RuralScope: An Repository for Tracking Rural Disbursements

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Problem: Development Aid

- Trace
  - Increasing reporting requirement
  - Quantifying the loss
  - Evidencing the loss
- Dissemination
  - Public activism in development
  - Much research on Internet and activism: maplight.org
  - Some interest in spatial analysis and development studies: gapminder.org, globalis.org
NREG Description

- 2005 Nationwide Act in India
- Designed for seasonal unemployment
- 31 Million households
  - Households need to register with panchayat
  - $1.50 per day minimum wage
- Wide data collection, poor aggregation
NREG Problems

- Allocation
  - Non-issuance of cards
  - Misrepresentation of payments
- Monitoring
  - Social Audits (tens of millions recovered yearly)
    - Door to door, time consuming
    - Murders/intimidation of
  - Public interest (Rural news)
- Data Storage
  - No systematic storage of data
NREG Data in various states
RuralScope

• Create a structured, browsable interface for NREG data
  
  FOR MONITORS
  • Allow easy record access for social audits
  • Create point of access for aggregating audit reports

  FOR CASUAL USERS
  • Allow users to create and store visualizations of data
  • Annotate and classify visualizations

• Current Status
  • Initial prototype ready
  • Round 1 of testing with Govt. of Andhra Pradesh
  • Demo at ICTD2009
Data Flow and System Components

Web browser

Domain Dataset store

Create a data-def

Search Interface

Create a view-def

Definition store

Save

Lookup

Add filtering options

No

Satisfied with view?

Yes

Create and save viz-def

Annotate viz-def

Govt. data store on NREGA site

Internet

Download raw data

Disconnected operation

Database slice

Offline mobile devices

On field social audit activists

Researchers, Administrators Civil society

RuralScope server

Online interaction

Online web-client
Visualization Output

(A) Dimensions

Name: District
Type: Location
Level: District

Adilabad
Anantapur
Chittoor
East Godavari
Guntur
Kadapa
Kanindagar
Khammam
Krishna
Kurnool

(B) Measures

Works in Progress
Max value: 
Min value: 

Works Completed
Max value: 
Min value: 

Title for the view

Create View

(C) Graph

In-progress projects
Completed projects

Go to Parent View

sort by

labels

Refresh
Annotation Output (construction)

COMPLEX ANNOTATION

SIMPLE ANNOTATION
Challenges

• **Technical**
  - Technical agenda limited in basic system redesign
  - Annotations most interesting, difficult with dynamic sample

• **Socio-economic**
  - Popular use of online economic information still anecdotal
  - Privacy / ethical issues
  - Comparable cases with same levels of data rare