Philippine Institute for Development Studies
Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas

# DEVELOPMENT RESEARCH NEWS

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## In this issue



## Poor global health financing hurts PH, rest of ASEAN

THE PHILIPPINES, TOGETHER with the rest of middle-income countries, is under threat due to poor investments in global health.

In his presentation during the fifth Annual Public Policy Conference (APPC), Dr. Gavin Yamey, director of the Center for Policy Impact in Global Health based at the Duke Global Health Institute in Durham, North Carolina, revealed that such poor investments have threatened the welfare of those living in middle-income countries as they continue to experience the so-called "middle-income dilemma".

Middle-income countries are those that have reached a national income level that disqualifies them from receiving official development assistance (ODA) and yet are still in poverty.

Unfortunately, around 70 percent of the world's poor still live in middle-income countries, according to Yamey.

"Thus, there is a dilemma. They do not qualify for aid and yet most poverty-related ill health is now in middle-income countries, not low-income countries," he explained.

## Editor's Notes

Our last issue this 2019 features some of the takeaways from the fifth Annual Public Policy Conference (APPC) held in September, PIDS studies on housing, small and medium enterprises, and senior citizens, and articles about the Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA) and smart cities.

This year's APPC centered on the New Globalization and the global and local challenges that it presents. Among these challenges, health-related ones can be considered the most critical as they impinge on economic progress and sustainable development. Today's more complex, globalized, and interconnected world has increased the risk of communicable diseases, which are a serious threat to global public health. Compounding this issue are poverty-related health concerns, multidrug-resistant illnesses, and mental health, among others. These are problems that no one country can solve alone. As underscored in the banner article, international cooperation is essential in the provision of global public goods, such as public health services. Part of it is allocating sufficient funding for the development of vaccines, pandemic preparedness, policy research, and health promotion/education.

Another feature of the New Globalization is worsening inequality that could aggravate if appropriate public policies are not in place. This can be seen in the experience of China and India, which had similar levels of inequality in the 1980s but with China achieving more success in reducing inequality over time. This is due to China's investments in education, health, and infrastructure, (Page 28)

Within the Association of Southeast Asian Nations (ASEAN) alone, the Asian Development Bank has identified six lower-middle income nations, namely, Cambodia, Indonesia, Lao PDR, Myanmar, Philippines, and Viet Nam, in 2018

Meanwhile, Malaysia and Thailand have fallen under the upper-middle income category.

Of the 10 ASEAN member-countries, only Brunei Darussalam and Singapore made it to the high-income list.

### Wealthier, but not healthier

Behind the rise of poverty-related health issues are threats brought about by globalization, according to Dr. Susan Pineda-Mercado, special presidential envoy of the Philippines for Global Health Initiatives, who also spoke during the APPC.

"A lot of these [threats] come from a highly globalized environment, where you have porous transport of goods, people, services, ideas, and viruses across the world," Pineda-Mercado explained.

Sadly, while "the world is wealthier than before, it is not necessarily healthier," she revealed.

In fact, the situation has become too complex, that whatever is happening to the world's physical environment has an impact on health outcomes.

"The obvious effects of the increase in surface temperature are extreme heat and drought, which affect our food production and nutrition, and the melting of the icebergs, which affects us through unpredictable and frequent disasters such as floods and intense storms," Pineda-Mercado explained.

The health official also mentioned that environmental risk factors, such as air pollution and climate change, have resulted in "more than 3.5 million deaths" globally every year.

Changes in the environment have affected not only humans but also the "behavior of insects", said Pineda, citing the recent prevalence of *Aedes aegypti* mosquito.

"This mosquito has already become a vector for dengue now seen in cities of temperate zones, when this used to be confined to the tropics," she revealed.

### GPGs eyed as solution

With this backdrop, Yamey argued that an additional USD 11.5 billion investment on global public goods (GPGs) for health is needed to further health and economic progress.

GPGs generally refer to goods whose impact transcend national boundaries and which no single nation can devise a response sufficient to implement them.

They also extend across generations and go beyond one socioeconomic group.

Included in the current GPGs for health are efforts geared toward the prevention or containment of some communicable diseases, such as the Global Fund to Fight AIDS, Tuberculosis, and Malaria.

AIDS stands for acquired immunodeficiency syndrome caused by the human immunodeficiency virus (HIV), a virus that attacks cells that help the body fight infection, making a person vulnerable to diseases. This is on the rise in many parts of the world, including the Philippines.

GPGs also serve as funding for product development, pandemic preparedness, polio and malaria eradication, procurement mechanism for noncommunicable diseases, population policy research, and other World Health Organization (WHO)-supported activities.

While the estimate for additional funding seems daunting, Yamey argued it is much "more feasible compared to hundreds of billions worth of inaction".

"Investing in these [GPGs for health] could be a very powerful way to continuously improve the health of the poor in middle-income countries," he explained.

"In the case of [the global initiative against] multidrug-resistant tuberculosis, affected communities in middle-income countries would benefit from product development, market shaping to reduce prices, and collective purchasing," he added.

Moreover, investing in GPGs for health has "very impressive health and economic returns", according to Yamey.

"Returns to investing in an HIV vaccine will be very large when eventually developed. If by 2030 we are able to develop an HIV vaccine of even partial efficacy, the returns will be somewhere from USD 2 to 70 for every dollar invested," he revealed.

## Unstable health funding

Despite these payoffs, global investments on health GPGs have been unstable over the years.

"In 2013, less than 25 percent of the total ODA for health was spent for GPGs for health. That proportion went up to 29 percent in 2015 and down again to 24 percent in 2017," he explained.

"In the wake of Ebola, there was a temporary increase in spending on GPGs for health which, then, fell post-Ebola," he furthered.

A paper by PIDS researchers Roehlano Briones, Connie Dacuycuy, Francis Quimba, and Michael Abrigo titled "Understanding the New Globalization: Implications for the Philippines" noted that despite the importance of GPGs, they remain underprovided. Citing a 2016 publication edited by Inge Kaul, Briones and his coauthors explained that such underprovision stems from coordination and cooperation failures among stakeholders due to "organizational frictions, information asymmetry, fairness concerns, and conflicting global norms".

## Fund for the sick, not health

Meanwhile, Yamey said country-level investments on GPGs for health can have transnational benefits.

This, however, presents a challenge for the Philippines as a transition middle-income country, according to Pineda-Mercado.

"We have graduated from being a recipient of donor money to a self-sufficient middle-income country and yet the health goals and outcomes that we

*Global health expert Gavin Yamey urged government to invest on global public goods for health, such as vaccines against human immunodeficiency virus, to reap health and economic returns.*

desire have yet to be achieved," Pineda-Mercado explained.

The problem lies within investments on health that are more focused on cure rather than prevention, the global health envoy claimed.

This is despite the fact that the Universal Health Care Law covers not only curative care but also protective, promotive, preventive, and, in fact, rehabilitation components of health.

"For instance, in the case of teenage pregnancies, what we need is not contraceptives, but to map out and focus on the areas where the teens would be most vulnerable, such as exposure to drugs and drinking," she explained.

"The problems in prevention and promotion are not about the individual, but the environment that creates vulnerability," she added.

Pineda-Mercado also criticized the Philippine Health Insurance Corporation (PhilHealth), saying it is a fund for the sick, not for health.

"If it continues in that direction, there will not be enough resources for the healthy population and will never create better outcomes for the people," she warned.

"If I can be candid, [PhilHealth] is so fraught with all kinds of systemic issues that it cannot get its head above the water to strategically fund prevention and promotion," she added.

*Dr. Susan Pineda-Mercado, special presidential envoy of the Philippines for Global Health Initiatives, criticized government initiatives that are more focused on the sick rather than keeping the country's population healthy.*

"Even with universal health care, if we do not have the proper institutional arrangements to promote and prevent diseases, then our resources will all be drained into hospital care and dialysis, among others," she explained.

## Small wins

Pineda-Mercado, however, noted a small win at the provincial level, citing the case of the health promotion board of the City of Balanga, Bataan, as the first to utilize a part of their tobacco taxation to fund prevention and promotion.

Yamey also agreed with taxation at a global level as an efficient mechanism to close the global financial gap for health.

He cited the case of Unitaid, a nonprofit organization investing on innovations to prevent, diagnose, and treat diseases—such as tuberculosis and malaria—funded from airline ticket and carbon taxes, among others.

Likewise, ODAs of middle-income countries that already graduated from direct country support can also be mobilized as funds for GPGs on health, Yamey added.

"With voluntary earmarked mechanisms, you would still need an overarching governance structure which is best provided by WHO," he stressed.

This, however, requires a change in the financial structure of WHO, whose funds are mostly from heavily earmarked voluntary contributions and extra-budgetary funds, Yamey noted.

For instance, he cited the case of the Global Commission on Investing in Health whose capacity to supply GPGs and other global functions to low- and middle-income countries is undermined due to earmarking of funds at WHO.

"We have to address this dilemma if we are going to address the critical funding gap for common goods for health," he stressed.

Pineda-Mercado, on the other hand, called for strategic partnerships between the health sector and other sectors to bring about a "health-promoting environment".

She added that "it is about people having more skills and knowing what they should and should not eat. It is about strategic communication and empowering people to take control over their lives and their health."

The APPC served as highlight of the celebration of the 17th Development Policy Research Month (DPRM).

The DPRM is celebrated across the country every September in view of Malacañang Proclamation 247 issued in 2002. It promotes public awareness and appreciation of the importance of policy research in the formulation of evidence-based public policies, programs, and projects.

With the theme, "Navigating the New Globalization: Local Actions for Global Challenges", this year's APPC gathered experts from government, academe, and multilateral development agencies to provide a deeper understanding of how changes in the global economy as well as technological advancements will affect equity and inclusiveness of humanity's progress. **CPSD, GBDC**

# Hefty taxes blamed for lack of PH competitiveness

EXPENSIVE TAXES SLAPPED on businesses remain one of the reasons behind the reluctance of foreign players in entering the Philippine market.

This was according to Imelda Tiongson, trustee at Fintech Philippines Association, when asked for the reasons behind the declining competitiveness ranking of the country within the Association of Southeast Asian Nations (ASEAN).

Tiongson served as one of the speakers during the breakout session on global trade restructuring of the fifth Annual Public Policy Conference (APPC).

With Tiongson were Francis Mark Quimba of state think tank Philippine Institute for Development Studies (PIDS), Executive Director Corazon Dichosa of the Board of Investments (BOI) of the Department of Trade and Industry (DTI), Fintech consultant Jove Tapiado, and Kristina Baris from the Asian Development Bank.

In its *2019 Global Competitiveness Index*, the World Economic Forum (WEF) ranked the Philippines 64th out of the 141 economies when it comes to global competitiveness.

From fifth, the country's ranking dipped to sixth among nine countries covered in the ASEAN.

While WEF did not give specific reasons behind this decline, it stated in its report that it assessed an economy based on its enabling environment, human capital, as well as markets and innovation ecosystem.

Overall, the Philippines got a higher score of 62.1 for 2019, but still suffered a slight decline in the global rankings.

Dichosa stressed that the Philippines needs to update its laws on businesses, some of which "were decades-old already".

For instance, the National Internal Revenue Code, which slaps businesses with corporate income tax (CIT) rate of 30 percent, was passed in 1997.

The BOI official primarily focused on the need to provide investment incentives to foreign players, such as fiscal incentives in the form of tax holidays, among others.

"We do provide incentives to these foreign businesses, but only in a limited way," Dichosa revealed.

Despite the urgent need for such reforms, however, she admitted that "it might take a while before we can do all of them."

## CITIRA bill

The Philippines used to be the forerunner in ASEAN when it comes to granting incentives to attract foreign and domestic investments, according to a study by the National Tax Research Center.

While Singapore, Thailand, and Malaysia only started offering incentives in the late 1960s, the Philippines has already granted tax exemptions to industries as early as 1946 through the implementation of Republic Act 35.

Today, the Philippines has lagged behind with 30 percent CIT rate, the highest in ASEAN.

In an attempt to lower CIT and rationalize fiscal incentives, President Rodrigo Duterte, in his fourth State of the Nation Address, called on the Philippine Congress to "immediately pass Package 2 of the Comprehensive Tax Reform Program", then known as the Tax Reform for Attracting Better and High-Quality Opportunities (TRABAHO) bill.

The measure sought to encourage investments by reducing CIT rate from 30 percent to 20 percent and rationalize investment tax incentives to enhance fairness, improve competitiveness, plug tax leakages, and attain fiscal sustainability.

On the sidelines of the APPC, DTI Assistant Secretary and former PIDS Senior Research Fellow and Vice President Rafaelita Aldaba recommended the passage of the TRABAHO Bill, saying it is pro-research and development, helping the industries to innovate.

However, TRABAHO bill failed to hurdle the Congress when its counterpart in the Senate remained pending at the committee level upon the closing of the 17th Congress.

In September 2019, the House of Representatives refiled the TRABAHO bill and renamed it as the Corporate Income Tax and Incentive Rationalization Act (CITIRA).

CITIRA is now pending before the Senate Committee on Ways and Means. **RGV**

*The Philippine economy still suffers from outdated laws on businesses that affect the entry of local and foreign investments, experts claim.*

# Digitization seen to improve government transparency

*Incorporating blockchain technology in government processes creates a more transparent and trustworthy system, policy expert says.*

BLOCKCHAIN TECHNOLOGY MIGHT just be the key to gaining the public's trust on their respective governments.

Speaking at the fifth Annual Public Policy Conference (APPC) conducted recently, Alan McQuinn, senior policy analyst at the United States-based Information Technology and Innovation Foundation, explained how the public sector can adopt blockchain into its processes to improve public trust.

He described blockchains as "shared digital ledgers that record information that is then distributed among a network of computers".

One key feature of the blockchain is that "the system functions without an intermediary. It decentralizes the authority into each individual who is participating in the network. At any point, someone can have an audit in the system," McQuinn explained.

"Before blockchain ever existed, you would have to rely on some sort of trusted intermediary," McQuinn said, citing as examples banks and government agencies that keep record of people's bank accounts and land titles, respectively.

With blockhain technology, the risk of tampering with public records lessens. Instead of relying on a centralized system or one authority to secure these records, the public is assured that changes and updates in the system are seen and monitored by anyone who has access to them.

However, McQuinn elaborated that blockchains are not necessarily more secure but "they are more transparent in how they run and operate."

"When it comes to government blockchains, the best thing about them is they create a permanent time-stamped record that cannot be unilaterally altered. Anyone can have access to the record without being able to adjust it for other people," McQuinn said.

"This creates trust because you can audit the record whenever you want, and the system can have full transparency," McQuinn added.

## Trust issue

The issue of trust, however, is something of important concern to the public.

Incidents where vital information of individuals are compromised erode public trust. During the recent Philippine national elections, the voters list of the Commission on Elections, which contains personal information of millions of Filipino voters, was hacked.

McQuinn, however, explained that "there will always be fraud, if not on blockchain, it may concern another technology." This is why "regulatory frameworks are needed," he said.

## Going digital

McQuinn then provided ways on how policymakers can advance the application of blockchain in their respective governments, one of which is by adopting new and emerging technologies.

"Governments should work toward understanding how blockchains work and looking where these can add value in their current programs," he explained.

He also called on policymakers to support research and development for blockchain, saying that "certain problems that will affect blockchain applications are too big for companies to tackle alone."

But before governments can reap the benefits of blockchain, a strong digital system and framework should be in place.

According to McQuinn, creating a digital framework will facilitate adoption of blockchain and other applications, where a government will gain, either "in terms of efficiencies or reduced costs". Corruption in the government could also be minimized.

Blockchain technology and digital system could resolve issues concerning personal information, such as assets and properties.

He cited the case of Haiti where "they lost land records because they were all on paper" after it was hit by a strong earthquake in 2010. Likewise, in Honduras, there was a period of time when "some officials were changing records to steal people's lands."

Other areas where blockchain technology has already been used, according to McQuinn, are in electronic voting, managing public records (e.g., land registry), tracking drug trafficking, and for some governments, in developing their digital identity programs.

Finally, McQuinn said governments should promote data interoperability by working with the private sector to ensure that "people can adopt the technology anywhere and everywhere." **GBDC**

# BIMP-EAGA eases trade for Mindanao under New Globalization

GENERAL SANTOS CITY – Mindanao should leverage the Brunei Darussalam-Indonesia-Malaysia-Philippines-East ASEAN Growth Area (BIMP-EAGA) to reap the fruits of the so-called New Globalization.

This was emphasized by Mindanao Development Authority's (MinDA) Deputy Executive Director Romeo Montenegro at the fifth Mindanao Policy Research Forum (MPRF) held in General Santos City.

BIMP-EAGA is a subregional economic cooperation in Southeast Asia established in 1994 to "spur economic development in the lagging subeconomies" by narrowing the development gaps among its member-states. Despite being located in different countries, one of BIMP-EAGA's advantages is the strategic proximity of its focus areas.

It covers the entire sultanate of Brunei Darussalam; Kalimantan, Sulawesi, Maluku, and Papua in Indonesia; the federal states of Sabah and Sarawak and the federal territory of Labuan in Malaysia; and Mindanao and Palawan in the Philippines.

Given the economic and technological developments that unfold under the New Globalization, the characteristics of BIMP-EAGA could be an advantage in boosting trade in the subregion, which, eventually, can help Mindanao develop, according to Montenegro.

"BIMP-EAGA, as an economy, accounts for one-fifth of the total [gross domestic product] of the Association of Southeast Asian Nations region. *Ganun kalaki ang economy ng BIMP-EAGA* ," Montenegro said, adding that BIMP-EAGA's strength lies in being "a major food basket" as well as having the world's richest biodiversity areas.

Many have wondered how the Philippines, particularly Mindanao, can stand out given the many common


*Complementation of goods is key to boosting trade in the Brunei Darussalam-Indonesia-Malaysia-Philippines-East ASEAN Growth Area, says Mindanao Development Authority Deputy Executive Director Romeo Montenegro.*

characteristics shared by the four member-states.

According to Montenegro, many are asking what Mindanao can trade across borders considering that it produces the same thing as the others.

He, however, clarified that they are not looking at trading the same thing. "We are looking at complementation [of products]" by producing goods and products that are needed in other member-states, he added.

Montenegro also urged the region to participate in the global value chain by capitalizing on the agriculture sector, saying that this can "create a dent in terms of reducing poverty in the region".

According to Montenegro, instead of competing in areas that are beyond their core strength, such as production of semiconductors and electronic products, led by the CALABARZON (Cavite, Laguna, Batangas, Rizal, and Quezon) region, Mindanao can focus on capitalizing on its strength—"the agri sector where 40 percent of the country's food trade comes from". About "60 percent of jobs created in Mindanao are related to the agriculture value chain," he added.

Montenegro likewise highlighted the importance of the ASEAN production network and cited the case of a vehicle, such as Toyota Innova, which is a Japanese brand, but with some parts assembled in Indonesia, rubbers from Thailand, and other electronic parts from several other countries.

## Prioritizing connectivity

The promising future of Mindanao under the BIMP-EAGA could only be realized if the region's connectivity—transportation and communication—to other member-states is improved, Montenegro emphasized.

He urged the national government to provide the necessary infrastructure support to Mindanao, lamenting the minimal financial resources allocated to the region.

"Up until today, Mindanao is only getting 12 percent of the national budget. [For] the Department of Transportation budget alone, 90 percent is in Luzon [while] only 3 percent is allocated to Mindanao. At least, [with the] Department of Public Works and Highways, 40 percent of the annual public works budget is already allocated to Mindanao," Montenegro said.

He noted, however, that with the creation of the BIMP-EAGA Vision of 2025, "around USD 21 billion worth of projects were identified" with half of it accounting for infrastructure projects in Mindanao and Palawan.

The MPRF is a regular event jointly undertaken by the Philippine Institute for Development Studies (PIDS) and MinDA, in partnership with a local university. This year, PIDS and MinDA collaborated with Mindanao State University–General Santos campus. Launched in 2015, the MPRF is part of a series of activities organized every September to celebrate the Development Policy Research Month. **GBDC**

# Improve policy implementation to counter worsening inequality

*Focus on policies addressing the problem of the poor to address inequality, expert says. (Photo by Marcin Gabruk/Flikr)*

THE POOR IMPLEMENTATION of policies drives global inequality into its worse condition.

Dr. Lucas Chancel, co-director of the World Inequality Lab and World Inequality Database at the Paris School of Economics, emphasized this during one of the break-out sessions of the fifth Annual Public Policy Conference (APPC) organized by state think tank Philippine Institute for Development Studies (PIDS).

"The rise of global inequality is not a deterministic by-product of globalization or technological process but is the result of policies pursued by countries, such as changes in tax policies, investment policies, and education policies," he said. "Inequality is not about trade or technology per se," Chancel explained.

The *2018 World Inequality Report* showed an increasing trend in global inequality since 1980.

This is despite the high economic growth in emerging economies like India, China, and Russia and areas like North America and Europe.

Income inequality refers to the degree to which total income is distributed unevenly throughout a population. According to the Organisation for Economic Co-operation and Development, it is an indicator of how material resources are distributed across society.

## Uneven income distribution

The rise in global inequality could be attributed to income growth that is concentrated mainly among the higher income level or the rich, which constitutes only a small portion of the population.

However, this growth at the top is not "necessarily meaningful" as this only represents 1 percent of the global population, according to Chancel.

Instead, the focus should be whether this "growth is happening at the bottom 50 percent," or among the poor, he added.

Chancel highlighted the important role of policy in shaping the inequality outcomes of countries.

He cited the case of the United States (US) and Western Europe—two regions with relatively similar ways in trade and technologies but radically followed divergent paths since 1980.

The story of China and India is relatively similar.

According to Chancel, although the top income distribution of China and India has very similar growth rates, the share of the bottom 50 percent in China—referring to the poor—"grew at a much faster rate than in India".

This is due to policies pursued by China, such as investments in education, health, and infrastructure in rural China, which were not done at the same extent in India.

## Inequality in Asia

Presenting on the regional perspective on inequality, Donghyun Park, principal economist at the Asian Development Bank (ADB), reported that there is a growing inequality in Asia despite the recent economic growth in the region.

Park explained that inequality in Asia is an effect of technological progress, international trade, and economic growth. Advances in technology, particularly information and communications technology, drive economic growth in the region.

The Asian region showed “impressive record of growing rapidly in terms of gross domestic product,” Park said. As a result, “poverty reduction has been unprecented in the last 40 years,” he added.

“The crucial thing is not the change in technology but how the economy adjusts,” Park said.

It must be emphasized, however, that “the growing inequality and poverty reduction are two different things,” according to Gabriel Demombynes, program leader for Human Development for Brunei, Malaysia, Philippines, and Thailand of the World Bank.

Inequality and poverty, though different concepts, “are very much related. Inequality has an impact on poverty,” Demombynes explained.

## Inequality in PH

In the Philippines, poverty continues to drop but at a slow pace.

“Overall, there is “relatively little progress in the Philippines compared to the rest of the Asian region, considering the relatively higher economic growth,” Demombynes said.

The Philippines ranked as one of the most unequal countries in the world where 1 percent of the country’s population owned more than half of the country’s wealth.

*Asian Development Bank Principal Economist Donghyun Park claims technological progress as one of the causes of worsening inequality in Asia.*

Demombynes also reported that more than half of the country’s population is poor in areas most affected by conflict and natural disasters. Further, climate change would have an extreme impact on economic growth resulting in many Filipinos not moving from poverty to middle-income class.

## Policies matter

To fully understand income gaps and come up with the right policies in addressing inequality, “we need to be more transparent in income inequality,” Chancel said. It should “start with the democratization of economic data”.

“The objective is not to make everybody agree on inequality but to allow transparent, sound, and relevant economic data to be shared and used by everyone, especially by policymakers, media, and researchers,” he added.

The government should make these statistics public with the help of the United Nations to have essential and appropriate policy responses to these trends,” Chancel emphasized.

If governments are to invest in the future in education, environmental protection, health, and infrastructure, public debt needs to be reduced. “Progressive wealth taxation and debt relief have been successful measures to reduce debt and empower a generation,” Chancel further explained.

This is supported by Park, who urges the government to “help the economy adjust to the technological revolution by making the labor market "more flexible to protect workers and industries".

According to Park, the critical response to technological changes is "flexible labor markets, training and retraining of workers, and investing in ICT".

PIDS Senior Fellow Roehlano Briones offered that another solution to reduce poverty and inequality is the movement of workers out of agriculture as revealed in his study on "Wage gap between male and female agricultural workers: Analysis and implications for gender and development policy".

"The shift from agriculture to nonagricultural employment could cause structural change since it will shift workers to a higher-paying job and indirectly raise wages among remaining workers in agriculture," Briones explained.

Farmers in the Philippines mostly belong to the lower income bracket of society with an average income of PHP 100,000 per year or just over PHP 8,000 a month per the Family Income and Expenditure Survey.

"The overarching priority should be to upgrade public administration" and this includes improving implementation of services and public procurement practices, Demombynes concluded. **JOA**

# 'Globotics' to impact employment, future of work, says expert

'Globotics' will highly affect not just jobs in the manufacturing sector but also employment in the service industry.

This is according to Professor Richard Edwin Baldwin of the Graduate Institute of Geneva during the fifth Annual Public Policy Conference organized by the Philippine Institute for Development Studies (PIDS) in September 2019. Baldwin is the author of the book ,"*The Globotics Upheaval: Globalization, Robotics, and the Future of Work*", which tackles the role of digital technology in driving both globalization and automation of service and professional jobs in advanced economies.

Machines and computers in this era can now "read, write, see, speak, understand speech, create visual outputs, and recognize subtle patterns", which makes some human tasks redundant, Baldwin said.

'Globotics' is a term coined by Baldwin from the words "globalization" and "robotics". According to the World Economic Forum (WEF), Globalization 4.0 is a phase characterized by major shifts in technology, geopolitics, environment, and society while robotics refers to the automation of complex series of actions, usually performed by programmable machines.

A 2016 WEF report on "*The Future of Jobs"* predicted that about 7 million jobs will be lost in the coming years due to automation, while around 89 percent of workers in the

business process outsourcing sector, a key sector in the Philippines, are at high risk of being replaced by computers.

“This is the biggest breakthrough [in the world today]. Automation is now touching a whole range of service sector tasks, which were previously in the exclusive domain of humans,” Baldwin pointed out. “This time, software robots are competing with professional workers,” he added.

For instance, advanced economies are starting to use the Robotic Process Automation (RPA) in processing customer requests and feedbacks. RPA opens emails from customers and read them using machine learning tools to figure out the needs and demands of these customers. Baldwin said it works faster and records everything, which lowers the incidence of “untraceable fat-finger mistakes” usually committed by human employees.

Many big companies are also beginning to use remote intelligence and artificial intelligence (AI) platforms in performing complex tasks such as business auditing. “[T]hey have humans collecting information (e.g., billing, records), and they have people processing it. The data are then fed to an AI platform to look for inconsistencies in billing, shipment, and other processes. In the end, a real accounting takes over, but one aspect of the accounting service job is being done by a high-end, white-collar robot,” Baldwin explained.

These developments are being accelerated by digital technology, which, according to Baldwin is launching globalization and robotics in a new direction.

## Shift to telemigration

Digital technology has paved the way for domestic telecommuting. In rich countries, companies are changing their structures and are using cloud-based collaborative software to make it easier to integrate workers who are remote or those who are not “physically present” most of the time.

Baldwin, however, cautioned that hiring foreign-based remote workers will not be as good as having domestic workers in place, although it will be cheaper. He projected that there will be more telemigration—a term he invented to describe “people sitting in one nation and working in offices in another”—activities in the future. This means workers in the service sector will have direct wage competition with low-cost foreigners working abroad.

Apart from domestic telecommuting, people are now working remotely through online freelancing platforms (e.g., Upwork, eBay/Alibaba, Amazon, Fiverr, Witmart). Anybody who has an internet access and connection can buy and sell goods and services online. To keep up with the demands of consumers, many companies are now setting up outsource services abroad in a more organized way through these platforms.

Further, advanced telecoms, such as telepresence system and augmented reality, virtual reality systems, and holograms, also made it possible for workers in different locations to work together, as if they are actually in the same place.

## Where do humans fit in?

Based on a study conducted by the McKinsey Global Institute, 81 percent of “predicted physical activities”, 69 percent of data processing activities, and 64 percent of data collection activities can be automated. However, it also identified human activities that are difficult to automate. These include managing and developing people, or expertise that would involve decisionmaking, planning, creative work, ingenuity, ethics, and interfacing with stakeholders.

According to Baldwin, service sector workers have a more flexible skill set, which makes it easier for them to look for another job. “Many service sector workers in rich countries are already in services where there is a possibility of getting [other type of] employment,” he said.

He also argued that not all human tasks can be done by an AI. “Machine learning is the jet engine, but big data is the jet fuel. This means that many of the tasks performed by humans do not involve clear questions and outcomes, therefore, you cannot capture a large data set. Consequently, you cannot train an AI or a machine to do it,” he said.

Moreover, Baldwin maintained that future jobs would require people to be in the same room, either face-to-face with one another or with the aid of a machine, which telemigrants or robots cannot do. RTT

# Study examines immediate and long-term impacts of rice tariffication

*Rice tariffication benefits rice consumers in the long run, according to Roehlano Briones, senior research fellow at the Philippine Institute for Development Studies. (Photo by Adam Cohn/Flickr)*

AMID CALLS TO amend or repeal the Rice Tariffication Law, a study released by state think tank Philippine Institute for Development Studies (PIDS) sheds light on the immediate effects and long-term impacts of the law.

Speaking at a recent forum organized by PIDS and the House of Representatives' Congressional Planning and Budget Research Department (CPBRD), the author of the study, PIDS Senior Research Fellow Roehlano Briones, said that "it is better to take a long-term perspective in assessing the impact of the law rather than be distracted by the short-term aftermath of its implementation."

"It is difficult to pin down the impact of a policy based on a very short period, such as looking into it on a month-to-month or quarter-to-quarter basis," he maintained.

Based on his initial simulation, Briones noted that rice consumers, on average, stand to gain about PHP 197 billion every year for the first five years of the implementation of the law, or a total of about PHP 2.26 trillion in the next 10 years.

The biggest gainers in real terms, he said, are those in the top income groups, getting approximately PHP 367 billion. Meanwhile, the poorest group, or those in the lowest income decile, is estimated to gain PHP 87 billion.

In terms of the rice tariffication's impact on the average household expenditure projected over 10 years, these benefits represent only a 1.8-percentage change—bigger among the poorer households at 2.4-percentage points and lower for the richer households at about 1-percentage point.

"Looking at this perspective, we can say that the law is a propoor policy. Considering that not all farmers are into *palay* farming and have to purchase their rice from the market, they are also likely to benefit. Thus, we can say that law is also a profarmer policy," Briones explained.

The PIDS researcher projected that with the law in place, rice imports will grow at 52.8 percent annually in the first five years, tapering off to about 5.4 percent from 2020–2025, or an average of 29.1 percent in the next 10 years.

The projected increase in rice imports, he pointed out, will bring down rice production in the country at an average of 4.3 percent in the next 10 years, with the impact leveling off during the latter part of the decade.

Area harvested for rice is also expected to decline by 1 percent annually for the next 10 years.

In terms of the law's impact on farmers' income, Briones estimated that farmers stand to lose about PHP 7.5 billion per year, rising to PHP 13 billion per year in the latter part of the decade, or an average of PHP 10 billion per year.

This amount, he noted, coincidentally matches the rice fund enshrined in the law as a form of compensation to farmers.

"Our analysis of the law's impact points to some losses to palay farmers. This was expected. In fact, the law has provided PHP 10 billion per year as rice fund, which serves as a safety net within the law to offset these expected losses to farmers," Briones explained.

## Why tariffy rice?

The Rice Tariffication Law, which took effect in March 2019, lifted the quantitative restriction (QR) on rice and replaced it with a general tariff.

It also stripped the regulatory function of the National Food Authority, leaving it with a limited mandate of maintaining rice buffer stock specifically for emergency purposes, with stock to be procured from local farmers only.

According to Briones, the decision to control the amount of imported rice in the market through QR has created a big gap between the domestic and world border prices for rice.

This means that Filipino rice consumers have been paying twice as much as their Vietnamese or Thai counterparts.

In October 2018, the high retail prices of rice were also blamed for the rising inflation, shooting up to a high of 6.7 percent in October 2018, a few months prior to the signing of the law.

Meanwhile, for September and October 2019, the Philippine Statistics Authority reported an inflation rate of 0.9 percent and 0.8 percent, respectively, owing to the decline in food and beverage index, with rice index alone dipping by 9.7 percent.

The prices of well-milled rice in September 2018 averaged at around PHP 49 compared to PHP 42 in September 2019.

Briones further emphasized that the law did not liberalize rice trade in the country, as tariffs are still collected from rice imports.

Under the law, a 35-percent tariff is imposed on rice coming from member-countries of the Association of Southeast Asian Nations (ASEAN), such as Thailand and Viet Nam, 40 percent for rice imports within the minimum access volume (MAV) of 350,000 metric tons coming from non-ASEAN countries, and 180 percent for those above the MAV and coming from non-ASEAN countries.

## Compensation to farmers

To allay fears of dislocation of rice farmers, the law provides for a safety net in the form of the rice competitiveness enhancement fund or Rice Fund, amounting to PHP 10 billion per year, plus any tariff revenues in excess of said amount, over the next five years.

Specifically, the Rice Fund allocates PHP 5 billion for the provision of rice farm equipment as grants-in-kind to rice farmers' associations, rice cooperatives, and local government units to be administered by the Philippine Center for Postharvest Development and Mechanization (PhilMech).

Another PHP 3 billion is intended for the development, propagation, and promotion of inbred rice seeds, and organization of rice farmers into rice seed growers' associations or cooperatives to be administered by the Philippine Rice Research Institute (PhilRice).

In addition, PHP 1 billion will be provided as rice credit assistance with minimal interest rate and collateral, to be implemented by the Land Bank of the Philippines and the Development Bank of the Philippines, and the remaining PHP 1 billion for the development of rice extension support and for teaching skills on rice crop production to rice farmers through farm schools. The Technical Education and Skills Development Authority receives the bulk of the allocation, along with the Agricultural Training Institute, PhilRice, and PhilMech.

Should the revenues collected from rice tariffs exceed PHP 10 billion, the law provides that said amount be allocated as financial assistance for rice farmers cultivating not more than two hectares, rice land titling, expanded rice farmer insurance, and productivity enhancement assistance to rice farmers who wish to diversify out of rice farming.

In recent months, rice farmers have seen declining buying price of palay, which many associate with the implementation of the law.

Briones advised the government to focus its efforts on providing offsetting compensation to rice farmers, who have been losing income from the reform.

In particular, he urged the government to accelerate the delivery of compensation to palay farmers hit by tariffication.

Likewise, he pointed out the need to investigate the state of competition in rice marketing and diligently enforce competition policy in the rice industry.

He hinted that although retail prices are going down, the decline has been not as fast compared to the fall of buying prices for palay.

For example, he pointed out that in October 2019, the wholesale price of Viet Nam white rice, the most common type of rice exported to the Philippines, was still around PHP 38 compared to its border price of about PHP 20 per kilogram.

Applying tariffs and freight and port costs, Briones suggested that the wholesale price of this type of rice should have only been around PHP 27 per kilogram.

"I suspect there is something wrong and this should be investigated so that consumers would feel the benefits much quicker," he suggested.

Since 1999, the PIDS and the CPBRD have been holding knowledge-sharing seminars for legislators and their staff on topics helpful in crafting evidence-based policies. **GGM**

# People-led PH housing key to solving backlog

STRONG ENGAGEMENT OF people's organizations in local housing boards (LHBs) will help fast-track the socialized housing projects of the government for informal settler families in major cities, a study by the state think tank Philippine Institute for Development Studies (PIDS) suggests.

"The role of LHBs should be expanded to that of a mobilizer of the peoples' plan, enabling the implementation of community housing projects", said Marife M. Ballesteros and Jenica A. Ancheta, PIDS vice president and research analyst, respectively, and authors of the study "Participatory governance in the delivery of housing services: The case of Local Housing Boards in the Philippines".

The authors have stressed the need for cities and municipalities to maximize the potential of LHBs in delivering efficient housing services for underprivileged Filipinos.

As of 2018, at least 3.6 million Filipinos in urban areas are living in informal settlements according to Philippine Statistics Authority data.

The country's current housing backlog, meanwhile, stands at about six million.

The authors advised local governments to maintain transparency and ensure that communities are equally represented in their respective LHBs to make the local shelter plans of cities more efficient and people-inclusive.

People's organizations should be involved in the decision-making process through "their greater representation and the inclusion of legitimate concerns and suggestions in board decisions", the authors said.

## Varying functions

Examining three cases of highly urbanized cities in Metro Manila, namely, Quezon City, Pasig City, and Manila, the PIDS study found that the functions of LHBs vary by location.

Among the three LHBs, only LHB of Quezon City was able to "build trust between the local government and the people's organizations", the authors observed.

"The process of deliberation in the LHB shows that a good relationship has been developed between the Quezon City government and the people's representatives," the authors said. The role of the LHB has also been expanded to other aspects of shelter development such as involving peoples' organizations in developing the city's local shelter plan.

This indicates that participatory governance in housing is at work in the city.

Providing regular funding for socialized housing programs is also critical in building the community's confidence in government's housing programs for the marginalized sectors, the authors added.

By continuing its initiative, the Quezon City LHB could also encourage the strong commitment of communities in terms of projecting outputs, apart from resulting in more acceptable housing projects for the people.

On the other hand, the authors claimed that the main objective for the creation of LHBs in Pasig City and Manila was to take advantage of its clearinghouse function for the eviction and demolition activities of informal settlers in urban-poor communities.

"In the case of Pasig and Manila Housing Boards, the participation of the people organizations and nongovernment organizations in the decision-making process is minimal," the authors said.

While the foremost task of LHBs was to develop, implement, and monitor policies on the provision of low-cost housing and mass dwelling projects, LHBs in other cities solely serve their clearinghouse function, the authors explained.

Often, the LHB is only convened when the need arises. It is "a last resort when incentives or proposals of the local government fail to work. Thus, the essence of participatory governance is not present [there]," the authors said.

In 2008, Executive Order 207 directed the transfer of the clearinghouse function from the Presidential Commission on the Urban Poor to the local government units (LGUs). The same order paved the way for the institutionalization of LHBs across different cities and municipalities in the Philippines.

To this day, meanwhile, LHBs in some cities can only act as "a forum for discussion between affected communities and different government sectors", said Ballesteros and Ancheta, who also noted that other LHBs have remained inactive for years, while some appeared to have emerged only for the sake of compliance.

"Some LHBs lack the required number of members while others have no regular representatives from the civil society or the community," the authors said. **EGR**

Photo by chrisinplymouth/Flickr

# Niche markets, indirect exporting to boost SMEs chance of global success

*Finding the right market is the key to the country's small and medium enterprises' success in the global value chain, according to Tristan Canare, consultant at the Philippine Institute for Development Studies.*

SMALL AND MEDIUM ENTERPRISES (SMEs) should target new market niches where competition is still low or consider indirect exporting to successfully enter the foreign market.

This, according to Tristan Canare, consultant at the Philippine Institute for Development Studies (PIDS) and coauthor of the study on "Obstacles and enablers of Philippine SMEs' participation in global value chains (GVCs)", during a public seminar organized by PIDS.

Canare revealed that only 1.3 percent of 530 SMEs in Metro Manila in 2016 are connected to GVCs.

SMEs, including micro enterprises, comprise 99.5 percent of all firms in the country. However, despite this large share, their contribution to the total economic output has remained low at only about 36 percent according to the 2018 List of Establishments by the Philippine Statistics Authority.

GVC, which refers to activities performed by firms and workers in multiple offshore locations to bring a product or service to end use, is known to promote human capital development, and transfer of information and technology, which can lead to job creation and economic growth, according to the World Bank.

According to Canare, SMEs that are able to latch on to GVCs are "able to access wider markets, better technologies, and positive spillovers from other firms in the chain".

However, SMEs are faced with a host of obstacles in penetrating the global market.

## Tough market competition

The tough competition in the Association of Southeast Asian Nations (ASEAN) and East Asian markets remains a big challenge for many local SMEs.

Unlike their foreign competitors in the region that are able to sell products at more competitive prices due to their low cost of labor and mechanized production processes, Philippine SMEs lack the ability to mass-produce. As such, they "fail to meet large market demands abroad" and unable to "take advantage of the economies of scale" that could allow them to sell their products at lower prices.

Further, SMEs in other countries benefit from the support provided by their governments.

However, Canare clarified that the strong competition abroad should not hinder Philippine SMEs to participate in the global markets. "They cannot do anything about the lower cost of labor in competitor countries and the bigger support that these SMEs are receiving from their governments", he said.

Instead, he advised SMEs to "target the right market where they can establish early mover advantages".

Canare also warned SMEs to avoid investing in equipment with high asset specificity or those designed to perform a limited function. Consumer tastes and preferences as well as market conditions can change quickly, thus, SMEs should be able to adjust quickly to such changes.

"A footwear manufacturer, for example, should avoid acquiring a machine that can only produce one type of shoe. Similarly, a clothing producer should refrain from buying equipment that cannot manufacture different types of clothes," he elaborated.

## International standards and regulations

Before SMEs can be part of the GVC, they often need to hurdle various regulatory requirements and meet international standards, which can be costly.

"Most SMEs do not have the capital" needed to secure the necessary export permits and certifications, Canare said. Given their small capital, SMEs are mostly "risk-averse and lack entrepreneurial mindset and skills" to expand their business, he added.

This is partly due to lack of social protection. "They do not have fallback or safety net in case an investment produces negative returns, so they are reluctant to invest in something that is new and unfamiliar," Canare explained.

Further, inefficiencies in ports and customs operations, and sometimes, even corruption issues, unnecessarily increase the costs for SMEs.

A study by PIDS on "Nontariff measures in the Philippines: A preliminary stocktake of incidence and linkages with imports" also points to the unnecessary delays, numerous administrative windows or redundant documents, informal payments, and unusually high fees and charges as major obstacles to SMEs' participation in global trade.

"Procedural obstacles—not regulations by themselves—are hampering import-export trade," said PIDS Senior Research Fellow Francis Quimba, author of the study.

Thus, he advised the government to hasten the completion of the Philippine National Single Window to improve trade facilitation and reduce the procedural obstacles related to import licensing and issuance of permits.

On the other hand, Quimba noted that there are NTMs that help increase exports and expand markets. Process and product NTMs, for example, help in ensuring that the quality of exports is aligned with global standards.

## Indirect exporting

SMEs' lack of access to market information, particularly in export destination countries, is likewise a hindrance to penetrating foreign markets.

SMEs in the Philippines do not know the "demand of consumers". "They also have difficulty accessing inputs, including skilled labor," Canare noted.

One way to overcome this, according to Canare, is through indirect exporting, which is done through consolidators—a third party that buys export-quality products from local producers and sell these products in countries where demand exists.

By providing inputs to large firms or foreign companies, local SMEs can be indirectly involved in exporting. These inputs may be in the form of supplies or services through outsourcing or subcontracting arrangements.

Thus, Canare advised SMEs to take advantage of available platforms provided by the government such as the *Negosyo* Centers and *Kapatid* Mentor Me Program to improve their entrepreneurial abilities.

In addition, SMEs may also connect to GVCs by linking with large domestic firms and multinational enterprises that typically supply their products or services to exporters or local offices of foreign enterprises. SMEs may also enter into formal agreements, such as subcontracting or outsourcing, with foreign or large domestic firms to penetrate the global market.

Canare, however, revealed a weak connection between SMEs and large domestic firms, "with only 23.4 percent of those surveyed indicated that they sold to large firms" while "only 14.5 percent were involved into formal agreements with a large domestic business or a foreign firm."

Canare coauthored the study on "Obstacles and enablers of Philippine SMEs participation in global value chains" with Jamil Paolo Francisco and Jean Rebecca Labios of the Asian Institute of Management-Rizalino S. Navarro Policy Center for Competitiveness. GGM

# Promise of smart cities in the Philippines

The country has to improve its information and communications technology infrastructure, among others, to participate in the smart city movement.

VARIOUS ISSUES, SUCH as traffic congestion, air pollution, and corruption, still hound many of the Philippine urban areas.

Recently, the country's transport situation was at the center of debate after consecutive glitches in the train lines in Metro Manila. While there remains a disagreement whether Manila is experiencing a transportation crisis or not, one cannot deny that travelling within Manila has been an arduous task. The recent *Asian Development Outlook* suggests that transport congestion exists in Metro Manila. According to Japan International Cooperation Agency, Manila congestion alone costs the country around PHP 2.4 billion daily. On top of this, urban dwellers are confronted with other challenges, such as unaffordable and inadequate housing, unreliable supply of water, and expensive energy.

Urban areas are instrumental to a nation's economic growth, where most of the employment opportunities, business activities, and government services converge. These associated gains attract city-ward migration. Unfortunately, this surging urban population has strained the already limited urban resources and infrastructure of the country. With lack of planning and strategies, these urban dilemmas will remain, if not worsen, as the urban population continues to rise. The trend remains true for the Philippines, where the United Nations estimates that more than 75 percent of the country's population will be living in urban areas by 2030. Amid the worsening urban problems, there has been an increasing move toward smart city initiatives.

## The smart city movement

Smart city turns to digital solutions to address city problems and make cities livable. It uses digital technologies to collect data, connect citizens and infrastructures, and analyze data to come up with basis for action toward intended outcomes, such as reduced commuting time or more housing options.

Despite its merits, the smart city approach is often criticized for being purpose-built for wealthier cities and ill-suited to the realities of poorer cities. One possible reason is that the deployment of smart city technologies can be dependent on existing infrastructure not available in developing economies. An important infrastructure requirement of smart cities is the information and communications technology (ICT) infrastructure, including network connectivity and reliable broadband.

So how does the Philippines fare in terms of these requirements? The country's *National Broadband Plan* shows that the Philippines ranks behind its neighbors in the Association of Southeast Asian Nations (ASEAN) in terms of affordability, availability, and speed of internet access. Likewise, the *2016 Global Information Technology Report* shows that the Philippines has much to improve in terms of its capacity to leverage on ICTs for increased competitiveness and well-being. A study on "Going digital: From innovation to inclusive growth in the Philippines" by Dr. Francis Mark Quimba and Sylwyn Calizo Jr., senior research fellow and research assistant at state think tank Philippine Institute for Development Studies, also notes that prices of ICT services in the Philippines are among the highest in ASEAN.

On the other hand, the country can boast of its rapidly growing internet population. According to Internetlivestats.com, the Philippines has more than 44 million internet users nationwide. Furthermore, OpenSignal's *State of LTE Report* shows that almost 70 percent of the internet users can access a 3G or 4G signal. However, compared to its ASEAN peers, the Philippines still falls behind in terms of broadband speed, according to the *State of the Internet Connectivity Reports 2015–2016* of Akamai.

In recent years, urban technologies have grown in the Philippines, considered to be part of smart city applications. These are in the form of applications, such as the ride-hailing platforms, peer-to-peer accommodation, online retraining programs, and cashless payment methods. Digitalization has also reached health services, with applications for online care search and scheduling or remote patient monitoring and telemedicine, according to Quimba and Calizo.

## Initiatives in the Philippines

In its report, *Smart Cities in Southeast Asia*, McKinsey Global Institute (MGI) presents the possible starting points for smart city adoption for cities, like Metro Manila. The report categorizes Manila as a "prime mover" or city with major physical and social infrastructure but is often strained beyond capacity and exhibits significant inefficiencies. For this city category, smart technologies can be utilized in a way that they retrofit existing infrastructure. An example is sensor-informed predictive maintenance, which can optimize the operation of existing mass transits. Smart city initiatives are financially viable for these cities given their scale. In the Philippines, there has been increasing interest in the smart city approach, as seen in recent developments in various parts of the country.

For instance, two new smart cities are on the rise in the country. First is the New Clark City, envisioned as a smart and disaster-resilient city north of Metro Manila. It plans to have an integrated operations center that will coordinate all utility operations and facilitate remote management of various city operations. The city also plans to introduce driverless cars. Within Metro Manila, another massive smart city project is underway, namely, the New Manila Bay City of Pearl, which aspires to be the first smart city in Southeast Asia with artificial intelligence integrated into the smart grid. It also plans to establish a driverless light rail transit for an environment-friendly and efficient mode of transportation.

The cities of Cebu, Davao, and Manila are also members of the ASEAN Smart Cities Network (ASCN). These cities' action plans toward smart city adoption are articulated

*Smart technologies, such as sensor-informed predictive maintenance, are seen to improve the state of mass transportation in the country, according to McKinsey Global Institute. (Photo by Daniel Go/Flickr)* in the *Smart City Action Plan* of ASCN. A common smart city technology proposed by these cities is the use of closed-circuit television (CCTV) or intelligent surveillance technology for improved public safety.

Cebu City's smart city action plan includes the installation of higher resolution CCTV cameras that can increase capability to detect crimes, the use of intelligent traffic control system, and the implementation of Bus Rapid Transit system for better traffic condition. For its part, Davao City aims to have intelligent surveillance and upgraded communication capabilities for improved public safety and intelligent transport and traffic systems with security. Lastly, the City of Manila envisions to use digital technology for better security and disaster response, as well as for online access to education and health services. For security domain, the Rehabilitation and Reorientation of Command Center to a cloud-based system is included in Manila's smart city action plan.

The Philippine Council for Industry, Energy, and Emerging Technology Research and Development (PCIERRD) has been pushing for smarter city development in the country. One of its recent projects is aimed at promoting the adoption of science, technology, and innovations for smart governance. Recently, it has awarded six municipal e-governance systems to the municipalities of Nabua and Bula in Camarines Sur.

## Concerns on smart city

There are various concerns regarding the adoption of smart city in the Philippines. These include the state of ICT infrastructure, governance and people's cooperation, digital divide, and data issues.

In terms of ICT infrastructure, the deployment of smart city technologies will depend on the roll-out of broadband. However, as reported above, the country has a relatively weak performance based on key ICT indices. Further, smart cities may also require a lot of sensors, actuators, and hardware, as well as intensive infrastructure for processing large amounts and variety of data. This means huge resources for infrastructure and upskilling of human resources for data processing. Nonetheless, given the government's vision as articulated in plans such as the *National ICT Ecosystem Framework (NICTEF)*, *National Broadband Plan*, and *E-Government Masterplan 2022,* which cover investments in infrastructure and capacity building, the country can expect significant improvement in its ICT status.

When it comes to governance, various reports point out to the weak public institutions and lack of capacity in many areas of governance as hurdles in improving the delivery of infrastructure and services in urban areas. Given the quality of governance the country has, one can only hope that leaders can manage digital technologies, integrate these new business models in governing cities, and collaborate with private technology service providers. At the end of the day, smart city requires visionary leadership from local leaders coupled with staff equipped with the necessary digital skills.


*The Philippine Council for Industry, Energy, and Emerging Technology Research and Development recognizes successful e-governance systems across the country to promote smart governance. (Photo from www.dost.gov.ph)*

Adding to the possible constraint is people's participation. Benefits of smart city will be seen if the applications are used by the intended users and the latter's behaviors are changed because of the information provided to them. The depth of diffusion of these technologies will depend on the willingness of the citizens and private firms to share their data. Given the perception of privacy risks, hesitation to share personal information is very likely.

Another concern is related to digital divide, wherein benefits of technologies may not be evenly distributed to different population groups. In addition, because the information from groups without access to technology is not captured, the aggregated data collected from the city may be distorted and may not accurately reflect the representative information from the population. This may have implication to unequal allocation of government funds. Nonetheless, the national government acknowledges the issue of growing digital divide and, through the NICTEF, various programs to bridge digital divide are underway.

Finally, data issues also linger, particularly those related to privacy, security, and data validity across many applications. Given that the common characteristics of smart city technologies are data collection and transfer to a network, these pose security and privacy risks as personal data may be prone to hacking. Another data-related risk relates to the validity of data. Data-driven decision may be theoretically better as it removes personal or political biases of the decision maker. However, how can we assess data validity in case the deluge of data come from distributed sources? In case of digital divide, there is undercoverage in data collection, which might lead to incorrect conclusion or unsound decision. Furthermore, decisions based on straightforward data analytics may undermine the intricacies of urban problems, which may be deeply rooted on culture and politics, factors difficult to capture.

## Ways forward

Urbanization will continue to increase but the cities can be left struggling to meet the demand of surging population sans sustainable and efficient solutions in managing cities. Globally, there is a large infrastructure gap constraining economic activities and challenging the daily lives of the people. Smart city initiative is one of the emerging trends in managing cities, a testament to the widening application of Fourth Industrial Revolution technologies.

Smart city offers digital solutions that can catch up to the rapidly rising urban challenges. It has potential impact to improve delivery of services, such as access to education and health, expedite government transactions, improve urban mobility, or even ensure public safety. However, there are downsides to the adoption of smart city initiatives. Critics argue that the approach is better suited to the realities of wealthier cities. For one, it is costly and requires reliable broadband, which the Philippines is still struggling at. The intensive data collection also raises privacy and security concerns. The heavy reliance of smart cities on digital technologies may reinforce the digital divide, favoring only the groups that have access to internet, devices, and applications.

Nonetheless, there are still opportunities for adopting smart city technology albeit at a modest scale. There is an increasing call to redesign smart city technologies to be more suited to the context of poorer cities. MGI argued that this kind of urban technologies are a game changer because they address a big market in Africa, Asia, and Latin America. The effectiveness of smart city approach in poorer cities requires contextualization of the realities of those cities. The deployment of technologies may be phased depending on the current situation of those cities. For its part, the Philippines has started some initiatives that follow smart city models. Urban technologies are also widely used. It also appears that Filipinos are comfortable sharing their data to address urban problems.

If the country will pursue a smarter city development, it should enhance its research capacity on innovative approaches. By capitalizing on research, it can move forward in its smart city agenda in a systematic way. The research should not be focused on technologies alone but should provide an understanding of the local realities. Blindly adopting smart city framework tested for developed country might lead to failure of smart city programs. Formulation of a smart city roadmap can be a good starting point. The roadmap will provide situational analysis and systematize and converge efforts from various adopters toward smart city development.

Amid reports of transport crisis in Metro Manila, smart city technologies in the transport sector can make a big difference. As an example, Metro Manila can invest in intelligent traffic lights installed with sensors and controls to optimize timing of road traffic. Later on, trackers can also be installed in vehicles to collect real-time traffic data, which can be analyzed to provide information on traffic conditions.

Moreover, the busiest rapid transit line in Metro Manila often suffers from breakdown, thus interrupting operations and delaying commute time. Sensors can be installed in railways and trains to perform sensor-informed predictive maintenance by monitoring condition and potential failure before the breakdown occurs. A more sophisticated technology to address congestion is dynamic congestion pricing, with the help of automated gates and digital payment systems, where private cars are charged with fees for plying through certain roads or hours. For existing urban technologies, such as smartphones and mobile applications, the government can think of ways of converging them in a more coordinated way to realize smart city application potentials. New technologies can be developed through cocreating solutions with academe and industries, which can address the concern over the high cost of digital technology applications and infrastructures.

*This article was written by Christine Ruth P. Salazar, a project development officer at the Philippine Institute for Development Studies.*

# Silver Linings for Seniors in the Philippines

THE PHILIPPINES IS on its way to becoming an aging population given its increasing number of people 60 years and older. With the higher prevalence of illnesses and comorbidities among senior citizens and considering that they are also less economically active compared to younger people, greater government support for their health care and income security is a necessity.

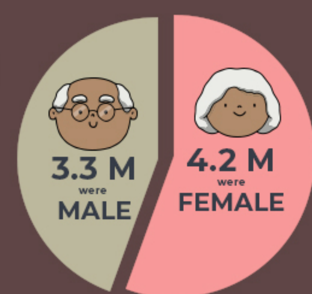
This infographic looks into the situation of senior citizens in the Philippines. It also analyzes the major government policies and programs for them and identifies the gaps in these programs. Finally, it discusses some ways to make the government's social protection programs for senior citizens more accessible and responsive to their needs. **GGM**

**Senior citizens** are defined in Republic Act 9994 as those persons aged **60 years or over**.

Based on the 2015 Census of Population and Housing by the Philippine Statistics Authority (PSA), there were about

**7.5 MILLION**
SENIOR CITIZENS.

This means that in 2015,
**7.5%**
of the total population were SENIOR CITIZENS




The share of senior citizens to the total population is expected to further increase to

**11.4%** IN 2030

**15.9%** In 2045

## Many senior citizens struggle with poverty

IN 2015,

| ABOUT **900,000** or (13.2%) of SENIOR CITIZENS belong to households classified as **INCOME POOR** | ABOUT **300,000** or (4.3%) of SENIOR CITIZENS belong to households classified as **FOOD POOR** | ABOUT **3.8 M** or (51%) of SENIOR CITIZENS completed at most **ELEMENTARY EDUCATION** |
|---|---|---|

SOURCES: Authors' estimates using merged Family Income and Expenditure Survey and Labor Force Survey, PSA; 2015 Census of Population and Housing

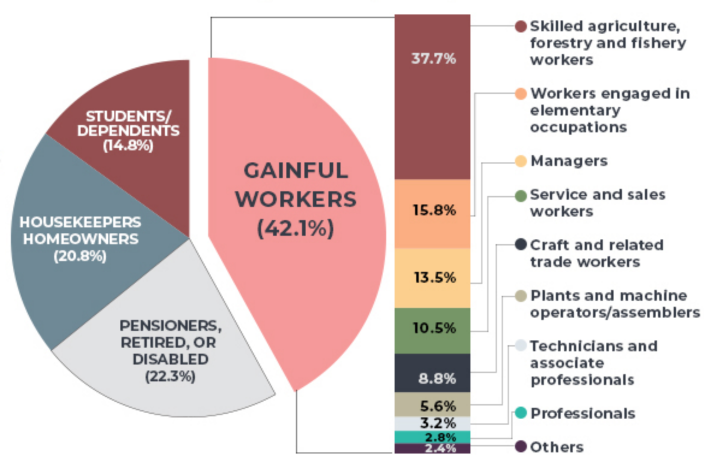
## Most senior citizens are in NCR and Regions 3 and 4-A

**4** in every **10**
SENIOR CITIZENS
reside in the National Capital Region (NCR), Region 3, and Region 4-A

SOURCE: Facts on Senior Citizens: Results of the 2015 Census of Population, PSA

## Less than half of all senior citizens have a job

Share of senior citizen population by usual activity or occupation, 2015




SOURCE: Facts on Senior Citizens: Results of the 2015 Census of Population, PSA

# Senior Citizens' Access to Social Protection Programs

**The government's social protection programs for senior citizens provide income support (i.e., through retirement packages, pensions, discount privileges, and tax incentives) and health-care support (i.e., through health-care insurance coverage by PhilHealth) to all senior citizens. How accessible are these programs? Do they address the needs of senior citizens?**

**5.7 M**
or about
**7 IN EVERY 10**
senior citizens
**ACCESSED**
at least one of the income support programs (SSS, GSIS, Social Pension) or PhilHeath in 2017

**2.5 M**
or about
**3 IN EVERY 10**
senior citizens
**ACCESSED**
PhilHealth + at least one of the income support programs

**26.8%** of FEMALE

**34.4%** of MALE

senior citizens
**ACCESSED**
PhilHealth + at least one of the income support programs

*Source: Authors' estimates using data from* 2017 Annual Poverty Indicators Survey

# Making Social Protection Programs More Accessible and Responsive to the Needs of Senior Citizens

**1**

### PROMOTE EMPLOYMENT OF WOMEN IN THE LABOR FORCE

Since contributory pension programs of the government are only accessible for those previously employed, being employed may improve women's access to social protection programs when they reach the age of 60. Likewise, a nonworking woman who is managing the household and family affairs full time and whose spouse is employed and actively pays Social Security System (SSS) contributions may avail of a voluntary coverage under the SSS.

**2**

### INCREASE AWARENESS OF SENIOR CITIZENS OF THE GOVERNMENT'S SOCIAL PROTECTION PROGRAMS

Focus must be given to poor senior citizens and those in disadvantaged sectors to identify and address any access issues to these programs.

**3**

### IMPROVE THE TARGETING SYSTEM FOR SOCIAL PENSION FOR INDIGENT SENIOR CITIZENS

Given the government's limited budget, the high leakage rate (e.g., inclusion of beneficiaries that are already receiving other forms of pension and those belonging to the richest income ladder) serves as a barrier to indigent senior citizens not enrolled in the program. Having a comprehensive database of senior citizens and a better targeting system may improve access of indigent seniors.

**4**

### INCREASE THE MONTHLY STIPEND OF INDIGENT SENIOR CITIZENS

The PHP 500 monthly stipend may not be adequate to sustain the daily needs of indigent senior citizens, particularly if given only every six months. The government should revisit the amount and the frequency of payouts of the social pension program.

This infographic is based on PIDS Discussion Paper Series No. 2019-09 titled, *Silver Linings for the Elderly in the Philippines: Policies and Programs for Senior Citizens*, written by Celia M. Reyes, Arkin A. Arboneda, and Ronina D. Asis, PIDS president, research specialist, and executive assistant, respectively.

**POLICY ISSUE AT A GLANCE**

# RESEARCH DIGESTS

### PJD 2017 Vol. 44 No. 1

**Philippine Journal of Development Vol. 44, No. 1**
by *Various Authors*

This volume of the *Philippine Journal of Development* revisits some of the government policies specifically designed for those in the margins, namely, the farmers, rural poor, and the children. The first article tackles the varied prices of urea fertilizer across the regions of the Philippines, while the second article presents the chronic food poverty in rural areas and its association with weather condition in the area. Completing this volume are studies on social protection and healthcare coverage among the Filipino children and the impact of foreign linkages on innovation activity of manufacturing firms in CALABARZON.

### RPS 2019-04

**Senior High School and the Labor Market: Perspectives of Grade 12 Students and Human Resource Officers**
by *Aniceto C. Orbeta, Marites B. Lagarto, Ma. Kristina P. Ortiz, Danica Aisa P. Ortiz, and Maropsil V. Potestad*

This study assesses the likelihood of achieving the employment and entrepreneurship objectives of the program by examining the experience of Grade 12 graduating students and the views of firms about the labor market prospects of the SHS graduates. It does this by looking into the SHS curriculum and the competencies developed among the graduates, identifying the types of jobs that fit the Grade 12 graduates, gathering the private sector perspective on the jobs available and appropriate for the Grade 12 graduates, and providing policy recommendations for improving the implementation of the SHS program. The study revealed that despite identifying employment and entrepreneurship as a rationale for the program, three quarters of the Grade 12 students plan to proceed to higher education. Among the highlights of the focus group discussion with students is the revelation that they are not very confident that they will get a job after graduating from SHS. Meanwhile, most of the firms lack in-depth knowledge of the SHS program.

### PN 2019-11

**Effects of TRAIN Fuel Excise Taxes on Goods and Prices**
by *Czar Joseph Castillo, Ramon L. Clarete, Marjorie S. Muyrong, and Philip Tuaño*

In January 2018, the first package of the Tax Reform for Acceleration and Inclusion (TRAIN) Law took effect, adjusting, among others, the excise tax rates on fossil fuel and petroleum products. This *Policy Note* discusses the impacts of such adjustment on productive activities and prices across the economy. It finds that the increase in fuel excise taxes would have a slight impact on sectoral outputs and prices, and therefore on household welfare through incomes and employment. Sectors that are energy-intensive would also see a slight decline in output and there would be a slight increase in poverty given higher prices. Nonetheless, the tax reform would also lead to increased economic activity following increased consumption brought about by lower income tax rates, especially among the highest income deciles.

### PN 2019-10

**Impacts of TRAIN Fuel Excise Taxes on Employment and Poverty**
by *Czar Joseph Castillo, Ramon L. Clarete, Marjorie S. Muyrong, and Philip Tuaño*

This *Policy Note* discusses the impacts on poverty and employment of the increased fuel excise tax rates under the first package of the Tax Reform for Accelerated Inclusion (TRAIN) Law. Among others, it finds that the general price increase resulting from new excise tax rates on fuels slightly increased poverty incidence, particularly among farmers and transport workers. Nonetheless, the law's provision on unconditional cash transfer mitigated such increase in poverty. In terms of employment, the net effect was positive, wherein the total employment still grew. Still, employment in some sectors suffered from reduced level of economic activities. Although overall employment may still increase, the transition from one work to another may become costly for some workers. To address this issue, this study calls for the crafting of active labor market policies, such as direct employment creation, and passive labor market policies, among others.

### PN 2019-09

**Strengthening Institutional Links for Irrigation Water Governance**
by *Agnes C. Rola*

Despite huge irrigation investments, the performance of the Philippine irrigation sector has barely improved through the years. This *Policy Note* revisits the arrangements for the Philippine water resource governance across macro- and meso-level agencies to point out inefficiencies. Among others, it finds that behind the weak performance of the irrigation sector is the fragmented development planning, with several agencies not necessarily linked to one another. It thus suggests for the crafting of an integrated irrigation development plan and calls for the creation of an apex body for water to harmonize policies of the water sector and connect various actors involved in managing water resources. It argues that irrigation cannot afford to be isolated from the other water institutions.

### DP 2019-10

**The Philippines' Voluntary National Review on the Sustainable Development Goals**
by *Celia M. Reyes, Jose Ramon G. Albert, Aubrey D. Tabuga, Arkin A. Arboneda, Jana Flor V. Vizmanos, and Carlos C. Cabaero*

United Nations member-states, including the Philippines, committed to the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) to "conduct regular and inclusive reviews of progress at the national and sub-national levels, which are country-led and country-driven". The Voluntary National Review (VNR) aims to facilitate the sharing of experiences, including successes, challenges, and lessons learned, to accelerate the implementation of the 2030 Agenda. The VNR also seeks to strengthen policies and institutions of governments and to mobilize multistakeholder support and partnerships for the implementation of the SDGs. In particular, this VNR report examines where the country stands in several SDGs, analyzing baseline data and recent historical data on SDG indicators, as well as other supporting indicators and identifying challenges and constraints.

## Editor's Notes (continued from page 2)

which were not considerably pursued in India. Moreover, the fusion of globalization and robotics, which an expert termed as "globotics", will negatively impact employment in both manufacturing and services sectors due to increased automation and can therefore exacerbate inequality. This underscores the need for retraining and upskilling of the current workforce, greater investments in education, including aligning the curriculum with the skills needed for the jobs of the future, and social protection for affected workers. In the agriculture sector, the importance of safety nets has been amplified in the aftermath of the Rice Tariffication Law's implementation, which affected rice farmers as a result of the surge of imported rice.

Cities are at the heart of globalization. However, for those unprepared for its consequences, this means a host of problems, including overcrowding, transport congestion, unaffordable and inadequate housing, unreliable supply of water, and expensive energy. The smart city approach offers a solution by equipping cities to tackle these problems through the application of modern technologies. Such approach, as described in another article, has the potential to improve the delivery of public services, hasten government transactions, enhance access to education, improve urban mobility, and ensure public safety. The development of smart cities is among the planned activities under the BIMP-EAGA, along with infrastructure development to improve the connectivity among the member-states covered by this subregional economic cooperation. Leveraging the BIMP-EAGA to boost trade will be beneficial to Mindanao in terms of reducing poverty and inequality.

The smart city approach requires not only upgrading the technological infrastructure but also improving governance. Government should be at the forefront of innovation. It should take the lead in adopting technological advancement to improve the way it delivers services and connects with the public. It should be open to integrating new business models in governing cities. Improving urban governance also entails better engagement with stakeholders. Approaches that promote people's participation in planning, decisionmaking, and project implementation, such as local housing boards, can make housing services for the poor more efficient and inclusive as demonstrated by the experience of Quezon City.

Also featured in this issue is an article that underscores the Philippines' low competitiveness in attracting foreign investments due to hefty corporate income taxes. The passage of the Corporate Income Tax and Incentive Rationalization Act is envisioned to address this issue by reducing the corporate income tax rate from 30 to 20 percent and rationalizing fiscal incentives. Having a more transparent and trustworthy system is another way to encourage foreign investments, as well as enhance the public's trust in government—something that the blockchain technology can help achieve.

Another article provides recommendations on how to assist SMEs in connecting to global markets. Such assistance includes helping SMEs target the right market, reducing their cost of doing business, increasing their access to market information, linking with large domestic firms and multinational companies through subcontracting, and indirect exporting through consolidators.

Completing this issue is an infographic on the situation of senior citizens in the Philippines, the policies and programs being implemented for them, and the policy gaps. **SVS**

## About DRN

*Development Research News* is a quarterly publication of the Philippine Institute for Development Studies (PIDS). It highlights the findings and recommendations of PIDS research projects and important policy issues discussed during PIDS seminars. PIDS is a nonstock, nonprofit government research institution engaged in long-term, policy-oriented research.

This publication is part of the Institute's program to disseminate information to promote the use of research findings. The views and opinions expressed here are those of the authors and do not necessarily reflect those of the Institute.

## Editorial box



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