

# What are Natural Climate Solutions?

Natural Climate Solutions (NCS) are nature-based solutions that address. climate change. They build on nature's capacity to remove and store carbon from the atmosphere and are among the most cost effective ways to significantly contribute towards global emissions reductions and GHG removal efforts. NCS have the potential to remove over 100 gigatons of the projected 810 gigatons of CO<sub>2</sub> removals required by the end of the century to stay on the below 1.5°C pathway. Natural climate solutions are among our strongest possibilities for combating climate change, when deployed in conjunction with other decarbonization initiatives. They are also key to meeting the other central challenges of our era, protecting biodiversity and providing positive socio-economic benefits for people.

NCS take an integrated approach to these challenges and promote synergies by tackling both climate mitigation and adaptation challenges at relatively low cost, while providing multiple additional benefits for nature and for people. This is what high-quality NCS means, integration of nature and people into a project or program's climate change mitigation promises.

## What are NCS in Action?

They are a collection of powerful testaments to the critical importance of investing in natural climate solutions on the voluntary carbon market. Through a series of compelling stories that highlight the social and biodiversity benefits, NCS in Action show how NCS investments can make a real difference in the world.

The <u>NCS Alliance</u> strongly believe that the voluntary carbon market is necessary for financing NCS projects and programs. It is critical however that it rests on the integrity of the climate benefits, i.e. the ability of credits to truly represent real and verifiable carbon reductions.

The NCS Alliance recognizes the importance of staying up-to-date with the latest science and best practices as carbon-crediting programs evolve. We acknowledge that there have been challenges with certain methodologies and that improvements have not always been

made as quickly as necessary. However, we believe that this is a valuable learning-by-doing process and that scaling up NCS is crucial in achieving global 1.5C goals. In support of this, the NCS Alliance will continue to highlight projects and programs in this space while also advocating for consistent improvement in standards and methodologies. For more information about how and when these methodologies are updated see Verra, Plan Vivo, ACR, ART.

While it is important to reduce the number of low-quality credits on the market, this is not something that can be achieved overnight. The greater threat would be to create an environment where we choose to believe it is less risky to ignore a viable solution, than to explore how we can support high-integrity credits which have the potential to scale climate action that communities around the world need as priorities.

So far, the NCS Alliance has 19 NCS in Action testimonials. Each has its own peculiarities and specificities; all have generated climate change mitigation outcomes; biodiversity gains; and benefits for the local communities. The next pages illustrate the total impact they have had to date in these areas.

#### Impact to date across 19 Natural Climate Solutions Testimonials



## Fundaec

### NCS in Action: projects with impact

To elevate the successful human, environmental and climate stories behind NCS around the globe, the <u>Natural Climate Solutions Alliance</u> (NCSA) highlights NCS examples focused on mitigating environmental and social risks and generating positive environmental impacts and socioeconomic benefits. These are <u>NCS in Action</u>.

	Kasigau REDD+ Project	Northern Kenya Rangelands	<u>Laguna Om</u>	<u>Nii Kaniti</u>	<u>Makame</u> avannah	<u>Ntakata</u> <u>Mountains</u>
Region	Kenya	Kenya	Mexico	Peru	Tanzania	Tanzania
Project Type	REDD+	Agricultural Land Management	Conservation	REDD+	REDD+	REDD+
Carbon Programme	VCS + CCB	VCS + CCB	CAR*	VCS + CCB	VCS + CCB	VCS + CCB
Area	169,741 ha	1,993,075 ha	84,000 ha	127,004 ha	104,065 ha	216,000 ha
Ecosystem	Dryland Forest	Savannah	Tropical Rainforest	Tropical Rainforest	Savannah	Forest
Mt CO <sub>2</sub> e reduced or removed / yr	1.5	1.4	0.42	0.56	0.14	0.55
Biodiversity Benefits	Over 15 HCV species protected including important endangered populations such as Grevy's zebra and African Wild dogs	9 species populations growing, including 4 of which are endangered	Preserves rainforest from deforestation, promoting restoration and conservation in areas with high biological and cultural value	5 threatened species protected including the jaguar, blue-headed macaw and tapir	Reduced deforestation across 364,000ha, 93% reduction in poaching, 13 threatened species protected, 5 critically endangered	1.25 million trees protected, 12 threatened species protected, 3 of which are endangered
Social Benefits	Project activity support 300 jobs and has increased water access for >50,000 people, 120 school projects and awarded >25,000 student bursaries	An initial \$15 million received for 14 conservancies, benefiting 175,000 people	500 livelihoods are supported, 35% of income is reinvested in climate action.	18 sustainable enterprises created or supported, 7 indigenous communities involved in the project and 32 women in management roles	\$900,000 for 5 Maasai communities, 14,900 people directly benefit	135 businesses started with microloans supported by revenue, 50% of businesses owned by women.

	Yaeda-Eyasi Landscape	Carbon by Indigo	Mai Ndombe REDD+	Conservation Coast	Katingan Mentaya <u>Project</u>	<u>Rimba Raya</u>
Region	Tanzania	USA	Democratic Republic of Congo	Guatemala	Indonesia	Indonesia
Project Type	REDD+	Soil Enrichment	REDD+, A/R, IFM	REDD+	REDD, ARR, WRC	REDD+
Carbon Program	Plan Vivo	CAR	VCS + CCB	VCS + CCB*	VCS + CCB	VCS + CCB* + SDVista*
Area	110,527 ha	2,023,428 ha	300,000 ha	54,157 ha (expanding to 128,448 ha)	4,157 ha (expanding 128,448 ha) 149,800 ha	
Ecosystem	Forest	Farmland	Tropical Rainforest	Tropical Rainforest	Tropical Peatland	Peat Swamp Forest
Mt CO <sub>2</sub> e reduced or removed / yr	0.17	0.02	5.6	0.73	7.5	3.5
Biodiversity Benefits	Protects over 171,000 trees from deforestation Wildlife numbers are improving with giraffe sightings increased by 68%.	Regenerative farming makes for more resilient and nutritious soil for healthier crops which need less chemical fertilizer and soil holds more water, reducing runoff and erosion.	Return of previously eradicated species, including elephants, leopards, and buffalo, as well as the recovery of critical Bonobos populations	Protection of the Mesoamerican Biological Corridor, which is vital habitat for 120 migratory birds	Protection of endangered species, including the Bornean orangutan and Sunda pangolin	Protects habitat for endangered species, including the Bornean orangutan
Social Benefits	Carbon finance supports traditional hunter gatherer lifestyle of one of the last remaining communities like this in the world.	100% increase in price of carbon credits since first enrolment, working over 30 US states supporting regenerative farmers	Direct payments to 28 villages in the project area	Project activities support 487 jobs, 24% of which are held by women	Improves wellbeing and develops sustainable sources of income for 34 local communities	Employs 200 people, providing medical services to village members

	Sumatra Merang Peatland Project	Luangwa Community Forests Project	Keo Seima	<u>Vida Manglar</u>	LZRP	<u>Guyana</u>	Southern Cardamom
Region	Indonesia	Zambia	Cambodia	Colombia	Zambia	Guyana	Cambodia
Project Type	ARR, WRC	REDD+	AFOLU, REDD+	Blue Carbon	REDD+	JREDD	AFOLU, REDD+
Carbon Program	VCS + CCB*	VCS + CCB	VCS + CCB	VCS + CCB	VCS + CCB	ARTTREES	VCS + CCB +SDVista
Area	23,000 ha	1,037,000 ha	292,690 ha	7,561 ha	40,126 ha	18,001,790 ha	465,839 ha
Ecosystem	Peatland Forest	Riparian Forest	Forest	Mangrove Forest	Forest	Rainforest	Rainforest
Mt CO <sub>2</sub> e reduced or removed / yr	1.3	1.7	1.4	0.03	0.2	22.6	3.9
Biodiversity Benefits	Protection of a high conversion priority region, including the Merang biodiversity corridor	Protects over 565 million trees from deforestation and conserves a major wildlife corridor	85 globally threatened species protected (13 critically endangered)	3 HCV species protected (2 endangered and 1 vulnerable).	One of Africa's last 10 lion strongholds, and home to one of the region's largest elephant populations.	Guyana has a low deforestation rate (0.05%), high forest cover (99%), and is home to many of the worlds plant (2.4%) and animal species (4%).	Efforts protected 35 IUCN Red List species. >24,546 patrols removed 27,721 logs, 5,624 chainsaws, 175,534 snares, and rescued 3,058 animals.
Social Benefits	Supports community development initiatives, including 100 jobs created	Activities support 217,000 community beneficiaries across 12 Chiefdoms	3 protected areas in 5 villages, 4 more in process. Clean water for 2,200 people, improved healthcare access, and >\$400K distributed to local communities.	12,000 inhabitants benefit from mangroves' ecosystem services. 435 families benefited from programs promoting sustainable economic alternatives.	18 community initiatives to mitigate deforestation including eco-tourism, climate-smart agriculture training, eco-charcoal, bee-keeping, school environmental education, scholarships, forest football, and savings and loans groups.	224 loans, 591 grants, 4,482 trained in business management, 2,101 jobs in low-carbon sectors, 111 Amerindian villages titled, and ICT access for 27,000 households.	215 employed, 82,548 have better water from 43 wells. >\$360,000 in bursaries awarded (62% to women/ girls), \$2.1M USD distributed for community activities.

<sup>\*</sup>Components of this project are still under verification. A/R = Afforestation/Reforestation

CAR = Climate Action Reserve IFM = Improved Forest Management Mt CO<sub>2</sub>e = million tonnes of carbon dioxide equivalent REDD = Reducing emissions from deforestation and forest degradation SDVista = Sustainable Development Verified Impact Standard VCS = Verified Carbon Standard WRC = Wetlands Restoration and Conservation 1 tonne CO<sub>2</sub>e = 1 credit

To read the stories behind the stats and found out more about NCS click here.





ARR = Afforestation, Reforestation and Revegetation CCB = Climate, Community and Biodiversity Standards ha = hectares