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Experience on Development of CamStat, CAMBODIA’s National SDG Reporting Platform

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Presentation Outline

1. The Implementation Experience
2. The Key Outputs
3. Lesson Learnt
4. Current Update & Maintenance Exercise
5. Next Step
1 Implementation Experience

Stat Suite and SDMX/CAMSTAT

- Data modeling and SDMX Information Model,
- .Stat Data Explorer and DLM
- .Stat hosted at the UN Global Platform (UNGP) cloud environment
Migrating into CamStat Production

- Extract from CamInfo
- 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
Key Outputs

- 898 indicators and about 170,000 data observations uploaded to CamStat using the .Stat Data Lifecycle Manager (DLM)
- Number of NIS Subject Matter staff/team trained on data standards and tools, .Stat DLM
- Training workshop on data sharing protocol and CamStat reporting platform, such as the fundamentals of data modeling, SDMX Information Model
- CamStat running on UNGP using AWS cloud services
- Data exchange has been established for SDG indicators with the SDG Global Platform
API query

- API query can be automatically generated based on SDMX standard
SDMX standard

```xml
<-- NSI Web Service v7.13.2.0 -->
 xmlns:common="http://www.sdmx.org/resources/sdxml schemas/v2_1/common">
  <message:Header>
    <message:ID>IDREF42591</message:ID>
    <message:Test>false</message:Test>
    <message:Prepared>2021-01-28T12:38:22.7506325+00:00</message:Prepared>
    <message:Sender ID="Unknown"/>
    <message:Receiver ID="Unknown"/>
  </message:Header>
  <message:Structure>
    <structure:Dataflows>
      <structure:Dataflow id="DF_SDG_KH" agencyID="KH_NIS" version="1.2" isFinal="false">
        <common:Annotations>
          <common:Annotation>
            <common:AnnotationType>NonProductionDataFlow</common:AnnotationType>
            <common:AnnotationText xml:lang="en">true</common:AnnotationText>
          </common:Annotation>
          <common:Annotation>
            <common:AnnotationTitle>TIME_PERIOD</common:AnnotationTitle>
            <common:AnnotationType>LAYOUT_COLUMN</common:AnnotationType>
          </common:Annotation>
          <common:Annotation>
            <common:AnnotationTitle>FREQ,REPORTING_TYPE,REF_AREA,SEX,AGE,URBANISATION</common:AnnotationTitle>
            <common:AnnotationType>NOT_DISPLAYED</common:AnnotationType>
          </common:Annotation>
        </common:Annotations>
        <structure:Structure>
          <structure:Structure id="SDG" version="1.2" agencyID="KH_NIS" package="datastructure" class="DataStructure"/>
        </structure:Structure>
      </structure:Dataflow>
    </structure:Dataflows>
    <structure:CategorySchemes>
      <structure:CategoryScheme id="CAM_CAT" agencyID="KH_NIS" version="1.8" isFinal="true" isPartial="true">
        <common:Name xml:lang="en">National SDG Indicators</common:Name>
        <common:Name xml:lang="km"></common:Name>
        <common:Name xml:lang="km"></common:Name>
      </structure:CategoryScheme>
    </structure:CategorySchemes>
  </message:Structure>
</message:Structure>
```
Much effort required on SDMX artefact maintenance and versioning

Expert knowledge of SDMX required with current interface and tools to model, map and upload data structures and dataset

Different requirements for dissemination vs reporting when using global Data Structure Definitions (DSDs)

- Code descriptions
- Unused dimensions
- National extensions

NIS will need further technical assistance to use and maintain CAMSTAT
Current general situation for reporting (LMs/LAs)
Current Updating & Maintenance Exercise

- Updating timeseries data from LMIs, Survey and census report
- Prepare indicators template for respective line ministry to be updated.
- CamStat data have been reviewed (codelist dimension, customization) adapt to new feature of StatSuite
1. Prepare mapping file with inclusive parameter sheet
2. Using DSD Matrix Generator
   - To add/edit the required code list
   - Or To upgrade the version (DSD, CL, DF...)
3. SDMX converter
   - Using the generated DSD
   - Using the mapped file
4. Upload into DLM
In 2020, CamStat was migrated from temporary hosting to the UN Global Platform with assistance from UNSD, OECD, UNESCAP, and UNICEF

- it provided a home for CamStat in a robust cloud environment,
- the technical aspects of the .Stat installation and maintenance is addressed by the UNGP community.

- CamStat now running on UNGP using AWS cloud services
- Working with FAO to disseminate Agricultural Survey on CamStat.
- Future integration with Open SDG front-end through CamStat API (SDMX).
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!