

Climate Smart Governance Dashboard; Technical Guide

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Colombo, Sri Lanka

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CGIAR Initiative on Climate Resilience

The CGIAR Initiative on Climate Resilience, also known as ClimBeR, aims to transform the climate adaptation capacity of food, land, and water systems and ultimately increase the resilience of smallholder production systems to better adapt to climate extremes. Its goal is to tackle vulnerability to climate change at its roots and support countries and local and indigenous communities in six low-and middle-income countries to better adapt and build equitable and sustainable futures.

Learn more about ClimBeR here: https://www.cgiar.org/initiative/climate-resilience/

Disclaimer

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SUMMARY

The Climate-Smart Governance (CSG) Dashboard stands as an innovative platform, providing data on climate-related hazards, vulnerability, climate scenarios, and sector-specific information. Developed as part of the CGIAR initiative on Climate Resilience (ClimBeR), the CSG Dashboard plays a crucial role in supporting nations undertaking the UNFCCC National Adaptation Plan (NAP) process. Aligned with the iterative nature of the NAP process, the CSG Dashboard enhances adaptive capacity and resilience, minimizing vulnerability to climate change impacts. The training manual aims to guide users through the platform, ensuring ease of use and a clear understanding of its functionalities.

The homepage offers an overview of the project, collaborative partners, and statistical data. Users register to access country-specific information. The landing page includes sections such as About Us, Our Team, Resources, Language, and Login. The platform comprises eight main sub-pages, including Country Overview, Climate Outlook, Project Tracker, Geo Intelligence Tools, Monitoring and Evaluation, Development Indicators, Adaption Catalog, and Investment Portfolio Planning. Users can navigate through these modules for detailed information, facilitated by the "View More" option.

This module provides a comprehensive snapshot of a country, including water resources, agriculture, ecosystems, health, and climate hazards. It incorporates vital indicators like Human Development Index, electricity access, internet usage, and adaptive capacity. Historical and future climate data offer insights into the environmental and socio-economic landscape. Utilizing UNFCCC Shared Socioeconomic Pathways, this module projects a nation's risk under different climate policies and regions. Sub-modules include Climate Risk Profile, Future Climate Risk, Climate Risk Visualizer, and Climate Sectoral Impacts, allowing users to explore forecast predictions for climate variables.

A powerful visualization tool, the Project Tracker aids in systematically monitoring adaptation, mitigation, and cross-cutting initiatives. Users can assess projects, identify successful strategies, and explore project details by category. The module also allows searching and viewing projects on a map. This component serves as a dynamic hub for overseeing climate change projects, enabling input, organization, and visualization of project data. Users can add, modify, delete projects, and view progress and reports associated with outcomes. This page offers detailed country-level information on geospatial data. Users can visualize, analyze, and interpret data, tailoring exploration with filters and comparing hazard and risk indicators. Administrative boundaries, project distribution, hydrology, infrastructure, hazard, and risk indicators are available.

Users can explore individual Sustainable Development Goals (SDGs) in detail, assessing a country's progress towards meeting UN SDGs. The module guides monitoring, and evaluation teams and allows users to select specific SDGs for trend analysis. Showcasing global climate

adaptation projects, this module encourages users to contribute project information. Users can visualize project distribution on a map, filter projects, and view individual project details. This module evaluates a country's economy and climate-related risks, focusing on GDP impacts across different climate scenarios. Policymakers can analyze potential financial implications and attract donor investment. The CSG Dashboard, developed under the CGIAR initiative, serves as a comprehensive solution, addressing challenges in climate-related initiatives. By consolidating data, providing planning tools, and adopting collaboration, it plays a critical role in enhancing adaptive capacity, resilience, and informed governance. The interconnected modules create a responsive and user-friendly platform, empowering stakeholders to make informed decisions and contribute to climate resilience globally

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LIST OF ACRONYMS

CSG	Climate Smart Governance
CGIAR	A Global Research Partnership for a Food-Secure Future
ClimBeR	CGIAR Initiative on Climate Resilience
GDP	Gross Domestic Product
NAP	National Adaptation Plan
SDG	Sustainable Development Goals
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change

INTRODUCTION

Introducing the Climate-Smart Governance (CSG) Dashboard, an innovative platform offering precise data on climate-related hazards, population vulnerability, forecasted climate scenarios, and sector-specific information such as water, health, agriculture, and ecosystem data. This tool also encompasses infrastructure details and climate-related projects, facilitating coordinated mid- to long-term adaptation planning aligned with Sustainable Development Goals (SDG). Developed as part of the CGIAR initiative on Climate Resilience (ClimBeR), the Climate-Smart Governance (CSG) Dashboard plays a pivotal role in supporting nations undertaking the UNFCCC National Adaptation Plan (NAP) process.

Aligned with the iterative and ongoing nature of the NAP process, the CSG Dashboard aims to enhance adaptive capacity and resilience, thereby minimizing vulnerability to climate change impacts. Its design caters to fostering the integration of adaptation strategies into national, sectoral, and local policies and programs, with a focus on providing a space for public- and private-sector entities to access up-to-date data. This facilitates the development of effective adaptation policies, monitoring, and evaluation of progress towards adaptation, collaborative resource utilization, and the exchange of information on best practices and investment opportunities.

Addressing common challenges faced in climate-related initiatives, such as lack of coordination, unavailability of data on hazards and community vulnerability, and duplication of efforts due to unawareness of existing initiatives, the CSG Dashboard is a game-changing solution. Serving as a comprehensive tool, it consolidates data on variables encompassing past and future climate conditions and societal characteristics. Moreover, it provides planning tools for investments, facilitates reporting and monitoring of climate adaptation projects, and aids in evaluating progress towards meeting the United Nations Sustainable Development Goals (SDGs).

As a part of the CGIAR Initiative on Climate Resilience (ClimBeR), the CSG Dashboard contributes to the overarching goal of building capacity for resilient governance that operates effectively across multiple levels and scales. This initiative is aligned with broader objectives within the ClimBeR Program, including reducing risks to food producers' livelihoods and agricultural value chains, providing evidence-based policymaking, and addressing security risks posed by climate change. The ClimBeR Program is actively implemented in Zambia, Morocco, Senegal, the Philippines, Guatemala, Kenya, and Sri Lanka, reflecting a global commitment to enhancing climate resilience through informed governance and sustainable practices.

OBJECTIVE

The objective is to guide users through the details of the platform, ensuring ease of use and a clear understanding of its functionalities.

HOW THE TECHNICAL GUIDE WORKS

The user guide has been meticulously crafted with an interactive design to ensure effortless accessibility while utilizing the platform. It serves as an invaluable resource by presenting fundamental insights into the platform's landing page, offering a comprehensive understanding of each module, as visually represented in the detailed Figure below. This intentional design strategy is geared towards elevating the overall user experience, as it delivers user-friendly and intricate guidance that enables users to effortlessly navigate through the platform with precision and ease. The guide not only acquaints users with the basics of the landing page but goes beyond by furnishing in-depth information at the module level.

LANDING PAGE

The landing page as illustrated in figure 1 features sections at the header, including "About Us," "Our Team," "Resources," "Language," and "Login."

About us – Insight of ClimBeR, Governance for resilience (G4R) and partners

Our team – The collaborative team dedicated their efforts to producing and enhancing the platform.

Resources – Other relevant details about the Climate-Smart Governance (CSG) platform.

The homepage offers users a comprehensive overview and understanding of the project's overall concept. An important feature on the landing page is the presentation of statistical data showcasing the total project information tracked on the platform across various countries. Additionally, the page offers valuable insights into the main modules of the dashboard, as visually represented in the image below. Notably, users can easily identify and explore the collaborative partners who have played a crucial role in the development and implementation of the dashboard.



Figure 1: Landing page of CSG dashboard

Registration

Users are required to register to use the modules of the dashboard therefore, prior usisng the platform, users must create an account by providing their basic information as dispalyed in Figure 2. The registration process involves filling in mandatory fields that are essential for future contact information. Users have the option to select their respective country for accessing country-specific information. Once users input their basic details, they can proceed to click on the "Register" button, making this a one-time process.

Climate Resilience	Development Version	About Us	Our Team	Resources Engl	ish v Login
Climate S Governar Dashboa	Characteristic Control of the contro	Login Register Name* Email* Country* Organization* Organization* Organization Category Mobile Number Gender* Reason to use the tool Create a password* Register		Emational Water Inagement Institute	CGIAR

Figure 2: New User Registration Interface

Login Page

After successful registration, users gain access to the dashboard pages and need to input the details used during the registration process. Users must ensure that the entered details match the information used for creating the account (Figure 3); otherwise, the login attempt will be denied.

CGIAR	Climate Resilience		Development Version			About Us	Our Team	Resources	English	~ Login	
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Figure 3: Login Page for CSG Dashboard

Modules

The platform includes eight main sub-pages, each offering distinct data about the country, accompanied by a detailed description for clarity. The pages include (Figure 4):

- Country Overview
- Climate Outlook
- Project Tracker
- Geo Intelligence Tools
- Monitoring and Evaluation
- Development Indicators
- Adaption Catalog
- Investment Portfolio Planning

To explore additional information on each page, users can simply click on "View More." Navigation is facilitated through the menu provided within the platform.



Figure 4: Representation of the Main Modules in the CSG Dashboard

COUNTRY OVERVIEW

This module offers a comprehensive overview of a country's critical aspects, encompassing water resources, agriculture, ecosystems, health, and various climate hazards, including floods, droughts, tsunamis, landslides, and cyclones. Through the incorporation of these elements, the module provides a holistic understanding of the country's susceptibility to climate-related challenges. Additionally, it incorporates vital indicators such as the Human Development Index (HDI), accessibility to electricity, internet usage statistics, and the population's adaptive capacity to disasters (Figure 5). The module explores historical data and projections for temperature, precipitation, and sea level rise, offering users a nuanced snapshot of the country's environmental and socio-economic landscape.

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Figure 5: Representation of the country overview page of CSG Dashboard

CLIMATE OUTLOOK

Utilizing the UNFCCC Shared Socioeconomic Pathways, this feature illustrates potential shifts in the nation's risk profile based on diverse climate policies and regional variations. Users can navigate through specific regions and examine projected outcomes related to climate variables like temperature and precipitation. The Climate Outlook module (Figure 6) comprises four distinct sub-modules: Climate Risk Profile, Future Climate Risk, Climate Risk Visualizer, and Climate Sectoral Impacts, providing a multi-layered exploration of anticipated climate-related scenarios and impacts. Users can navigate through various tabs on the page for more in-depth information.



Figure 6: Representation of climate Outlook in the CSG Dashboard

Climate risk profile

The Cliamte risk profile segment provides users with a comprehensive details of existing climaterelated risks in a designated geographic areas. It joins data from diverse sources and models to present a coherent overview of historical and anticipated climate patterns, encompassing risks like climate escalation and alterations in precipitation patterns (Figure 7). This resource equips policymakers, managers, and communities with vital information to grasp and tackle immediate climate challenges effectively.



Figure 7: Representation of climate risk profiles in Climate Outlook in the CSG Dashboard

Future Climate risk

The Future Climate Risk component serves as a necessary tool for anticipating and strategizing responses to the impacts of climate change. Leveraging existing climate models and scenario analyses, it provides valuable insights into the probable evolution of climate-related risks in the forthcoming years and decades. Decision-makers can leverage this information to evaluate potential challenges on the horizon, including but not limited to floods, droughts, or heatwaves. This insight enables the formulation of adaptive strategies, advancing resilience and ensuring long-term sustainability.

This tool empowers users to visualize temperature and precipitation parameters at both allows users to visualize temperature and precipitation parameters at and sub-national levels, presented across various percentiles and under different climate scenarios (Figure 8).



Figure 8: Representation of future climate risk in Climate Outlook in the CSG Dashboard

Climate Risk Visualizer

The Climate Risk Visualizer sub-module serves as a comprehensive tool, offering insights into hazards, exposure, vulnerability, and the absence of coping capacity, enabling the assessment of the risk index at the national level (Figure 9). This valuable information is instrumental for policymakers and managers, aiding them in prioritizing adaptation and mitigation strategies. By providing a nuanced understanding of vulnerabilities, the module facilitates targeted investments aimed at reducing vulnerability within communities and enhancing the resilience of critical infrastructure.



Figure 9: Representation of climate risk visualizer in Climate Outlook in the CSG Dashboard

To access more detailed information about each section, users can simply scroll through and click on the (i) symbol provided.

Sectoral Climate Impact

The Sectoral Climate Impact sub-module conducts a thorough sector-specific analysis, unravelling the repercussions of climate change and its effects on various critical sectors. It adeptly consolidates and visually represents data about climate-related variables such as

temperature fluctuations, altered precipitation patterns, and extreme weather events like droughts and floods (Figure 10). The sectors scrutinized include agriculture, water, energy infrastructure, and health. This sub-module delves into the intricate details of how these climate-related factors impact each sector, offering nuanced insights into vulnerabilities and opportunities. By elucidating the specific challenges and prospects within each sector, the sectoral climate impact analysis becomes an indispensable tool for policymakers, businesses, and stakeholders. It aids in making well-informed decisions and formulating targeted strategies for climate adaptation and resilience.

Furthermore, the module goes beyond merely identifying risks; it serves as a comprehensive resource for proactive mitigation measures. In an era characterized by climate uncertainty, the insights provided contribute to fostering sustainable development practices. Users have the flexibility to navigate between modules, expanding or collapsing them as needed, to gain a more in-depth understanding of each sector and its climate-related implications.

Climate Resilience	Development Versio	n About Us	Our Team Rest	ources English	
Climate Outlook	-			Sri Lanka	
	4				-
Climate Risk Profile	Future Climate Risk	Climate Risk Visualizer		Sectoral Climate Impact	
This module provides a sector specific analysis of fluctuations, shifting precipitation patterns and ex detailed insights into the vulnerabilities and opport and crafting largeted strategies for climate adapta fostering sustainable development in an era of climate development in an era of climate adapta for the strategies for climate adapta for the strategies for the strategies for climate development in an era of climate development dev	the consequences of climate change and treme weather events such as drought an tunities within each sector, the sectoral cl tion and resilience. It serves as an invalue nate uncertainty.	ts impacts. It compiles and visualizes d d floods, impact key sectors like agricu imate impact will assist policymakers, b ble resource for identifying sector-spec	ata on how climate-rei Iture, water, energy inf pusinesses, and stakeh cific risks, facilitating pr	ated factors, such as ter frastructure and health. iolders in making inform roactive mitigation meas	nperature By offering led decision: sures, and
Agriculture & Food Security					^
Sri Lanka's agricultural sector comprises 7.8 per market, food security, and export potential. The	cent of GDP and occupies 28 percent of the labo main crops in Sri Lanka, namely various types o	or force. Consequently, the adverse effects o f rice, tea, and cocorut, are particularly sen	f a changing climate will o itive to variation in tempe	reate strain on Sri Lanka's d erature and precipitation. Va	omestic ariability
in distribution and amounts of precipitation are	the primary concerns for Sri Lanka's agricultura	sector, both currently and for predicted co	nditions.		
	0 :	Ś		**	
Sea level rise Inv	creased Temperatures	variability in distribution		Increased drought	
Soil erosion	Saltwater aquifers a	ntrusion into nd cropland	Reduced cro	p yields	
Crop failures	Increased	mainutrition	Overload of I systems leading	rrigation ng to flood	
G Water Resources					~
Coastal Zones And Ecosystems					~
Infrastructure And Industry					~
😥 Human Health					~
Reference https://www.climatelinks.org/resources/climate-risk-profi	le-sri-lanka				

Figure 10: Representation of sectoral climate impact in Climate Outlook in the CSG Dashboard

PROJECT TRACKER

The Project Tracker module (Figure 11) reveals a robust visualization tool designed for systematic monitoring of projects, with a specific focus on adaptation, mitigation, and cross-cutting initiatives. This analytical feature provides valuable insights, empowering public, and private sectors, as well as development partners, to effortlessly and thoroughly evaluate actions aimed at addressing the impacts of climate change.

By offering a transparent and comprehensive view, the Project Tracker facilitates a thorough assessment of climate change-related initiatives across diverse dimensions and scopes. It serves as a centralized platform for understanding the implementation of projects, highlighting successful strategies, and pinpointing specific areas where additional actions and interventions may be required. Users benefit from a categorized presentation of project details, allowing for deep dives into specific areas of interest. To explore a particular category in detail, users can easily click on "View all" next to the respective category, enhancing the user experience and providing a more comprehensive understanding of the ongoing projects.



Figure 11: User Interface of the Project Tracker Module.

Projects are visually represented on a map, offering a spatial understanding of clusters or potential gaps in initiatives. Users can utilize the search option to navigate through the projects and access detailed information.

Climate Resilience	Developme	nt Version About 1	Js Our Team Resources English 🗸 😫
Adaptation 👻	0 Add Project 🔶	Manage Projects	Sri Lanka
This module showcases the climate adaptation projects from an visible to all other users of the system. In time, the dashboard m initiatives or gaps exist.	ound the world that are implemented from national to local scale. As ay be made available more widely, so that members of smaller ente	yone who has signed up to the system can upload information abou prises and the public can also upload information on initiatives. Pro	t projects they are working on, with this information then becoming eets can be viewed on a map. to show where clusters of similar
66 Projects	4.81 Million Beneficiaries	4.27 Billion Budget (5)	26 Funding institutions
			Search Q D C m
Adaptation Climate Resilience Intergrated Water Management Project (CRIVMP)	Adaptation Climate Resilience Improvement project (CRIP)	Adaptation The Mahavell Water Security Investment Program (Investment program)	Adaptation Climate Smart Irrigated Agriculture Project (CSIAP)
CURRENT STATUS	CURRENT STATUS	CURRENT STATUS	CURRENT STATUS
Ongoing	Completed	Ongoing	 Ongoing
TARGETED SDGS	TARGETED SDGS B states T	TARGETED SDGS	TARGETED SOGS
View More	(View More)	View More) View More

Once a user clicks on "View all" the user is shown category category-wise page (Figure 12).

Figure 12: Visualization of Adaptation Projects in the Project Tracker Module of the CSG Dashboard.

Adaptation, mitigation and crosscutting project

This page serves as a comprehensive showcase of climate adaptation, mitigation, and crosscutting projects implemented across various scales within a specific country. Users who have registered with the system with access gain the ability to contribute information about the projects they are involved in, making this information visible to all other users within the platform. The collaborative nature of the platform encourages knowledge sharing and networking among participants, fostering a community-driven approach to climate initiatives. As the platform evolves, there are considerations for expanding its accessibility to include members of smaller enterprises and the public. This would allow a broader spectrum of individuals to contribute information on diverse initiatives, creating a more inclusive and dynamic knowledge sharing environment. Clicking on "View more" (Figure 13) provides users with in-depth insights into individual projects (refer to the below image), promoting a deeper understanding of the diverse climate projects within the specified region.



Figure 13: Project Summary Displayed in the CSG Dashboard.

To gain a deeper understanding of the project's details through visual interpretation, users have the option to explore both the graphs view and the table view (Figure 14 and 15). The graphs view provides a visual representation of analytics related to individual-level projects, breaking down data into comprehensible visuals that highlight key insights. Users can navigate through various graphs to extract pertinent information. For those interested in delving into the specifics of an individual project, the table view offers a detailed breakdown. This tabular representation allows users to explore granular details, providing a comprehensive overview of the project's components and analytics. By seamlessly switching between graphs and tables, users can tailor their exploration based on their preferences, ensuring a flexible and user-centric experience.



Figure 14: Comprehensive Representation of Project Details in the Graphical Views.

				Sear	rch Q 🗅 e 🔳
Show 10 🖌 entrie	es				
S.No	🗍 Project Name	Start Year	End Year	Current Status	Action +
1	Climate Resilience Intergrated Water Management Project (CRIW)	MP) 2017	2024	Ongoing	View Details
2	Climate Resilience Improvement project (CRIP)	2013	2019	Completed	View Details
3	The Mahaweli Water Security Investment Program (investment pr	ogram) 2015	2025	Ongoing	View Details
4	Climate Smart Irrigated Agriculture Project (CSIAP)	2018	2024	Ongoing	View Details
5	Water Supply and Sanitation Improvement Project (WaSSIP)	2021	N/A	N/A	View Details
6	Climate Resilience Multi-Phase Programmatic Approach (CResMP)	A) 2022	2026	Ongoing	View Details
7	The North-East Irrigated Agriculture Project	2000	2005	Completed	View Details
8	Strategic Support to Accelerate Climate Action in Sri Lanka	2022	2023	Ongoing	View Details
9	The Small Grants Programme - Conserve and restore the environ	ment 2022	2025	Ongoing	View Details
10	Climate Change Adaptationproject - Climate smart and non-chem agricultural practices	ical 2017	2022	Completed	View Details
Showing 1 to 10 of 66	5 entries				Previous 1 2 3 4 5 6 7 Next

Figure 15: Comprehensive Representation of Project Details in the Table Views.

Moreover, the CSG offers users the capability to search for projects using keywords, enhancing the system's user-accessibility. For instance, if a user enters the keyword "Climate," the system will efficiently shortlist all projects related to that specific term (Figure 16). This search

functionality adds a user-friendly dimension to the CSG, allowing users to quickly and precisely locate relevant projects based on their specific interests or focus areas.

Interest as Climate Resilience	Developmen	nt Version About U:	s Our Team Resources English V
		(climate Q
Adaptation	Adaptation	Adaptation	Adaptation
Climate Resilience Intergrated Water Management Project (CRIWMP)	Climate Resilience Improvement project (CRIP)	Climate Smart Irrigated Agriculture Project (CSIAP)	Climate Resilience Multi-Phase Programmatic Approach (CResMPA)
CURRENT STATUS	CURRENT STATUS	CURRENT STATUS	CURRENT STATUS
Ongoing	Completed	Ongoing	Ongoing
TARGETED SDGS	TARGETED SDGS	TARGETED SDGS	TARGETED SDGS
	6 determine 1 3 determine	12 promini 6 statesta 13 stri 14 stri	8 iiii
View More	View More	View More	View More

Figure 16: Visualization of Project Search Functionality.

The dashboard offers users the privilege to both "Add" new projects and "Manage Projects" that have already been entered into CSG. To utilize the "Add Project" feature, users are required to input all mandatory details (Figure 17). After successfully entering all the necessary information, users can click on "Save" to create the project. Once a project is successfully created, users can conveniently oversee and administer the project by navigating to the "Manage Projects" section or accessing the "Monitoring and Evaluation Tools." This streamlined process ensures efficient project management and monitoring within the dashboard interface.

Home / Monitoring and Evaluation Tools / Add Project

Add Project

BASIC DETAILS							
Name of the Project*	Category*		Project Description*				
Name of the Project	Nothing selected		Project Description				
Project Status*	Start Year*	End Year*	Country*				
New	•		Sri Lanka	•			
Province/County*	District		Funding Amount (USD)*				
10 items selected	25 items selected		•				
OTHER DETAILS							
Agro Ecology*	Number of Beneficiaries*		Types of Beneficiaries*				
Nothing selected	•		Nothing selected	•			
Beneficiary Categories*	Sector*		Climate Hazard*	Climate Hazard*			
Nothing selected	Nothing selected		Nothing selected	•			
Risk*	Purpose of Adaptation*		Scale*				
Nothing selected	▼ Nothing selected		▼ Nothing selected	•			
ADAPTATION DETAILS							
Adaptation Description*	Adaptation Typology*		Typology Categories*				
Adaptation Description	Nothing selected		▼ Nothing selected	•			
Governance Level*	Funding Organizations*		Implementation Partners*				
Nothing selected	▼ Nothing selected		✓ Nothing selected	·			
Other Partners*	SDGs Targeted*		SENDAI Indicators*				
Nothing selected	 Nothing selected 		 Nothing selected 	•			

Figure 17: Add Project' Window, Enabling Users to Input and Include Relevant Information for a New Project.

MONITORING AND EVALUATION TOOLS

The Monitoring and Evaluation segment of the CSG serves as a dynamic hub for overseeing climate change projects across different levels and scales. It empowers users to input and organize project data, establish measurable goals, and monitor progress in real-time. This component provides users with the capability to visualize project performance, evaluate key metrics, and pinpoint potential bottlenecks, facilitating informed, data-driven decision-making.

Users can initiate a new project using the "Add Project" button, and once created, they have the flexibility to edit the project details. Modification of project details is easily accomplished through the "Modify Project" option (Figure 18). In instances where a project was not properly created, users can employ the "Delete Project" feature. Additionally, users can add or modify outcomes associated with a specific project.



Figure 18: Monitoring and Evaluation Module, Featuring Additional Functionalities for Comprehensive Project Monitoring and Evaluation.

For prabilityth attached reports, users can seamlessly view progress and access detailed reports through the "View Progress/View Report" option (Figure 19). This user-friendly interface ensures comprehensive project oversight and efficient management within the CSG Dashboard.

CGIAR	Internet con Climate Resilience	Development Version	About Us	Our Team	Resources	English y	•	
Man	age Outcomes							
Hom	e / Monitoring and Evaluation Tools / Climate Resilience Int	ergrated Water Management Project (CRIWMP)						
					Add Outcome	Search		
Show	10 v entries							
Out	come 🔺	Description		Act	ion			
-	No data available in table							
Show	ing 0 to 0 of 0 entries					Previous	Next	

Figure 19: Visualization of Project Outcomes for Reporting Purposes

GEO INTELLIGENCE TOOLS

The Geo-Intelligence Tools page serves as a comprehensive resource, offering users detailed country-level information on the available geospatial data within the platform. Within this page, users can access and explore various sections that provide an in-depth overview of the country-level information. The Geo-Intelligence components are designed to empower users in visualizing, analyzing, and interpreting an extensive array of information, facilitating rapid assessment and decision-making.

On this page, users have the flexibility to tailor their exploration by selecting different combinations through the filters provided on the left. These filters enable users to focus on specific aspects of the geospatial data, ensuring a customized and precise analysis. Additionally, the compare buttons, strategically positioned next to hazard and risk indicators, enhance the user experience by allowing a side-by-side comparison of all relevant parameters. This feature aids users in gaining a holistic view of different data points simultaneously, facilitating a comprehensive understanding of the geospatial information presented. The user-friendly interface and interactive tools make the Geo-Intelligence Tools page a valuable resource for users seeking nuanced insights into country-level geospatial data.

Major catergories of geo-inteligent (Figure 20)



Figure 20: Data Panel Interface within the Geointelligence Tool

Admin

The CSG Dashboard incorporates essential administrative boundaries, including country, province, and district demarcations. Users can easily engage with these boundaries through a straightforward process within the Geo-Intelligence Tools. By checking the designated checkboxes, users can seamlessly visualize specific data associated with the selected administrative layer whether it pertains to the entire country, specific provinces, or detailed district-level information (Figure 21). This user-friendly approach allows for a dynamic and customizable visualization experience. Users retain control by simply unchecking the boxes to remove specific layers from the visualization, ensuring a clear and focused representation of the desired geographical information. This standardized process remains consistent across all available layers within the Geo-Intelligence Tool, enhancing ease of use and enabling users to efficiently navigate and analyze geographical data at various administrative levels.



Figure 21: Visualization of Various Administrative Boundaries in the Geointelligence Tool

Project feature

Within the Geo-Intelligence Tool, the Project feature offers an engaging and interactive way to visualize the spatial distribution of projects. Users can seamlessly explore the provincial-level distribution by clicking on the map. Upon selecting a specific province, the tool dynamically displays all projects associated with that region. The projects are categorized into key themes such as adaptation, mitigation, and crosscutting. This user-friendly functionality not only provides a visual overview of project locations but also offers additional details, including the specific categories to which each project belongs. By incorporating an interactive map interface, users can efficiently navigate and explore the spatial distribution of projects at the provincial level, contributing to a comprehensive understanding of ongoing initiatives within a particular geographic area (Figure 22).



Figure 22: Spatial Distribution Visualization of Projects at Provincial Level with Relevant Details in the Geointelligence Tool

One notable aspect of this tool is its dynamic behaviour. When a new project is added to the system through the Project Tracker or Monitoring & Evaluation module, it is immediately reflected in the Geo-Intelligence Tool. This seamless integration ensures that the spatial distribution of projects stays up-to-date, offering users real-time insights into the geographic expansion of climate-related initiatives. The interconnected nature of the modules enhances the tool's responsiveness, providing users with accurate and timely information about the evolving landscape of projects across different regions.

Hydrology

The Hydrology feature offers comprehensive information on hydrological aspects, encompassing distinct layers such as rainfall stations, river gauges, river basins, and individual rivers. The availability of separate layers ensures that users can selectively visualize and delve into specific aspects of hydrology based on their analytical needs (Figure 23).



Figure 23: Visualization of Relevant Hydrological Parameters Essential for Informed Decision-Making

Infrastructure

The Infrastructure features offer pivotal layers crucial for decision-making in the project implementation process. These layers include essential elements such as roads, railways, and major towns, as well as the locations of major hospitals and schools. These infrastructure layers play a vital role in providing contextual information and insights necessary for effective decision-making during various stages of project planning and execution.

Hazard

The Hazard feature within the CSG is a crucial component, encompassing the main multi-hazard layer along with distinct layers for individual hazards such as flood, drought, landslide, extreme rainfall, extreme cyclone, wildfire, and coastal risks. This feature empowers users by allowing them to visualize hazard information both as separate individual layers and through a comparative view that displays all layers simultaneously (Figure 24). This capability provides users

with comprehensive insights into diverse hazards, facilitating a nuanced understanding of the complex risk landscape (Figure 25).



Figure 24: Interactive Representation of District-Level Multihazard Data, Including Single Hazard Events such as Flood, Drought, Landslide, Extreme Rainfall, Extreme Temperature, Cyclone, Wildfire, and Coastal Hazard.



Figure 25: Display of Risk Indicators within the Geointelligence Tool Interface

Risk Indicators

The Risk Indicators feature in the CSG offers critical information on key risk indicators, including metrics for casualties, injuries, missing persons, affected populations, house damage, house destruction, agricultural damage, and relief payments for major disasters in Sri Lanka, such as cyclones, floods, droughts, and landslides (Figure 26). This feature is equipped with the flexibility to provide users with insights through individual and comparative views, enhancing the user's ability to analyze and comprehend the impact of various disasters on different parameters.



Figure 26: Interactive Display of District-Level Cyclone Exposure, Including Metrics such as Casualties, Injuries, Missing Persons, Affected Population, House Damage, and House Destruction.

DEVELOPMENT INDICATORS

Within the CSG, users can delve into the details of individual Sustainable Development Goals (SDGs) by simply clicking on a specific SDG, prompting an in-depth analysis to appear on the right panel. This module is meticulously crafted to enhance comprehension of a country's advancement in fulfilling the UN SDGs. As individual projects are enumerated, users on the dashboard input information about the specific SDGs they aim to address.

This feature serves as a guiding beacon for monitoring and evaluation teams, directing them to conduct surveys that assess changes in SDG indicators and the measures by which progress towards meeting targets is judged. The combined data from numerous projects contributes to a comprehensive view of a nation's accomplishments in advancing towards SDGs (Figure 27). Additionally, users have the flexibility to select a particular SDG in the filter, allowing them to examine the trend of SDG scores for the selected goal (Figure 28). This functionality not only

advances a nuanced understanding of progress but also empowers users to explore the intricacies of individual SDGs and their tracks over time.



Figure 27: Representation of Country-Level Achievement of Sustainable Development Goals (SDGs).



Figure 28: Representation of Country-Level Achievement of Sustainable Development Goals (SDGs).

ADAPTATION CATALOG

This module serves as a global showcase for climate adaptation projects, ranging from national to local scales, implemented worldwide. Users who have registered on the system gain the capability to contribute information about the projects they are engaged in, making this information accessible to all other users within the system. As the dashboard evolves, there are prospects for broader accessibility, potentially allowing members of smaller enterprises and the general public to contribute information on their initiatives. The geographical distribution of projects is visualized on a map, providing insights into the clustering of similar initiatives or identifying areas with gaps in project coverage (Figure 29). Users can employ filters, either through the map interface or the options provided on the left, to tailor their view. To delve into the specifics of a single project, users can seamlessly click on a project listed in the table below, facilitating a detailed exploration of individual initiatives.



Figure 29: Visualization of the Adaptation Catalogue within the CSG Dashboard.

INVESTMENT PLANNING PORTFOLIO

This module offers a comprehensive snapshot of a country, outlining key pillars of its economy and assessing the climate-related risks it faces. Users can delve into the potential impacts on Gross Domestic Product (GDP) across various climate scenarios within the agriculture, services, and industry sectors, along with an evaluation of stress levels (Figure 30). Policymakers can leverage this module as a foundational tool for in-depth analysis, enabling them to gauge the potential financial implications of climate change within their nation. Additionally, this evidence can be instrumental in attracting investment from donors by providing a clear understanding of the economic landscape and associated risks.



Figure 30: Visualization of Investment Portfolio Planning within the CSG Dashboard