

Data Archival and Access through Water Data Portal



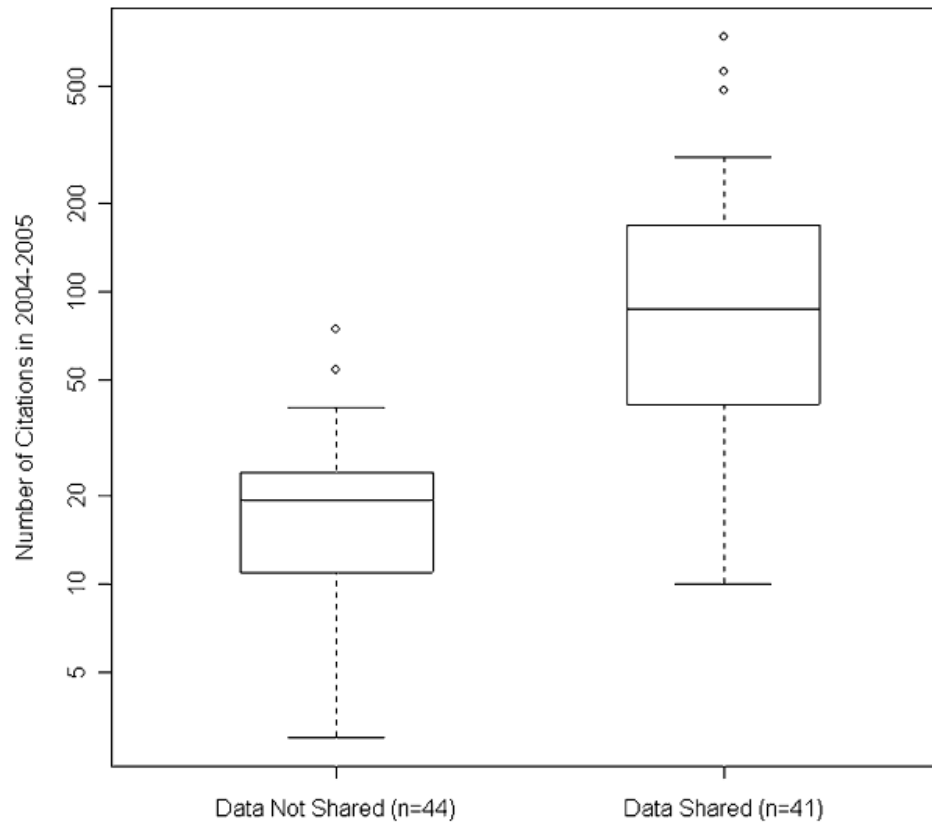
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International Water
Management Institute (IWMI)

**Inception Workshop
Turning Tragedy into Opportunity:
Water Management Solutions for Flood Recession and Dry Season Farming in Nigeria**

Abuja, Nigeria – 9th July 2014

Importance of Data Sharing

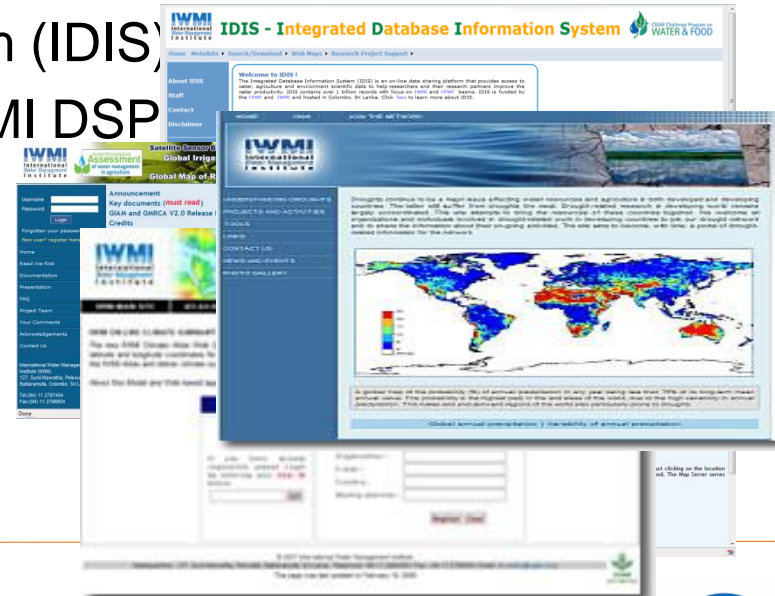


Source: Piwowar HA, Day RS, Fridsma DB (2007) Sharing Detailed Research Data Is Associated with Increased Citation Rate. PLoS ONE 2(3): e308. doi:10.1371/journal.pone.0000308



Usual Scenario

- Large amount of data
 - individual computer or network storage devices
 - in the HQ and regional offices
- Data disseminated through various data portals:
 - Integrated Data and Information System (IDIS)
 - Remote Sensing Data Storehouse (IWMI DSP)
 - Global irrigated area map
 - IWMI global wetland database
 - South West Asia drought monitor
 - Drought Information System
 - Water and Climate Atlas and others



Scenario

- Staff Leaving/Projects closing
- No Backup of the data
- Data Duplication/Redundancy
- Limited Access
- Limited knowledge of where about of the Data



Requirement

- An integrated repository providing a one stop access to all data stored in IWMI's archive
- Access to data is provided in compliance with copyrights, intellectual property rights and data agreements



Water Data Portal

The screenshot shows the Water Data Portal website. At the top left is the IWMI logo (International Water Management Institute). The main header features the text "WATER DATA PORTAL" and "Integrated portal for IWMI research data" over a world map background. A navigation bar below the header contains links for "Home", "About", "Search", and "User".

The main content area is divided into several sections:

- Welcome:** A text block providing an overview of the portal's purpose and access to data in IWMIDSP and IDIS.
- Login:** A form with fields for "User Name" (containing "SSiddiqui") and "Password" (masked with dots), a "Remember me" checkbox, and a "Login" button.
- Usage Meter:** A box showing "Member Total: 1020" and "There are 0 registered members and 1 guests viewing the site."
- Recent Contributors:** A list of contributors with their names and counts in parentheses, separated by dashed lines:
 - IWMIDSP(787)
 - T. A. Boden, Russ Vose(216)
 - Dr. Mats Lannerstad(34)
 - B.R. Ariyaratne - Benchmark Basin Coordinator(33)
 - Dr. Mobin Ahmad(31)
- RSS Feed:** A box with an RSS icon and the text "Recent uploads".
- Disclaimer:** A small box at the bottom left of the main content area.

A small image of a person in a white shirt looking at a screen is located in the top left of the main content area.

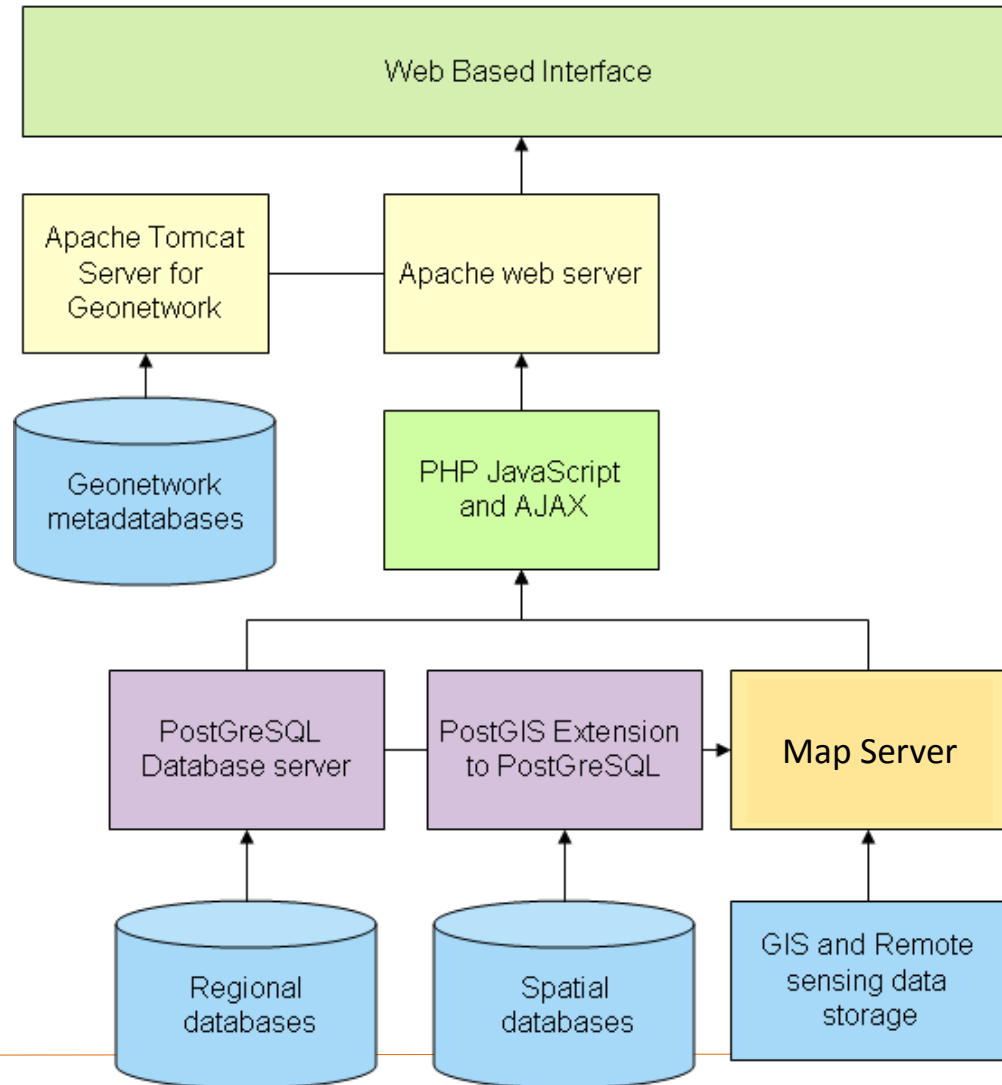


Data Sets

- Water Data Portal stores all datasets from earlier data portal (e.g. IDIS, IWMIDSP, etc.) as single data repository.
- Provide flexible access to Basin kits
- Information on Model Setups
- Integrated interface to **share** project data and **submit** data at project closure



Architecture



Data Access

- Enhanced feature to access all IWMI and project data
- The search features provide keyword search as well as spatial search for the whole repository
- Built-in Filter - provide information on number of available dataset in different category



User/Access Management

- Levels of users
 - General Users
 - IWMI Users
 - Project
- Data managed at different levels
 - Country
 - Basin
 - Project



User/Access Management

Completely Public	Public with Registration	Files Restricted	Files Restricted
All users can access metadata and download files	All users can access metadata but need agree to license/terms of use to download files	All users can access metadata, but files are only available to IWMI Users	Only Project team can access metadata and files. This means that the data can not even be found by searching for non-authorized users.



Access Control

- Users can set up access privileges
- Administrator/Project Leader control on publishing dataset after checking the quality
- IWMI user can login with their network credentials to access the system
- Metadata could be viewed without login



User Interaction

- WDP maintains single style on presenting datasets throughout the system.
- Number of expected records (hits) are displayed against each filter-value.
- Users can do comment on datasets.
- Users can bookmark datasets. (for future references)
- Users can share useful web links.
- Most recent uploads in home page
- Contributors list in the home page
- RSS feed to publish in other web site



Access Issues

- A Dedicated Server
 - 16mb bandwidth
 - 68TB of storage space



DEMO

Water Data Portal

<http://waterdata.iwmi.org>



Thank you!

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Questions

