5-SDGs Dataset

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*Abstract*— The United Nations' Sustainable Development Goals (SDGs) are a globally recognized framework for promoting peace and prosperity. Comprising 17 interconnected goals, the SDGs were unanimously adopted by all UN member states in 2015, forming the 2030 Agenda for Sustainable Development. This project concentrates on five of the SDGs: No Poverty, Decent Work and Economic Growth, Sustainable Cities and Communities, Climate Action, and Peace, Justice, and Strong Institutions. The project's main problem statement pertains to the fragmentation and inaccessibility of data from various sources, particularly in the Philippines. Data engineering plays a pivotal role in transforming, integrating, and managing data to create a comprehensive '5-SDGs Dataset.' This dataset covers socio-economic, disaster resilience, poverty, demographics, and technology-related attributes. The dataset adheres to dimensional normal form, ensuring it is user-friendly and meets data engineering standards.

Keywords—SDG, sustainable development goals, data engineering, ETL, dimensional model, normalized model, dataset, technology, economy, poverty, demographics, disaster risk reduction

# Introduction

## Background

The Sustainable Development Goals (SDGs) established by the United Nations are a plan aimed at promoting peace and prosperity. These 17 interconnected goals were unanimously adopted by all member states in 2015 as part of the 2030 agenda, for development. It is crucial to acknowledge their significance within society. The SDGs provide a framework that transcends borders encouraging collaboration among countries organizations and individuals to address pressing challenges. By prioritizing collaboration, inclusivity, and sustainability the SDGs strive to improve the well-being of both people and the planet while ensuring that no one is left behind.



**Figure 1**: 17 United Nations Sustainable Development Goals

Among the 17 UN SDGs, five of them were chosen for this project to address key issues in the society associated with it. The following are the key definitions of these goals, according to their website:

**No Poverty** - End poverty in all its forms everywhere

**Decent Work and Economic Growth** - Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all.

**Sustainable Cities and Communities** - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

**Climate Action** - Take urgent action to combat climate change and its impacts.

**Peace, Justice, and Strong Institutions** - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels.

The UN Sustainable Development Goals (SDGs) have an impact on the field of data engineering. This impact is seen in the need to gather, organize and analyze varied datasets. Data engineers have a role in supporting the SDGs by making sure that relevant data is easily accessible, trustworthy, and capable of monitoring progress and guiding decision making.

In terms of data quality and standardization, data engineers play their role in ensuring that data sources are accurate and trusted and keep track of essential metrics. Through data engineering, it enables advanced analytics and predictive modeling to support SDG initiatives. Data engineers also play their role in data integration, create a comprehensive view or dashboard that shows progress towards targets.

UN SDGs are not just goals; they are a call to action that impacts every aspect of civil society, including data engineering. Meeting these global targets requires a concerted effort to harness the power of data and technology for a more sustainable and equitable future.

## Problem Statement

The existing problems behind statistics originating in the Philippines is that data is scattered across various sources, making it challenging to compile a comprehensive dataset. OpenStat website is incomplete, lacking, and suffers from obfuscation. There may be other organizations collecting other metrics and using formats, resulting in fragmentation.

The PSA OpenStat website is hard to use and does not conform to relational model. It still uses multi-indexing methods where there is multiple granularities resulting to violations in 3rd normal form. Data retrieval is also limited to 100,000 rows per download.

Converting data from multiple sources into a standardized format that adheres to dimensional normal form can be complex and time-consuming. It makes data transformation more complicated.

In order to solve the problems stated above, the project aims to achieve the following:

* Develop a comprehensive '5-SDGs Dataset' by aggregating, transforming, and loading data from multiple sources.
* The dataset should encompass a wide range of socio-economic, disaster resilience, poverty, demographics, and technology-related attributes from various CSV files, such as agricultural wage rates, external debt, disaster risk reduction and management (DRRM) indicators, poverty statistics, demographics (population, language, etc.), and technology adoption statistics.
* Ensure that the dataset contributes to the development of 5 United Nations sustainable development goals – No Poverty, Decent Work and Economic Growth, Sustainable Cities and Communities, Climate Action, and Peace, Justice, and Strong Institutions.
* The result should be user-friendly and conform to dimensional normal form.

# Methods

## Data Sources

**PSA OpenSTAT**

OpenSTAT is a public dataset serviced under the Philippine Statistics authority. It offers multiple data under different domains including bot not limited to demographics, economics, environment, etc. Most of raw datasets in this project comes in this website.

OpenSTAT, as defined in their website:

OpenSTAT is an open data platform powered by PC-Axis, a user-friendly application for presenting statistical data and metadata coupled with API and visualization features. This system allows the PSA to share data under an open data license where data can be freely used, re-used and redistributed by anyone without any restrictions other than proper source attribution.

**Humanitarian Data Exchange**

The Humanitarian Data Exchange (HDX) is an open platform for sharing data across crises and organisations. Launched in July 2014, the goal of HDX is to make humanitarian data easy to find and use for analysis. Our growing collection of datasets has been accessed by users in over 250 countries and territories.

Some datasets collected by the Humanitarian Data Exchange were used in this project, commonly datasets that are partially cleaned and aggregated from OpenSTAT’s website.

**United Nations Statistics Division Sustainable Development Goals API**

UNSD SDG API is a public API developed by the United Nations that provides real-time access to data and information, specifically all data under the 17 Sustainable Development Goals. In this project the API was used for merely obtaining the different details and goals of the 16 SDGs, and integrating it with the transformed datasets.

## Extract

All CSV files were downloaded from their respective sources. For OpenSTAT files, I’ve only selected geographical locations of the lowest degree available to ensure the high granularity of the dataset. For the complete list of datasets, their attributes and granularity, refer to **Table 2**: *List of Source Datasets and its Attributes*

## Transform

**General Transformation Rule**

To maintain a consistent and organized format for data transformation, the following rules were applied to all dimensions using Pandas DataFrame.

* The granularity should be one row per geographical location (could be national, regional, provincial, municipal, or barangay level).
* Each row should correspond to one attribute. Therefore, one metric per row.
* To facilitate the observation of data changes over time, each column is associated with a specific year. It is important to note that not all columns may contain values; however, a single column should have a value associated with it for each row.

Population Data

As the dataset is not consistent with the location dataset, I’ve used similarity index to create a mapping between two datasets. In turn, join performance has decreased significantly.

All of these datasets are placed in the database as a staging table.

**Normalized Model**

In transforming the cleaned and consistent models into a normalized model, all datasets were appended or combined to a single domain table. In tables where the attribute is not specified, the table name is used as the attribute in the domain table.

Then, all attributes were transferred to another dimension entitled “AttributeDim”. Attributes within dimensions are now foreign keys in the attribute dimensions.

The location data has been aggregated where administrative names of multiple levels have been combined into one column to make it compatible with object-relational model. Like attribute dimensions, all geolocations within dimensions are now foreign keys in the location dimension.

All of these datasets are placed in the database as the dimension table.

See Figure 3: Normalized Model on the next page for the normalized model.

## Load

All staging tables are now loaded in the SQLite database, ready for consumption of the end users.

**Dimensional Normal Form**

The dimensional normal form of the dataset combines all fact values from dimension tables: demographics, DRRM, economic, poverty, and technology sector into a single huge fact table.

The dimension follows mostly star schema, with *all data* acting as the fact table and the location, attribute, domain, and SDG tables acting as the dimension tables.

The granularity remains the same:

* The granularity should be one row per geographical location (could be national, regional, provincial, municipal, or barangay level).
* Each row should correspond to one attribute. Therefore, one metric per row.
* To facilitate the observation of data changes over time, each column is associated with a specific year. It is important to note that not all columns may contain values; however, a single column should have a value associated with it for each row.

All individual attribute dimensions have also been combined into one table, with the addition of Industry column that is only used in technology dimension.

A diagram of a dataset

Description automatically generated

Figure 2: Dimensional Normal Form

As all dimension tables have the same schema, another dimension was added to each dimension – signifying the contribution of the dimension to the United Nations Development Goals.

|  |  |
| --- | --- |
| **Dimension** | **Sustainable Development Goal** |
| Poverty | #1: No Poverty (End poverty in all its forms everywhere). |
| Economics | #8: Decent Work and Economic Growth (Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all). |
| Technology | #11: Sustainable Cities and Communities (Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation). |
| Disaster Risk and Reduction Management (DRRM) | #13: Climate Action (Take urgent action to combat climate change and its impacts). |
| Demographics | #16: Peace, Justice, and Strong Institutions (Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels). |

Table 1: Dimensions' Attributions to the UN Sustainable Development Goals

# Results and Discussion

**Dimensional Normal Form**

## A screenshot of a spreadsheet Description automatically generated

Figure 3: Preview of the Fact Table

The fact table is saved on *final/all\_data.csv* file. It contains 104027 rows, and 64 columns. The first column is a unique identifier, while the next 5 columns are foreign keys that reference the dimension tables. The rest of the columns are values of the attributes from 1961 to 2022. Note that not all values are filled due to lack of available data during that time.



Figure 4: SDG Dimension

The SDG Dimension remains largely unchanged from its raw counterpart, with a code, title, description, and URI as available columns.

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Figure 5: Location Dimension

The location dimension has been transformed to fit the relational model. Parent geographical location is referenced in *parent\_pcode*, representing hierarchical relationship.

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Figure 6: Attribute Dimension

The attribute dimension is the list of all metrics collected during the transformation process. Industry values are only available in the technology domain.

A screen shot of a list

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Figure 7: Domain Dimension

Lastly, the domain dimension is the domain associated with the dataset. This dimension is created to follow the dimensional model.

**Source Code**

The source code of the project is publicly available at this [GitHub repository](https://github.com/PeteCastle/Data-Engineering-Capstone). All Python files are located on the *root* folder, as well as on the folders *DRRM, demographics, economic, poverty*, and *technology*. All raw datasets can be found on *raw* folder; while final normalized and dimensional tables are on the *final* folder.

To rerun the entire ETL process, open the *main.ipynb* file and run all. No setup is required for the other users.

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Figure 8: GitHub Repository

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Figure 9: Normalized Model

**Table 2**: List of Source Datasets and its Attributes

|  |  |  |  |
| --- | --- | --- | --- |
| Domain (SDG Goal) | Dataset Name | Attributes | Granularity |
| **Disaster Risk and Reduction** | [Proportion of local governments units that adopt and implement local disaster risk reduction strategies in line with national](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__3I__G11/0053I3D11B2.px/?rxid=c09b975b-e66b-4dde-915d-fe6229921b2d) disaster risk reduction strategies | Proportion of LGUs that implements national DRR strategies. | Annual data for various regions of the country with each year from 2000 to 2022 |
| [Philippines: Vulnerable groups by city/municipality from DSWD National Household Targeting Office as of February 2016](https://data.humdata.org/dataset/philippines-pre-disaster-indicators/resource/3e58fc29-e01f-4da8-b54f-9564ec3e8ee0) | Child headed Male  Child Headed Female  Single Headed Male  Single headed Female  Disability Male  Disability Female  Solo Parent Male  Solo Parent Female  Older Male  Older Female | Number of specific vulnerable group per city/municipality |
| [Philippines: Number of evacuation center by city/municipality](https://data.humdata.org/dataset/philippines-pre-disaster-indicators/resource/bf1b93a9-e851-4252-a547-9eb773e8f1db) | Evacuation Center count | Number of evacuation center per city/municipality. |
| **Poverty** | [Annual Per Capita Poverty Threshold and Poverty Incidence Among Families with Measures of Precision, by Region and Province: 2015, 2018, and 2021p](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__1E__FY/0011E3DF010.px/?rxid=8d510cc8-f9de-49b1-b3ca-521e56fa62c5) | Annual Per Capita Poverty Threshold  Poverty Incidence  Coefficient of Variation  Standard Error  Upper Limit Confidence Interval  Low Limit Confidence Interval  (Families) | Annual data for various regions of the country with each year from 2015, 2018, and 2021 |
| [Annual Per Capita Poverty Threshold and Poverty Incidence Among Population with Measures of Precision, by Region and Province: 2015, 2018, and 2021p](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__1E__FY/0031E3DF020.px/?rxid=8d510cc8-f9de-49b1-b3ca-521e56fa62c5) | Annual Per Capita Poverty Threshold  Poverty Incidence  Coefficient of Variation  Standard Error  Upper Limit Confidence Interval  Low Limit Confidence Interval  (Population) |
| [Annual Per Capita Food Threshold and Subsistence Incidence Among Families with Measures of Precision, by Region and Province: 2015, 2018, and 2021p](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__1E__FY/0051E3DF030.px/?rxid=8d510cc8-f9de-49b1-b3ca-521e56fa62c5) | Annual Per Capita Food Threshold  Subsistence Incidence  Coefficient of Variation  Standard Error  Upper Limit Confidence Interval  Low Limit Confidence Interval  (Families) |
| [Annual Per Capita Food Threshold and Subsistence Incidence Among Population with Measures of Precision, by Region and Province: 2015, 2018, and 2021p](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__1E__FY/0071E3DF040.px/?rxid=8d510cc8-f9de-49b1-b3ca-521e56fa62c5) | Annual Per Capita Food Threshold  Subsistence Incidence  Coefficient of Variation  Standard Error  Upper Limit Confidence Interval  Low Limit Confidence Interval  (Population) |
| [Magnitude of Poor Families with Measures of Precision, by Region and Province: 2015, 2018, and 2021p](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__1E__FY/0091E3DF050.px/?rxid=8d510cc8-f9de-49b1-b3ca-521e56fa62c5) | Magnitude of Poor Families Estimate  Coefficient of Variation  Standard Error  Upper Limit Confidence Interval  Low Limit Confidence Interval  (Families) |
| [Magnitude of Poor Population with Measures of Precision, by Region and Province: 2015, 2018, and 2021p](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__1E__FY/0111E3DF060.px/?rxid=8d510cc8-f9de-49b1-b3ca-521e56fa62c5) | Magnitude of Poor Families Estimate  Coefficient of Variation  Standard Error  Upper Limit Confidence Interval  Low Limit Confidence Interval  ( Population ) |
| [Magnitude of Subsistence Poor Families with Measures of Precision, by Region and Province: 2015, 2018, and 2021p](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__1E__FY/0131E3DF070.px/?rxid=8d510cc8-f9de-49b1-b3ca-521e56fa62c5) | Magnitude of Subsistence Poor Families, in thousands  Coefficient of Variation  Standard Error  Upper Limit Confidence Interval  Low Limit Confidence Interval  ( Population ) |
| [Magnitude of Subsistence Poor Population with Measures of Precision, by Region and Province: 2015, 2018, and 2021p](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__1E__FY/0151E3DF080.px/?rxid=8d510cc8-f9de-49b1-b3ca-521e56fa62c5) | Magnitude of Subsistence Poor Families, in thousands  Coefficient of Variation  Standard Error  Upper Limit Confidence Interval  Low Limit Confidence Interval  ( Family ) |
| [Income Gap with Measures of Precision, by Region and Province: 2015, 2018, and 2021p](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__1E__FY/0181E3DF100.px/?rxid=8d510cc8-f9de-49b1-b3ca-521e56fa62c5) | Income Gap %  Standard Error  Upper Limit Confidence Interval  Low Limit Confidence Interval | Annual data for various provinces and regions of the country with each year from 2015, 2018, and 2021 |
| [Severity of Poverty with Measures of Precision, by Region and Province: 2015, 2018, and 2021p](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__1E__FY/0221E3DF120.px/?rxid=8d510cc8-f9de-49b1-b3ca-521e56fa62c5) | Severity of Poverty %  Standard Error  Upper Limit Confidence Interval  Low Limit Confidence Interval |
| **Economic** | [Agricultural Wage Rates of Farm Workers by Type of Wages, Type of Farm Workers, Geolocation, Year and Sex](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__2N/0012N5FAWR0.px/?rxid=bdf9d8da-96f1-4100-ae09-18cb3eaeb313) | Nominal Wage Rate  Real Wage Rate | Annual data for various provinces and regions of the country from 4 types of farm workers, male and female, from 1975 to 2015. |
| [Philippines - Economic, Social, Environmental, Health, Education, Development and Energy](https://data.humdata.org/dataset/world-bank-combined-indicators-for-philippines) | Too many attributes to mention. Includes: Agriculture and Rural Development, Aid Effectiveness, Economy and Growth, etc. | National annual data from 1961 to 2021. |
| [Philippines – External Debt](https://data.humdata.org/dataset/world-bank-external-debt-indicators-for-philippines) | Too many attributes to mention. Includes: Commercial banks and other lending, Current account balance, Debt service, Debt service on external debt, etc. |
| Demographics | [Gross Regional Domestic Product, by Region](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__2B__GP__RG__GRD/0012B5CPGD1.px/?rxid=14c225bf-5242-49e1-9759-d6ee1f532303) | Gross Regional Product at Current Prices  Gross Regional Product at Constant 2018 Prices | One row per region. |
| [Summary Statistics for Transportation and Storage Establishments by Geolocation, Industry Description, Year and Data Items](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__2D__2019/0002D4BAH00.px/?rxid=d039e164-9f8d-469d-a188-7ace94346676) | Number of Establishments Total Employment  Paid Employees  Workers on Sub-Contract Agreement or Under Manpower Agencies/Contractors  Total Revenue  Total Expense  Compensation  Other Expense  Value Added  Gross Additions to Tangible Fixed Assets  Change in Inventories  Sales from E-Commerce TransactionsSubsidies | One row per transportation type and geographical region. |
| [Core Consumer Price Index for All Income Households by Commodity Group (2018=100): January 2018 - September 2023](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__2M__PI__CPI__2018/0012M4ACP17.px/table/tableViewLayout1/?rxid=7661e891-0bb4-437a-a09a-8f15de3bd4f3) | Core Consumer Price Index | One row per commodity group and geographical location. |
| [Philippines: Languages](https://data.humdata.org/dataset/philippines-languages) | Number of population who speaks a specific language.  Main language  Main language share  Total, Male, and Female Population  Literacy Rate for Male and Female  Data Confidence | One row per geographical location. |
| [2020 Census of Population and Housing (2020 CPH) Population Counts Declared Official by the President](https://psa.gov.ph/content/2020-census-population-and-housing-2020-cph-population-counts-declared-official-president) | 2020 Population |
| **Technology** | [Summary of Core ICT Indicators for Establishments Under Business Process Management (BPM) Activities: Philippines](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__3F/0033F4BSIB1.px/) | Number of establishments  Establishments with computers and communication equipment  Establishments with internet access  Number of employees  Employees using computer routinely at work  Employees using computer with internet connection routinely at work  Establishments with web presence  Establishments with intranet  Establishments with extranet  Establishments with wired local area network | One row per ICT indicator and geographical location. |
| [Summary of Core ICT Indicators for Establishments Under Information Economy: Philippines](https://openstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__3F/0023F4BSIC0.px/?rxid=bdf9d8da-96f1-4100-ae09-18cb3eaeb313) |
| **Location** | [Philippines - Subnational Administrative Boundaries](https://data.humdata.org/dataset/cod-ab-phl?) (adm01234) | Names of barangay, cities/municipalities, province, and region. | One row per barangay |
| **Sustainable Development Goals** | [United Nations Statistics Division SDG API](https://unstats.un.org/sdgs/UNSDGAPIV5/swagger/index.html) | Goal Name, Description | One row per SDG indicator. |

##### Biblography

##### Kaci, A. Y. (2017). The Sustainable Development Goals. United Nations Publications. Publications.

##### Appendices

**SQL Scripts**

*Note: All SQL scripts are located in main.ipynb file. Simply run all models to generate and saved from database to the Data Warehouse.*

**Normalized Models**

demographics\_cpi

1. CREATE TABLE IF NOT EXISTS demographics\_cpi (

2. pcode TEXT,

3. AttributeID INTEGER,

4. "2018" REAL,

5. "2019" REAL,

6. "2020" REAL,

7. "2021" REAL,

8. "2022" REAL,

9. FOREIGN KEY(pcode) REFERENCES location(pcode),

10. FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

11. );

12.

13. INSERT INTO demographics\_cpi(pcode, AttributeID, "2018", "2019", "2020", "2021", "2022")

14. SELECT stg\_demographics\_cpi.ADM2\_PCODE,

15. AttributeDIM."AttributeID",

16. stg\_demographics\_cpi."2018",

17. stg\_demographics\_cpi."2019",

18. stg\_demographics\_cpi."2020",

19. stg\_demographics\_cpi."2021",

20. stg\_demographics\_cpi."2022"

21. FROM stg\_demographics\_cpi

22. LEFT JOIN AttributeDIM

23. ON stg\_demographics\_cpi."Commodity Description" = AttributeDIM.AttributeDesc;

24.

demographics\_grdp

1. DROP TABLE IF EXISTS demographics\_grdp;

2.

3. CREATE TABLE IF NOT EXISTS demographics\_grdp (

4. pcode TEXT,

5. AttributeID INTEGER,

6. "2000" REAL, "2001" REAL, "2002" REAL, "2003" REAL, "2004" REAL, "2005" REAL, "2006" REAL, "2007" REAL, "2008" REAL, "2009" REAL, "2010" REAL, "2011" REAL, "2012" REAL, "2013" REAL, "2014" REAL, "2015" REAL, "2016" REAL, "2017" REAL, "2018" REAL, "2019" REAL, "2020" REAL, "2021" REAL, "2022" REAL,

7. FOREIGN KEY(pcode) REFERENCES location(pcode),

8. FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

9. );

10.

11. INSERT INTO demographics\_grdp(pcode, AttributeID, "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021", "2022")

12. SELECT stg\_demographics\_grdp.ADM2\_PCODE,

13. AttributeDIM."AttributeID",

14. stg\_demographics\_grdp."2000", stg\_demographics\_grdp."2001", stg\_demographics\_grdp."2002", stg\_demographics\_grdp."2003", stg\_demographics\_grdp."2004", stg\_demographics\_grdp."2005", stg\_demographics\_grdp."2006", stg\_demographics\_grdp."2007", stg\_demographics\_grdp."2008", stg\_demographics\_grdp."2009", stg\_demographics\_grdp."2010", stg\_demographics\_grdp."2011", stg\_demographics\_grdp."2012", stg\_demographics\_grdp."2013", stg\_demographics\_grdp."2014", stg\_demographics\_grdp."2015", stg\_demographics\_grdp."2016", stg\_demographics\_grdp."2017", stg\_demographics\_grdp."2018", stg\_demographics\_grdp."2019", stg\_demographics\_grdp."2020", stg\_demographics\_grdp."2021", stg\_demographics\_grdp."2022"

15. FROM stg\_demographics\_grdp

16. LEFT JOIN AttributeDIM

17. ON stg\_demographics\_grdp."Attribute" = AttributeDIM.AttributeDesc

18.

demographics\_languages

DROP TABLE IF EXISTS demographics\_languages;

CREATE TABLE IF NOT EXISTS demographics\_languages (

pcode TEXT,

"2010" REAL,

AttributeID INTEGER NOT NULL,

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

WITH languages\_only AS (

SELECT admin2\_name AS pcode,

"Value",

"Attribute"

FROM stg\_demographics\_languages

WHERE "Attribute" IN (

"primary\_language","secondary\_language","tertiary\_language"

)

), language\_metrics AS (

SELECT admin2\_name AS pcode,

"Value",

"Attribute"

FROM stg\_demographics\_languages

WHERE "Attribute" NOT IN (

"primary\_language","secondary\_language","tertiary\_language"

)

)

INSERT INTO demographics\_languages(pcode, "2010", AttributeID)

SELECT

pcode,

languages\_list.languageId AS "Value",

AttributeDIM."AttributeID"

FROM languages\_only

LEFT JOIN languages\_list

ON languages\_only."Value" = languages\_list.languageName

LEFT JOIN AttributeDIM

ON languages\_only."Attribute" = AttributeDIM.AttributeDesc

UNION ALL

SELECT

pcode,

Value,

AttributeDIM."AttributeID"

FROM language\_metrics

LEFT JOIN AttributeDIM

ON language\_metrics."Attribute" = AttributeDIM.AttributeDesc

demographics\_population

DROP TABLE IF EXISTS demographics\_population;

CREATE TABLE IF NOT EXISTS demographics\_population (

pcode TEXT,

"2020" REAL,

AttributeID INTEGER NOT NULL,

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO demographics\_population(pcode, "2020", AttributeID)

SELECT

brgy\_code,

"2020 Population",

(SELECT AttributeID FROM AttributeDIM WHERE AttributeDesc = 'Population')

FROM stg\_demographics\_population

demographics\_transportation

DROP TABLE IF EXISTS demographics\_transportation;

CREATE TABLE IF NOT EXISTS demographics\_transportation (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2019",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO demographics\_transportation(pcode, AttributeID, "2019")

SELECT

stg\_demographics\_transportation.ADM1\_PCODE,

AttributeDIM."AttributeID",

stg\_demographics\_transportation."2019"

FROM stg\_demographics\_transportation

LEFT JOIN AttributeDIM

ON stg\_demographics\_transportation."Attribute" = AttributeDIM.AttributeDesc

drrm\_drr\_implementation

DROP TABLE IF EXISTS drrm\_drr\_implementation;

CREATE TABLE IF NOT EXISTS drrm\_drr\_implementation (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2016",

"2017",

"2018",

"2019",

"2020",

"2021",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO drrm\_drr\_implementation(pcode, AttributeID, "2016", "2017", "2018", "2019", "2020", "2021")

SELECT

"ADM1\_PCODE" as pcode,

AttributeDIM."AttributeID",

"2016",

"2017",

"2018",

"2019",

"2020",

"2021"

FROM stg\_drrm\_drr\_implementation

LEFT JOIN AttributeDIM

ON stg\_drrm\_drr\_implementation."Indicator" = AttributeDIM.AttributeDesc

drrm\_evacuation\_center

DROP TABLE IF EXISTS drrm\_evacuation\_center;

CREATE TABLE IF NOT EXISTS drrm\_evacuation\_center (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2019",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO drrm\_evacuation\_center(pcode, AttributeID, "2019")

SELECT

"ADM3\_PCODE" as pcode,

AttributeDIM."AttributeID",

"2019"

FROM stg\_drrm\_evacuation\_center

LEFT JOIN AttributeDIM

ON stg\_drrm\_evacuation\_center."Indicator" = AttributeDIM.AttributeDesc

drrm\_vulnerable\_groups

DROP TABLE IF EXISTS drrm\_vulnerable\_groups;

CREATE TABLE IF NOT EXISTS drrm\_vulnerable\_groups (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2018",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO drrm\_vulnerable\_groups(pcode, AttributeID, "2018")

SELECT

"ADM3\_PCODE" as pcode,

AttributeDIM."AttributeID",

"2018"

FROM stg\_drrm\_vulnerable\_groups

LEFT JOIN AttributeDIM

ON stg\_drrm\_vulnerable\_groups."Indicator" = AttributeDIM.AttributeDesc

economic\_all\_indicators

CREATE TABLE IF NOT EXISTS economic\_all\_indicators (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"1960" REAL, "1961" REAL, "1962" REAL, "1963" REAL, "1964" REAL, "1965" REAL, "1966" REAL, "1967" REAL, "1968" REAL, "1969" REAL, "1970" REAL, "1971" REAL, "1972" REAL, "1973" REAL, "1974" REAL, "1975" REAL, "1976" REAL, "1977" REAL, "1978" REAL, "1979" REAL, "1980" REAL, "1981" REAL, "1982" REAL, "1983" REAL, "1984" REAL, "1985" REAL, "1986" REAL, "1987" REAL, "1988" REAL, "1989" REAL, "1990" REAL, "1991" REAL, "1992" REAL, "1993" REAL, "1994" REAL, "1995" REAL, "1996" REAL, "1997" REAL, "1998" REAL, "1999" REAL, "2000" REAL, "2001" REAL, "2002" REAL, "2003" REAL, "2004" REAL, "2005" REAL, "2006" REAL, "2007" REAL, "2008" REAL, "2009" REAL, "2010" REAL, "2011" REAL, "2012" REAL, "2013" REAL, "2014" REAL, "2015" REAL, "2016" REAL, "2017" REAL, "2018" REAL, "2019" REAL, "2020" REAL, "2021" REAL, "2022" REAL,

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO economic\_all\_indicators(pcode, AttributeID, "1960", "1961", "1962", "1963", "1964", "1965", "1966", "1967", "1968", "1969", "1970", "1971", "1972", "1973", "1974", "1975", "1976", "1977", "1978", "1979", "1980", "1981", "1982", "1983", "1984", "1985", "1986", "1987", "1988", "1989", "1990", "1991", "1992", "1993", "1994", "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021", "2022")

SELECT

ADM0\_PCODE as pcode,

AttributeDIM."AttributeID",

"1960", "1961", "1962", "1963", "1964", "1965", "1966", "1967", "1968", "1969", "1970", "1971", "1972", "1973", "1974", "1975", "1976", "1977", "1978", "1979", "1980", "1981", "1982", "1983", "1984", "1985", "1986", "1987", "1988", "1989", "1990", "1991", "1992", "1993", "1994", "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021", "2022"

FROM stg\_economic\_all\_indicators

LEFT JOIN AttributeDIM

ON stg\_economic\_all\_indicators."Indicator Name" = AttributeDIM.AttributeDesc

economic\_external\_debt

DROP TABLE IF EXISTS economic\_external\_debt;

CREATE TABLE IF NOT EXISTS economic\_external\_debt (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"1960" REAL, "1961" REAL, "1962" REAL, "1963" REAL, "1964" REAL, "1965" REAL, "1966" REAL, "1967" REAL, "1968" REAL, "1969" REAL, "1970" REAL, "1971" REAL, "1972" REAL, "1973" REAL, "1974" REAL, "1975" REAL, "1976" REAL, "1977" REAL, "1978" REAL, "1979" REAL, "1980" REAL, "1981" REAL, "1982" REAL, "1983" REAL, "1984" REAL, "1985" REAL, "1986" REAL, "1987" REAL, "1988" REAL, "1989" REAL, "1990" REAL, "1991" REAL, "1992" REAL, "1993" REAL, "1994" REAL, "1995" REAL, "1996" REAL, "1997" REAL, "1998" REAL, "1999" REAL, "2000" REAL, "2001" REAL, "2002" REAL, "2003" REAL, "2004" REAL, "2005" REAL, "2006" REAL, "2007" REAL, "2008" REAL, "2009" REAL, "2010" REAL, "2011" REAL, "2012" REAL, "2013" REAL, "2014" REAL, "2015" REAL, "2016" REAL, "2017" REAL, "2018" REAL, "2019" REAL, "2020" REAL, "2021" REAL, "2022" REAL,

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO economic\_external\_debt(pcode, AttributeID, "1960", "1961", "1962", "1963", "1964", "1965", "1966", "1967", "1968", "1969", "1970", "1971", "1972", "1973", "1974", "1975", "1976", "1977", "1978", "1979", "1980", "1981", "1982", "1983", "1984", "1985", "1986", "1987", "1988", "1989", "1990", "1991", "1992", "1993", "1994", "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021", "2022")

SELECT

ADM0\_PCODE as pcode,

AttributeDIM."AttributeID",

"1960", "1961", "1962", "1963", "1964", "1965", "1966", "1967", "1968", "1969", "1970", "1971", "1972", "1973", "1974", "1975", "1976", "1977", "1978", "1979", "1980", "1981", "1982", "1983", "1984", "1985", "1986", "1987", "1988", "1989", "1990", "1991", "1992", "1993", "1994", "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021", "2022"

FROM stg\_economic\_external\_debt

LEFT JOIN AttributeDIM

ON stg\_economic\_external\_debt."Indicator Name" = AttributeDIM.AttributeDesc

economic\_farmer\_wage

DROP TABLE IF EXISTS economic\_farmer\_wage;

CREATE TABLE IF NOT EXISTS economic\_farmer\_wage (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"1994" REAL, "1995" REAL, "1996" REAL, "1997" REAL, "1998" REAL, "1999" REAL, "2000" REAL, "2001" REAL, "2002" REAL, "2003" REAL, "2004" REAL, "2005" REAL, "2006" REAL, "2007" REAL, "2008" REAL, "2009" REAL, "2010" REAL, "2011" REAL, "2012" REAL, "2013" REAL, "2014" REAL, "2015" REAL, "2016" REAL, "2017" REAL, "2018" REAL, "2019" REAL,

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

WITH concatenated AS (

SELECT

\*,

stg\_economic\_farmer\_wage."Type of Wages" || " of " || stg\_economic\_farmer\_wage."Gender" || " " || stg\_economic\_farmer\_wage."Gender" || stg\_economic\_farmer\_wage."Type of Farm Workers" AS "Indicator Name"

FROM stg\_economic\_farmer\_wage

)

INSERT INTO economic\_farmer\_wage(pcode, AttributeID, "1994", "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019")

SELECT

concatenated.ADM1\_CODE,

AttributeDIM."AttributeID",

"1994", "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019"

FROM concatenated

LEFT JOIN AttributeDIM

ON concatenated."Indicator Name" = AttributeDIM.AttributeDesc

languages\_list

DROP TABLE IF EXISTS languages\_list;

CREATE TABLE IF NOT EXISTS languages\_list (

languageId INTEGER PRIMARY KEY,

languageName TEXT UNIQUE

);

INSERT INTO languages\_list(languageName)

VALUES('Adasen'),('Agta'),('Agta-Dumagat'),('Agusan Manobo'),('Agutaynen'),('Akeanon'),('Alangan'),('Ata'),('Ata-Manobo'),('Ayangan Ifugao'),('Ayta language group'),('Bagobo/Tagabawa'),('Balangao'),('Baliwon/Ga''dang'),('Banao'),('Bantoanon'),('Belwang (N.Bontok dialect)'),('Bikol'),('Binongan'),('Binukid'),('Bisaya/Binisaya'),('B''laan/Blaan language group'),('Bontok'),('Bugkalot/Ilongot'),('Buhid'),('Cagayanen'),('Capizeño'),('Cebuano'),('Chavacano'),('Cuyonon/Cuyonen'),('Davaweño'),('Dibabawon'),('Dumagat/Remontado'),('English'),('Gaddang'),('Giangan'),('Hanunuo'),('Higaonon'),('Hiligaynon Ilonggo'),('Ibaloi/Ibaloy'),('Ibanag'),('Ibatan'),('Ilianen Manobo'),('Ilocano'),('Iranun'),('Iraya'),('Isinai'),('Isnag'),('Itawis'),('Ivatan'),('Iwak/Iowak/Owak/I-wak'),('Jama Mapun'),('Kalagan'),('Kalanguya'),('Kalibugan/Kolibugan'),('Kalinga language group'),('Kamiguin'),('Kankanaey'),('Kapampangan'),('Karao'),('Karay-a'),('Kirenteken'),('Mabaka'),('Maeng'),('Maguindanao'),('Majokayong'),('Mamanwa'),('Mandaya'),('Manobo'),('Manobo-Cotabato'),('Mansaka'),('Maranao'),('Masadiit'),('Masbateño/Masbatenon'),('Matigsalog/Matigsalug'),('Molbog'),('Muyadan'),('Obo Manobo'),('Unspecified Sama language'),('Palawani'),('Palawano language group'),('Pangasinan/Panggalato'),('Paranan'),('Romblomanon'),('Sama Bangingi'),('Sama Laut'),('Sangil'),('Subanen/Subanon/Subanun'),('Surigaonon'),('Tadyawan'),('Tagakaulo'),('Tagalog'),('Tagbanua'),('Tagbanua Calamian'),('Tau-buid'),('Tausug'),('Tboli'),('Teduray'),('Tuwali'),('Waray'),('Yakan'),('Yogad'),('Zambal')

poverty\_food\_threshold\_subsistence\_family

DROP TABLE IF EXISTS poverty\_food\_threshold\_subsistence\_family;

CREATE TABLE IF NOT EXISTS poverty\_food\_threshold\_subsistence\_family (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2015",

"2018",

"2021p",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO poverty\_food\_threshold\_subsistence\_family(pcode, AttributeID, "2015", "2018", "2021p")

SELECT

"ADM2\_CODE" as pcode,

(SELECT AttributeID FROM AttributeDIM WHERE AttributeDesc = 'Food Threshold Subsistence') AS AttributeID,

"2015",

"2018",

"2021p"

FROM stg\_poverty\_food\_threshold\_subsistence\_family

poverty\_food\_threshold\_subsistence\_pop

DROP TABLE IF EXISTS poverty\_food\_threshold\_subsistence\_pop;

CREATE TABLE IF NOT EXISTS poverty\_food\_threshold\_subsistence\_pop (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2015",

"2018",

"2021p",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO poverty\_food\_threshold\_subsistence\_pop(pcode, AttributeID, "2015", "2018", "2021p")

SELECT

"ADM2\_CODE" as pcode,

(SELECT AttributeID FROM AttributeDIM WHERE AttributeDesc = 'Food Threshold Subsistence') AS AttributeID,

"2015",

"2018",

"2021p"

FROM stg\_poverty\_food\_threshold\_subsistence\_pop

poverty\_income\_gap

DROP TABLE IF EXISTS poverty\_income\_gap;

CREATE TABLE IF NOT EXISTS poverty\_income\_gap (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2015",

"2018",

"2021p",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO poverty\_income\_gap(pcode, AttributeID, "2015", "2018", "2021p")

SELECT

"ADM2\_CODE" as pcode,

(SELECT AttributeID FROM AttributeDIM WHERE AttributeDesc = 'Income Gap'),

"2015",

"2018",

"2021p"

FROM stg\_poverty\_income\_gap;

poverty\_magnitude\_poor\_family

DROP TABLE IF EXISTS poverty\_magnitude\_poor\_family;

CREATE TABLE IF NOT EXISTS poverty\_magnitude\_poor\_family (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2015",

"2018",

"2021p",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO poverty\_magnitude\_poor\_family(pcode, AttributeID, "2015", "2018", "2021p")

SELECT

"ADM2\_CODE" as pcode,

(SELECT AttributeID FROM AttributeDIM WHERE AttributeDesc = 'Magnitude of Poor'),

"2015",

"2018",

"2021p"

FROM stg\_poverty\_magnitude\_poor\_family;

poverty\_magnitude\_poor\_pop

DROP TABLE IF EXISTS poverty\_magnitude\_poor\_pop;

CREATE TABLE IF NOT EXISTS poverty\_magnitude\_poor\_pop (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2015",

"2018",

"2021p",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO poverty\_magnitude\_poor\_pop(pcode, AttributeID, "2015", "2018", "2021p")

SELECT

"ADM2\_CODE" as pcode,

(SELECT AttributeID FROM AttributeDIM WHERE AttributeDesc = 'Magnitude of Poor'),

"2015",

"2018",

"2021p"

FROM stg\_poverty\_magnitude\_poor\_pop;

poverty\_magnitude\_subsistence\_poor\_family

DROP TABLE IF EXISTS poverty\_magnitude\_subsistence\_poor\_family;

CREATE TABLE IF NOT EXISTS poverty\_magnitude\_subsistence\_poor\_family (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2015",

"2018",

"2021p",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO poverty\_magnitude\_subsistence\_poor\_family(pcode, AttributeID, "2015", "2018", "2021p")

SELECT

"ADM2\_CODE" as pcode,

(SELECT AttributeID FROM AttributeDIM WHERE AttributeDesc = 'Magnitude of Subsistence Poor'),

"2015",

"2018",

"2021p"

FROM stg\_poverty\_magnitude\_subsistence\_poor\_family

poverty\_magnitude\_subsistence\_poor\_pop

DROP TABLE IF EXISTS poverty\_magnitude\_subsistence\_poor\_pop;

CREATE TABLE IF NOT EXISTS poverty\_magnitude\_subsistence\_poor\_pop (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2015",

"2018",

"2021p",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO poverty\_magnitude\_subsistence\_poor\_pop(pcode, AttributeID, "2015", "2018", "2021p")

SELECT

"ADM2\_CODE" as pcode,

(SELECT AttributeID FROM AttributeDIM WHERE AttributeDesc = 'Magnitude of Subsistence Poor'),

"2015",

"2018",

"2021p"

FROM stg\_poverty\_magnitude\_subsistence\_poor\_pop;

poverty\_poverty\_incidence\_threshold\_family

DROP TABLE IF EXISTS poverty\_poverty\_incidence\_threshold\_family;

CREATE TABLE IF NOT EXISTS poverty\_poverty\_incidence\_threshold\_family (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2015",

"2018",

"2021p",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO poverty\_poverty\_incidence\_threshold\_family(pcode, AttributeID, "2015", "2018", "2021p")

SELECT

"ADM2\_CODE" as pcode,

(SELECT AttributeID FROM AttributeDIM WHERE AttributeDesc = 'Poverty Incidence Threshold'),

"2015",

"2018",

"2021p"

FROM stg\_poverty\_poverty\_incidence\_threshold\_family

poverty\_poverty\_incidence\_threshold\_pop

DROP TABLE IF EXISTS poverty\_poverty\_incidence\_threshold\_pop;

CREATE TABLE IF NOT EXISTS poverty\_poverty\_incidence\_threshold\_pop (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2015",

"2018",

"2021p",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO poverty\_poverty\_incidence\_threshold\_pop(pcode, AttributeID, "2015", "2018", "2021p")

SELECT

"ADM2\_CODE" as pcode,

(SELECT AttributeID FROM AttributeDIM WHERE AttributeDesc = 'Poverty Incidence Threshold'),

"2015",

"2018",

"2021p"

FROM stg\_poverty\_poverty\_incidence\_threshold\_pop;

poverty\_poverty\_severity

DROP TABLE IF EXISTS poverty\_poverty\_severity;

CREATE TABLE IF NOT EXISTS poverty\_poverty\_severity (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2015",

"2018",

"2021p",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO poverty\_poverty\_severity(pcode, AttributeID, "2015", "2018", "2021p")

SELECT

"ADM2\_CODE" as pcode,

(SELECT AttributeID FROM AttributeDIM WHERE AttributeDesc = 'Poverty Severity'),

"Poverty Severity 2015",

"Poverty Severity 2018",

"Poverty Severity 2021p"

FROM stg\_poverty\_severity\_poverty;

technology\_core\_ict\_indicators\_under\_bpm

DROP TABLE IF EXISTS technology\_core\_ict\_indicators\_under\_bpm;

CREATE TABLE IF NOT EXISTS technology\_core\_ict\_indicators\_under\_bpm (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2013",

"2015",

"2017",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO technology\_core\_ict\_indicators\_under\_bpm(pcode, AttributeID, "2013", "2015", "2017")

SELECT

ADM1\_CODE as pcode,

AttributeDIM."AttributeID",

"2013",

"2015",

"2017"

FROM stg\_technology\_core\_ict\_indicators\_under\_bpm

LEFT JOIN AttributeDIM

ON stg\_technology\_core\_ict\_indicators\_under\_bpm."Industry Description" = AttributeDIM.Industry

AND stg\_technology\_core\_ict\_indicators\_under\_bpm."Metric" = AttributeDIM.AttributeDesc

technology\_core\_ict\_indicators\_under\_information\_economy

DROP TABLE IF EXISTS technology\_core\_ict\_indicators\_under\_information\_economy;

CREATE TABLE IF NOT EXISTS technology\_core\_ict\_indicators\_under\_information\_economy (

pcode TEXT,

AttributeID INTEGER NOT NULL,

"2010",

"2013",

"2015",

"2017",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

);

INSERT INTO technology\_core\_ict\_indicators\_under\_information\_economy(pcode, AttributeID,"2010", "2013", "2015", "2017")

SELECT

ADM1\_CODE as pcode,

AttributeDIM."AttributeID",

"2010",

"2013",

"2015",

"2017"

FROM stg\_technology\_core\_ict\_indicators\_under\_information\_economy

LEFT JOIN AttributeDIM

ON stg\_technology\_core\_ict\_indicators\_under\_information\_economy."Industry Description" = AttributeDIM.Industry

AND stg\_technology\_core\_ict\_indicators\_under\_information\_economy."Metric" = AttributeDIM.AttributeDesc

**Dimensional Models**

all\_data

DROP TABLE IF EXISTS all\_data;

CREATE TABLE IF NOT EXISTS all\_data (

id INTEGER PRIMARY KEY,

pcode TEXT,

AttributeID INTEGER NOT NULL,

DomainID INTEGER NOT NULL,

SdgID INTEGER NOT NULL,

"1960" REAL, "1961" REAL, "1962" REAL, "1963" REAL, "1964" REAL, "1965" REAL, "1966" REAL, "1967" REAL, "1968" REAL, "1969" REAL, "1970" REAL, "1971" REAL, "1972" REAL, "1973" REAL, "1974" REAL, "1975" REAL, "1976" REAL, "1977" REAL, "1978" REAL, "1979" REAL, "1980" REAL, "1981" REAL, "1982" REAL, "1983" REAL, "1984" REAL, "1985" REAL, "1986" REAL, "1987" REAL, "1988" REAL, "1989" REAL, "1990" REAL, "1991" REAL, "1992" REAL, "1993" REAL, "1994" REAL, "1995" REAL, "1996" REAL, "1997" REAL, "1998" REAL, "1999" REAL, "2000" REAL, "2001" REAL, "2002" REAL, "2003" REAL, "2004" REAL, "2005" REAL, "2006" REAL, "2007" REAL, "2008" REAL, "2009" REAL, "2010" REAL, "2011" REAL, "2012" REAL, "2013" REAL, "2014" REAL, "2015" REAL, "2016" REAL, "2017" REAL, "2018" REAL, "2019" REAL, "2020" REAL, "2021" REAL,

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

FOREIGN KEY(DomainID) REFERENCES DomainDim(DomainID)

FOREIGN KEY(SdgID) REFERENCES SdgDim(SdgID)

);

INSERT INTO all\_data(pcode, AttributeID, DomainID, SdgID, "1960", "1961", "1962", "1963", "1964", "1965", "1966", "1967", "1968", "1969", "1970", "1971", "1972", "1973", "1974", "1975", "1976", "1977", "1978", "1979", "1980", "1981", "1982", "1983", "1984", "1985", "1986", "1987", "1988", "1989", "1990", "1991", "1992", "1993", "1994", "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021")

SELECT pcode,

AttributeID,

DomainID,

(SELECT code FROM SdgDim WHERE title = 'Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all'),

"1960", "1961", "1962", "1963", "1964", "1965", "1966", "1967", "1968", "1969", "1970", "1971", "1972", "1973", "1974", "1975", "1976", "1977", "1978", "1979", "1980", "1981", "1982", "1983", "1984", "1985", "1986", "1987", "1988", "1989", "1990", "1991", "1992", "1993", "1994", "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021"

FROM economic;

INSERT INTO all\_data(pcode, AttributeID, DomainID, SdgID, "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021")

SELECT pcode,

AttributeID,

DomainID,

(SELECT code FROM SdgDim WHERE title = 'Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels'),

"2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021"

FROM demographics;

INSERT INTO all\_data(pcode, AttributeID, DomainID, SdgID, "2016", "2017", "2018", "2019", "2020", "2021")

SELECT pcode,

AttributeID,

DomainID,

(SELECT code FROM SdgDim WHERE title = 'Take urgent action to combat climate change and its impacts'),

"2016", "2017", "2018", "2019", "2020", "2021"

FROM drrm;

INSERT INTO all\_data(pcode, AttributeID, DomainID, SdgID, "2015", "2016", "2017", "2018", "2019", "2020", "2021")

SELECT pcode,

AttributeID,

DomainID,

(SELECT code FROM SdgDim WHERE title = 'End poverty in all its forms everywhere'),

"2015", "2016", "2017", "2018", "2019", "2020", "2021"

FROM poverty;

INSERT INTO all\_data(pcode, AttributeID, DomainID, SdgID, "2010", "2013", "2015", "2017")

SELECT pcode,

AttributeID,

DomainID,

(SELECT code FROM SdgDim WHERE title = 'Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation'),

"2010", "2013", "2015", "2017"

FROM technology;

attribute\_dim

CREATE TABLE IF NOT EXISTS AttributeDIM (

AttributeID INTEGER PRIMARY KEY,

AttributeDesc TEXT,

Industry TEXT,

UNIQUE(Industry, AttributeDesc)

);

INSERT INTO AttributeDIM(AttributeDesc)

SELECT DISTINCT "Commodity Description" FROM stg\_demographics\_cpi;

INSERT INTO AttributeDIM(AttributeDesc)

SELECT DISTINCT "Attribute" FROM stg\_demographics\_grdp;

INSERT INTO AttributeDIM(AttributeDesc)

SELECT DISTINCT "Attribute" FROM stg\_demographics\_languages;

INSERT INTO AttributeDIM(AttributeDesc)

VALUES('Population');

INSERT INTO AttributeDIM(AttributeDesc)

SELECT DISTINCT "Attribute" FROM stg\_demographics\_transportation;

INSERT INTO AttributeDIM(AttributeDesc)

SELECT DISTINCT "Indicator" FROM stg\_drrm\_drr\_implementation ;

INSERT INTO AttributeDIM(AttributeDesc)

SELECT DISTINCT "Indicator" FROM stg\_drrm\_evacuation\_center;

INSERT INTO AttributeDIM(AttributeDesc)

SELECT DISTINCT "Indicator" FROM stg\_drrm\_vulnerable\_groups;

INSERT INTO AttributeDIM(AttributeDesc)

SELECT DISTINCT "Indicator" FROM stg\_drrm\_vulnerable\_groups;

INSERT INTO AttributeDIM(AttributeDesc)

SELECT DISTINCT "Indicator Name" FROM stg\_economic\_all\_indicators;

WITH concatenated AS (

SELECT

stg\_economic\_farmer\_wage."Type of Wages" || " of " || stg\_economic\_farmer\_wage."Gender" || " " || stg\_economic\_farmer\_wage."Gender" || stg\_economic\_farmer\_wage."Type of Farm Workers" AS "Indicator Name"

FROM stg\_economic\_farmer\_wage

)

INSERT INTO AttributeDIM(AttributeDesc)

SELECT DISTINCT "Indicator Name" FROM concatenated;

INSERT INTO AttributeDIM(AttributeDesc)

SELECT DISTINCT "Indicator Name" FROM stg\_economic\_external\_debt;

INSERT OR IGNORE INTO AttributeDIM(AttributeDesc)

VALUES("Food Threshold Subsistence");

INSERT OR IGNORE INTO AttributeDIM(AttributeDesc)

VALUES('Income Gap');

INSERT OR IGNORE INTO AttributeDIM(AttributeDesc)

VALUES('Magnitude of Poor');

INSERT OR IGNORE INTO AttributeDIM(AttributeDesc)

VALUES('Magnitude of Subsistence Poor');

INSERT OR IGNORE INTO AttributeDIM(AttributeDesc)

VALUES('Poverty Incidence Threshold');

INSERT OR IGNORE INTO AttributeDIM(AttributeDesc)

VALUES('Poverty Severity');

INSERT INTO AttributeDIM(Industry,AttributeDesc)

SELECT DISTINCT "Industry Description", "Metric" FROM stg\_technology\_core\_ict\_indicators\_under\_bpm;

INSERT OR IGNORE INTO AttributeDIM(Industry,AttributeDesc)

SELECT DISTINCT "Industry Description", "Metric" FROM stg\_technology\_core\_ict\_indicators\_under\_information\_economy;

Demographics

DROP TABLE IF EXISTS demographics;

CREATE TABLE IF NOT EXISTS demographics (

id INTEGER PRIMARY KEY,

pcode TEXT,

AttributeID INTEGER NOT NULL,

DomainID INTEGER NOT NULL,

"2000" REAL, "2001" REAL, "2002" REAL, "2003" REAL, "2004" REAL, "2005" REAL, "2006" REAL, "2007" REAL, "2008" REAL, "2009" REAL, "2010" REAL, "2011" REAL, "2012" REAL, "2013" REAL, "2014" REAL, "2015" REAL, "2016" REAL, "2017" REAL, "2018" REAL, "2019" REAL, "2020" REAL, "2021" REAL, "2022" REAL,

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

FOREIGN KEY(DomainID) REFERENCES DomainDim(DomainID)

);

INSERT INTO demographics(pcode, AttributeID,"2018", "2019", "2020", "2021", "2022", DomainID)

SELECT pcode,

AttributeID,

"2018",

"2019",

"2020",

"2021",

"2022",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Consumer Price Index') AS DomainID

FROM demographics\_cpi;

INSERT INTO demographics(pcode, AttributeID, "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021", "2022", DomainID)

SELECT pcode,

AttributeID, "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021", "2022",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Gross Regional Domestic Product')

FROM demographics\_grdp;

INSERT INTO demographics(pcode, AttributeID,"2010", DomainID)

SELECT pcode,

AttributeID, "2010",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Languages')

FROM demographics\_languages;

INSERT INTO demographics(pcode, AttributeID,"2020", DomainID)

SELECT pcode,

AttributeID, "2020",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Population')

FROM demographics\_population;

INSERT INTO demographics(pcode, AttributeID,"2019", DomainID)

SELECT pcode,

AttributeID, "2019",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Transportation')

FROM demographics\_transportation;

domain\_dim

CREATE TABLE IF NOT EXISTS DomainDim (

DomainID INTEGER PRIMARY KEY,

DomainDesc TEXT UNIQUE

);

INSERT OR IGNORE INTO DomainDim(DomainDesc)

VALUES

("Consumer Price Index"),

("Gross Regional Domestic Product"),

("Languages"),

("Population"),

("Transportation");

INSERT OR IGNORE INTO DomainDim(DomainDesc)

VALUES

("Disaster Risk and Reduction Implementation"),

("Evacuation Center"),

("Vulnerable Groups");

INSERT OR IGNORE INTO DomainDim(DomainDesc)

VALUES

("General"),

("External Debt"),

("Farmer Wage");

INSERT OR IGNORE INTO DomainDim(DomainDesc)

VALUES

("Family"),

("Population"),

("All");

INSERT OR IGNORE INTO DomainDim(DomainDesc)

VALUES

("Business Process Management"),

("Information Economy");

drrm

CREATE TABLE IF NOT EXISTS drrm (

id INTEGER PRIMARY KEY,

pcode TEXT,

AttributeID INTEGER NOT NULL,

DomainID INTEGER NOT NULL,

"2016" REAL, "2017" REAL, "2018" REAL, "2019" REAL, "2020" REAL, "2021" REAL, "2022" REAL,

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

FOREIGN KEY(DomainID) REFERENCES DomainDim(DomainID)

);

INSERT INTO drrm(pcode, AttributeID, "2016", "2017", "2018", "2019", "2020", "2021", DomainID)

SELECT pcode,

AttributeID, "2016", "2017", "2018", "2019", "2020", "2021",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Disaster Risk and Reduction Implementation')

FROM drrm\_drr\_implementation;

INSERT INTO drrm(pcode, AttributeID, "2019", DomainID)

SELECT pcode,

AttributeID, "2019",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Evacuation Center')

FROM drrm\_evacuation\_center;

INSERT INTO drrm(pcode, AttributeID, "2018", DomainID)

SELECT pcode,

AttributeID, "2018",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Vulnerable Groups')

FROM drrm\_vulnerable\_groups;

Economic

DROP TABLE IF EXISTS economic;

CREATE TABLE IF NOT EXISTS economic (

id INTEGER PRIMARY KEY,

pcode TEXT,

AttributeID INTEGER NOT NULL,

DomainID INTEGER NOT NULL,

"1960" REAL, "1961" REAL, "1962" REAL, "1963" REAL, "1964" REAL, "1965" REAL, "1966" REAL, "1967" REAL, "1968" REAL, "1969" REAL, "1970" REAL, "1971" REAL, "1972" REAL, "1973" REAL, "1974" REAL, "1975" REAL, "1976" REAL, "1977" REAL, "1978" REAL, "1979" REAL, "1980" REAL, "1981" REAL, "1982" REAL, "1983" REAL, "1984" REAL, "1985" REAL, "1986" REAL, "1987" REAL, "1988" REAL, "1989" REAL, "1990" REAL, "1991" REAL, "1992" REAL, "1993" REAL, "1994" REAL, "1995" REAL, "1996" REAL, "1997" REAL, "1998" REAL, "1999" REAL, "2000" REAL, "2001" REAL, "2002" REAL, "2003" REAL, "2004" REAL, "2005" REAL, "2006" REAL, "2007" REAL, "2008" REAL, "2009" REAL, "2010" REAL, "2011" REAL, "2012" REAL, "2013" REAL, "2014" REAL, "2015" REAL, "2016" REAL, "2017" REAL, "2018" REAL, "2019" REAL, "2020" REAL, "2021" REAL,

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

FOREIGN KEY(DomainID) REFERENCES DomainDim(DomainID)

);

INSERT INTO economic(pcode, AttributeID, "1960", "1961", "1962", "1963", "1964", "1965", "1966", "1967", "1968", "1969", "1970", "1971", "1972", "1973", "1974", "1975", "1976", "1977", "1978", "1979", "1980", "1981", "1982", "1983", "1984", "1985", "1986", "1987", "1988", "1989", "1990", "1991", "1992", "1993", "1994", "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021", DomainID)

SELECT pcode,

AttributeID, "1960", "1961", "1962", "1963", "1964", "1965", "1966", "1967", "1968", "1969", "1970", "1971", "1972", "1973", "1974", "1975", "1976", "1977", "1978", "1979", "1980", "1981", "1982", "1983", "1984", "1985", "1986", "1987", "1988", "1989", "1990", "1991", "1992", "1993", "1994", "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'General')

FROM economic\_all\_indicators;

INSERT INTO economic(pcode, AttributeID, "1960", "1961", "1962", "1963", "1964", "1965", "1966", "1967", "1968", "1969", "1970", "1971", "1972", "1973", "1974", "1975", "1976", "1977", "1978", "1979", "1980", "1981", "1982", "1983", "1984", "1985", "1986", "1987", "1988", "1989", "1990", "1991", "1992", "1993", "1994", "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021", DomainID)

SELECT pcode,

AttributeID, "1960", "1961", "1962", "1963", "1964", "1965", "1966", "1967", "1968", "1969", "1970", "1971", "1972", "1973", "1974", "1975", "1976", "1977", "1978", "1979", "1980", "1981", "1982", "1983", "1984", "1985", "1986", "1987", "1988", "1989", "1990", "1991", "1992", "1993", "1994", "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", "2019", "2020", "2021",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'External Debt')

FROM economic\_external\_debt;

INSERT INTO economic(pcode, AttributeID, "1994", "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018", DomainID)

SELECT pcode,

AttributeID, "1994", "1995", "1996", "1997", "1998", "1999", "2000", "2001", "2002", "2003", "2004", "2005", "2006", "2007", "2008", "2009", "2010", "2011", "2012", "2013", "2014", "2015", "2016", "2017", "2018",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Farmer Wage')

FROM economic\_farmer\_wage

location\_dim

DROP TABLE IF EXISTS location;

CREATE TABLE IF NOT EXISTS location (

pcode TEXT PRIMARY KEY,

name TEXT,

hierarchy TEXT,

parent\_pcode TEXT

);

WITH AD3\_UNIQUE AS (

SELECT ADM3\_PCODE AS pcode,

ADM3\_EN AS name,

ADM2\_PCODE AS parent\_pcode

FROM stg\_location

GROUP BY ADM3\_PCODE, ADM3\_EN

),

AD2\_UNIQUE AS (

SELECT ADM2\_PCODE AS pcode,

ADM2\_EN AS name,

ADM1\_PCODE AS parent\_pcode

FROM stg\_location

GROUP BY ADM2\_PCODE, ADM2\_EN

),

AD1\_UNIQUE AS (

SELECT ADM1\_PCODE AS pcode,

ADM1\_EN AS name,

"PH" AS parent\_pcode

FROM stg\_location

GROUP BY ADM1\_PCODE, ADM1\_EN

)

INSERT INTO location(pcode, name, hierarchy, parent\_pcode)

SELECT ADM4\_PCODE AS pcode,

ADM4\_EN AS name,

"ASM4" AS hierarchy,

ADM3\_PCODE AS parent\_pcode

FROM stg\_location

UNION ALL

SELECT \*,

"ADM3" AS hierarchy

FROM AD3\_UNIQUE

UNION ALL

SELECT \*,

"ADM2" AS hierarchy

FROM AD2\_UNIQUE

UNION ALL

SELECT \*,

"ADM1" AS hierarchy

FROM AD1\_UNIQUE

UNION ALL

SELECT "PH" AS pcode,

"Philippines" AS name,

"PH" AS hierarchy,

NULL AS parent\_pcode

poverty

DROP TABLE IF EXISTS poverty;

CREATE TABLE IF NOT EXISTS poverty (

id INTEGER PRIMARY KEY,

pcode TEXT,

AttributeID INTEGER NOT NULL,

DomainID INTEGER NOT NULL,

"2015" REAL,

"2018" REAL,

"2021p" REAL,

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

FOREIGN KEY(DomainID) REFERENCES DomainDim(DomainID)

);

INSERT INTO poverty(pcode, AttributeID, "2015", "2018", "2021p", DomainID)

SELECT pcode,

AttributeID, "2015", "2018", "2021p",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Family')

FROM poverty\_food\_threshold\_subsistence\_family;

INSERT INTO poverty(pcode, AttributeID, "2015", "2018", "2021p", DomainID)

SELECT pcode,

AttributeID, "2015", "2018", "2021p",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Population')

FROM poverty\_food\_threshold\_subsistence\_pop;

INSERT INTO poverty(pcode, AttributeID, "2015", "2018", "2021p", DomainID)

SELECT pcode,

AttributeID, "2015", "2018", "2021p",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'All')

FROM poverty\_income\_gap;

INSERT INTO poverty(pcode, AttributeID, "2015", "2018", "2021p", DomainID)

SELECT pcode,

AttributeID, "2015", "2018", "2021p",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Family')

FROM poverty\_magnitude\_poor\_family;

INSERT INTO poverty(pcode, AttributeID, "2015", "2018", "2021p", DomainID)

SELECT pcode,

AttributeID, "2015", "2018", "2021p",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Population')

FROM poverty\_magnitude\_poor\_pop;

INSERT INTO poverty(pcode, AttributeID, "2015", "2018", "2021p", DomainID)

SELECT pcode,

AttributeID, "2015", "2018", "2021p",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Family')

FROM poverty\_magnitude\_subsistence\_poor\_family;

INSERT INTO poverty(pcode, AttributeID, "2015", "2018", "2021p", DomainID)

SELECT pcode,

AttributeID, "2015", "2018", "2021p",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Population')

FROM poverty\_magnitude\_subsistence\_poor\_pop;

INSERT INTO poverty(pcode, AttributeID, "2015", "2018", "2021p", DomainID)

SELECT pcode,

AttributeID, "2015", "2018", "2021p",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Family')

FROM poverty\_poverty\_incidence\_threshold\_family;

INSERT INTO poverty(pcode, AttributeID, "2015", "2018", "2021p", DomainID)

SELECT pcode,

AttributeID, "2015", "2018", "2021p",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Population')

FROM poverty\_poverty\_incidence\_threshold\_pop;

INSERT INTO poverty(pcode, AttributeID, "2015", "2018", "2021p", DomainID)

SELECT pcode,

AttributeID, "2015", "2018", "2021p",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'All')

FROM poverty\_poverty\_severity;

Sdg\_dim

DROP TABLE IF EXISTS SDGDim;

CREATE TABLE IF NOT EXISTS SDGDim (

code INT PRIMARY KEY,

title TEXT,

description TEXT,

uri TEXT

);

INSERT INTO SDGDim(code, title, description, uri)

SELECT code, title, description, uri

FROM stg\_sdggoals

Technology

DROP TABLE IF EXISTS technology;

CREATE TABLE IF NOT EXISTS technology (

id INTEGER PRIMARY KEY,

pcode TEXT,

AttributeID INTEGER NOT NULL,

DomainID INTEGER NOT NULL,

"2010",

"2013",

"2015",

"2017",

FOREIGN KEY(pcode) REFERENCES location(pcode),

FOREIGN KEY(AttributeID) REFERENCES AttributeDIM(AttributeID)

FOREIGN KEY(DomainID) REFERENCES DomainDim(DomainID)

);

INSERT INTO technology(pcode, AttributeID, "2013", "2015", "2017", DomainID)

SELECT pcode,

AttributeID, "2013", "2015", "2017",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Business Process Management')

FROM technology\_core\_ict\_indicators\_under\_bpm;

INSERT INTO technology(pcode, AttributeID, "2010", "2013", "2015", "2017", DomainID)

SELECT pcode,

AttributeID, "2010", "2013", "2015", "2017",

(SELECT DomainID FROM DomainDim WHERE DomainDesc = 'Information Economy')

FROM technology\_core\_ict\_indicators\_under\_information\_economy;