WWF BANKABLE OPPORTUNITIES

ERS, May 2021

A Bankable Nature Solution or any project or company that:

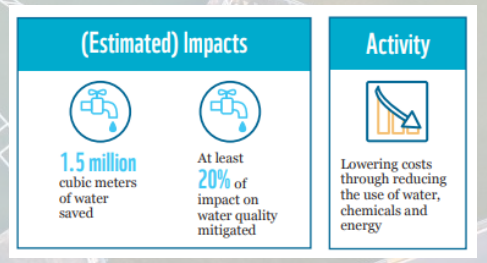
1. Has a positive impact people and nature at a landscape level
2. Generates a positive financial return*

**In many cases it will use blended finance*

EXAMPLES

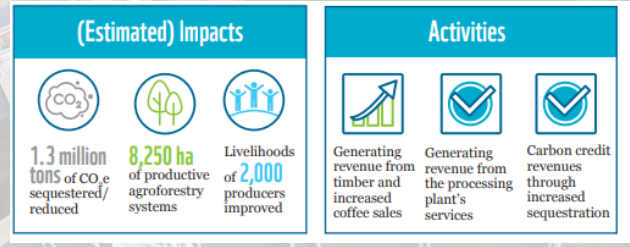
BÜYÜK MENDERES RIVER BASIN

Cleaner production methods in the textile sector WWF, Central Government of Turkey (Department of Water Affairs), metropolitan authorities of Aydin and Denizli, South Aegean Development Agency (GEKA), international buyers/brands, textile manufacturing companies



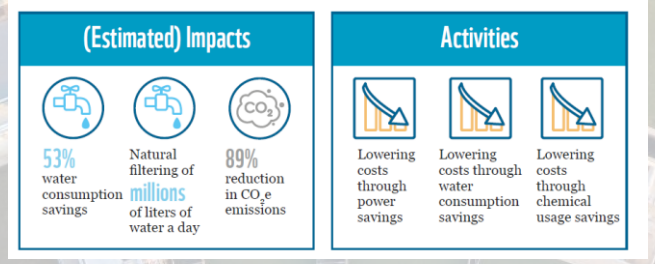
CAFÉ SELVA NORTE

Climate-smart coffee agroforestry systems in Peru The Land Degradation Neutrality (LDN) Fund, LDN Technical Assistance Facility (TAF), URAPI Sustainable Land Use Vehicle, ECOTIERRA



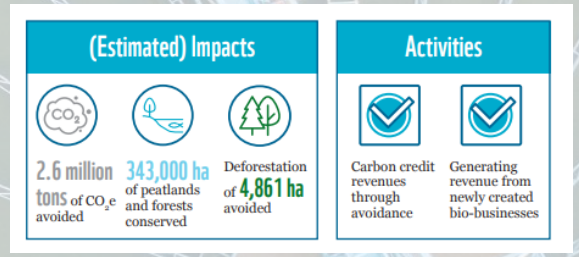
INGOLDISTHORPE WETLAND

A natural capital solution of the first water utility green bond in Europe from Norfolk Rivers Trust (NRT), Anglian Water, Environment Agency, William Morfoot Ltd



RESILIENCE OF WETLANDS IN PERU

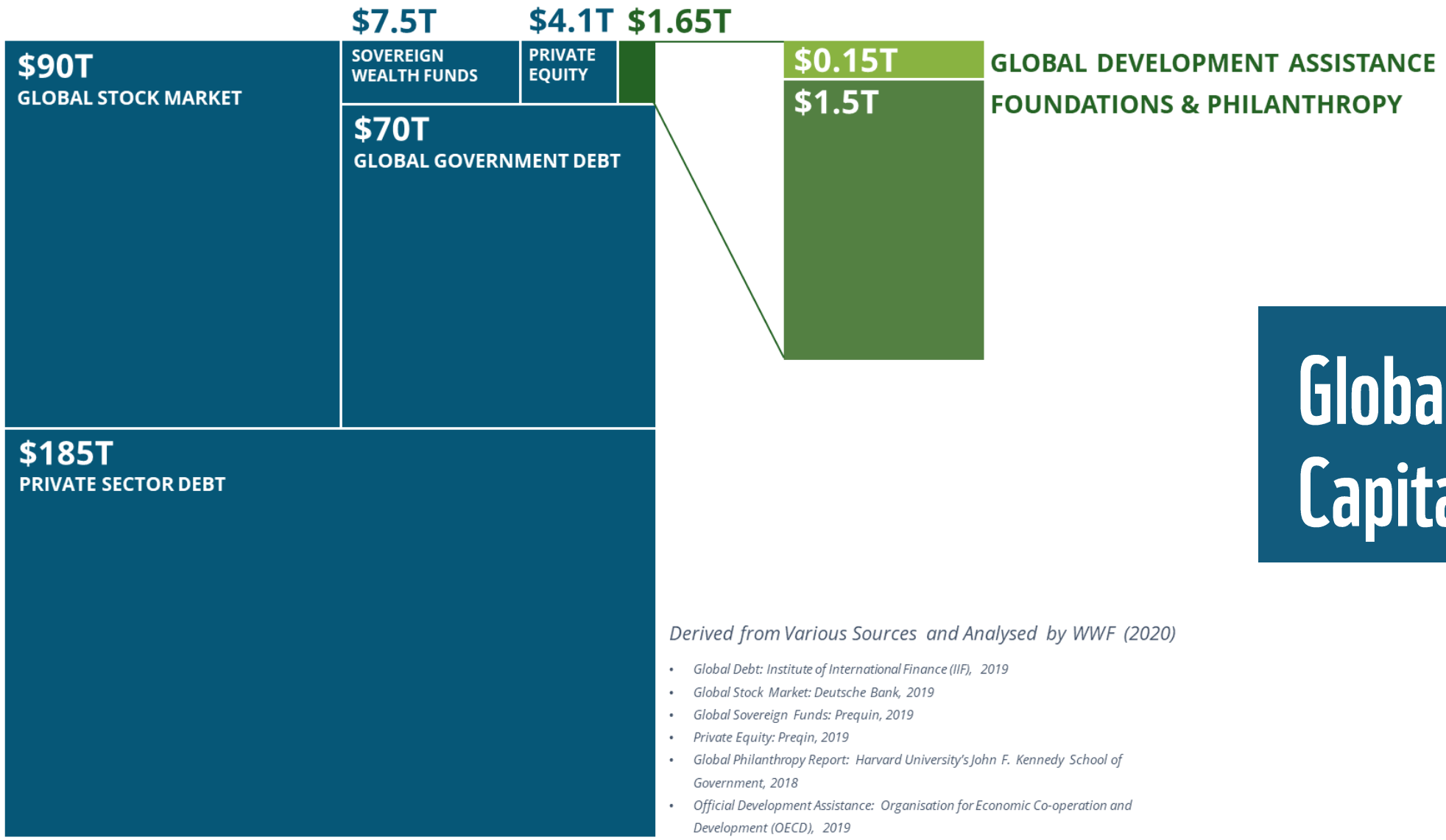
Building the resilience of Wetlands in the Province of Datem del Marañón, Peru Green Climate Fund (GCF), Peruvian Trust Fund for National Parks and Protected Areas (Profonanpe), Korean government



FINANCING GAP

Analysed by WWF (2020)

Data: UNCTAD. 2014. "World Investment Report: Investing in the SDGs: An Action Plan."

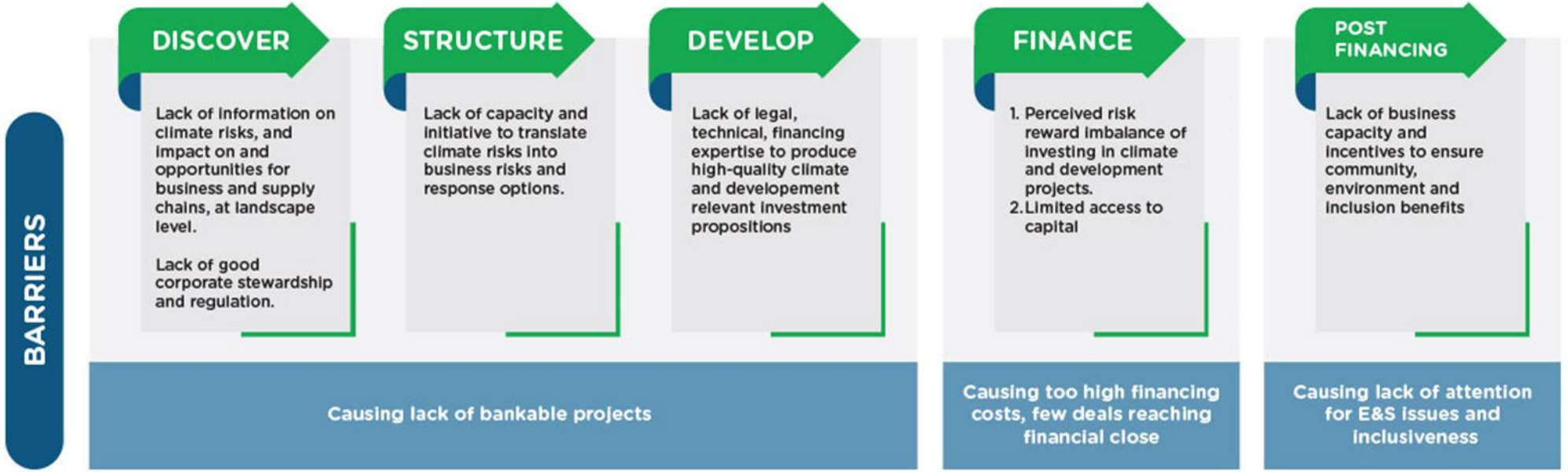


Global Financial Capital

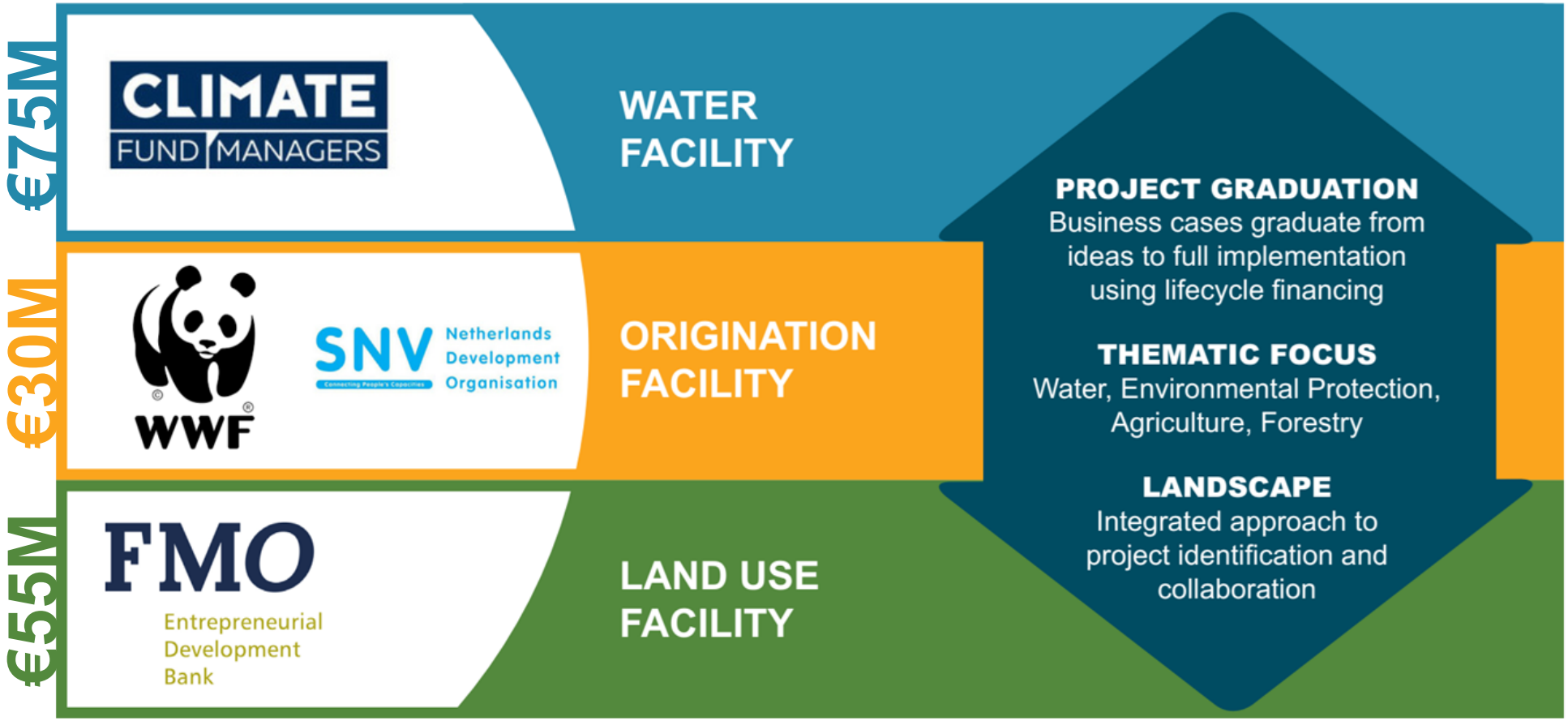
Derived from Various Sources and Analysed by WWF (2020)

- *Global Debt: Institute of International Finance (IIF), 2019*
- *Global Stock Market: Deutsche Bank, 2019*
- *Global Sovereign Funds: Prequin, 2019*
- *Private Equity: Preqin, 2019*
- *Global Philanthropy Report: Harvard University's John F. Kennedy School of Government, 2018*
- *Official Development Assistance: Organisation for Economic Co-operation and Development (OECD), 2019*

LACK OF PIPELINE



THE DFCD STRUCTURE



FOCUS THEMES

Climate-smart agriculture

Climate-smart agriculture is an approach that helps to guide actions needed to transform and reorient agricultural systems to effectively support development and ensure food security in a changing climate. Climate-smart agriculture has three main objectives:

- Sustainably increasing agricultural productivity and incomes;
- Adapting and building resilience to climate change;
- Reducing and/or removing greenhouse gas emissions and the use of (chemical) fertilizers, pesticides and water to reduce the footprint on terrestrial and freshwater ecosystems.

Opportunity

- Climate-smart agriculture contributes to improving food security thanks to higher resilience of crops to extreme weather events;
- Maintains and improves soil quality, reduces soil degradation and saves water;
- Increases biodiversity by creating a healthy and natural environment;
- Reduces reliance on fossil fuels and pesticides resulting in the release of less chemicals and pollution in the environment.

Environmental protection

This theme encompasses projects that aim to protect or restore key ecosystems such as wetlands, peatlands and mangroves. This leads to many benefits ranging from the local to global scale. It provides important services to flora, fauna and local communities whose livelihoods depend on functioning ecosystems. In addition, these ecosystems are essential in protecting people against natural hazards, such as extreme floods, droughts and wind surges, and can serve as enormous carbon sinks.

Opportunity

- Ecosystems can provide ecosystem services e.g. stormwater management, improved air quality etc.;
- Ecosystems are nature's best defences against extreme weather events;
- Formerly degraded land becomes productive again leading to economic benefits resulting from natural resources and ecotourism;
- Biodiversity significantly increases when natural environments are protected or restored.

Forestry

This theme promotes healthy and thriving forests. Forests can be conserved or actively planted. Forests can be planted on land which previously contained forest but was converted to other land uses, as in the case of reforestation. Afforestation increases tree cover on land which historically did not contain forest. The diversity in tree cover is key for healthy and thriving forests, maximizing the benefits that these forests provide. Multiple sources of revenue can be derived from forests, including revenues from timber as well as from Non-Timber Forest Products such as nuts and edible fruits.

Opportunity

- Reverse land degradation and rehabilitate degraded land;
- Changes in land use through afforestation can lead to a gradual accumulation of Soil Organic Carbon (SOC), providing an effective climate mitigation strategy;
- Improved ecosystem functions and services such as soil and water conservation;
- Increase in biodiversity when using mixed species;
- Sustainable management of forestry and afforestation, providing job opportunities and benefits to the local economies.

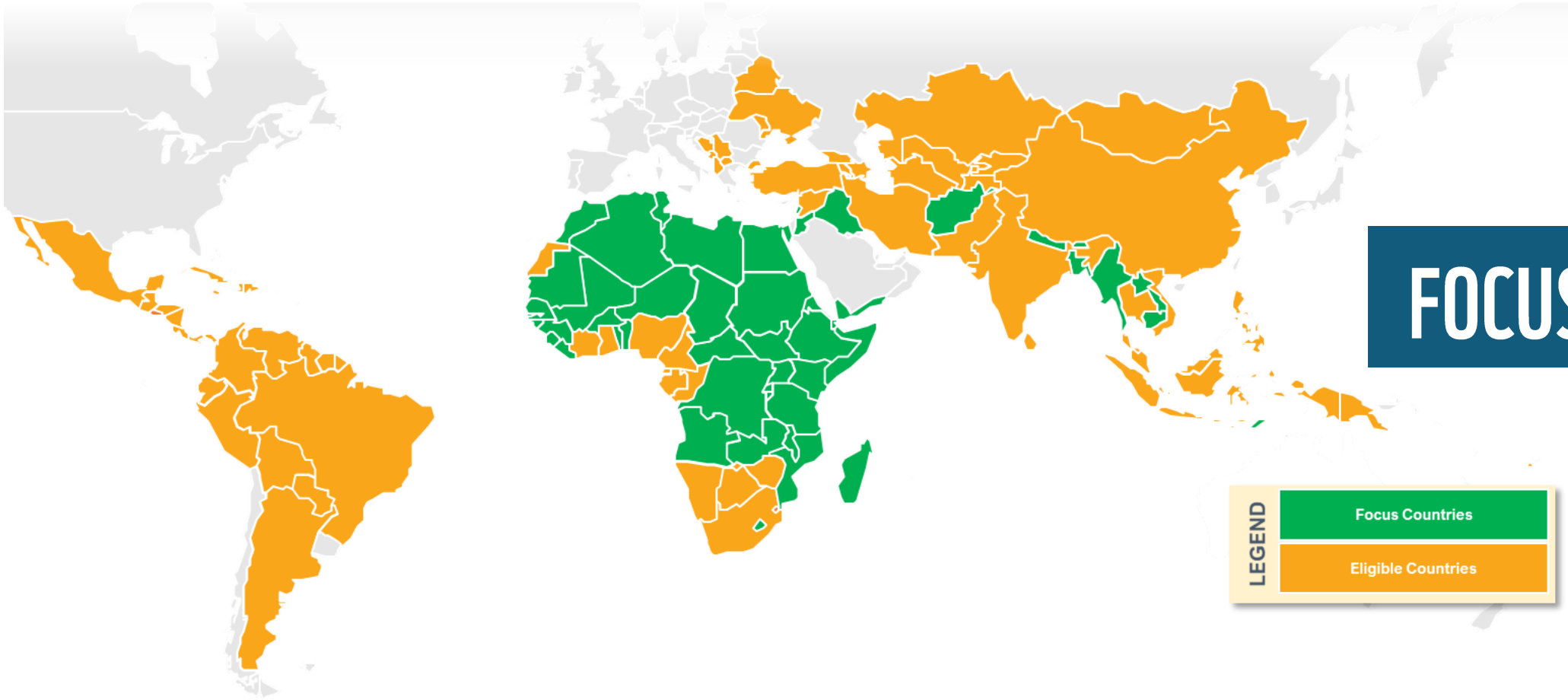
Water & Sanitation

Climate change is expected to cause fluctuations in the water supply (e.g. droughts or flooding) and affect the quality of water. This theme consists of a broad range of possible interventions that mitigate or adapt to these changes. It encompasses restoration and sustainable management of wetlands, headwaters and floodplains in order to conserve crucial water resources. Moreover, it includes Water, Sanitation and Hygiene (WASH) programs that are aimed at improving availability of and access to drinking water and sanitation supplies.

Opportunity

- Restoration and sustainable management of water bodies builds resilience towards weather extremities, such as floods and droughts;
- Good wastewater treatment helps prevent contamination and destruction of natural habitats;
- WASH helps achieve gender equity as women and girls no longer need to collect water over large distances;
- WASH helps to provide more educational opportunities for children due to a decline in diarrheal diseases, and good and safe water supplies and sanitation.

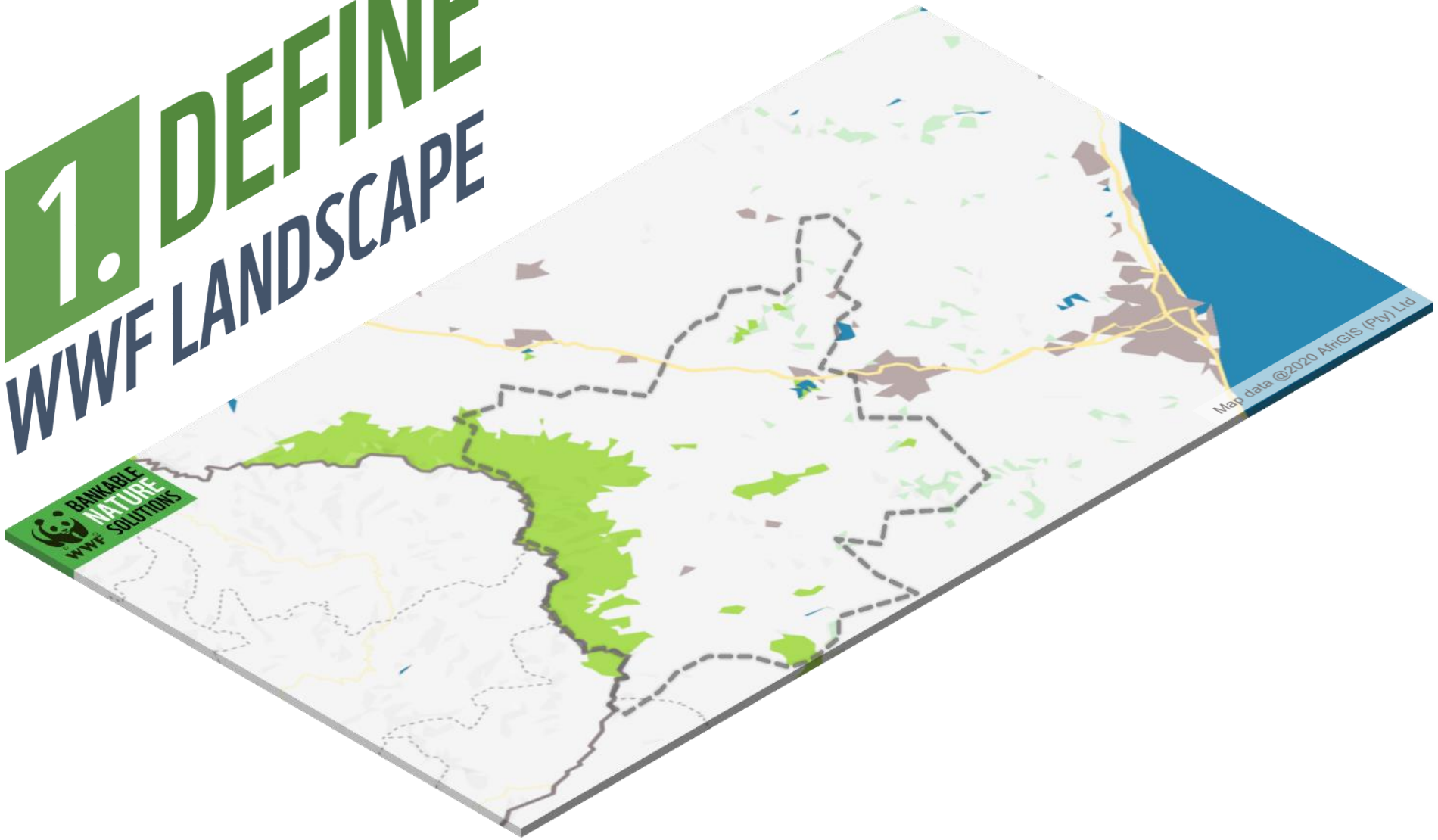
FOCUS REGIONS



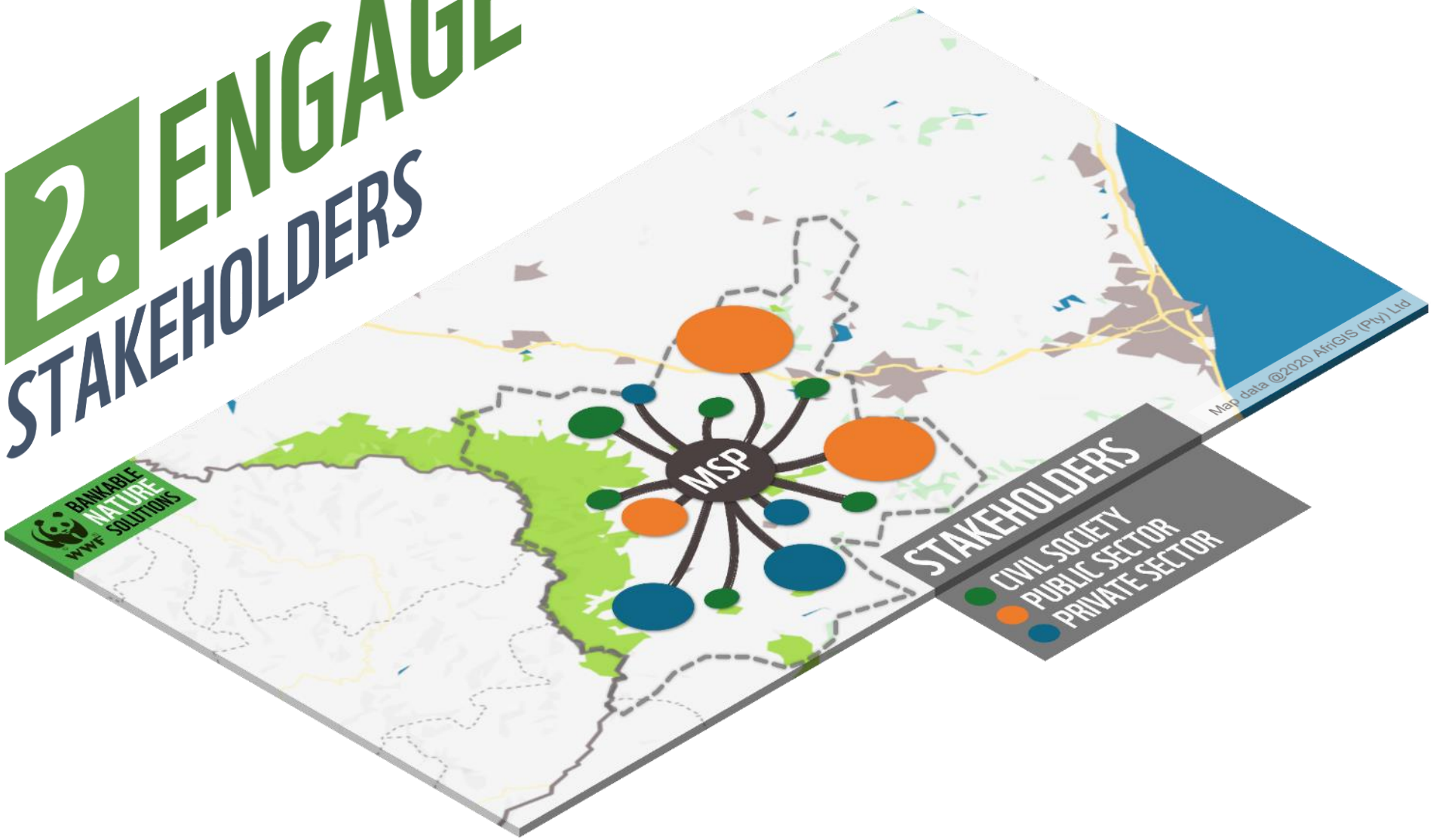
LANDSCAPE

THE DUTCH FUND FOR CLIMATE AND DEVELOPMENT

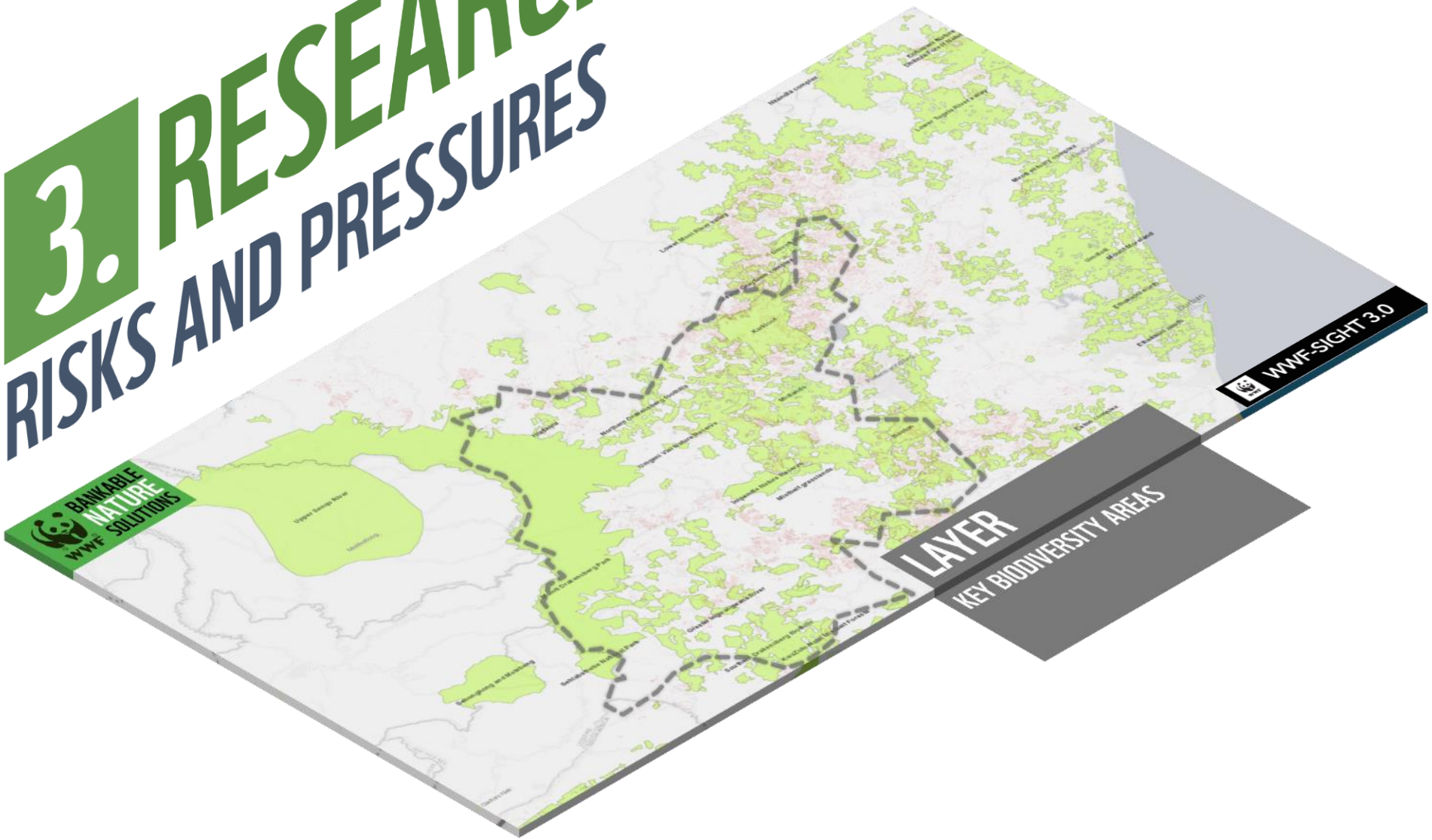
1. DEFINE
WWF LANDSCAPE



2. ENGAGE STAKEHOLDERS



3. RESEARCH
RISKS AND PRESSURES



KEY BIODIVERSITY AREAS

Description

The World Database of Key Biodiversity Areas (KBAs) Spatial Dataset lists "sites that contribute to the global persistence of biodiversity", including vital habitat for threatened plant and animal species in terrestrial, freshwater and marine ecosystems. For further details, see www.keybiodiversityareas.org. KBAs include Important Bird and Biodiversity Areas (IBAs) identified by the BirdLife Partnership. For further details, follow the next link.

Limitations

Blank

Credits

BirdLife International ([year 2018]). *World Database of Key Biodiversity Areas*. Developed by the KBA Partnership: BirdLife International, International Union for the Conservation of Nature, Amphibian Survival Alliance, Conservation International, Critical Ecosystem Partnership Fund, Global Environment Facility, Global Wildlife Conservation, NatureServe, Rainforest Trust, Royal Society for the Protection of Birds, Wildlife Conservation Society and World Wildlife Fund. Available at www.keybiodiversityareas.org.

Cautions

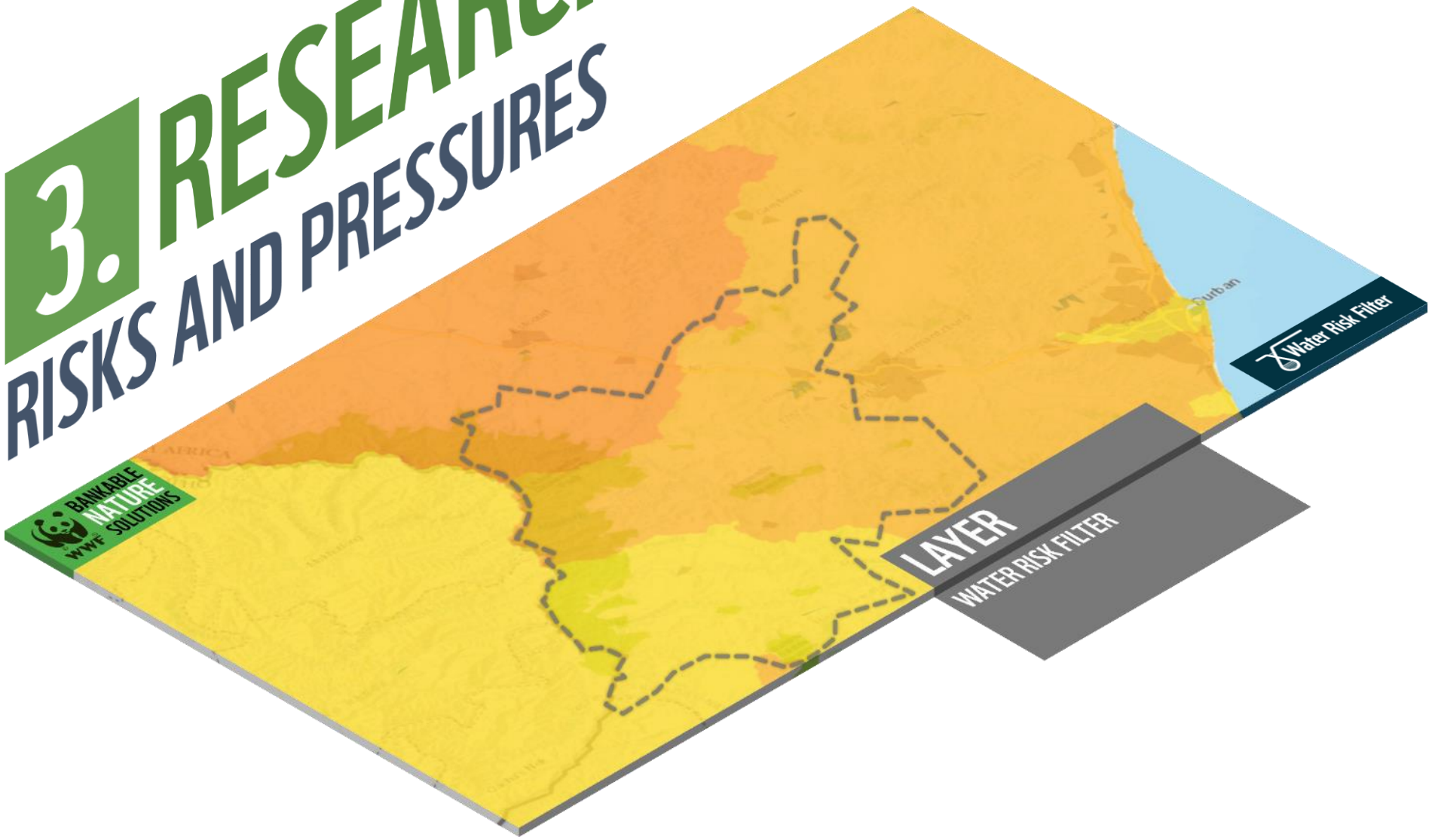
No commercial use - Neither (a) KBA Data nor (b) any Derivative Works (as further defined in clause 5) may be put to Commercial Use without the prior written permission of the KBA Secretariat, which grants permission on behalf of the owners of the relevant intellectual property rights. For the purposes of these Terms and Conditions, "Commercial Use" means a) any use by, on behalf of, or to inform or assist the activities of, a commercial entity (an entity that operates 'for profit') or b) use by any individual or non-profit entity for the purposes of revenue generation. If you wish to use the information obtained from The KBA Website for such commercial purposes, you must obtain written permission by contacting the KBA Secretariat directly using the contact details below in section 16. However, the KBA Partners warrant that you are free to view and query The KBA Website, and place no restrictions on the identity of named KBAs and the criteria under which they qualify.

Find data license in the next link.

This is an external data layer. For exports please request the data from the original source at http://www.keybiodiversityareas.org/site/requestgis

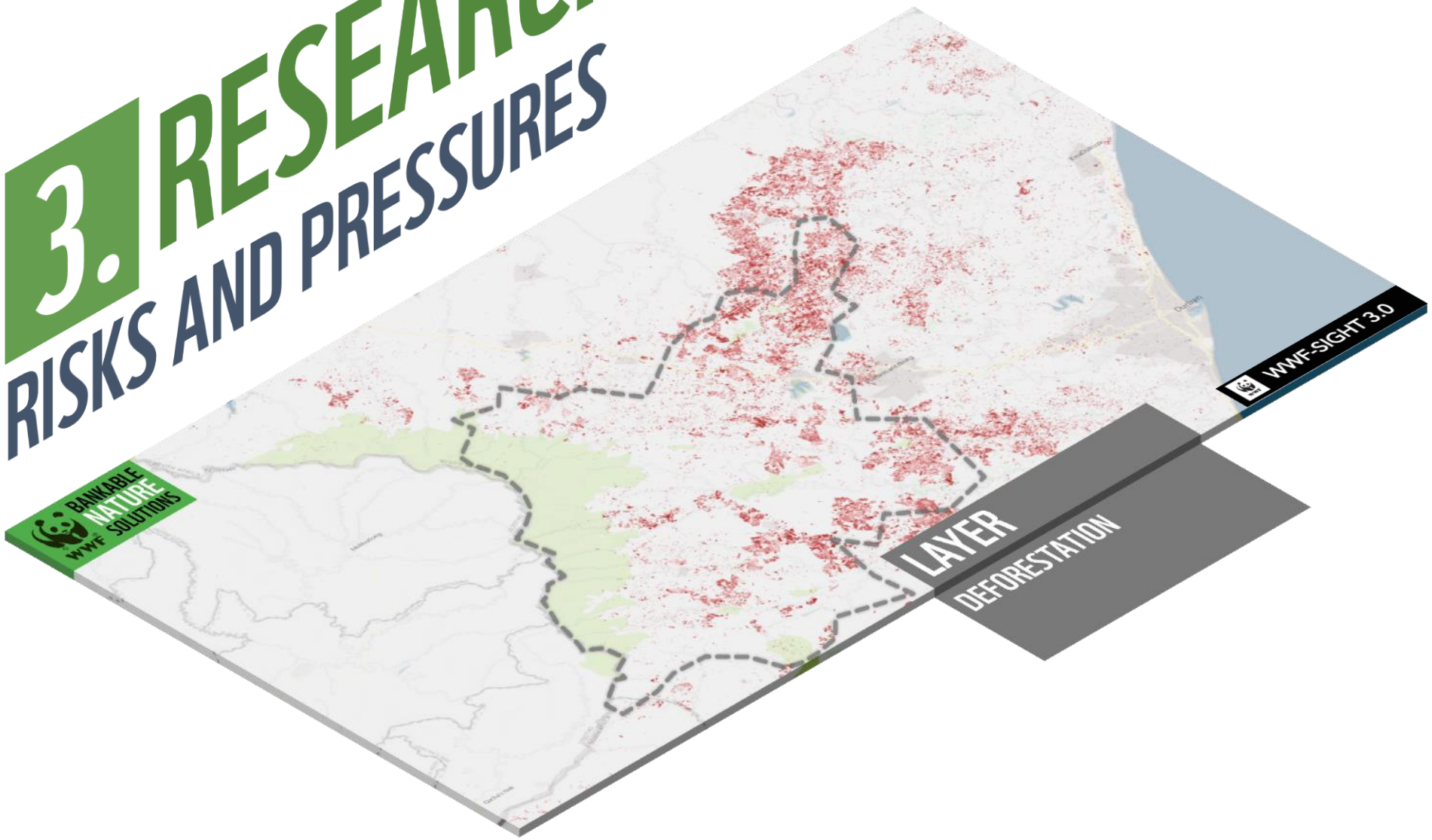
3. RESEARCH
RISKS AND PRESSURES

Launched in 2012 || the Water Risk Filter is a practical || online tool that helps companies and investors assess and respond to water-related risks facing their operations and investments across the globe. Developed by WWF and the German finance institution DEG || the Water Risk Filter has become a leading and trusted source of water risk data for thousands of users – from multinational corporations and SMEs to financial institutions – which have used it to evaluate hundreds of thousands of specific sites. After a major upgrade in 2018 and a wealth of new functions || the Water Risk Filter 5.0 will enable companies and investors to Explore || Assess || Value and Respond to water risks.



3. RESEARCH

RISKS AND PRESSURES



FOREST LOSS DURING THE PERIOD 2000-2012

Description

This data set, a collaboration between the GLAD (Global Land Analysis & Discovery) lab at the University of Maryland, Google, USGS, and NASA, measures areas of tree cover gain across all global land (except Antarctica and other Arctic islands) at 30 × 30 meter resolution, displayed as a 12-year cumulative layer. The data were generated using multispectral satellite imagery from the Landsat 7 thematic mapper plus (ETM+) sensor. Over 600,000 Landsat 7 images were compiled and analyzed using Google Earth Engine, a cloud platform for earth observation and data analysis. Reference composite imagery are median observations from a set of quality assessed growing season observations in four spectral bands, specifically Landsat bands 3, 4, 5, and 7. The clear land surface observations (30 × 30 meter pixels) in the satellite images were assembled and a supervised learning algorithm was then applied to identify per pixel tree cover loss.

In this data set, "tree cover" is defined as all vegetation greater than 5 meters in height, and may take the form of natural forests or plantations across a range of canopy densities. Tree cover loss was defined as a "stand replacement disturbance," or the complete removal of tree cover canopy at the Landsat pixel scale. Tree cover loss may be the result of human activities, including forestry practices such as timber harvesting or deforestation (the conversion of natural forest to other land uses), as well as natural causes such as disease or storm damage. Fire is another widespread cause of tree cover loss, and can be either natural or human-induced.

When zoomed out, pixels of loss are shaded according to the density of loss at the 30 x 30 meter scale. Pixels with darker shading represent areas with a higher concentration of tree cover loss, whereas pixels with lighter shading indicate a lower concentration of tree cover loss.

For additional information about the results of global forest loss and gain detected during the period 2000-2012, please see the associated journal article in the following link.

Limitations

Due to variation in research methodology and date of content, tree cover, loss, and gain data sets cannot be compared accurately against each other. Accordingly, "net" loss cannot be calculated by subtracting figures for tree cover gain from tree cover loss, and current (post-2000) tree cover cannot be determined by subtracting figures for annual tree cover loss from year 2000 tree cover.

The authors evaluated the overall prevalence of false positives (commission errors) in this data at 13%, and the prevalence of false negatives (omission errors) at 12%, though the accuracy varies by biome and thus may be higher or lower in any particular location. The model often misses disturbances in smallholder landscapes, resulting in lower accuracy of the data in sub-Saharan Africa, where this type of disturbance is more common. The authors are 75 percent confident that the loss occurred within the stated year, and 97 percent confident that it occurred within a year before or after. Users of the data can smooth out such uncertainty by examining the average over multiple years. Read Global Forest Watch's blog series on the accuracy of this data for more information.
Please be aware that the results provided by this tool depict forest loss, defined as a stand-replacement disturbance, or a change from a forest to non-forest state *(for all vegetation greater than 5 meters in height). "Loss indicates the removal or mortality of tree cover and can be due to a variety of factors, including mechanical harvesting, fire, disease or storm damage. As such, "loss" does not equate to deforestation"* (Hansen, M. C. et Al., 2013). From the global point of view this tool provides a proxy to understand the natural and anthropogenic disturbances occurred on the forest cover loss. However, if the underlying causes and impacts of these changes want to be further understood, further assessments should be realized (i.e. studies on land use change, fires occurrence and regeneration, etcetera).

When analyzing a specific year of "forest loss", it is important to bear in mind that the 2011-2016 data was produced using updated methodology. Comparisons between the original 2001-2010 data and the 2011-2016 update should be performed with caution.

Credits

Hansen, M. C., P. V. Potapov, R. Moore, M. Hancher, S. A. Turubanova, A. Tyukavina, D. Thau, S. V. Stehman, S. J. Goetz, T. R. Loveland, A. Kommareddy, A. Egorov, L. Chini, C. O. Justice, and J. R. G. Townshend. 2013. "High-Resolution Global Maps of 21st-Century Forest Cover Change." Science 342 (15 November): 850–53. Data available online from:http://earthenginepartners.appspot.com/science-2013-global-forest. Accessed through Global Forest Watch, www.globalforestwatch.org

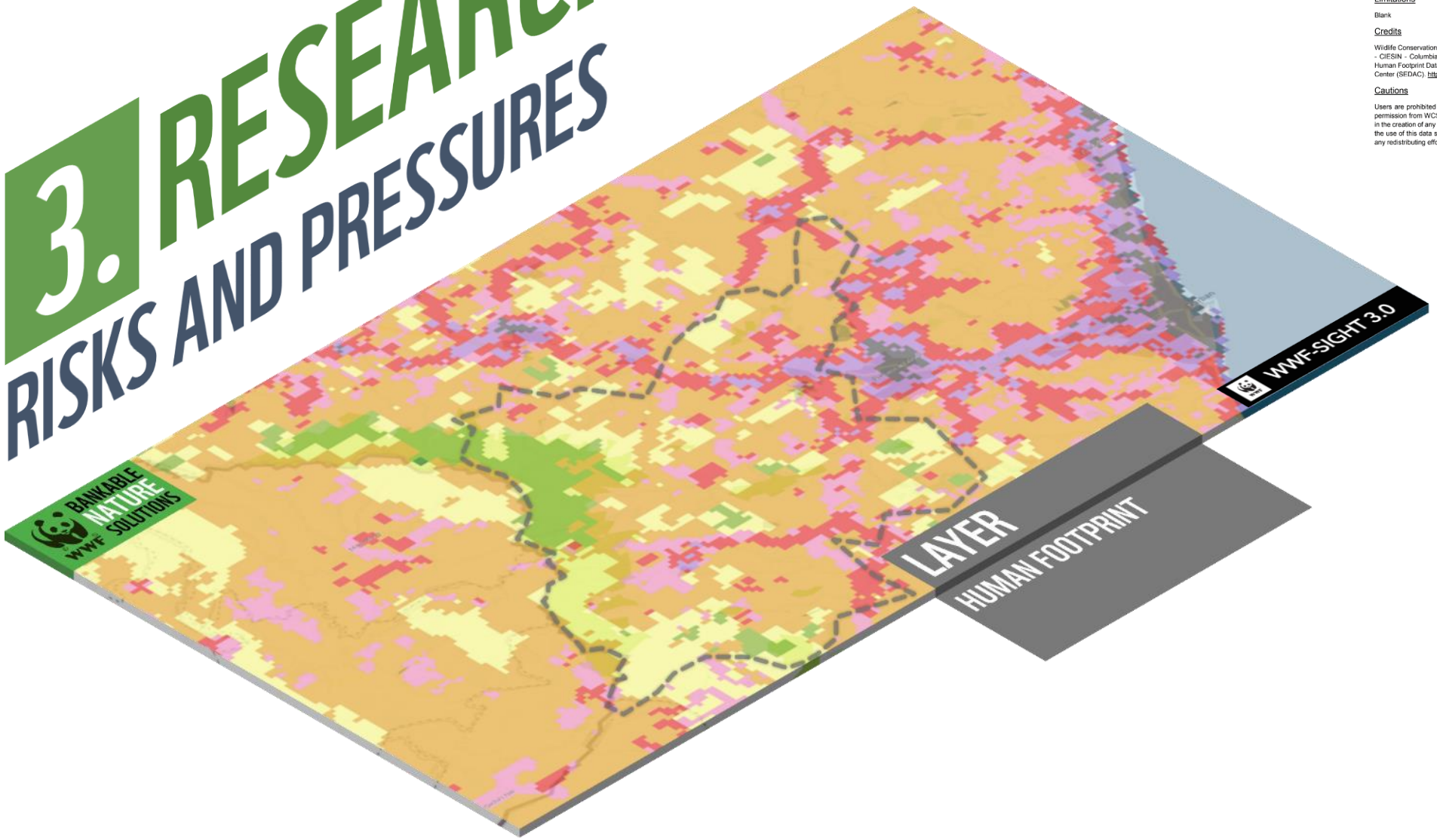
Cautions

Legend

Forest Loss During the Period 2000-2012

Forest Loss

3. RESEARCH
RISKS AND PRESSURES



HUMAN FOOTPRINT

Description

The Global Human Footprint Index is the relative human influence in each terrestrial biome expressed as a percentage. The purpose is to provide an updated map of anthropogenic impacts on the environment in geographic projection which can be used in wildlife conservation planning, natural resource management, and research on human-environment interactions. Dataset Summary The Global Human Footprint Index Dataset of the Last of the Wild Project, Version 2, 2005 (LWP-2) is the Human Influence Index (HII) normalized by biome and realm. The HII is a global dataset of 1-kilometer grid cells, created from nine global data layers covering human population pressure (population density), human land use and infrastructure (built-up areas, nighttime lights, land use/land cover), and human access (coastlines, roads, railroads, navigable rivers). A value of zero represents the least influenced- the "most wild" part of the biome with value of 100 representing the most influenced (least wild) part of the biome.

Limitations

Blank

Credits

Wildlife Conservation Society - WCS, and Center for International Earth Science Information Network - CIESIN - Columbia University. 2005. Last of the Wild Project, Version 2, 2005 (LWP-2): Global Human Footprint Dataset (Geographic). Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC). http://dx.doi.org/10.7927/H4M61H5F.

Cautions

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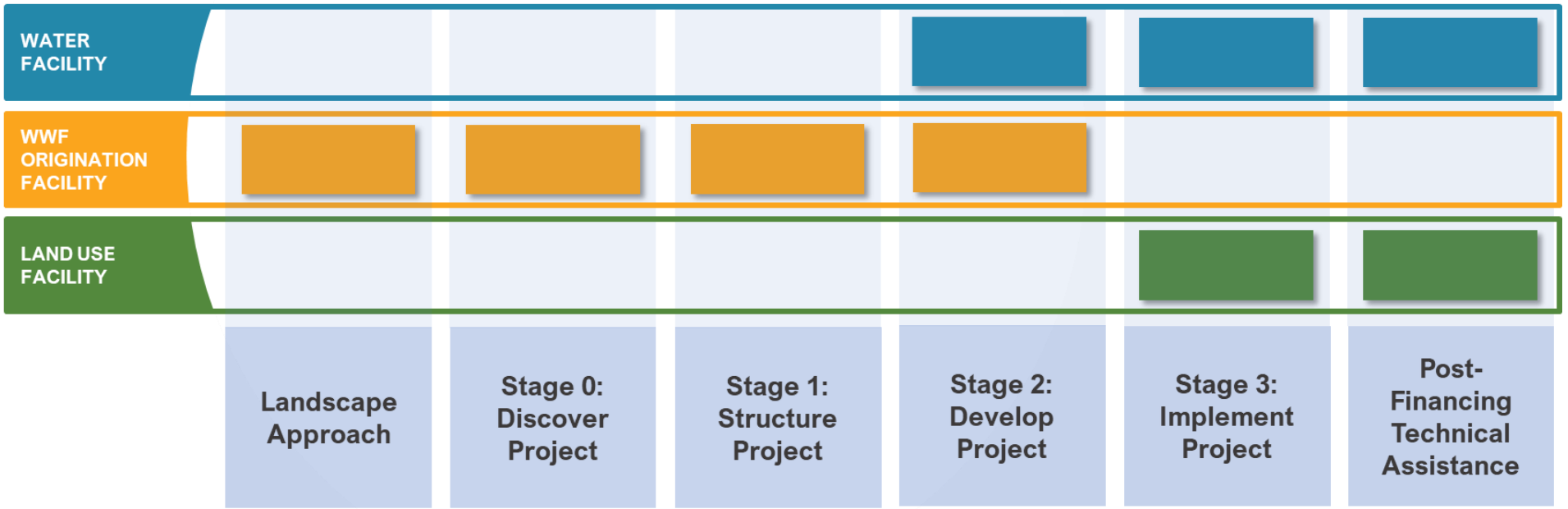
4. IDENTIFY
INTERVENTIONS & SOLUTIONS

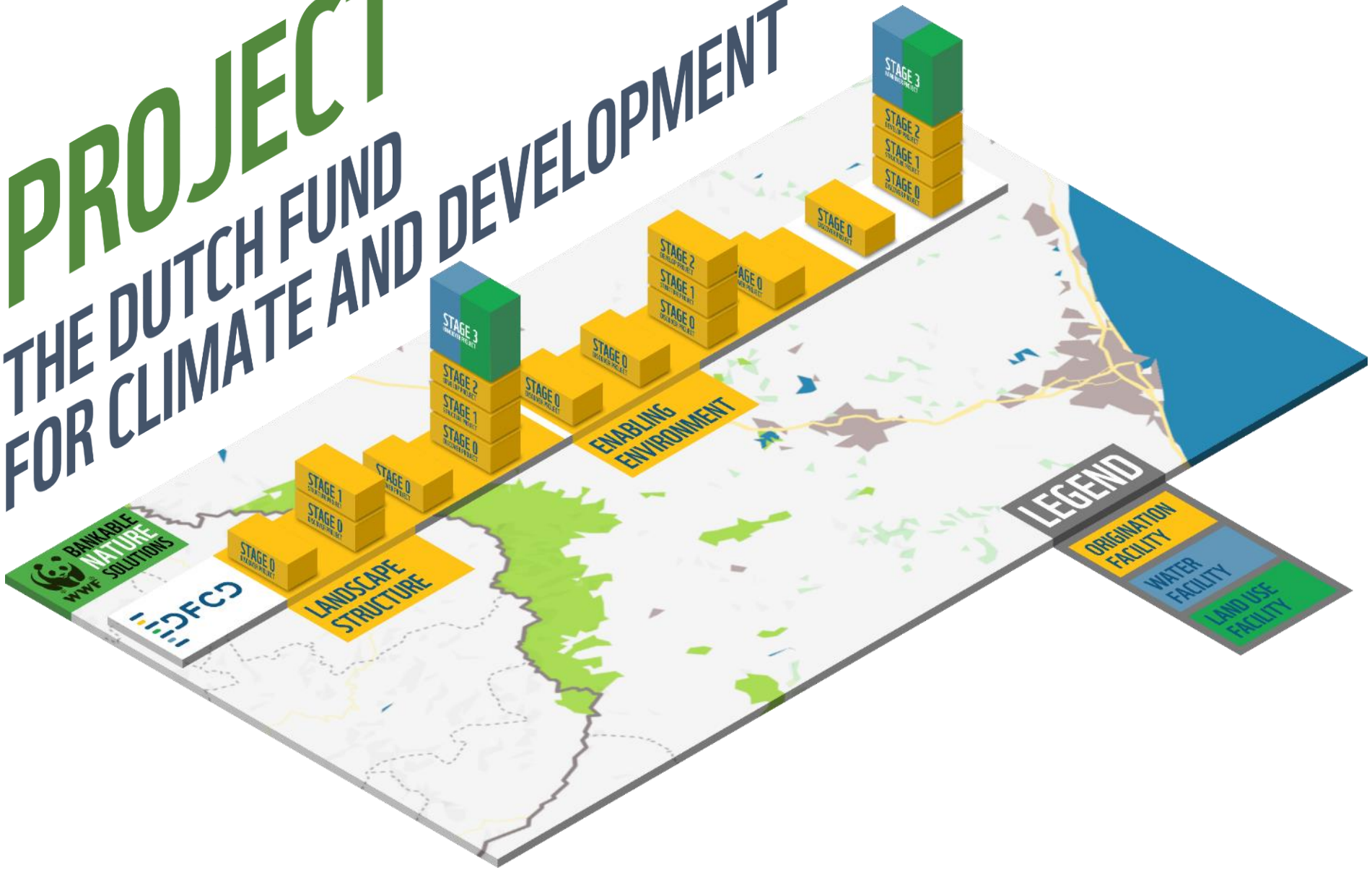

STAGE 3
HANDOVER PROJECT
STAGE 2
DEVELOP PROJECT
STAGE 1
STRUCTURE PROJECT
STAGE 0
DISCOVER PROJECT

WWF PROCESS

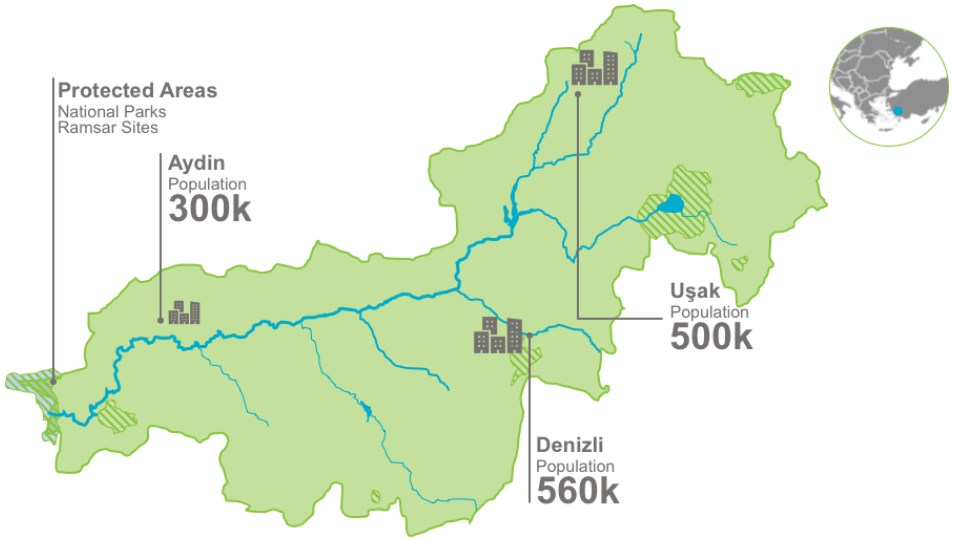

WATER FACILITY
WWF ORIGINATION FACILITY
LAND USE FACILITY
Landscape Approach
Stage 0: Discover Project
Stage 1: Structure Project
Stage 2: Develop Project
Stage 3: Implement Project
Post-Financing Technical Assistance

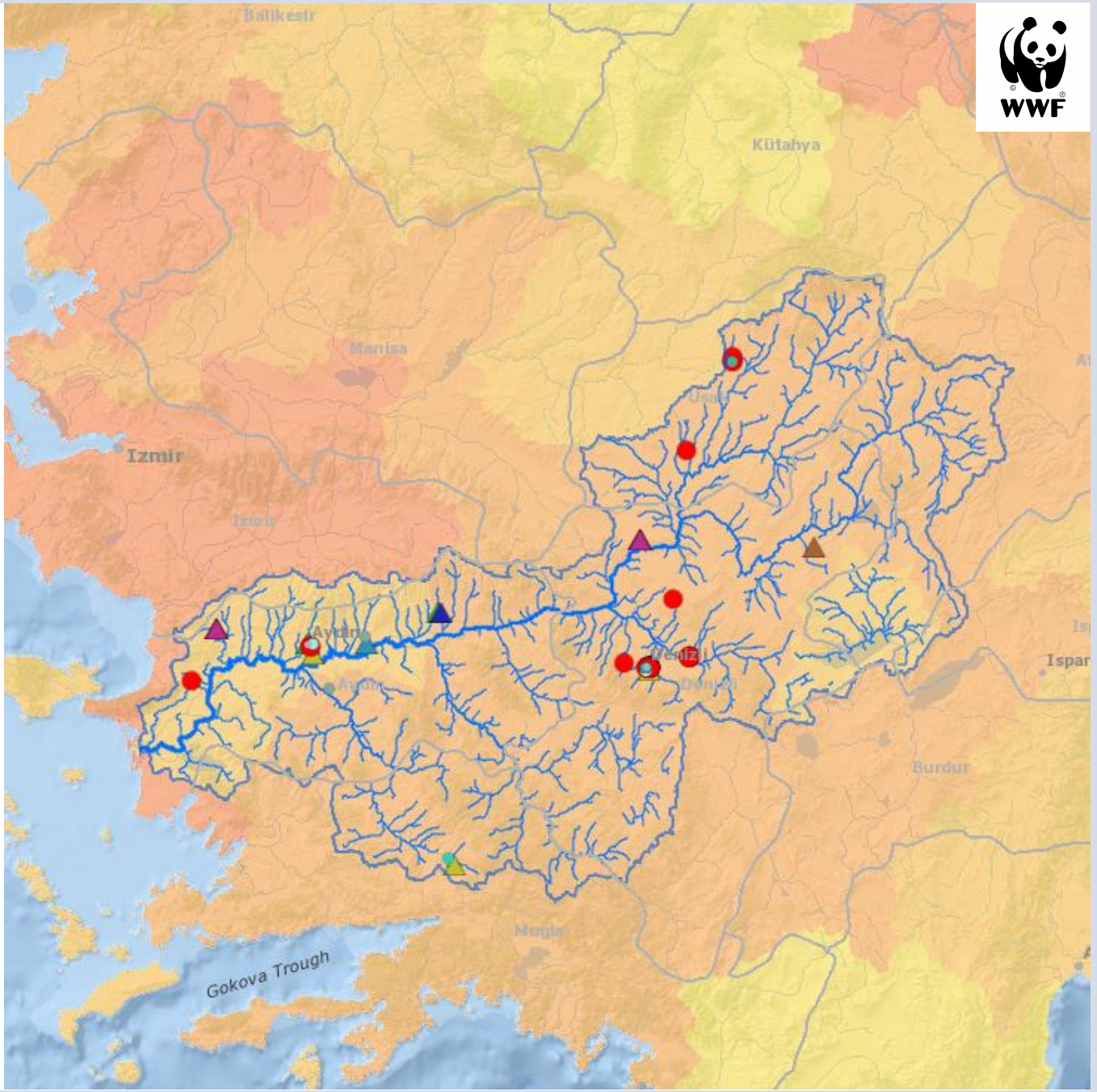
PROJECT

THE DUTCH FUND FOR CLIMATE AND DEVELOPMENT

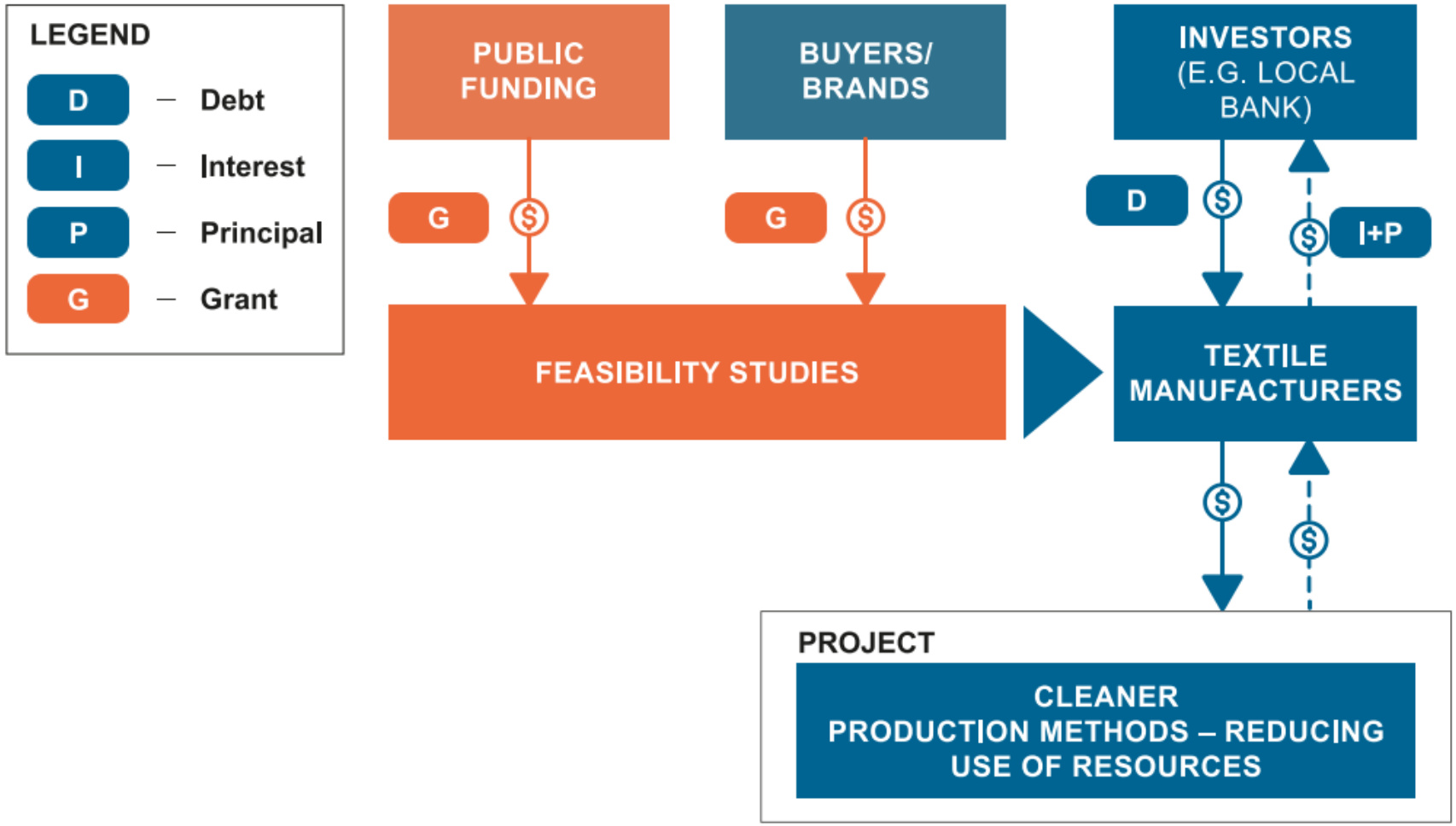


Buyuk Menderes, Turkey





The Model Overview



Successes

Buyuk Menderes Brand Event, Istanbul March 26th, © *WWF-Turkey*

SEVEN TEXTILE COMPANIES IN THE BUYUK MENDERES BASIN HAVE ALREADY INVESTED **€6.5M** IN MORE EFFICIENT PRODUCTION TECHNIQUES, SAVING 1.5 MILLION CUBIC METRES OF WATER.

April 2019

Working to sustain the natural world for the benefit of people and wildlife.

together possible™ panda.org

WWF, 28 rue Mauverney, 1196 Gland, Switzerland. Tel. +41 22 364 9111

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