

# Exploiting the Full Potential of Information Technology: Implications for the Organization and Operation of National Statistical Offices

M. Khalid Siddiqui  
Statistics Division  
ESCAP

# Basic functions and goals of a statistical agency

- **Functions:**
  - Data collection
  - Dissemination
  - Analysis
- **Common primary goal:**
  - Meeting the needs of data users
- **Common objectives:**
  - Timely release of data
  - Quality
  - Accessibility

# Benefits of Information Technology (IT)

- **Widely recognized by NSOs:**
  - **IT is of fundamental importance to the statistical work**
  - **Offers cost-effective solutions to the challenges**

# **Application of Information Technology in the ESCAP region**

- **Areas discussed:**
  - **Networks and the Internet**
  - **Geographic Information Systems (GIS)**
  - **The year 2000 problem**

# Implications for the NSOs

- **Application of IT is more than hardware and software purchases.**
- **The value of IT as a whole is much higher than the sum of benefits drawn from its various components.**
- **To exploit the full potential of technology, NSOs have to review their :**
  - **corporate culture;**
  - **data systems;**
  - **procedures and practices;**
  - **organizational structure.**

# Further Implications for the NSOs

- **Need supporting policy environment.**
- **Vision of the data processing personnel alone is insufficient.**
- **With maturing IT, planning for the future may not be as difficult.**
- **Need to review and change organizational structure.**
- **Developed countries already embarked on plans to redevelop their IT infrastructure.**
- **NSOs must set goals and formulate strategic plans to achieve them.**
- **The top management must understand technological issues management commitment**

# Steps in information system development

- IT application not an end by itself
- A series of internal projects and modules supporting mission priorities
- Questions to be asked:
  - Are there commercial off-the-shelf packages available?
  - Are there similar applications elsewhere?
  - How does the project fit into the agency's technology and information architecture?
  - Are there lessons learned by others which may be incorporated into the project plan?

# Further Considerations

- **If the benefits of IT are so obvious and computing more affordable than ever, why is the computerization of information management still difficult for many NSOs?**
- **NSOs in developing countries are in a position to leapfrog in information technology development.**
- **What strategies NSOs can follow to enlist the support of the decision-makers?**
- **How would one ensure the necessary financial commitment?**
- **In reviewing organizational structure and procedures, would it be appropriate to adapt the models from developed countries?**

## Further Considerations (cont'd)

- **Would there be any implication for the staff and the statistical operations and service?**
- **Application of IT in NSOs has far reaching implications for human resources development.**
- **What are the suitable strategies for training?**
- **How much reliance should be placed on in-house training?**
- **What would be the role of the academic institutions?**
- **What role the international agencies and their training programmes can play?**

Thank you.