

Revitalizing Philippine Irrigation: A Systems and Governance Assessment for the 21st Century

Edited by Roehlano M. Briones

DEVELOPMENT RESEARCH NEWS

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PIDS dissects PH irrigation issues in new book

STATE THINK TANK Philippine Institute for Development Studies (PIDS) recently released a book dissecting the issues affecting the country's irrigation development program.

During the virtual launch on January 28, PIDS President Celia Reyes said the analyses contained in the book can guide policymakers and administrators in implementing the country's irrigation program.

"The authors offer a set of practical and useful recommendations not only for the National Irrigation Administration (NIA) but also for other stakeholders in the national irrigation development agenda," Reyes said.

Written by experts from various disciplines, the PIDS book, *Revitalizing Philippine Irrigation: A Systems and Governance Assessment for the 21st Century*, combines both field-based qualitative and ocular assessment as well as quantitative evaluation using hydraulic and economic modeling of the Philippine irrigation system. It examines the entire project cycle—planning, design and implementation, operations, and monitoring

In this issue

- 2 Editor's Notes
- 4 Rice fund 'more than enough' to offset tariffication's impact on poverty
- 5 Message: Secretary William Dar during the irrigation book launch
- 7 Joining agri orgs boosts farmers' access to credit and trade
- 9 'Parcelization' of collective land titles could boost crop yields
- 11 Agri performance remains lackluster despite increased gov't financing
- 12 LGUs lack tech capability on infra, funds underused
- 14 Redundancy, overlapping roles hound PH water sector
- 16 PIDS study calls for health system reform to address NCD risk
- 18 Policy Issue at a Glance: Making Online Work Sustainable in PH
- 19 Research Digests

Editor's Notes

The agriculture sector has been hailed by many as the Philippine economy's saving grace amid the pandemic. In the second and third quarter of 2020, agriculture registered positive growth while other sectors struggled. Unfortunately, disaster-related damages in the fourth quarter derailed its sustained growth. We cannot overemphasize enough the importance of keeping our agriculture productive and resilient, especially at this time when the country is reeling from the effects of the pandemic and doing its best to recover. For this reason, we devoted this issue to a discussion of the agriculture sector and related sectors based on recently completed PIDS studies.

The banner story presents the Institute's newest book on irrigation. A compendium of papers drawn from a series of multidisciplinary research projects organized by the Institute, its analyses encompass the national and communal irrigation systems and various program aspects, including water resource governance, benefits and costs, and policy reforms. The book describes the low economic returns of irrigation projects despite the massive budgetary allocation being poured into the program. It recommends improving the operations and maintenance of our irrigation systems and the accuracy of prefeasibility studies of proposed projects by considering "land conversion trends, assessment of water supply sources, and climate change impacts in estimating irrigation potential". (Page 20)

and evaluation. The analyses cover national and communal systems and various program considerations, such as water resource assessment, governance issues, benefit-cost comparisons, and policy reforms, particularly the Free Irrigation Service Act (FISA).

In his keynote speech, which was read by Department of Agriculture (DA) Undersecretary Leocadio Sebastian, Secretary William Dar said the PIDS' book will support the whole-of-society collaboration that the agency is advocating.

"The information it carries and issues it raises will shape discussion plans in improving irrigation in the country," he added. [Read the full text of Secretary Dar's speech on page 5.]

Senator Cynthia Villar, meanwhile, lauded PIDS for coming up with "relevant and comprehensive data and assessment" of the government's irrigation program, which, she emphasized, "can aid legislators in crafting laws and policy reforms".

"This is the kind of research that we need—research that is reliable and accurate for which PIDS is known for, research that can influence the implementation of policy reforms, the process of law-making, and most of all, bring about life-altering changes to the lives of the beneficiaries of the laws and reforms, in this case, the farmers and their families," she maintained.

Villar also noted that the analyses in the book could guide the preparation of the irrigation master plan, which will set the direction for the country's irrigation

development, including the financing for its operations and management.

"The government has been spending a lot on irrigation," Villar stressed. Thus, it is important to evaluate whether irrigation has "improved the lives of the farmer-beneficiaries and if it was able to help solve the country's long-standing problem of food security and rural development," the senator stated.

The resurgent irrigation program of the Philippines

Since the world rice price crisis of 2008, irrigation has been getting the biggest chunk of the government's spending on agricultural programs.

PIDS Senior Research Fellow Roehlano Briones, one of the authors and the editor of the book, noted that from only PHP 8 billion in 2008, the budget for irrigation increased to PHP 24.4 billion in 2012 and ballooned to about PHP 32.3 billion annually from 2013 to 2018.

On top of this, the government has also made irrigation free to farmers with the passage of the FISA in 2018. Under the law, farmers with landholdings of 8 hectares and lower, which represent 98 percent of all farms, will no longer pay irrigation service fees.

"This shifted the burden of paying irrigation operations and maintenance from direct users—the farmers—to the public treasury funded by taxpayers," Briones said.

But how much bang for their buck are taxpayers getting?

According to the authors, the area of irrigated systems has been growing, particularly the communal irrigation systems. However, they argued that the costs of irrigation investment are too large compared with the expected benefits.

As of 2015, about 1.7 million hectares or 57.33 percent of the 3.1 million hectares considered as irrigable had been developed for irrigation, an increase of over 40 percent from baseline figures in 1994. Briones said that this has been the highest ever achieved by the government in closing the gap between potential and actual irrigated areas.

However, this is still far from the target of 65.07 percent irrigation area ratio by 2022 under the *Philippine Development Plan 2017–2022*.

Using cost-benefit analysis, Briones concluded that despite the consistent increase in irrigation investment and area irrigated, there has been no significant growth in area harvested and yield in areas that are receiving irrigation services compared to the rainfed areas, which do not have access to irrigation.

In addition, Briones pointed out that *palay* production had been increasing for only 8.5 million tons in 1987 up to an all-time high of 19.3 million tons in 2017. He also noted intermittent dips in *palay* output in 2015–2016 due to an *El Niño* episode.

Using econometric modeling, the author computed the incremental returns to

government's investment in irrigation at PHP 4.3 billion in 2017, and declining to over PHP 1 billion per year for the succeeding years.

“Together with the incremental cost savings, total benefits deflated to 2006 prices is estimated at PHP 3.1 billion in 2017, declining to just PHP 1 billion or below in the following years,” Chapter 7 of the book reads.

However, Briones noted that his computation of the benefits is confined only to rice production impacts whereas NIA employees interviewed during field visits pointed out that actual feasibility studies incorporate noncrop benefits from irrigation. Nonetheless, he suggested that project evaluation at the

feasibility stage must be stricter about making credible projections concerning future crop and noncrop benefits of proposed irrigation projects.

Free irrigation under FISA

Briones likewise pointed out that while the beneficiaries of the free irrigation are poorer than average, a large majority of them are nonpoor.

He maintained that the 8-hectare cutoff for the provision of free irrigation under the law is quite high. A better way, he suggested, is to have a more targeted type of subsidy like a conditional cash transfer, which is already tested to be effective globally. This way, only those who meet certain conditions will be given help by the government.



The increase in irrigation investment did not significantly improve agricultural productivity, study says.

Irrigation planning and maintenance

For NIA to improve its performance in identifying and developing projects, the authors recommended that the irrigation agency builds its capacity through stronger coordination with the DA and local government units.

“The agency should also improve its prefeasibility studies given the significant

gaps between planned versus actual new irrigated areas. It should consider land conversion trends, assessment of water supply sources, and climate change impacts in estimating irrigation potential,” the authors further suggested.

To improve operations and maintenance of the irrigation systems, the book recommends adopting the asset management method, which considers financial, economic, social, and engineering

conditions. It also suggested that given the increased demand for technical assistance and operations and management resulting from the FISA, as well as the higher targets for new irrigated and rehabilitated areas, permanent technical positions need to be created in NIA offices.

The electronic copy of the PIDS book is available at <https://www.pids.gov.ph/publications/7189>. **GGM**

Rice fund ‘more than enough’ to offset tariffication’s impact on poverty

THE MINIMUM PHP 10 billion Rice Competitiveness Enhancement Fund (RCEF) is more than enough to offset the impact of tariffication on poverty.

This is according to Roehlano Briones, senior research fellow at state think tank Philippine Institute for Development Studies (PIDS), in the study titled *“Did the opening up of rice importation in the Philippines worsen income poverty and inequality?”*

Briones noted that the rice tariffication causes only a slight increase of 0.56-percentage points in income poverty per year during the first five years, but this impact is expected to diminish over time.

Based on his computation, poor households are expected to lose PHP 2.84 billion annually, on average, during the first three years of implementation of Republic Act (RA) 11203 or the Rice Tariffication Law (RTL). The losses are expected to decline further to PHP 2.1 billion annually in 2022–2024.

Such losses, Briones argued, are far lower compared to the annual RCEF guaranteed under the law. (Page 6)



I'm sure all of you know by now that the agri-fishery sector contracted by 1.2 percent in 2020. And I'm sure it is within the range of what many here were expecting given how last year brought in "a perfect storm" — from the Taal eruption and the pandemic to the continuing ASF problem and the series of typhoons.

This is a small decline given the cataclysm of 2020. But the most positive news perhaps is how the crops sector was unscathed amid all that, managed even to thrive by 1.5 percent.

The DA will continue to boost production of major commodities, the rice and corn subsectors, and high value crops. The importance of high value was emphasized anew when vegetable supply had been disrupted by typhoons, and thus turned to be a culprit, along with meat, for the 3.5 percent rise in December inflation.

Boosting our crops sector will be an important investment as we target a 2.5-percent agri-fishery growth this year. A critical undertaking will be allocating bigger resources in infrastructure, particularly irrigation projects, and ensuring that they are built in coordination among pertinent government agencies and with science-based approach.

Beyond national agencies, the agency is augmenting ties with local government units down to communities. We are taking a community-centric approach, which was a key element in the success of a banner irrigation management program we implemented in India back when I was spearheading ICRISAT.

With community-based and farmer-centric approaches we were able to ensure all-year-round availability of water, higher productivity, efficiency, and enhancement of incomes. In the end, we were able to create an empowered community, fueling inclusive growth.

To ensure that every drop of water contributes to our goal of food security, we will aggressively harness technologies and global best practices that support a competitive agriculture while ensuring the effective management of our water resources.

In communities in India, there is widespread adoption of water harvesting technologies that collect rainwater, the volume of which can often sufficiently serve farming needs during the dry season.

Water catchment projects are a good low-cost solution especially as our BSWM has limited funds. This brings me to an important point and a very critical part of our initiatives in establishing irrigation system. We will invest in land profiling, and hydro-geological profiling must be conducted to respectively identify suitable areas and aquifers, the latter for rainwater storage.

Rainwater harvesting, as well as solar powered irrigation projects, will help accelerate our achievement of targeted irrigated areas. In addition, it will help us cope with the expected increase of rainfall in the years ahead, given the effects of climate change.

As such, we must also invest in more research for development pursuits to resolve water issues. As agriculture makes up 80 percent of water use in the country, we have to innovate and take greater care of our water resources by means of climate-smart technologies to ensure we have enough food for our growing population in the next decades.

On the problem of political interference, the DA will tirelessly call on the help of the Anti-Red Tape Authority and partner with them to ensure that those who stifle irrigation projects for purposes of personal interests will be dealt with accordingly.

Politics is very much a bane to the progress of any society, but its continued intervention to today's progress is doubly heartbreaking because by now, everyone should understand that now is a time to work hard together for a collective goal and not personal interests.

This new book by the Philippine Institute of Development Studies, I am confident, will support the whole-of-society collaboration that we at the DA would like to establish, especially in these unfamiliar times.

Undeniably, the information it carries and the issues and recommendations it raises will shape discussions and the plans we have for improving irrigation systems in the country.

We look forward to more PIDS-initiated efforts that put the spotlight on food security as a tool for social and economic development.

Thank you!

**Message of Agriculture Secretary William Dar
during the virtual launch of the PIDS book,
*Revitalizing Philippine Irrigation: A Systems and
Governance Assessment for the 21st Century***

(Delivered by Agriculture Undersecretary Leocadio Sebastian)

Rice fund...from page 4

The RCEF, an annual fund of at least PHP 10 billion to be given for the first six years of the law's implementation, is intended to help small farmers counter the potential adverse impacts of the RTL. It will be spent on programs, such as farm mechanization, credit, training, seed provision, and other activities to enhance the competitiveness of farmers. Any tariff collected from rice imports beyond PHP 10 billion will likewise form part of the RCEF.

But for the RCEF to be effective, Briones emphasized that it has to be properly targeted.

He also recommended that the programs under RCEF, particularly their impact on the rice industry at the grassroots (farm operators, farmworkers, and other entrepreneurs and workers in the value chain), must be evaluated.

It is important to assess whether the law has “adequately compensated the losers of the policy reform and whether it has helped accelerate the transformation of rice and other agricultural value chains,” he said.

Rice Tariffication Law

RA 11203, which took effect in March 2019, repealed the regulatory and import functions of the National Food Authority (NFA). The old import quotas imposed by NFA, known as quantitative restrictions (QRs), were then converted into ordinary customs duties. This



The Rice Competitiveness Enhancement Fund is enough to support farmers who suffered huge losses under the Rice Tariffication Law, according to a PIDS study.

means that businesses can now import as much rice as they want as long as they pay the required tariffs or import taxes.

The implementation of rice tariffication has come under heavy fire, with high-profile objections being raised by some groups. For instance, the Federation of Free Farmers (FFF), a large alliance of farmer organizations in the country, has called for its amendment, including the reinstatement of QRs.

According to critics, the benefits of tariffication have been captured mostly by importers and retailers rather than consumers while inflicting huge losses on farmers.

The numbers say otherwise. The PIDS study noted that domestic prices of rice fell at the retail, wholesale, and farmgate level while gross marketing margins of traders (or the difference between retail and farm

prices) increased, except for wholesalers of regular milled rice (RMR), which is the most common type of rice.

Between 2018–2019 and 2019–2020, retail prices for well-milled rice (WMR) and RMR fell by 6.9 percent and 9.5 percent, respectively, per data from the Philippine Statistics Authority.

According to Briones, this seems inconsistent with what critics are saying that the retail prices of rice have “hardly budged”.

The study also noted an even sharper decline in wholesale prices for WMR and RMR at 15.4 percent and 19.8 percent, respectively. Although the decline in *palay* prices has been sharpest at 21.8 percent, this only represents a 2-percentage-point difference versus the drop in RMR wholesale prices, the study stated.

In terms of margins, retailers have been reaping the largest increase, which is more than double for RMR at 122.3 percent and WMR at 59.5 percent. Meanwhile, wholesalers have not benefited as much, with RMR wholesaler's margin falling by 13.5 percent for RMR and rising mildly by 4.5 percent for WMR.

It is possible that “unlike retail prices, wholesale prices react earlier and faster to trade shocks simply because they own more stocks and incur higher costs of storage, making them more exposed to greater market risk,” Briones explained.

Further, he added that most wholesalers are also more specialized in rice and therefore

“more averse to an expected decline in price whereas rice could just be a small part of most retailers’ overall inventory of goods”.

These considerations, the author pointed out, “add up to the relative inertia to reduce prices among retailers and a greater willingness to cut prices among wholesalers”.

Who benefits from lower prices of rice?

Consumers, particularly the poor, are benefiting from the declining prices of rice.

Rice accounts for a fifth (20%) of poor households’ expenses, higher than what the nonpoor devote to rice, which is only

about one-tenth (10.9%). The author said that 72 percent of the poor’s rice spending is for RMR, which is cheaper than WMR. Meanwhile, the nonpoor’s budget for rice is for higher-quality rice, with a smaller portion of it for RMR.

“NFA rice accounts for just 13.3 percent of the poor’s rice spending, which means that 87 percent is spent on commercial rice,” Briones said.

While the law has stopped the sale of affordable NFA rice, “the bulk of the poor’s spending is for commercial RMR rice, which has become considerably cheaper upon tariffication,” Briones explained. **GGM**

Joining agri orgs boosts farmers’ access to credit and trade



Better access to credit and wider market reach are some of the benefits when joining farmer organizations. (Photo by UUSC/Flickr)

SMALLHOLDER FARMERS AND fisherfolk are advised to join farmer organizations to participate in higher agriculture value chains and better access credit.

A study by state think tank Philippine Institute for Development Studies (PIDS) titled “*The role of agrarian reform beneficiary organizations (ARBOs) in agriculture value chain*” reveals that farmers get better contract offers from buyers if they are members of an organization than when they individually act on their own.

According to PIDS Vice President and senior research fellow Marife Ballesteros and research analyst Jenica Ancheta, authors of the study, smallholder farmers

usually do not have the capital, technology, or facility to participate in agriculture value chains.

By joining an organization, smallholder farmers are able “to pool their resources and jointly carry out profitable activities. It enables them to access technology and skills training and lowers risks and transaction costs”.

According to the authors, value chain refers to a “series of value-adding activities from production to the end use of a product or service”.

ARBOs as conduit to higher value chains

The authors cited the case of farmers involved in the production and trade of *abaca*.

For instance, before *abaca* can be graded and traded, the barks need to be stripped prior to converting them into *abaca* fibers. Stripping is “a laborious process if done manually. Farmers need stripping equipment to raise their productivity,” the authors said.

“Although fibers can be sold, unbundled, and ungraded, it can be traded in the informal market but at a low price,” they added.

Moreover, segregation of fibers based on quality is required by the Philippine Fiber Industry Development Authority in issuing a certification of fiber quality.

Given the capital investments needed, all these primary processes for *abaca*

(i.e., from stripping to bundling and certification) require shared facilities, especially for smallholders.

Through ARBOs, smallholder farmers are able “to consolidate outputs and invest in facilities and equipment that they are constrained to undertake individually”.

Similarly, the PIDS study, “*Land tenure, access to credit, and agricultural performance of ARBs, farmer-beneficiaries, and other rural workers*”, emphasized the crucial role of ARBOs to improve small farmers and fisherfolk’s access to credit.

Ivory Myka Galang, supervising research specialist at PIDS, said that membership in organizations or cooperatives like ARBO allows farmers and fisherfolk “to access government programs and private-led initiatives, such as agricultural workshops and trainings, input and technological support, market linkage, and credit facilitation, among others”.

Out of 1,144 ARBO households surveyed in the study, 428 households were able to access any credit during the reference period.

Credit programs have been viewed as crucial part in developing the agriculture sector, especially small-farm agriculture.

Results showed that 37 percent of ARBO household borrowers sourced their loans from microfinance institutions (MFIs), 25 percent from cooperatives and farmer associations, 13 percent from private and commercial bank loans, while only 3 percent borrowed from traders.

Moreover, even poor ARBO households engaged in agricultural activities were able to access formal credit (i.e., mostly from either MFIs or cooperatives and farmer associations), according to Galang.

About 74 percent of these poor ARBO households borrowed their largest credit from formal sources while only 26 percent sourced their largest credit from informal sources such as family and friends.

She added that on average, the largest credit “a poor household was able to borrow from formal sources amounted to PHP 23,964.”

Further, borrowing ARBO agricultural households earned higher net income from agricultural activities than nonborrowing ARBO agricultural households by an average amount of PHP 14,666.

Greater demand for capital, facilities

As farmers move to higher level of the value chain, activities become more complex, such as postharvest and marketing activities.

These activities demand bigger capital and facilities that poor farmers often lack.

“It benefits smallholders by linking them to markets and improving their capacities for enterprise development,” Ballesteros and Ancheta said.

According to them, “small farmers, especially in developing countries, must

now adapt their production methods to the demands of the local and international markets.”

“They need to be closely aligned with other actors in the agriculture value chains as these value chains become global and concentrated,” Ballesteros and Ancheta said.

Policy recommendations

Both studies underscored the importance of policies directed toward organizing farmers to increase their access to formal credit and market.

“As pointed out by an earlier PIDS study on credit to smallholders, it is crucial for the government to reduce the cost of lending by using farmer cooperatives and associations as conduits and promoting digital finance,” Galang said.

“The potential of cooperatives as lenders to small farmers and fisherfolks who need credit to support production activities is huge, given that majority of farmers and fisherfolk are still not members of cooperatives and do not have access to formal credit sources,” she explained.

Galang noted that the risks related to smallholder lending may be reduced through the “strengthening of market linkage of farmer producer organizations, fast-tracking of the payout of crop insurance claims, and instituting mechanisms for the provision of guarantee for cooperatives”.

Meanwhile, sustainability of the organization is a main concern as it appears that “many farmer organizations in the country have a low level of organizational maturity and mainly formed to access funding,” according to Ballesteros and Ancheta.

As such, there is also a need for capacity-building programs, including training on leadership and credit management. The authors explained that it is important for ARBOs to “establish other nonfarm enterprises that will generate additional incomes for members and sustain the operations of the organization”.

Both studies also suggested capacitating farmer organizations in building alliances/networking not only among farmer organizations but other stakeholders as well.

The two PIDS studies examined the ARBOs covered by the Convergence on Value Chain Enhancement for Rural Growth and Empowerment project implemented by the Department of Agrarian Reform with support from the International Fund for Agricultural Development. **MJLS, RTAL**

‘Parcelization’ of collective land titles could boost crop yields

THE SUBDIVISION OR “parcelization” of Collective Certificates of Land Ownership Award (CCLOA) could improve farmers’ agricultural performance, according to a paper by Philippine Institute for Development Studies (PIDS) titled *“Boosting agricultural productivity through parcelization of Collective Certificate of Land Ownership Awards”*.

The PIDS study, which identified benefits and problems of subdividing collective land titles, maintained that sampled farmers in the study who are under individual land ownership arrangements are better off than those engaged in collective farming.



In April 2019, President Rodrigo Duterte mandated the Department of Agrarian Reform (DAR) to subdivide “CCLOA-issued lands that are not collectively farmed or operated in an integrated manner” to address some problems (i.e., boundary issues and inclusion and/or exclusion of agrarian reform beneficiaries in the original master list).

Using data from a PIDS-DAR survey of agrarian reform beneficiary organization (ARBO) members, PIDS supervising research specialist Ivory Myka Galang, author of the study, found that the total household income, net income from farm and nonfarm businesses, and other sources of income of individual-CLOA households are higher than those of collective-CLOA households.

She estimated the average annual sales for all types of crops planted in a year per hectare of individual-CLOA households at PHP 34,894 versus PHP 29,511 for collective-CLOA households.

For permanent crops, individual-CLOA households made an average annual sales of PHP 41,005 per hectare compared to only PHP 23,437 for collective-CLOA households.

For temporary crops, individual-CLOA households had an average annual sales per hectare of PHP 41,694 versus PHP 37,525 for collective-CLOA households.

Galang also cited various studies showing the advantages of individual land

ownership. In China, for instance, large productivity increases were associated with the shift from collective to privately owned farms. She also noted that land titling has been proven to increase Thailand's land value and investments in farming capital.

Moreover, farmers will be encouraged to plant more perennial crops, such as trees, if they have more secure tenure and if they have the option to transfer rights to their heirs and other farmers.

“These two desirable properties—tenure security and transferability of rights—are both established under individual land ownership,” the PIDS study read.

Further, it pointed out that while land subdivision is being pursued, other rural development strategies, such as farm consolidation in the form of contract farming, could be undertaken.

Contract farming arrangement is a common practice in the banana and pineapple industries in Mindanao as well as in the tobacco industry in Northern Luzon.

Farmers under contract farming are able to access credit and technical assistance and are provided with guaranteed price.

How can the government implement the parcelization program more efficiently?

The PIDS study urged DAR to “use a modern cadaster and a record-keeping system that concerned government

agencies can access easily”. It noted the importance of cadastral surveys in pursuing rural development, as these data help in identifying the type of investments appropriate for various areas (e.g., irrigation scheme and farm road construction).

Countries with advanced cadastral surveying and recording systems are India and Singapore. India, through its Digital India Land Records Modernization Programme, has already achieved “more than 90 percent of their target for digitization of land records”. Meanwhile, Singapore, is pursuing a more advanced cadastral system that supports not only digital cadastre but also 3D cadastres.

The study also recommends that DAR should continuously improve its agrarian justice delivery system involving land tenure service issues. During the first semester of 2019, the agency reported a resolution rate of 71 percent, as it was able to resolve 17,588 cases out of its 24,579 total caseload. Disputes in the validation of beneficiaries list could hamper the parcelization process, thus, it is important to resolve cases immediately.

Based on 2019 figures, DAR has issued 2.251 million hectares covered by CCLOAs in agricultural land, 76 percent of which were awarded to agrarian reform beneficiaries who are not engaged in collective farming. It has also created a separate office called Agrarian Reform Title Stabilization to facilitate the parcelization process. **RTT**

Agri performance remains lackluster despite increased gov't financing



Despite additional government support, farmers and fisherfolk are still among the sectors with high poverty incidence, study says.

DESPITE THE INCREASING government-led financing programs, the agricultural sector is still hounded by issues of low productivity, according to the study *“Towards a more sustainable financing of small farmers and fisherfolk’s (SFF) agricultural production”* published by state think tank Philippine Institute for Development Studies (PIDS) and funded by the Agricultural Credit Policy Council.

The sector is critical in the attainment of Sustainable Development Goal 2 (zero hunger) and its targets of doubling the agricultural productivity and incomes of small-scale producers and ensuring sustainable production systems by 2030.

In 2018, the sector accounted for 36 percent of the country’s total employment. However, its contribution

to the gross domestic product has been declining from 15 percent in 2009 to merely 9 percent in 2019. Using data from the Philippine Statistics Authority, the study also noted that farmers and fisherfolk had the highest poverty incidence among the country’s basic sectors.

SFF financing abound, but critical challenges linger

While the government has intensified its lending programs to help the agriculture sector, particularly the SFF, the PIDS study showed there are still issues that must be addressed to ensure the successful implementation of these programs.

Among these are production and market risks, two of the overarching concerns expressed by the study’s respondents.

Other issues that contribute to agricultural finance risks identified were the “limited insurance to cover damages sustained due to natural calamities and unfavorable practices of traders and merchants”.

The study also noted that the Land Bank of the Philippines’ (LBP) focus on retail lending has resulted in project monitoring problems.

Another challenge mentioned in the study was the perception among the SFF that money from the government lending programs is a grant and not meant to be repaid, which is partly reflected in the low repayment rates.

Harnessing the agricultural value chain financing

Despite various lending programs already in place, the study stated that these are “unlikely to be successful if financing and production are not viewed in the bigger context of a value chain financing”.

A 2010 book titled *“Agricultural value chain finance: Tools and lessons”* defined agricultural value chain financing (AVCF) as “any or all of the financial services, products, and support services flowing to and/or through a value chain to address the needs and constraints of those involved in that chain, be it a need to access finance, secure sales, procure products, reduce risk, and/or improve efficiency within the chain”.

Globally, the AVCF has become a major focus of agricultural development programs, according to the study.

With the identified challenges confronting the SFF, the authors said that a facilitator-driven AVCF, which is driven by donors such as government or nongovernment organizations, is the most suitable approach to ensure an SFF-inclusive AVCF in the short run.

To do this, the government can facilitate the replication and scale-up of successful AVCFs. This means that cooperatives should evolve from being conduits to one that facilitates markets, agro-input suppliers should have strong links with financial institutions, and the LBP should help in linking the SFF with their clients who are merchants or traders.

The study also emphasized the need to improve information systems to properly

record and analyze agricultural loans to better understand product designs, risk management strategies, and innovations. Meanwhile, the implementation of SFF literacy programs can help the SFF ease into the use of technology and develop a savings habit.

In the medium run, the study said the government can focus on establishing infrastructures, including connectivity, and building postharvest facilities and processing hubs.

Meanwhile, long-term plans should include the evolution of the facilitator-driven AVCF into an integrated AVCF, with SFF associations, and even financial institutions, being closely linked to facilitate the various activities of the value chain.

The study also said that the SFF and their associations should come up with innovative AVCF strategies to forge new

linkages. Moreover, information systems should be in place to allow AVCF players to “monitor the movement of goods, download/repay loans, purchase inputs, and access critical information”. These systems should be able to link the data on financing instruments to reduce administrative costs of verification on the part of the lender and the transaction costs to produce proof on the part of the borrower.

However, the study noted that with the country’s current traditional value chain, it takes time to set up the requisites of successful AVCFs, such as capacitating the SFF, associations, and small cooperatives.

The authors recommended exploring buyer-driven AVCF—a scaled-down version of the integrated AVCF in terms of markets, although systems that facilitate the flow of information and the interlinking of financial instruments with financial institutions remain essential. **GBDC**

LGUs lack tech capability on infra, funds underused



Most local infrastructure development projects are still lodged under the national budget, leaving local funds underutilized.

THE LOCAL DEVELOPMENT Fund (LDF) of local government units (LGUs) remain underutilized despite the increase in their devolved functions.

According to a study by Philippine Institute for Development Studies (PIDS) written by Charlotte Justine Diokno-Sicat, Angel Faye Castillo, and Ricxie Maddawin titled “*Philippine local government public expenditure review: A survey of national government local government support programs*”, LGUs spend mostly on general public services (46%), social services (21%), and economic services (15.4%).

“With general public and social services getting the largest shares of local government spending, capital outlays have lagged behind,” the authors said.

Local development investment programs, such as roads, health facilities, evacuation centers, and water supply facilities, are mostly implemented through assistance from the national government.

Citing the findings of an earlier PIDS study by Rosario Manasan and Ruben Mercado, the authors noted that the common reason cited for the national government’s continuous involvement in local infrastructure projects is LGUs’ lack of technical capability.”

In the past decade, national government-assisted LGU programs, such as the Department of Public Works and Highways’ Local Infrastructure Program, the Department of Agriculture’s Farm-to-Market Road Development Program, and the Department of the Interior and Local Government’s (DILG) Financial Assistance to LGUs, received the largest budgetary allocations on average.

The study further revealed that LGUs prioritize implementing programs funded by the national government rather than their LDFs because the former is time-bound, while the latter does not have an expiration date.

However, this setup may affect LGUs’ budget planning once the Mandanas ruling is fully implemented in 2022.

In 2018, the Supreme Court ruled that LGUs’ internal revenue allotment (IRA) or share in national taxes will not only

be based on the national government’s revenue taxes but also on other taxes collected by the Bureau of Customs, such as customs duties.

To mitigate the impending fiscal impact of the ruling on the national budget, the national government is expected to discontinue its financial assistance programs for LGUs.

According to the study, these national government-assisted programs received about 12 percent of local government expenditures, which is roughly the same as the average share that LGUs spend on capital outlay.

“This implies that if the national government programs are discontinued in the future, LGUs must double their capital outlay expenditures to maintain at least the current levels of local infrastructure spending,” the authors warned.

Policy recommendations

To prepare for the full decentralization of basic services in 2022, the study recommends strengthening LDF utilization.

“There has to be a strengthened oversight in development fund utilization if national government’s assistance programs for LGUs will be discontinued. To do this, understanding the bottlenecks to complete fund utilization should be a priority,” the authors emphasized.

For instance, oversight agencies, such as the DILG and the National Economic and Development Authority, should continue to confirm that development plans are aligned with the national development agenda.

Other national agencies, such as the Department of Budget and Management and the Bureau of Local Government Finance, are also urged to strengthen their efforts toward ensuring that LGUs spend the mandated LDF on priority investment programs.

“Oversight agencies could issue guidelines effecting an expiration of LDFs, which could be gradually adjusted from the current ‘no hard budget constraint’ to a two-year validity, and eventually to just a one-year validity,” the authors said, highlighting that fast-tracking expenditures will have an immediate impact in jumpstarting local economies.

For low income and vulnerable LGUs that are consistently affected by natural disasters and have lackluster performance in governance or poor implementation of investment programs (i.e., those that might still need funding support from the national government), the study suggests that objectives, eligibility criteria, and monitoring and evaluation mechanisms should be clearly defined.

“Any additional support to LGUs represents a trade-off in the amount available for urgent national government policies, such as education, infrastructure, and social protection programs,” the authors emphasized.

Focusing on strategic infrastructure investments will also propel local development as these activities have the largest potential for creating economic growth, according to the study.

“Whether to reduce poverty or propel the economy into recovery, this should be one of the major considerations in the design of policies,” the authors highlighted. **CPSD**

Redundancy, overlapping roles hound PH water sector



The Philippine water sector is still hounded by governance issues. (Photo by All Hands Volunteers/Flickr)

WATER REGULATION IN the country remains fragmented and lacks necessary integration, a study by state think tank Philippine Institute for Development Studies (PIDS) revealed.

In the paper titled *“The Philippine local government water sector”*, researchers Lawrence Velasco, Charlotte Justine Diokno-Sicat, Angel Faye Castillo, and Ricxie Maddawin discussed overlaps and gaps in the roles of national and local government bodies tasked to manage the water situation in the Philippines.

“Overlapping mandates and functions in policy planning, data monitoring, and infrastructure and program development [for the sector] exist among many water-related government agencies,” they said.

The study noted how redundancies in water governance have obstructed the coordinated and efficient management of the country’s water sector.

“Uncoordinated planning and implementation of programs and projects in the water sector remains a major challenge because of this fragmented institutional setup,” the authors said.

“The inability to effectively assess the impact or success of water service provision efforts subsequently result in inefficient policy, programs, or interventions to address shortcomings,” they added.

For instance, there is no agency responsible for the nationwide delivery of water in the country despite the number of government bodies in the water sector.

To help attain the country’s goal of 100-percent access to potable water by 2030, the authors suggested to revamp and further define the economic rules and regulations relating to the Philippine water sector.

In particular, the authors recommended streamlining and unifying tariff-setting formula and principles to ensure uniform water rates nationwide.

“Once water rate-setting formulas are harmonized, we can have a systematic way of ensuring that all consumers benefit from the same principles of prudence and operating efficiency,” they added.

The authors also called for a framework that will consolidate and allocate available financial resources to water service

providers through subsidies and loans, among others.

Since operational costs are the primary determinant for water rates charged to the public, “monitoring operational efficiency and spending prudence are critical,” the authors added.

“Inefficiency and wastage may be priced-in and passed on to consumers without a clear technical benchmark,” they cautioned.

As such, there should be more stringent and nationally aligned technical standards to ensure fairness and greater transparency in water rate charging.

The study, meanwhile, highlighted the importance of strengthening investment coordination among public and private water service providers.

The authors noted that none of the water planning agencies keeps track of the amount invested in the sector, as well as the targets for each entity, whether it is a water district, water utilities issuing certificates of public convenience, or managed by the local government.

“Investment coordination is needed because of evidence of duplication of investments in the same city or municipality,” they said.

However, the authors clarified that duplications are not necessarily inefficient. There could be multiple water service providers in a municipality, but if they service different barangays, then, there is no investment duplication.

Without active monitoring of investments and targets in all public and private

entities, the authors noted that attaining the goal of water security and water for all by 2030 will be challenging.

Current regulations issued by the National Water Regulatory Board (NWRB) give an option for government agencies in the sector to subject themselves to the economic regulation of the NWRB, which sets, administers, and enforces all rules related to water, such as the control, conservation, and protection of waters, watershed, and related land resources.

Although only an option, the authors clarified that this “creates ambiguity and vagueness on the regulatory scope of the NWRB”.

“It is also unclear how this option can be implemented when the original enabling laws are still in force,” they added.

Apart from the NWRB, the Local Water Utilities Administration, a government-owned and -controlled corporation attached to the Department of Public Works and Highways, provides affordable loans to local water districts.

Local government units (LGUs) are also primarily responsible for the delivery of water services, flood control, and enforcement of sanitation laws.

But while LGUs are directed to implement water projects in their areas, their decisions and actions are bound by mandates at the national level. The local legislative councils of LGUs also have an oversight function in implementing water projects.

“One of the challenges of having different programs spread across government agencies all addressing the same concern of local governments is to assess their efficacy and impact on the targeted sector,” authors said.

“Identified weaknesses in institutional mandates both cause and exacerbate the lack of consistent and regularly reported data, which poses challenges in monitoring and evaluating water service providers as the basis for sector reforms,” they added. **EGR**



Water regulation reforms are needed to ensure that all Filipinos will have access to potable water by 2030.

PIDS study calls for health system reform to address NCD risk



A PIDS study recommends revisiting the country's existing healthcare setup to accommodate the increasing cases of noncommunicable diseases.

The Philippine healthcare system is deemed ill-equipped in handling the growing threat of noncommunicable diseases (NCDs), particularly in poor communities.

According to a study by Philippine Institute for Development Studies (PIDS) researchers Valerie Gilbert Ulep, Jhanna Uy, and Lyle Daryll Casas titled *“Primary health care for noncommunicable diseases in the Philippines”*, the country's health system remains focused on addressing infectious diseases and maternal and child health (MCH). Such has cultivated a healthcare delivery system that is episodic, fragmented, and only focused on one-time treatment of diseases.

This is despite NCDs becoming the main cause of disease burden in the Philippines.

NCDs, such as cancer, chronic respiratory disease, cardiovascular disease, and diabetes, are medical conditions that progress rather slowly and require continuous care.

“In 2019 alone, NCDs accounted for 70 percent of the total 600,000 deaths nationwide,” the authors wrote, citing findings of previous studies from the Philippine Statistics Authority and the Institute for Health Metrics and Evaluation.

These numbers are projected to increase in the medium to long term.

The study further noted that the increase in NCD deaths is faster in poor communities, affecting those who do not

have enough resources to detect or treat these diseases.

Over the last decade, the poorest local government units (LGUs) experienced a 7-percentage-point increase in NCD deaths while that of the relatively richer LGUs remained stagnant with an average 2-percentage-point increase over the same period, the authors wrote.

This will significantly impact the country's poverty reduction efforts.

“Due to the chronic nature of NCDs, households who are mostly poor are further pushed into extreme poverty either through out-of-pocket health spending or through loss of economic productivity,” the authors explained

They also noted unplanned urbanization as one of the major factors affecting NCD risk in the country, with the share of population in urban areas increasing from 30 percent in the 1960s to 50 percent in 2019.

“Traditional communities in the Philippines have experienced hurried and unforeseen urbanization, which resulted in lifestyle changes that stemmed from unhealthy dietary patterns and sedentary lifestyle,” the authors said.

With NCD treatments requiring continuous care, the country's current healthcare

delivery system may not work for people with the disease, the authors posited.

“Single encounter between a patient and health providers will not address the needs of NCD patients. NCDs are chronic and lifelong in nature. Thus, the goal is to improve the quality of life (e.g., reduce symptom or pain), which requires constant monitoring, evaluation, and referral between specialists and primary care practitioners,” the authors explained.

The study also raised that the country’s changing demographics—from a relatively young population to a slowly aging economy—has been accelerating the epidemiologic transition from infectious diseases to NCDs.

The authors added that the country can expect an “increase in NCDs and conditions related to frailty and a further decline in the burden related to MCH”.

Policy recommendations

To address the increasing NCD burden in the country, the study pushes for a robust primary healthcare (PHC) system.

This will provide greater access to early management of the disease through first contact, continuous, and integrated healthcare services.

As such, the study pushes for bold health reforms through the country’s Universal Health Care Act to address challenges in governance, financing, service delivery,

and health human resources that hinder the delivery of comprehensive NCD services in local communities.

For instance, the current governance structure of the Philippine healthcare system, which is highly decentralized with different levels and types of care under different political jurisdictions and leadership, must transition from being fragmented to being able to provide a more integrated whole-person approach.

According to the study, the creation of province or citywide health care provider networks (HCPNs) will integrate different levels of public and private health facilities to provide coordinated and continuous healthcare services to the people.

“HCPNs must have a network of primary care facilities (PCFs) composed of rural health units, barangay health stations, and/or private primary healthcare facilities. PCFs shall serve as the first point of contact of patients, families, and communities to access basic and comprehensive PHC. If specialized care is needed, patients will be referred to hospitals within the network—Level 2 hospitals providing intensive care services and some specialty care. The HCPN must also be linked to an apex hospital as an end-referral center,” the authors explained.

Likewise, the country’s relatively low health spending for PHC facilities must be addressed.

“The Philippines only spends about USD 6 per person for PHC. In contrast, [its neighbors in the Association of Southeast Asian Nations] spend around 8 percent of total health spending on PHC (about USD 20 or more per person),” the study noted.

Due to low public fund allocation, the majority of health spending in PHC facilities tend to be out-of-pocket expenses, the authors claimed.

Further, results of the 2017 National Demographic and Health Survey revealed that almost 50 percent of NCD patients used their own salary to finance their visits, while more than 20 percent of the poorest patients resorted to loans.

With the looming increase of NCD cases in the coming years, the country’s health human resource, as well as the technological advancement of the entire health system, must be strengthened.

“About 50,000 primary care physicians are needed to meet the PHC demand,” the authors pointed out. They also highlighted the current health workforce’s need for training on NCD interventions.

The use of information and communications technology can enhance connectivity and improve service delivery within a PHC system, according to the study.

The ambiguity of laws related to the use of telemedicine or telehealth techniques in the medical practice must also be addressed to accommodate new and innovative ways of patient-provider interactions. **CPSD**

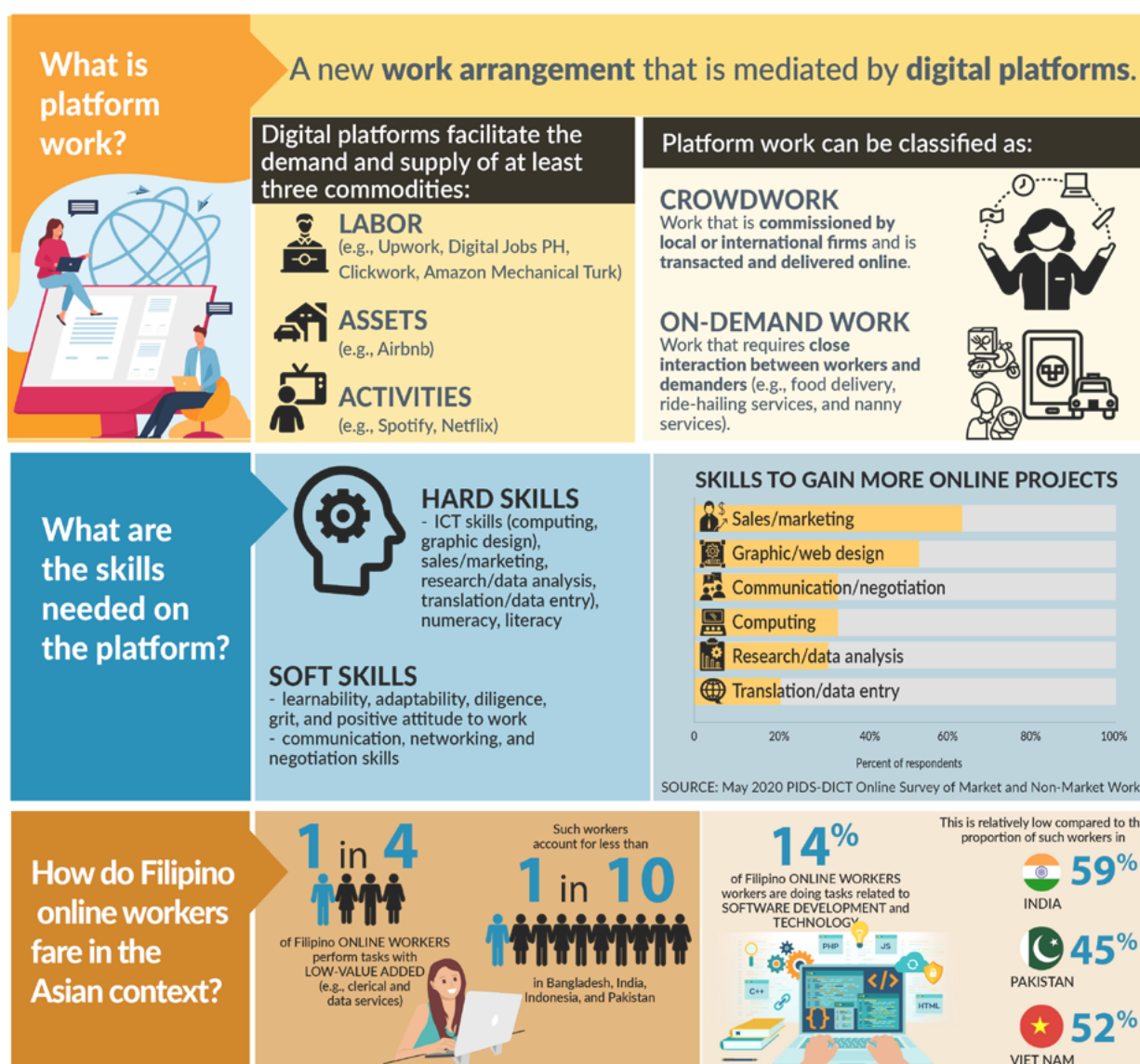
Making Online Work Sustainable in PH

The COVID-19 pandemic has forced many to make the abrupt shift to working from home. It has also opened new employment opportunities. However, is online work sustainable in the long run?

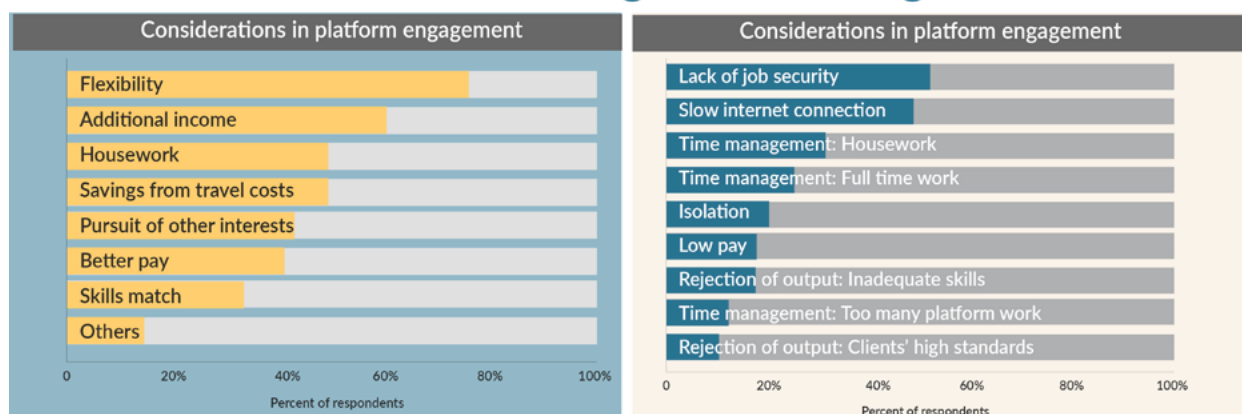
This infographic provides a glimpse of the online work landscape in the country.

It also looks at the advantages and the challenges of working on a digital platform and identifies the gaps that the government needs to narrow to help online workers harness the benefits and overcome the challenges in this work arrangement. **GGM**

Platform Work in the Philippines



Considerations and Challenges of Working in Platforms



SOURCE: Authors' estimates using data from May 2020 PIDS-DICT Online Survey of Market and Non-Market Work

This infographic is based on the PIDS Discussion Paper titled *"Towards a Sustainable Online Work in the Philippines: Learnings from the Online Survey of Market and Nonmarket Work during the Enhanced Community Quarantine"* written by Connie Bayudan-Dacuycuy, Aniceto Orbeta Jr., Ramonette Serafica, and Lora Kryz Baje, senior research fellows and research analyst, respectively, at PIDS. The full version of this infographic can be downloaded from <https://www.pids.gov.ph/gallery/517> while the full study may be accessed at <https://www.pids.gov.ph/publications/7152>.

**POLICY
ISSUE AT
A GLANCE**

RESEARCH DIGESTS

PJD Vol. 45 No. 1
Philippine Journal of Development
Vol. 45, No. 1
by Various Authors

This volume of the *Philippine Journal of Development* consists of articles on social housing, the Japan-Philippines Economic Partnership Agreement (JPEPA), export relationships of local enterprises, and water demand management. The first article examines the roles that local housing boards in the country's highly urbanized cities play in bringing effective social housing services for the poor. Using the synthetic control method, the second article evaluates the effects of JPEPA on Philippine trade 10 years after it was signed by both countries. The third article analyzes the duration of Philippine micro, small, and medium enterprises' export relationships with select countries, particularly its Asia-Pacific Economic Cooperation and Association of Southeast Asian Nations peers. The last article reviews water demand among households in Carcar City, Cebu, and recommends hard and soft mechanisms that can be

adopted by the local government, water district, and individuals to better manage water consumption in the area. Download the full version of the journal at <https://www.pids.gov.ph/publications/7218>.

PN 2021-01
What Are the Effects of the Performance-Based Bonus on Government Workers and Agencies?
by Jose Ramon Albert, Ronald Mendoza, Janet Cuenca, Jana Flor Vizmanos, and Mika Muñoz

This *Policy Note* looks into whether the Performance-Based Bonus (PBB) scheme has been effective in achieving its goals. It found evidence of generally positive outcomes resulting from it, such as increased compliance on conditions for PBB access and a shared perception among over 1,200 sampled government bureaucrats that the PBB helps improve public service. The study also noted evidence of some dysfunctional behavior, including allegations that some staff are gaming the incentives. Among others, the study recommends that the government continue implementing the

PBB scheme but with improvements to its design and implementation, including a moratorium on changes in PBB requirements, especially in light of the COVID-19 pandemic. Download the full study at <https://www.pids.gov.ph/publications/7190>.

DP 2021-07
Process Evaluation of the Department of Health Human Resources for Health Deployment Program
by Michael Ralph Abrigo, Gina Opiniano, and Zhandra Tam

This study aims to assess the Department of Health Human Resources for Health (HRH) deployment program and document its implementation vis-à-vis its stated design. The study finds that while the program has many advantages to local governments in reallocating HRH across geographic boundaries, there are design and implementation challenges that may negatively impact the experiences of deployed healthcare workers. The study also provides some actionable recommendations to improve the program. Download the full study at <https://www.pids.gov.ph/publications/7216>.

Editor's Notes (continued from page 2)

But irrigation is only a part of the whole suite of interventions for agricultural development. The article on the Rice Competitiveness Enhancement Fund, also known as Rice Fund, shows the importance of having safety nets to cushion the potential negative impacts of any policy reform. The Rice Fund is an essential component of the Rice Tariffication Law to protect the most affected sector—the farmers—from the law's unfavorable impacts on their livelihood. However, it must be properly targeted for the Fund to meet its intended objectives, as the article underscored. An evaluation of its effectiveness must also be part of its implementation to ensure that the “losers of the policy reform” are “adequately compensated”.

Meanwhile, the other articles in this issue showed the value of improving smallholder farmers and fisherfolk's access to credit and markets and how joining farmer organizations can increase their participation in the agriculture value chain. Focusing on Agrarian Reform Beneficiary Organizations (ARBOs), the story summarizes the case study, which describes how membership in an ARBO has enabled farmers “to consolidate outputs and invest in facilities and equipment that they are constrained to undertake individually”. A related article also discussed ways to assist farmers beyond credit support by capacitating small cooperatives and associations as conduits linking farmers to input suppliers and markets. Another article from a study that utilized the same sample emphasized the importance of tenure security and transferability of rights to encourage farmers to invest in long-term farm improvements, thus making them active participants in agricultural development.

The last three articles deal with healthcare and water access. One of them reveals the local governments' underutilization of their local development fund, which is a required allocation from their internal revenue allotment to be used for their priority development projects, such as roads, health facilities, evacuation centers, and water supply facilities. It turned out most of these projects are being implemented by LGUs through national government funding. The authors of the study asserted that this practice drives resources away from urgent national programs on education, infrastructure, and social protection. The other article underscores the governance issues hounding water service provision at the local level. It shows how overlapping mandates and poor investment coordination in the water sector have resulted in inconsistent tariff-setting, nonuniform performance standards, and redundant investments, affecting both the quality and efficiency of water service. The last article looks into the growing incidence of noncommunicable diseases in the country and the needed health reforms to address this emerging concern alongside other public health challenges.

This issue also features digests of other PIDS studies and an infographic that provides a glimpse of the country's online work landscape. **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.

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