Institutional Arrangements for Statistical Systems for Socio-Economic Transformation in Africa.

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Statistics is a Science

- Science is any system of acquiring knowledge using verifiable means.
- Statistics is defined as the science of collecting, organizing, and interpreting numerical facts/data emanating from our activities and the environment.[1],[2]. It is applied science when used in the study of natural, social, economic or other phenomena. It is a pure science when it involves development of new statistical methodologies or new statistical concepts.
- Hartley[3] describes Statistics as the science of uncertainty.
- Statistics help quantify and summarize issues thus making them easier to comprehend.

[1] http://www.gseis.ucla.edu/courses/ed230a2/prelim.html, [2] Iver Bradley and John Smith.

- **[3] Journal of American Statistical Association, March 1990, Volume 75, Number 369.**

Statistics is a Technology

- Technology: What people do; the methodology they use to do it; the tools, equipment or systems they use to do it; the practical knowledge and skills or technical know-how they use to do it and the process from identification of needs for the task to development of solutions[4].
- Statistics can therefore be seen as a form of technology, a tool, methodology or process of making sense out of a maze of data collected in order to solve a given problem.
- It is critical to understanding socio-economic situations and the process of planning for and implementation of socio-economic transformation, its monitoring and evaluation.
- [4] http://encarta.msn.com/thesaurus_/technology.html, http://atschool.eduweb.co.uk/trinity/watistec.html, http://en.wikipedia.org/wiki/Technology

Social transformation

- Social transformation - an action/event that affects a society. Understanding or measurement of such action/event requires the use of statistics [5].
- Example: India has been able to begin the shift of its economy from Agriculture to industry by diverting its 60% workforce predominantly dependent on agriculture to manufacturing and service by assessing its current state using statistics and projecting possible scenarios of where they want their economy to shift to[6].
- [5] Social change - Wikipedia, the free encyclopedia.htm, [6] Four Asian Tigers - Wikipedia, the free encyclopedia.htm

Statistics - Indispensable in Socio-economic Transformation

- The value of statistics can therefore not be underestimated.
- Planning, implementation, monitoring, evaluation, etc without statistics amounts to gambling and guess work.
- Progress in science, technology and innovation would be greatly enhanced when statistics is appropriately used

Institutional Arrangements for Statistical Systems

- There are global, regional and national institutional arrangements.
- At the global level, the UN Statistics Division is the umbrella that oversees statistical development in the world.
- the UN Handbook on Fundamental Principles of Official Statistics guides development of legal frameworks for statistical development.
- Funding and technical support usually comes through the UN system and programmes, PARIS21 and other Development Partners.
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Institutional Arrangements for the Statistical Systems in Africa

- The 2003 African Ministerial conference for Science and Technology noted that STI statistics is crucial for monitoring Africa's scientific and technological development. They are useful for formulating, adjusting and implementing STI policies, monitoring global technological trends, and determining specific areas of investment[7].
- Collection of these indicators/statistics requires a robust institutional arrangement which incorporates all stakeholders in a well coordinated statistical system.

[7] Africa's Science and Technology Consolidated Plan of Action, August 1985.

Institutional Arrangements for the Statistical Systems in Africa

- The Africa regional level arrangement has
- A Center for African Statistics at UNECA responsible for Statistical development
- The Africa Symposia on Statistical Development (ASSD) established as annual series of conferences so as to revitalize the use of statistics in Africa's development agenda.
- The Africa Statistical Association. All African nations are encouraged to become members and subscribe to its values and standards.

Institutional Arrangements for the Statistical Systems in Africa

- The Africa Regional Statistical Training Centres : ENSEA (Abidjan, Côte d'Ivoire), ISSEA (Yaounde, Cameroon), Department of Statistics at the University of Ibadan (Nigeria), ISAE at Makerere University (Uganda), EASTC (Tanzania), IFORD (Yaounde, Cameroon), and INSEA (Rabat, Morocco).
- Technical and financial support is from UN and other Development Partners.

Institutional arrangements at National level [1]

- **Organisation:** The National Statistical Systems (NSS's) are essentially decentralized with the National Statistical Offices (NSOs) acting as co-ordinating agencies.
- Uganda: NSO is UBOS which coordinates statistical activities of districts statistical offices, government ministries, NGOs, researchers and individuals.

- [1] United Nations Economic and Social Council, Economic Commission for Africa, Tenth Meeting of the Coordinating Committee on African Statistical Development (CASD) 25 – 26 April 2001 Addis Ababa, Ethiopia, ECA/DISD/CASD.10/01/2 Rev.2.

Institutional arrangements at National level [1]

- **Infrastructure:** Most NSOs do not have adequate office space and there is shortage of equipment. The consequence is poor performance in statistical development. Some like UBOS have a state-of-the art statistical home with functioning internet and LAN. Some countries have set up websites which they use to disseminate their statistical products.
- **Statistical Committees:** Active and dynamic User/Producer and Producer/Producer Committees should be formed.

Institutional arrangements at National level [1]

- **Legal Framework and structure of the NSS's:** UN Fundamental Principles of Official Statistics provide for independence and autonomy of the NSS. The Total Quality Management (TQM) principles guide the NSSs in ensuring production of credible statistics in a country.
- In Uganda, UBOS is independent and semi-autonomous as provided for in the Statistics Act

Institutional arrangements at National level [1]

- **Human, Financial and other resources:** Financial support comes from Government, UN and other agencies, sell of statistical products and consultancy work. For most countries, the financial resources are inadequate.
- **Statistical Training:** Formal training is done at the Africa-regional training centers and statistics departments in Universities. Informal training is conducted in form of in-house seminars and on-the job training.
- **Data Quality and Dissemination:** TQM principles are used to ensure quality, adequate coverage, accuracy, consistency, reliability, availability/accessibility, timeliness, relevance and use of appropriate methodology.
- Dissemination is mainly by statistical reports, dissemination seminars and electronic media e.g. CD-ROM, diskettes, intranet and Internet.

Institutional arrangement for Uganda's NSS

- Before formation of UBOS Uganda had a weak statistical infrastructure. The NSS was managed by a department without autonomy within the Ministry of Finance, Planning and Economic Development (MoFPED).
- It had little financial support from government and therefore grossly incapacitated in its ability to generate statistics and oversee statistical production and dissemination in the country for planning & budgeting.
- Although links with districts were strong existed, links with other producers and users of statistics was weak or non existent.
- The legal framework required that all those who needed to gather statistical data sought permission from the Statistics Department but the department had no capacity to police the legal framework.

Institutional arrangement for Uganda's NSS

- After an evaluation of the statistical system, a more robust statistical system was proposed:
- The Department of statistics was upgraded to a semi-autonomous and independent statistical bureau – UBOS.
- Funding for statistical development increased,
- A home for statistics was relocated from Entebbe to Kampala nearer the users and housed in a state-of-the-art Statistics House, a better working environment,
- Standardization of statistical activities, more efficient statistical operations, better quality data
- Government now had reliable figures to go by. This had a direct impact on progress in measurement of development goals and socio-economic activities and programmes.

Effect of decentralization on Uganda's NSS

- Some of these achievements were partly lost as a result of decentralization.
- Decentralization transferred power to the districts and gave them a level of autonomy.
- District statisticians were no longer answerable to UBOS but to the district CAO.
- The decisions about the work of statisticians are now decided by the district. UBOS may make suggestions but districts have a final say on how they go about managing and collecting and using information.

Effect of decentralization on Uganda's NSS

- Districts now needed data for planning at lower levels but have no capacity to collect it.
- A number of districts did not necessarily see the need for statisticians so some do not have them.
- There is disharmony of Sectoral Ministry roles in the districts vis-à-vis district authorities on the planning process raising questions as to whether actual planning at district actually translates to the Annual Ministry Sectoral Plans.
- The Sectoral statistical units continue to collect their own statistics. Whereas they may have some link with the UBOS due to the process of standardization and coordination, there does not seem to be a strong link with the districts.

Strengthening Uganda's NSS

- Under PNSD, UBOS therefore proposed introduction of a common cadre for all statisticians working in government whether in districts or ministries so as to strengthen the link and create harmony among the statisticians and planners.
- This create synergy in efforts towards robust statistical development that would in turn improve available statistics for socio-economic transformation.
- There is now need for a forum that brings together the district statisticians, the sectoral statisticians, the private sector and those at head quarters as well as related associations like the Uganda Statistical Society

Conclusion

- Enhancing socio-economic transformation for science and technology requires reliable statistics.
- In order to obtain such reliable statistics, there is need for a robust and effective institutional arrangement.
- Critical to the success of an institutional arrangement is
  - unity and harmony of the statistical system,
  - ownership and financing by government,
  - user friendliness and links with the science and technology frameworks,
  - aligning national statistical systems with the science, technology and innovations agenda;

Conclusion

- linkage with training institutions to ensure relevant human resource development for the statistical agencies;
- adequate data coverage for MDGs,
- proper coordination of Development Partners' support,
- collaboration with global arrangements for statistical development, and
- mainstreaming gender in the statistical system.

THANK YOU