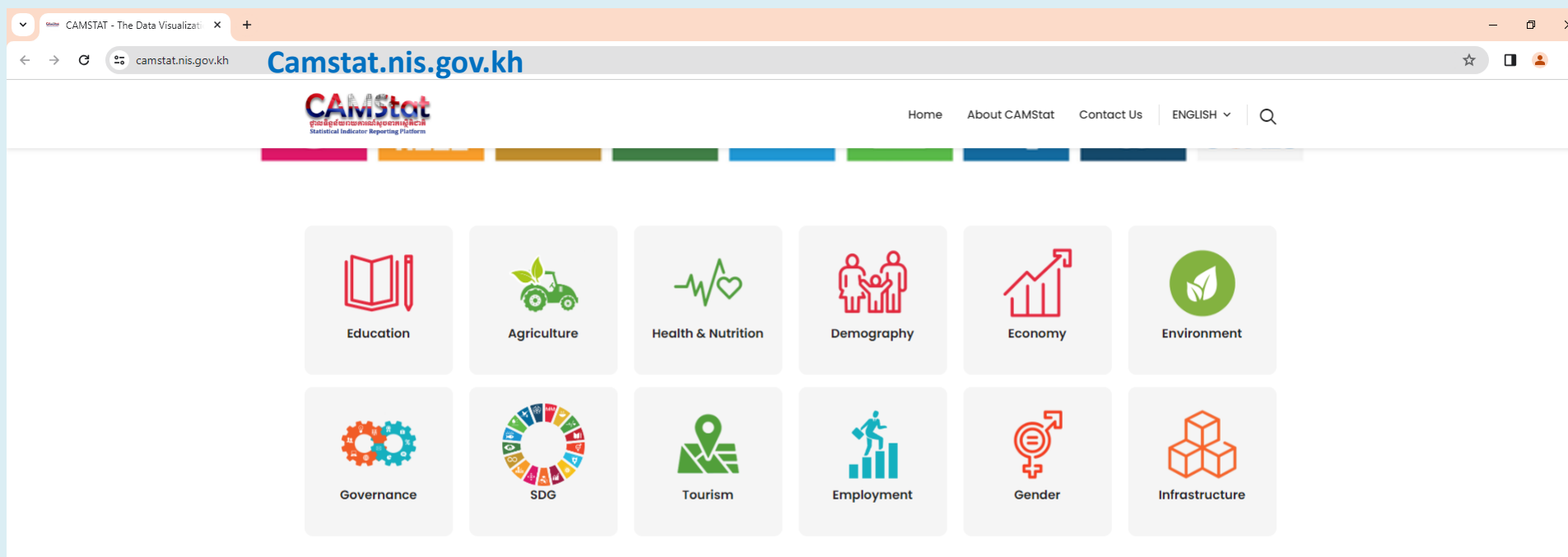


National Open Data Conference

Open Government Data for Inclusive Development

Theme 3: Open Data for Official Statistics and SDGs



About CAMStat

CAMSTAT is a data reporting platform and dissemination the national development indicators for monitoring and evaluation the National Strategic Development Plan (NSDP), Cambodian Sustainable Development Goal (CSDG/SDG) and others. CAMSTAT is based on the .Stat dissemination platform and suite of components which are currently being re-developed. CAMSTAT will be an end-to-end statistical solution covering all phases of the statistical processing life cycle from data collection through to dissemination. The implementation of the CAMSTAT system has the goal to strengthen statistical cooperation throughout the National Statistical System (NSS) and international monitoring agencies. It will improve coordination and harmonization in the production and dissemination of timely and high-quality data and statistical information to support the government in its policy making.

26-27 March 2024

Prepared by National Institute of Statistics, email: bsomethea@gmail.com

Presentation Outline

- I. About National Institute of Statistics
- II. CAMSTAT platform
- III. Data Dissemination
- IV. Next Step/Challenge



I. About National Institute of Statistics

- The National Institute of Statistics is the focal point on statistical matters in Cambodia. The NIS compiles and consolidates statistics provided by decentralized offices and collects primary data up to household and establishment level.
- Legal Framework
 - Statistics law, 2015
 - National Strategy for the Development of Statistics 2019-2023 (NSDS)
 - In the process to develop NSDS 2024-2028
- Censuses
 - Population Census
 - Economic Census
 - Agriculture Census
- Survey
 - Agriculture Survey
 - Cambodia Demographic and Health Survey (CDHS)
 - Socio Economic Survey (CSES)
 - Labour Force Survey
 - Consumer Price Index
 - National Account
 - Statistical Year Book
 -

I. CAMSTAT platform

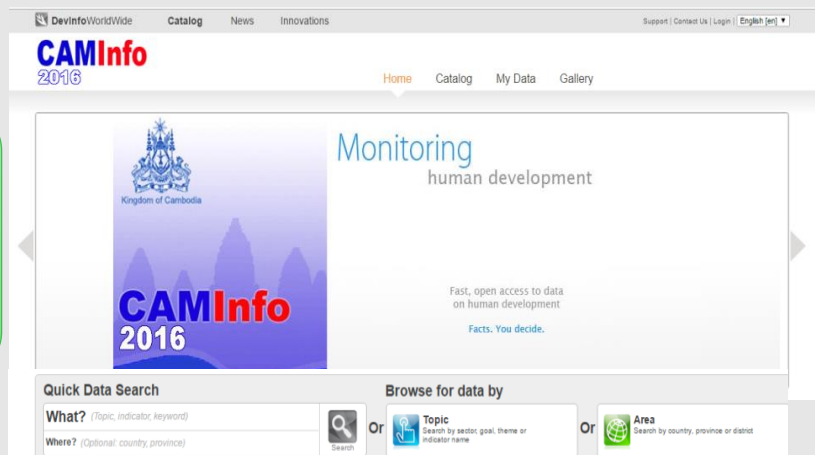
I. CAMSTAT


1.1. Background: Why Camstat?

- Since 2004, the National Institute of Statistics (NIS) was disseminating its statistical data using UNICEF's DevInfo (branded as "CamInfo")
- In 2015, with the end of the MDG era, software development on DevInfo ended
- UNICEF initiated transition from CamInfo to an alternative platform based on the .Stat software, developed by the SIS-CC
- Migrate DevInfo structures to SDMX for all statistical domains
- Migration of data from CamInfo to the new CamStat, 2018
- Add new datasets: develop structures for SDG indicators
- Deploy Camstat on the UN Global Platform
- OECD, PARIS21, UNSD, UNESCAP, UNFPA Cambodia supported the project
- UNICEF and OECD temporarily hosted Camstat for 2 years
- CamStat became the official data dissemination platform of Cambodia

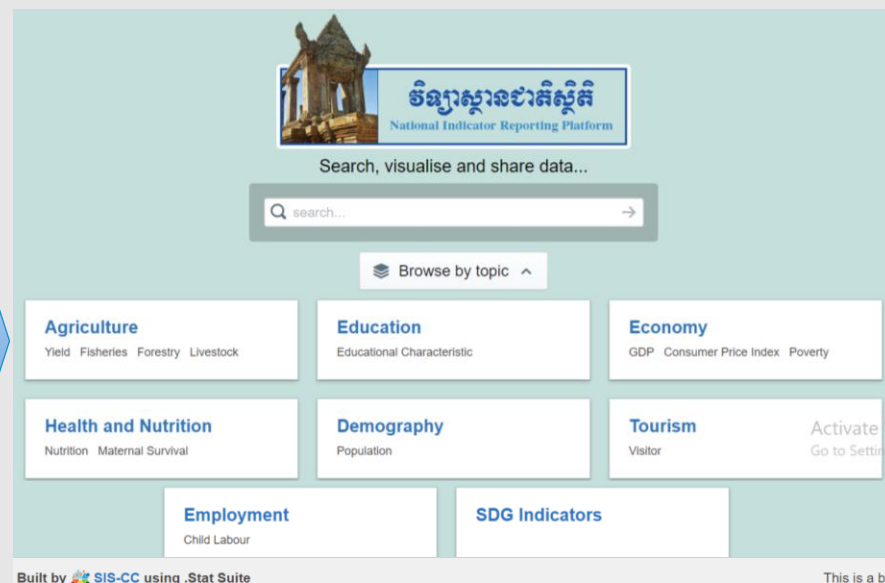
Migrating into CamStat Production

Extract from CamInfo



Model following
 **sdmx**

Populate in .Stat



Pilot Exercise (2018-2019)

Flash Back to The Pilot Missions of OECD, UNICEF, PARIS21 and UNSD

Mar 2018

- Structured *SDG DSD*,
- *Structured Education Data*
- *Uploaded data to .Stat Suite*

Oct 2018

- . Structured *Demography Data* & uploaded data to .Stat Suite.
- . Built skills in **SDMX standards** and tools good practices

Dec 2018

- . Structured *Agriculture data* and upload to .Stat Suite
- . Deepened skills in data standards and tools good practices

May 2019

Full migration of CamInfo data, including NSDP and CSDG/SDG data.



Tool Used

- DSD Constructor
 - Create Concept Scheme
 - Create Code list
- Mapping Assistant
 - Mapping all data of CamInfo Database
- SDMX Converter
 - Create data flow



API query

- API query can be automatically generated based on SDMX standard

The screenshot shows a web browser window displaying the National Indicator Reporting Platform. The URL is camstat.nis.gov.kh/#/vis?locale=en&endpointId=disseminate&agencyId=KH_NIS&code=DF_SDG_KH&version=1.1&activeFilterId=S.... The page title is "National Indicator Reporting Platform".

The interface includes a search bar with the results "National SDG Indicators" and "Search results (2 results)". The "Used filters" section shows "SDG Series" and "6.1.1 Proportion of population using an improved drinking water source". The "Period" section shows a range from 1970 to 2020, with markers for 2008 and 2018. The "Frequency of observation" is set to 0/9, "Reporting type" to 0/3, and "SDG Series" to 1/146. A search for "water" is active, showing a list of indicators, with "6.1.1 Proportion of population using a..." selected.

The "Data query" section shows the following URL: `http://cambodia-statvm1.eastasia.cloudapp.azure.com/SeptemberDisseminateNSIService/rest/data/KH_NIS,DF_SDG_KH,1.1/..SH_H2O_SAFE...?startPeriod=2008&endPeriod=2018&dimensionAtObservation=AllDimensions`. The "Structure query" section shows the following URL: `http://cambodia-statvm1.eastasia.cloudapp.azure.com/SeptemberDisseminateNSIService/rest/dataflow/KH_NIS/DF_SDG_KH/1.1/?references=all`.

The "National SDG Indicators" section shows the following details: Frequency of observation: Annual • Reporting type: National • SDG Series: 6.1.1 Proportion of population using an improved drinking water source • Reference area: Cambodia Percent.

Time period	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
-------------	------	------	------	------	------	------	------	------	------	------

SDMX standard

```
<!-- NSI Web Service v6.16.0 -->
<message:Structure xmlns:message="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/message" xmlns:structure="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/structure"
xmlns:common="http://www.sdmx.org/resources/sdmxml/schemas/v2_1/common">
  <message:Header>
    <message:ID>IDREF5</message:ID>
    <message:Test>false</message:Test>
    <message:Prepared>2019-11-04T01:59:10.5392422+00:00</message:Prepared>
    <message:Sender id="Unknown"/>
    <message:Receiver id="Unknown"/>
  </message:Header>
  <message:Structures>
    <structure:Dataflows>
      <structure:Dataflow id="DF_SDG_KH" urn="urn:sdmx:org.sdmx.infomodel.datastructure.Dataflow=KH_NIS:DF_SDG_KH(1.1)" agencyID="KH_NIS" version="1.1" isFinal="true">
        <common:Annotations>
          <common:Annotation>
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            <common:AnnotationText xml:lang="en">true</common:AnnotationText>
          </common:Annotation>
        </common:Annotations>
        <common:Name xml:lang="en">National SDG Indicators</common:Name>
        <structure:Structure>
          <Ref id="SDG" version="1.0" agencyID="KH_NIS" package="datastructure" class="DataStructure"/>
        </structure:Structure>
      </structure:Dataflow>
    </structure:Dataflows>
    <structure:CategorySchemes>
      <structure:CategoryScheme id="CAM_CAT" urn="urn:sdmx:org.sdmx.infomodel.categoryscheme.CategoryScheme=KH_NIS:CAM_CAT(1.0)" agencyID="KH_NIS" version="1.0" isFinal="true">
        <common:Name xml:lang="en">Topic</common:Name>
        <common:Name xml:lang="km">តំបន់</common:Name>
        <structure:Category id="AGRI" urn="urn:sdmx:org.sdmx.infomodel.categoryscheme.Category=KH_NIS:CAM_CAT(1.0).AGRI">
          <common:Name xml:lang="en">Agriculture</common:Name>
          <common:Name xml:lang="km">កសិកម្ម</common:Name>
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          </structure:Category>
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          </structure:Category>
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            <common:Name xml:lang="en">Fisheries</common:Name>
          </structure:Category>
        </structure:CategoryScheme>
    </structure:CategorySchemes>
  </message:Structures>
</message:Structure>
```

1.4. Key Output

Search, visualise and share data...

search... | →

Browse by

Topic ^

- Education (EDU)
- Demography (DEMO)
- Governance (GOV)
- Gender (GENDER)
- Agriculture (AGRI)
- Economy (ECO)
- SDG indicators (SDG)
- Infrastructure (INFRA)
- Health and Nutrition (HEALTH_NUT)
- Environment (ENV)
- Employment (EMP)
- Tourism (TOURISM)

- 12 topics
- 898 indicators and about 170,000 data observations
- Time series data, Since 1998 to 2022
- NSDP/CSDG/SDG indicators

Topic	Sub-Topic	Indicator Name	Source of Data	Source of Agency
Health and Nutrition	Access to Health Services	Antenatal Care Consultations by Province		
Education	Enrollment	Gross Enrollment Rate of Children by Age	ECE	MOEYS
Economy	National SDG Indicators	Amount of ODA disbursed to civil society partnerships (as % of GDP)	CDC	CDC
Agriculture	Land use	Rice Paddy by Land use Type	MAFF	MAFF

1.4. Key Output

camstat.nis.gov.kh/vis?locale=en&constraints[0]=6nQpoAP%2C0%7CEducation%23EDU%23&start=0&facet=6nQpoAP&dataflow[datasourceId]=CamStat-stable&dataflow[dataflowId]=DF_ADMISSIONS&dataflow[agencyId]=KH_NIS&dataflow...

Clear all filters

Time Period: 13 / 24

Indicator: 0 / 3

Reference area: 0 / 26

Sex: 0 / 3

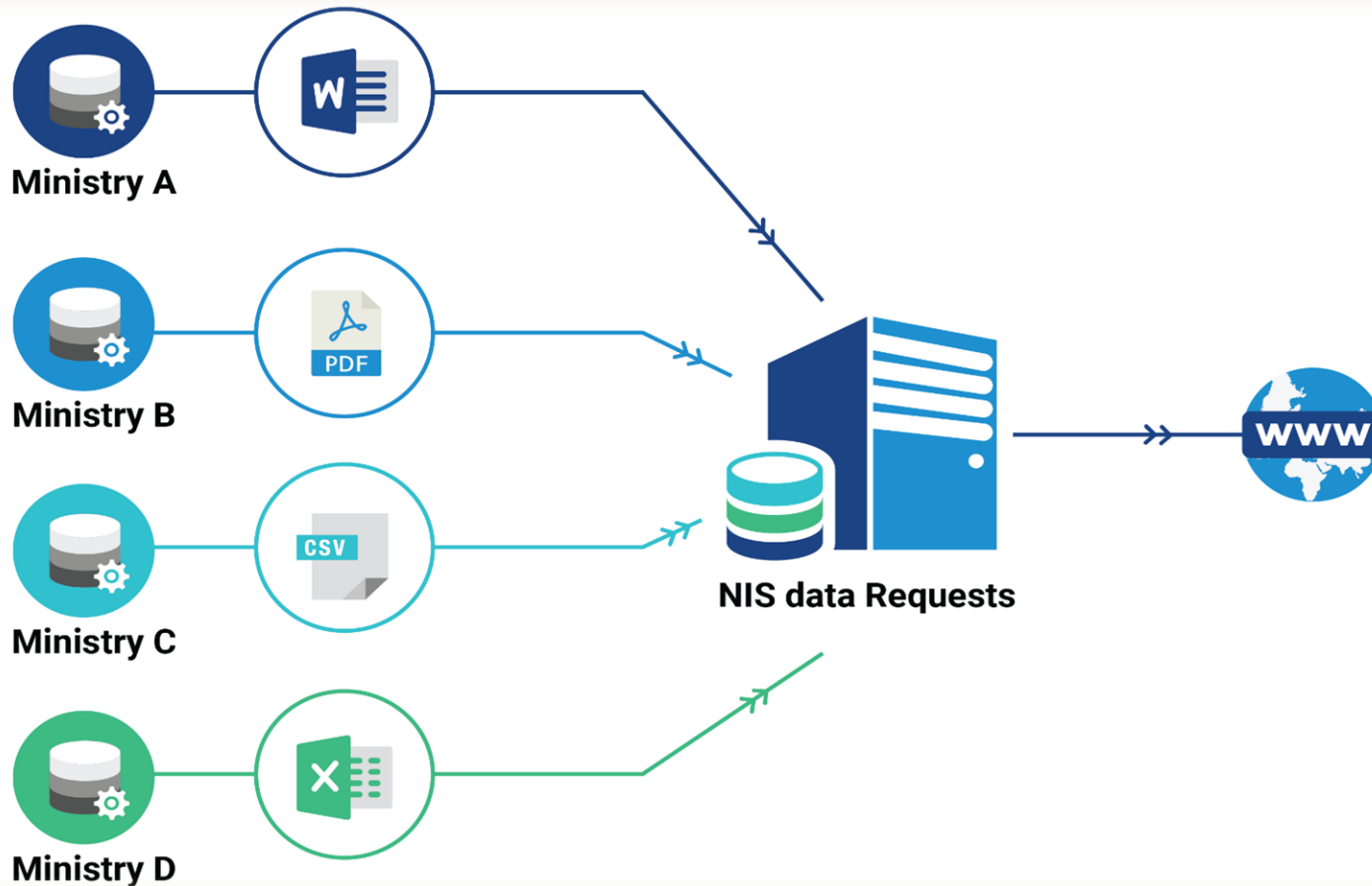
Degree of Urbanisation: 0 / 4

Frequency: Annual

This preview displays 2,501 data points. Your selection is above this limit resulting in an incomplete table. All selected data points can still be downloaded in tabular text (CSV).

Time period	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Reference area													
Indicator: Gross Admission Rate • Sex: Total • Degree of Urbanisation: NA													
Cambodia	* 141.3	* 136.3	* 145.9	* 121.1	* 137.3	* 129	* 132.3	* 130.5	* 127.9	* 118.2	* 114	* 114.9	* 111.8
Banteay Meanchey	* 140.8	* 132.5	* 134.2	* 127.5	* 123.1	* 122.3	* 118.1	* 111.4	* 105.1	* 107.5	* 105
Battambang	* 169.2	* 137.4	* 153.5	* 153.5	* 145.8	* 145.9	* 139.9	* 127.6	* 126.6	* 125.9	* 112.9
Kampong Cham	* 157.8	* 124.5	* 153.4	* 125.6	* 148.9	* 137	* 133.2	* 128.4	* 124.7	* 123.2	* 122.3
Kampong Chhnang	* 129.9	* 109.3	* 112.1	* 115.6	* 113.8	* 117.2	* 115.5	* 106	* 102.2	* 103.2	* 100.5
Kampong Speu	* 149.8	* 110.8	* 131.3	* 123.6	* 128.1	* 126.9	* 122.5	* 111.4	* 103	* 103.4	* 101.8
Kampot	* 145.9	* 123	* 133.9	* 122.4	* 120.6	* 116.4	* 113.3	* 105.5	* 102.2	* 102.4	* 106.2
Kandal	* 130.1	* 108.2	* 125.5	* 110.8	* 128.8	* 130.6	* 126.2	* 113.3	* 111.3	* 114.4	* 114.1
Koh Kong	* 165.7	* 137.7	* 154.9	* 117.8	* 130.8	* 119.5	* 108.8	* 101.4	* 98.9	* 91.6	* 88.8
Phnom Penh	* 121.6	* 114.8	* 112	* 104	* 107.3	* 109.9	* 106.1	* 87.6	* 87.9	* 90.8	* 84.1
Prey Veng	* 143.1	* 107.7	* 132	* 129.8	* 131.8	* 129.7	* 131.1	* 124.2	* 119.1	* 118	* 120.1
Pursat	* 156.9	* 127.5	* 145.3	* 148.8	* 139.8	* 141.2	* 139.2	* 136.9	* 129.4	* 125.6	* 138.2
Svay Rieng	* 133.3	* 100	* 127.1	* 131.6	* 131.5	* 131.8	* 136.8	* 124.5	* 120.8	* 125.7	* 134.5
Takeo	* 130.1	* 105.1	* 123.7
Kratie	* 138.5	* 126.2	* 137.2	* 140.4	* 148.1	* 146.9	* 145.5	* 135.8	* 132.1	* 134.2	* 124.1
Siem Reap	* 156.1	* 132.9	* 146.2	* 141.4	* 135.2	* 133.4	* 129.7	* 116.9	* 113.2	* 113.6	* 110.2
Otdar Meanchey	* 166.1	* 139.8	* 144.6	* 148.3	* 143.5	* 132.2	* 127.3	* 121.3	* 111.1	* 109.8	* 103.9
Preah Vihear	* 148.7	* 132.8	* 158.3	* 143.4	* 152.7	* 139.2	* 144.1	* 136.3	* 135.7	* 135	* 133.3
Ratanak Kiri	* 172.3	* 154	* 207	* 215.6	* 206.8	* 205.3	* 212.1	* 197.5	* 188.9	* 185.4	* 150.6
Mondul Kiri	* 157.6	* 168.5	* 141.8	* 161.8	* 138.8	* 139.2	* 144.5	* 145.1	* 133	* 135.9	* 118.9
Preah Sihanouk	* 157.6	* 168.5	* 141.8	* 161.8	* 138.8	* 139.2	* 144.5	* 145.1	* 133	* 135.9	* 118.9

Current situation for reporting (Line ministries)



Excel/CSV template in CAMSTAT platform
API

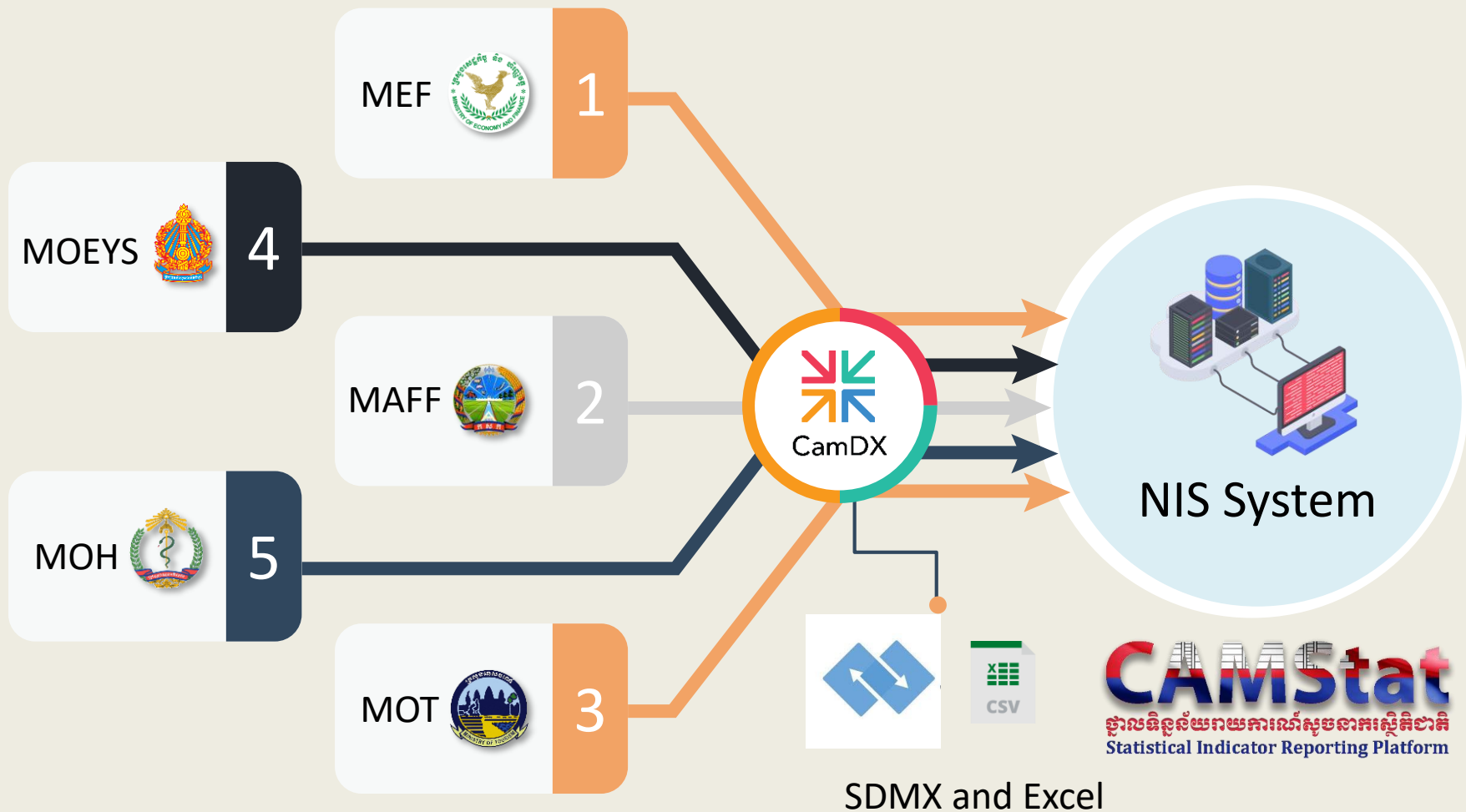
II. Data Dissemination

II. Data Dissemination

- NIS web site, **nis.gov.kh**
 - **CAMSTAT:** <https://camstat.nis.gov.kh/>
 - **Micro data:** <https://microdata.nis.gov.kh/>
 - **Open SDG** platform <https://sdgcambodia.github.io/site/en>
 - **Open health** platform <https://healthdata.nis.gov.kh/>
- **REDATAM software:** Population Census
- **Workshop:** Hard Copy, USB, Leaflet, info graphic
- **Social Media:** Facebook, Telegram
- **Data User Services Center,** NIS library

III. Next step/Challenge

NIS Data Exchange via CamDX



Challenge

- Requested new data for updating time series data in CAMSTAT
- Need for continued technical support/capacity building, for example adopt/implement MOU
- Data sharing tools to automate data reporting/exchanging
- Provide Training on using Data Explorer to the NIS subject matter team and line ministries/ other agencies to ensure sustainability over the long term

Thank you!