

Building resilience—key to achieving sustainable and inclusive growth

A STRONG COUNTRY springs from a prepared, equipped, vigilant, and united people. Only when it is resilient to multiple risks can economic growth be truly sustained and enjoyed by all segments of the population. This is a critical challenge for the Philippines. How can the country sustain its rapid economic growth and make it more inclusive amid increasing vulnerability and exposure to climate change and natural hazards, and other types of risk factors?

This fundamental question confronting the country was the focus of discussions at various events last September in celebration of the 14th Development Policy Research Month (DPRM), which centered on the theme “*Angkop na Kahandaan: Matatag na Ekonomiya at Lipunan*” or Investing in Risk Reduction for a Resilient Philippines.

At the DPRM’s culminating activity—the 2nd Annual Public Policy Conference (APPC) held on September 22 at the Marco Polo Hotel in Pasig City—the concept



The destruction brought by Typhoon Haiyan (Yolanda) in 2013 served as an eye opener on the reality of climate change and the importance of disaster risk reduction and management. However, it needs to be emphasized that the sources of threat are numerous, interrelated, and constantly evolving; natural hazards are only one of these sources as this DRN issue shows. (Photo by Ben White / CAFOD Photo Library)

Editor’s Notes

The Philippines commemorates the third anniversary of Super Typhoon Yolanda this November. One of the strongest calamities recorded in history, the devastation it wrought was an eye opener not just to the Philippines but also to the global community. It awakened the world to the reality of climate change and gave emphasis anew to the importance of disaster risk reduction and management. However, the enormity of Yolanda’s damage also dimmed people’s consciousness on the diversity of risk factors. While the threat of natural hazards and extreme weather events was brought to the fore, it watered down the

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of resilience was discussed at length, as well as the different risks the country confronts and the mechanisms and structures needed to reduce risks. This year's conference on "Risks, Shocks, and Building Resilience" was aimed at providing policymakers evidence-based information that could assist them in formulating appropriate and timely policy interventions to build resilience.

Dr. Ernesto Pernia, socioeconomic planning secretary and director-general of the National Economic and Development Authority (NEDA), emphasized the importance of building multiple resilience systems in sustaining the country's economic gains. In his keynote address delivered by NEDA Deputy Director-General Rolando Tungpalan, Pernia stressed the need for the country to acquire the right tools and the right capacities to mitigate risks and prevent calamities from turning into disasters.

As an example, he cited how Typhoon Yolanda left thousands of people homeless and jobless, which held back economic growth in the region. Based on data from the Department of Agriculture, the total damage on agriculture caused by typhoons from 2000 to 2013 amounted to as much as PHP 195 billion. This amount keeps adding up every year due to the increasing frequency and intensity of weather disturbances.

Pernia pointed out that disasters and natural hazards entail not only economic costs but also social and health costs. Thus, he encouraged everyone to stay vigilant, knowing full well that another big disaster might just be around the corner.

"With every threat, we face the real risk of losing human lives, and we should work harder and faster toward a more vigilant and resilient society. Indeed, we

must never underestimate the effects of climate change on society, because proper preparation or lack thereof can spell the difference between survival and disaster," he stated.

However, Pernia acknowledged that disruptive weather events and natural calamities are just among the risks and threats that we must watch out for.

"The risk landscape has evolved into a web of various threat sources encompassing economic, environmental, societal, geopolitical, and technological risks. These risks are intricately linked to one another—and their effects can easily spread across economies and nations," he cautioned.

According to Pernia, rising food and fuel prices and structural unemployment and underemployment are some examples of macroeconomic risks that threaten the country's pursuit of sustained and inclusive development. In addition, increased regional integration has also made the Philippines more vulnerable to market disturbances related to exchange rates, capital flows, and stock prices.

"In the area of health, risks from epidemics and pandemics have been intensified by greater mobility of people across national borders, increased trade flows, and more accessible transportation networks. Likewise, greater concentration of people and large-scale economic activities and infrastructure development have made urban communities more vulnerable to natural hazards, especially typhoons, floods, and landslides," he added.

Thus, Pernia emphasized the need for a multidisciplinary approach in building resilient systems given their complex and multifaceted nature.

Developing a multidisciplinary and holistic approach requires a clear understanding of the nature of risks at the sectoral level and how these impact the whole system. Thus, the APPC devoted four sessions to discuss the issues affecting the resilience of the macroeconomic, agriculture, urban environment, and health sectors. Top researchers presented the critical policy issues in these sectors, which, together, affect the country's capacity to mitigate adverse shocks brought about not only by natural hazards but also by risks from financial crises, energy price volatility, food crises, pandemics, and failure of climate change mitigation and adaptation measures.

For example, on the aspect of agricultural resilience, discussions revolved around the effectiveness of support services to farmers, such as crop insurance and irrigation facilities. In the session on health, the structural problems that contribute to the vulnerability of the sector were tackled. Conversations in the urban environment session centered, among others, on building resilient infrastructure and settlement, and the multiple dimensions of disaster risk and resilience in coastal megacities like Metro Manila. In the macroeconomy session, discussions were rife on how to address financial market stability and on the effects of oil price shocks on the Philippine economy. The usefulness of economic modeling to determine the probable cost of disasters as a guide to more effective policy formulation on disaster risk reduction was also acknowledged. *(See the individual articles for the highlights of these sessions.)*

At the end of the sessions, it became clear that while individual sectors are confronted with risks that may be unique to them, their effects are interrelated. The health of an entire system—be it a



Dr. William Padolina (at the podium), a member of the PIDS Board of Trustees, synthesizes the main points tackled in the conference. He said there is no one-size-fits-all approach in managing risks. Sitting from left to right are Dr. Marife Ballesteros, Dr. Aniceto Orbeta Jr., Dr. Roehlano Briones, and Dr. Lawrence Dacuycuy who served as moderators during the parallel sessions on urban environment resilience, health resilience, agricultural resilience, and macroeconomic resilience, respectively. (Photo by Gizelle Manuel / PIDS)

community, a country, or a region—also depends on the proper functioning of its component parts and their capacity to effectively absorb shocks, adapt to changes, and transform into more resilient entities. Governance is a key element that cuts across sectors. Policies should emanate from a multidisciplinary analysis of issues. Resilience building, however, is not the sole ambit of government. It should be a shared responsibility among all sectors of society.

“An all-of-government approach is necessary to put forward relevant policies. However, these policies will be more effective if the academic and research communities continue to engage and assist policymakers in crafting these policies. Everyone—the business and private sectors, civil society organizations, the media, and the public—has an important role to play in resilience building,” Pernia concluded.

PIDS President Gilberto Llanto explained that building the country’s capacity to mitigate expected adverse shocks requires Philippine society and policymakers to be

proactive in anticipating these shocks and crafting policy measures to cushion their potential impact.

“A resilient system has a capacity to quickly rebuild after a shock and build back better, and a capacity to recognize interdependencies of components of ecosystem and formulate holistic approach or measures,” he said in his welcome remarks.

Dr. William Padolina, PIDS Board of Trustees member and former science and technology secretary, also highlighted the importance of looking at risks and shocks in holistic terms to better understand their impacts on society and economy.

“The risks that we are exposed to are all very complex, and their impacts must be understood. Thus, we must look at these risks in terms of systems. I hope that we are all training our present and future researchers in using systems approach,” he emphasized.

According to Padolina, the use of modern tools and information infrastructure

that are now readily available allows researchers to have a broader and interactive view of these risks. He cited the availability of satellite data and maps, as well as research outputs from institutions like PIDS, that researchers could put together to get a better picture of these risks and problems.

“At the end of the day, what we want is an early warning system, a kind of forecast so that we can prepare ourselves. At the same time, our leaders and policymakers can be provided with good information. It cannot just be a one-size-fits-all approach in managing risks,” Padolina maintained. He also stressed the importance of communicating research results to policymakers, whom he said have the capacity to translate these research findings into good policies and provide resources to implement all of the recommendations.

“It is very clear that even if we are able to provide an initial understanding of the risks, some possible solutions, and ways to cope with them, at the end of



Resolving fundamental issues pivotal in achieving agricultural resilience

LOW PRODUCTIVITY IS a perennial problem of the agriculture sector. In recent years, it is further aggravated by climate change and natural hazards. In 2015, the sector grew by only 0.11 percent compared to 1.39 percent in 2014; this was largely due to weather-related shocks. Earlier years were characterized by mediocre performance at 2 and 1.2 percent in 2012 and 2013, respectively.

The hope of averting the destructive impacts of strong typhoons, floods, and droughts on the sector is not absolutely a long shot. The National Framework Strategy for Climate Change 2010–2022 puts forward a clear strategy for building the adaptive capacities of communities, increasing resilience of natural ecosystems, and optimizing mitigation opportunities.

“For the agriculture sector, adaptation and mitigation strategies have primarily focused on the development of flood hazard maps, conduct of vulnerability mapping, and capacity building through more intensive information dissemination and promotion of smart agricultural approaches and best practices in farming. Enhanced social protection through climate-proof livelihood options and financial risk management schemes is also given emphasis,” explained Dr. Marites Tiongco, dean of the School of Economics of De La Salle University-Manila.

Tiongco was one of the presenters at the session on building agricultural

resilience at the 2nd Annual Public Policy Conference on “Risks, Shocks, and Building Resilience” held on September 22 at the Marco Polo Hotel in Pasig City. The conference was the highlight of the 2016 Development Policy Research Month last September 2016, which centered on the theme “Investing in Risk Reduction for a Resilient Philippines”.

According to Tiongco, recent trends in budget allocation of the agriculture department indicate the government’s increasing resolve to support mitigation and adaptation initiatives. In 2015, 20 percent of the total budget was intended for flood control, reforestation, sector-specific research and development (R&D) on climate change, and disaster risk reduction. Efforts were also made to align programs and projects with the intended outcomes of the National Climate Change Action Plan.

“What is also needed is to make sure policies and programs are monitored and evaluated for their effectiveness in reducing the impacts of climate change and climate-related risks on agriculture,” reminded Tiongco.

This task appears to be most urgent for the irrigation sector. As shown by Dr. Agnes Rola, professor at the College of Public Affairs and Development of the University of the Philippines (UP) Los Baños and a former consultant of PIDS in its impact evaluation study on irrigation,

the sector is performing poorly in minimizing agricultural risks emanating from the growing water scarcity.

Rola revealed in her presentation that only 56 percent of the estimated total irrigable area is developed, or 1.7 million hectares out of 3 million hectares, thus creating a large gap between potential and actual area. This cannot be attributed to fund insufficiency as irrigation consistently gets a large allocation in the agriculture budget each year.

Moreover, both types of system—the national irrigation system and the communal irrigation system (CIS)—have not contributed to increase agricultural productivity. In some of the cases studied by Rola, she discovered that the design of the irrigation systems is not feasible for elevated paddy areas to be reached by water, and that the maintenance of existing systems was not enough.

The capacity of irrigators’ associations to manage the CIS upon project completion was also found to be inadequate. Most irrigators’ associations also reported severe funding constraints for operation and maintenance.

Rola also underscored the poor structure in the management of water resources. “There are many water-related agencies with fragmented and overlapping functions. Multiple agencies are in-charge of irrigation, and there

is no central planning body for water resources,” said Rola.

Governance issues are likewise impairing the crop insurance program, an important risk management tool for farmers. Administered by the Philippine Crop Insurance Corporation (PCIC), it is a production cost insurance that covers the cost of production inputs up to a certain amount. Product lines available are for rice and corn, high-value crops, and noncrop (i.e., livestock, fishery, term insurance).

Only a small percentage—less than 1 percent—of the total number of eligible beneficiaries listed in the Registry System for Basic Sectors in Agriculture (RSBSA) has availed of the program. This could largely be attributed to the low level of awareness of the program among farmers, and even among local governments, due to inadequate information dissemination



A small agricultural community lies at the center of the world-famous Batad Rice Terraces in Banaue, Ifugao—a community that has successfully withstood a number of environment-related risks. (Photo by Vin Aranas / PIDS)

by PCIC. For those who availed of the program, they are also not aware of how the insurance payments are determined.

Other factors come into play. “The insufficient insurance cover is also a deterrent. The amount of cover is not

enough to finance replanting when a disaster strikes,” revealed PIDS Senior Research Fellow Celia Reyes.

Reyes, who heads the PIDS research project that evaluated the program, said

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Macroeconomic and financial resilience: The boon and bane of risks

THE OBJECTIVE OF building a more resilient financial sector is especially challenging because, by nature, financial markets are all about taking risks. Unlike in other sectors, resilience in finance amounts not to reducing risks but to managing risks well. After all, risks in finance are related to generating profits. Building financial resilience, therefore, said *Bangko Sentral ng Pilipinas* (BSP) Assistant Governor Johnny Noe Ravalo at the 2nd Annual Public Policy Conference last September, requires diligently understanding the complexities of financial risk.

“The issue of financial resilience and financial market stability,” said Ravalo, “boils down to what is it that we know, and what is it that we do not know.”

In dealing with what is known, Ravalo warns against the temptation of thinking that there is a magic formula for building financial market resilience, or that the effective policies today will work tomorrow when market conditions are different.

Risks have a “nasty habit” of being “nonadditive, nonlinear,

nontransparent, and they co-mingle with each other”. Apart from being interconnected, constantly evolving, and unpredictable, the nature of risks in financial market also depends on the financial institution concerned.

For banks, they deal with the risks that come with credit. For security firms, they deal with liquidation-related risks; and for insurance companies, risks are found in liabilities, and so on. Managing these risks depends on the gains that each sector or institution wants to make, and for that, Ravalo said, there is no hard limit.



“It is unbounded. You can always take home more returns if you are willing to take the risk. *Sino po ang magsasabing sobra*, and how do you know it is excessive? What is the basis of *sobra*?”

More often than not, the only way experts know the financial system has undertaken excessive risks is when the risks have already translated into shocks.

For regulators at the BSP, Ravalo admitted that they “only see the balance sheets in the fourth quarter. Where in the balance sheet is the systemic risk?”

Regulators are not privy to the decisions that go into the funding of the balance sheets, making it all the more difficult to determine *ex ante* the degree of risks institutions undertake, and whether they are still manageable or excessive leading to collapse.

“The homework for financial stability is not just to connect the dots. The homework for financial stability is to connect invisible dots. We have to figure out what it looks like before the evidence presents itself,” said Ravalo.

Not only must the BSP be proactive, but it has to be comprehensive in its approach.

“It is a terrible mistake to look at the financial market in its parts. The entire system is an integrated nexus of related issues, whether short term or long term. The homework for financial stability is to look for those linkages,” said Ravalo.

He emphasized that understanding how risks interact with one another, and the degree in which they affect one another, will ultimately inform how financial institutions and regulators can work together to better manage financial risks.



As the central bank of the Philippines, the BSP is mandated “to promote and maintain price stability and provide proactive leadership in bringing about a strong financial system conducive to a balanced and sustainable growth of the economy”. It is tasked to implement sound monetary policies, with an overarching goal of making the Philippine financial market and economy resilient. (Photo by James Sarmiento / Flickr)

Lessons from the crises

Concerned with the ambiguity of the lessons on the complexity of financial market resilience, Visiting Research Fellow Vicente Paqueo of PIDS asked Ravalo to enumerate specific examples of instances the BSP has averted a financial disaster and saved the economy.

Ravalo mentioned the BSP proactively run all kinds of simulations at the onset of the 2008 economic crisis to anticipate the nature of its impact on the country. In the end, the BSP decided to make sure the impact would lead to a liquidity issue not a solvency issue—meaning, making sure the economic meltdown did not disrupt the Philippines’ ability to finance its long-term obligations.

At the time, Ravalo relayed, “nobody was borrowing because interest rates had spiked, and nobody was lending because nobody wanted to let go of their liquidity.”

In response, the BSP created a dollar liquidity board, encouraging banks and

financial institutions to continue lending and borrowing despite growing fears abroad of credit defaults, and ensuring the continuing flow of funds needed for a healthy market.

“The signal was if you lend or borrow, [the BSP] will be there.”

Since then, the Philippines has moved from having the highest insurance risk in the region, measured through credit default swaps, to having the lowest. The dollar-peso rate has not moved to the extremes either way, growth remains at 7 percent this year, inflation is low, banks seem profitable, and the market spreads have not spiked.

All of these, Ravalo said, indicate how well the BSP is managing things.

UP School of Economics Professor Sarah Daway acknowledged the BSP’s “vigilance” in creating buffers for the financial system to resist the impact of the 2008 crisis, especially given the fact that the BSP had to deal with a lot of uncertainties.

Still, Daway enjoined the conference participants to consider the context. Financial market resilience implies that the system “has the capacity in terms of scale to take on risks by adopting new, perhaps destabilizing, innovations and measures that also open up opportunities for growth and development.”

In the case of the Philippines, attributing the country’s resilience to actions taken by the BSP in connection with the 2008 crisis may be overlooking the fact that the country had very little exposure to the global market to begin with.

The Philippines receives a lot less foreign direct investment than the rest of its neighbors. “There is also the issue of the lack of financial development scale,” added Daway.

But for Ravallo, “size is irrelevant.” It is not about the size of the market but the size of the risks taken by the market, and the channels of that risks taken to interact and potentially grow.

Currently, the BSP regularly runs stress tests by sector, making it possible to “categorically” predict the impact of sectors collapsing on other sectors, thereby identifying “channels of contagion”. The surveillance is updated in a weekly basis, said Ravallo.

In the light of contemporary issues

In addition to Ravallo’s presentation on building financial market resilience, other macroeconomic experts were also present to discuss other relevant areas of policy in building macroeconomic resilience.

Dr. Arlan Brucal discussed the effect of oil price shocks on the Philippine economy, and Dr. Philip Arnold Tuano presented the results of his and Dr. Ramon Claret’s

use of computable general equilibrium modeling to analyze the impact of disruptive weather events like Typhoon Ondoy on the economies of the cities of Marikina and Pasig.

Brucal’s study tested the “conventional wisdom” that claims oil price drops positively affect oil nonimporters. For a developing, oil-importing country like the Philippines, the theory applied means “if the price falls below the 40-dollar mark, the gross domestic product growth would increase by 2 percent.”

However, noted Brucal, “what we see is actually the reverse. We did not see [growth] in the first quarter of 2015. It was the lowest.”

The problem is only a few studies have been done on the impact of oil shocks on non-Organisation for Economic Co-operation and Development countries. Furthermore, the new wisdom gaining ground looks at price shocks now simply as symptoms reflecting some other shocks in some other parts of the world.

“Prices are endogenous,” said Brucal. The recent oil price shock, in particular, was affected by other events like the development of fracking; the slowdown of the Chinese economy and, subsequently, in their demand for oil; and the recurrence of destabilizing conflicts across the Middle East.

For the Philippines, Brucal concluded that “the recent oil price decline actually hurt the Philippine economy,” whereby its export labor and services were deeply impacted by the negative impact of the shock on Middle East economies.

Brucal’s study drove home the lesson on the interconnectedness of risks. It is not enough to focus on one component or

one channel of interaction. One shock may be good for a sector, but it can also be bad for another.

Creating “meaningful policies” requires disentangling the shocks related to and influencing the oil price shock, and identifying the various mechanisms through which they can affect various sectors of the Philippine economy.

Tuano and Claret’s study demonstrated how helpful it is to disaggregate the impact of shocks like weather disruptions on the economy. Their focus on the impact of Typhoon Ondoy on the cities of Pasig and Marikina showed that the services and manufacturing sectors had different experiences of resilience and recovery.

“The typhoon more greatly impacted the textile and garments, and hotel and restaurant industries,” reported Tuano. “Manufacturing industries were affected by the availability, mainly, of raw materials and also the destruction of their capital equipment. Meanwhile, services companies were affected by the lack of availability of personnel.”

Eventually, services recovered much more quickly, and manufacturing less because replacing capital machineries took longer. Overall, the economic losses for Pasig City and Marikina City were almost the same numerically, but because Marikina’s economy is only a third of Pasig, Marikina’s losses were greater in degree.

As summed up by session moderator Dr. Lawrence Dacuycuy, the importance of Tuano and Claret’s study lies in shedding light on the critical details that are useful for policymakers to focus on, such as identifying the sectors that need the most assistance in building resilience. **MHB**



Resilience of health sector hinges on better management, cross-sectoral collaborations, and improvement of health workers' welfare

THE HEALTH SECTOR plays an important role in building the country's resilience to different types of risks. Alarming pandemics that spread geographically like wildfire pose a significant challenge to the sector's capacity to avert looming threats. However, failure to address other risks, such as climate change, food crises, water supply, and unemployment, also has detrimental effects on health. In short, while playing a vital role, the health sector is also vulnerable to risks and shocks.

Health experts who attended the session on health resilience at the 2nd Annual Public Policy Conference held on September 22 at the Marco Polo Hotel in Ortigas agree that building and enhancing the resilience of the Philippine health sector is imperative to combat compounding health issues. Central to this are better management of the delivery and financing of health services; cross-sectoral collaboration between and among health units, government agencies, the private sector, and civil society; and a holistic approach in ensuring the emotional resilience of health workers.

Better management

According to Dr. Orville Jose Solon, dean at the University of the Philippines School

of Economics (UPSE), outcomes have remained essentially unchanged despite reforms in the health sector.

Together with UPSE Professor Alejandro Herrin, Solon looked at how the health sector has progressed in the last 25 years in terms of health and poverty, health-care financing, and disasters and emergencies, among others. They noted that there have been significant efforts to address both inequities and inefficiencies in the areas of health financing, service delivery, and regulation. However, the impact on the health status of Filipinos remains mixed because, for the most part, the health needs of the poor have not been adequately addressed.

"Investments in human capital have not translated into real outcomes. The structural problems that the Department of Health (DOH) faced in 1999, such as the fragmented delivery and financing of public health services due to devolution, remain today," Solon said.

These perennial health problems have led to a wide variation in access and quality of health services. Health facilities in local government units have also not been upgraded, and technical coordination between and among health units remained low or nonexistent.

Whether or not these challenges will be addressed, according to Solon, depends on the government's capacity to manage and sustain reforms, and the scientific community's ability to design and evaluate interventions.

Solon and Herrin recommended expanding and reinforcing the scientific community by investing in graduate-level scientific training, capacitating local research and academic institutions, and strengthening international linkages. Likewise, to better manage health sector reforms, both experts agree that the government should invest in trainings for specific managerial expertise and create partnerships with local and international experts.

Cross-sectoral collaboration

Meanwhile, Ronald Law underscored that there are factors and actions that lie outside of the realm of the health sector that influence the development of health risks. Law is chief of the DOH Health Management Emergency Bureau.

According to Law, the key challenges the health sector faces, particularly during disasters, include difficulty in combating diseases, subpar quality of infrastructure and services, inadequate financial resources, poor management

of health risks, and lack of coordination and collaboration.

“Health should be at the center of disaster risk reduction. Health straddles both climate change and disaster, so it will play a huge role in building resilience. How can you expect to use a system to respond to disaster when the system itself is weak,” asked Law.

The necessary response, according to Law, is cross-sectoral collaboration—or the “synchronization of the acts of different actors, individuals, institutions, and organizations”. In a changing health-care environment, Law said cross-sectoral collaboration can make significant advances on the whole health system.

For former Health Secretary Manuel Dayrit, who now serves as dean of the Ateneo School of Medicine and Public Health, fixing the internal weaknesses in the health sector means building resilience on trust. He noted that the Philippine health sector must build trust both within the sector (intersectoral) and outside the sector (cross-sectoral) to fully move forward.

“We have to develop a system where we build trust. Legal mandates, guidelines, organizational leadership, understanding of roles, and mobilization of resources are all necessary, but it is trust that is the glue that will keep us together. The greater the fragmentation, the bigger the challenges in the Philippine health sector. The weaker the science, the less the inclination to trust interventions. The poorer the capacity to manage the system, the less likely we are to trust the system. We need to bond together in the spirit of trust,” said Dayrit.

Welfare of health workers

To make the approach more inclusive, former DOH Undersecretary Madeleine De Rosas-Valera believes that the welfare of health workers should not be neglected. According to her, a resilient health system is essential for the provision of universal health coverage and for a prompt response to disasters or outbreaks of disease.

One key element to make this possible is an adequate number of trained health workers.

Health workers, to be effective in providing quality health services, must rise from, adapt to, and recover from crises, shocks, or stresses without compromising their duties, said De Rosas-Valera.

“We talk about infrastructure resilience, but very few talk about the emotional aspect of resilience. Health workers face the issue of resilience not only during disasters but also during day-to-day situations; they are not immune to stress,” she added.

De Rosas-Valera recommended setting up of a professional and personal resilience strategy that involves preorientation and daily debriefing activities, buddy system at work, and rotation program among health workers to provide them with enough rest and sleep.

According to Johanna Banzon, health consultant at the United Nations Children’s Fund, investing in the welfare and the emotional resilience of health workers helps in improving the productivity of the whole workforce and human capital. **MVPA**



A pregnant woman (center) talks with a doctor at a hospital in San Jose, Batangas—depicting daily activities in an outpatient department of a district hospital. (Photo by Juan Alfonso Tanghal / PIDS)



A holistic approach to urban environment resilience a must

POLICYMAKERS MUST PUSH for an integrated approach to urban environment resilience.

This is how Dr. Marife Ballesteros, acting vice president of state think tank Philippine Institute for Development Studies (PIDS), summarized the discussion on urban environment resilience last September 22.

“When we look at resilience, we should not merely be concerned with the sectoral aspects but also with the integrated policy approach,” she explained.

The said discussion was part of the 2nd Annual Public Policy Conference on “Risks, Shocks, Building Resilience”, which is the highlight of the celebration of the 14th Development Policy Research Month (DPRM). Resilience in agriculture, health, and macroeconomy was also covered during the one-day event.

The DPRM is celebrated across the country every September in view of Malacañang Proclamation No. 247 issued in 2002. This year’s celebration focused on the importance of building the country’s resilience, aptly captured in the event slogan, “*Angkop na Kahandaan: Matatag na Ekonomiya at Lipunan*”.

Most glaring problems in the metro

Ballesteros said that a clear understanding of the nature of resilience must first be

addressed before policy recommendations can be made.

“Risks are complex, but so is resilience,” explained Ballesteros, who served as the moderator for the session on building urban environment resilience.

In order to target urban resilience specifically, studies should focus on the metropolitan areas, such as Manila, where urban environment problems are “most glaring”, she added.

A panelist also raised the need for an integration of disciplines, where social sciences must be combined with the natural sciences to maximize their strengths in crafting policy solutions.

“We are so trained as specialists, economists, political scientists, physicists, but the reality is that the problems we are facing are all interconnected,” said Dr. Emma Porio, sociology professor at the Ateneo de Manila University, who discussed risk and resilience in Metro Manila during the session.

“In a sense, when you think of urban resilience in the city, you have to think of the city as a system,” she added.

She explained policymakers should look at the interaction of the geophysical, political, economic, and social aspects so as to understand vulnerability and

the potentials of building resilience in Metro Manila.

PIDS President Gilberto Llanto earlier urged policymakers to look beyond natural hazards and acknowledge that the sources of risks are many, and that those risks are interconnected.

Porio also challenged the current manner of looking at socioecological and political development in governance in understanding urban environment.

“Floods do not recognize political boundaries, but we always make planning and data analysis according to political administrative boundaries,” she explained.

Significant policy gap

Apparently, the Philippines still has a lot to do in terms of building resilience.

“There is a significant policy gap in terms of structures, laws, and mindsets,” Ballesteros said.

The session called for the review of Republic Act 10121 or the Philippine Disaster Risk Reduction and Management Act of 2010, which Ballesteros considered “not adequate”.

Porio added that the present governance system only reacts to the current needs

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New PIDS Corner opens in Cebu



The PIDS Corner at the University of San Carlos in Cebu City (above) is the 24th PIDS Corner established in the country. (Photo by Sheila Siar / PIDS)

THE UNIVERSITY OF San Carlos (USC), a premier academic and research institution in the Visayas region, now has a PIDS Corner. Inaugurated on September 29, the Corner is located at the Josef Baumgartner Learning Resource Center, the library of the university's Talamban Campus in Cebu City.

The state-of-the-art knowledge facility is dubbed as the biggest library in the country. Built on an expansive area, the library has four floors, a basement, and split-level floors.

The PIDS Corner is located on the ground floor of the library. It contains printed copies of the Institute's publications, which are also available on the PIDS website (www.pids.gov.ph) and the Socioeconomic Research Portal for the Philippines (serp-p.pids.gov.ph).

The inauguration was a fitting activity to cap the 14th Development Policy Research Month celebration this year,

which is focused on the theme of building a resilient Philippines.

According to PIDS Director for Research Information Sheila Siar in her remarks of bequest on behalf of PIDS President Gilberto Llanto: "Building an educated citizenry is key to building a resilient country. Education is essential to produce citizens that have the right combination of knowledge, skills, values, and attitudes to become productive and responsible citizens who can actively participate in development processes, make informed decisions, and can absorb shocks and stresses and adapt to changes around them."

Siar noted that building an educated citizenry through the PIDS Corners is the Institute's way of helping build a resilient Philippines through knowledge sharing.

In her remarks of acceptance, Dr. Elizabeth Remedio, who represented USC President Fr. Dionisio Miranda,

said that the PIDS Corner is "a symbol of enormous wealth", as research materials empower and capacitate students, teachers, and researchers to know, reflect, and evaluate the things that matter. With more resources, Remedio said "we become better policy stakeholders and better citizens."

"This is the only way we can fight the poverty of knowledge; we are better equipped in life if we have studies, research, and education," she added. Remedio is USC's coordinator in the Commission on Higher Education Philippine Higher Education Research Network and a faculty member of the College of Education.

With the opening of the PIDS Corner at USC, there are now 24 PIDS Corners in strategic places in the country. Started in 2007, this dissemination and advocacy project of PIDS aims to make socioeconomic materials produced by PIDS more accessible in areas outside of Metro Manila. **SVS**



Mindanao hosts opening of DPRM 2016

FOLLOWING THE SUCCESSFUL gathering of Mindanawon researchers and policymakers in Davao City in 2015, state think tank Philippine Institute for Development Studies (PIDS) and the Mindanao Development Authority (MinDA) joined forces anew to conduct the 2nd Mindanao Policy Research Forum in Butuan City on September 1, 2016. The forum, which was the opening salvo of this year's Development Policy Research Month (DPRM) celebration, was co-organized by Butuan-based Father Saturnino Urios University (FSUU) and the Commission on Higher Education-Caraga (CHED-Caraga).

In line with the 2016 DPRM theme, "Investing in Risk Reduction for a Resilient Philippines", the forum had "Nurturing Resilient Communities in Mindanao toward Sustainable Development" as its main topic. More than 100 participants from the local government, academe, civil society organizations, and the private sector gathered at the FSUU Auditorium for the whole-day event, which was teemed with discussions about the region's vulnerability to threats and overlapping risks.

Members of local tribes in Agusan del Norte were also present to air their views on issues affecting the indigenous peoples of Mindanao.

In his welcome remarks, FSUU President Rev. Fr. John Christian Young said that policy research is often neglected in the Philippines. "Thais and Vietnamese learned agriculture in the Philippines, but they managed to overtake the country in terms of agricultural yield and development. This is a policy issue that needs to be looked at, and research plays a crucial role in doing so," he explained.

Young emphasized that the forum is an opportunity to build capacity in doing research and to promote its utilization—both, he said, are crucial to nation building, especially for Mindanao.

Young then raised four questions to the forum participants: (1) How much research is utilized by policymakers, legislators, and regulators?; (2) How much resources do we put in research and in building capacity for research in our own institutions?; (3) Why are there incidences of data suppression in some government institutions?; and (4) How can we ensure truly independent research, and how do we engage other organizations to do research in validating results? These questions, according to Young, have implications to policy research and development.

"It is important to ensure that truly independent research is moved forward. Research needs to be free from politics,

ideology, and even from budgetary pressure. Unless we conduct research and use it in decisionmaking, we will go around in circles, and our nation will never be served," emphasized Young.

Engr. Ramil Sanchez, supervising education specialist at CHED-Caraga, touched on the forum's relevance to Mindanao's education sector. "Changes in the education landscape, such as K to 12 and internationalization, have become more apparent. For us working in higher education institutions, it is necessary that we develop a research culture because it is crucial for the country's economic and inclusive growth," he said. He added that "the research community has to harness technology, including social media, to collaborate with local partners in doing research." This, he emphasized, will enable communities to be more resilient and to stay ahead of the many unexpected things that may happen in the future.

Meanwhile, Dr. Sheila Siar, director for research information at PIDS, provided the framework of the forum and explained the importance of celebrating the DPRM in Mindanao. "Mindanao is a region with so many possibilities but, admittedly, has a lot of untapped potentials in terms of human, economic, cultural, and social capital." Siar underscored that to bring Mindanao to its fullest potential, it has to be resilient to different types of risk.





FSUU President Rev. Fr. John Christian Young poses several questions (i.e., on the accessibility and independence of research, and on building capacity to do research) to the participants of the 2nd Mindanao Policy Research Forum held on September 1, 2016, at the FSUU Campus in Butuan City. This forum kicked off the celebration of the DPRM in 2016. (Photo by Gizelle Manuel / PIDS)

“Mindanao has suffered immensely over the years from a host of overlapping risk factors, including armed conflict, natural hazards, environmental degradation, and high poverty incidence,” Siar said. This signals the need, she added, for a more proactive and innovative response to risks and shocks by way of evidence-based policies, programs, and interventions.

Divided in two plenary sessions, the forum focused on agricultural and environmental resilience—aspects that have so much impact on the region.

In the morning session, PIDS Research Fellows Danilo Israel and Celia Reyes presented their studies on the impact evaluation of the National Greening Program and the Crop Insurance Program of the government, respectively.

Researchers from Caraga State University (CSU) opened the afternoon session with their studies on responsible mining and geographic information system (GIS) for local government. These were presented, respectively, by Dr. Raquel Balanay and Engr. Michelle Japitan. Dr. Shirlene

Medori Alegre and Mr. Jeffrey Carin, both from FSUU, meanwhile, presented the university’s security and safety measures, and its disaster risk reduction and management (DRRM) initiatives.

Representatives from the Bangsamoro Development Authority, Department of Environment and Natural Resources (DENR)-Caraga, Department of the Interior and Local Government (DILG)-Caraga, and REACH Foundation served as discussants.

During the lunch break, a press conference on the DPRM was held at the FSUU Board Room for the members of the local media. Siar and Israel were joined in the panel by Director Reyzaldy Tan of MinDA and representatives of the regional offices of CHED, Department of Health, and Department of Science and Technology. This was held simultaneously with a presentation for the forum participants by Mark Vincent Aranas of PIDS on the Socioeconomic Research Portal for the Philippines (SERP-P), a database with more than 5,000 socioeconomic

materials contributed by PIDS and more than 50 member-institutions comprising the SERP-P network.

In the afternoon, FSUU and CSU researchers steered the discussion with their presentations on responsible mining, GIS for local government units, and DRRM initiatives.

In her presentation, Dr. Raquel Balanay of CSU said that the mining process starts in exploration and ends in rehabilitation. Her study, which started in 2012, centered on infusing a science and technology-based program to achieve responsible mining in Mindanao. This particular study had eight components: (1) terrestrial biodiversity assessment, (2) aquatic biodiversity assessment, (3) profiling of artisanal and small-scale gold mining, (4) documentation of contamination pathways, (5) rehabilitation of mined-out areas, (6) processing of chromite and laterite ores, (7) development of alternative technologies for small-scale mining, and (8) generating web-based information system for responsible

mining. These components were aimed at confronting issues related to mercury and cyanide pollution, erosion, environment degradation, and landscape destruction, among others.

“The ultimate goal of the program is to implement a socially acceptable, economically viable, environment-friendly, and sustainable mining in Mindanao,” said Balanay. This, she added, entailed crafting of policies on wildlife conservation and pollution management, and addressing the lack of information on the concept behind responsible mining.

However, Balanay admitted that responsible mining has no universal definition yet. This echoed the sentiments of REACH Foundation Executive Director Arceli Nagpala, who served as one of the discussants in the forum. According to her, the parameters that make mining “responsible” should first be identified. She suggested for a national government vision for mining, where planning starts at the regional level.

Technological developments in local governance in Butuan City were also highlighted during the forum. Engr. Michelle Japitan, also from CSU, led the presentation on the Comprehensive Land Information Management System (CLAIMS) that is being implemented in the city.

By harnessing the technological benefits of GIS, the CLAIMS-GIS Project is able to address Butuan’s need for an integrated and automated systems for real property unit mapping, assessment, and tax collection. The project optimizes the use of these maps for various spatial mapping endeavors, particularly in crafting comprehensive land use plans and other disaster risk assessment applications. “It has been one of the goals of the city



PIDS' Sheila Siar said that "Mindanao is a region with so many possibilities but, admittedly, has a lot of untapped potentials in terms of human, economic, cultural, and social capital." Photo shows one of the most vibrant districts in the city of Davao; the city is considered the center of economic development in the region. (Photo by Constantine Agustin / Flickr)

to develop Butuan as a ‘Smart City’. The CLAIMS-GIS Project could be the springboard that will launch never-before-seen Butuan City technologies,” said Japitan.

Other developments instituted in the local government of Butuan were: (1) a barangay system profiler that performs geotagging on households; (2) a tree-tracker application for the DENR, which locates and monitors planted seeds; and (3) a disaster aid tagger and access system that designates households to evacuation centers, among others.

As co-organizer of the forum, FSUU’s Dr. Shirlene Medori Alegre, director for Graduate Studies and Research, and Mr. Jeffrey Carin, director for Community Involvement and Advocacy, presented the university’s security and safety measures, and its DRRM initiatives.

“School safety ensures the continuity of providing quality education for students. This requires a dynamic and continuous process instigated by school administrators

and participated by all stakeholders. Disasters can be prevented and mitigated with the spirited application of knowledge, creativity, and resourcefulness,” said Alegre. Thus, disaster preparedness should be an integral part of educational planning, she added.

Carin, meanwhile, highlighted the need for appropriate, relevant, and responsive solutions to face immediate and identified problems that impede growth. According to him, the integrated community involvement and advocacy framework that FSUU is implementing aims to promote a holistic program that instills development values in their students. The framework also addresses DRRM facets that include preparedness, relief operations, and rehabilitation programs.

Aware of the importance of collaboration, Carin said: “We cannot conduct these programs without tapping government agencies, civil societies, and the private sector.” This call was received favorably by the OIC-Assistant Regional Director

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PIDS, PIA hold press conferences in major Philippine cities

BUILDING COMMUNITIES THAT are resilient to natural hazards and economic shocks is vital to sustaining development. This was emphasized in four press conferences jointly organized by the Philippine Institute for Development Studies (PIDS) and the Philippine Information Agency in the cities of Butuan, San Fernando, Tacloban, and Cebu in celebration of the 14th Development Policy Research Month (DPRM).

The DPRM, which is spearheaded by PIDS, is held every September to highlight the importance of policy research in nation building. For this year, the celebration centered on the theme, “*Angkop na Kahandaan: Matatag na Ekonomiya at Lipunan*” or “Investing in Risk Reduction for a Resilient Philippines”.

Building resilience vital to Mindanao’s development

Panelists at the press conference held in Father Saturnino Urios University in Butuan City on September 1 concurred that promoting Mindanao’s development depends largely on the ability of the region to cope with persistent threats and problems brought by natural calamities, health risks, poverty, and security issues.

According to Director Reyzaldy Tan of the Mindanao Development Authority (MinDA), Mindanao—which posted a

gross domestic product growth of 7.4 percent in 2015—is expected to continue achieving 7–9 percent growth in the next five years.

“We foresee an improvement in the agriculture sector given that the focus of our current government is to develop the potential of Mindanao. With a Mindanawon president, along with cabinet members and lawmakers who are mostly from Mindanao, we foresee dramatic increase in resources to be invested in the region,” Tan explained.

Tan also noted that infrastructure projects, logistics, as well as transport networks are also expected to grow significantly in the next few years.

But peace and order concerns remain a major obstacle, particularly in areas affected by conflict. Tan said MinDA has adopted the Mindanao 2020 Peace and Development Framework, which has a timeframe of 2011–2030, to serve as guide in developing more geographically specific regional or local plans to ensure consistency and coherence within a Mindanao-wide perspective.

He also emphasized that MinDA is strongly supporting the Bangsamoro Development Plan (BDP) to achieve development in the region. The BDP is a medium- and long-term vision and strategy for the recovery and development

of the Bangsamoro. Started in 2014, the BDP is a six-year development plan that lays the direction for existing and planned interventions of the government and development partners in the proposed Bangsamoro region.

In terms of disaster preparedness and mitigation, Ednon John Ellar Aparicio of the Department of Science and Technology (DOST)-Caraga asserted that modern technologies are now available for communities to become more proactive in dealing with risks brought by natural hazards.

According to Aparicio, DOST has installed early warning systems, which include 85 automatic rain gauges and automatic water level monitoring sensors, in the Caraga region. These early warning systems—which are strategically located in flood-prone areas—collect data, which are, in turn, uploaded to Project NOAH. Project NOAH, which stands for Nationwide Operational Assessment of Hazards, aims to provide an accurate, integrated, and responsive disaster prevention and mitigation system, especially in high-risk areas throughout the Philippines. These data are available and can be accessed online.

In addition, DOST is also slated to launch the Rx Box, a 5-in-1 device capable of storing and transmitting patient data to allow health workers in remote



communities to consult with medical specialists in urban areas. Each Rx Box contains blood pressure monitor, pulse oxymeter, electrocardiogram, fetal heart monitor, maternal tocometer, and temperature sensor. According to DOST, the Rx Box will provide better access to life-saving health-care service in isolated and disadvantaged communities nationwide.

In the area of mitigating health risks, Romelyn Esther Torralba, health education and promotion officer at the Department of Health (DOH)-Caraga, disclosed that dengue cases in the Caraga region have been increasing, with already over 4,500 cases recorded so far. This number, she said, is higher by a thousand compared to last year's data. Thus, she stressed the need to inform communities about the importance of practicing the 4S (i.e., search and destroy mosquito breeding places, use self-protection measures, seek early consultation for fevers lasting more than two days, and say yes to fogging when there is an impending outbreak) to fight the spread of dengue.

Torralba also said the DOH is also implementing several projects to address the shortage in health personnel and, at the same time, empower the country's human resource in health.

"At present DOH-Caraga employs more than 500 nurses under the Nurse Deployment Project. We also employed a hundred midwives under our Rural Health Midwives Placement Program. We are also looking at employing more doctors under the Universal Health Care Program and the Doctors to the Barrios Program," Torralba enumerated.

Torralba added that the DOH is also helping government in the rehabilitation of drug dependents in Caraga who have surrendered to the authorities.

The department, she said, is working with local government in training and conducting community-based rehabilitation programs.

Lessons from best practices

Back in 1991, Pampanga was devastated by lahar when Mt. Pinatubo erupted. Then Governor Bren Guiao had famously rallied the province with the promise that "Pampanga will bounce back." Decades later, the rallying march for greater community resilience returned to San Fernando City on September 21.

In his opening remarks at the press conference, PIDS President Gilberto Llanto discussed the importance of evidence-based research in creating policies to help communities understand and reduce risks, absorb and recover from the impact of shocks, and transform and adapt.

Llanto mentioned Singapore as an example of a country that is highly exposed to various risks given its geography. According to him, Singapore has not only managed to protect itself but currently ranks as one of the most resilient states in the world.

This level of resilience was possible because Singapore adopted "effective government policies". To have effective policies, a country has to invest in evidence-based research.

"People should be aware that when we talk of risks, shocks, and building resilience, it is not just about building better roads or stronger buildings. Far beyond that, we should aim to build resilience among us," Llanto added.

Last year, Pampanga received the *Gawad KALASAG (Kalamidad at Sakuna Labanan, Sariling Galing ang Kaligtasan)*

Award for helping its communities improve the standard of disaster risk reduction and management (DRRM). The province was recognized for having the best DRRM council in Central Luzon.

Chief Angie Blanco, head of the Provincial DRRM Council, shared her office's best practices at the press conference.

The province complies with the four thematic areas of DRRM as prescribed by the Department of the Interior and Local Government (DILG): (1) prevention and mitigation, (2) preparedness, (3) response, and (4) rehabilitation and recovery.

One of the proactive initiatives adopted by the council is to acquire desilting equipment. What the local government realized, said Blanco, was that despite the Mt. Pinatubo erupting over a decade and a half ago, silt deposits continue to accumulate in the rivers of Pampanga, making the municipalities vulnerable to flooding. Pampanga now conducts year-round desilting.

Meanwhile, DOST Regional Director Julius Cesar Sicat shared the agency's role in feeding the Pampanga River Basin Flood Forecasting and Warning Center with accurate data gathered from the department's monitoring equipment distributed across Luzon. Another crucial monitoring device, which was launched into outer space last year, is the DIWATA satellite, which sends data back to DOST offices, making flood predictions more effective.

Beyond preparation and mitigation practices, Pampanga's DILG Assistant Regional Director Araceli San Jose underscored the inclusive quality of their response and rehabilitation programs. The provincial and local governments are required to have residential care



From left to right: PIDS President Gilberto Llanto, PIDS Acting Vice President Marife Ballesteros, and PIDS Research Fellows Danilo Israel and Sonny Domingo serve as some of the resource speakers in the DPRM regional press conferences in San Fernando, Cebu, Butuan, and Tacloban, respectively. (Photos by Gizelle Manuel and Misha Borbon / PIDS)

facilities for vulnerable sectors and a registered social worker to address the needs of women, children, persons with disabilities, and indigenous peoples.

Assistant Regional Director Venus Rebuldela of the Department of Social Welfare and Development (DSWD), likewise, reinforced this trend in local government policy to improve the “adaptive capacities of vulnerable groups” in line with improving government response.

Mapping out the risk and resilience landscape in Tacloban after Yolanda

Typhoon Yolanda took the lives of 4,000 Filipinos, displaced 4.4 million others, and cost the country an estimated USD 6.5–15 billion. The reconstruction and rehabilitation processes that followed not only helped the region bounced back economically but also informed and improved their assessment of the risk and resilience landscape.

At the DPRM press conference in Tacloban City on September 27, PIDS Research Fellow Sonny Domingo was joined by

National Economic and Development Authority Region 8 Chief Economic Development Specialist Meylene Rosales, Philippine Atmospheric, Geophysical, and Astronomical Services Administration (PAGASA) Engineer Mario Peñaranda, Philippine Institute of Volcanology and Seismology (PHIVOLCS) Senior Science Research Specialist Nemesio Cañete, and DILG Operations Officer Adrian Thomas Colasito, to discuss how Tacloban has transformed itself since Yolanda.

Rosales said that on the planning side, the recovery efforts were cumulative, and they relied on interagency cooperation. But more importantly, the experience emphasized the role of documentation and evidence in assessing the damages and losses down to the household level. She explained that they could not “proceed with recovery planning without evidence-based disaster research”.

The virtue of cumulative and comprehensive interagency efforts was also embraced by the DOST regional offices of PAGASA and PHIVOLCS in improving their predictive capacities. “The DOST cannot do its mandate [of

warning] without help from the academe and private sectors,” stated Cañete.

The same can be said about the local government’s disaster preparedness efforts.

“One of the things we are trying to do is professionalize the local DRRM office,” said Colasito, as he announced the local government and academe’s decision to create an undergrad program on DRRM.

Yolanda put Tacloban in a learning position, giving insights about the urgent vulnerabilities of bureaucracy and concurrent planning weaknesses. Colasito believes the onus is on Tacloban to lead the charge toward investing in DRRM professionals.

As chair on disaster preparedness, the DILG is also keen on promoting DRRM in every sector, requiring businesses to incorporate DRRM in their business plans, and enhancing communities at the barangay level to improve their response capabilities. It takes “concentrated community effort”, in Cañete’s words, to create a more resilient generation.

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PIDS, partners bat for MSME development

MICRO, SMALL, AND medium enterprises (MSMEs) play a critical role in the socioeconomic health of developing countries. They act as engines of growth and as instruments for poverty reduction. In the Philippines, they make up 99.6 percent of all business establishments. To promote the growth and sustainability of the MSME sector, the Philippine Institute for Development Studies (PIDS) organized two events in the cities of Manila and Davao with development partners.

In Manila, PIDS and World Bank (WB)-Philippines jointly sponsored the policy forum “Increasing Philippine SMEs’ Participation in the Global Value Chains”. Held on September 8, the forum was part of the celebration of the 14th Development Policy Research Month, which centered on the theme “Investing in Risk Reduction for a Resilient Philippines”.

Discussions focused on the factors that threaten the competitiveness and sustainability of MSMEs, such as low rate of business entry, low productivity, and the stagnation of the sector’s structure, to name a few.

The more productive medium-sized enterprises, for instance, only account for 0.4 percent of the total number of MSMEs in the Philippines, compared to microenterprises, which comprise 90.3 percent of the sector.

“Very few firms are really able to get into that medium segment,” said Cecille Fruman, Trade and Competitiveness director of the WB Group.

Vulnerability to natural hazards, disasters

One possible reason to the stagnation of the MSMEs’ structure is their vulnerability to disasters.

“Microenterprises, particularly, are more vulnerable to natural hazards and disasters than medium and large enterprises,” said PIDS Director for Research Information Sheila Siar in her opening remarks. “They are usually the ones severely affected by strong typhoons, floods, and earthquakes.”

Unfortunately, there is no standby government support to refinance businesses in the Philippines in the event a disaster occurs, according to WB Senior Financial Sector Specialist Nataliya Mylenko.

Moreover, despite a law requiring banks to allocate at least 10 percent of their credit resources to MSMEs, local banking system’s compliance remained low at 9.2 percent for the first quarter of 2016, based on data released by the *Bangko Sentral ng Pilipinas*. This is because formal financial institutions generally regard MSMEs as high-risk clients.

“The banks actually would just opt to pay the penalty instead of giving loans to MSMEs,” said Romeo Balderrama, president of the Philippine Homestyle and Holiday Decor Association, one of the company-representatives of the MSME sector in the forum.

Development Bank of the Philippines Vice President Benel Laguna said his institution is willing to engage in disaster financing. However, it can be a “little bit costly” to them.

Mylenko explained that while the government carries the cost related to reconstruction and recovery, it fails to sufficiently cover MSMEs after calamities.

“There needs to be an element of public subsidy [to support them],” she argued. She added that because disasters are inevitable in the Philippines, a “more systematic thinking” is needed.

Resilience building is key

Building the resilience of the MSME sector figured in the discussions at the policy forum in Davao City held on August 10 jointly sponsored by PIDS and the University of Southeastern Philippines. Titled “Harnessing the Capacity of MSMEs as Engines of Growth”, the forum drew crowds from the government, business, and civil society sectors of Davao City.

According to Sonny Domingo, research fellow at PIDS, more action is needed to protect MSMEs against natural hazards and disasters.

“While the Disaster Reduction and Risk Management Plan and the Climate Change Act are both comprehensive, their provisions and pillars on mitigation, preparedness, response, and recovery have not been translated into actual plans at the local level,” Domingo explained.

Domingo recommended building resilient transport and strategic communication systems, providing financial security instruments, incorporating the national disaster plan in the MSME Magna Carta, and strengthening social networks and partnerships from within the local communities to the entire region as some of the measures the government can adopt to strengthen MSME resilience.

Increasing competitiveness

Both forums also touched on other pressing issues affecting the capacity of Philippine MSMEs to compete domestically and globally. As a way of

boosting MSME performance, the Shared Services Facilities (SSF) program was rolled out by the Department of Trade and Industry (DTI) in 2013 to assist MSMEs enhance their operations and increase their productivity through the provision of support services, such as production facilities and equipment.

In 2015, as part of its impact evaluation research, PIDS assessed the effectiveness of these SSFs. Three case studies were undertaken to evaluate the impact of the facilities in selected industries in Luzon, Visayas, and Mindanao.

According to PIDS Senior Research Fellow and Project Director Erlinda Medalla, who presented the evaluation results, the SSFs significantly increased the revenues of the banana chips industry in Luzon, and significantly increased the production capacities of the banana powder, coco coir, and coco twine industries in Mindanao. “The impacts of the new technology provided through SSFs have been transformative,” she said.

However, Medalla noted problems in the identification and targeting of MSMEs.

Only those that already had equity and access to ready markets were given the opportunity to use the facilities.

During the open forum, the DTI representative present clarified that the agency has a separate program that specifically targets MSME start-ups. Across the industries that were evaluated, Medalla also noted a lack of awareness that SSFs were existing and available at all.

Nevertheless, there is a bright future in further developing SSFs, according to Medalla. “SSFs are one of the good projects of the government. They cost very little and have really high and proven impact on increasing jobs and production capacities,” she said.

She recommended improving the dissemination of information about SSFs and the targeting and selection of projects, developing a database of technical information about changes in MSME performance under SSFs, and integrating the SSF in other SME-oriented programs and activities.

GVCs as channels of growth

Aside from support services, such as SSFs, direct participation in global value chains (GVCs) by MSMEs can help increase their capacities.

“It is not only about entering GVCs but also about upgrading once you are in GVCs,” said WB Senior Economist Olivier Cattaneo at the September 8 policy forum. To explain this point, Cattaneo enumerated the vertical transfer from lead firms to MSMEs of the following benefits: skills and management capacities, technology upgrades and innovations, access to finance, access to global markets



MSMEs play a critical role in the socioeconomic health of developing countries, as they inspire growth and help reduce poverty. File photo shows MSME players participating in an agricultural trade fair/exhibit of the Department of Agriculture-Bureau of Agricultural Research in 2013. (Photo by Vin Aranas / PIDS)

Resolving fundamental... from p. 5

this can be explained by the inadequate budget allocation to PCIC. Constrained by limited resources, PCIC had to offer a small insurance cover to service more farmers. Alternatively, it could increase the cover, but this would mean a smaller number of beneficiaries.

The good news is PCIC is up for a bigger budget starting in 2017. The proposed budget is PHP 2 billion from PHP 1.6 billion in 2016 and PHP 1.3 billion in 2015. But resolving the budget issue is only half of the story. Making sure the insurance premium subsidies are directed to the poorest farmers is critical. After all, the program was designed to protect small farmers from economic shocks.

To address this, the Department of Budget and Management has also asked PCIC to prioritize, as program beneficiaries, farmers listed in the RSBSA with farms that are three hectares and below. Reyes, however, cautioned that the list of farmers in the registry also needs to be validated.

“There are many agrarian reform beneficiaries not in the registry. It also contains nonfarmers and excludes some farmers,” said Reyes.

For a country where a large percentage of the population still depends on agriculture for livelihood and where food security is an utmost concern, building agricultural resilience is an

urgent task. The National Climate Change Action Plan is a step in the right direction, but clearly more needs to be done. Resolving the issues in the crop insurance program and the irrigation systems is equally essential. And as UP Los Baños Professor Agham Cuevas, one of the session discussants, emphasized: “Unless fundamental problems like inadequate R&D budgetary support; weak extension systems; limited access to formal credit; inadequate, low quality, and poorly maintained infrastructure; and weak rural institutions, to name a few, are properly addressed, climate resilience in agriculture would be very difficult to achieve or it will take longer to achieve.” **SVS**

PIDS, PIA hold... from p. 17

Role of local studies in risk reduction, resilience building

Meanwhile, at the press conference in Cebu City held on September 29, Dr. Marife Ballesteros, PIDS acting vice president, called on government agencies and academic institutions, especially state universities and colleges, to undertake more studies geared toward building resilience. Likewise, she stressed the importance of being able to effectively communicate the results of these studies so that policymakers—both at the national and local levels—can use them in crafting good policies and programs.

“Local studies are able to assess the risks specific to a particular locality and able to recommend ways to cope with them. Local researches, therefore, are important in building resilience from

as basic as barangay communities,” Ballesteros noted.

Aside from Project NOAH, Rx Box, and the DIWATA satellite project, which were explained in previous DPRM press conferences, DOST is also implementing other projects geared toward developing early warning systems that the government can use to calibrate their plans and responses to disasters.

According to DOST Region 7 Director Edilberto Paradel, the Phil-LiDAR (Light Detection and Ranging technology) is now on its second stage. The Phase 1 of the project aims to produce 3D flood hazard maps that may be used for early flood warning, while the Phase 2 goes beyond hazard mapping and focuses on mapping the country’s natural resources. Under the Phil-LiDAR 2, state-of-the-

art technologies are used to generate high-resolution resource maps and resource vulnerability maps that give detailed assessment of the country’s natural resources, such as high-value agricultural crops, coastal resources, forest, and hydrological and renewable energy resources. These data are useful in formulating recommendations to address future local supply and demand in the said resources.

In addition, DOST, through PHIVOLCS also conducted digital mapping of fault zones. The data sets are useful not only for seismic hazard mitigation but also for land use planning, risk assessment, and disaster risk reduction plan and awareness.

“Thus, even if we are not capable of predicting the probability of earthquake

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Experts agree that the resilience of urban communities, particularly those in Metro Manila, will depend on the interaction of geophysical, political, economic, and social aspects, which will be glued together by good and effective policies. (Photo by Misha Borbon / PIDS)

A holistic... from p. 10

of this generation. “It does not think whether your grandchildren will have resources in the future,” she explained.

In terms of climate adaptation, Porio said the government should come up with convergent and integrative ways of addressing the issue. “Right now, what we have is a fragmented system of governance at different levels,” she added. Porio explained that “our policymakers

continue to put ourselves in an increasingly risky situation because of their decisions.”

Manila is considered the most exposed city to natural disasters in the world, according to the 2016 Natural Hazards Vulnerability Index from the United Kingdom-based risk analyst, Verisk Maplecroft. **RGV**

Mindanao hosts... from p. 14

of DILG-Region 13, Donald Seronay, who said that the government and the academe are conducting overlapping projects that could be resolved by collaboration.

According to Dr. Alexander Campaner, forum moderator, the gathering of Mindanawon researchers, policymakers, and public and private stakeholders aims for more collaborations in research and policymaking for the benefit of Mindanao.

Tan of MinDA closed the forum by encouraging the participants to walk the talk in DRRM, and in nurturing resilient communities in Mindanao. “Balancing green and urban development is a function of a holistic, inclusive, and sustainable growth,” he said. This, he added, requires responsive and adaptive capacities, innovation, localization, education, and focusing on niches, among others. **MVPA**

Building resilience... from p. 3

the day, our policymakers are the ones who will eventually adopt, listen to what we are saying, and translate our recommendations into good policies,” he explained.

He concluded his closing speech by encouraging the audience to do more research. He reminded the audience that it is their responsibility to make sure (1) that there are succession plans in terms of pursuing these kinds of studies, (2) that talent base will continue to expand, and (3) that institutions will be strengthened to be able to respond to this growing need to analyze risks and to make the necessary adjustments.

This year’s APPC, which was attended by over 200 participants, was jointly organized by PIDS and *Bangko Sentral ng Pilipinas*. In 2015, also during the DPRM, the inaugural conference was launched with the theme “Harnessing Our Human Capital and Institutions for Inclusive Growth”. **GGM, SVS**

PIDS, partners... from p. 19

and increased connectivity, and an overall improved business environment.

In recent years, Philippine businesses have become less integrated in the electronics GVC but more in the services GVC.

This is no coincidence. According to PIDS Senior Research Fellow Ramonette Serafica, there has been “an increase of services intensification” in various industries across the country, whether they are already service chains or manufacturing chains. Most of the Philippine MSMEs are concentrated in three industries (i.e., retail and wholesale, accommodation, and food services and manufacturing).

While increased GVC participation may increase MSMEs’ exposure to global economic risks, this is offset by the numerous benefits that come hand-in-



PIDS Senior Research Fellow Ramonette Serafica says the increase in services intensification is apparent in various industries across the country. This was during the WB-PIDS event titled “Increasing Philippine SMEs’ Participation in the Global Value Chains: A Practitioner’s Workshop” held on September 8, 2016, in Taguig City. (Photo by Misha Borbon / PIDS)

hand with becoming more integrated in the global market, such as the prospects of increasing their capacity to grow, innovate, improve their performance, and access resources.

For a developing country like the Philippines, inclusive growth requires

promoting the development of the MSME sector. By enhancing local projects that already work and addressing the problem of business continuity in the face of destabilizing shocks, policymakers can help MSMEs strengthen themselves and access more market opportunities.

MHB, RGV, SVS

PIDS, PIA hold... from p. 20

occurrence, this system allows us to determine which areas are at greater risk should a major earthquake strikes,” Paradela said.

On the part of the DSWD, the department is now advocating the social protection concept in reducing vulnerability to risks, according to Planning Officer Anthony Arsenal.

Through social protection programs and policies, the government will be able to promote and protect the livelihood and employment of people, especially the marginalized. This way, Filipino families will be more protected against hazards

and sudden loss of income, thereby improving their capacity to manage risks.

Arsenal said the DSWD has trained local social welfare officers, planning officers, and local and regional DILG officers and representatives in translating social protection inputs into tangible action plans in their respective local governments.

Likewise, Arsenal stated that the DSWD is advocating the use of available data from DOST, such as hazard maps, landslide maps, and other early warning systems among local government units. The DSWD also uses the hazard maps

of DOST in the prepositioning of relief goods in cities and municipalities.

The DOH also uses local data in its disaster preparedness and response activities. According to Dr. Eugenia Mercedes Cañal of DOH Region 7, they usually refer to data taken from previous calamities in preparing for their medical response and prepositioning in times of disaster.

Likewise, Cañal said that on top of responding to natural hazards, DOH also prepares for outbreaks, such as dengue and Zika virus. Cebu has already one confirmed Zika case, and the DOH already conducted the necessary steps to prevent an outbreak. **GGM, MHB**

Research Digests

Policy Notes No. 2016-12

Economic and Poverty Impacts of the National Greening Program

by Caesar B. Cororaton, Arlene B. Inocencio, Marites M. Tiongco, and Anna Bella S. Manalang

The National Greening Program (NGP) was implemented in 2011 to increase reforestation and address related problems on poverty, food security, environmental stability and biodiversity conservation, and climate change. This *Policy Note* assesses the potential economic and poverty effects of the NGP using the computable general equilibrium (CGE) model. The CGE model was specified, calibrated, and used to simulate three scenarios. Results from the quantitative assessment showed that under full NGP implementation, forest cover increases by 1.5 million hectares by 2050, decline in agriculture land productivity is prevented, and human health improves thereby preventing a decrease in labor supply. However, this *Note* indicates that while full implementation of the NGP generates notable poverty reduction in the long run, partial implementation of the program is more realistic and likely to be achieved based on past reforestation programs of the country.

Policy Notes No. 2016-14

Competition for the Market: A Policy Framework for Improving Bus Operation along EDSA

by Gilberto M. Llanto and Hope A. Gerochi

The worsening traffic logjam along Epifanio de los Santos Avenue (EDSA) is a serious problem in Metro Manila. It has caused hardship and suffering on commuters, and tremendous costs in terms of losses in productivity and unnecessary fuel consumption. Various yet unsuccessful solutions have been tried. Thus, this *Policy Note* invites policymakers to consider applying “competition for the market” or competitive tendering/auctioning as a policy

framework for rationalizing bus operation along EDSA. This framework proposes a way to effectively implement the bus consolidation strategy, which can create more traffic space and ease movement of traffic along EDSA.

Policy Notes No. 2016-15

How to Improve Smallholders’ Access to Formal Credit: Lessons from the Agrarian Production Credit Program

by Gilberto M. Llanto, Ma. Piedad S. Geron, and Jocelyn R. Badiola

The Agrarian Production Credit Program (APCP) is a credit program for smallholders designed and implemented by the Department of Agrarian Reform to provide smallholders with access to formal sources of credit. Under the APCP, documentary requirements for accessing credit have been streamlined to meet the level of financial education and literacy of agrarian reform beneficiaries (ARBs). This *Policy Note* reviews APCP’s capacity to effectively address ARBs’ problem with accessing formal sources of credit. Some lessons have emerged. APCP has provided credit to ARBs and agrarian reform beneficiaries’ organizations, but loan repayment, not just provision of credit, should be equally emphasized to sustain the program. Smallholders need whole-of-government support that includes investments in rural infrastructure and communication, more effective extension services, and access to modern farming technologies and innovations to address binding constraints to productivity and growth.

Policy Notes No. 2016-18

Is the Community Mortgage Program Propoor?

by Marife M. Ballesteros, Tatum P. Ramos, and Jasmine E. Magtibay

The government established the Community Mortgage Program (CMP), which is administered by the Social Housing Finance Corporation (SHFC), to enable informal settler

families (ISFs) to purchase land by providing them with affordable financing. Loans are granted to community associations (CAs) where ISFs must belong to access the CMP. Given the government’s significant subsidy to the program, has the CMP been able to address the needs of the poor and their communities? Results of the assessment show the equity requirements set by the SHFC prevented poor households from becoming program beneficiaries. As this could worsen with further increases in urban land price, this *Policy Note* recommends implementing an income-based subsidy scheme to prevent further exclusion of the poor. It also suggests making capacity building of the CAs an integral part of the CMP process.

Discussion Paper No. 2016-30

Potential Effects of the Regional Comprehensive Economic Partnership on the Philippine Economy

by Caesar B. Cororaton

Using a global computable general equilibrium model, this paper analyzes the potential effects of Regional Comprehensive Economic Partnership (RCEP) on the Philippine economy. The analysis comprises 80-percent reduction in tariffs and 10 percent in nontariff barriers within RCEP member-countries over a 10-year period. Results indicate trade creation within RCEP, while exports of RCEP to nonmembers decline. Moreover, within RCEP, the improvement in exports of the six non-ASEAN members is relatively higher than the Association of Southeast Asian Nations (ASEAN) members. Viet Nam benefits the most among ASEAN members; exports of the rest of ASEAN also increase including the Philippines. The entry of cheaper rice benefits the poor, and the entry of cheaper textile benefits the garment industry. Overall, Philippine gross domestic product improves by 3 percent and welfare by USD 2 billion. Philippine poverty declines from 24.9 percent to 23.3 percent.

Editor's... from p. 1

fact that the sources of threat are numerous, interrelated, and constantly evolving.

This year's Development Policy Research Month (DPRM) celebration is meant to put things in their proper perspective as far as risk and resilience building are concerned. DPRM 2016 is aimed at educating policymakers and the public on the complex risk landscape confronting the Philippines. With the theme "Risks, Shocks, Building Resilience", aptly captured in the slogan "*Angkop na Kahandaan: Matatag na Ekonomiya at Lipunan*", it also underscores the role of appropriate policy interventions in building the country's resilience to various economic, environmental, technological, political, and societal risks and stresses.

As the highlight of the DPRM, the 2nd Annual Public Policy Conference (APPC) serves as an opportunity for social science experts, researchers, and policymakers to understand risk and resilience better. It deviates from the insular view that risk is all about climate change and natural hazards. Rather, the conference advocates a systems perspective and thus devotes four sessions to discuss the issues affecting the resilience of the macroeconomic, agriculture, urban environment, and health sectors. The idea is to have a clear grasp of sectoral-level risk factors and issues and how these are affecting the individual sectors and the system as a whole.

Moreover, analyses are made not just by economists but also by other social science academics and practitioners, such as anthropologists, sociologists, and political scientists. This is in view of the multidisciplinary character of the APPC

and in recognition of the superiority of a multidisciplinary approach in understanding development issues. These key features of the APPC reflect some of the guiding principles of PIDS' research work—systems oriented, multidisciplinary, and collaborative.

These same values are also apparent in the Institute's knowledge dissemination activities, such as the press conferences held during the DPRM celebration. The voices of various stakeholders—convened by PIDS, with support from the Philippine Information Agency—are featured in these events. Representatives from academe, government, health, and science and technology sectors as well as local officials are invited to talk about their agencies' initiatives in risk reduction and management. The format is likewise holistic to emphasize that resilience building is not just the task of one entity but a collective undertaking. **DRN**

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