings (e.g., FMNR, climate- smart agriculture, apiculture, mangrove restoration) School-based	Improved knowledge and awareness; improved production capacity	Increased yields and income from different forms of production Behaviour change	Children are well-nourished. Children have hope and vision for the future.	4 COMMITTY DE CONTRE LE COMMITTY DE COMMIT
education and awareness- raising		awareness-raising, including safe school initiatives	knowledge and awareness	and improved practices		
Waste management	Pollution,ContaminationIncreaseddiseaseprevalence	Community- based solid and liquid waste management; human and animal faeces management	Solid and liquid waste collection and treatment system in place	Reduced contamination; improved health	Children are protected from infectious disease and preventable death.	3 GOOD HEALTH AND WELL-BEING FOR ENDER S GENDER S GENDER
(Climate change mitigation)		Provision of waste disposal bins	Reduced disease spread; reduced pollution	Reduced contamination; improved health		6 CLEAN WATER AND SANITATION 11 SUSTAINABLE CITIES AND COMMUNITIES
		Recycling of waste and awareness- raising; sanitation promotion, hygiene practices	Clean environment	Reduced pollution		♠██▆
Energy- efficient technologies (Climate change mitigation)	Air pollution	Fuel-efficient stoves	Use of less fuelwood compared to open fires, reducing costs to purchase fuel or time normally allocated to collecting fuelwood especially for women; reduced indoor air pollution; lower risk of a catastrophic kitchen fire	Reduced pressure on forests; jobs growth for local stove artisans; reduced greenhouse gas emissions that can translate (via sales of carbon credits) into income for communities; children living with improved indoor air quality	Children are protected from preventable death.	3 GOODMEADTH AND WELL-SPING

3. WORLD VISION'S KEY AREAS OF ENVIRONMENT AND CLIMATE ACTION

3.1. Overview

The scale of World Vision's environment and climate action work:





2.3 million people participated

24 countries



0.9 million people participated

27 countries



Climate-smart agriculture

630 Projects

3.3 million people participated

33 countries



Community-based disaster risk management

210 Projects

1.1 million people participated

15 countries



Integrated water resource management

30 Projects

0.3 million people participated 7 countries



Climate empowerment through environment and climate change education

670 Projects

3.8 million people participated 34 countries



Energy-efficient technologies

6 Projects

0.5 million people participated

3 countries



Waste management

260 Projects 2.4 million people participated

Source: World Vision project logframes, including projects active from 2020 onwards. The numbers are based on data available in World Vision's Horizon platform and are approximate.

Overall gender representation among participants of these projects was 51% female and 49% male.

*Some projects counted in multiple focus areas.



3.2. Natural resource management

World Vision promotes sustainable Natural Resource

Management (NRM), complemented by climatesmart agricultural approaches, energy-efficient technologies and practices, and the development of inclusive market systems which target women, small producers and other vulnerable community members to strengthen sustainable agricultural production and market access.^{IV}

Our work in NRM protects and restores land, vegetation and water to ensure sustainable improvements in agroecosystems. Projects typically focus on smallholder farmers working in semi-arid rain-fed farming systems, where declining household food and income security and increasing exposure to climate-related shocks and disasters place children's well-being at risk.

Key outcomes of NRM interventions include the following:

- improved soil, water and vegetation/tree conservation
- increased hectares of land (e.g., crop, pasture) and/or forest areas under sustainable community-based management
- improved vegetation cover, improved soil carbon and increased tree density on farms and in degraded areas
- improved health and nutrition
- increased fodder, firewood, timber and other forest products
- reduced reliance on natural resources (e.g., for livelihoods, household chores) through adoption of energy-saving technologies and practises
- gender-sensitive regulatory frameworks that support climate resilience.

SPOTLIGHT: Integrated Management of Natural Resources for resilience in Arid and Semi-Arid Lands (IMARA) in Kenya^v

The IMARA programme objective is to increase the resilience of marginalised households to climate-change—related shocks. This is done through diversified livelihoods and improved natural resource management in the arid and semi-arid lands counties of Isiolo, Laikipia, Marsabit and Samburu. The three-year programme, co-funded by the Government of Sweden in partnership with Northern Rangelands Trust and the Stockholm Environment Institute, has an overall budget of over US\$10 million.

It applies a conflict-sensitive approach with multiple components including NRM-based value chains, such as honey production, gums and resins collection; FMNR for increased fodder for livestock; Savings for Transformation groups for improved saving; vocational training for vulnerable youth; water infra owls beer structure installation; and peacebuilding and conflict resolution activities. The four intended outcomes are as follows:

- secure livelihoods and strengthened market systems including for women and youth that support sustained management of natural resources
- sustainable management and rehabilitation of land, forest and water resources for strengthened ecosystem services
- strengthened governance systems and structures for sustainable NRM at community, county, and arid and semi-arid region
- programme monitoring, evaluation, accountability, learning and research effectively coordinated.

SPOTLIGHT: Eco-friendly villages in Bangladeshvi

World Vision Bangladesh has been a forerunner in integrating climate actions under its 'eco-friendly villages' initiative. An eco-village strives to reduce negative impact on the natural environment through intentional physical design and resident behaviour choices. People living in eco-friendly villages seek alternatives to ecologically destructive electrical, water, transportation and waste-treatment systems to build more socially, economically and ecologically sustainable communities.

Through local environmental risk assessment, the programme team gained an enhanced understanding of the anticipated risks and developed a plan of action to mitigate or reduce the risks. The programme focuses on sensitising communities about the negative effects of environmental degradation. The programme interventions aim to protect the environment which supports their activities sustainably. To strengthen the community's climate resilience, World Vision implemented training on natural resources management and non-farm production, supported value chain development, and

established environment-friendly production systems.

In Kisoreganj Area Programme, World Vision Bangladesh is piloting eco-friendly village activities in four villages. One such activity the village development committees are replicating is vermicomposting production. Since 2011, more than 1,000 ultra-poor households in this area are continuing to produce and apply improved compost to homestead gardens and field crops.

In 2021, World Vision Bangladesh initiated a total of 177 eco-friendly villages in its 48 area programmes. This will include implementing and promoting programmes to build more socially, culturally, economically and/or ecologically sustainable communities through the following: tree plantation, bio fortified crops, Bondhu Chula (Friendly Stove), compost and bio pesticides usage, hygienic latrines, climate adaptive technologies, floating gardens in coastal bed districts, hydroponic fodder cultivation, solar power use, and permaculture.



Vermicompost producer.



3.3. Agroforestry and Farmer Managed Natural Regeneration

Climate change, unsustainable farming practices and exploitation of natural resources are rapidly degrading the landscapes of communities in rural areas. When landscapes are degraded, communities cannot sufficiently grow food, gather water or access firewood. They are also more vulnerable to climate-induced disasters and natural resource-based conflicts. This negatively impacts the community's ability to develop sustainable livelihoods, resulting in more fragile communities and more vulnerable children.

Farmer Managed Natural Regeneration (FMNR), an example of an NRM intervention, is a community-led, nature-based solution that reverses environmental degradation and tackles poverty, hunger and climate change through the regeneration of trees and shrubs. This natural regeneration of trees from living tree stumps and wild seedlings has a significantly higher success rate than tree planting, though tree planting is often a necessary complementary activity. FMNR has an immediate positive effect on the environment and micro-climate in the respective area under practice, while it can easily be integrated with additional measures such as climate-smart agriculture (CSA) in order to tap its full potential.

Through its community-based management of trees and forest resources, FMNR gives individuals and communities responsibility for the care and nurture of naturally occurring woody vegetation, and a number of benefits from the sustainable harvesting of wood and non-timber forest products.

Gender equality and social inclusion are also key components of FMNR. Successful FMNR systems lighten the burdens of women and girls by increasing access to resources such as firewood, but also enhance the leadership role of women in protecting their farmland and communal areas. FMNR was selected by the United Nations as a key good practice contributing to 12 of the 17 Sustainable Development Goals (SDGs).^{vii} World Vision has introduced FMNR to 27 countries since 2009.

Key outcomes of agroforestry and FMNR programming include the following:

- increased tree cover on crop, pasture, private and common lands
- decreased wind and water damage to crops and soil
- increased water retention in watershed
- improved nutrition, dietary diversity and access to food
- increased informal employment opportunities and income-generation potential (with resulting food, educational, and development benefits to families and children)
- increased crop yield and diversity
- increased access to firewood for home or sale use
- increased access to wood for non-fuel uses for home or economic activities
- less need to migrate for access to pastures or work
- improved NRM through local development of community by-laws and ability to influence policy and government structures.

Nature-based solutions

The International Union for Conservation of Nature (IUCN) defines nature-based solutions (NbS) as actions to 'protect, sustainably manage and restore natural and modified ecosystems in ways that address societal challenges effectively and adaptively, to provide both human wellbeing and biodiversity benefits'. Whis have been increasingly featured in the environment and climate change policies and plans, with growing international support. FMNR is an example of NbS.

SPOTLIGHT: Carbon sequestration through the Humbo forestry projectxi

The Humbo forestry project, a community-managed reforestation initiative in southwest Ethiopia, has regenerated 2,728 hectares of previously degraded land. Carbon stock monitoring data from World Vision's Humbo Community Managed Natural Regeneration Project (2005–2035) in Ethiopia found that FMNR activities led to the sequestration of 254,989 tCO2e^{xii} to date and the sale of carbon credits has generated over US\$700,000 income for local communities. The project also supported the provision of technical training on FMNR, value chain development, savings and loan groups, and carbon stock monitoring. The project is expected to remove

>870,000 tCO2e from the atmosphere by 2035, the expected project end date. The restored landscape has also helped to strengthen livelihoods in the local community through increased grass cover for livestock, increased availability of firewood, recovery of springs and groundwater, decreased erosion, and less flooding. The project made an intentional effort to include femaleheaded households and women, which has enhanced women's participation in the forest management groups and cooperative's platform. As we support the restoration of landscapes, we see the restoration of hope for communities who once felt powerless in the face of climate change.



3.4. Climate-smart agriculture

Climate-smart agriculture (CSA) is based on three principles: sustainably increasing the productivity of agricultural systems, increasing climate resilience and mitigating or reducing greenhouse gas emissions arising from agricultural systems. World Vision promotes all three principles under its livelihoods programming. This includes, for instance, the promotion of agroforestry, conservation agriculture, water harvesting, crop diversification, biochar and composting, climate information services, and erosion control techniques. These methods and approaches build resilience to climate change while increasing farm productivity. World Vision acknowledges that CSA is an approach that requires contextualised practices and actions. Identifying contextualised components and practices - based on local climate threats, needs, resources, skills, preferences and public policies is therefore a critical first step in the design and implementation of CSA in practice.

Adopting CSA practices can reduce the climaterelated risks faced by smallholder farmers as well as mitigate the effects of extreme weather events on farms. CSA offers:

- enhanced food security by sustainably increasing the reliability and productivity of agricultural livelihood activities
- increased smallholder resilience and adaptation to the likely effects of climate change
- where appropriate, and in the interest of smallholder farmers, reduced greenhouse gas emissions from agriculture and improved carbon sequestration.xiii

Key outcomes of CSA interventions in World Vision programmes include:

- trained farmers apply climate-smart agricultural practices including efficient water systems such as solar pumps and drip irrigation
- agricultural inputs (tools, improved seeds and other inputs) are accessed and utilised
- improved soil fertility and soil health, with residual soil carbon
- improved nutrition, dietary diversity and access to food
- kitchen gardens/home gardens/vegetable gardens established
- permaculture sites are established to support household-level water management and household gardens
- agroforestry/trees-on-farms are in place which prevent erosion and increase infiltration.

SPOTLIGHT: Eco-Agriculture in Sahelxiv

Many communities in the Sahel region of West Africa are afflicted with chronic and increasing poverty arising from a variety of linked challenges, the most central challenge being low and unreliable production of food crops and livestock in communities with agriculturebased economies. In the absence of adequate and resilient farming output, other problems commonly cascade through communities: widespread food insecurity, decreased family income, fewer children in school and more children working, decreased safety for women and children, increased prevalence of malnutrition (both chronic and acute), increased incidence of disease, limited access to healthcare, and communities suffering repeated disasters such as famine.

Improving the resilience of smallholder farmers to climate shocks and stresses is essential to ending hunger and poverty. World Vision Mali implemented the *Eco-Agriculture* project in the

Diema and Kolokani districts of Mali from 2013 to 2018. The project focused on restoring land, improving water availability and crop yields, and enhancing accessibility to agricultural markets, with the goal of helping farmers improve household food and nutrition security so that they can move out of poverty.

The project had two phases. Phase I (2013–2015) promoted FMNR and other CSA practices, including conservation agriculture. Phase 2 (2016–2018) added Savings Groups and Local Value Chain Development interventions to strengthen financial resilience and increase income through enhanced access to markets. This project is an example of how strong collaboration between World Vision and the Government of Mali, coupled with innovative and evidence-based interventions, can improve participation in FMNR and ultimately build resilience, restore livelihoods, and improve child health in a sustainable manner.



The women of the various S4T saving groups in Gouba Inna.

SPOTLIGHT: Strengthening weather and climate information services in Uganda^{xx}

World Vision Uganda worked with the Uganda National Meteorological Authority (UNMA) and other parts of the Ugandan Government, alongside civil-society partners and community organisations, to provide improved weather and climate information services in 22 districts across all parts of the country. The project was funded by UK Aid, through the UK Meteorological Office's WISER programme.

The project supported UNMA to improve information on weather and climate, and also to provide advice on crop suitability, farming calendars, agricultural practices, and soil and water conservation techniques for coffee, maize and beans in 22 districts. The forecasts were translated into commonly spoken languages and broadcast through channels such as email, public gatherings, social media, local radio programmes, women's groups and government extension staff. In addition, World Vision shared seasonal weather forecast information with selected district officials, farmers' associations, other local organisations and the media, and collected feedback on its access and use.

The project reached 200,504 people (120,352 women and 80,152 men) directly with improved weather and climate information in multiple languages. Over 80 per cent of them reported taking positive actions to improve their resilience as a result.

The main practices adopted were choosing specific crop varieties to plant, planting on recommended dates, pest control measures, soil conservation techniques and tree planting. Overall, the project achieved the following impacts:

- significant improvement in access to weather and climate information, from 60 per cent at the start of the project to 90 per cent
- 78 per cent of people asked, believed that the weather and climate information received was accurate and relevant (an increase from 13 per cent)
- 161,807 farmers are less vulnerable to climatic hazards
- 81 per cent of farmers surveyed are now using sustainable agricultural practices as a result of better and more timely access to weather information (up from 60 per cent at baseline).

World Vision Project Model: Building Secure Livelihoods (BSL) and CSA

The BSL project model^{xvi} provides a comprehensive pathway out of poverty for families to increase their income in a sustainable manner — moving them from merely surviving to thriving. It aims to work directly with smallholder farmers to strengthen the whole farming system by fostering positive relationships between individuals, groups and the environment; making farming more profitable; ensuring sustainable management of natural resources; and reducing the risks of disaster in the face of a changing climate.

Green recovery

World Vision is supporting a 'green recovery' from COVID-19, as we cannot mitigate future

crises without addressing climate change and taking actions to eradicate poverty and inequality. Green recovery from the pandemic implies moving from risk to resilience and building back better and stronger by addressing key underlying causes of the pandemic: unsustainable economic development, climate change and a collective disregard for the natural environment. We support sustainable economic activities by helping to protect and rebuild livelihoods in ways that consider climate risks and prioritise climate-smart outcomes.

World Vision's Fragile Context Programme Approach

Our Fragile Context Programme Approach (FCPA) aims to address collective outcomes within the humanitarian, development and peace nexus,

where the impact of climate change is most keenly felt by marginalised communities. More often than not, communities on the periphery in fragile settings do not have influence on decision-making that directly affects their lives, are discriminated against and face deep-seated structural conflict causes. These factors result in grievances that have not been addressed such as land confiscation,

forced displacement and lack of an effective government response to the evolving nature of climate change. The FCPA enables World Vision to respond flexibly to cyclical or recurrent shocks and stresses in fragile contexts — including multiple hazards resulting from climate change — thereby reducing their impact and supporting the peace that is essential for sustainable child well-being.



3.5. Communitybased disaster risk management

As the climate crisis increases the frequency of severe droughts and floods, risking the lives and livelihoods of millions around the world, World Vision partners with vulnerable children, families and communities to reduce their exposure to climate risks through Community-Based Disaster Risk Management (CBDRM). This project model includes reducing vulnerabilities and increasing capacities of the most vulnerable children, families and communities to cope with, prevent or minimise loss and damage to life, property and the environment.

The CBDRM project model primarily focuses on building existing community coping mechanisms and adaptation capacities, which leads to a locally appropriate and locally owned strategy for disaster mitigation, preparedness, and response to risk reduction. This is carried out by identifying risks well before a disaster strikes and concurrently focusing on disaster mitigation and preventive disaster measures as a part of preparedness and public awareness. World Vision facilitates capacity building for local government and community members on Anticipatory Action, an innovative approach which links early warnings to actions designed to protect families and their assets ahead of a shock before it turns into a disaster **VIII.

Before disasters hit, World Vision invests in strengthening early warning systems to support

more effective disaster preparedness and response. Disaster Management Committee training topics include leadership skills development, first aid, search and rescue, early warning, and gender equity and social inclusion, among others.

When disasters do hit, World Vision rapidly responds to provide urgent life-saving assistance and support the recovery of disaster-affected girls, boys, women and men. World Vision also supports the disaster-affected community to strengthen their disaster risk reduction and resilience plan as part of the response transition to development to help them bounce back better. In 2021, World Vision provided humanitarian assistance to 30.1 million people through 59 emergency responses in 53 countries.

Key outcomes of CBDRM include:

- communities are prepared to prevent, reduce and respond to disaster events
- community Action and Adaptation Plans (CAAPs) and Contingency Plan are in place
- hazard risk reduction plans, strategies, policies, and contingency plans in place
- local governments and communities adopt and implement local disaster risk reduction strategies (CAAPS and Contingency Plans)
- committees trained in early warning information and dissemination and key disaster risk reduction approaches.

SPOTLIGHT: Junior Rescuers in Mongolia*viii

In Mongolia, the frequency of natural hazards such as droughts, dzud (severe winter), thunderstorms, heavy rains, dust and snow storms, hail, and flash floods have been increasing year by year due in part to climate change. The climate-induced disasters are expected to grow in the future, creating urgency for Mongolia to take serious actions to reduce disaster risk and to increase disaster-preparedness capacity in the education and disaster management sectors.

World Vision Mongolia, with the effective collaboration of partners, initiated and formed 'Junior Rescuer' clubs in public secondary schools in 2014 in order to build capacity of children to reduce potential disaster risks.

Through the club activities, children learn how to protect themselves during disasters and are encouraged to become peer educators to disseminate the knowledge to thousands of other children and their families. Also, the children participate in re-evaluation of school environment safety and monitor disaster risk reduction activities at the school level.

As of 2021, around 3,000 school children have joined 320 Junior Rescuer clubs across almost 300 schools. The Government of Mongolia promotes Junior Rescuer clubs as part of its national strategy for community participatory disaster risk reduction and aims to form Junior Rescuer clubs in at least 80 per cent of all schools in Mongolia. The clubs have been recognised by the Ministry of Education, Culture, Science and Sport and the National Emergency Management Authority, and have been instrumental in developing awareness and promoting peer-to-peer knowledge dissemination among girls and boys.



Junior rescuers.



3.6. Integrated water resource management

Integrated Water Resources Management (IWRM) is a sustainable approach seeking to address the socio-economic needs of all stakeholders in a watershed, preserving the environment and considering the needs of future generations. IWRM is critical to the sustainability and resilience of rural communities. World Vision applies this approach through the development and implementation of multiple-use water systems, which provide water for domestic uses, agriculture, livestock and livelihoods. Through the IWRM approach, World Vision's programmes provide equitable access to water

while also considering the impact of pollution on human activities. WASH committees – the basic entities of local WASH governance – consult with the community on needs and the status of the current water supply. The committees also learn how to safely and efficiently manage water and sanitation resources with environmental protection in mind.*ix

Key outcomes include:

- improved access to water for irrigated agriculture and livestock production and domestic use
- rehabilitated and upgraded water infrastructure
- improved and efficient irrigation systems.

SPOTLIGHT: Integrated water point monitoring system in Somalia^{xx}

Somalia is a fragile state with inter-communal conflict, terrorism, drought and food insecurity. The decreased rainfall over the last few years has caused many issues for local pastoralists who must search for water and pasture and also the general population seeking access to sources of water. The impact on people can be managed by implementing early warning systems and providing government agencies with information for preparedness actions, such as water rationing or planning for life-saving water provision.

World Vision Canada and the UK company Wagtech Projects, collaborate on an early warning system designed to inform how much water is needed for internally displaced peoples in Somalia. The system harnesses hydrological and meteorological data collected remotely using 3G water loggers and mini weather stations. When a water point is found to be compromised, a local repair team is deployed.

Data logging stations were also installed, which utilised GSM modems for relaying data to remote servers in collaboration with service providers. Government officials and World Vision staff were trained on advanced data processing, analysis, interpretation, including geographic information system (GIS) mapping.

Through these interventions in Somalia, internally displaced peoples and refugees have more reliable access to functional improved sources of water and increased access to potable water, which when combined with hygiene promotion, reduces harmful practices leading to waterborne illnesses.



3.7. Climate empowerment – environment and climate education

World Vision is committed to Action for Climate Empowerment (ACE) ¬– a concept adopted by the United Nations Framework Convention on Climate Change (UNFCCC) – which aims to empower all members of society to engage in climate action through education, training, awareness-raising, participation, public access to information and international cooperation on these issues.*

In line with ACE, many World Vision project models – such as BSL, CBDRM, Citizen Voice and Action (CVA) and Ultra Poor Graduation – include the key building blocks of environmental education, awareness-raising and climate empowerment. In addition, World Vision-supported children's clubs and school-based committees provide behaviour change activities and climate change education.

Across multiple countries and regions, partnering with schools and Ministries of Education has enabled World Vision to contribute to the curriculum design and syllabus integration about disaster risk reduction, and environment and climate education.

Key outcomes of environment and climate education include the following:

- As part of the classroom activities, children learn to create seasonal calendars, develop hazard mapping around the school and homes, and learn the historical evolution of climate change.
- Children learn to identify the issues in their environment and are encouraged to find solutions and make plans to help prepare for emergencies.
- Children become aware of climate change and its impact, and what they can do to help sustain the environment.

SPOTLIGHT: Environmental education in Ghana

In Ghana, the Ministries of Education and Environment, Science, Technology and Innovation have integrated environmental education in school syllabuses to ensure education for sustainable development. World Vision Ghana supported this initiative by inaugurating 10 school clubs in the Garu-Tempane District and training its members in FMNR concepts as part of measures to help increase children's interest in environmental issues. The training attracted 116 participants across the 10 school clubs – 67 boys, 39 girls and 10 teachers.

World Vision Project Model: Citizen Voice and Action (CVA)

The Citizen Voice and Action (CVA) project model, World Vision's unique approach to social accountability,*Xii is designed to improve the relationship between communities and government in order to improve services such as health care, education, and social and child protection. The approach begins with civic education on people's rights, entitlements and responsibilities, followed by a social audit that allows the community to assess whether government services meet the set standards. In

a separate set of activities, communities use a scorecard to rate services against criteria that they themselves generate. The findings are presented and discussed at a town hall 'interface' meeting through which community members, service providers and other government representatives agree upon an action plan to improve services. Communities work with government and other local partners to ensure the action plan is being implemented. Since 2005, communities in 50 countries around the world have successfully applied the CVA approach, including in 15 countries designated as fragile contexts.

SPOTLIGHT: SAUTI Youth Project – climate change advocacy at a local levelxxiii

The eastern coastal region of Tanga in Tanzania has been experiencing increased deforestation due to poor control and planning, and degradation of coastal habitats. World Vision engages with youth from the coastal region in taking urgent actions to combat climate change and its impact on their community through the SAUTI Youth Project, cofunded by the European Union.

The project empowers girls and boys to be strong voices to improve community welfare in various issues focusing mostly in the area of climate change. World Vision is supporting children and youth participation in Tanzania through Citizen Voice and Action (an approach

to social accountability in communities). The project is creating young leaders who will not only spearhead proper utilisation of resources for conservation of the environment but who will also raise their voices to empower more youth inclusion in community development committees.

In addition to increasing youth engagement at the local level, World Vision advocates for the creation of mechanisms to consult with children and youth at all levels, empowering them to protect themselves from climate-related risks and to meaningfully participate in decision-making processes. World Vision also developed a SAUTI app which links directly to the global CVA database.



SAUTI youth.



In densely populated areas, solid waste management services struggle to meet demand. Ensuring effective and sustainable waste management systems — especially in refugee and internally displaced people's camps and settlements — is key to maintaining adequate and hygienic living standards and for minimising environmental and health impacts. With the

right approach, waste management can also be a source of environmental protection, revenue and employment.

Key outcomes include:

- efficient and effective solid waste management system in place
- employment opportunities created through waste management and recycling
- improved health and hygienic conditions.

SPOTLIGHT: Waste management for livelihoods (PHINLA) in Sri Lankaxxiv

PHINLA programme in Sri Lanka aims to develop livelihoods for poverty-affected populations through a waste management system with a multi-sectorial approach. Its goal is to tackle two major problems in the country: the growing urban population in poverty and the unbalanced production of waste without proper segregation and recycling systems. The programme is cofunded by the German Federal Ministry for Economic Cooperation and Development (BMZ) with an overall budget of 4 million Euro (approximately US\$4.5 million).

The programme provides livelihood opportunities for 500 households by helping them incorporate environmentally friendly solutions for waste disposal. The 'ReSource Banks' function as resource recovery centres, providing a place for the families to segregate and drop off their non-biodegradable and clean waste and earn rewards based on the type and amount. The waste brought to the centre is weighed and pre-agreed points are allocated. When the individual reaches 1,000 points, he/she is eligible to redeem them for 1,000 rupees or other alternative rewards of equal value. The centre operators facilitate value additions through further segregation, cleaning, storing, baling etc., to prepare them for resale to recycling companies.***

World Vision also provided the local authorities with trainings to ensure the implementation of the existing policy and regulation for waste management and recycling systems. Capacity building components included exposure visits on resource recovery processes and the management of Material Recovery Facilities.

SPOTLIGHT: Green Centre in a fragile context in Jordan - Waste management in refugee camps^{xx}

World Vision, with support from the European Union, has been providing solid waste management services at Azraq Camp in Jordan since 2017. The refugee camp covers 14.7km² and is 25km from the nearest town; it has a population of around 36,500 Syrian refugees.

Approximately 20.7 tonnes of waste are produced at the camp daily – just over 15 per cent of which is recyclable. The rest is primarily organic waste, which is currently not compostable in Jordan. World Vision created the 'Green Centre' to provide the only solid waste management at Azraq Camp. The Green Centre uses an environmentally friendly approach with the aim of reducing both environmental and health impacts of waste. It also reduces operating costs of waste management and provides sustainable livelihood opportunities in the form of employment for residents.

Behaviour change is crucial for initiatives like this to be effective. World Vision targeted awareness-raising campaigns towards children and their caregivers. An average of 35.1 tonnes of recyclable materials are collected monthly, 29 per cent of which is plastic waste. Recyclables are then sold to local buyers, who collect directly from the Green Centre, generating an income of approximately 2,500 Jordanian Dinars

(US\$3,526) per month. This amount pays for 20 per cent of the Green Centre's running costs. The remaining 18 tonnes of nonrecyclable daily waste is sent to the nearby landfill at Zarqa.

Key successes

- Construction and running of a Green
 Centre for sorting and processing waste,
 powered in part by solar energy.
- Provision of two types of bins for recyclable and nonrecyclable waste for every eight households.
- Daily collection of 21 tonnes of solid waste from households and community centres.
- Behaviour change campaign targeting community meetings, households, schools and children's centres – to encourage sorting and recycling at the source.
- Community mobilisers organised childfocused awareness-raising on waste separation.
- Cash-for-work opportunities for Syrian refugees through the hiring of 40 Incentive-Based Volunteers (IBVs) for daily collection and sorting and 150 IBVs on a monthly rotation for awareness-raising and behaviour-change activities.



3.9. Energy-efficient technologies

World Vision has been improving access to fuel-efficient and environmentally friendly stoves in three countries. The benefits of introducing more fuel-efficient stoves in place of open fires are numerous and cut across health and livelihoods sectors. Fuel-efficient cookstoves can reduce indoor air pollution and exposure to woodsmoke, particularly for women and children, and at the same time reduce greenhouse gases.*

Key outcomes include:

- reduced pressure on dwindling forest resources
- efficient fuel usage lowers energy costs for those purchasing fuelwood and reduces labour associated with firewood collection – typically done by women and girls
- income-generating opportunities and informal jobs for local stove artisans
- increased awareness of women and youth about climate change and the importance of transitioning to clean energy
- income generated by sales of carbon credits to support micro-loans and women's income generation, under the management of women's cooperatives.

SPOTLIGHT: Energy-efficient cookstoves in Ethiopia*xviii

According to the World Health Organization, each year, 4.2 million people die from diseases attributable to household air pollution caused by open cooking fires. *** Children are particularly vulnerable as exposure to the smoke can stunt the development of their organs and immune system.

Relying on open fire stoves also has environmental impacts; burning stove fuel releases an estimated one billion tonnes of carbon dioxide into the atmosphere each year.***

Additionally, collecting firewood contributes to deforestation and prevents women from earning money and children from attending school. Field research has shown that cleaner stoves can reduce indoor air pollution by 70 per cent and produce a 74 per cent reduction in greenhouse gas emissions**** Moreover, social benefits of improved stoves are considerable, as women who spend less time collecting fuel have more opportunities to undertake income-generating activities and take care of their children.

The project impact areas include improved community capacity, economic benefits, and environmental benefits such as reduced greenhouse gases emission.**

Key successes

- More than 50,000 people have been trained on cooperative development and improved cookstoves.
- 290 cooperatives were formed with a total of just under 50,000 members (90 per cent women).
- A culture of saving and increased financial literacy was created, especially for women and members of the cooperatives.
- 2,473 women got access to credit through their savings over a two-year period.
- The project also anticipates carbon revenue from the sale of 660,000 tonnes of CO2.



Bekelech and her co-worker, Birki, with one of the clean, fuel-efficient stoves they sell.

4. CONCLUSIONS AND RECOMMENDATIONS

This study has illustrated the focus areas, objectives and scale of World Vision projects and programmes that are reducing climate-related risks for children and their families.

Based on this work, we make the following conclusions:

- World Vision has a significant footprint in environment and climate action work globally, with a large number of projects encompassing one or more elements of environment and climate action in the design.
- Promising practices across diverse regions and contexts tend to have a multi-sectoral approach with a child-focused lens to address environmental degradation and climate change.
- Examples of promising practices and innovative designs identified in this study could be further explored and evaluated for potential to scale up.
- We have a valuable opportunity to synthesise data from many projects and show evidence of impact at scale. However, this requires an evidence framework and guidance on selection of environment and climate action indicators in project designs.

World Vision understands that effective action to address the climate crisis requires meaningful, long-term international cooperation. While we all must do our part to respond to the climate crisis, we also must support and strengthen the global cooperation that can deliver decisive and meaningful action. The section below provides recommendations for UN agencies and for local, national and international CSOs — including World Vision — to better deliver environment and climate action to the broad international community.



Integrate environment and climate action into existing programmes

One of the most effective ways to address climate issues is to incorporate climate actions into existing projects/programmes throughout the entire project/programme lifecycle***

- from assessment to design to monitoring to evaluation. Therefore, UN agencies and local, national and international CSOs should integrate environment and climate change considerations and objectives into their broader development and humanitarian work in areas such as child protection, education, health and nutrition, livelihoods, and WASH, among others.



Promote climate empowerment through environmental education and awareness-raising

World Vision's organisational commitment to child participation means creating opportunities for children and young people's experiences to be at the core of our work. As World Vision responds to the threat posed by climate change, children and young people must be active participants in developing this response.**

Informing children and young people on climate change is the very first step of their meaningful participation in environment and climate action. While World Vision integrates training and awareness-raising components and environment and climate education in most of the interventions, a climate empowerment lens should be integrated in all World Vision's core programme approaches.

We call for local and national governments; UN agencies; and local, national and international CSOs to ensure the participation of the most vulnerable – particularly children - in environment and climate action at all levels.



Scale up indigenous restoration practices such as FMNR

World Vision has become a global leader in integrating community development with landscape restoration, largely due to the successes generated by the FMNR project model. The FMNR project model and the Regreening Communities approach — a participatory approach to scaling-up indigenous restoration practices — provide a holistic way for communities to lead the restoration of their natural environment.

As part of World Vision's participation in the UN Decade for Ecosystem Restoration — a rallying call for the protection and revival of ecosystems all around the world — we are committed to equipping World Vision's partners with FMNR practices. The international community should increase its efforts to promote the scaling-up of indigenous restoration practices, strengthening government partnerships for restoration, and implementing proven practices like FMNR and CSA.



Streamline evidence building

While World Vision has a long history of implementing community-based programmes that address the impacts and causes of climate change, the field-based evidence on environment and climate action has been often fragmented due to its cross-sector nature. Using the common indicators contributing to SDG targets is crucial so as to track outcomes and impacts in a more transparent and consistent manner. The international community should promote a suite of community-based climate action projects and participatory monitoring and evaluation methods from which to showcase evidence of experience and impact.



Increase investment in environment and climate action

The international community must increase investment in environment and climate action in order to support communities to build their resilience to climate change. In particular, donors should step up investment in programmes that protect and restore environmental assets through nature-based solutions, support vulnerable communities' food security and livelihoods, and mitigate climate change.

- United Nations Office of the High Commissioner for Human Rights (2017), 'Analytical Study on the Relationship between Climate Change and the Full and Effective Enjoyment of the Rights of the Child (A/HRC/35/13)', https://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/35/13.
- Philipsborn, P and Chan, K (2020), Climate Change and Global Child Health, https://pediatrics.aappublications.org/content/pediatrics/141/6/ e20173774.full.pdf.
- ^{III} Chigavazira, T and Ho, J (2021), World Vision International Environment and Climate Landscape Report.
- World Vision (2020), Climate Action Policy Position, https://www.worldvision.co/media/publicaciones/None/World_Vision_Policy_Position_-_Climate_Action.pdf.
- *World Vision Kenya, 'Integrated Management of Natural Resources for Resilience in Arid and Semi-Arid Lands (IMARA)',

 $\underline{\text{https://www.vi.org/kenya/integrated-management-natural-resources-resilience-arid-and-semi-arid-lands-imara.}$

^{vi} World Vision (2021), 'Eco-friendly villages – World Vision's initiative to restore the ecosystem',

 $\underline{\text{https://www.wvi.org/stories/climate-change/eco-friendly-villages-world-visions-initiative-restore-ecosystem.}$

- vii UN SDG Partnership Platform, https://sustainabledevelopment.un.org/partnership/?p=30735.
- viii IUCN, 'Nature-based Solutions', https://www.iucn.org/theme/nature-based-solutions/about.
- [™] Hou-Jones, X, Roe, D and Holland, E (2021), *Nature-based Solutions in Action: Lessons from the Frontline*. London, https://climatenetwork.org/wp-content/uploads/2021/07/bond_-_nbs_case_studies_-_v4.pdf.
- *UN (2021), 'COP26 Day 7: Sticking points and nature-based solutions',

 $\underline{\text{https://www.un.org/en/climatechange/cop26-day-7-sticking-points-and-nature-based-solutions.}}$

- World Vision (2020), Climate Action Policy Position, https://www.worldvision.co/media/publicaciones/None/World_Vision_Policy_Position_-_Climate_Action.pdf.
- vii UNFCCC, 'Project 2712: Humbo Ethiopia Assisted Natural Regeneration Project', https://cdm.unfccc.int/Projects/DB/JACO1245724331.7/view.
- **ii World Vision (2014), 'The Africa Climate-Smart Agriculture Alliance', https://www.wvi.org/sites/default/files/Climate-smart%20alliance%207914.pdf.
- xiv World Vision, 'Eco Agriculture in Sahel', https://www.wvi.org/mali/video/eco-agriculture-sahel.
- xv Met Office, https://www.metoffice.gov.uk/about-us/what/working-with-other-organisations/international/projects/wiser/uganda.
- **i World Vision (2020), Building Secure Livelihoods, https://www.wvi.org/publications/economic-development/building-secure-livelihoods-2019.
- xvii Pforr, T, Weingärtner, L and Wilkinson, E (2020), 'The evidence base on Anticipatory Action'.
- World Vision Mongolia, 'Junior Rescuers Club', https://worldvision.mn/junior-rescuers-club-mongolia-mn/.
- $^{\mbox{\tiny xix}}$ World Vision, 'Integrated water resources management',

 $\underline{\text{https://www.wvi.org/clean-water-sanitation-and-hygiene-wash/integrated-water-resources-management.}}$

**Creating Hope in Conflict (2020), 'Integrated Water Point Monitoring System for Vulnerable Populations',

 $\underline{\text{https://humanitariangrandchallenge.org/innovator/world-vision-canada/.}}$

- W UNFCCC, 'What is Action for Climate Empowerment?', https://unfccc.int/topics/education-youth/the-big-picture/what-is-action-for-climate-empowerment.
- World Vision, Social Accountability, <u>Citizen Voice and Action.</u>
- will World Vision (2021), Children and young people's participation in climate action, https://www.wvi.org/publications/climate-change/children-and-young-peoples-participation-climate-action.
- www.wvi.org/sri-lanka/solid-waste-management-phinla.
- world Vision (2020), World Vision provides livelihood intervention through eco-friendly waste disposal, https://www.wvi.org/newsroom/sri-lanka/ world-vision-provides-livelihood-intervention-through-eco-friendly-waste.
- www World Vision (2019), Solid Waste Management in refugee Camps in Jordan, https://reliefweb.int/sites/reliefweb.int/files/resources/SWM%20 Policy%20Paper%20WV%20EU%202019.pdf.
- www World Vision Australia (2011), Fuel-efficient cooking stoves: a triple win for child health, development and the environment, https://www.worldvision.com.au/docs/default-source/publications/climate-change/wv_fuel-efficientcookingstovesreport.pdf?sfvrsn=871dec3c_6.
- xxviii World Vision Ethiopia, 'Clean stoves in Ethiopia',

 $\underline{\text{https://www.worldvision.com.au/global-issues/work-we-do/climate-change/clean-stoves-in-ethiopia.}}$

- wix World Health Organization (2021), 'Air Pollution', https://www.who.int/health-topics/air-pollution#tab=tab_1.
- xxx World Bank (2011), Household Cook stoves, Environment, Health, and Climate Change, https://documents1.worldbank.org/curated/en/732691468177236006/pdf/632170WP0House00Box0361508B0PUBLICO.pdf.
- World Vision Ethiopia (2019), https://www.wvi.org/sites/default/files/Coock%20Stove%20Megazine%20May%2019%202016.pdf.
- xxxxiii OECD (2011), 'Integrating climate change adaptation into development planning', https://www.oecd.org/dac/environment_development/45856020.pdf.
- *** World Vision (2020), Talk Less and Act More: Children Front and Centre of Climate Action, https://www.wvi.org/publications/report/climate-change/talk-less-and-act-more-world-needs-help-children-front-and.

World Vision is a Christian relief, development, and advocacy organisation dedicated to working with children, families, and communities to overcome poverty and injustice. Inspired by our Christian values, we are dedicated to working with the world's most vulnerable people. We serve all people regardless of religion, race, ethnicity or gender.

