

## *The HISP/BEANISH Project*

[www.hisp.info](http://www.hisp.info)

[www.hisp.org](http://www.hisp.org)

[www.hisptanzania.or.tz](http://www.hisptanzania.or.tz)

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## Aim of presentation

- The fundamental role of HIS
- Discuss issues of importance for the global HISP network
  - Building Europe-Africa Collaborative Networks for applying IST in health care sector (BEANISH): 2005-2007
- Describe some of the activities in which HISP-Tanzania is involved

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## The Problem of Health in Developing Countries

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- The magnitude of the health problem, for example:
  - South Africa – the problems of AIDS
  - Mozambique – the maternal mortality problem
  - India – the population problem
  - Tanzania- the malaria problem
  - etc

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## The role of Information to support PHC

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- Routine management of health services
- Program specific support, for example AIDS
- Planning for new facilities
- Epidemiological analysis
- Supporting policy making
- Reporting to International agencies

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## HISP Background

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- Started by Oslo in 1994 in South Africa
  - Information systems to support the emerging post-apartheid decentralised health structures
  - Aim was to support the processes of health sector reform post-apartheid
- Approach: Local use of information; Maximise end-user control; Local empowerment & bottom-up design and system development
- Focus on
  - standardisation of primary health care data
  - development of database software to support a 'flexible' hierarchy of PHC data
- Today, HISP is national standard in S Africa
- HISP ongoing in various countries in different degrees, with varying levels of impacts

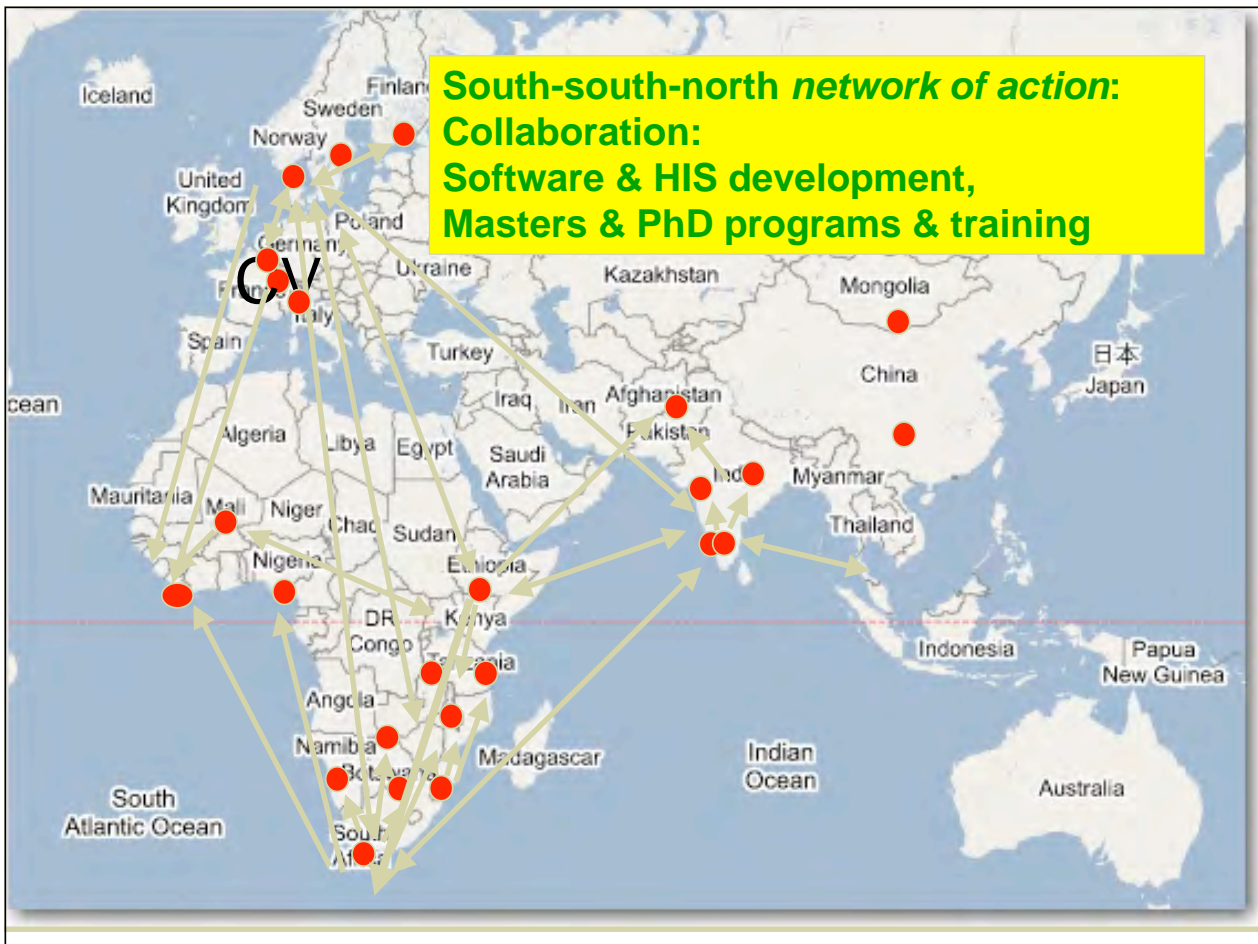
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## HISP core activities: Global/Local

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- Design, development, and implementation of open source and free software tools for health care
- Capacity building through supporting PhD and Masters students in respective countries and in-service training
- Sharing learning and best practices in the network through joint research and participation in joint workshops

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## Funding Sources: Glocal and local

- Global network supported by Norwegian Aid, Norwegian research council, EU-BEANISH(1M EURO), Health Metrics Network.
- Locally, in respective countries, funding from various sources: national and state health ministry, Danida, Dutch Aid, etc.
  - In Zanzibar, fully funded by DANIDA
  - In Tanzania, partially funded by EU and NRC

## The Norwegian Role in the global Network

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- Sharing of medical related knowledge
- Sharing of Software related knowledge and workable IT solutions
- Sharing of best practices
- Educational capacity- support PhD training
- Looking for funding opportunities
- Access to other experts in Europe

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## Approaches of HISP: HISP philosophy

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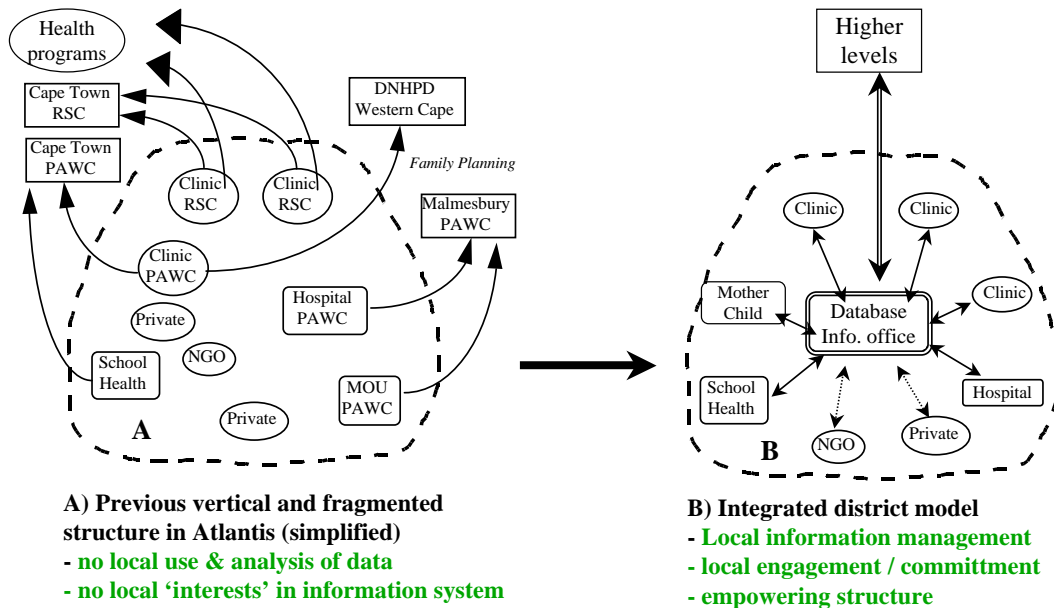
- Focus on local use of information for supporting action
- Flexibility to allow incorporation of new data and indicator sets from health programs and other stakeholders
- Integration – coordinating and integrating data from different sources
- Participation/action research to create local ownership and promote learning and support HSR towards decentralization

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# Information management at district level

**District database** - Integrating fragmented information flows

**Building capacity** for use and analysis of own data



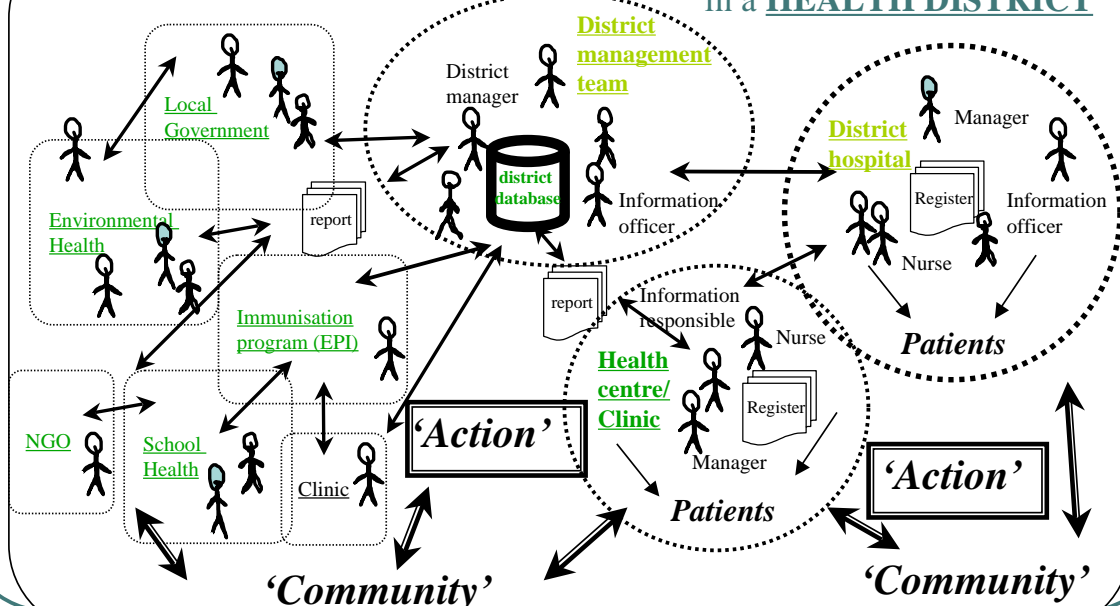
District information system = **SOCIAL SYSTEM**

Need to be developed & sustained by a 'process approach'

'Cultivation' of local commitment, ownership & capacity:

Training, ongoing support, cultivation of routines, practices and management culture

**'Information for action'** - actors & flow of information and action in a **HEALTH DISTRICT**

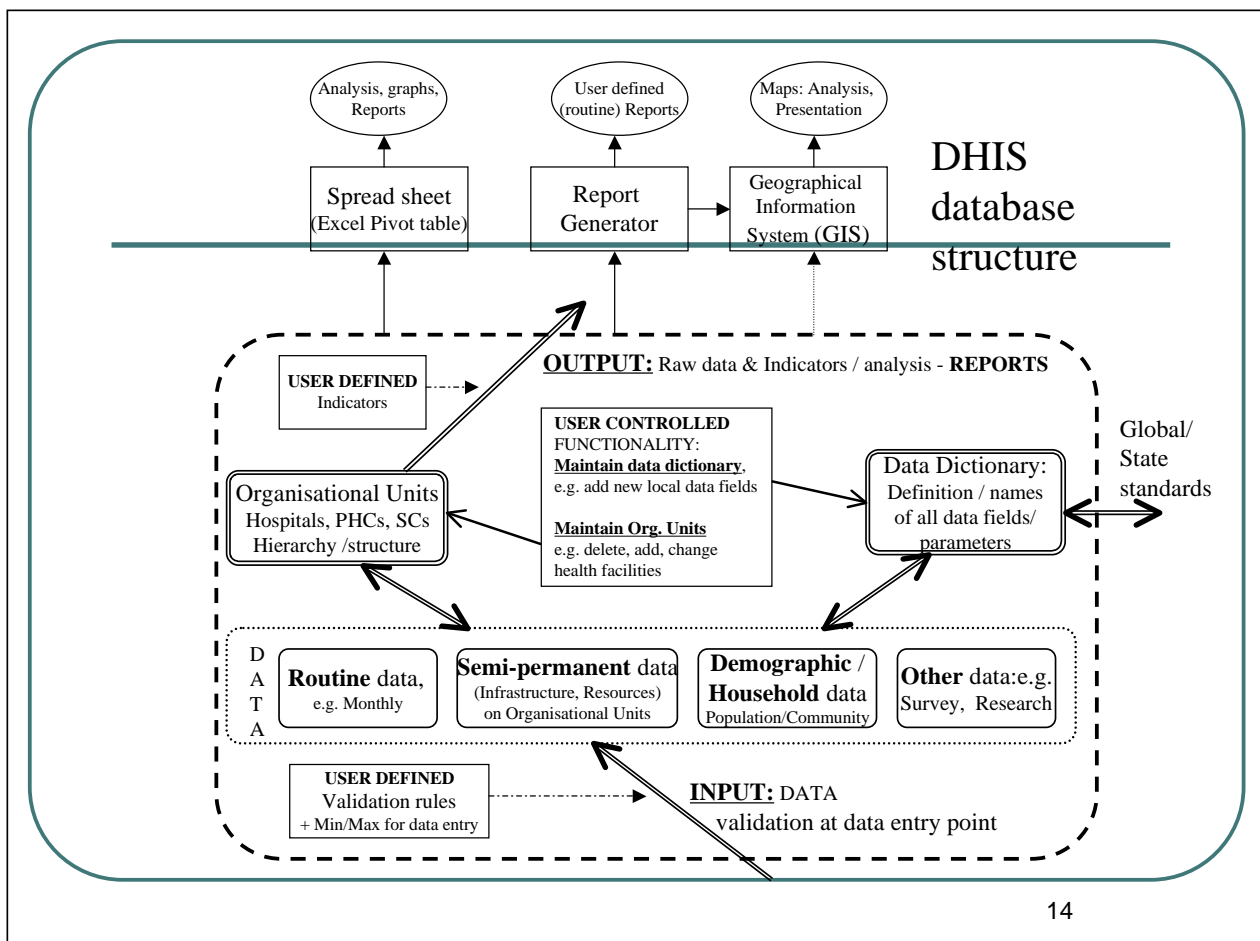


## Database = District Health Information Software (DHIS)

a tool to help improve service management to achieve better health for all by using available information:

- ❖ is based on the collection & analysis of routine data (essential dataset) at local level
- ❖ gathers info that shows changes in local health conditions, health status & health priorities – is indicator based
- ❖ informs different levels of health care providers of progress made towards achieving set objectives & targets
- ❖ promotes decentralisation of decision-making

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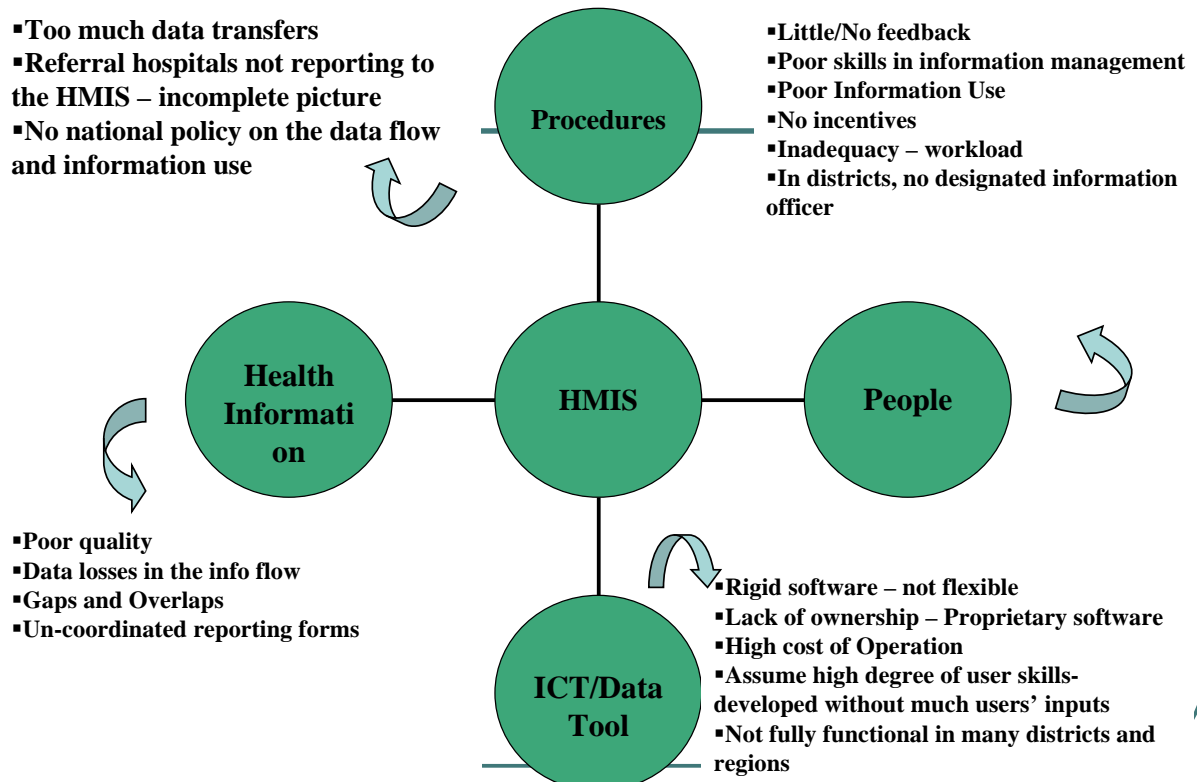
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# What DHIS provides

- Flexibility
  - Data sets and indicator sets
  - Infinite Org Units
  - Reporting / Information visualization
  - Local information handling
- Integration
  - Import & Export module
  - Integrate DHIS/HMIS with Computerized EPR systems
  - It is a Data warehouse
- Control and ownership of the source code
- Availability of Local support and Maintenance
- Advanced visualization – GIS, Web
- User friendly

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# Routine HMIS Status in Tanzania



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## HISP in Tanzania (2002-

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- Initial links established in 2002
- Implemented and running in three districts in the Tanzania Mainland: Bagamoyo, Kibaha, and Karagwe (Kagera)
- Plan underway to implement in the city of Dar es Salaam (all districts)
- Fully implemented and running in all districts in Zanzibar under DANIDA support

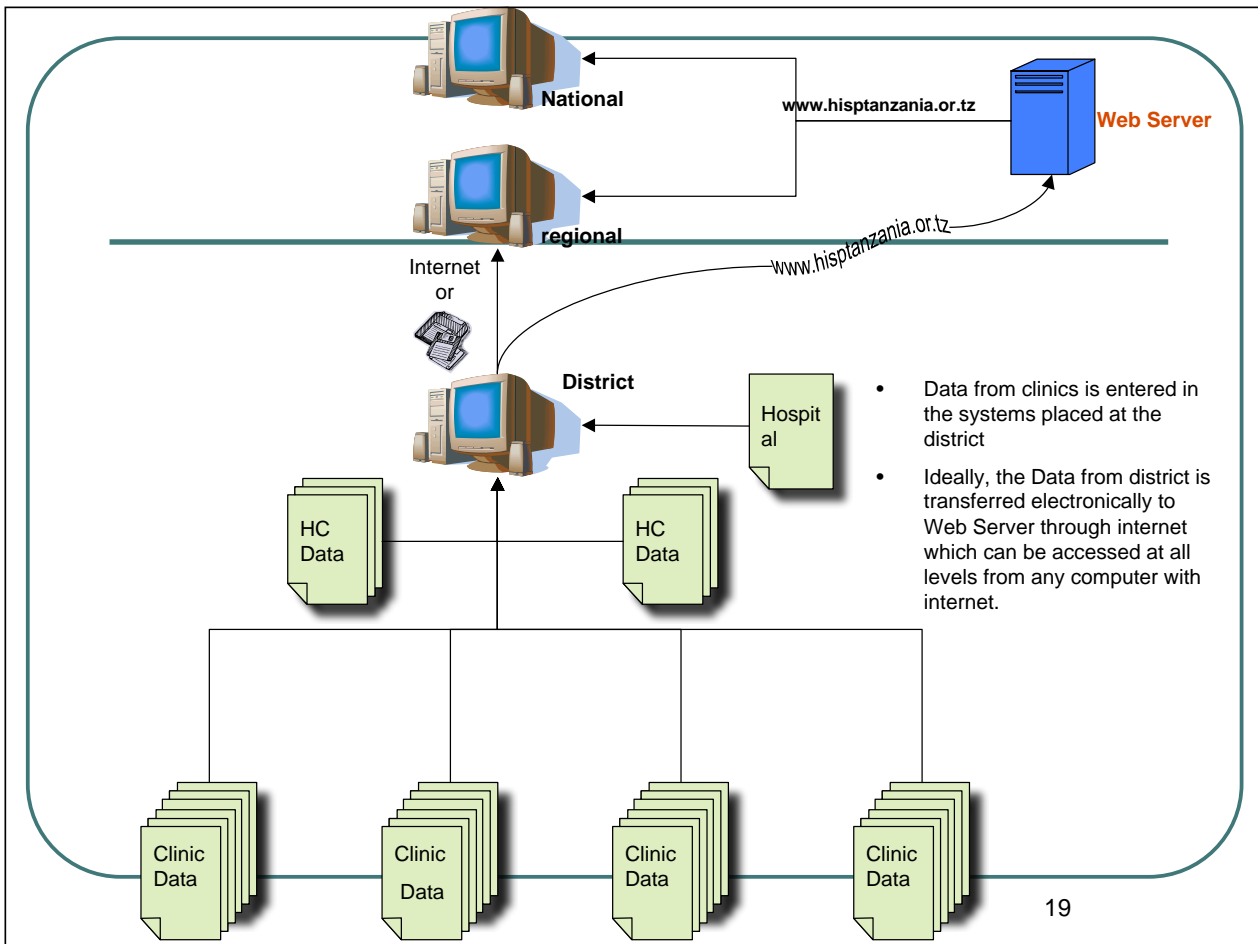
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## HISP in Tanzania

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- DHIS customization mimic MTUHA reporting formats and the data formats created at the district level to cater for the data not included in MTUHA (Dubbed as 'Reports outside MTUHA' & 'MTUHA Shortcomings')
- Vertical programs data sets which are not included in MTUHA are also implemented in DHIS
  - HIV/AIDS data sets
  - EPI Data sets

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## On going activities in Tanzania

- Research and Development
- Capacity Building-on site support, training, professional training
- Sustaining existing pilot sites and continuing adaptation of software to other selected districts
- Networking with other stakeholders on the ground/in the country

## Research - The PhD/Masters Students

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- Key catalysts to the change process
- Various topics for ongoing research
  - Systems design and adaptation
  - Integration of vertical programs with DHIS
  - GIS and health care
  - Open Source Software Development
  - Use of information – social, political and cultural perspectives
  - Decentralization and Sustainability

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## Capacity Building in the health sector

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### ❖ Professional HMIS Course (2005 & 2006)

- A nine month HMIS course programme for health workers and managers was run in two batches:
  - collaboration between the Tanzania - HISP/BEANISH and the global HISP led by the University of Oslo, Norway
  - hosted by the Department of Computer Science at the University of Dar es Salaam (UDSM), Tanzania
  - Enrolled 49 students from Tanzania- both mainland and Zanzibar, Malawi and Ethiopia
  - Lecturers came from Norway, Ethiopia, South Africa, Mozambique, India and Tanzania were involved in teaching and supervision
- Empowered health workers, for example one student, after finishing the course initiated HMIS training for all health workers at the district level

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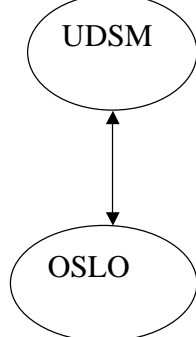
# Capacity Building in the health sector

- **Advanced Masters in Health Informatics Programme-Evening**
  - Started in November 2007 and is supported by NORAD, 8 qualified students are granted scholarship
  - Administer by UDSM but taught in collaboration with the academics from universities in the HISP network
  - Enrolled 17 participants
    - Tanzania, Malawi, and Zambia
    - Students with Health, science, and informatics background
  - Forms an institutional base for health informatics educational scheme as well as educating trainers who will support scaling of DHIS
  - Potentially support training of health and informatics professional
  - Create potential PhD candidates in the HISP

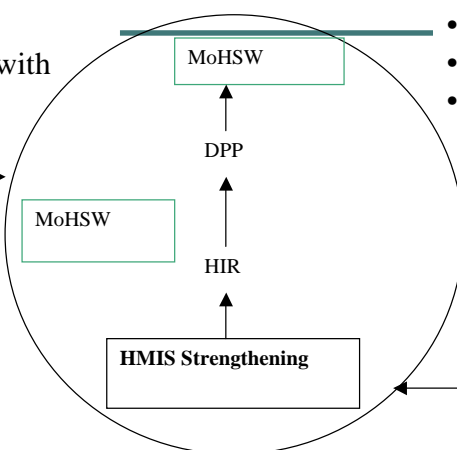
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## Latest development (Nov. 2007 & 2008) The Consortium & Partners

- Information Technology
- Software Development
- Training in collaboration with MUHAS & IHRDC



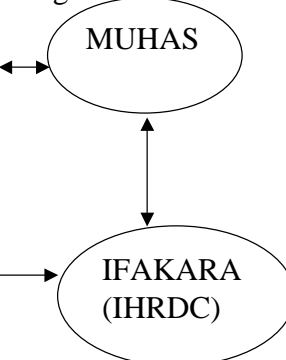
International Experience and Advisory role



General Overseer and management

Health Component of HMIS Program

- Epidemiology
- M&E
- Using Info for Action



**Formation of a consortium to support implementation of DHIS to cover the whole country**

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## The Consortium: Priority tasks

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- Redefine and harmonize core indicators
- Finish revision of the source registers (most of these already revised) based on the source information needed for these indicators
- Introduce the DHIS to capture facility reports. This will totally succeed the current software that has had limited success
- Use the DHIS to automate the collation of monthly-to-quarterly-to-annual data.
- Institutionalize routine analysis and feedback of information
- Ensure institutional capability to implement HMIS revisions and use of information for action

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## Way Forward

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- Opportunity with offer of Norwegian support through NTPI
- **Finalizing the proposal to access this support and others**
- Preliminary estimates show that this will require substantial investment and time to implement successfully.
- Can be done in stages (first harmonize indicators & revise the input forms, then introduce and support the software, then improve use of info for decision-making)
- Credible, clear plan of action will also be able to access support from other partners
- Consortium of national and international expertise ready to take this task forward.
- **MOHSW has already signed an MoU with the Consortium**

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