

# Modernization in Land Registration and Management

8.1 Determination of user needs

8.2 Restructuring of administrative and **organizational structure**

8.3 Legislative reforms, surveying land and property boundaries

8.4 Land information management

8.5 Central Vs decentralize system

8.6 Developing awareness in the user community

8.7 Capacity building for Land registration and land management

8.8 Role of professional body

GIS GMC

WDC SCF

# Determination of user need

- To identify the needs or demand of the situation
- To know what should be done on the basis of the existing situation and demand of the situation

How to identify need?

- Situation analysis
- Gap identification
- Identifying Actions to be taken

GIS

# Contd...

## ❑ Need analysis

- Need analysis focus on the **requirement related to the goals**, needs of user or user community and **feed them into the system**
- The ultimate purpose of need analysis is the **user's satisfaction**

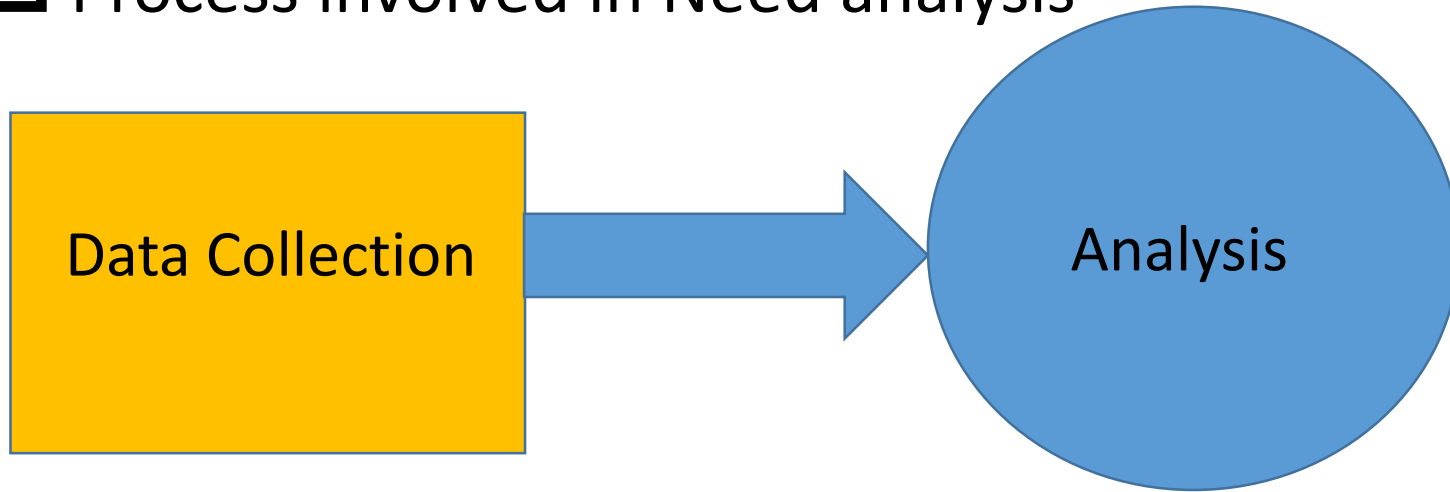
## ❑ So how to identify the customer's need

- Client request
- Modification of an existing system/design
- Generation of new system/product

GMC

# Contd...

## ❑ Process involved in Need analysis



### Data Collection

- Observation/Workshadowing
  - ✓ Observing the people in workplace
  - ✓ Workshadowing : If you follow somebody around in workplace we call it workshadowing
- Questionnaires
- Expectation
- Interviews( telephone, Postbox etc)

- Analysis focus on the situation gap, analyze the various questionnaires, expectation from the user and provide the service

Contd...

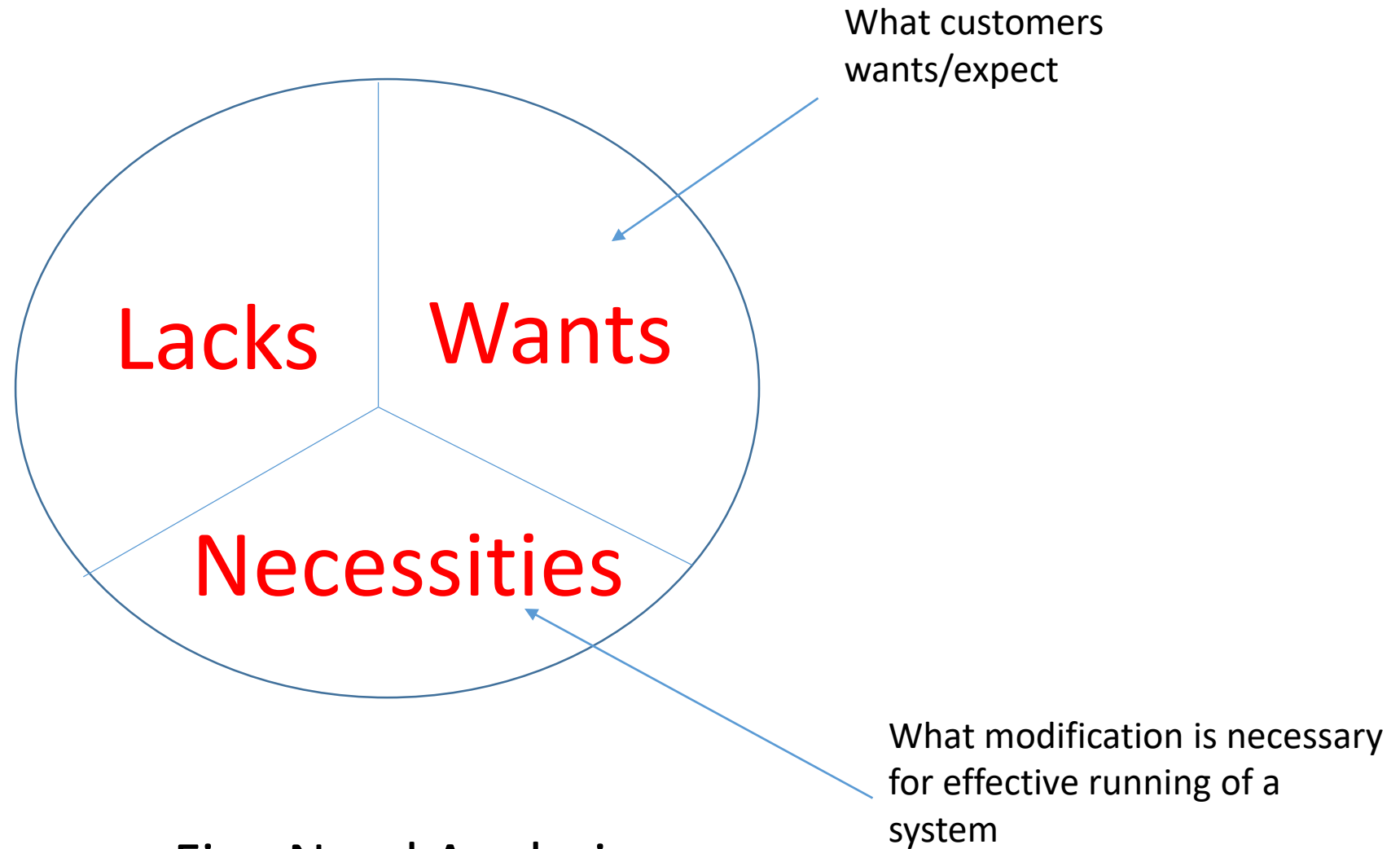


Fig : Need Analysis

# Example

## MaP PLeT

- Cadastral system
  - Existing situation
    - Poor documentation
    - Manual procedure
    - Possibility of error is higher
    - Time consuming
    - Less accuracy
  - Required situation
    - Good documentation
    - Automatic procedure
    - Less possibility of error
    - Faster
    - Highly accurate
    - Many other advantages
- What will be the solution?
- Digital Cadastre could be a solution

# Determination of user need



# Emerging Trends

## E-Land Administration System

- **4D cadastre**: recording 'time' in cadastre
- **Crowd sourcing** in land administration
  - A new, collaborative partnership between **citizens and land professionals**
  - it uses **Internet and on-line tools** to get work done by obtaining input & stimulating action from citizen volunteers
  - supports scientific evidence gathering and record events in disaster management
  - Possibilities are being explored how citizens **could be engaged for land administration** with this approach that would be much more **inclusive for the disadvantaged and vulnerable**, increase access to land markets and help support **poverty reduction**.



# Contd...

- Cadastre vision 2034
- “A cadastral system that enables people to readily and confidently identify the location and extent of all rights, restrictions and responsibilities related to land and real property.”

# Basics of organizational structure

Simply organizational structure indicates **how the job tasks are formally divided**, grouped and coordinated.

- Designing organizational structure is specifically a management's job. If we count these factors, the six are key elements that must be addressed. These are:

1. Work Specialization
2. Departmentalization
3. Chain of Command
4. Span of Control
5. Centralization and Decentralization
6. Formalization

# Contd....

## Work Specialization:

- The essence of work specialization is that, rather than an entire job being done by one individual, it is **broken down into a number of steps**, with each steps being completed by a **separate individual**.
- To some extent work specialization **increases efficiency and productivity**.
- But in some jobs it also brings **fatigue, stress, low productivity, poor quality, increase absenteeism** (*employee's intentional or habitual absence from work*). In such cases, productivity could be increased by enlarging, rather than narrowing, the scope of job activities.

# Contd....

## Departmentalization

- Is an aspect of organizational design that includes the subdivision into **units based** on their **function or other criteria**.
- Jobs can also be departmentalized by the **type of product, geography, process, and customers**.

# Contd...

## **Chain of Command:**

It answers question for employees such as "To whom do I go if I have problem?" and "To whom am I responsible?" so it is an unbroken line of authority that extend from the top of the organization to the lowest echelon (*a level or rank in an organization*) and clarifies who reports to whom.

# Contd....

## **Span of control**

It indicates the number of **subordinates a manager can efficiently and effectively direct**. The span of control is important because, to a large degree it determines the numbers of levels and managers an organization has.

(Stephen P. Robbins).

# Contd....

## Centralization and Decentralization

- If the top management makes the organization's key decisions **with little or no input** from lower level personnel the organization is said **centralized**.
- In contrast the **more that lower level personnel provide input** or are actually given the judgment to make decisions the more **decentralization** there is.

# Contd....

## Formalization:

It refers to the **degree** which jobs within the organizations are **standardized**. If there are **explicit** (*stated clearly and in detail*) **job descriptions**, lots of organizational rules and clearly defined procedures covering work processes in organization, it can be said there is a **high formalization**.

If a job is highly formalized, the job **incumbent** (*necessary for (someone) as a duty or responsibility*) has a **no confusion** over what is to be done, when it is to be done and how he or she should do it.

Employees can be expected always to handle same input in exactly the same way resulting in a consistent and uniform output. So, the management should find which job needs what degree of formalization.



# Restructuring of administrative and organizational structure

The top reasons why organizations change:

- Innovations in technology, work processes.
- New and shifting markets.
- Actions of global competitors, demands, and diversity.
- Regulatory and ethical constraints from the environment.

# Getting to effective Organizational Restructuring.

- Consider the impact of **internal and external factors** causing change on the current structure.
- Commit to a new strategy to address the changes in market, technology, regulations, etc.
- Define the 'gaps' in existing roles which will make any structural changes effective.
- Design roles to support the changes in the business.
- Define **performance metrics** (*is the process of collecting, analyzing and/or reporting information regarding the performance of an individual, group, organization, system or component*). Measure before and after the change to ensure that the change is effective.
- Understand the cost of organizational change.

# Capacity building in the field of LA

- Various universities TU/PU/TU
  1. Master in Land administration (KU)
  2. Msc in Geospatial (I.O.E, TU)
  3. ME/MS in Geoinformatics (KU)

- BE in Geomatics Engineering

- ☐ Kathmandu University

- ☐ Paschimanchal Campus

Training for Senior and junior course

- CTEVT
- LMTC

# Question

- Explain the role of various Professional Organization/Association in the field of Land Administration in context of our country?

# Role of Professional Associates

## **Nepal Engineering council**

- To regulate engineering profession effectively and scientifically.
- Undertakes registration of engineers in accordance to their academic qualifications.

## **Jurisdiction of Nepal Engineering Council**

- Registration of engineers.
- Official approval of certificates of academic qualifications.
- Recognition of academic qualifications.
- Professional code of conduct.
- Autonomous body formed under NEC act 2054.

# Role of Professional Associates

## Nepal Engineering Association

- General national body of Nepalese engineers of various disciplines established on 2024 B.S. (1968 A.D.)
- An independent and non-profit organization.
- It regulates the practice of professional engineering in the national development.
- It governs its member in accordance with the statute of the association and related law of the country in order to serve and protect the public interest.
- It safeguards the rights and strengthens the professional capacity of engineer.

# Role of Professional Associates

## Nepal Survey Association

- At present, there are two professional organizations related with the cadastral system in Nepal namely :
  - Nepal Surveyor Society
  - Nepal Surveyor's Association.
- These organizations are presently concentrated mainly to maintain the professional rights, to publish regularly the professional magazine and to conduct national conference.
- On 2050, Nepal Surveyor Society conducted a conference on cadastral, the resolutions adopted by the conference was recommended to Nepal Government for the implementation.

# Land Issues at global level – Agenda 21

## Rio de Janeiro 1992

### Land Issues

- ☐ Combating Poverty
- ☐ Demographic Dynamics
- ☐ Sustainable Settlement Development
- ☐ Integrated Environment & Decision making
- ☐ Planning & Management of Land Resources
- ☐ Land and Sustainable Agriculture & Rural development
- ☐ Land and Protection of Oceans & Coastal Zones

### Global Plan of Action 1992

- ☐ strengthen legal frameworks for land management, access to land resources, land ownership
- ☐ achieve basic shelter
- ☐ adopt codes for access to land
- ☐ establish land information systems
- ☐ create land markets
- ☐ establish appropriate forms of land tenure
- ☐ improve the use of data
- ☐ review regulatory framework
- ☐ update information on land use
- ☐ influence land tenure and property rights
- ☐ improve land registry
- ☐ streamline procedures



# Land Issues at global level – HABITAT Istanbul 1996

## Land Issues

- ☐ Many people suffer from bad housing and unacceptable living conditions
- ☐ 50% of the world population will live in urban areas.
- ☐ Mega-cities mainly in developing world
- ☐ Housing for all
- ☐ Sustainable development of human settlements in an urban environment

## Global Plan of Action 1996

- ☐ improve accessibility of land and security of tenure
- ☐ improve equal distribution of land
- ☐ protection against illegitimate expulsion
- ☐ Programmes for construction of houses
- ☐ adequate means of financing
- ☐ develop a land market
- ☐ create mechanisms for land transfer and delivery of land
- ☐ clarify land tenure
- ☐ improve legal frameworks
- ☐ regulate informal ownership
- ☐ streamline cadastres
- ☐ reform expensive and ineffective regulations

# Land Issues at global level - New Delhi Declaration 1996

## Land Issues

- ☐ Decentralization of government
- ☐ informal land developments
- ☐ community sector participation
- ☐ procedures

## The role of land - Actions

- ☐ quick procedures for land conflict resolution
- ☐ municipal land policies should include delivery mechanisms, land banks, demarcation of communal land reserves
- ☐ processing land record at the local level
- ☐ local governments should manage land records
- ☐ land taxation important tool for financing land development and services
- ☐ utilize options for land tenure security
- ☐ promote community land ownership
- ☐ adequate supply of land
- ☐ develop land markets
- ☐ innovative mortgages