In the name of Allah, the Beneficent, the Merciful
Land Administration & E-gov in Punjab

Reality & Desire

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Who I am?

- Represent the Punjab Government
- Punjab is the largest Province of Pakistan
- Population: 90m
- Area: approx 200,000 sq km
- 35 districts, 144 sub districts
- 35% urbanized
- 5 cities of m+, with Lahore at 8m
Preamble

- The presentation is based upon a project that is *work in progress*

- & hence does not answer all the questions, and may look a bit disorganized

- But that is *by design & not by default.*
What I shall talk about

1. The LAS system
2. The Punjab SDI
3. The urban GIS
4. The future vision of e-governance
Land Administration System

- The current LAS was designed more than a century ago, based upon a system that was designed 450 years ago.
- It is deed registration based.
- It of course is paper based and the cadastral maps we have are cloth printed.
- The system as a whole suffers from a number of issues and is in need of serious re-engineering.
Land Administration System

Essentially an Information Management System (Spatial & Alphanumeric)

- Land features (location, parcel size, use, legal status etc)
- Owner ship rights
- Transfer details and record
- Encumbrances (Taxes & Charges)
Components of Land Admin System

1. The People
2. The Premises
3. The Papers
4. The Process
5. The Product
The Papers

- Very old, archaic, hand written documents overflowing with errors, ill kempt and poorly managed,
The Premises

- Almost no patwari offices, low quality ill maintained field of
Imprisoned record:
Needs to be liberated
Land Records
Urban Land Administration

- The LAS in Punjab was designed primarily for agricultural lands
- Urban land has been managed on the same system
- This gives us an opportunity to design a new system, based upon GIS & cadastral maps
On a scale designed for weighing wood......
We are trying to measure Gold
Computerization

- Computerization with the same Business Processes

- Replacing a few components of the system without changing the inter-relationships, interdependencies and interactions will not change the system

- Like putting a diesel engine in a Horse driven cart
Improved premises
### Similar Product

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<th>Description</th>
<th>Quantity</th>
<th>Size</th>
<th>Price</th>
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<td>Product C</td>
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*Note: All prices are in USD.*
BPR

- Business Process Re-engineering is the missing link
What is Required

Change the whole system
Successful GIS Project
or: Why Most of the GIS projects fail to deliver

- 20% Technology
- 35% Business Process Reengineering
- 45% Change Management
Changing the system

- Change is very difficult to implement
- Almost everyone wants status quo
- The only person ready and willing for change is ...........

6/10/2009
What is a system?

- A group of *interrelated*, *interacting* and *interdependent* components, forming a complex whole, designed to achieve some objective.
Integration

- Land Admin System
- Planning
- Development
- Management
  - Of all government functions
  - At local, city, district, provincial, national levels
  - All ITC work done till date
Re-engineering the system

Issues

- Inertia
- Human resource
- Vested interest
- Champion for change
Work done till date

- Computerization of land records
- GIS system for Punjab (starting with urban areas)
- Pilot GIS based mapping [lahore_parcel.mxd]
Lahore Density Map
LAHORE GIS

- Iris
Vision for a Punjab GIS

- A comprehensive IMS, based upon GIS, with an enterprise level, web based architecture, covering all departments & all levels of the Government, where it is integrated into the entire business processes, using state of the art technologies, yet simple in use for all users.
Where are we?

- Satellite imagery procured 25% of cities
- Base map for entire Punjab
- Parcel level mapping for urban areas
- Various levels of thematic maps
- Applications being developed
A Brand name: Iris Punjab
Property Tax GIS
Punjab SDI (Work in progress)

- Regulatory framework
- Hardware
- Standards
- Partnerships
Capacity Building

- Institutional
- Personnel
Learning from International Experience

- Every system is based upon *Principles*
- We need to design *Processes*,
- Then we need *People to Practice* the system
- All this in the local *Perspective*
Cost of system

- Not looking at the financial cost benefit
- But the economic cost benefit of improving the system
- The opportunity cost of not doing it
The Strategy 1

- Incremental growth, BUT

- With a very clear sense of destination:
  - The vision
  - The Direction
Strategy 2

Termite approach
Strategy 3

- Communication levels only appropriate
- Not worried that only 1% understand the technology
- So is the case with pharmacology, & medicine
Strategy 4

- Client led approach &
- Not Consultant led
Thank You

End of Presentation
How the customer explained it

How the Project Leader understood it

How the Analyst designed it
How the Programmer wrote it

How the Business Consultant described it

How the project was documented
What the customer really needed