

Disaster Management System

UNESCAP

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Why Do we need WEB DRM

- Provide place to centralize data
 - Infrastructure data
 - Disaster data
 - Social Economical data
- Provide Rapid data sharing
 - Remote sensing data from E.g. JAXA, NASA
 - Local data from local agencies
- Easy disaster response coordination
 - Organized response of disaster response teams.
- Visualize and analyze disaster data

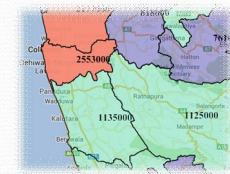


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SADKN & Limitations

Web GIS system to visualize disaster data

- Only disaster Coherence data
 - Location of disaster and information
- Difficult interpret the data
 - Changing point size is not very effective
- Limited Query functions
 - Only based on year and disaster



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SADKN Limitations cont...

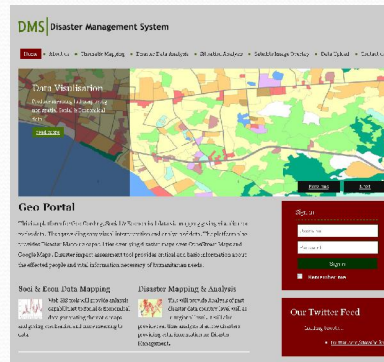
- Display disaster as point data.
 - No Idea of disaster extend
- Can not incorporate other data sources.
 - Land use, building, roads, ect..
- No statistical analysis of the data
 - Disaster frequency , total number killed



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UNESCAP Disaster Management System

- Powerful web based tool based on GeoEDGE to support
 - Social and Economic data visualization.
 - Disaster data visualization.
 - Disaster data analysis using high resolution images.
 - Real time situation analysis based on Remote sensing data.

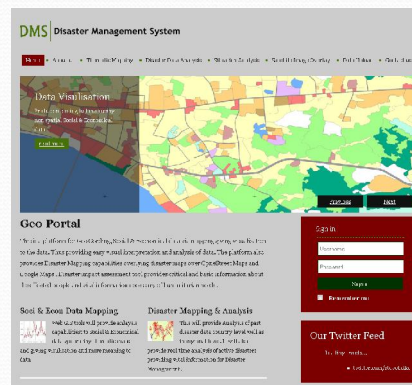


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Geo Portal capabilities

Functions

- Thematic Mapping
 - Map Social & Economic data
- Disaster Data Analysis
 - Past disaster analysis
- Situation Analysis
- Satellite Image Overlay
 - Functions
 - Thematic Mapping
 - Map Social & Economic data
 - Disaster Data Analysis
 - Past disaster analysis
 - Situation Analysis
 - Satellite Image Overlay
 - Real Time disaster mapping using satellite data.



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What does this all mean

- Any one can produce thematic map's based on Social and Economic data without prior GIS knowledge.
- Visually analyze disaster, social and economics data.
- Automatic situtation analys

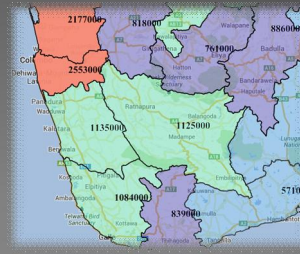
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Data sources

- Social and Economic data
 - UN data (<http://data.un.org/>)
 - World bank data
- Disaster data
 - <http://floodobservatory.colorado.edu>
 - <http://www.desinventar.net>
- Satellite Remote Sensing data
- User Input
 - Buildings, land use, roads

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Thematic mapping



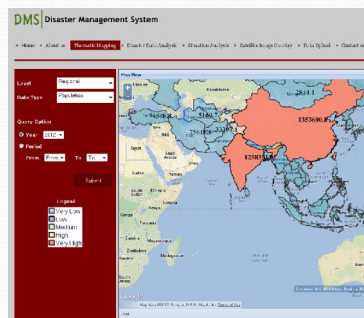
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Thematic mapping

Powerful tool that enables automatic Geo coding of social & economic data and dynamics map base on user Query.

- *Automatic Geo-code Social & Economic data.*
- *Generate Dynamic Thematic Maps.*
- *Easy comparison of data.*
- *Simple layer switching functions*
- *User query of data.*

#	Country	Area (km ²)	Population (millions)	Density (per km ²)	Population (millions)	Density (per km ²)	Population (millions)	Density (per km ²)	Population (millions)	Density (per km ²)
1	China	9,600,000	1,353,600,800	140.0	1,353,600,800	140.0	1,353,600,800	140.0	1,353,600,800	140.0
2	India	2,973,100	1,258,351,600	423.3	1,258,351,600	423.3	1,258,351,600	423.3	1,258,351,600	423.3
3	USA	3,797,000	307,000,000	80.8	307,000,000	80.8	307,000,000	80.8	307,000,000	80.8
4	Indonesia	1,904,000	237,000,000	124.5	237,000,000	124.5	237,000,000	124.5	237,000,000	124.5
5	...	...	...	...	...	...	...	...	...	...
6	Japan	377,835	126,800,000	335.8	126,800,000	335.8	126,800,000	335.8	126,800,000	335.8
7	UK	244,810	61,000,000	249.2	61,000,000	249.2	61,000,000	249.2	61,000,000	249.2
8	France	643,801	65,000,000	101.1	65,000,000	101.1	65,000,000	101.1	65,000,000	101.1
9	Germany	357,021	82,000,000	229.7	82,000,000	229.7	82,000,000	229.7	82,000,000	229.7
10	Italy	301,330	60,000,000	199.1	60,000,000	199.1	60,000,000	199.1	60,000,000	199.1
11	Spain	505,992	45,000,000	88.9	45,000,000	88.9	45,000,000	88.9	45,000,000	88.9
12	Canada	9,984,670	33,000,000	3.3	33,000,000	3.3	33,000,000	3.3	33,000,000	3.3
13	Australia	7,741,220	22,000,000	2.8	22,000,000	2.8	22,000,000	2.8	22,000,000	2.8
14	South Africa	1,219,090	55,000,000	45.1	55,000,000	45.1	55,000,000	45.1	55,000,000	45.1
15	Brazil	8,511,763	207,000,000	24.3	207,000,000	24.3	207,000,000	24.3	207,000,000	24.3
16	Argentina	2,780,167	43,000,000	15.5	43,000,000	15.5	43,000,000	15.5	43,000,000	15.5
17	South Korea	100,431	50,000,000	498.0	50,000,000	498.0	50,000,000	498.0	50,000,000	498.0
18	Sweden	450,295	9,000,000	20.0	9,000,000	20.0	9,000,000	20.0	9,000,000	20.0
19	Norway	385,203	5,000,000	13.0	5,000,000	13.0	5,000,000	13.0	5,000,000	13.0
20	Finland	148,586	5,300,000	35.7	5,300,000	35.7	5,300,000	35.7	5,300,000	35.7



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Automatic Geo-code Social & Economic data

Provide Social & Economic data in tabular format.

Add Regional Social

Fields with * are required.

Country

Year

POP

GDP

GDP Growth

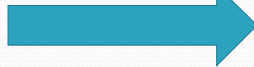
Paddy Quantity

Paddy Area

Paddy Yield

Life Expectancy

Convert Tabular data in to maps



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Generate Dynamic Thematic Maps.

- Query based on the **Data Type**
- Query based on **year or period**

Level

Data Type

Query Option

☒ Year

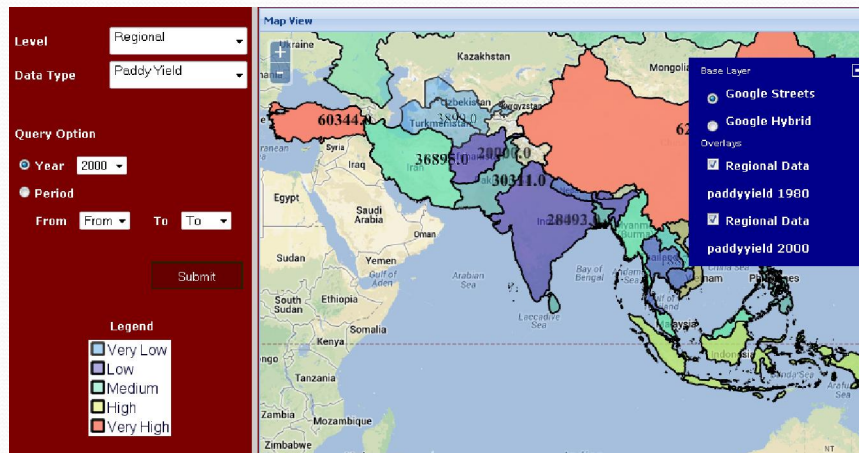
☐ Period

From To

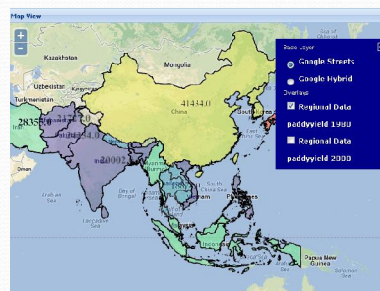
Legend

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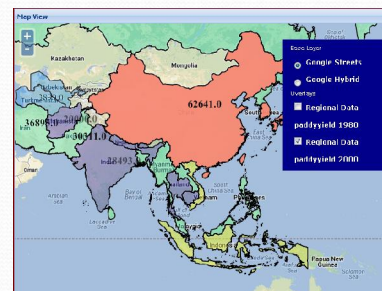
Easy analysis & comparison of data.



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Paddy Yield 1980



Paddy Yield 2000

Easy Selection tools



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Uploading data

- Web based tool set to easily upload data.

- Simple form for data upload

The screenshot shows the 'Update Regional Social' form within the DMS Disaster Management System. The form includes a sidebar with navigation links: 'List Regional Social', 'Add Regional Social', 'View Regional Social', and 'Manage Regional Social'. The main content area contains a form with the following fields: Country (a dropdown menu showing 'Democratic People's Republic of Korea'), Year (a text input with '1990'), POP (a text input with '2010.2'), GDP (a text input), GDP Growth (a text input), Paddy Quantity (a text input with '1.5e+006'), Paddy Area (a text input with '60000'), Paddy Yield (a text input with '3000'), and Life Expectancy (a text input with '70.2'). A 'Save' button is located at the bottom of the form. At the bottom right of the page, there is a copyright notice: 'Copyright © 2013 by G.T.I.G.C. All Rights Reserved. Developed by: G.T.I.G.C. 2013.10.10'.

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Task

- Create map of population in year 2010?
- Which country has the second highest population?

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_5750

