Development of a Training Knowledge Management System for the SERVIR global network

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I. Introduction

The SERVIR program is a partnership between NASA, the U.S. Agency for International Development (USAID), and leading regional organizations ('hubs') across the Americas, Africa, and Asia (**Fig. 1**). SERVIR has focused on building capacity to use Earth observations for addressing development challenges.
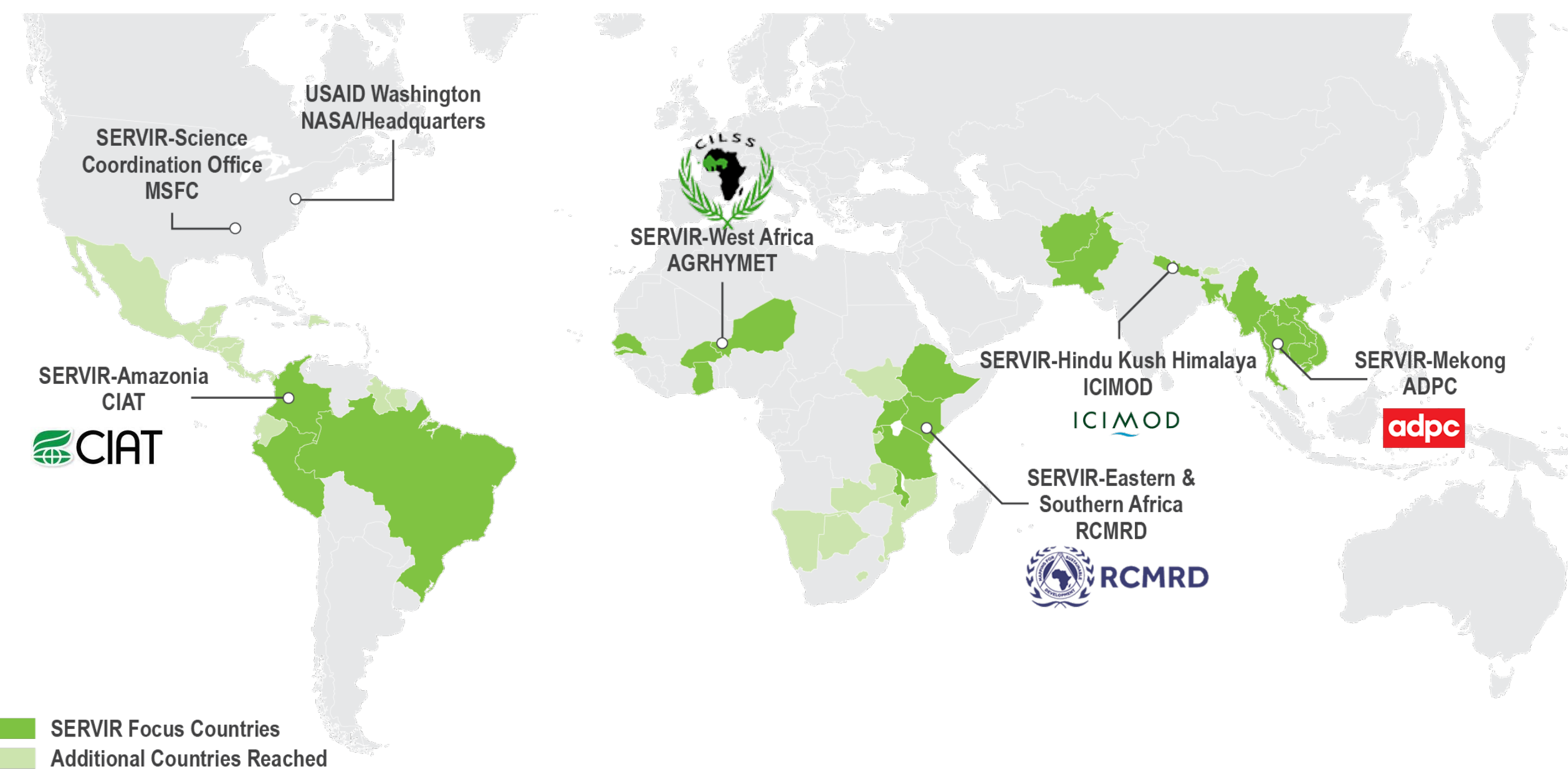

FIGURE 1: SERVIR focuses on countries in Africa, the Americas and Asia.

Since mid-2004, SERVIR has:

* delivered **323** trainings to more than **5,000** professionals
* executed **58 trainings in 2019** alone (**Fig. 2**)
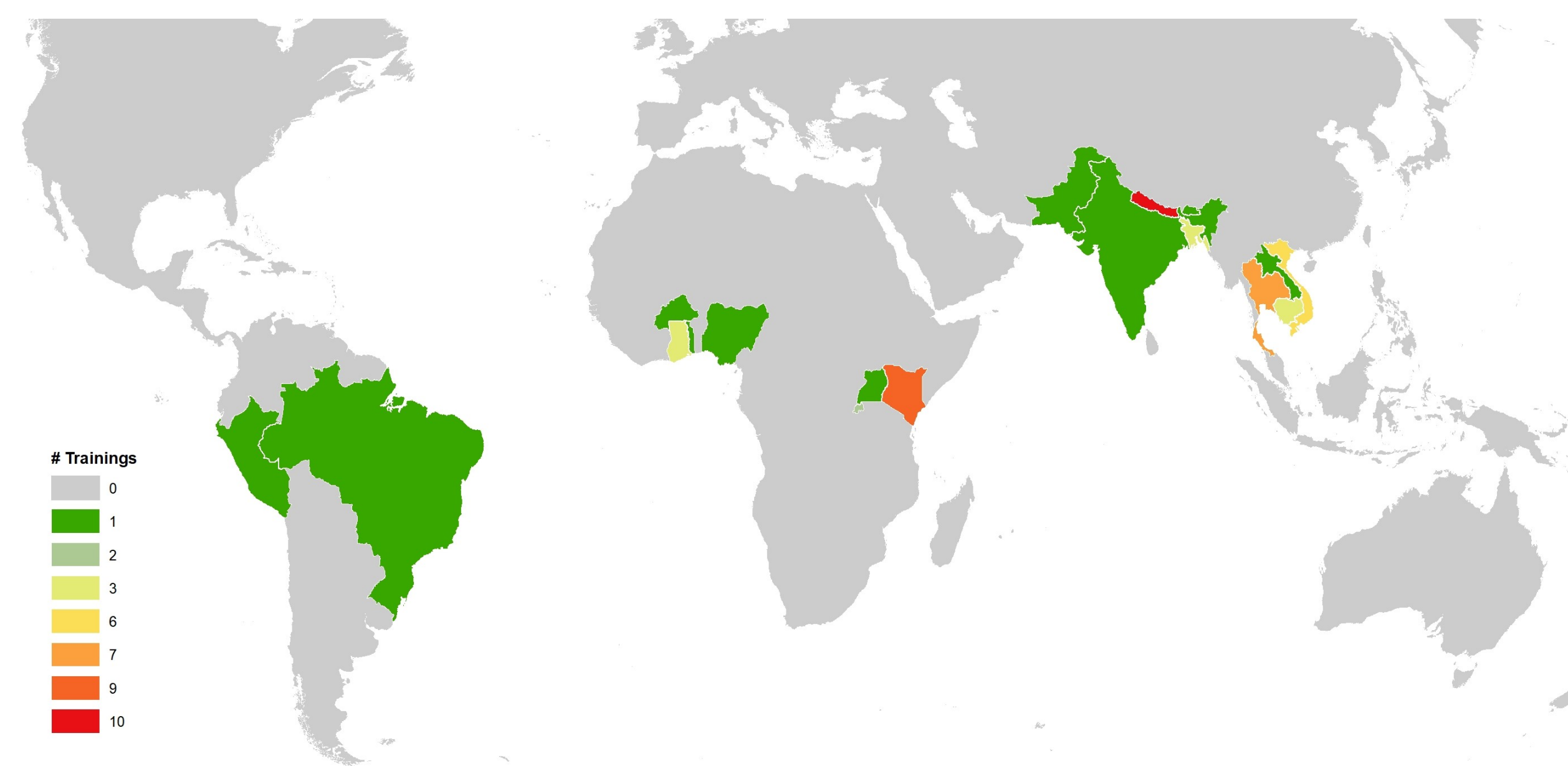* focused on capacity building in topics related to Earth observations, spatial analysis, and modeling

FIGURE 2: Trainings carried out across the network in 2019.

Problem statement: The large number of trainings constitute both an opportunity and a challenge with respect to knowledge management. While the training materials developed can later be reused in other parts of the SERVIR network, the lack of a central repository for those materials has prevented wider dissemination and use.

II. Methods

A SERVIR Training Knowledge Management (TKM) system is therefore in development, to facilitate access to the network's wealth of training materials. The TKM system is being implemented in the following phases:

Short term
* Document priorities and necessities across the SERVIR network
* Development of the framework for the TKM system

Medium term
* Development of a SERVIR Earth observation capacity building framework, in parallel

Long term
* Implement the archiving of training materials
* Make available self-guided training materials
* Put in place a QC process (e.g. external peer review & publication, internal review)

III. Results and Discussion

The framework for the SERVIR TKM system is shown in **Figure 3**, with the system possessing components for:

* archiving of materials from the trainings
* having a calendar of past as well as upcoming training events
* providing access to pre- and post-course surveys
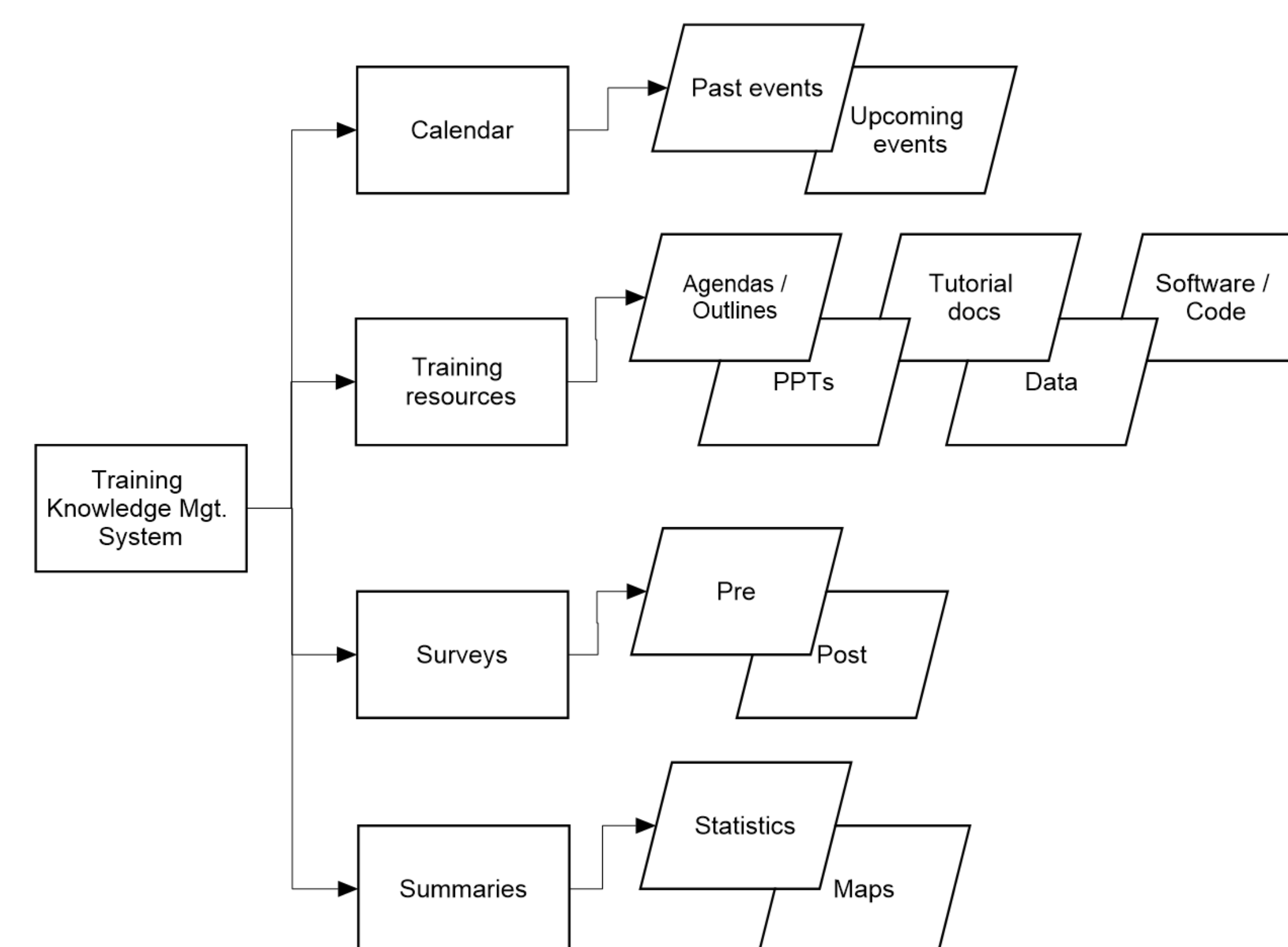* being able to rapidly generate statistics or maps related to trainings

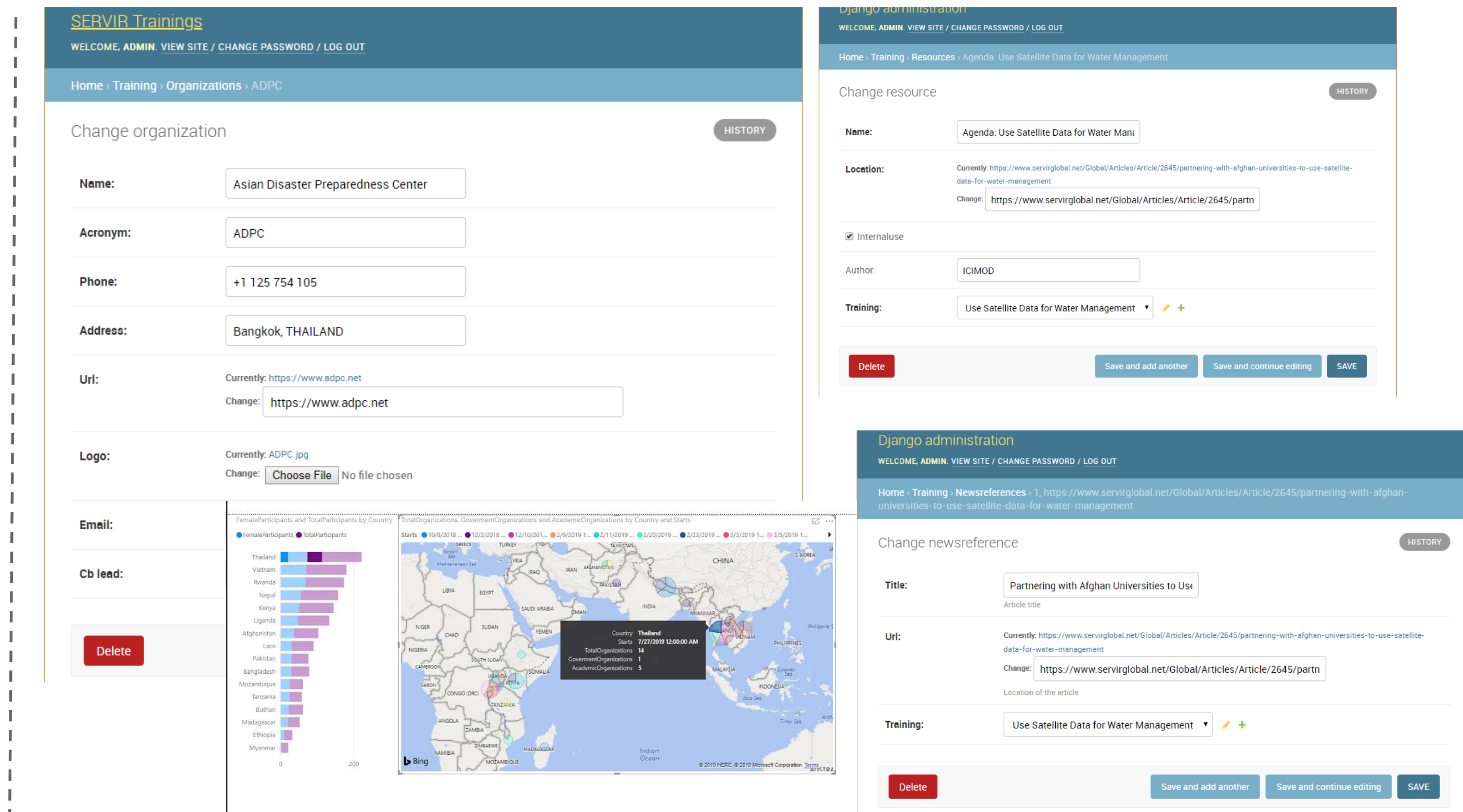FIGURE 3: Schematic diagram of the components of the SERVIR TKM system.

FIGURE 4: Screenshots from SERVIR TKM system interface.

Figure 4 illustrates the Web interface for the SERVIR TKM system, an Internet-based platform for data entry and the generation of summaries on capacity building activities that have been conducted across the SERVIR network.

IV. Conclusions

While the SERVIR TKM system is still in development, it is anticipated that it will:

✓ Facilitate upscaling of services / transfer of capacity from hub to hub (e.g. AGRHYMET being able to uptake CREST / EF5 capacity by using materials already developed by and for RCMRD)
✓ Allow hubs, USAID, NASA to be aware of what trainings are occurring w/in the network -> south-south collaboration
✓ Facilitate access to information that is often requested by NASA, USAID management
✓ Support CEOS WGCapD / GEO Capacity Building foundational task activities regarding global inventories of capacity
✓ Help to avoid duplication of effort re: reporting; improve reporting by having de-centralized 'one stop shop'