

WHO - FIC Asian – Pacific Network Meeting

**Approaches of Improvement of
Health Information Systems by
Relative Organizations
(Japanese Case)
Part I**

***10 – 11 September 2007
Paruru Plaza Kyoto, Japan***

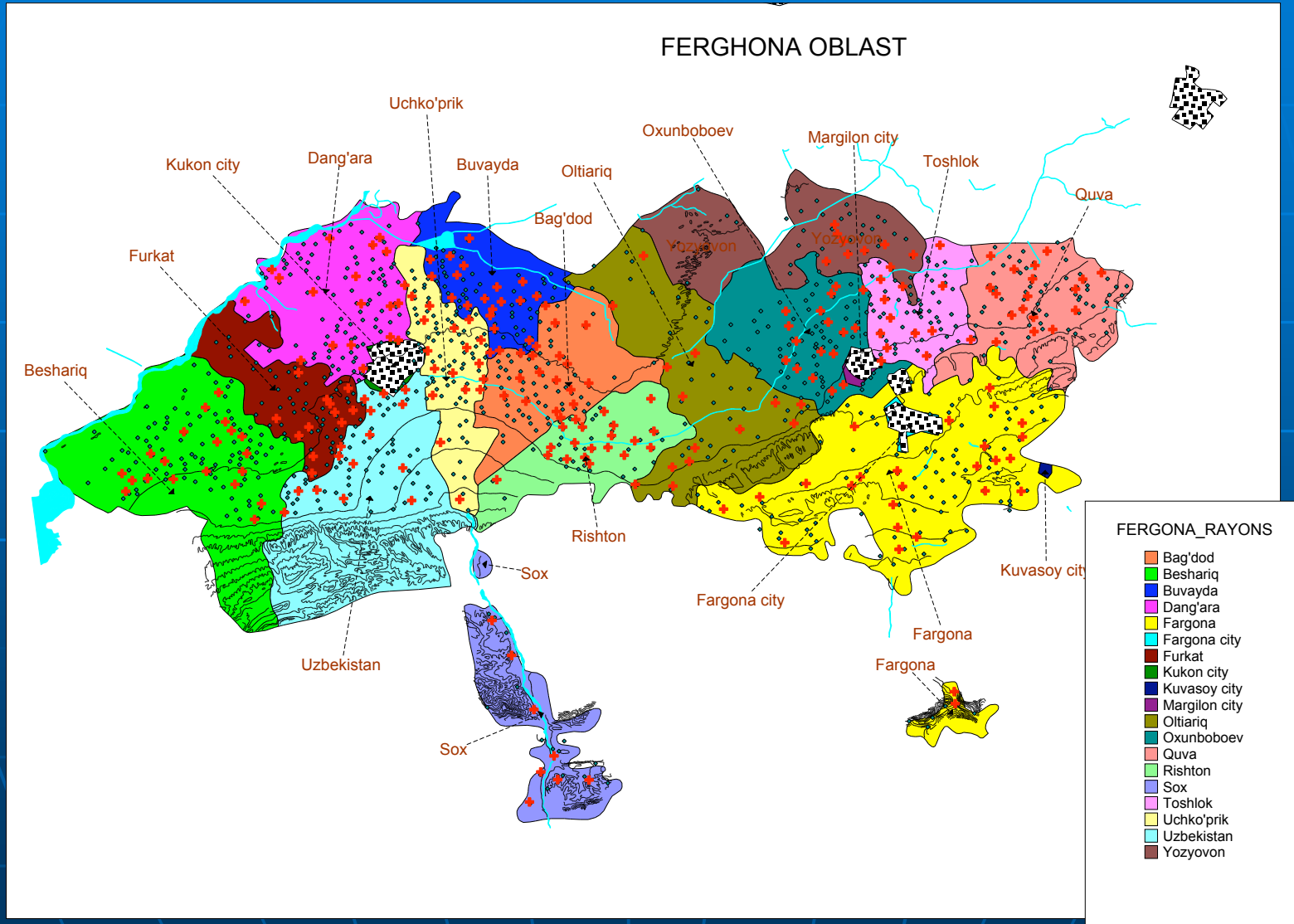
History of Activities

- **Activities for Improvement of Health Information Systems (HISs) : ~ 2003**
[Part of the Technical Cooperation Project / Program]
 - Dispatch of Experts
 - Counterparts Training in Japan
 - Project Type Technical Cooperation
 - Master Plan Study



Focus on HISs for Improvement of Health Service & Management/ Health Situations

GIS Mapping by Master Plan Study (Sample)



Master Plan Study in Pakistan

■ Background:

- No Single HIS,
- Existing HIS Introduced in 1992
- Devaluation
- Management of Health Services by Districts
- Need for District based HIS (*DHIS*)

■ Duration:

- Jan. 2004 – Feb. 2007

■ Objective:

- Development of National Action Plan for the Improvement of HISs

Master Plan Study in Pakistan

■ Approaches:

- Situation Analysis
- Formulation of Steering Committee, Provincial /Core Working Groups, Series of Consultative Meetings/ Workshops



Development of District Based HIS for Management

- Pilot Test in 4 Districts
- Development of DHIS Software
- Monitoring & Evaluation of Pilot Test



DHIS Design and HIS National Action Plan

Issues - Development of HIS

■ Main Issues:

- Production of Quality Data by the HIS
- Continuous Use of the Information Generated by the HIS

■ Causes:

- Only Focus on Technical Factors

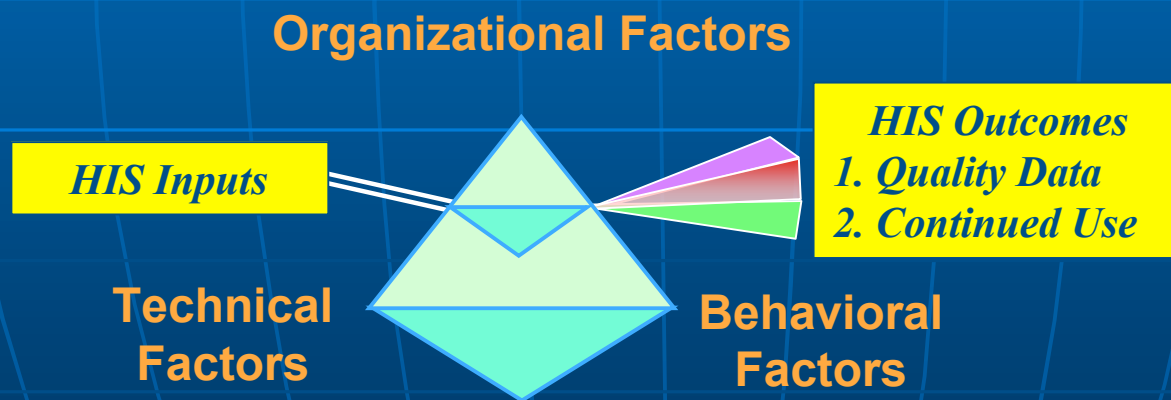


■ Need to Focus on Other Factors

- Technical Factors: System Design, Data Collection and Reporting Forms, Skills and Knowledge of Personnel
- Organizational Factors: Leadership, Structure, Roles & Responsibilities, Resources
- Behavioral Factors: Attitudes, Motivation

PRISM Framework Used for DHIS Design

- **PRISM** (**P**erformance of **R**outine **I**nformation **S**ystem **M**anagement) *
 - Experiences on Routine HIS Development in Developing Countries in the 90th (South Africa, Uganda, etc.)
 - Interventions to Improve RHIS Performance



* : Dr. Lippeveld Theo, Vice President, John Snow Inc. (2000, Geneva⁷)

Framework for Improvement of DHIS

- **DHIS will Provide Information for Management and Performance Improvement of District Health System**
 - **Contribution to Evidence-Based Decision Making**
 - **Provision of Performance Indicators**
 - **Epidemiology**
 - **Health Facility Performance**
 - **Health Resources (Personnel, Finance, Logistics, Materials, etc.)**



DHIS Design

DHIS Design

- **RHIS for Health Service Management**
- **DHIS Indicators**
 - **Collection of Minimum Key Indicators for Performance Monitoring**
- **Mechanism to Assure Data Quality**
- **Data to be Processed and Reported to the Higher Tier**
- **Mechanism to ensure Use of Information**
- **Development of DHIS Software**
- **Development of DHIS Tools/Instruments**
 - **Data Collection Sheets, Forms, Registers**
 - **Manuals (Training, Procedure, etc.)**

Implementation of Pilot Test

Pilot Test of DHIS in Four Province

- NWFP, Sindh, Punjab, Balochistan
- Pre-Pilot Test in NWFP
- Training of Trainers
- Training of Health Facility Staffs
- Training on Use of Information
- Setting and Training of DHIS Software
- Monitoring & Supervisory Visits



Reflection of Results of Pilot Test

- Development of Final Version DHIS Instruments Based on Evaluation
- Development of NAP

Outline of NAP

■ Objective

- To Reform and Create an Enabling Environment for the HISs to Continuously Evolve and Improve to Respond to the Information Needs of the Health Sector

■ Improvement of Routine HIS

- DHIS as a Core Component of NAP
- DHIS Replication Procedure



Decisions at Steering Committee Meeting

- Approval of NAP
- Replacement of Existing HIS with DHIS in Phased Manner

Thank you!



End of Part I

WHO - FIC Asian – Pacific Network Meeting

**Approaches of Improvement of
Health Information Systems by
Relative Organizations
(Japanese Case)
Part II**

*10 – 11 September 2007
Paruru Plaza Kyoto, Japan*

General Issues of HISs -1

(1) Quality of Data/Information

(2) Use of Information

■ Quality of Data/Information

• Direct Causes

- Motivation
- Staff capacity
- Quality Assurance Mechanism
- Technical Design
- Resource Allocation

• Indirect Causes

- Supervision, Planning, Monitoring, Evaluation & Revision Mechanism

General Issues of HISs -2

■ Use of Information

• Direct Causes

- 1) Low Quality of Data/Information
- 2) Low Motivation at Administrative Side
- 3) Low Motivation at Facility

• Indirect Causes

- Capacity Building
- Coordinating Roles
- Feedback Mechanism
- Resource Allocation,
- HIS is not Part of Planning
- Self-Evolution & Performance Improvement

■ Root Causes

- Accountability, Authority & Ownership
- Policy for HIS
- No Performance-Based Manner of Health System

Basic Approaches for HIS Development

Problems and Issues

1. Quality of Data/Information

- Direct Causes
- Indirect Causes

2. Use of Information

- Direct Causes
- Indirect Causes

3. Root Causes

Planning Framework for NAP

- 1 : Improved Policy and Institutional System for HISs
- 2 : Improved Quality of Data/Information
- 3 : Improved Use of Information

Pilot Test

Monitoring and Evaluation

- Technical Aspects
- Institutional Aspects

NAP Formulation

- : Contribution to
- Management and Resources Allocation/Use
 - Institution and Organization

Difficulty of Development/ Consensus Building Process

- **Less Motivation of HIS Improvement by Counterpart**
 - Policy for HIS is not sufficient
 - Less Accountability, Authority & Ownership for HIS
 - Health Management is Carried Out Historical Manner
 - Several Verticalised HISs are Implementing
- **Appropriate Level of System Design**
- **Vast Areas of Study Implementation (4 Provinces)**
- **Large Number of Relevant Personnel**
- **Selection of Indicators tend to Personnel Interest**



- **Participatory Approaches**
 - Formulation of Steering Committee, Provincial /Core Working Groups, Series of Consultative Meetings/ Workshops

Thank you!



End of Part II