



# 2023 National Information and Communications Technology Household Survey PHILIPPINES

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# Republic Act No. 10844

Department of Information and Communications Technology Act of 2015

Primary policy, planning, coordinating, implementing, and administrative entity of the Executive Branch of the government that will plan, develop, and promote the national ICT development agenda.







**Improved Public Access** 



Resource-Sharing and Capacity Building



Consumer Protection and Industry Development



# Republic Act No. 10625

Philippine Statistical Act of 2013

# Central statistical authority of the Philippine Government

**Prepare and conduct** periodic censuses on population, housing, agriculture, fisheries, business, industry and other sectors of the economy

**Prepare and conduct** statistical sample surveys on socoecomic life

Collaborate with departments of the national government including GOCCs and their subsidiaries in the collection, compilation, maintenance and publication of statistical information, including special statistical data derived from the activities of those departments, corporations and their subsidiaries;

Coordinate with government departments and local government units on the promotion and adoption of statistical standards involving techniques, methodologies, concepts, definitions and classifications, and on the avoidance of duplication in the collection of statistical information

# PSA Memorandum Order No. 12 Series of 2015

Establishing the Interagency Committee on Information and Communications Technology Statistics (IACICTS)

# PSA Memorandum Order No. 06 Series of 2020

Reconstituting the Interagency Committee on Information and Communications Technology Statistics



Exchange views and expertise to resolve technical issues and problems arising from the production, dissemination, and use of ICT statistics



Improvement of statistics as well as the system of data generation, dissemination and utilization of ICT statistical and all related indicators



Recommend efficient workable scheme for the allocation of agency responsibilities in the production, dissemination and archiving of ICT statistics



Prioritization of outputs required to carry out ICT and related programs set forth in the country's national statistical development programs



# ICT SURVEY SERIES PROGRAM (2018 to Present)



# **2019 National ICT Household Survey**

The conduct of the first ever National ICT Household Survey collected key household-based ICT indicators used to determine ICT access and use and overall impact of ICT interventions in the country.



# **2020 Expanded Data Analysis and Policy Research of the NICTHS**

Analyzed the results of the NICTHS to help design and evaluate ICT policies and strategies, compare the country's ICT development and adopt solutions to reduce the digital divide. The project produced a discussion paper and three policy notes on ICT infrastructure, gender and ICT and an inclusive digital society.

# **2022 Women in ICT Development Index Survey**

It aims to generate data on how women and girls are able to access and use ICT. It is also envisioned to provide data to help the DICT in identifying key technology-based strategies or interventions that will strengthen women's access to ICTs, and promote the safe and efficient use of technology for women's livelihood and employment.

# **2022 NGA-LGU ICT Readiness Survey**

The NGA ICT Readiness Survey aims to generate baseline data focusing on online services and web presence of National Government Agencies. It aims to determine the readiness and status of the NGAs' online web presence and availability of online services that cater to the needs of the public under the New Normal.

# 2023-2024 National ICT Household Survey (Phase 1)

The conduct of a 2nd NICTHS builds on the success of the 2019 NICTHS and will continue to provide an effective monitoring of performance indicators (i.e. SDGs, Philippine Development Plan Results Matrix, DICT plans, and international benchmarking indexes), especially as they compare to pre-pandemic context.



# National ICT Household Survey

Results of the 2019 NICTHS have been used as an input to more than 18 local and international research studies, policy notes, and 16 news articles, as well as in ITU's initiatives in machine learning, modelling, and advanced data processing in 2022 and 2023.









#### Box 13. The 2019 National ICT Household Survey-Philippines to monitor development plans

The Philippine Statistics Authority (PSA) granted clearance to the implementation of the 2019 National ICT Household Survey. The survey is proposed by the Department of Information and Communications Technology (DICT) and will be conducted by the Philippine Statistical Research and Training Institute (PSRTI).

he survey aims to:

- gather ICT data at the household and individual level to support the monitoring of performance indicators in the Sustainable Development Goals (SDGs), Philippine Development Plan (PDP) Results Matrix, DICT plans, and international benchmarking indices
- gather critical data on ICT demand towards improvement of public service delivery as well as growth of potential markets in the digital economy (e.g. e-commerce)
- provide a national baseline for core ICT household indicators.

Source: http://www.psa.gov.ph/content/psa-approves-conduct-2019-national-ict-household-survey-0

#### **Better Internet Act (SBN 1381)**

shall provide to their subscribers eighty (80) per cent of their advertised speed available at eighty (80) of the time. Speed and reliability shall be measured based on the prescribed measurement methodology by the NTC.

Sec. 9. Responsibilities of the DICT. – In addition to responsibilities imposed in other sections of this Act, the DICT shall:

- Maintain and make public a National ICT Assets Index (NICTAI), which shall be updated on an annual basis, in order to provide accurate data on broadband coverage and ICT adoption and utilization in the country;
- Conduct the National ICT Household Survey and publish the National ICT Household Plan every three (3) years, and identify unserved and underserved areas for purposes of this Act;
- Regularly review and update ICT policy guidelines, strategies and plans, including, but not limited to, the National Broadband Plan to ensure that the Philippines' Internet service policy framework is at par with global standards and best practices; and
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#### INQUIRER.NET

This is consistent with the recent 2019 National ICT (information and communications technology) Survey which shows that the majority of households use fixed broadband internet versus mobile internet, and that this is the case for most regions across the country.

Our key findings include:

Access to sufficient internet speeds shrink in rural areas.

In 2019, the DICT released high-level findings from the first National ICT Survey, aimed to establish internationally comparable ICT indicators for the country. Based on the survey, only half of the country's 42,064 barangays have telco operators in the area and only 30 percent have fiber optic cables installed.



# National Coordination for ICT Statistics

Cited as a partnership model between the Ministry (DICT) and the National Statistics Office (PSA) in the ITU's Manual for Measuring ICT Access and Use by Households and Individuals (version of 2020)

**ITUPublications** 

#### International Telecommunication Union

**Development Sector** 

#### Manual for measuring ICT access and use by households and individuals 2020 edition



#### Box 6. National Coordination for ICT Statistics: Philippines

The task of generating ICT statistics in the Philippines resides within a government-led, interagency mechanism initiated through the enactment of Republic Act No. 10625 (RA 10625) or the "Philippine Statistical Act of 2013".

The law provides for the establishment of interagency statistical committees (IACs) by the Philippine Statistics Authority (PSA) for the purpose of coordinating and resolving agency and sectoral concerns on statistical matters. The IACs serve as forums for discussion of the issues raised by concerned producers, users and other stakeholders of statistics!

Under this mechanism, the Interagency Committee on ICT Statistics (IAC-ICTS) was established. The IAC-ICTS is Chaired by the Department of Information and Communications Technology (DICT) and Co-Chaired by the PSA. Through this cooperative framework, the domain of ICT statistics is able to lay the foundations for ICT statistics development, to address current ICT data gaps and challenges.

A key result of this cooperative framework is the National ICT Household Survey (NICTHS) which was conducted in 2019. The NICTHS is the first-ever national survey on ICT being conducted at the household level, addressing data gaps in ICT access and use and incorporating indicators from Philippine ICT plans and policies as well as ITU core ICT household indicators. The survey is a crucial source of key indicators of households' ICT use in barangays for evidence-based planning and policy formulation using the PSA Master Sample

With the successful implementation of the NICTHS in 2019, the next step for the IAC-ICTS is the institutionalization of the NICTHS for implementation every two years, thus ensuring the sustainability and supply of key metrics to measure ICT development and diffusion in the Philippines.

Source: Department of Information and Communications Technology, Philippines https://psa.gov.ph/content/interagency-committees-statistics

https://psa.gov.ph/content/interagency-committees-statistics





#### Box 9. Information society statistics in the Philippines

The improvement of the state of ICT in the country by expanding the deployment of ICT infrastructure addressing the gaps in digital connectivity, continuing the enhancement of the country's e-government and establishing reforms in the policy and regulatory frameworks are parts of the Philippine Development Plan (PDP) 2017-2022. The PDP 2017-2022 aims to lay down a strong foundation for inclusive growth, a high-trust society, and a globally-competitive knowledge economy. It is intended to be the first of four medium-term plans geared towards the attainment of the long-term vision called "Ambisyon Natin 2040"

The Philippine Statistical System (PSS) is a decentralized system that ensembles all statistical organizations at all administrative levels, its personnel and the national statistical development program. One of its main components for an effective and efficient national statistical system is the management and coordination mechanism within the government.

The Philippine Statistics Authority (PSA), as lead agency, has to coordinate and monitor the implementation, periodic assessment and updating of the PSDP.

In the formulation of the PSDP, the PSS takes into consideration the long-term plan "AmBisyon Natin 2040" and the Philippine Development Plan (PDP) 2017-2022 to respond to the new and emerging statistical requirements of the government and private sector.

Among other domains, the PSDP presents plans and methods of action to accurately monitor, track, and measure the impact of ICT, through timely and relevant statistics. An Interagency Committee on Information and Communications Technology Statistics (IAC-ICTS) was establish to coordinate the production of statistics in the ICT domain.

A number of key developments in ICT statistics in the PSDP 2018-2023 included institutional, methodological and implementation activities, among them:

- Inclusion of e-commerce indicators on establishment and household surveys;
- Inclusion of the ICT indicators and statistical activities in the system of official statistics;
- Creation of technical working groups under the IAC-ICTS to discuss plans to improve

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Source: http://www.psa.gov.ph/content/psa-approves-conduct-2019-national-ict-household-survey-0

# Key Results of First Ever 2019 National ICT Household Survey



## Household







**34**%

With Internet Connection at Home

# Php 1,280.59

Average monthly spending for internet connection at home



# Data Utilization



# **Data Requests**Government Agencies

- Academe
- Private, Local, and International Organizations (ITU, ADB)

## **Successfully Published**

# **Policy Notes**

- Bridging the Digital Infrastructure Gap: Policy Options for Connecting Filipinos
- ICT Development for Promoting a More Innovative and Inclusive Society
- Gender Perspectives in E-Livelihood and E-Entrepreneurship





# NATIONAL OCT HOUSEHOLD SURVEY

The 2023 National ICT Household Survey in the Philippines aims to provide statistical information deemed essential in monitoring relevant dimensions of Information and Communications Technology (ICT) usage in households and by individuals.









A plan for deep economic and social transformation to reinvigorate job creation and accelerate poverty reduction by steering the economy back on a high-growth path.

A comprehensive statistical program that will address the information requirements of the country's national development plan as well as provide for activities that will promote the development of an efficient statistical system to ensure reliability, relevance, quality, and accessibility of information generated



Goal 4 - Proportion of Population with Exposure to Internet



Digital Philippines initiative of the DICT - An initiative dedicated to providing every Filipino with access to vital ICT infrastructure and services.



> ICT Infrastructure

Provide every Filipino with access to vital ICT infrastructure and services (Digital Philippines initiative of the DICT)

- Sustainable Growth of ICT Industries

  Ensure the sustainable growth of ICT-enabled industries, create more jobs, establish One Digitized Government, One Nation, support the administration in achieving its goals
- World Class Digital Economy

  Enable, innovate, achieve, and lead in pushing the country's development and transition towards a world-class digital economy.
- Provide data on household and individual indicators in the post-recovery period following the COVID-19 pandemic.
- Benchmarks for ICT Indicators

  Generate updated benchmarks for key ICT indicators that have seen a surge during the pandemic.

# **Objectives of the Survey**



#### **Objective 1:**

To gather ICT data at the household level to continuously support the monitoring of performance indicators in the SDGs, PDP Results Matrix, DICT plans, and international benchmarking indices



#### **Objective 2:**

To monitor the development of the identified critical data on ICT supply and demand



#### **Objective 3:**

To assess and monitor the growth of potential markets in the digital economy (e.g. e-commerce)



#### **Objective 4:**

To provide inputs to the development of national ICT plans, programs, projects, and policies



#### **Objective 5:**

To provide a comparative analysis of data gathered from 2019 national baseline



#### **Objective 6:**

To improve design of survey instruments and overall survey strategy, including data processing.



# Scope of the Survey

# **Phases and Implementation Period**

- Phase 1 Field Data Collection
  - Covered the survey preparatory activities up to the enumeration and supervision during data collection
- Phase 2 Data Processing, Analysis, and Dissemination
  - To be conducted to cover the remaining activities including data processing, data evaluation, data analysis, data dissemination and project documentation



# Phase 1



Conceptualization, Crafting of Survey Instruments, Development and Testing of Systems, Survey Clearance

Conduct of Pretests for Paper and Pen Personal Interview (PAPI) and Computer-Aided Personal Interview (CAPI)





Conduct of Survey Trainings:

- 1. Training of Trainers
- 2. Task Force Training
- 3. 2nd Level Training
- 4. 3rd Level Training

#### Field Operations



ONAL OCT SEHOLD



# **Data Collection**

# Method of data collection

Computer-Aided Personal Interviews (CAPI)

# **Survey Questionnaires and the respondents**



Community-level Questionnaire

by Team Supervisor; to the barangay; with the Barangay Captain/Official



Household Questionnaire

by Statistical Researcher (SR); to the household (Hh); with the Hh head/any adult Hh member



**Individual Questionnaire** 

by the SR; to the randomly selected Hh member





# **Data Collection**

Given the critical indicators derived from the NICTHS, it is required that the response rate should be at least 95 percent. Field Interviewers are expected to complete interviews with at least 95% of all eligible households. Achievement of the high response rate is critical to achieve results that are representative of the country's population.



Level

## HOUSEHOLD

Level





# COMMUNITY

Level







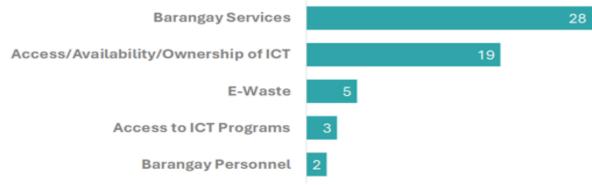
# **BARANGAY**

Level



57 Indicators





#### **Target Respondent:**

## **Authorized Personnel of the Barangay**

The Barangay Level Questionnaire surveys the existence of ICT infrastructures in the barangay, and its awareness, access to and use of ICT products and services.

# Use of Indicators:

- Inputs in development of ICT policies
  - Social Media Use
  - ICT Positions
  - E-Waste
- Measuring the availability of ICT services at the barangay level
- Measuring access to ICT programs at the barangay level

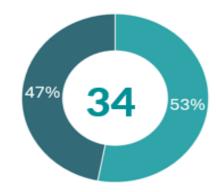


## HOUSEHOLD Level



Target Respondent:
Head of Household or
knowledgeable member of the
Household





- Presence/Availability of Household Assets
- Demographic Characteristics





## HOUSEHOLD Level



#### 34 Indicators

Presence/Availability of Household
Assets

Demographic Characteristics

16

18



#### Use of Indicators:

- Development and monitoring of plans and policies
  - National ICT Development Agenda
  - Philippine Development Plan
  - Regional Development Plan
- Inputs to the following:
  - Statistical Indicators on Philippine Development (StatDev)
  - ITU Household Questionnaire
- Policy research and analysis
- Measuring of ICT use and access at the household level

## **Key Indicators**



- Household Access to ICT
  - o Radio
  - Television
  - Fixed Telephone Line
  - Mobile Phone
  - Computer
  - Internet
- Type of Internet
- Barriers to household internet access



## **INDIVIDUAL** Level



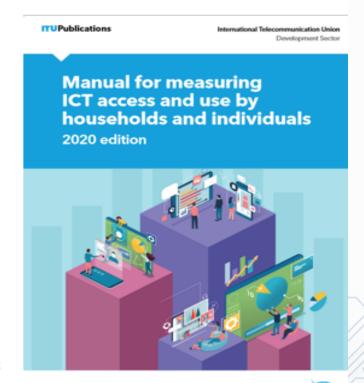
141 Indicators



## 59% New Indicators

**Target Respondent:** Individuals aged 10 years old and above

- E-Waste
- **Emergency and Disaster Preparedness**
- Artificial Intelligence





## INDIVIDUAL

Level



#### 141 Indicators



#### **Key Indicators**

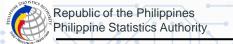
- Individual ICT Use and Access
- Levels of digital skills
- Access to online government websites and services
- Digital economy activities
  - Online selling
  - Online buying
  - Online financial activities

# #

#### Use of Indicators:

- Development and monitoring of plans and policies
  - National ICT Development Agenda
  - Philippine Development Plan
  - Regional Development Plan
  - Philippine Youth Development Plan
- Inputs to the following:
  - Statistical Indicators on Philippine Development (StatDev)
  - ITU Household Questionnaire
- Monitoring of SDG Indicator
- Policy research and analysis
  - E-waste
  - Disaster Preparedness
  - Artificial Intelligence
  - Technology Enabled Incidents
- Measuring of ICT use and access at the individual level
- Measuring digital skills
- Assessing Public Service Delivery
  - Access to government services





# Challenges

# **Strategies**

#### **SAMPLES**



Vacant Housing Units (VHUs) upon visit to the household



Replacement of sample housing unit within the same area



Difficulty to enter sample condominium units, exclusive subdivisions and other areas



Coordinate with the Building Administrator, Local Government Units



Randomly selected Individual respondents are not readily available



Schedule the interview; Replacement method using KISH table



# Challenges

# **Strategies**

## **ITEMS OF INQUIRY**



Difficulty in explaining technical terms and concepts to the respondents



Flashcards were shown to aid the respondents



Respondents burden in answering long questionnaire

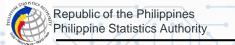


Explain the importance of the survey; revision/ updating of questionnaire in the next survey round



Finalizing the logical sequence of the questions in the individual level questionnaire





# Challenges

# **Strategies**

#### **TECHNICAL**



Reliability of Virtual Private Network connection to ensure security of data transfer



Constant coordination with the IT Team in order not to disrupt the operation

#### **FINANCIAL**

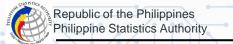


Budget constraint for the conduct of some of the activities



Proposal in the Interagency Committee on ICT Statistics for the institutionalization of the survey





## INDICATORS FOUND DIFFICULT TO UNDERSTAND/ANSWER BY RESPONDENTS

- Electronic Waste
- Artificial Intelligence
- Digital Terrestrial Television Broadcasting (DTTB)
- Occupational Classification
- Industrial Classification
- ICT Courses
- ICT Subjects



# Learnings

Use of laymanized technical terms/concepts or translation into vernacular language

Allocation of appropriate funds for the conduct of the survey

Establishment of a strong collaboration with different Government Agencies and stakeholders

Continuous
review of
questionnaire
items and survey
manual to
ensure collection
of accurate data
and information

Enhancement of the technology in the conduct of interview or accomplishment of the questionnaires













# **Partners in ICT Statistics**





































# Thank you!

http://www.psa.gov.ph

http://openstat.psa.gov.ph

https://twitter.com/PSAgovph

https://www.facebook.com/PSAgovph



