



Kingdom of Cambodia  
Nation Religion King

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**MINISTRY OF EDUCATION, YOUTH AND SPORTS**

# **EDUCATION MANAGEMENT INFORMATION SYSTEM IN CAMBODIA**

**2008 Regional Workshop on  
Education Statistics for East, West and South Asia**

**Bangkok, 9-12 November 2008  
Supported by UNESCO**

**Presented by Kuy Phala**

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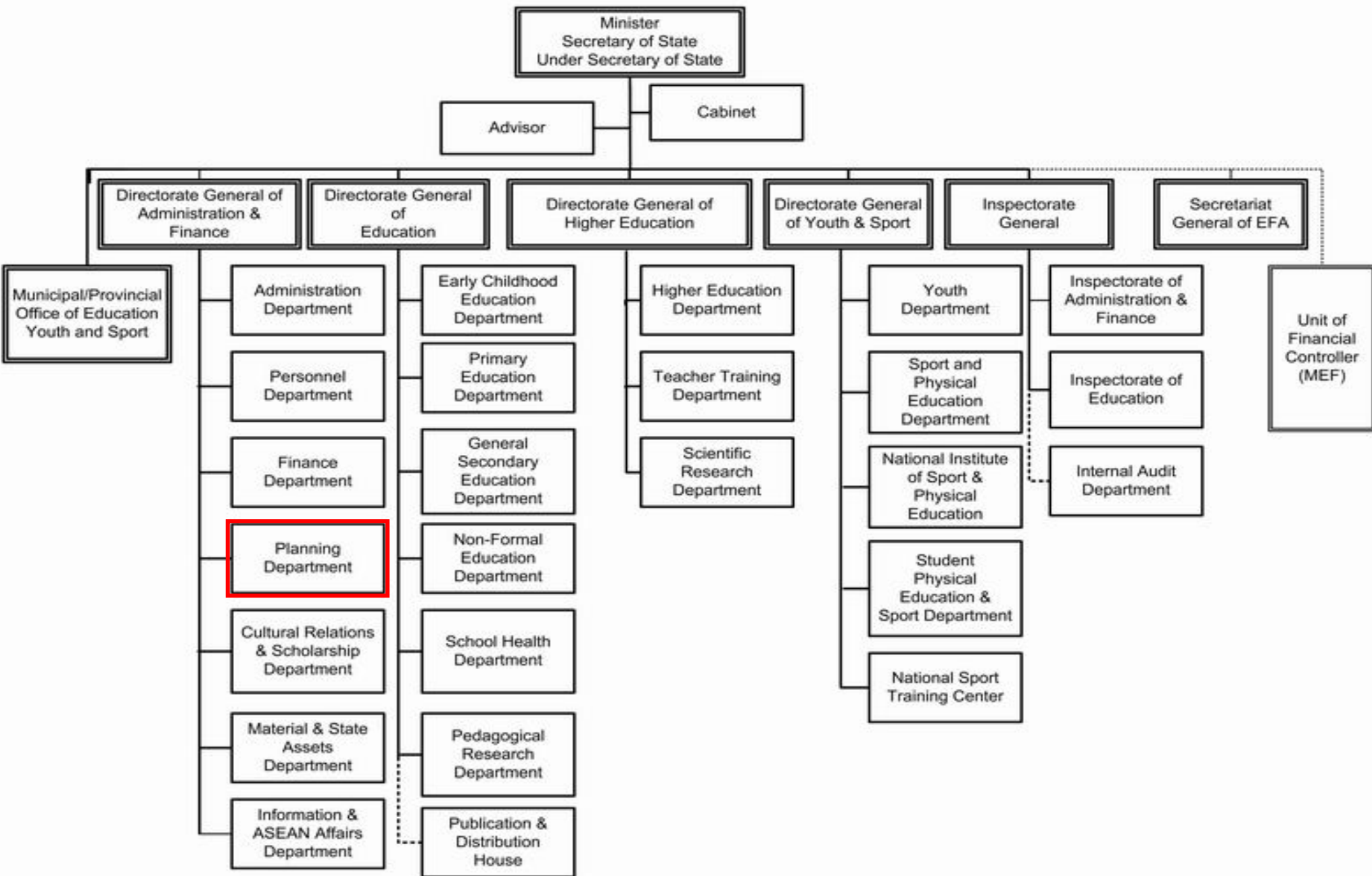
# CAMBODIA AT A GLANCE

- Situates in South-East Asia, shares borders with Vietnam, Laos, Thailand and 440 km of coastal borders
- Climate: warm and humid
- Surface area 181,035 Km<sup>2</sup>
- Possesses 24 provinces, 185 districts, 1,621 communes and 14,073 villages
- Population in 2008: 13,388,910
- Density 75 and population growth rate 1.54

# CAMBODIA AT A GLANCE– cont-

- **Employment by sector - year 2004**
  - **Primary sector** **74.2%**
  - **Secondary sector** **7.0%**
  - **Tertiary sector** **18.8%**
- **GDP per capita in 2006 -US\$** **513**
- **% of National budget for Education-2007** **19.2%**
- **Literacy rate 15 years old and over-2004** **73.6%**
- **Literacy rate 15-24 years old -2006** **84.7%**
- **26 Tertiary Institutions-public: students in 2008** **44,126**
- **40 Tertiary Institutions-private: students** **55,677**
- **200 Vocational schools-public & private: students in 2006** **38,531**

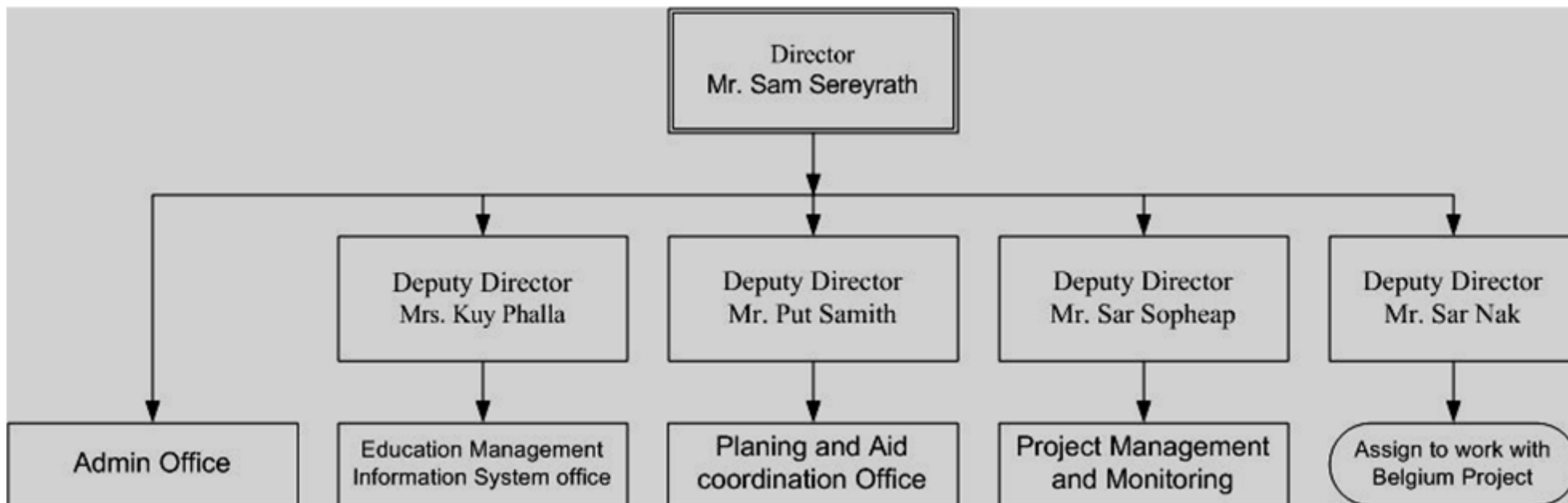
# ORGANIZATIONAL CHART OF THE MINISTRY OF EDUCATION, YOUTH AND SPORT



# Vision and Mission of MoEYS

- ***The MoEYS vision is to establish and develop human resources of the very highest quality and ethics in order to develop a knowledge-based society within Cambodia.***
- ***The MoEYS mission is to leading, managing and developing the Education, Youth and Sport sector in Cambodia in responding to the economic and cultural development needs and the reality of globalization.***

# Organization Chart of DOP



# Vision and mission of DOP

- *The DOP's vision: **Be the best source of educational information** and the main facilitator in educational planning.*
- *The DOP's mission is **to produce educational information**, propose policies and develop all kinds of educational plans with good cooperation to all concerned partners in both technical and financial aspects.*



# **TECHNICAL/DONNOR ASSISTANCE DETAILS TO EMIS IN THE PAST AND PRESENT**

- **In 1995, UNESCO with financial assistance from UNDP launched a “Capacity Building” project for MoEYS**
- **A component of the project was to develop a functioning EMIS**
- **UNICEF provided a building for EMIS Office and such kind of equipments**

# TECHNICAL/DONNOR ASSISTANCE TO EMIS

## *Human resource and training (17 Staffs)*

- **UNESCO project provided intensive trainings – in country and overseas – to newly recruited EMIS and planning staff on:**
  - basic computer skills in Microsoft Word and Excel
  - fundamentals of computer maintenance
  - setting-up and using local area networks (LAN)
  - designing, operating and managing databases
  - education data analysis with SPSS/PC and
  - modern education planning

# TECHNICAL/DONNOR ASSISTANCE TO EMIS

- Eight technical staff were sent to Asian Institute for Technology, Thailand, for acquiring advanced skills such as database design and management with Visual dBase , data analysis with SPSS/PC
- Also, provided series of in-country training to provincial staff:
  - on basic computer skills
  - using data entry programs
  - database management and
  - data analysis

## TECHNICAL/DONNOR ASSISTANCE TO EMIS

After the **UNESCO project finished**, from **1999** until now **UNICEF/Sida** is the robust financial assistance for **EMIS processing**:

- **Staff incentive, upgrading staff capacities, stationeries/consumables, hardware supplies, printing school questionnaires ASCF and EMIS output, EMIS workshop, repaired EMIS building...**

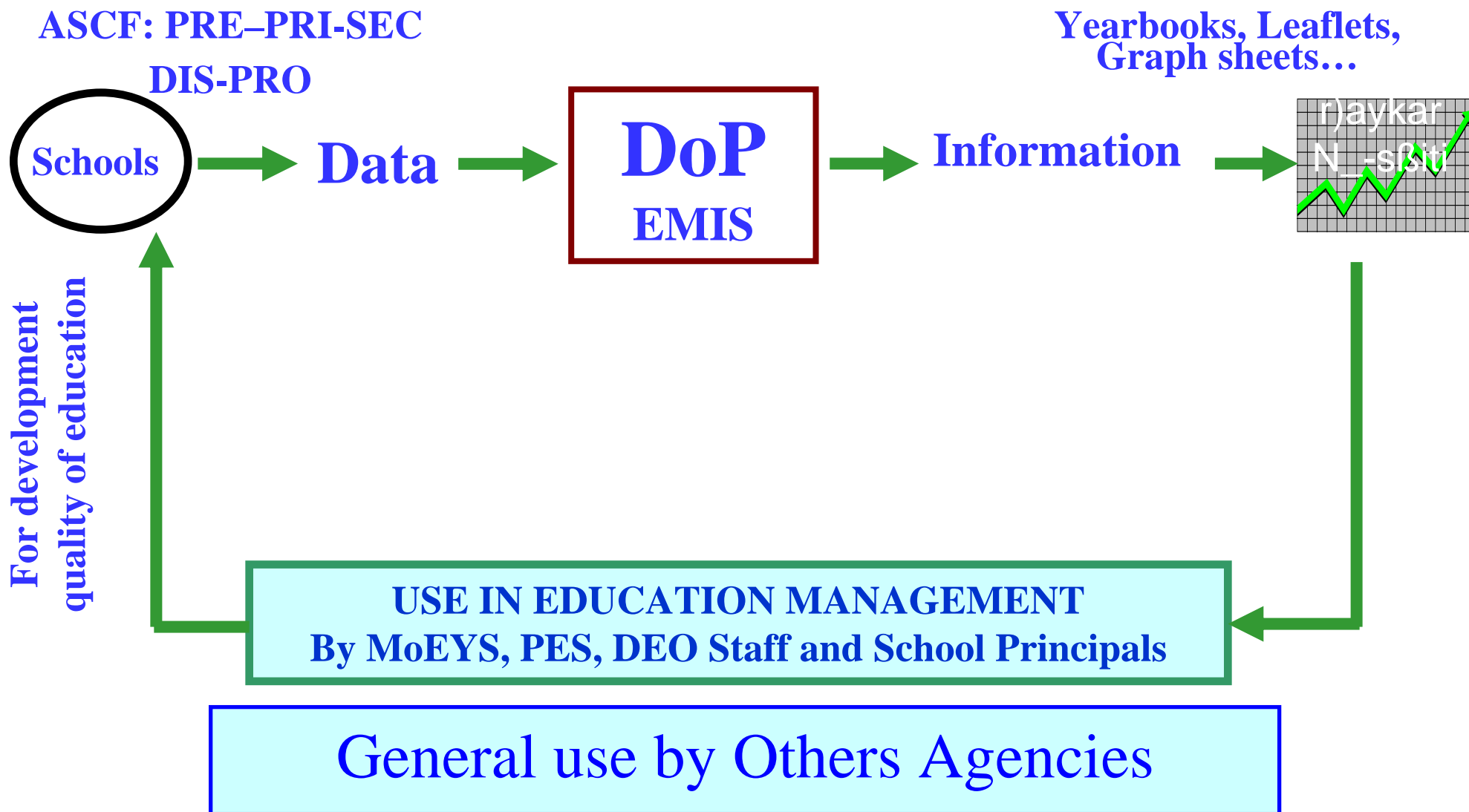
# TECHNICAL/DONNOR ASSISTANCE TO EMIS

- In August 2006, UNICEF conducted EMIS data quality assessment.
- UNICEF supported EMIS to update school map 2007-08 by providing plotting printer and JICA supported 3 staff for upgrading GIS training.
- In June 2008 UNICEF and JICA have supported 5 staff of Department of Planning to train on data analysis in NUEPA India.

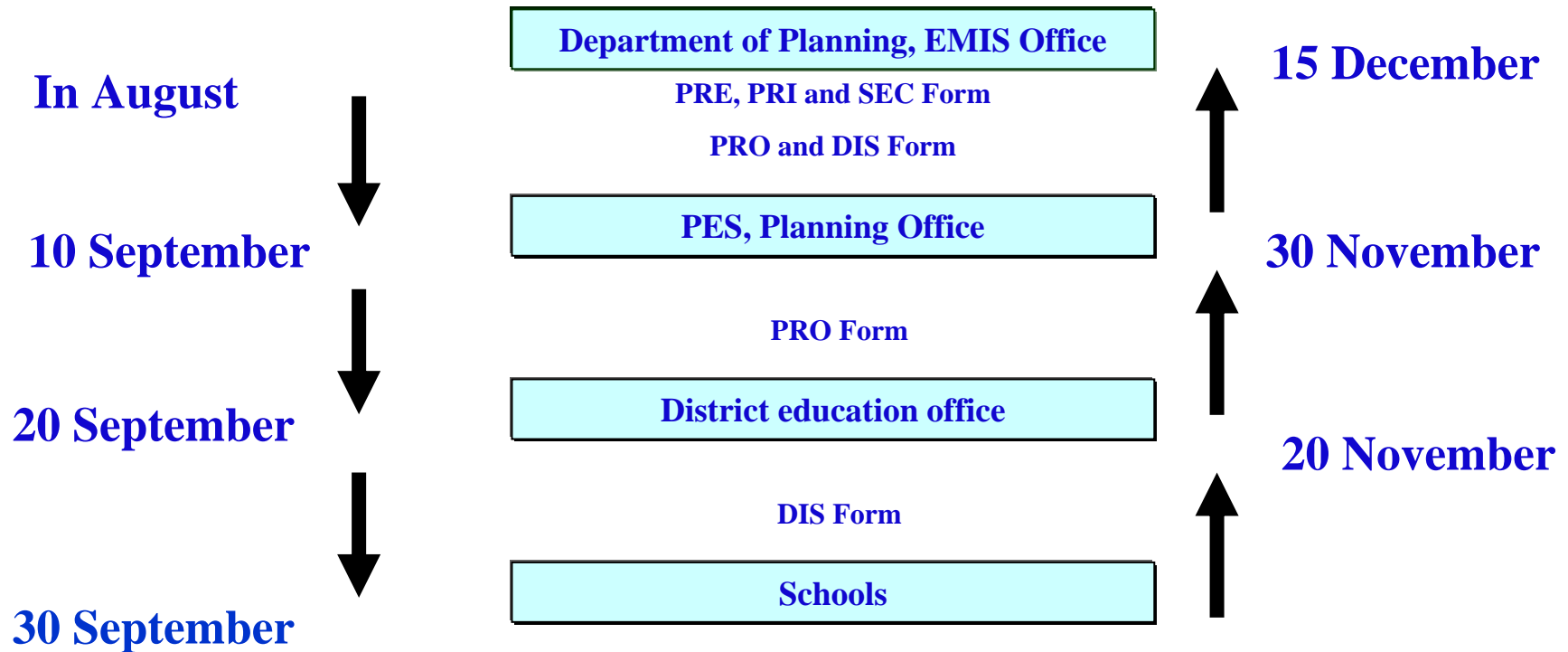
# Different Types of Data Collection in MoEYS

- Most Departments in MoEYS have a “planning section” which is responsible for collecting data directly from PES and other relevant sources
- Most prominent data collections in MoEYS:
  - *Annual School Census by EMIS Office, DOP*
  - *Bi-annual data collection* by Personnel and Finance Department
  - *Tri-annual data collection* by :
    - Planning Department
    - Primary Education Department
    - Secondary Education Department
    - Early Childhood Education Department
    - Non-Formal Education Department

# EMIS Process



# Flow of Data collection

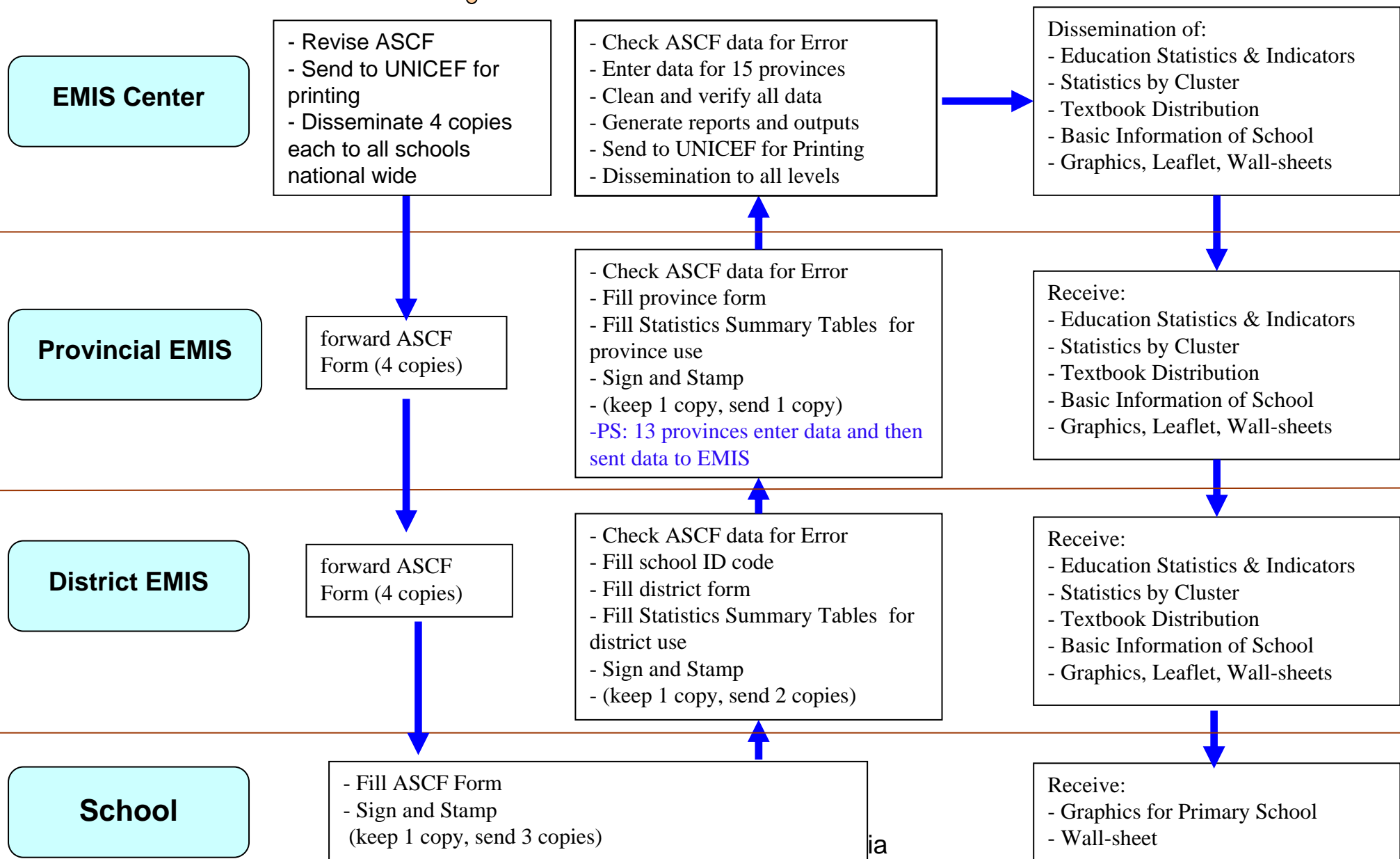


ASCF: PRE, PRI, SEC

*30 days after school-opening day and enrolment becomes stable, all school principal start to collect data or count student enrolment and set in ASCF.*



# EMIS Workflow



# EMIS Data Collection Form

EMIS Office started to collect the education data in 1996.

## Types of Data Collection:

### 1. Data Collection Form used by Provincial and District offices of Education (PRO and DIS)

– *Basic information on education staff*

– *Population by age (0, 1, 2, ..., 18, 19-25, 26-45, 46+)*

### 2. Annual school census form – ASCF apply for all schools (PRE, PRI, SEC)

# EMIS Data Collection Form-cont

## Seven main characteristics of ASCF:

### *1. Identification and Background Information*

- School Principal
- School Characteristics
- In-Charge of Annex School (for Annex Schools)

### *2. Students*

- New, Promoted and Repeating Students by age, sex, grade, (T,F)
- Enrollment and Examination Results by sex, grade for Last Year

### *3. Teaching-Learning Facilities and Classrooms*

- Classrooms and Classes, chairs, tables, blackboard, ...
- Number of availability of teachers guides and new received TG from MoEYS
- Textbooks Collected from students and Reusable from Previous Year
- New Textbooks Received and Total Distributed to Students (Free)

# EMIS Data Collection Form-cont

## **4. Teaching and Non-Teaching Staff**

- Age (in broad age groups)
- Service year in Education
- Salary Scale
- Staff with Special Functions
- Education level training and Pedagogical Training
- Secondary Teachers Teaching at Primary by Specialization

## **5. Physical Facilities**

- School Area
- Structure of Buildings
- Condition of Buildings, Classrooms and Facilities
- School Sports Teams and Facilities

## **6. Community Participation**

## **7. School Financing**

# EMIS Data Collection Form-cont

In school year 2002-2003, in responding to the planning and monitoring purpose of ESSP, ASCF has been added an **Extra sheet Questionnaire for Primary and Secondary schools:**

## **8. Additional questionnaire on class shift, classes and Staff:**

- **Class shift; Number of Classes by shift and by grade;**
- **Number of students by shift and by grade;**
- **Students G1 have passed early childhood program;**
- **Number of new re-entry program students;**
- **Students/staff/core teachers who took the training on HIV and AIDS Awareness;**
- **Number of students in multi -grade class by shift;**
- **Multi-grade teacher and methodological training;**
- **Teacher by grade and by shift;**
- **Contract teacher by grade and by shift.**

# EMIS Data Collection Form-cont

## **9. Additional questionnaire on Facilities:**

- Condition of school building
- Latrines
- Water sources and material

## **10. Disadvantage students by grade:**

- Seeing Difficulties
- Speaking Difficulties
- Learning Difficulties
- Malnutrition
- Migrant family
- Orphan
- Hearing Difficulties
- Moving Difficulties
- Psychological Difficulties
- Health
- Poor family

## **11. Distribution of Diworming tablets in 2006-07**

# Data collection

- The EMIS questionnaire collects at the beginning of school year; the data will be defined on 30 October.
- The teacher in-charge of each class checks and counts their students and lists in the **table for teacher filled** and send to school secretary or principal for summing up by grade, by characteristics of children and by gender (in October- November).

# EMIS Data Processing

- The main questionnaires need to process in the first step.

**A. Check, edit and code data, data entry and verify.**

**B. Clean and Analyze**

- 1<sup>st</sup> and 2<sup>nd</sup> draft of Education Statistics and Indicators will be produced at the end of April for Checking
- Progress report for Statistics and Indicators will be made and sent to MoEYS's Leaders
- Final draft of Statistics and Indicators are ready to Printing House in May and produced in the Early of June.
- Since 2001, national education staff have operated the EMIS system successfully
- **Visual dBase** is used as main database engine.
- Data analysis and presentations are carried out using **SPSS** and **MS Excel, MS Power Point, MS Words.**



# Annual School Census Form - DRI

Ministry of Education, Youth and Sport  
EMIS Office, Department of Planning

**KINGDOM OF CAMBODIA**  
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## ANNUAL SCHOOL CENSUS - PRIMARY SCHOOLS

### 1. Identification and Background

#### 1. (A) School Principal

Director Name:   
Date of Birth:   
Gender:   
Education:   
If Replace Teacher:   
Total Service:   
Director Service:   
Teaching hour / week:

**Add Record**

**Close Form**

Computer ID:

#### 1. (C) In-Charge of Annex School

Position of In-charge:   
In-charge Name:   
Date of Birth:   
Gender:   
Education:   
Total Service:   
Teaching hour / week:

School ID:   
School Type:  Last Verified:   
School:   
New School:   
Village:   
Commune:   
District:   
Province:

#### 1. (B) School

Urban/Rural Location:   
Number of Shifts:   
College in the Compound of Primary:   
Floating School:   
Totally in Pagoda:   
Classes in Pagoda:   
Teaching Monks:   
Community Teachers:   
Pre-school Attached:   
Annex School:   
Name of Cluster School Only:   
Core or Satellite School:   
Schools in Cluster:

[Information?](#)

[Verifying How!](#)

[To Part-II](#)

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# Selection of Indicators

- Within the **context of planning, monitoring and evaluation** the education objectives and target set by MoEYS;
- *From the array of standard education indicators used by UNESCO, UNICEF and related agencies as measures of educational development;*
- In the global focus on the **assessment and development of Education For All.**

# Main outputs of EMIS

- **Education Statistics and Indicators** (Yearbook – national and provincial level)
- **Education Statistics and Indicators by School Cluster by province**
- **Situation of Textbook Distribution by School Cluster by province**
- **Basic Information of Schools**
- **Graphics of Primary Schools**
- **Wall sheet: Education in Cambodia** (Education structure and development trend indicators graphs)
- **Pamphlet: Education Indicators**
- **School maps of Cluster, district, province and nation**
- **CD of EMIS**, combining all EMIS outputs
- **Subsets of EMIS databases**
  - for the provinces (PES)
  - for different MoEYS projects and
  - for selected users (on request)

# Education Statistics and Indicators - Yearbook

## **I- Education statistics contain 33 tables on**

- Schools, Classes, Students and Staff**
- Characteristics of Schools and School Principals**
- Number of Schools by Highest Grade Taught**
- Enrollment by Level of Education, 2006/07 and 2007/08**
- Characteristic of Teachers - non-teaching staff**
- Student and population by school age,....**

# Education Statistics and Indicators - Yearbook

## II- Education indicators contain 25 tables on

- Pupils, classes, staff, classrooms, etc. per school;
- Access, Equity, Quality and Enrolment: GAR, NAR, GER, NER and transition rate by Sex, province, district and national...
- Student Flow Rates by Grade by Sex, education level (total, male, female)
  - Promotion rate, Repetition rate, Dropout rate
- Graduates by level of education by Sex, province, district and national
- Survival and Completion Rates 2006-07
  - Grade 1 to Grade 5, Grade 1 to Grade 6, Grade 1 to Grade 9

# EDUCATION IN CAMBODIA 2007-08

<b>Statistics</b>	<b>Pre-school</b>	<b>Primary schools</b>	<b>Lower sec. ed</b>	<b>Upper sec. ed</b>	<b>Total</b>
<b>Schools</b>	<b>1,634</b>	<b>6,476</b>	<b>1,006</b> Junior HS	<b>315</b> Senior HS	<b>9,431</b>
<b>Classes</b>	<b>2,678</b>	<b>60,384</b>	<b>13,300</b>	<b>4,968</b>	<b>81,330</b>
<b>Students -Total</b>	<b>79,585</b>	<b>2,311,107</b>	<b>637,629</b>	<b>260,965</b>	<b>3,289,286</b>
<b>Students –Girl</b>	<b>40,013</b>	<b>1,094,577</b>	<b>296,907</b>	<b>106,782</b>	<b>1,538,279</b>
<b>% of girl</b>	<b>50.27</b>	<b>47.4</b>	<b>46.56</b>	<b>40.91</b>	<b>46.8</b>
<b>Teachers -Total</b>	<b>2,960</b>	<b>46,921</b>	<b>23,158</b>	<b>6,784</b>	<b>79,823</b>
<b>Teachers Female</b>	<b>2,914</b>	<b>20,422</b>	<b>8,093</b>	<b>1,903</b>	<b>33,332</b>
<b>% of Female</b>	<b>98.44</b>	<b>43.52</b>	<b>34.94</b>	<b>28.05</b>	<b>41.76</b>
<b>Staff -Total</b>	<b>3,130</b>	<b>58,776</b>	<b>27,240</b>	<b>7,857</b>	<b>97,003</b>
<b>Staff -Female</b>	<b>3,073</b>	<b>23,264</b>	<b>8,893</b>	<b>2,162</b>	<b>37,392</b>

# EDUCATION IN CAMBODIA 2007-08

<b>Indicators</b>	<b>Pre-school</b>	<b>Primary schools</b>	<b>Lower sec. ed</b>	<b>Upper sec. ed</b>	<b>Total</b>
<b>NAR Total</b>		<b>89.5</b>			<b>89.5</b>
<b>NAR Fem</b>		<b>89.7</b>			<b>89.7</b>
<b>NER Total</b>		<b>93.3</b>	<b>34.8</b>	<b>14.8</b>	
<b>NER Fem</b>		<b>93.3</b>	<b>35.9</b>	<b>13.8</b>	
<b>Transition rate Tot</b>		<b>78.9</b>	<b>71.5</b>		
<b>Transition rate Fem</b>		<b>78.5</b>	<b>71.0</b>		
<b>Pupil/Teacher ratio</b>	<b>26.9</b>	<b>49.3</b>	<b>27.5</b>	<b>38.5</b>	<b>41.2</b>
<b>Pupil/Class ratio</b>	<b>29.7</b>	<b>38.3</b>	<b>47.9</b>	<b>52.5</b>	<b>40.4</b>
<b>Promotion rate</b>		<b>78.6</b>	<b>77.0</b>	<b>82.3</b>	
<b>Repetition rate</b>		<b>10.6</b>	<b>2.0</b>	<b>3.4</b>	
<b>Drop out rate</b>		<b>10.8</b>	<b>21.0</b>	<b>14.4</b>	

## WHAT IS THE YEAR BOOK FOR?

- To improve practices of all levels of education administrators and managers;
  - To be a primary source of education data for researchers in education and associated fields;
  - To shape any studies / surveys in Cambodia for policy analysis and planning; and
  - To monitor and evaluate the progress of sector program indicators and targets of EFA, MDG, NSDP and ESP/ESSP.



# Responding to Education Indicators targets of EFA - MDG - ESP 2006-07

**EFA 19 indicators - MDG 10 indicators - ESP 31 indicators**

# Dissemination of EMIS Outputs

## *Central level:*

- Ministry of Education, Youth and Sport
- Leaders of the Ministry
- All directorates, inspectorate and cabinet in the Ministry
- All departments

## *Provincial level:*

- All Provincial Education Services (PES)  
and All District Education Offices (DEO)
- all Public Schools

# Dissemination of Yearbook-cont

## ***National Institutions:***

- National Senate
- National Assembly
- Council of ministers
- All Ministries

## ***Other Institutions:***

- All Embassies in the Kingdom of Cambodia
- Some National and International organizations related to education (UNICEF, UNESCO, UNDP, ADB, WB, EU, WFP, NGO, ... )

# Major Issues

- Yet, not all provinces could enter school data successfully
- Planning section/ unit where EMIS functions at the PES and DEO do not have sufficient staff and facilities
  - computers, office space and equipment

# Major Issues

- **Major complaints from users include:**
  - **lack of timeliness**
  - **unavailability of specific data needed for projects and**
  - **questionable quality of data**
    - **such as incomparability over time**
    - **huge differences in education statistics from EMIS and from household surveys and field observations**

# EMIS Next Step

- Coordinate with the [Ministry of Culture and Religious](#) to ensure that all schools are covered in the Annual School Census.
- EMIS unit with all the modern software and hardware and computer professionals exclusively for the work relating to EMIS be established in all the 24 provinces and municipalities of Cambodia.
- Provide flexibility to provinces to first undertake data entry of key variables to facilitate their urgent need.
- Re-design the existing formats to make it complete in all aspects.

# EMIS Next Step

- Department of Planning may explore possibility to bring out Provincial Report Cards (PRCs) annually which may present information on all aspects of school education.
- Efforts should be made to **present data analysis** (to begin with central and provincial analysis) at the time of release of EMIS data in a function to be organized by the Department of Planning **starting 2008-09**
- The DoP initiate efforts to bring out Analytical Report which can present provincial level analysis.

**THANK YOU**