

Resource mapping and impact analysis on health security investment

(REMAP)



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1. Background

Under the WHO General Programme of Work (GPW 13), the WHO Health Emergencies Programme (WHE) will contribute to the strategic priority of having 1 billion more people better protected from health emergencies. WHO developed the resource mapping and impact analysis on health security investment (REMAP) tool to advance this effort and support Member States in strengthening core health security capacities.

The REMAP tool helps countries meet the requirements of the International Health Regulations (IHR, 2005) by facilitating the mobilization of financial and technical resources for implementation of National Action Plans for Health Security (NAPHS) and other country plans with relevance to health security. The tool supports countries in donor coordination, identifying gaps and needs, monitoring of plan implementation, and in the linkage of different plans to increase efficiency and achieve synergies.

IHR (2005) is a legally binding set of regulations adopted by all WHO Member States for the prevention and control of events that may constitute a public health emergency of international concern. Through the regulations, countries are required to develop, strengthen and maintain minimum national core public health capacities to detect, assess, notify and respond to public health threats. Country capacities are evaluated through the IHR Monitoring Evaluation Framework (MEF) which is comprised of four components: State Party Self-Assessment Annual Reporting (SPAR), voluntary Joint External Evaluation (JEE), simulation exercises (SimEx) and After Action Reviews (AAR). Countries can create a NAPHS to address the gaps in health security capacity found in the assessments.

The implementation of the IHR MEF will draw on WHO's convening role to facilitate strategic cooperation and generate collaborative dynamics between and within countries; as such the WHO Strategic Partnership for IHR and Health Security (SPH) created the REMAP tool to play a catalytic role in promoting/ensuring coordination and harmonization among countries, partners and donors for plan implementation.

2. Overview of REMAP

The REMAP process is designed to support implementation of NAPHS and other national plans with relevance for health security. The tool maps the health security projects that partners are supporting in the country — through financial or technical assistance — allowing policymakers and partners to see where the gaps exist and where more investment of resources is needed. This provides valuable information for the country and at the same time offers visibility for the partners' financial and technical investments.

The tool can for example, identify whether partners are mostly supporting one area such as laboratory systems with little support for another priority area like zoonosis activities. The REMAP process fosters dialogue between countries and partners for a coordinated multisectoral approach to plan implementation.

Resource mapping workshops have revealed overlap in donor-funded projects, encouraging donors to be more flexible in their earmarking of funds to achieve better coordinated results. New and reprogrammed funding has been identified through the REMAP process, both domestic and external, resulting in the funding of prioritized activities and the acceleration of plan implementation through strategic partnerships.

The Excel-based tool can also faciliate country prioritization of health security activities and provides a platform for users to identify which activities that a country's different plans have in common, demonstrating the linkages between plans and enabling the harmonization of health security and IHR (2005) efforts.

The tool allows countries to track the progress of implementation of their NAPHS activities or other national plans' activities and to monitor the completion of prioritized activities and the strengthening of country IHR (2005) capacities.

As plan implementation progresses, the tool can be used to demonstrate the effect of the activities on overall health security through an impact analysis. This allows the country, and donors, to measure the results of their investment and to make evidence-based decisions on resource mobilization and allocation.

The country controls the resource mapping process and maintains ownership of the data, while WHO provides ongoing guidance and technical support that can include adapting the tool for the national context.

3. Target Audience

This document is for Member States, partners (including donors and partners who are providing technical assistance) and other stakeholders to better understand the REMAP tool and how it can support implementation of national health security plans. The document details the objectives of the tool, describes how the REMAP process works, how WHO supports the process, and illustrates the features of the tool.

4. Objectives of the REMAP tool

- 1. To provide Member States with better visibility of available and potential resources for health security in order to accelerate implementation of National Action Plans for Health Security (NAPHS) and other health-security related plans
- 2. To facilitate the sharing of information between Member States, partners and donors, including data on partner investments and activities, on country needs and gaps, and on the effectiveness of allocations for public health preparedness and health security activities
- 3. To foster collaboration and synergies through harmonization of country, donor and partner efforts for effective public health preparedness and strengthening national capacities to prevent, detect, and respond

4. To provide Member States with evidence-based information to measure the effectiveness of investments, informing the allocation and distribution of resources for strengthening national, regional and global health security

5. How REMAP works

process.

POST

REMAP is a country-owned process run by the national authorities with support from WHO to provide information on the resources invested in health security-related activities and the impact on strengthening IHR (2005) capacities.

Resource mapping process Checklist on workshop Resource mapping Regular communication among template preparation Government focal point, WHO (all Share the template with Draft Agenda level), donors and partners technical lead and partners to pre-populate the matrix. Concept note Identified list of country Identified list of resources available to Drafting the Draft for monitoring next steps for priorities for support implementation of country and evaluation implementation priority activities implementation mechanism to track Consensus building process to define country priority using the Information sharing among all stakeholder on the needs and gaps potential resources facilitated by progress proposed prioritization categories the resource mapping tool **Budget Process** Advocacy Strategic Monitor Action for 3 Cycle of National Planning and budgeting Partnership Financing implementation

Regular coordination among WHO

update the resource mapping tool

ors and partners on progress

Resource mapping is a collaborative process with active participation from country and partner representatives. The process can involve a workshop in which participants are divided into technical working groups (i.e. Prevent, Detect, Respond and other IHR) based on participant expertise. Each group is assisted by a facilitator who has been trained in the process. Each group is given a REMAP data sheet to provide inputs into the tool.

WHO coordinates Financing

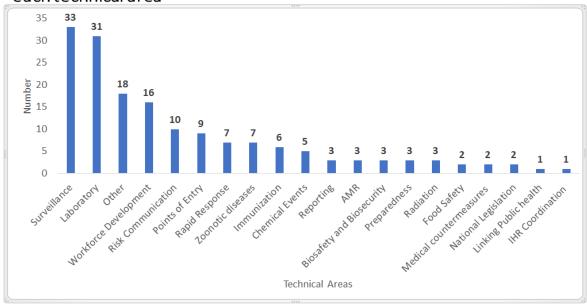
Forum with Countries, Don

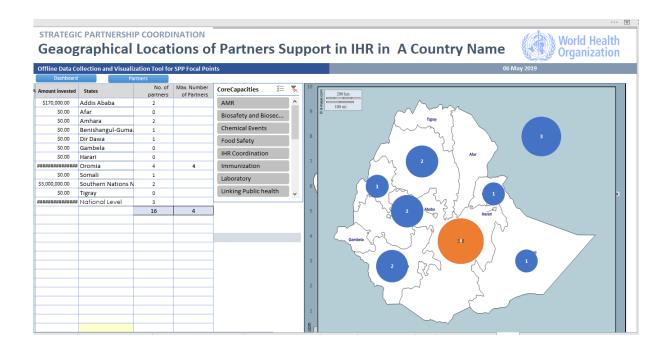
and Partners.

The participants use the REMAP data sheet to identify the ongoing health security investments and activities in the country, both from partners and the government. The data collected includes details on the name of the partner supporting the project, the name of the project, a description of the project, the start and planned end date, the main technical area being supported, how far along the project has progressed, the channel of funding (direct, bilateral, through WHO, through other agencies), the amount invested, the type of contribution (financial, in-kind, in-service), and the location of the project in a specific country.

The inputs are collated in the REMAP tool, which provides data visualization of the partner and donor landscape (examples below).

Number of interventions being implemented by partners/donors under each technical area





The REMAP process continues beyond the initial mapping. A national focal point is trained to continue the process with WHO support, inputting information from new partners into REMAP and updating existing information. Donor coordination forums can be held to discuss the results of the resource mapping, identify areas for collaboration, and mobilize resources for filling gaps and strengthening preparedness.

REMAP is also used for plan monitoring and establishing linkages. The tool displays each of the activities in the NAPHS or other national plan being monitored. These activities can be filtered by technical area, activity status, etc. and matched with activities in other health-security-related plans

to identify synergies and duplications. For example, users can review whether both NAPHS and an Ebola preparedness plan call for the establishment of a rapid response team. If they do, the plans may be linked, for example, through creation of a rapid response team with Ebola and broader IHR (2005) capacities.

The tool is updated as activities are completed and displays progress in implementing the plan being monitored. As implementation progresses, the country can conduct an impact analysis to measure the effect of the activities.

b. Impact analysis on health security investment

The impact analysis assesses the results that come from completion of prioritized activities. The process emphasizes country ownership of health security and involves the Ministry of Health or equivalent authority creating a high level impact analysis committee, potentially inviting partners to participate.

The committee would collaborate with a WHO technical team in the development of a questionnaire to measure the impact of prioritized activities in alignment with the GPW 13 strategic priority of 1 billion more people better protected from health emergences. The questionnaire, based on existing JEE and health system indicators, would focus on assessing the impact on capacities such as infection prevention and control (IPC), health emergency operations centre (EOC), surveillance, and laboratory.

The collection and centralization of impact data is through the REMAP tool. The tool produces an impact score based on the results of the questionnaire. For example, an activity could involve the training of 100 health workers, and the impact analysis would examine whether the training methodology and structure led to an improvement of country capabilities. If not, then a different approach would be warranted.

The objective of the impact analysis is to assess the effectiveness of the investment and also to inform the country in making decisions on future resource allocation. The impact analysis can identify which activities provide maximum public health benefits with minimum inputs, supporting policymakers in prioritizing actions.

6. How WHO supports REMAP

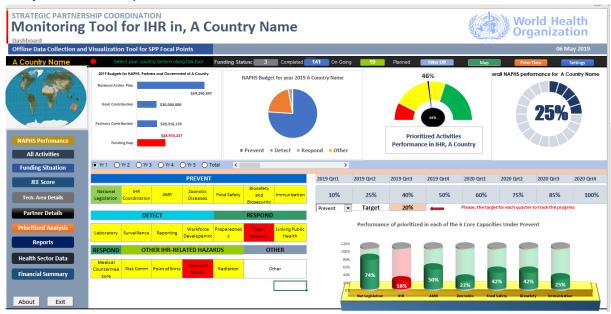
- WHO will support development of the REMAP tool for individual Member States and support
 the country in setting up a multisectoral platform (i.e. dashboard in excel or other costeffective application) to help policymakers prioritize activities using an evidence-based
 approach.
- WHO, at country request, will provide technical assistance through an in-country workshop
 or other means practicable to meet country needs. This assistance can include technical
 support for activity prioritization, linking of plans, mapping of partner projects in the country,
 and multisectoral preparedness coordination to assist the country in consultations with
 partners and other stakeholders for resource mobilization. WHO will brief workshop

participants on use of the tool and help train country facilitators to assist the process of collating information on partner investments and activities at the national and sub-national levels.

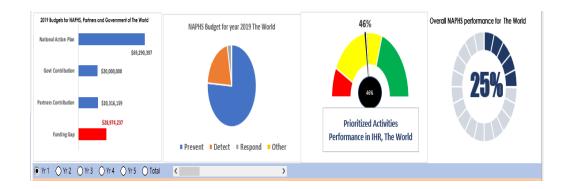
- WHO will work with countries upon request to develop and build consensus on a questionnaire to measure the impact of plan activities on health security capabilities, and provide technical assistance in the impact analysis.
- WHO will work with an in-country focal point to assist in ongoing resource mapping and provide follow-up support as needed
- WHO will provide remote capacity building and other support to countries where applicable

7. Features of the REMAP tool

The features of the REMAP tool cover 13 main pages, with the front page (the dashboard) being the main control page. The dashboard has the name of the tool and the country, e.g. "Monitoring Tool for IHR in Country Name."



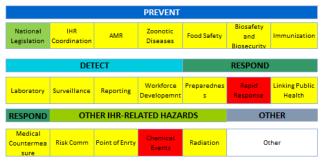
The top of the dashboard features charts that visualize data on funding, partner contributions and progress on IHR and health security: The dashboard data visualizations depend on the resource mapping data and the NAPHS data.



- Budgets for NAPHS, Partners and Government in the country: This chart shows the
 total NAPHS estimated cost in USD as well as the known partner and government
 contributions to plan implementation. The "funding gap" displayed in the chart is the
 difference between the total cost and the contributions. The figures can be viewed
 for the entirety of the five-year plan or separated into costs and contributions for
 individual years.
- **NAPHS Budget**: This chart displays the estimated NAPHS cost divided into the categories of Prevent, Detect, Respond and Other.
- Prioritized Activities Performance in IHR in a Country: This chart displays progress in
 meeting country targets for implementing prioritized activities within the plan. The
 chart updates automatically when data is entered into the REMAP tool on progress
 toward completing an activity.
- **Overall Plan Performance:** This chart shows the percentage of progress made in completing all activities in the plan.

A table beneath the charts displays the 19 technical areas grouped under the categories Prevent, Detect, Respond, and Other IHR related hazards and other. The colors of each of the technical areas

reflect the country's JEE score in that particular area (no capacity – red; limited or developed capacity – yellow; demonstrated or sustainable capacity – green). Clicking each of the technical areas will take you to the detail page for that technical area. Example: if you click laboratory, it will take you to the laboratory details and show you the number



of partners, the amount of investment and the region/district of operations etc.

The battery chart at the bottom right corner of the dashboard displays the implementation progress by technical area of the country's prioritized activities within the plan. Countries can set quarterly

targets for implementation and use the chart to review progress on meeting those targets. This is done by entering the quarterly targets in the target cell and the charts will automatically update. All the areas with values equal to or greater than the target value turn green, while those below the targets remain red.



The top row of the front page has seven buttons, the first three of which are used to filter the dataset.

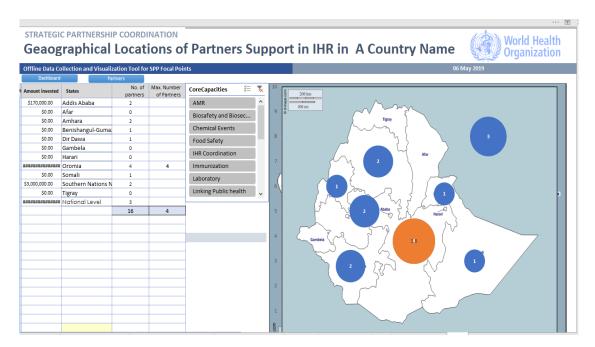
Funding Status: 50 Completed 143 On Going 21 Planned Filter Off Map Enter Data Settings

- The grey button separates out completed activities for display. The number of completed activities is displayed on the button.
- The blue button separates ongoing activities for display. The number of ongoing activities is displayed on the button.

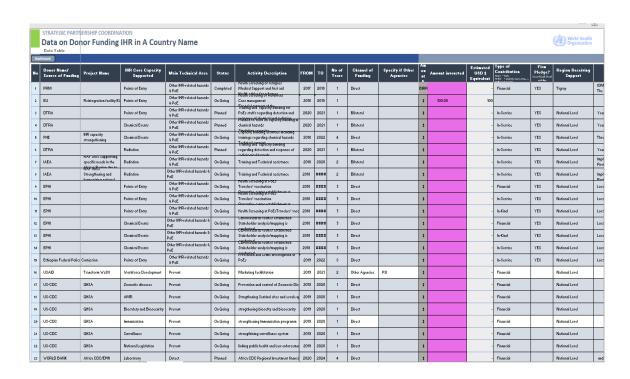
- The green button filters out planned activities for display. The number of planned activities is displayed on the button.
- The light blue button is used to clear the filter in the main dataset after any of the three filter buttons have been used

The final three buttons on the top row are navigation buttons to access the map page, the data entry page and the settings page.

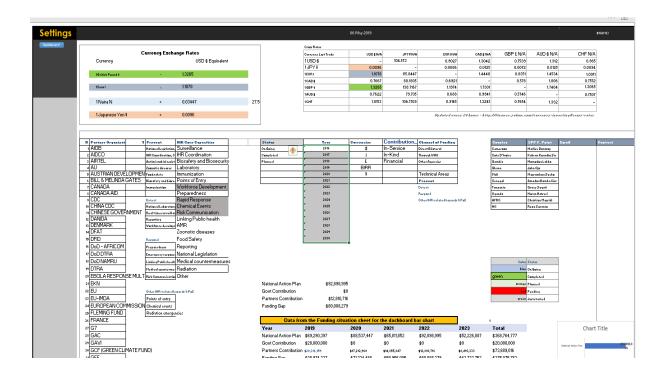
Map page: This page displays the country map subdivided into districts (i.e. states or provinces). The number of partner interventions in each district is shown (the district with the largest number of interventions is highlighted in orange). The number of partners providing support in each district can also be displayed. Users can select a technical area and see how much partner support that each district within the country is receiving in that particular technical area.



Data entry page: This is the engine of the dashboard. All the visualizations are generated based on this page. The user must therefore be careful to enter accurate and complete data in this page. The main data entry fields for this page are the name of the country; the name of the project being implemented; the technical area being supported; the status of the project (whether completed, ongoing, just started, early stage etc.); a description of the project, the start and end dates of the project; the channel of funding (whether bilateral, through WHO or through other agencies); the amount invested by the donor, the type of contribution (whether financial, in-kind or in-service); the location of the project or investment (whether it be at region/district level or at the national level); and a remarks column to note issues of interest.



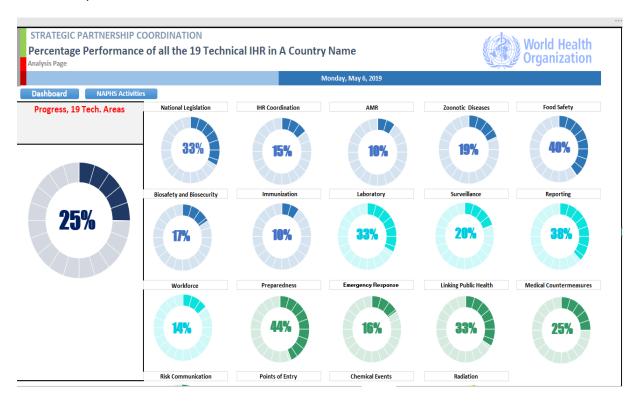
Settings page: This is the page that supports the programming of the dashboard and users are advised not to delete or enter anything here unless they are asked to do so. The detail user manual for this page is part of the troubleshooting manual.



The extreme left of the dashboard front page has a map of the country. Once you click on it, you go to the map page. Below the country map are buttons that navigate to additional pages within the REMAP tool.



NAPHS Performance page: This page visualizes implementation of plan activities in each of the 19 technical areas. The performance of this page depends on the **NAPHS Activities page.** Users should not click any of the charts.



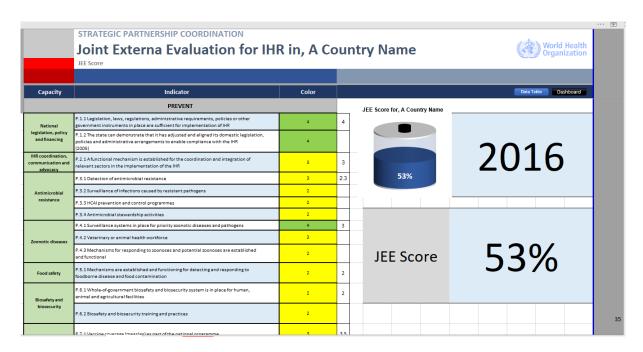
NAPHS Activities page: This page details each of the activities in the plan by technical area, indicator and objectives. It includes a description of the activity, the budgeted amount for the activity, and progress in completion.

Dashboard NAPHS Performance									
Technical area	Indicator	Objectives	Activity specification	Activity	Status		centage of hievement	Budgeted Amount for 2018	Budgeted Amou for 2019
National Legislation	Legislation, laws, regulations, administrative requirements, policies or other government instruments in place for implementation of IHR.	To ensure adequate statutory and administrative provisions for the implementation of IHR by December 2018	NAPHS Activity	Develop an inventory of the administrative and statutory provisions relevant to IHR 2005 in relevant Ministries, Departments and Agencies (MDAs)	Just Started		25%	151740000	151740000
National Legislation	Legislation, laws, regulations, administrative requirements, policies or other government instruments in place for implementation of IHR.	To ensure adequate statutory and administrative provisions for the implementation of IHR by December 2019	NAPHS Activity	Assess the existing administrative and statutory instruments in line with IHR 2005	Ongoing	•	50%	66850000	66850000
National Legislation	Legislation, laws, regulations, administrative requirements, policies or other government instruments in place for implementation of IHR.	To ensure adequate statutory and administrative provisions for the implemtation of IHR by December 2020	NAPHS Activity	Develop or review the administrative and statutory instruments to make them compliant with IHR 2005	Pending		10%	637938000	637938000
National Legislation	Legislation, laws, regulations, administrative requirements, policies or other government instruments in place for implementation of IHR.	To ensure adequate statutory and administrative provisions for the implemtation of IHR by December 2021	JEE Recommendation	Hasten the review of the Public Health Ordinance and develop related policy guidelines	Pending		10%		
National Legislation	Legislation, laws, regulations, administrative requirements, policies or other government instruments in place for implementation of IHR.	To ensure adequate statutory and administrative provisions for the implemtation of IHR by December 2022	JEE Recommendation	Review other laws touching on the implementation of the IHR and develop their policy guidelines	Completed	0	100%		
National Legislation	Legislation, laws, regulations, administrative requirements, policies or other government instruments in place for implementation of IHR.	To ensure adequate statutory and administrative provisions for the implemtation of IHR by December 2023	JEE Recommendation	Assess the Enviromental Protection Act and MAFFS (Draft Animal Disease Act)	Just Started		25%		
National Legislation Sub Total						3	6.67%		
National Legislation	Legislation, policies and administrative arrangements enable compliance with the IHR (2005)	To adjust and align legistlation, policies and admistrative arrangements in compliance with IHR 2005 by end of 2018	NAPHS Activity	Sensitize relevant stakeholders (MDAs, Paliamentarians, Partners etc) on the aligned documents	Advanced Stag	•	75%	75510000	75510000
National Legislation	Legislation, policies and administrative arrangements enable compliance with the IHR (2005)	To adjust and align legistlation, policies and admistrative arrangements in compliance with IHR 2005 by end of 2019	JEE Recommendation	Sensitize relevent stakehoders on these laws, policies and regulations	Completed	0	100%		

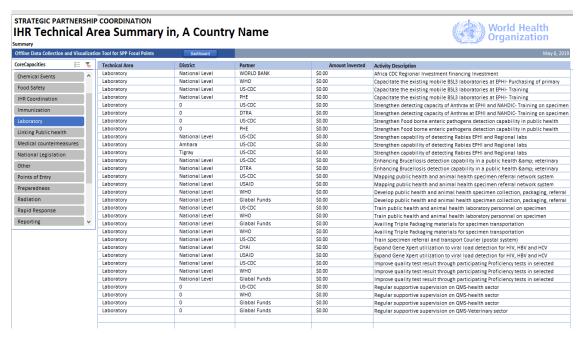
Funding Situation page: This page displays the funding situation in the country. The total estimated cost of the five-year NAPHS is displayed here along with the contribution from all partners and the government in each year. The funding gap is shown, representing the difference between the estimated cost of NAPHS implementation and the domestic and external funding.



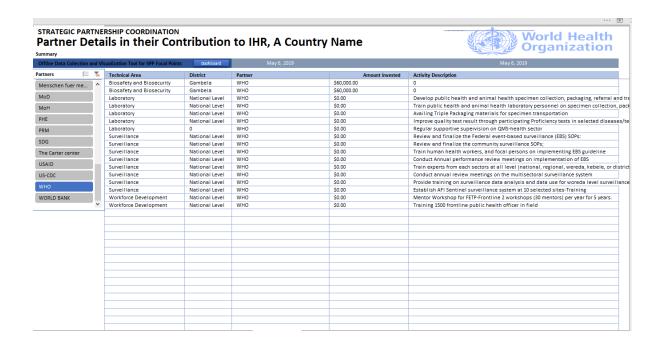
JEE Score page: This displays the country JEE scores in each technical area and shows the average score as a percentage.



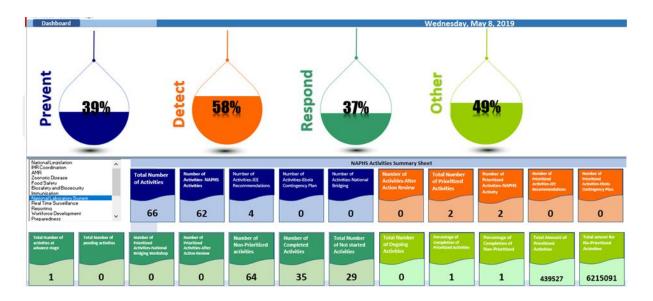
Partner by Technical Area: This page gives details of partner support by technical area. The page has a control slicer at the left-hand side that allows users to click any technical area and see details such as location of operations, partners investing in the technical area, amounts invested, and a description of the activities.



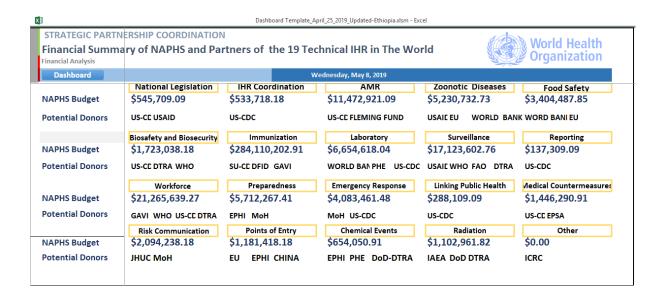
Partner Details: This page gives detail on each of the partners. The page has a control slicer on the left-hand side that allows users to click any partner and see details such as the districts of operations, the technical areas the partner supports, and the amount invested by that partner with a description of their activities.



Prioritization page: This page tracks prioritized activities divided into the four categories of prevent, detect, respond and other. Bottle charts update automatically when progress on prioritized activities is input to the NAPHS activity sheet. The page also includes summary information on activities.



Financial Summary information: This page displays the estimated costs of NAPHS implementation in each of the technical areas and potential partners identified by resource mapping data.





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