#TAWID

COVID

A PULSE ON POVERTY: APPLICATION OF CITIZEN-CENTERED INNOVATION

Working paper on Phase 1 of a survey commissioned by the United Nations Development Program Philippines and the Zero Extreme Poverty Philippines 2030.

Photo by Charles Deluvio on Unsplash

The Coronavirus Disease 19 (COVID-19) pandemic and the economic shutdown that it triggered could worsen poverty in the Philippines at an alarming speed and scale. It is, thus, critical to understand the socio-economic impacts of the pandemic on the poor and marginalized, including the most vulnerable among them — the elderly, chronically ill immuno-compromised, and pregnant and lactating women — in programming an inclusive and timely response.

The community quarantine imposed on several parts of the Philippines over the past two months posed challenges to data gathering and consultation. In response, The **Zero Extreme Poverty Philippines 2030 (ZEP PH 2030)** —a coalition of Non-Government Entities (NGEs) and networks—collaborated to seek innovative ways to reach across the digital divide and gather the sentiments of the poor and vulnerable. In partnership with the **United Nations Development Programme (UNDP) Philippines**, ZEP PH 2030 commissioned the **ZEP - UNDP COVID PULSE PH (m.me/covidpulseph) survey**.

This survey was deployed through messenger chatbots which can be accessed by poor households. In addition, the tool provided a safe space for the households to give candid feedback on government action and to express their sentiments. The survey was designed and implemented with innovation start-up **AI4GOV**.

The rapid pulse survey is intended to be deployed in three phases beginning in May in order to detect changes over time with respect to the socioeconomic conditions of households, their coping strategies, and the support they receive from government or other sectors. The high frequency of the survey also allows for deployment in an iterative manner.

The first survey phase aimed to test the viability and reach of chatbots as a survey tool. To ensure broad reach, ZEP2030 employed community organizing and social media advertising to reach the target population, i.e., households whose earnings fall below or are hovering just above the income poverty line. In subsequent phases, incentives for retention will be designed and tested.

The full technical report and the data dashboard can be accessed for more information on the results, methodology, effective sampling, and caveats.

HIGHLIGHTS

The survey was conducted from May 4 to 27 and reached 3,144 poor and vulnerable households from 10 cities in Metro Manila and 4 cities in Cebu:

Instrumentation. In the first phase, we found the messenger chatbot to be an effective way to reach the poor and the vulnerable through free mobile data.

Baseline Income. Of total respondents, about 70% earned below PhP10,000 a month and another 25% hovered above the official income poverty line (earned PHP 10,000 to 30,000). About two-thirds depended on informal or temporary work.

Income Decline. About 83% of the households surveyed experienced a decrease in their income, disproportionately affecting those who were already poor. About 34% totally lost their source of income.

Skipping Meals. About 33% of households had to skip at least one meal in a week; about 10% had to skip two or more meals in a week.

Bayanihan. About 84% of households received food relief and other in-kind assistance, mostly from the government but also from civil society. About half of surveyed respondents received cash assistance from the government.

Diskarte. About 68% of households employed at least one coping strategy, such as seeking other sources of income, relying on cheaper food, or borrowing money.

Photo submitted via chatbot

PHASE 1 STRATEGY & METHODOLOGY

In phase 1, the study aimed to build, test, and refine the use of messenger chatbot as means for high-frequency surveying; and to set some basic data to illustrate the baseline condition of households in the face of COVID19.

3,144
TOTAL RESPONDENTS

14
CITIES REACHED

The survey was conducted from May 4 to 27 and reached 3,144 households from 10 cities in Metro Manila and 4 cities in Cebu, which represent to a fair extent the target population.

For community organizing, ZEP tapped community-based volunteers in more than 150 barangays in Metro Manila and Cebu. The volunteers forwarded the link to targeted respondents and assisted them in answering the survey while upholding quarantine restrictions. Through this, ZEP garnered 3,072 respondents.

For social media advertising, ZEP developed alternative messages and ran targeted advertising in Metro Manila. It employed A/B tests to determine the most effective promotional messages

RESULTS OF INSTRUMENTATION

In this first phase, the chatbot survey tool was proven to be an effective and efficient way to reach the poor and engage them

- The chatbot was accessible to the poor using free mobile data. About 40% of respondents used free mobile data to access the surveys. For those who earned below PHP10,000 a month, the proportion was slightly higher at 45%.

- During testing for the usability of the tool, we garnered a score of 80 and above and an average time of 7.5 minutes to accomplish the task. When asked, respondents said they found the tool to be easy to use and trustworthy.

80
USABILITY SCORE

7.5
AVG. TIME ON TASK
(minutes)

- Community organizing was the more cost-effective way of socializing the chatbot. Social media advertising was still useful but, based on the A/B tests, messages with more straightforward calls to action should be used.

BASELINE INFORMATION

CHARACTERISTICS OF PHASE 1 HOUSEHOLDS

- **Demographics of survey respondents.** About two-thirds of the individual respondents were aged 26 to 60 years old and about three-fourths were female.

- **Household size.** The 3,144 respondents, represent a total of 18,328 individual household members. On average, there were about six members in a household.

- **Vulnerability.** About 1/3 have at least two (2) household members who are vulnerable to COVID19, e.g., children, seniors, pregnant women, people with disabilities, chronically ill.
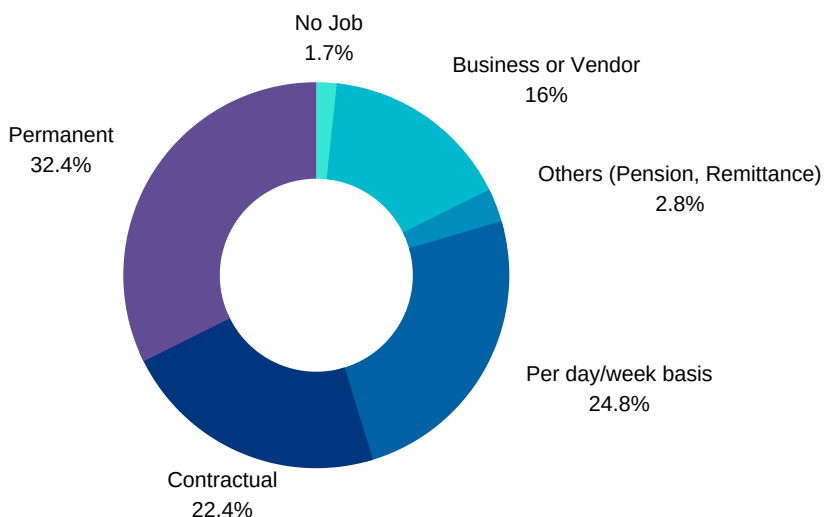
18,328
HOUSEHOLD MEMBERS
REPRESENTED

INCOME BEFORE THE PANDEMIC AND THE ECQ

The surveyed households were already among the most poor and vulnerable in Metro Manila and Metro Cebu.

SOURCE OF INCOME BEFORE ECQ

No Job
1.7%

Business or Vendor
16%

Others (Pension, Remittance)
2.8%

Per day/week basis
24.8%
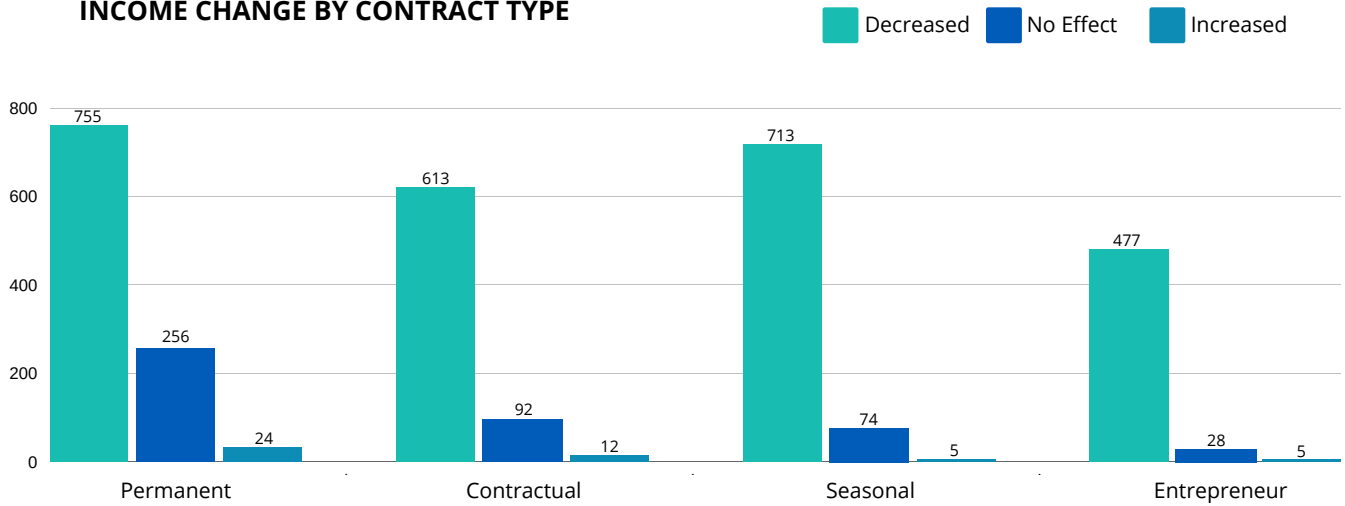
Contractual
22.4%

Permanent
32.4%

- **The Officially Poor.** About 70% of the respondents (or 2,186) have monthly incomes below PHP10,000, which is roughly the government's income poverty line.

- **On the Line/Margin.** Another 25% (798) earn between PHP10,000 to 30,000. They can be considered as "near poor" and are at risk of falling into income poverty when crises strike.

- **Informality.** About two-thirds depended on temporary or informal jobs: contractual work, street vendors, sari-sari store owners, and others. The proportion of informality increases as income decreases (to three-fourths at below PHP10,000)
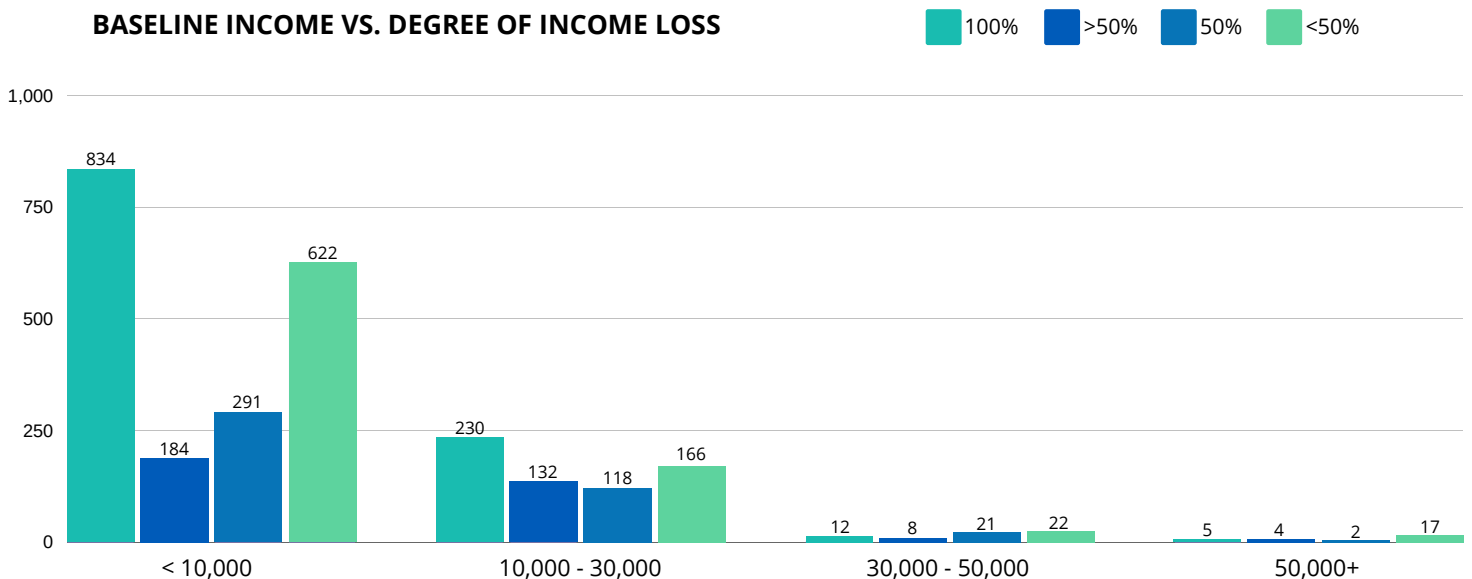
E F F E C T   O N   I N C O M E

The COVID-19 pandemic plunged families deeper into income poverty and vulnerability. The ZEP-UNDP COVID PULSE survey found that about **83% of the households surveyed experienced a decrease in their household income**, with 34% totally losing their source of income. Those who depend on unreliable sources of income suffered the worst.

INCOME CHANGE BY CONTRACT TYPE

Legend: ■ Decreased ■ No Effect ■ Increased

Contract Type	Decreased	No Effect	Increased
Permanent	755	256	24
Contractual	613	92	12
Seasonal	713	74	5
Entrepreneur	477	28	5

- Deeper into Poverty. Among those earning below PHP10,000, 44% totally lost their income: a higher proportion compared to those in the higher income brackets.

- Sliding into Poverty. Among those earning PHP10,000 to 30,000, about three-fourths lost at least half and, as a result, may have likely fallen below the income poverty line.

- Informal Sector Worse Off. About 42% of temporary or informal sector workers totally lost their income: slightly higher than 35% of permanent jobholders who lost their job.

BASELINE INCOME VS. DEGREE OF INCOME LOSS

Legend: ■ 100% ■ >50% ■ 50% ■ <50%

Baseline Income	100%	>50%	50%	<50%
< 10,000	834	184	291	622
10,000 - 30,000	230	132	118	166
30,000 - 50,000	12	8	21	22
50,000+	5	4	2	17

H U N G E R

Failing to meet their basic needs, ***about 33% of households*** had to skip at least one meal in a week; about 10% had to skip two or more meals in a week. A slightly higher proportion of 39% of those earning below PHP10,000 had to skip at least one meal a week. Significant relationships between skipping meals and baseline income, temporary/informal nature of work, and income decline were observed, indicating that the poor and precarious suffered more than the rest.

**INCIDENCE OF SKIPPING MEALS VS. BASELINE INCOME**

■ Yes ■ No
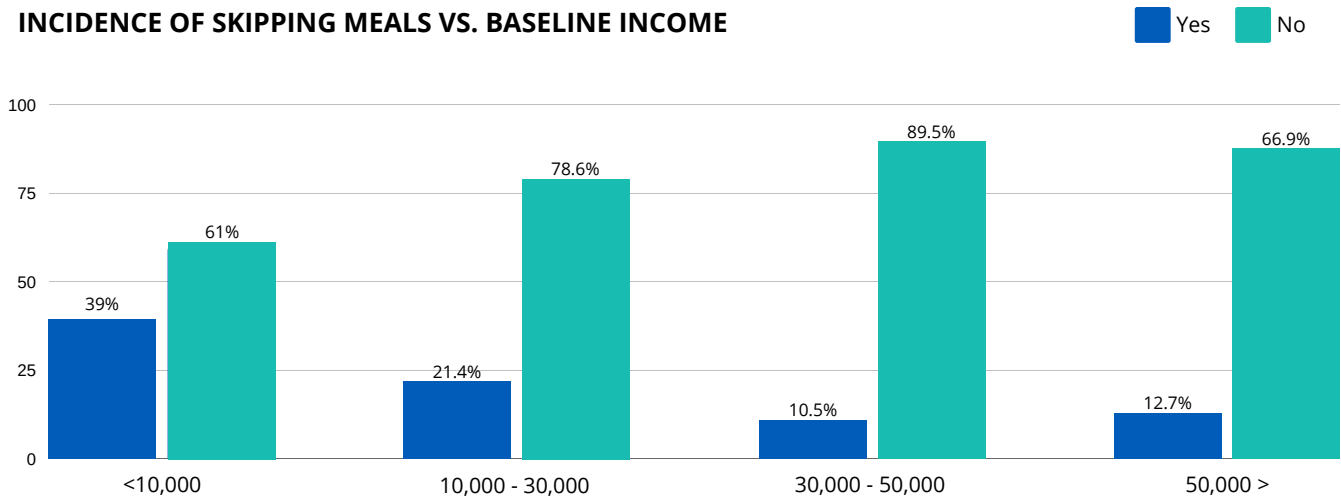
D I S K A R T E

Faced with dire straits, the poor and vulnerable have to make do to survive. Based on the COVID PULSE PH survey, **68% of households employed at least one coping strategy.**

- These included those which could be beneficial, such as seeking other sources of income (35%) or relying on cheaper food (31%), which were the top two coping strategies taken.

- There are, however, coping strategies which could be detrimental to the poor in the longer-run, e.g., borrowing money or food (24%, or third most-taken strategy).

COPING STRATEGIES
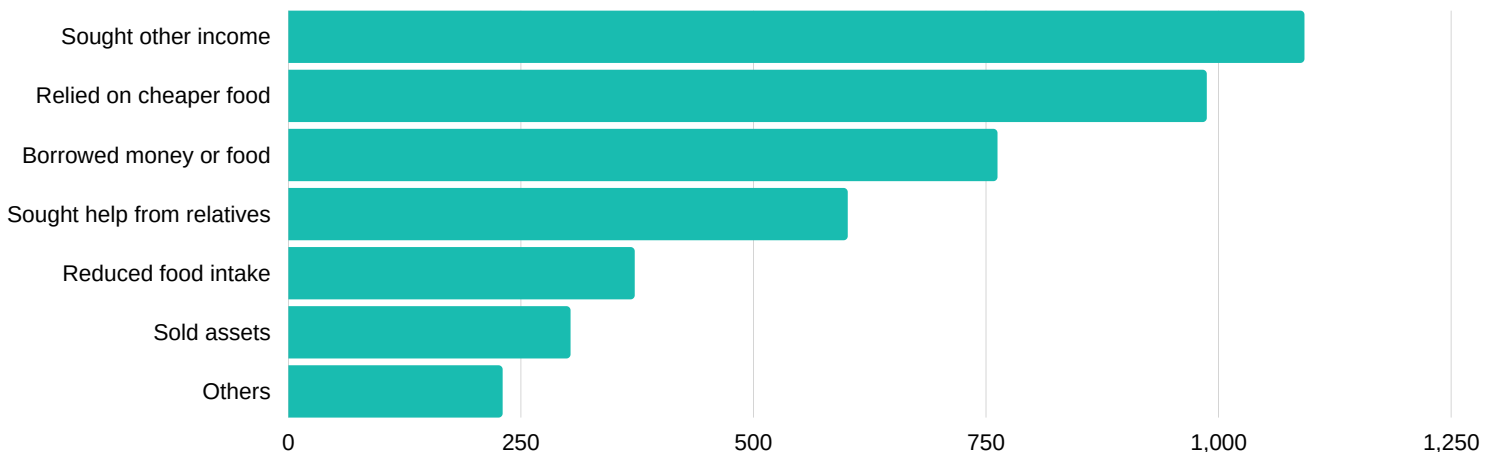
BAYANIHAN

The COVID PULSE PH survey found that about **94% of households received at least either in-kind or cash support**, most of which were received from the government. About 46% of the households received both kinds of support.

94%
RECEIVED AID

In-kind assistance in the form of food packs, relief goods, and others were received by **84% of households**. Frequency and quality of such assistance was unfortunately not covered by the first wave of the survey.

- **Government - *ayuda***. About 65 percent of households surveyed received their in-kind assistance from government entities whether national or local.

- **Civil society - *bayanihan*.** Though their reach was limited by capacity and resource constraints, about 30% of the families were reached by non-government, community- and faith-based organizations.

SUPPORT RECEIVED

In contrast, **cash assistance reached only 55% of surveyed households**, with the government again being the dominant source of support.

- **Social amelioration**. At the time of the survey, which coincided with the peak of distribution of the national government's social amelioration program (SAP), about half of respondents received cash assistance from the government.

- **Social capital**. About 14% of households received cash assistance from personal connections through families and friends (7%), civil society organizations (5%), and others (2%).

Was SAP effective? Though the survey was not explicitly designed to assess effectiveness of the SAP and the efficiency of its rollout, some key observations could be noted:

- Evidence to support any relationship between cash aid and baseline income as well as between cash aid and hunger were not statistically strong.

- Distribution rates varied widely across surveyed cities. In Manila and Pasig, more than 80% of respondents received cash assistance; compared to just above 40% in Malabon.
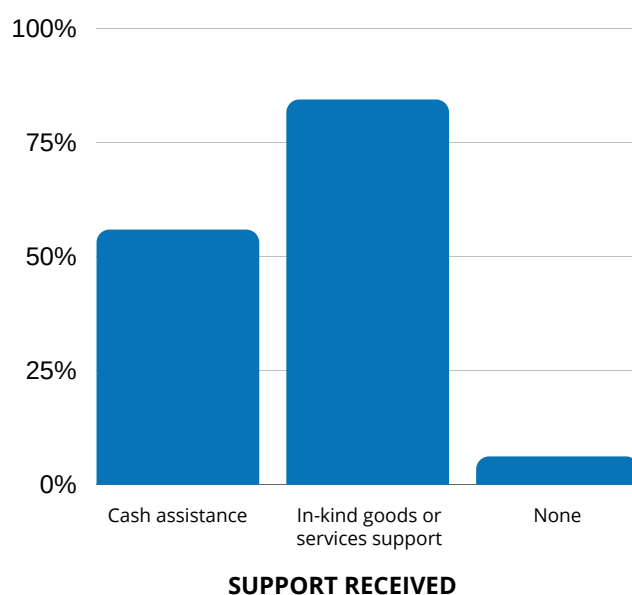
CONCLUSION

The evidence so far gathered by the first phase of the **COVID PULSE PH** survey give credence to what development actors had been fearing: the progress made in recent times to reduce income poverty and improve quality of life have likely been reversed in a short span of time.

This survey was implemented to quantify the detrimental effects of the pandemic and the interventions taken to flatten the proverbial curve using innovative tools. There are, of course, limitations to the results of Phase 1-notably the desired granularity and other additional information on how far-reaching and lasting these effects are on the country's attainment of the Sustainable Development Goals (SDGs). Nevertheless, the results bring to fore important takeaways and issues for further research:

1 **Rise in poverty and precarity.** The first phase of the survey found that many who hover above the poverty line, especially those who have informal livelihoods, have lost their incomes and joined the ranks of the poor. This is consistent with the findings of a recent UN University study, which estimated that the Philippines "could add above six million new poor to the global [poverty] count."[1] Meanwhile, the World Bank estimates that about 1.2 million more Filipinos could fall below the international poverty line for middle-income countries this year, although poverty incidence may improve in the following years if the economy recovers as expected.[2]

The fact that many families fell below the poverty line with just one crisis only exposes the high level of vulnerabilities that households face and the need to rethink poverty reduction programs to sustainably emancipate families from the poverty trap. What is still uncertain at present is how lasting the effects of the pandemic are on the welfare of the poor. Are the income and job losses temporary or deep-seated? How do the income losses affect other aspects of well-being? Do the poor have the needed capabilities for the "new normal?" These are questions still left unanswered. Thus, the following phases of this survey will explore if the situation has changed after the government has fully disbursed amelioration grants and selectively lifted mobility restrictions. The next phases will also explore impacts on the other dimensions of poverty in addition to income. Moreover, we must deepen the inquiry into the specific capabilities that these families need to build in order to be more resilient to shocks.

2 **Warning signs on food insecurity**. As a result of loss of incomes as well as disruptions in food supply chains, at least a third of households surveyed experienced skipping meals. This does not bode well for a country which missed its previous nutrition targets. In 2018, about 30 percent of children under five are stunted while 5.6 percent are wasted.[3] COVID-19's impact on the country's nutrition goals needs to be monitored closely. The following waves of the COVID Pulse survey will again check the extent of food insecurity. More in-depth assessments will be needed to ascertain the lasting impacts on critical nutrition goals. UN initiatives such as a UNDP-United Nations Children's Fund (Unicef) joint study on COVID19 impacts on vulnerable families and ongoing assessments by the Food and Agriculture Organization (FAO) on food security and supply chains will help address blind spots.

1. Sumner, A., Ortiz-Juarez, E. & Hoy, C. (2020) Precarity and the pandemic: COVID-19 and poverty incidence, intensity, and severity in developing countries. WIDER Working Paper 2020/77. Helsinki: UNU-WIDER. (https://www.wider.unu.edu/publication/precarity-and-pandemic)
2. World Bank. (June 2020) Braving the new normal: Philippines economic update. (https://openknowledge.worldbank.org/bitstream/handle/10986/33879/Philippines-Economic-Update-Braving-the-New-Normal.pdf)
3. 2018 National Nutrition Survey.

CONCLUSION

3 **The effectiveness of social amelioration.** It must be acknowledged that the SAP is the largest transfer so far provided by the Philippine government to address the hardship of low-income households. While, the survey was not able to detect statistically significant relationships between receipt of the cash aid against baseline income (indicative of effectiveness in targeting) or against skipping meals(indicative of effectiveness in reducing hardship). Succeeding survey rounds will test for the efficiency in the distribution of SAP and its sufficiency and timeliness. Given the results of this survey, there is reason for government, whether national or local, to continue providing social protection especially to those who need it the most. Real-time assessments of the sufficiency and efficiency of such support—such as by using a similar chatbot-based survey or reporting tool—should be employed and built into the program design. Collaborations between governments and civil society should be explored not only in monitoring the effectiveness of social protection but also in determining, designing, testing, and evaluating new ways to provide sustainable livelihood in the new normal.

4 **Innovation in socioeconomic impact assessment**. The first phase of the ZEP PH 2030 - UNDP COVID Pulse survey is an attempt to test innovative tools to collect data in an inclusive and potentially real-time manner. It proved that messenger chatbots are capable not only of bridging digital divides but also of providing a safe space for the poor to share their sentiments. Government may consider including this in its arsenal of instruments to assess the condition of target households/ and population groups.

The succeeding survey phases will expand from the megapolises and check the pulse of the rural areas: to test the effectiveness of the instrument in such contexts, as well as to measure the pandemic's ripple effects from the urban epicentres to the countryside. Moreover, ZEP PH 2030 and UNDP will collaborate with other citizen-driven and data-aided initiatives to enrich the analysis. The anonymized micro-data from this survey can be made available, upon request, to parties who would like to mine the data sets and collaborate with the initiative.

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COVID19

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ABOUT THE ORGANIZATION AND THE SURVEY

The COVID PULSE PH survey was commissioned by ZEP PH 2030 and UNDP. This working paper is being published to solicit feedback and discussion. The views expressed herein do not necessarily reflect the views of ZEP PH 2030, its individual members. and the UNDP.

ZEP PH 2030 is a movement that has a radical aim: to reduce a million Filipinos living in extreme poverty by the year 2030. The movement is dedicated to bringing about transformational change towards the realization of a Philippines where Filipino families enjoy the fullness of life in sustainable communities. It is composed of 140 non-government entities that are present in 430 cities and municipalities nationwide.

UNDP partners with people at all levels of society to help build nations that can withstand crises, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in more than 170 countries and territories, we offer global perspective and local insight to help empower lives and build resilient nations.

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