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COVER IMAGE

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Michael Varcas, Philippine Star,
https://www.bworldonline.com/top-stories/2023/01/16/498466/preparing-the-public-health-system-for-the-next-pandemic/

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ARTICLE

Local Governance in Non-Bamar Ethnic Areas in Myanmar

A Comparative Study of Local Governance between the National League of Democracy Government (2016–2020) and Post-Coup State Administration Council Regime

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Abstract

Local governance in Myanmar has undergone various reforms under successive administrations, fulfilling local needs to a certain extent while experiencing persistent challenges. This study analyzes the effectiveness of local governance mechanisms in non-Bamar ethnic areas in Myanmar in two governance periods of the National League for Democracy (NLD) government (2016-2020) and the post-coup State Administration Council (SAC) period (post-2021). Through decentralization and rebel governance theories, the study employs qualitative approaches, drawing semi-structured interviews and focus group discussions with ethnic leaders and organizations in the Arakan and Mon states. The study reveals that weak state-led governance following the 2021 coup led to increasing reliance on ethnic armed organizations (EAOs) for local services. Findings suggest the potential and significance of EAO-led governance in shaping decentralized governance models for non-Bamar ethnic areas in the post-conflict period.

Given the collapse of centralized NLD and SAC governance, the study advocates for integrating EAO-led governance into local governance policymaking. It recommends establishing decentralized governance mechanisms and granting fiscal autonomy within Myanmar's federal frameworks to ensure

inclusive, responsive, and sustainable local governance in non-Bamar ethnic areas.

Keywords: Ethnic armed organizations, local governance, National League of Democracy, non-Bamar, State Administration Council

Introduction

Myanmar, a diverse country dominated by a majority ethnic group, the Bamar, has struggled with questions of local governance since its independence from British colonization in 1948. Ethnic minority groups, which represent around 30 percent of the population, led by numerous ethnic armed organizations (EAOs), have resisted centralization policies and demanded more autonomy from Myanmar's successive Bamar-dominated central governments (Aung 2016; Emah 2020). While the country has been under military rule for decades, the quasi-democratic period of the 2010s failed to satisfy these demands, even under the democratically-elected National League for Democracy (NLD) government.

Local governance refers to public service mechanisms in education, healthcare and infrastructure, and local administration measures led by local authorities, such as officials appointed by the central government, community-based organizations, and non-state actors. In Myanmar, it has evolved under various political regimes, shaped by changing policies and constitutional shifts, particularly in non-Bamar ethnic areas[1] where it has been historically influenced by both state and non-state actors.

Local issues were historically handled through both traditional and modern local governance structures. Starting from 1993, the military government enacted the 1993 Development Committees Law, which established development affairs organizations (DAOs) responsible for municipal affairs and delivery of social services in both urban and rural areas (Arnold et al. 2015). At the same time, community-based organizations (CBOs) played an important role in solving local problems in their own missions of healthcare,

1 In this study, non-Bamar ethnic areas can be understood as regions populated by native Kachin, Karenni, Karen, Chin, Mon, Arakan and Shan, excluding Bamar-populated regions such as Yangon, Ayeyawady, Sagaing, Magway, Tanintharyi, Bago, Mandalay and Naypyidaw where most population is Bamar majority.

education, job opportunities, and vocational training (Martin 2021; Desaine 2011).

Over the years, the central government failed to fulfill local needs and resolve diverse ethnic issues, resulting in the expansion of many EAO activities beyond armed resistance to local governance functions. They developed parallel governance institutions in areas under their control or mixed control with the central government, offering public services such as education, healthcare, and local administration (Desaine 2011; Kyaw and Nwe 2019; South 2021). EAOs in ethnic states such as Arakan, Mon, Karen, and Kachin even formed their respective educational institutions to meet local demands based on ethnic languages and cultures, in parallel to the public education system under centralized state institutions. Beyond education, EAOs facilitated healthcare and local administration needs by establishing village clinics, provision of healthcare workers and medical supplies, and village administration networks. These decentralized efforts paved the way for EAOs to act as de facto local governance entities in their respective ethnic territories, often surpassing the central government in terms of effectiveness. (South 2021; Ong 2023).

The 2021 military coup brought about the rise of People's Defense Forces (PDFs) which were created by anti-coup democracy alliances and activists as an approach to put an end to the military dictatorship (Karinda and Rijal 2023). Different from EAOs with their respective territorial control and governance structures, PDFs depend on their collaboration with EAOs for military training, resources, and operational assistance (Matelski 2023). In many ethnic areas, both parties cooperate in joint resistance operations towards the military bases as a collective effort against the junta. PDFs are not entirely composed of NLD members; however, they are a broad coalition of pro-democracy activists and youths, acting as the armed wing of the National Unity Government (NUG) which has been a parallel revolutionary government to the SAC since the coup (Ministry of Defense 2021; Graceffo 2024).

In the post-coup period, which means the aftermath of the 2021 military coup on February 1, 2021, local governance under state institutions was largely disrupted in ethnic regions due to the rise of resistance movements from revolutionary groups such as the PDFs and EAOs, working for the anti-coup resistance. The military government suppressed these resistance activities nationwide, leading to the collapse of state-led governance mechanisms. Moreover, many civil servants participated in Civil Disobedience Movements (CDM) and denied working under the SAC (Sun 2022; Kean 2022), weakening

state-led local governance services. As a result, EAOs gained several opportunities to expand their governance functions, filling the void left by the SAC in areas such as education, healthcare, local administration, and security matters. Even though they try to re-function or scale up their local governance mechanisms for service delivery in their controlled ethnic areas, several challenges such as airstrikes, land mines, and unconditional armed clashes make it difficult for full operation (Sun 2022; Maizland 2022).

The objective of this study is to assess differences of local governance in non-Bamar ethnic areas during two governance periods of the NLD government (2016-2020) and the post-coup SAC period. It examines the role of EAOs in fulfilling governance voids left by these two governments and then discusses how they have become key actors in local governance in non-Bamar ethnic regions. Furthermore, it identifies major political and structural governance challenges faced by EAOs including financial limitations, legitimacy gaps, and jurisdictional conflicts. Ultimately, the paper argues that the level of local legitimacy achieved by the EAO-led governance underscores the importance of their role in shaping federal frameworks in post-conflict Myanmar. Through the contextualization of these governance models within broader debates on decentralization and rebel governance, the study contributes to discussions on federalism and local governance reforms in Myanmar.

Research Methodology

This research was carried out from June to November 2023 using semi-structured interviews and focus group discussions with local ethnic individuals and ethnic and civil society organizations in the Arakan[2] and Mon states in Myanmar. Interviews were conducted via Zoom and Signal telephone calls with 12 respondents from four townships in Arakan state (Sittwe, Rathedaung, Mrauk Oo and Taung-up), and 9 respondents from three townships in Mon State (Mudon, Ye and Thanbyuzayat). Selection was based strictly on respondents being at least 18 years old, currently living in their townships, lived there during the NLD government period (2016-2020), and at least one year post-coup. Most importantly, respondents are native Arakan and Mon ethnicities who can speak native ethnic languages. The interviews

2 Despite the term 'Rakhine' being the official term, this study refers to it as 'Arakan' to acknowledge its historical and cultural identity, favored by many Arakanese communities, including the ULA

were completed in July through both Zoom and Telegram calls. Focus group discussions were done via Zoom with three ethnic leaders from ethnic and civil society organizations in two sample ethnic states such as Arakan and Mon who are from different organizations on gender-representative basis in August.

These two data collection methods were employed to delve deeper into local ethnic leaders and their voices over conditions of local governance in their own ethnic states, explore challenges and changes in two periods, and gather primary data for qualitative data analysis by understanding local governance challenges and the impact of the 2021 coup on service delivery in non-Bamar ethnic areas.

Arakan and Mon states were selected based on their significant historical and contemporary roles in local governance and the existence of active EAOs. They offered a critical lens to examine local governance in non-Bamar ethnic areas and the impact of EAOs in local governance structures. Moreover, given conflict sensitivity in the country, Arakan and Mon states were safer options for conducting direct fieldwork and interviews for gathering qualitative data. Respectively the Arakan Army (AA), its political wing the United League of Arakan (ULA), and the New Mon State Party (NMSP) have established their own local governance mechanisms, offering services of education, healthcare, security, and local administration, which provided valuable insights into EAO-led governance study. Furthermore, these two states offered a comprehensive comparison study because the ULA in Arakan state increasingly assumes its state-like functions within the state while the NMSP operates like a parallel government in Mon state.

Sittwe, Rathedaung, Mrauk Oo, and Taung-up were purposely selected in Arakan State for data collection because these four townships are strategically geopolitical locations in northern and southern parts and conflicted regions where armed clashes between the AA and the Bamar military have been ongoing since pre-coup period. Most importantly, these townships are a great fit for collecting data in fulfilling research objectives and answering questions in terms of events that happened during two periods.

Mudon, Ye, and Thanbyuzayat were purposely chosen for being the most populated Mon ethnic townships where the NMSP, the Mon ethnic armed organization, holds its presence widely with its local governance mechanisms, providing public service delivery towards ethnic Mon communities.

The data collected from the interviews and focus group discussions helped answer research questions through detailed and context-specific information about the effectiveness of local governance mechanisms in two periods, the impact of the coup, and the roles of different actors in local governance.

For the limitations of the study, while Kachin and Karen states do have significant EAO governance structures, challenges such as growing conflict intensity and limited access to data made in-depth qualitative research unfeasible at this stage. Further research should explore these ethnic regions in more detail. In addition, since this study concentrates only on non-Bamar ethnic areas because of their unique governance models led by EAOs, the central part of Myanmar is excluded from the research because local governance in central regions evolved without any influence of EAOs. And these governance structures are fundamentally different from decentralized EAO-led governance models seen only in non-Bamar ethnic states.

Given political sensitivity in Myanmar, participant confidentiality was strictly followed for safety reasons. Before the interviews and discussions, participants were verbally informed of the study's purpose, risks, and voluntary nature to gain their informed consent. Pseudonyms were used to protect participants' identities and agreed that they had the right to withdraw any data collected from their participation at any stage without any consequences. They were informed that no video or audio recording was made and of written notes for paper writing purposes only. The research adhered to internationally recognized ethical standards, prioritizing participant well-being, confidentiality, and voluntary participation. Participants were encouraged to use VPNs to protect their online privacy for online interviews in secure locations or via encrypted communication software such as Signal and Zoom to minimize risks. These precautions were taken for the safety of participants while also maintaining research integrity.

Historical Development of Local Governance in Myanmar and Its Impact on Ethnic Areas

Due to several political regimes, local governance structures in Myanmar encountered significant transitions over the years, especially with struggles between the central government and decentralization efforts. These shifts affected not only local developments but also the lives of non-Bamar ethnic groups.

During British colonial rule, local governance was administered through a centralized system under the 1874 Burma Municipal Act and the colonial government exercised delegation of powers to municipal committees for municipal administration in major townships under the 1884 Burma Municipal Act and the 1884 Upper Burma Municipal Law (UNDP Myanmar 2015). This period laid the foundation for centralization that continued in post-independence.

In the post-independence period, Myanmar faced internal conflicts and political instability, with the emergence of EAOs establishing their own local governance mechanisms in their controlled areas. Following a coup in 1962, the country became a socialist state with a highly centralized governance system from national to local levels (Aung-Thwin and Aung-Thwin 2012) which weakened local governance in non-Bamar ethnic areas. Under the State Law and Order Restoration Council in 1988, it saw a continuation of centralized local governance structures which established development affairs organizations (DAOs) under the 1993 Development Committees Law, dominated by Bamar officials with the lack of local representation by local ethnic groups (Arnold et. al. 2015).

Moreover, the 2008 constitution remained centralized despite its integration of a few federal features. It allowed the formation of state and regional governments, and even self-administered zones for particular ethnic groups (Ninh and Arnold 2016), but with the absence of decision-making autonomy. The central government controlled these government levels through ministries and key policies related to finance, security, and judicial appointments (Bertrand et. al. 2022). The constitutional framework did not allow decentralized authority at non-central government levels, restricting legislative, financial and security powers of state and regional governments. In contrast, it allowed centralized control over them through military-controlled ministries and central government in terms of key policy decisions, disrupting decentralization efforts (Bertrand et al., 2022).

In addition, U Thein Sein's government in 2011-2015 introduced a few local governance reforms leading to decentralization and allocation of certain administrative duties to local authorities themselves. However, local administrations were granted limited autonomy as DAOs continued to control local governance structures under central government (Nixon et. al. 2015; Bertrand et. al. 2022). Subsequently, in 2016-2020 the NLD government made more decentralized shifts such as the introduction of the ethnic-language education policy (Bertrand et. al. 2022). However, the NLD failed to appoint

ethnic ministers in ethnic regions despite its electoral achievement. This decision resulted in public perceptions such that ethnic representation remained limited, and state and local governments were largely controlled by the central institutions (Zin et. al. 2024).

Furthermore, the failure of the Nationwide Ceasefire Agreement (NCA) and peace process contributed to increased intensification of ethnic conflicts within the country (Zin et. al. 2024). Despite its signatory success in 2015, it excluded multiple key EAOs such as the AA and Myanmar National Democratic Alliance Army (MNDAA). It was criticized for its lack of inclusivity and a comprehensive dialogue between the government and EAOs (Bertrand et. al. 2022). Ethnic groups were not given their rights to political concessions, causing rising distrust which escalated armed clashes in Arakan, Shan, and Kachin states later in 2018. Additionally, the 2021 coup even intensified these conflicts and provoked armed resistance nationwide, with PDFs and EAOs declaring war against the SAC regime (South 2021). This collaboration strengthened EAOs' role in both governance and resistance aspects.

Meanwhile, EAOs such as the AA, NMSP and, Karen National Union (KNU), started their own local governance mechanisms in their controlled ethnic areas since their founding, providing educational and healthcare services without any control of central government (UNDP Myanmar 2014; Kyaw and Nwe 2019; Pedersen 2024), which makes them important actors to be studied in local governance scenarios in non-Bamar ethnic areas in Myanmar.

In comparison to Bamar-majority regions, ethnic ones saw more challenges in developments due to centralized powers, undermining ethnic development. Non-Bamar ethnic affairs and their development were not just prioritized in development policies but also systematically neglected in education, healthcare, and infrastructure services. Big cities such as Yangon and Mandalay have become major economic centers where most economic and development projects are implemented, resulting in these urban cities receiving good services in education, healthcare, and infrastructure development in contrast with rural and ethnic areas (World Bank 2019; Biesty et. al. 2021).

Moreover, the 1874 and 1884 Burma Municipal Acts along with the 1989 Burma Municipal Law, historically driven by Bamar-led government and militaries, granted administrative roles only to Bamar literates which marginalized the role of non-Bamar ethnic leaders to participate in local governance mechanisms. Development was not prioritized in non-Bamar ethnic villages

and townships, instead, development became focused on Bamar-majority cities (Arnold et. al. 2015; Progressive Voice 2020).

Additionally, the 1993 Development Committees Law under the 2008 Constitution provided DAOs limited funds for local development. Nevertheless they could make funds from local taxes and revenues which is where ethnic communities, amidst low economic and job opportunities, cannot afford high taxes (UNDP Myanmar 2015). DAOs normally take advantage of this tax issue and do not support local developments which appears as a systematic marginalization policy by the central government to limit local development and public knowledge (Arnold et. al. 2015).

Theoretical Frameworks

In this study, two theoretical frameworks are applied in analyzing local governance structures in non-Bamar ethnic areas in Myanmar. Firstly, decentralization theory posits that devolution of powers from central government to local entities enhances efficiency, responsiveness, and accountability at local levels (Oates 1999). This can result in the development of effective local governance policies by local entities to meet grassroots community's needs (Rodden 2004; Schneider 2003). As will be discussed in the case studies, the NLD government saw decentralization attempts and maximized funding for state administrations. However, this did not result in meaningful local autonomy and failed to address diverse needs of ethnic communities (Zin 2020; Valley 2018). In contrast, EAOs largely addressed local challenges through their local governance mechanisms, providing services regarding education, healthcare, and infrastructure. This study applies decentralization theory to understand how EAO-led governance responded more effectively to local needs compared to centralized governance.

However, decentralization theory alone cannot completely explain governance structures in Myanmar's ethnic regions, as many regions are not under state control. This is where rebel governance theory acts as an important analytical lens. Rebel governance theory expresses how insurgent groups build their own governance systems in areas where state control is weak or absent, and challenges the traditional perspective that makes governance exclusive only to state actors . Florea and Malejacq (2023) and Spadaro (2023) argue that the theory explores how rebel organizations manage local affairs in conflict zones and administer their territories and even provide governance services to local communities. EAOs such as the ULA and NMSP establish their own

governance institutions in their controlled territories, providing local services from education to healthcare, filling gaps ignored by the central government. Applying rebel governance theory is helpful to understand how these EAOs achieve legitimacy at local levels and whether their governance structures should serve as governance models for Myanmar's future federal framework (Brenner 2019).

Both decentralization and rebel governance theories are applied in this study to critically evaluate why centralized local governance has proven less effective than decentralized EAO-led governance in non-Bamar ethnic regions, both before and after the coup. These theories help examine whether EAO-led governance should be taken into consideration as role models when developing federal governance frameworks in post-conflict Myanmar.

Despite extensive research on local governance in Myanmar, there is limited empirical evidence on governance in ethnic areas across different political periods—particularly under the NLD government and the SAC regime—while also accounting for the role of non-state actors. Building on discussions of the emergence of bottom-up federalism (South 2021), the qualitative examination of two case studies of non-Bamar local governance systems in Arakan and Mon states will provide a greater understanding of these dynamics, which is crucial to developing effective local governance policies promoting inclusive, responsive, and sustainable governance in Myanmar's ethnic regions.

The following sections present findings from in-depth interviews and focus group discussions conducted with respondents from Arakan and Mon state. It compares the effectiveness of local governance mechanisms under the NLD and post-coup SAC governances. The analysis concentrates on education, healthcare, and infrastructure—key areas where local governance functions have significantly evolved.

Case Study 1: Arakan State

The AA was established as an armed wing of the ULA in 2009, conducting resistance operations against the Myanmar military with the objective of achieving self-determination for Arakanese people (Jap and Courtin 2022). Despite its recent emergence, the ULA managed to expand its functions quickly in 2019, offering administration, justice programs, and local taxation in controlled territories. Its evolving governance model functions alongside the state, even enforcing law and order and fulfilling local needs independent from the central government (Faisal 2020).

On the other hand, post-2018 saw the most intense period of severe conflicts between the AA and the military, resulting in mass displacement and internet blackouts. There were different conditions in northern and southern Arakan despite the declaration of a ceasefire in 2020. The north saw consolidated control under the AA's governance, while the south remained contested at the presence of state institutions (Kean 2022; Pedersen 2024).

Moreover, the most controversial issue, the Rohingya crisis, saw some significant progress under the ULA in these periods, gaining limited participation under its governance model in certain areas. Prior to this, the Rohingya communities experienced severe restrictions such as forced displacement, statelessness, and humanitarian disparities because of Rakhine nationalist activities within the state (Faisal 2020). Yet, this progress of inclusion remains unsure and contested with widespread ethnic and political tensions within the state and countrywide.

Effectiveness of NLD Local Governance Mechanisms in Arakan State

Findings revealed that the NLD government made notable progress in public service delivery through its governance mechanisms, with significant disparities remaining between urban and rural areas of Arakan state.

During NLD's governance, education in Arakan State saw many improvements, with free education that provided books, uniforms, and stationery to students. However, most rural schools often did not receive these benefits, forcing students to pay for their own supplies. In the north, most villages only had primary schools, with high schools scarce in rural areas, lacking proper infrastructure and adequate IT facilities. Even though more teachers were provided in schools, the lack of teachers remained a major challenge because teachers do not want to go to rural and remote schools where armed conflicts between the military and the AA often break out while they face low pay (Multiple interviews July 8–9, 2023). However, the New Education Policy introduced ethnic education and Rakhine language classes in urban schools, excluding rural ones. Armed conflicts between the military and the AA in 2018–2020 in the north led to school closures and displacement, severely disrupting education (Personal communication July 8, 2023; Focus group discussion August 20, 2023).

In the south, educational support was more consistent under the NLD governance. Schools were free of charge and students received free uniforms,

textbooks, and stationery, improving accessible education for residents. More teachers were added to southern schools, but rural schools faced the same shortage as in northern schools. In short, the NLD government made outstanding improvements in education in both urban and rural Arkan schools in the south, but still challenges in resource allocation and teacher distribution remained (Multiple interviews July 10, 2023; Focus group discussion August 20, 2023).

Concerning healthcare, in the north, public healthcare services, despite being available at hospitals in major cities, lack modern medical facilities and equipment, resulting in poor treatment quality. Ethnic locals in rural areas do not even have adequate healthcare facilities or staff. Even so, urban public hospitals offered affordable services while rural clinics were under-equipped and understaffed. Moreover, remote villages had to rely on time-consuming and expensive water transport in the Lemro river to reach urban hospitals, posing significant risks and access challenges (Personal communication July 9, 2023). In contrast, healthcare services were generally better in the south—public hospitals provided free services and regular healthcare services were made available in schools and villages, despite poor customer service from healthcare providers. Still, southern village clinics lacked 24-hour service, forcing rural residents to travel to larger cities such as Sittwe in the north, Thandwe in the south, and Yangon in Yangon region for better treatment, which was costly and difficult due to expensive air tickets and poor road conditions (Multiple interviews July 10, 2023; Focus group discussion August 20, 2023).

In terms of infrastructure provision, the NLD government made significant progress in telecommunication, internet, and electricity projects in the north. People could easily buy SIM cards at local stores at affordable prices and obtain Wi-Fi services, gaining access to the internet. Road projects increased and several highway projects were initiated such as Mrauk Oo-Sittwe and Rathedaung-Sittwe. Meanwhile, rural areas lacked significant improvements in transportation and road services (Focus group discussion August 20, 2023). Besides this, electricity was made available and even reached rural villages in Rathedaung and Maungdaw. Access to water remained a critical issue in the north with households relying on public wells and streams without proper hygiene procedures and buying often from private companies, causing inaccessibility to clean water resources (Multiple interviews July 8–9, 2023). However, in the south, infrastructure improvements were seen during the NLD government, as the internet and electricity gained more access, with the same water scarcity problem as in the north (Multiple interviews July 10, 2023; Focus group discussion August 20, 2023).

In addition, both focus group and northern participants pointed out that the northern part of Arakan faced year-long internet blackouts during the NLD governance in 2018–2019 by the time when armed conflicts broke out between the AA and the military. This blackout affected local communities' access to internet, information, and electricity to meet their daily needs. During this period, the AA managed to support these Arakan communities with basic needs such as water, rice, and shelter (Multiple interviews July 8–9, 2023; Focus group discussion August 20, 2023).

Effectiveness of SAC-led Local Governance Mechanisms in Arakan State

Findings express that the SAC did not manage to sustain the previous government's progress in local service delivery and even escalated local conflicts in ethnic regions. After the 2021 coup, schools in northern townships such as Sittwe continued regular operations despite the CDM elsewhere in other ethnic regions. However, free educational resources available during the NLD's governance were no longer maintained and students had to pay for books and uniforms again (Personal communication July 9, 2023).

As explained below, teachers in Arakan State did not participate in the CDM, and many teachers from other ethnic regions relocated to Arakan State to avoid the CDM, slightly increasing teacher numbers. The New Education Policy, introduced by the NLD government, also continued and faced several challenges in implementation due to insufficient facilities and resources. Cyclone Mocha in 2023 further damaged schools and the SAC government not only failed to address these school damage problems but also restricted international aid in the north (Multiple interviews July 8–9, 2023; Focus group discussion August 20, 2023). Southern schools operated normally but faced unfree educational problems, along with shortages of teachers and teaching facilities (Personal communication July 10, 2023). The coup disrupted educational support in the north significantly while the south experienced fewer changes.

In the healthcare aspect, Arakan State saw an influx of healthcare workers due to the CDM, but they did not want to go to rural and remote Arakan villages for security reasons. At the same time, the devaluation of Myanmar's currency and international sanctions made healthcare services more expensive and less accessible, particularly for rural and IDP communities. Despite the increased healthcare workers, the same problems such as lack of medical equipment grew worse due to inflation and legal restrictions (Multiple

interviews July 8–9, 2023; Focus group discussion August 20, 2023). In the south, the healthcare situation mirrored that of the north, with new rising problems of private clinics being more accessible to wealthy families and public hospitals with poor healthcare quality for poor populations (Personal communication July 10, 2023). The coup exacerbated existing healthcare challenges, making services more expensive and less affordable for rural and displaced populations.

The coup led to increased surveillance, higher telecommunication costs , halted infrastructure projects, and continued water and electricity issues in both the north and south (Multiple interviews July 8–10, 2023; Focus group discussion August 20, 2023).

Role of the United League Of Arakan (ULA) in Arakan State's Local Governance

Post-coup, the ULA expanded its influence and governance activities in the Arakan State because of the collapse of state-led governance within the region. ULA accelerated its efforts in education, healthcare, and administrative sectors in key northern townships, including Buthidaung, Maungdaw, Rathedaung, Mrauk Oo, Kyauk Taw, and Minbya.

While the ULA does not operate its own schools or universities, it provides scholarships for underprivileged students from Arakan ethnic communities. In 2016-2020, it played a prominent role in protecting schools and students from armed conflicts, supplemented the need for teachers, and aided in construction of new schools. Post-coup, it did not openly encourage participation in the CDM due to its lack of alternative educational provision. However, it still allowed prospective teachers to come and take teaching roles at local schools, providing security and incentives (Multiple interviews July 8–9, 2023). One interviewee from Rathedaung added, "The ULA provided protection and additional teachers during conflicts, such as Cyclone Mocha, and even helped rebuild homes and schools" (Personal communication, July 9, 2023).

Moreover, the ULA excelled in delivering free healthcare services to Arakan communities, particularly in war-torn areas like Rathedaung, Mrauk Oo, Maungdaw, Buthidaung, and Punnarkyun. It staffed village clinics with healthcare workers and doctors, providing enhanced access to advanced healthcare services and medicines (Focus group discussion August 20, 2023). Respondents from Mrauk Oo and Rathedaung claimed, "We had increased

access to better healthcare services and medicines from ULA-appointed doctors and nurses, especially in our remote villages" (Multiple interviews, July 9–10, 2023). Consequently, rural communities had access to better healthcare services and medicines from ULA-appointed doctors and nurses, especially in rural and remote villages. This demonstrated the limitations of state-led governance and how the ULA stepped in to fill the gaps.

Besides education and healthcare, the ULA is notably more influential in local administration, especially in the post-coup period. Arakan residents prefer reporting crimes to ULA-appointed lawyers and courts rather than the military government's judicial system (Center for Arakan Studies 2024). This indicates growing trust and reliance on ULA's legal and administrative governance after the coup. On the other hand, the ULA's influence in the south is generally weaker than in the north due to the strong presence and influence of the military. But southern communities reported the reception of less educational and healthcare support compared to the north. But the ULA extended its assistance in the north after the coup and nowadays, more armed conflicts are going on in Thandwe and Gwa townships between the Bamar military and the AA in its attempt to unite one Arakan State (Multiple interviews July 8–10, 2023). In this context, findings show local communities' growing confidence in ULA's governance. This means, the ULA's governance services in education, healthcare, and administration are somehow more satisfactory for ethnic groups.

In short, NLD governance showed some attempts of decentralizing responsibilities, but these efforts were quite limited and restricted financial and administrative autonomy at state and local levels due to its centralized policies. In contrast, the ULA's governance model demonstrated the effectiveness of its localized decision-making, which supports the theoretical claim that governance is more responsive and effective only when local entities have the authority to decide. Moreover, the fact that Arakan people prefer the ULA's governance and public service delivery conveys the relevance of rebel governance theory in a way that non-state actors like the ULA achieve legitimacy within local communities at the provision of successful services in areas neglected by the state.

Case Study 2: Mon State

The NMSP, since its founding in 1964, functioned both with resistance and governance responsibilities within the state. Its governance mechanisms

through education, healthcare, and local administration positioned itself as a parallel government in the Mon ethnic communities. The extent of governance differs between its exclusively controlled areas and those with shared control with the central government (South 2003). Thus, the effectiveness of its governance relies on the degree of its authority and its cooperation with community groups.

Effectiveness of NLD's Local Governance Mechanisms in Mon State

Findings convey that NLD-led governance made progress in public service delivery in terms of education, healthcare, and local administration duties in ethnic areas of Mon state. However, this progress did not reach all villages and remote areas, leaving rural regions in need of more effective governance solutions.

During the NLD governance in 2016–2020, significant improvements were made in educational support in Mon State, providing free primary and secondary education, uniforms, books, and stationery to all students, including those in rural Mon villages. Still, there were many disparities between urban and rural areas in terms of access to quality education. Many new high schools were built in larger villages in Mudon, Thanbyuzayat, and Ye townships, but students from small villages had to travel long distances to other villages on foot or by their own transport. There was general increase in the number of teachers in schools, but this did not accommodate the growing student population, leading to the hiring of unqualified teachers, especially in rural and remote Mon villages. More school facilities were provided in urban areas but not in rural schools. Although the New Education system allowed Mon ethnic language classes in schools, this also created further strain on schools that struggled to keep up with increased classes and subjects with insufficient teachers and school capacities (Multiple interviews July 15–17, 2023).

In terms of the healthcare sector, the government increased the healthcare budget for improved access to public hospitals in urban areas, though they were not entirely free of charge. There was a significant gap between urban and rural access in healthcare services. Rural villages did not have any public clinics and existing clinics were understaffed and undersupplied with medicines. But public nurses and doctors paid visits to rural villages for regular healthcare services, but still emergency issues remained difficult to manage (Personal communication July 16, 2023; Focus group discussion August 27,

2023). In terms of healthcare infrastructure, public hospitals outside the capital Mawlamyine had limited medical equipment, forcing patients to travel to larger cities such as Yangon for better medical services. This was evident in the COVID-19 pandemic such that a high number of deaths were found due to insufficient oxygen concentrators and limited capacity of hospitals and staff within the state (Personal communication July 17, 2023).

Furthermore, the NLD government gained several achievements in construction of basic infrastructure including roads, bridges, internet, telephone services, water, and electricity provision. Highway roads from Mawlamyine to Yangon, from Mawlamyine to Hpa-an, and from Mawlamyine to Dawei were upgraded, and new roads and streets were built across townships for accessible transport and reachability of electricity to rural townships, but only on limited basis. Besides these, rural villages gained access to not just electricity but also internet and telecommunication services, making SIM cards and Wi-Fi more accessible and affordable for rural communities. In terms of water access, despite government projects of free public water fountains and tap water, many villages still had to purchase drinking water from private companies (Multiple interviews July 15–17, 2023; Focus group discussion August 27, 2023).

However, the controversy of naming the bridge connecting Mawlamyine and Bilukyun after General Aung San faced public criticism within the state. Local communities wanted a name reflecting Mon culture and historical identity, but these ethnic perspectives were ignored by the NLD government (Focus group discussion August 27, 2023). These proved the central government's failure to achieve ethnic representation and promote local autonomy, highlighting its centralized control over state and local matters.

Effectiveness of SAC-led Local Governance Mechanisms in Mon State

Like in Arakan state, findings demonstrate that, on one hand, the SAC-led local governance mechanisms were proven ineffective and unresponsive to addressing local needs in ethnic areas while, on the other, the military actively involved itself in brutal crackdowns towards resistance groups.

Following the 2021 coup, schools in Mon State closed for several months because of teachers not continuing their responsibilities under the military regime by participating in the CDM. This disrupted students' education. When schools reopened, free educational resources were no longer provided and

students had to pay for tuition fees, registration, uniforms, stationery, and books (Personal communication July 15, 2023).

Security concerns were also noted such that schools in Belin, Ye, and Thanbyuzayat townships were closed due to armed conflicts between PDFs and the military, while schools in non-conflicted areas continued operation regularly. Beside this, the CDM campaign largely affected education in Mon State, with the number of teachers significantly decreased when schools reopened and newly graduated teachers without proper teacher trainings were employed to fill the gaps. This resulted in students not effectively receiving teachings and lessons (Personal communication July 16, 2023; Focus group discussion August 27, 2023).

Post-coup, healthcare services faced many struggles, such as increasing medical costs due to high inflation rates and the loss of healthcare workers and staff in public hospitals due to CDM. While city-based services remained accessible, rural villages no longer received free medicines and treatments. Several clinics in villages since the coup were shut down and the shortage of healthcare workers and staff became a major challenge in Mon State, making rural communities lose access to even basic healthcare services (Multiple interviews July 15–17, 2023).

Apart from healthcare, internet and telecommunications accessibility, as in Arakan State, were limited by increased costs and high surveillance. Moreover, other infrastructure projects such as NLD-initiated roads and bridge projects were halted. At the same time, access to electricity was on a limited basis, with experiences of frequent outages. The 2021 coup disrupted local governance mechanisms in Mon State from urban to rural areas, with school closures, shortage of teachers and school capacities, new challenges in the healthcare sector, and infrastructure restrictions. As armed conflicts increase across the state between PDFs and the Bamar military, villages in war-torn areas lose services every day (Multiple interviews July 15–17, 2023; Focus group discussion August 27, 2023).

Role of New Mon State Party in Mon State's Local Governance

The NMSP has been active in local governance since its founding in 1964, starting with its Central Education Department and later expanding to healthcare and local administration institutions. After the coup, its role became more significant in the lives of ethnic Mon communities, especially

after public school closures. Mon National Schools, operated by the NMSP, were a significant option for Mon ethnic people to continue their education.

Mon National Schools were initially run at monasteries and later in separate village schools, offering primary and secondary education in ethnic Mon language as a medium of instruction and communication. Ethnic Mon families preferred sending their children to these schools rather than public schools. Moreover, these students can take mainstream public examinations. This parallel education has made it evident that the NMSP's education system is as important as centralized education (Multiple interviews July 15–17, 2023).

Mon national schools are situated in several villages, especially in Ye, Thanbyuzayat, Mudon, and Paung townships, making them accessible to both urban and rural villages. The influence of the NMSP's educational system has become stronger over ethnic Mon communities. In other words, its local governance efforts, through education towards ethnic Mon communities, have addressed the educational needs of local communities (Focus group discussion August 27, 2023). This highlights that the NMSP's educational governance is more effective and responsive to local demands than centralized ones. Moreover, this is further supported by interviews from Ye and Thanbyuzayat who said, "To date we do not want our children to go to mainstream schools because they do not have to speak Mon language and some of our children who went there already forgot how to speak Mon language" (Multiple interviews July 16–17, 2023).

In terms of local administration, NMSP is most influential in its controlled villages in its headquarters in Ye township and regionwide. Under its control, it established small clinics with Mon-speaking doctors and nurses for far-reaching Mon villages in southern townships such as Ye, Thanbyuzayat, and Mudon, even providing free healthcare services and addressing local healthcare needs. Additionally, through its Mon cultural heritage projects and social services, the NMSP has gained a strong bond with local Mon ethnic communities, making itself a central figure in Mon politics. Compared to urban populations, rural communities seem to be more reliant and trust more on the NMSP and its local governance contributions as it is a stand-by governance option for them to receive alternative local services (Multiple interviews July 15–17, 2023; Focus group discussion August 27, 2023).

Additionally, the study also finds that the NMSP continued its educational programs while SAC-led education was deteriorating in post-coup, which infers that the NMSP could successfully reinforce its role as a more effective

governance actor by sustaining its educational services. Moreover, in contrast to the state education, its educational system, based on ethnic language and cultures, exemplifies decentralization principles by stating that localized governance can perform more effectively and efficiently local service delivery by tailoring to community needs. Furthermore, the NMSP has managed to attain political legitimacy in Mon ethnic communities because of its substantial delivery of public services in education, healthcare, and administration, as rebel governance theory suggests (Personal communication July 15, 2023; Focus group discussion August 27, 2023).

Given these conditions, the NMSP has proved to be a key governance actor, even more effective than state-led governance, noting that EAOs like the NMSP have fulfilled local needs in ethnic regions beyond their resistance activities against the military. This underscores EAOs' potential role in facilitating federal frameworks in post-conflict Myanmar.

EAOs and their Potential Role in Development of Federal Governance Frameworks in Post-conflict Myanmar

The findings from case studies of Arakan and Mon states show that EAOs have become primary governance actors in ethnic regions because they managed to fulfil gaps left by state-led governance institutions under both the NLD government (2016–2020) and the SAC administration (post-2021 coup). Even though the NLD government began practicing decentralization principles, state and local governance bodies remained financially and administratively controlled by central institutions and ministries. Post-2021 coup, the SAC did not manage to maintain these decentralization attempts, and its state-led institutions even collapsed, worsening local governance gaps in ethnic regions. This led to the increased dependence of ethnic communities on EAOs such as the ULA in Arakan and the NMSP in Mon for essential public services. Weak state governance allowed EAOs to expand their governance roles as a non-state governance actors, illustrating their greater institutional capabilities and responsiveness compared to state-led ones

The idea of EAOs playing a dual role as both resistance and governance actors can be best comprehended through the lens of decentralization and rebel governance theories. Since the central government has consecutively failed to decentralize its powers, this allowed EAOs to establish their own governance structures, operating in parallel with state-controlled institutions. Rebel

governance theory posits that non-state actors often achieve and strengthen their legitimacy through their consistent public service delivery, which is evident in the ULA's and the NMPS' local governance mechanisms in post-coup Myanmar.

Before the coup, EAOs like the ULA and the NMSP had their own local governance functions, providing education, healthcare, and local administrative services in their controlled areas. They managed to handle local issues unsolved by the central government in such ways that additional ethnic-language-speaking teachers were employed if there was a need for more teachers at schools, scholarships for rural students were offered, schools built, and healthcare services delivered. The ULA has become a key actor in local administration, addressing local crime reports in controlled areas and providing security for local Arakan people amidst armed clashes. The NMSP similarly attained its local prominence through its educational efforts and ethnic language education, fulfilling local needs in ethnic Mon villages.

Given these pre-coup situations, it is evident that the ULA and the NMSP already positioned themselves as de facto local governments, fulfilling education, healthcare, and administrative services. They provided ethnic-based education and established collective community healthcare mechanisms, which earned them community trust, reinforcing their role as legitimate governance actors, as explained in rebel governance theory where non-state armed groups may surpass state institutions in legitimacy when they can provide effective, responsive, and inclusive public services to communities (Spadaro 2023).

The post-coup even strengthened their roles and importance at local levels. With the collapse of the central government's local governance services such as education, health, infrastructure, and security, EAOs such as the ULA and the NMSP have stepped in to fill the void. The ULA, despite ongoing conflicts, is actively expanding its efforts in providing education, healthcare, and social services in displaced communities, strengthening its role in local governance and achieving trust and reliance. The NMSP also continued supporting ethnic education through Mon National Schools, making it the most reliant educational opportunity in the state.

Applying both decentralization (Oates 1999) and rebel governance (Brennar 2019) theoretical perspectives, the EAOs' expanding governance role at the time of weakening institutions of central government in the post-coup period benefited their legitimate governance so much through their decentralized and community-based services. This has reinforced the argument that

EAOs could contribute largely towards developing Myanmar's future federal framework, given their long years of effective local governance experiences and knowledge.

Conclusion and Recommendations

This comparative study has revealed many differences in local governance mechanisms between these two periods of the NLD and SAC governments. The NLD's notable performance was observed in education, healthcare, and infrastructure services with remaining challenges in rural areas. The SAC government did not maintain these improvements and even exacerbated existing challenges, resulting in increased reliance of non-Bamar ethnic groups on their EAOs for essential services and security.

EAOs such as the ULA and NMSP have become crucial players in local governance, backed by their success in filling the gaps in local communities amidst the central government's failures in policies. This has underscored the prominence of EAOs in the local governance sector with their centrality and significant role in developing future federal governance frameworks for non-Bamar ethnic regions. Their effectiveness in governance models also demonstrates the need for decentralization in shaping future governance frameworks in federal Myanmar.

Based on these findings, the following recommendations aim to build a comprehensive local governance framework for effectively addressing governance challenges in non-Bamar ethnic regions of Myanmar.

1. Institutionalize a decentralized local governance system

   The study finds that the NLD's decentralization was still limited under centralized policies, restricting local autonomy, whilst EAOs like the ULA and the NMSP effectively governed local services in their ethnic areas. This shows the need for formal recognition of local governance bodies within a third-tier local government system to enable effective and responsive ethnic-led and localized service delivery.

2. Decentralize fiscal authorities to state and local governance bodies

   Findings indicate that state governments did not have fiscal autonomy under NLD governance leading to limitations on local resolutions. However, EAOs such as the ULA and the NMSP managed to fill governance

gaps by providing localized health and educational services through its decentralized decision-making principles. Therefore, granting fiscal autonomy to state and local entities would enable effective resource allocation and a comprehensive fiscal transfer system that directly funds localized decisions.

3. Integrate lessons from EAO-led governance into federal governance frameworks

   Through study findings, EAO's governance mechanisms have proven to be more effective and responsive in problem-solving in contrast with centralized governance in terms of the provision of localized ethnic-based educational, healthcare, and administrative programs. Incorporating EAOs along with their experiences and lessons in developing and designing effective federal governance policies in post-conflict Myanmar could secure tailored policy frameworks that effectively address ethnic and local issues and needs.

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ARTICLE

PhD Graduation in the University of the Philippines: Trends, Challenges, and Policy Implications[1]

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Abstract

The following are the yearly PhD graduation rates of the three leading constituent units of the University of the Philippines: UP Diliman (65.91 ± 15.48, with 70 doctoral programs in 2025; sampling period: 1990-2025), UP Los Baños (58.46 ± 14.26, with 33; 1999-2025), and UP Manila (4.22 ± 4.23, with 11; 1993-2025). The rates are low with no apparent tendency to improve despite escalated allocations of resources to hire more PhD faculty and to establish new research laboratories and PhD programs. The number of regular PhD faculty in June 2023 was 614 for UP Diliman, 211 for UP Los Baños, and 110 for UP Manila. A total of 202 UP professor emeriti were also appointed (65.84% since 2012) from 2000 to 2024. To increase the PhD graduation rate, data-driven policy recommendations are proposed in the grant of faculty tenure, and cross-rank promotion to full professor and professor emeritus. They are formulated with reference to the performance of the UP Diliman College of Science (CS, 13.14 ± 4.26 per year; with 11 programs) and the College of Engineering (CoE, 6.06 ± 5.4; 12 programs). Both accounted for 29.19% of the total UP Diliman PhD output from 1990 to 2025. The primary reason for the low PhD graduation rate is

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the lack of committed dissertation research supervisors who were able to guide students immediately upon entering their respective programs. From 2010 to 2025, UP Diliman yearly admitted 239.6 ± 33.41 (31.14% in the CS and CoE) new PhD students while graduating only 71.47 ± 10.82 (33.93% with CS and CoE degrees). Sustained student interest is not matched by a likelihood of success which is only at 29.83%. In contrast, UP Diliman graduated a total of 49,721 bachelor students while admitting 59,085 UPCAT applicants indicating an efficiency of 84.15%. The purpose of UP as the national university is best accomplished by it becoming a successful graduate university since PhD degrees are research degrees where dissertation research problems are solved to promote the common good and bring tangible improvements in the quality of life of Filipinos.

Keywords: University of the Philippines, PhD Degree Programs, Faculty Tenure, Philippine Higher Education Institutions

Introduction

UP became the national university of the country (July 2024 population: 112.7295M) on 29 April 2008 when President Gloria Macapagal-Arroyo signed Republic Act (RA) No. 9500 also known as An Act to Strengthen the University of the Philippines as the National University (Official Gazette 2008). UP was established by the American colonial government on 18 June 1908 through the ratification of Act No. 1870 of the First Philippine Legislature (University of the Philippines 2022). It is currently composed of eight constituent universities (CUs) namely, UP Diliman, UP Los Baños, UP Manila, UP Visayas, UP Open University, UP Mindanao, UP Baguio, and UP Cebu, in seventeen campuses across the Philippine archipelago.

There were a hundred and twelve Universities and Colleges (SUCs) including UP in AY 2019-2020 (CHED 2023). From FY 2006 to FY 2016, UP received 27.36 ± 1.32 percent of the total SUC budget allocation in the annual General Appropriation Act. The UP budget was 1.93 and 0.63 times that of the Department of Science and Technology (DOST) in FY 2006 and FY 2016, respectively (Saloma 2016). From FY 2020 to FY 2022, the average UP Budget was 26.38 ± 1.2 percent of the yearly SUC allocation (DBM 2020, DBM 2021, DBM 2022).

UP undergraduates fully enjoy the provisions of RA 10931 – Universal Access to Quality Tertiary Education Act, that institutionalizes free tuition and exemption from other fees in public universities and colleges unlike their counterparts in private HEIs (Official Gazette 2017). The provisions of RA 10931 do not also apply to students enrolled in graduate degree programs. As the national university, UP must lead in establishing academic standards and in initiating innovations in teaching, research, and faculty development [RA 9500 Section 3]. It is mandated to function as a graduate, research, and public service university while serving as a reference standard of academic governance and administration. It must also perform as a regional and global university that produces verifiable examples of best practices for other HEIs to emulate and adopt.

Measuring the degree in which UP has been able to accomplish its stated purpose is a challenging task. Metrics must be developed to achieve transparency and accountability as well as to enable UP to improve its institutional performance through time. The success of UP as a graduate university is not measured by the number of its PhD or doctoral degree programs nor by the number of full-time (regular) PhDs in its faculty roster, which are merely inputs. Success is gauged by the number of PhD graduates that are produced yearly from the arts and letters to the sciences, technology, engineering, and mathematics (STEM).

Proficient STEM PhD programs are the most reliable source of technically competent self-assured Filipino scientists and researchers who will capacitate Philippine society to collectively anticipate, respond, and formulate evidence-based solutions to the complex challenges that Filipino citizens, institutions, and enterprises encounter every day. The spectrum of societal problems that is in dire need of resolution, ranges from fragile food and energy security to pesky vehicular traffic, wasteful queuing in government offices, and graft and corruption.

The PhD degree is a research degree that is awarded to a qualified student who has made an original, novel, and significant contribution to the body of scientific knowledge under the guidance of a dissertation research supervisor. Only faculty members with the requisite PhD degree can serve as a dissertation research supervisor. Having UP faculty and researchers publish their research findings in reputable peer-reviewed journals is just one of the two critical features of a thriving graduate university. The other is PhD graduate production that should improve ideally with time as a consequence of the increasing number of applications in the UP College Admission Test (UPCAT). The Philippine population grew from 75.33M in 2000 to 109.04M (+44.75% increase) in 2020 (PSA 2021).

Here, we analyze the PhD graduation rates of UP Diliman, UP Los Baños, and UP Manila with the aim of formulating new measures to improve the graduation performance. For reference and context, we also examine the PhD Physics program of the National Institute of Physics (NIP) which is one of the ten degree-granting academic units of the College of Science (CS) in UP Diliman. We also compare the PhD graduation rates with the bachelor's graduation rates relative to the number of UPCAT applicants admitted yearly to determine if there a difference in the efficiency that UP produces PhD and bachelor's graduates.

The reputation of a PhD program critically depends on the ability of its PhD faculty to steadily attract talented students and enable them to finish in due time. Less than one percent of Philippine HEIs today offer tenable STEM PhD programs due to the lack of qualified PhD faculty and to the high cost of establishing STEM research laboratories (Saloma 2019). More HEIs are needed in various parts of the archipelago to enable the domestic scientific enterprise system to thrive and make a tangible impact in reducing income inequality and enhancing socio-economic inclusivity in Philippine society (Saloma 2021).

Graduation Requirements: Bachelor's and Graduate Degrees

Undergraduate admission into UP is based on merit and has become more competitive because the number of available slots has not increased in proportion to the number of yearly applicants who will compete through the UPCAT and/or talent test/audition. For admission to the graduate programs, applicants must possess the requisite bachelor's degree from a recognized HEI and show proof of intellectual capacity to tackle the demands of graduate work. Rules, guidelines and policies regarding entrance and graduation requirements in the undergraduate and graduate degree programs offered by the CUs are stated in the UPD Faculty Manual 2003 (OSU 2003), Faculty Manual Update 2005 (OAT 2005), and the Code of Student Conduct of UP Diliman 2012 (OSU 2012). The UP Board of Regents (BOR) is the highest policy making body of UP.

Students who satisfied the prescribed academic and other requirements are granted their degrees by the BOR upon the recommendation of the concerned CU University Council. Undergraduate students who complete their courses with the following absolute minimum general weighted average (GWA) shall be graduated with Latin honors: *Summa cum laude* (1.20), *Magna cum laude* (1.45), and *Cum Laude* (1.75). The GWA computation applies only to subjects prescribed in the curriculum, as well as to subjects that qualify as electives.

Subjects that do not require the numerical system of grading (e.g., Pass or Fail, Satisfactory or Unsatisfactory) are excluded. No corresponding Latin honors are bestowed to master's and PhD graduates.

Data Presentation and Analysis

The data sets presented here were collected, organized, updated, and processed over the years. They were provided to the author in response to specific requests, by pertinent offices of UP, UP Diliman and College of Science (CS). These offices include the OVPAA, Office of the University Registrar of UP Diliman, UP Diliman Human Resource Development Office and the Office of the CS Dean and the National Institute of Physics. Additional information regarding the graduate scholarship programs of the Department of Science and Technology (DOST) were provided by the DOST Science and Education Institute, and the National Academy of Science and Technology.

UPCAT Application and UP Admission Rates

From 2003 to 2023, applications to UP and UP Diliman increased at annual rates of 2,206.6 and 1,614 (by linear regression) respectively, when the data for the outlier years of 2016 and 2017 are excluded. More than sixty percent (62.56 ± 0.045) of UPCAT applicants preferred to enroll in UP Diliman. The consequence of increasing the number of years from four to six (K-12) in the high school curriculum was felt in 2016 and 2017 when the number of applicants decreased significantly by one order of magnitude with 89 percent of them signifying to study in UP Diliman. The written-test component of the UPCAT was suspended for applications filed in the first three pandemic years of 2020, 2021, and 2022. It was re-imposed in 2023.

Figure 1 presents the annual admission rate of UP (blue) and UP Diliman (green) applicants from 2003 to 2023. The rate is computed as the ratio between the number of qualifiers and the number of applicants times 100%. The yearly UPCAT admission rates of UP and UP Diliman were 17.07 ± 1.72 and 8.51 ± 1.71 including figures for the transition years of 2016 (30.88%; 19.27%) and 2017 (28.99%; 18.39%). The yearly admission rates were decreasing at -0.1732% (UP) and -0.18% (UP Diliman) when 2016 and 2017 are excluded.

The decline in admission rate happens since the steady rise in yearly UPCAT applications is not matched by a proportional increase in the number of admission slots. The available UP admission slots per year was 12,617.31 ±

987.32 from 2003 to 2016. In the transition years of 2016 and 2017, it decreased markedly to 1574.5 ± 23.34 representing a nominal deficit of 11,143.3 per year. From 2018 to 2022, the number was increased to 14,008.4 ± 1520.91 which is still insufficient to compensate for the deficit during the transition years. The average number of UP Diliman qualifiers per year was 4020.15 ± 503.44 from 2003 to 2015. It decreased significantly to 881.5 ± 9.19 in 2016 and 2017. The number of qualifiers then recovered to 4,426.6 ± 818.24 per year from 2018 to 2023.

Figure 1. Yearly admission rate of UP (blue) and UP Diliman (green) applicants from 2003 to 2023. Excluding 2016 and 2017, the annual admission rates were decreasing at -0.17% (UP) and -0.18% (UP Diliman).

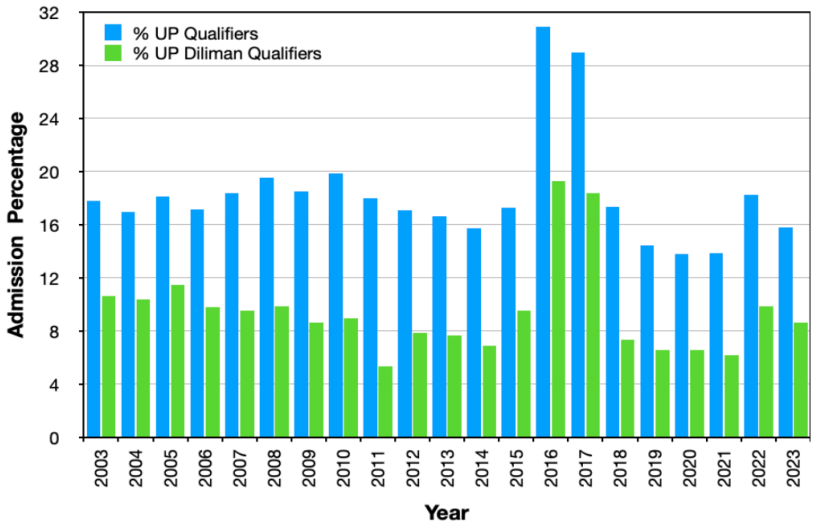


Table 1 compares the yearly admission rates of UP, UP Diliman, UP Los Baños, UP Manila, and UP Baguio. The four CUs (UP Diliman: 66.51%; UP Los Baños: 10%; UP Manila: 2.29%, UP Baguio: 9.91%) were the first preference of 88.71% of all UPCAT applicants (328,517) from 2012 to the outlier year 2016. UP Diliman had the lowest admission rate of 8 ± 1.13 percent—only one in every 12.5 applicants was successful (2012–2015). The corresponding admission rates for UP Manila, UP Los Baños, and UP Baguio were: 11.01 ± 1.8, 39.14 ± 4.98, and 74.56 ± 8.34 percent, respectively. The admission rate for the entire UP System was 16.67 ± 0.7 percent. In 2016, UP Baguio admitted 5.57 times more students than the number of applicants who listed it as their first preference.

Table 1. Admission rates (%) of UP, UP Diliman, UP Los Baños, UP Manila, and UP Baguio

YEAR	UP (%)	UP DILIMAN (%)	UP LOS BAÑOS (%)	UP MANILA (%)	UP BAGUIO (%)
2012	17.06	7.88	43.23	13.59	83.98
2013	16.61	7.66	42.59	10.9	76.73
2014	15.72	6.88	38.32	9.96	63.86
2015	17.3	9.56	32.42	9.6	73.66
2016	30.88	19.27	23.57	68.14	557.14

Undergraduate Graduation Rates and Latin Honors

Table 2 lists the number of bachelor's graduates produced by UP Diliman together with those who finished with Latin honors from AY 2010–2011 to AY 2024–2025 (period: 15 years). It produced 3,314 ± 496 graduates per year while admitting 3,939 ± 1,469 new students per year indicating a graduation success rate of 84.13 percent. From AY 2010–2011 to AY 2020–2021, 34.41% of UP Diliman graduates (34,360) graduated with Latin honors with a *summa-to-magna-to-cum laude* graduate ratio of 1:12.88:31.42. In AY 2022–2023 and AY 2023–2024, the percentage rose noticeably to 66.78 (1:3.92:2.43) and 62.03 (1:3.88:2.74) percent, respectively.

Table 2. From AY 2010–2011 to AY 2024–2025 (15 years) 43.75 percent of UP Diliman undergraduate students graduated with Latin honors (1:6.1:9.15). In AY 2010–2011, AY 2023–2024 and AY 2024–2025, the percentages were: 31.86 (1:10.29:37.38), 62 (1:3.88:2.74) and 61.11 (1:4.74:4.09), respectively.

ACADEMIC YEAR	BACHELOR'S GRADUATES (UP DILIMAN)	SUMMA CUM LAUDE	MAGNA CUM LAUDE	CUM LAUDE
2010–2011	3,208	21	216	785
2011–2012	3,138	19	222	862
2012–2013	3,446	15	218	813
2013–2014	3,380	20	248	792
2014–2015	3,499	29	250	921
2015–2016	3,580	30	325	936
2016–2017	3,666	36	337	1,016
2017–2018	3,570	29	402	1,004
2018–2019	3,981	55	1,058	1,173
2019–2020	2,892	28	302	683

ACADEMIC YEAR	BACHELOR'S GRADUATES (UP DILIMAN)	SUMMA CUM LAUDE	MAGNA CUM LAUDE	CUM LAUDE
2020–2021	2,099	29	199	456
2021–2022	2,516	147	652	634
2022–2023	3,359	305	1,196	742
2023–2024	3,511	286	1,109	783
2024–2025	3,876	241	1,143	985

Table 3 lists the number of bachelor's graduates from UP Los Baños together with those who graduated with honors from AY 2010–2011 to AY 2024–2025. The CU produced an average of 1,680.93 ± 395.53 graduates per year. From AY 2010–2011 to AY 2020–2021, 9.03 percent of the graduates (18,344) finished with Latin honors at a ratio of 1:22.88:183.45. In AY 2022–2023 and AY 2023–2024, the share jumped to 37.94 (1:13.32:19) and 55.04 (1: 5.61:23.18) percent, respectively.

Table 3. From AY 2010–2011 to AY 2024–2025, 20.45 percent of UP Los Baños students (25,876) graduated with honors (1:14.58:35.8). In AY 2010–2011, AY 2023–2024, and AY 2024–2025, the percentage were: 10.2 (1:9:66), 55 (1:15.61:23.18), and 57.73 (1:11.47:22.5), respectively.

ACADEMIC YEAR	BACHELOR'S GRADUATES (UP LOS BAÑOS)	SUMMA CUM LAUDE	MAGNA CUM LAUDE	CUM LAUDE
2010–2011	1,489	2	18	132
2011–2012	1,500	1	9	118
2012–2013	1,481	1	15	115
2013–2014	1,699	1	19	134
2014–2015	1,864	0	14	150
2015–2016	1,966	0	20	157
2016–2017	2,131	1	20	161
2017–2018	2,061	1	35	224
2018–2019	2,061	1	20	179
2019–2020	1,301	0	10	72
2020–2021	791	0	3	23
2021–2022	1,233	9	176	345
2022–2023	1,932	22	293	418
2023–2024	2,024	28	437	649
2024–2025	2,343	36	413	810

Table 4 lists the number of bachelor's graduates produced by UP Manila from AY 2010–2011 to AY 2023–2024 (Total: 12,685) showing rate of 906.07 ± 231.53 graduates per year. From AY 2010–2011 to AY 2020–2021, 21.92 percent graduated with Latin honors (1:29.67:192.56). In AY 2022–2023 and AY 2023–2024, the share more than doubled to 53.51 (1:14.65:20.9) and 52.44 (1:15.25:19.15) percent, respectively.

Table 4. From AY 2010–2011 to AY 2024–2025, 31.53 percent of UP Manila students graduated with Latin honors (1:16.9:45.84). In 2010–2011, AY 2023–2024 and AY 2024–2025, the percentages were: 19.18 (1:21:137), 52.44 (1:15.25:19.15), and 37.81 (1:15:31.8), respectively.

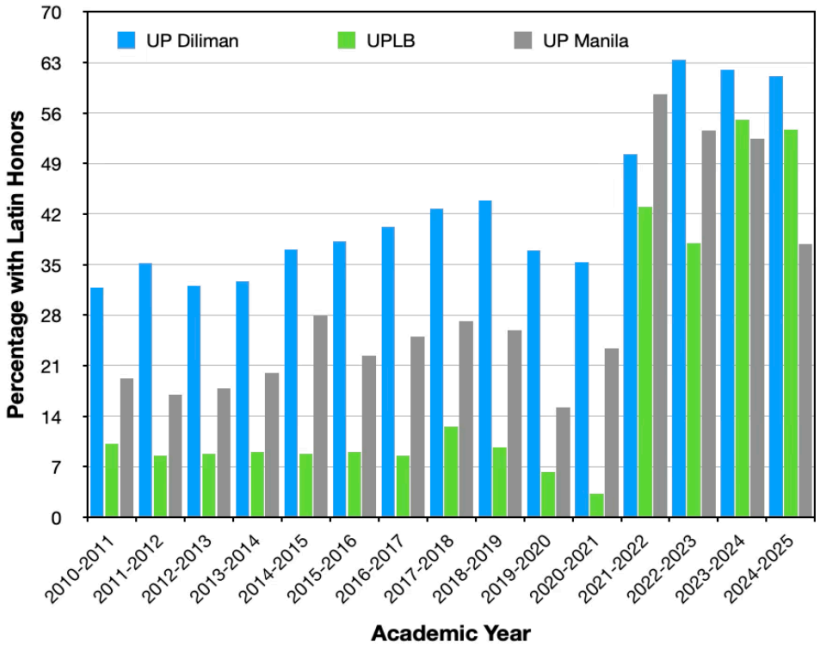
ACADEMIC YEAR	BACHELOR'S GRADUATES (UP MANILA)	SUMMA CUM LAUDE	MAGNA CUM LAUDE	CUM LAUDE
2010–2011	829	1	21	137
2011–2012	916	1	14	140
2012–2013	905	1	16	144
2013–2014	858	1	22	148
2014–2015	822	3	34	192
2015–2016	936	1	23	186
2016–2017	991	0	36	212
2017–2018	856	0	39	193
2018–2019	897	1	31	200
2019–2020	710	0	15	93
2020–2021	444	0	16	88
2021–2022	805	10	151	311
2022–2023	1,366	20	293	419
2023–2024	1,350	20	305	383
2024–2025	1,264	10	150	318

Figure 2 plots the percentage of bachelor's graduates finishing with Latin honors in UP Diliman, UP Los Baños, UP Manila and UP Baguio from AY 2010–2011 to AY 2023–2024. The percentage of Latin honor graduates in UP Diliman increased at a rate of +1.985 percent per year. A similar trend is observed for UP Manila (+2.58%) and UP Los Baños (+2.56%). A minimum percentage value is observable in AY 2019–2020 which is four years after the first transition year of AY 2016–2017.

Interest to study in UP continues to grow making undergraduate admission increasingly competitive particularly in UP Diliman—the preferred destination of 64.97 ± 9.02 percent of UPCAT applicants from 2003 to 2023 excluding the numbers in the K-12 transition years 2016 and 2017. In contrast, the corresponding annual admission rates decreased at -0.145% and -2.15% for UP and UP Diliman, respectively.

Figure 2 shows that an increasing number of students graduated with Latin honors from AY 2010–2011 to AY 2023–2024. Of the 34,752 bachelor's graduates of UP Diliman from AY 2010–2011 to AY 2020–2021, 37.17% finished with Latin honors. The percentage increased steadily at 1.54% per year from AY 2010–2011 to AY 2018-2019. It declined in the first two years of the COVID-19 pandemic (-37% in AY 2019–2020 and -35.29% in AY 2020–2021) but recovered drastically to +63.32% in AY 2021–2022. The average percentage in the last three years ending AY 2021–2022 is 45.21 ± 15.71 percent which is only 1.37% higher than that (43.84%) in AY 2018–2019.

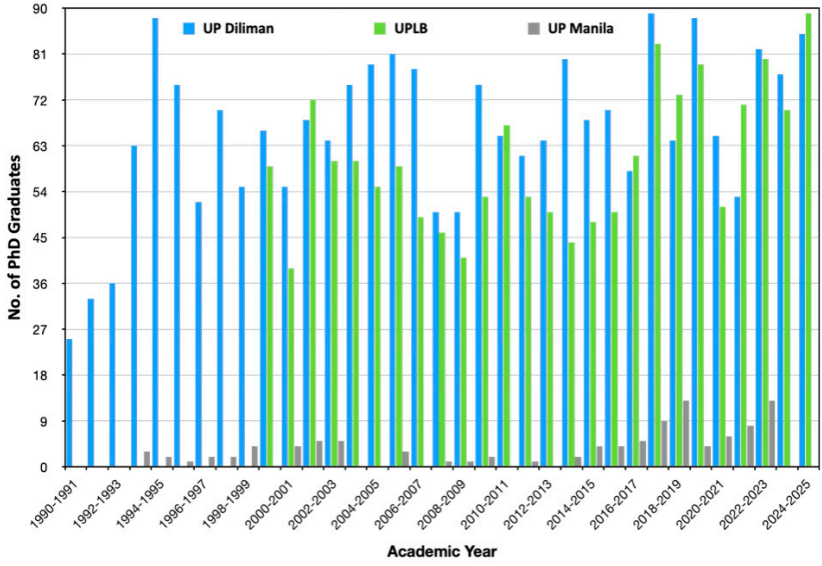
Figure 2. Percentage of Latin honor awarded in UP Diliman increased at +2.1 percent per year. Similar percentage trend is observed for UP Manila (+3) and UP Los Baños (+2.3). A percentage dip happened in AY 2019–2020 – four years after the first transition year AY 2016–2017.



PhD Graduation Rates of UP Diliman, UP Los Baños and UP Manila

Figure 3 plots the number of PhD graduates produced by UP Diliman from AY 1990–1991 to AY 2024–2025 (35 academic years), UP Los Baños from AY 1999–2000 to AY 2024–2025 (25 years), and UP Manila from AY 1993–1994 to AY 2022–2023 (30 years). The numbers consider graduates of all doctoral programs except those from the College of Law (UP Diliman), College of Medicine and College of Dentistry (UP Manila), and College of Veterinary Medicine (UP Los Baños). UP Diliman, UP Los Baños, and UP Manila produced an average of 65.91 ± 15.49, 60.08 ± 13.62, and 3.47 ± 3.5 PhD graduates per year, respectively.

Figure 3. PhD graduates per year in: UP Diliman (65.91 ± 15.49; sampling period: 35 years), UP Los Baños (60.08 ± 13.62; 26 years), and UP Manila (3.47 ± 3.5; 30 years). From 2010 to 2025 (15 years), UP Diliman admitted a total of 3,594 new PhD students and produced 910 PhD graduates (graduation ratio: 29.8%). From 2007 to 2025, UP Los Baños (UP Manila) admitted 105.67 ± 29.41 (21.56 ± 10.63) new PhD students and graduating 59.28 ± 16.1 (5.78 ± 4.92) per year, for a success rate of 56.1 (24.53) percent. Number of doctoral programs in 2025: 70 (UP Diliman), 33 (UP Los Baños), and 11 (UP Manila).



The number of PhD graduates produced annually is relatively low and is characterized by strong year-to-year fluctuations (UP Diliman: ±23.5%; UP Los Baños: ±22.67%; UP Manila: ±100%). There is no apparent tendency to improve or stabilize despite escalated allocation of resources by UP to hire, retain and

promote more PhD faculty, and to establish new research laboratories as well as PhD degree programs. A constant stream of incoming PhD students graduating on time (five or three years according to their program of study), would produce a relatively flat graduation profile in time (sampling period: AY 1990–1991 ≤ time (in one-year units) ≤ AY 2021–2022) with weak temporal variations caused by unforeseen medical leaves, academic disqualifications, a Black Swan event such as the COVID-19 pandemic, and relatively small variations in the number of new students.

Between AY 2000–2001 and AY 2022–2023 (23 years), 36.35% and 99.4% of PhD graduates were awarded with STEM degrees in UP Diliman and UP Los Baños, respectively. The STEM PhD graduates of UP Diliman studied in the College of Science (CS), College of Engineering (CoE), College of Social Sciences and Philosophy (CSSP), School of Statistics (SoS), School of Archaeology (SoA), and the College of Home Economics (CHE). UP Diliman produced less than one (0.93 ± 0.22) PhD graduate per degree per year from AY 2000–2001 to AY 2024–2025. UP Los Baños achieved a higher ratio of 1.64 ± 0.43 PhD graduates per STEM degree per year because it offered a fewer number of PhD degree programs.

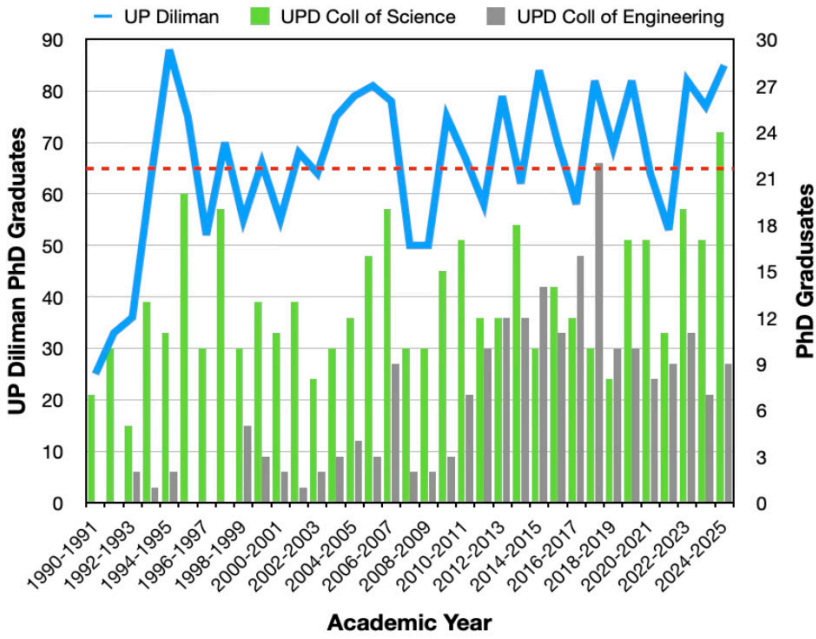
The number of regular PhD faculty members in UP Diliman grew from 471 in January 2013, to 498 (+5.73%) in December 2015, then to 608 (+28.88%) in February 2020. UP Los Baños employed 226 STEM PhD faculty members in AY 2011–2012, and 313 in AY 2022–2023. UP Diliman offered a total of 55 PhD degree programs in August 2024 – the number is 105 when the different tracks towards getting the degree are counted separately. Each program was endorsed separately by the UP Diliman University Council for approval by the UP Board of Regents. For example, the PhD degree in Industrial Engineering may be obtained via one of the following tracks: Straight MS-PhD, Regular PhD, or PhD by Research.

PhD and MS Graduation Rates of UP Diliman, College of Science, College of Engineering and the National Institute of Physics

Figure 4 compares the PhD graduate production rates of UP Diliman, CS, and the CoE from AY 1990–1991 to AY 2023–2024 (34 years). The three produced an average of 65.35 ± 15.35, 12.82 ± 3.88, and 5.97 ± 5.45 PhD graduates per year, respectively. The two colleges accounted for 28.75% of the UP Diliman output which reached a maximum of 89 in AY 2017–2018. From AY 2000–2001 to AY

2023–2024 (24 years) the number of PhD graduates in UPD, CS, and the CoE increased at rate of 0.3, 0.15, and 0.49 per year, respectively.

Figure 4. PhD graduates of UP Diliman (Total: 2,307; 65.91 ± 15.48 per year in red line), College of Science (460; 13.14 ± 4.26), and the College of Engineering (212; 6.06 ± 5.4) from AY 1990–1991 to AY 2024–2025 (35 years). From AY 2000–2001 to AY 2024–2025, UP Diliman, CS, and the CoE graduates increased at rate of 0.41, 0.23, and 0.44 per year, respectively. They produced 53.92%, 55.87%, and 82.55% of their total outputs in the last 18 years of the 35-year sampling period. Number of PhD programs in 2025: 70 (UP Diliman), 11 (CS), and 12 (CoE).



UP Diliman graduated 56.3 ± 20.1, 67.5 ± 12.1, and 70.7 ± 11.09 PhDs per year in the following ten-year periods: AY 1990–1991 to AY 1999–2000, AY 2000–2001 to AY 2009–2010, and AY 2010–2011 to AY 2019–2020. The figures indicate increasing decadal averages with decreasing standard deviation values implying improving stability (but still greater than 10%) in the annual yields. UP Diliman produced 69.25 ± 12.97 PhD graduates in AY 2020–2021 and 2023–2024 (four years). CS graduated 11.8 ± 4.73, 12.4 ± 3.37, and 13 ± 3.4 PhDs per year in the ten-year periods from AY 1990–1991 to AY 1999–2000, AY 2000–2001 to AY 2009–2010, and AY 2010–2011 to AY 2019–2020, respectively. CS produced 16 ± 3.46 graduates from AY 2020–2021 and 2023–2024. The highest CS outputs are 24 and 20 that were achieved in AY 2024–2025 and AY 1995–1996, respectively.

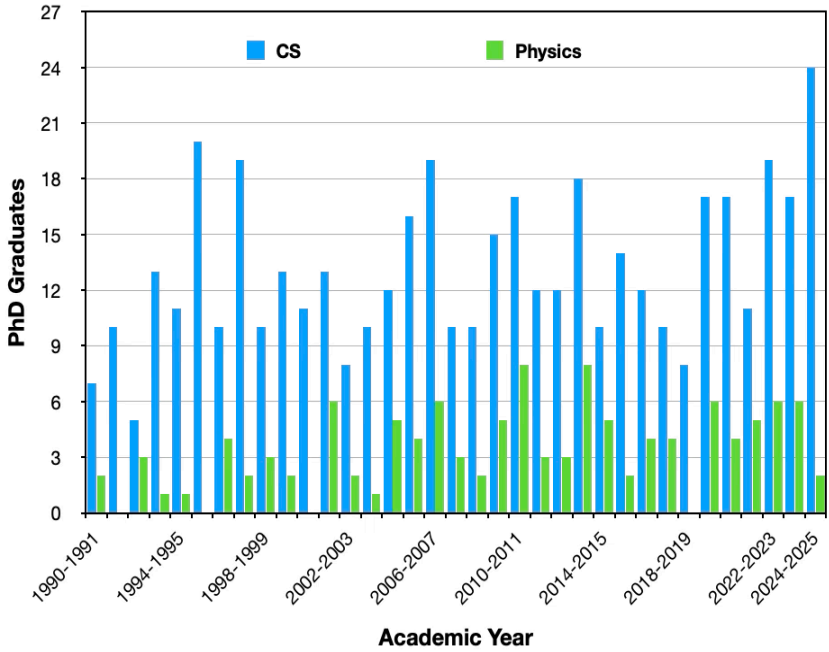
CoE graduated 1.3 ± 1.7, 3.1 ± 2.23, and 12.4 ± 4.17 PhDs per year from AY 1990–1991 to AY 1999–2000, AY 2000–2001 to AY 2009–2010, and AY 2010–2011 to AY 2019–2020, respectively. Highest production was at 22 achieved in AY 2017–2018. CoE produced 8.75 ± 1.71 graduates in AY 2020–2021 and 2023–2024. UP Diliman, CS, and the CoE produced 52.16%, 52.52%, and 86.21% of their PhD graduates in the last 17 years of the 34-year sampling period. Production has palpably benefited from the availability of additional PhD scholarships through the Engineering Research and Development for Technology Program (ERDT) of the Department of Science and Technology (DOST). The impact of the Advanced Science and Technology Human Resource Development program (ASTHRDP) on the CS PhD production is not apparent. The ASTHRDP is the counterpart program of the DOST for the basic and the natural sciences and mathematics. Both initiatives were first introduced in 2006.

The number of regular PhD faculty members in UP Diliman grew from 471 in January 2013, to 498 (+5.73%) in December 2015, and then to 607 (+28.88%) in February 2020. On the other hand, those affiliated directly with CS rose from 150 in June 2012 to 168 (+11.33%) in July 2018 and to 211 (+40.67%) in September 2024. The number for CoE increased from 66 in June 2012 to 97 (+46.97%) in July 2018 and then to 110 (+66.67%) in 2022. The following were the number of PhD faculty members in the eight CUs of UP on 31 December 2021: UP Diliman (406, 40.76 percent of total), UP Los Baños (323, 32.43%), UP Manila (69, 6.9%), UP Visayas (68, 6.83%), UP Baguio (44, 4.42%), UP Mindanao (36, 3.61%), UP Cebu (34, 3.41%), and the UP Open University (14, 1.4%). Two PhD faculty were affiliated directly with the Office of the UP President.

In the first semester of AY 2024-2025, UP Diliman, CS, and the CoE offered a total of 55 (105 if their different tracks are counted separately), 11 (21) and 11 (18) doctoral degree programs, respectively. The figures imply a yearly output of 1.19 ± 0.28, 1.16 ± 0.35, and 0.5427 ± 0.5 PhD graduate per degree for UP Diliman, CS and the CoE. The number of PhD programs in UP Diliman has increased since AY 1990-1991 while that of CS remained stable at 10 until the start of AY 2022-2023 when the PhD Data Science program was implemented.

Figure 5 compares the PhD graduate production of CS (12.82 ± 3.88 per year) and the National Institute of Physics (NIP) from AY 1990–1991 to AY 2023–2024. The CS and the NIP graduation increases at rate of 0.12 and 0.18 PhD graduates per year, respectively. The NIP produced a total of 116 graduates at a yearly average of 3.41 ± 2.23. PhD Physics graduates account for 26.6% of the total CS production. CS offers eleven PhD degree programs in AY 2024–2025 with NIP employing 13.74% of the entire CS PhD faculty.

Figure 5. PhD graduate production of CS (Total: 460; 13.4 ± 4.26) and the National Institute of Physics (118; 3.37 ± 2.21) from AY 1990–1991 to AY 2024–2025. CS and the NIP PhD graduation rates increase 0.17 and 0.1 per year, respectively. PhD Physics graduates account for 25.7% of CS production.



The PhD Physics program was first offered in 1983 when the then Department of Physics became the NIP. At present, NIP is the only degree-granting unit in UP that requires the successful mentoring of a PhD student in the grant of a permanent faculty appointment. To be recommended by the NIP Executive Council, a temporary PhD faculty must demonstrate his or her ability to supervise single-handedly the dissertation research of a PhD (Physics) student. The NIP Graduate Committee only permits the holding of a dissertation defense if the concerned student can show proof that his or her dissertation research findings are already accepted for publication in a peer-reviewed journal (with a journal impact factor) that is indexed in Clarivate's Web of Science. The two complementary policies which were first practiced in the early 2000s, have led to decisions on tenure and PhD student graduation that were transparent, consistent, and collegial to the NIP academic community.

Figure 6 reveals that the CoE PhD graduation output markedly improved beginning in AY 2010–2011 – four years after the first implementation of the

Engineering Research and Development for Technology Program (ERDT) of the DOST. Recipients of ERDT PhD and MS scholarships could study full-time with available financial support for their dissertation and thesis research. On the other hand, CS PhD graduate productivity is yet to show the impact of the Advanced Science and Technology Human Resource Development Program (ASTHRDP) – the DOST counterpart for the natural and applied sciences. The ASTHRDP and the ERDT were first implemented in 2006 [Saloma 2019].

Figure 6. Running sum of PhD graduates in CS (Total: 460; 13.14 ± 4.26 per year), CoE (212; 6.06 ± 5.4), and NIP (118; 3.37 ± 2.21) from AY 1990–1991 to AY 2024–2025 (25 years). CoE graduation rate started to improve in AY 2010–2011.

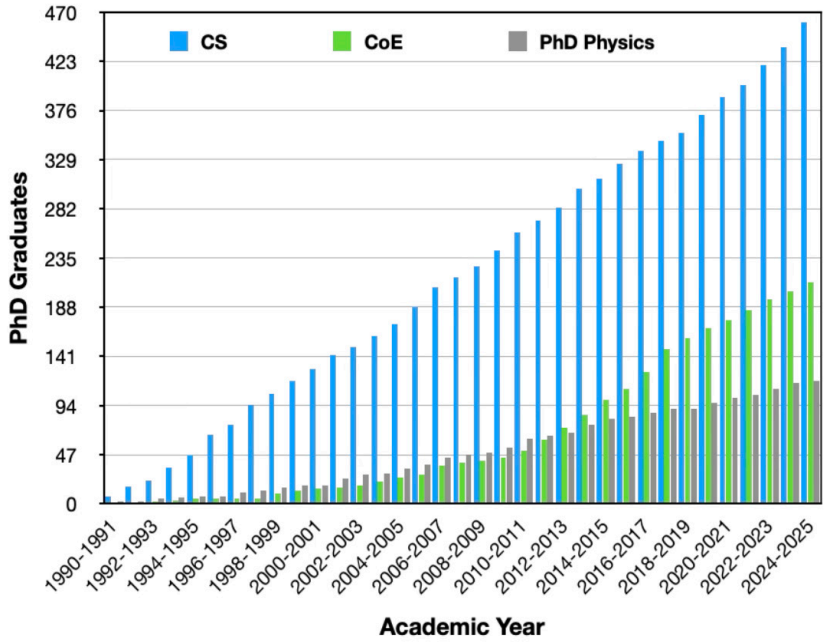


Figure 7 compares the MS graduate production of CS (Total: 1802; 75.1 ± 24.36 per year), CoE (1852; 77.17 ± 30.43), and the MS Physics Program of NIP (393; 16.38 ± 6.21) from AY 2000–2001 to AY 2023–2024. The CS, CoE, and the NIP graduation rates are increasing at rates of 2.62, 3.52, and 0.38 per year, respectively. MS Physics graduates account for 21.8 percent of the total CS production.

Figure 7. MS graduates of CS (Total: 1,923; 76.92 ± 25.22 per year), College of Engineering (1,956; 78.24 ± 30.27), and the National Institute of Physics (411; 16.44 ± 6.09) from AY 2000–2001 to AY 2024–2025 (25 years). CS, CoE, and the NIP profiles are increasing at 2.74, 3.36, and 0.35 graduates per year, respectively. MS Physics graduates account for 21.37 percent of CS production.

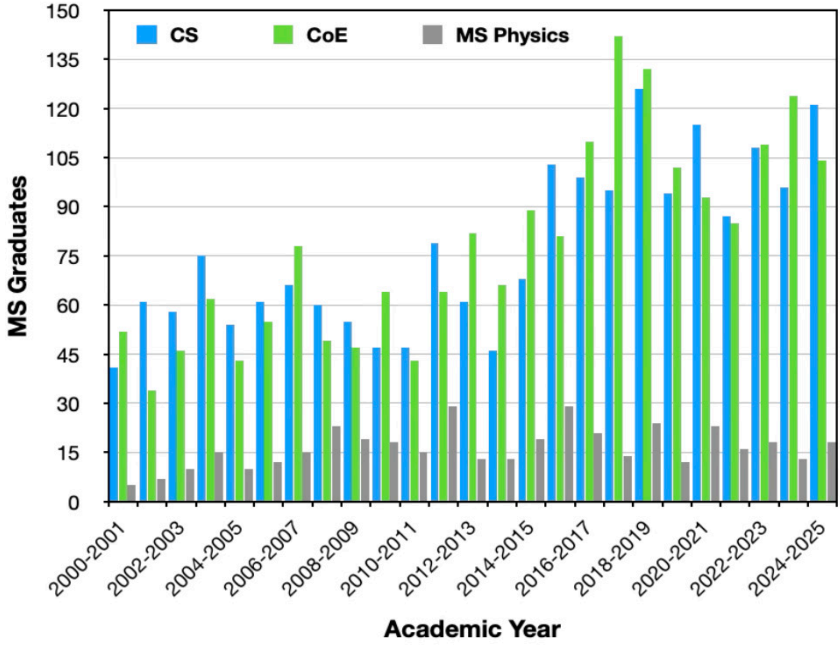


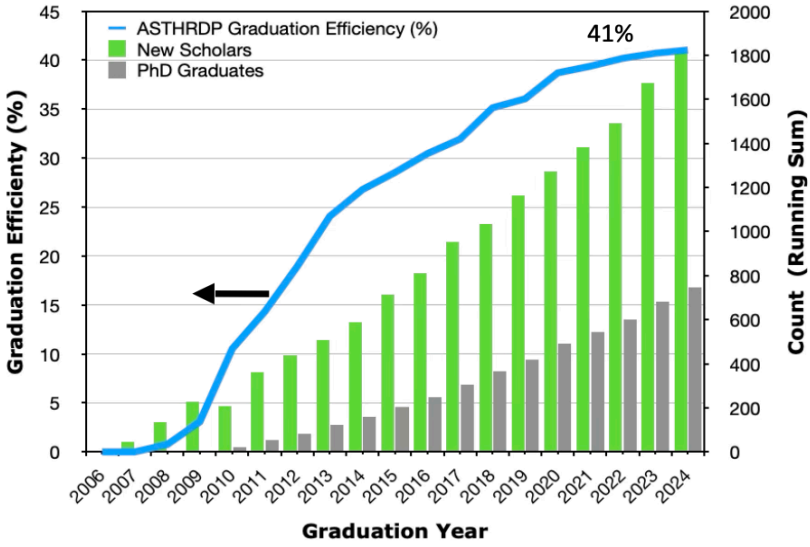
Table 5 compares the STEM PhD to Master's Graduation Ratio of UP Diliman, UP Los Baños, UP Manila, CoE, CS, and NIP from AY 2000–2021 to AY 2022–2023 (23 years). The NIP offers two undergraduate degree programs: BS Applied Physics (21.5± 8.043 graduates per year) and BS Physics (15.5± 8.16). At present, it does not have counterpart programs in PhD and MS Applied Physics. Among the three CUs, UP Los Baños has the highest PhD to bachelor's graduation ratio of 1:3.16:26.81.

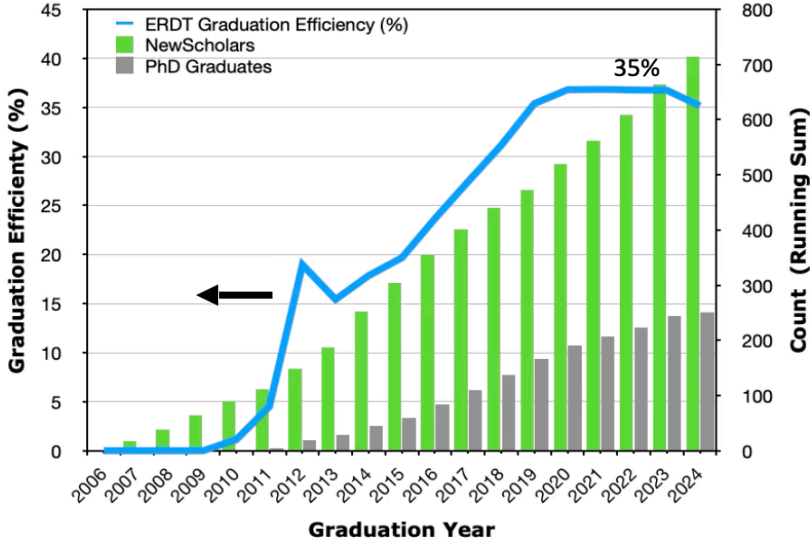
Table 5. STEM PhD to Master's (M) to Bachelor's (B) Graduation Ratio of UP Diliman, UP Los Baños, UP Manila, College of Engineering (CoE), College of Science (CS), and the National Institute of Physics (NIP). Period: AY 2000–2001 to AY 2022–2023 (23 years).

UNIT	STEM PHD: M:B GRADUATION RATIO
UP Diliman	1:5.43:904.6
UP Los Baños	1:3.16:26.81
UP Manila	1:38.7:1,927.7
CoE	1:9.74
CS	1:5.67
NIP	1:4.02:37 (BS)

A total of 1,823 ASTHRDP and 714 ERDT PhD scholarships were awarded over a period of 16 years from 2006 to 2024 (see Figure 8). More than fifty percent (57.73%) of the ASTHRDP scholars studied in UP Diliman, UP Los Baños, UP Manila, and UP Visayas; and 44.48% of the ERDT scholars enrolled in UP Diliman and UP Los Baños. The rest studied in other ASTHRDP [Ateneo de Manila University (ADMU), Central Luzon State University (CLSU), De La Salle University (DLSU), Mindanao State University-Iligan Institute of Technology (MSU-IIT), University of Santo Tomas (UST), Visayas State University, University of San Carlos (USC)] and ERDT (ADMU, CLSU, DLSU, MSU-IIT, USC, Mapúa University) partner institutions. For PhD scholars awarded from 2006 to 2024 the graduation efficiency approached towards a subpar 41% for the ASTHRDP (total: 748 graduates) and 35.2% for the ERDT (251 graduates).

Figure 8. Running sum of ASTHRDP (top) and ERDT (bottom) PhD scholars and graduates from 2006 to 2024. Also plotted are the corresponding graduation efficiencies [100 (no. of graduates/no. of scholars)]. Efficiency converges towards 41% for the ASTHRDP (total: 748 graduates) and 35% for the ERDT (251 graduates). For UP Diliman ASTHRDP and ERDT scholars, the efficiency is at 14.15% and 36.27%, respectively.





Key Findings

The information in Section III leads to the following key findings:

1. UP consistently attracts the best high school graduates of the country. From 2003 to 2023, UP and UP Diliman applications increased at rates of +2,206.6 and +1,614 per year respectively, minus the figures for 2016 and 2017. UP Diliman was the preference of 62.56 ± 0.045 percent of all UPCAT applicants.

2. Admission to UP is getting more difficult. Yearly admission rates (2003 -2023) to UP and UP Diliman were 17.07 ± 1.72 and 8.51 ± 1.71 percent when 2016 (30.88%; 19.27%) and 2017 (28.99%; 18.39%) are included. Absorption declined at a yearly rate of -0.1732% (UP) and -0.18% (UP Diliman) since the rise in UPCAT applications was not matched by a proportionate increase in admission slots. More and more talented young Filipinos are denied with the life-changing opportunity to learn from the most creative and productive teachers, artists, scientists, and researchers in the country (Saloma 2021). Those from the Visayas and Mindanao are particularly underrepresented in the undergraduate population.

3. Number of bachelor's graduates with Latin honors grew in UP Diliman (at an average rate +2.1% per year), UP Los Baños (+2.3%), and UP Manila (+3%) from AY 2010–2011 to AY 2024–2025. It is due to increasing competitiveness in admission and not by deliberate relaxation of academic standards. CUs with higher admission rates have lower percentages of students graduating with Latin honors.

4. The PhD graduation rates of UP Diliman (65.35 ± 15.35 per year; 36.35% in STEM programs), UP Los Baños (58.92 ± 15.35; 99.4%), and UP Manila (3.47 ± 3.5) have remained low and unstable even though the number of regular UP Diliman PhD faculty members increased from 471 in January 2013, to 498 (+5.73%) in December 2015, then to 607 (+28.88%) in February 2020. UP Diliman offered a total of 70 PhD degree programs in August 2025. UP Los Baños employed 226 STEM PhD faculty in AY 2011-2012, which increased to 313 (+38.5%) in 2023. It offered thirty-six (36) STEM PhD programs in 2025. The basic monthly salary of a full professor (Salary Grade 29-8) rose 102.33% from January 2016 to January 2024 (₱194,463).

5. From 2010 to 2025, UP Diliman admitted a yearly average of 239.6 ± 33.41 new PhD students (31.14% in the CS and CoE) while producing

only 71.47 ± 10.82 (33.93% from CS and CoE). Sustained student interest in the PhD programs is not matched by a reasonable likelihood of graduation which is only at 29.03 ± 1.05 percent. From 2007 to 2023, UP Los Baños (UP Manila) admitted 105.67 ± 29.41 (23.56 ± 10.63) new PhD students and produced 59.28 ± 16.1 (5.78 ± 4.92) PhD graduates per year, for success rate of 56.1 (24.53) percent.

6. From 2010 to 2025, UP Diliman produced a total of 49,721 bachelor's graduates (3,314.73 ± 496.49 per year) while admitting 59,085 new students indicating an efficiency rate of 84.15 percent. Only a fraction of the bachelor's graduates proceeds to enroll in the PhD degree programs.

7. Frequency analysis of the PhD graduation profile of UP Diliman reveals that those who graduated took an average of 8.5 academic years to finish. A straight STEM PhD curriculum is designed for completion within five years for qualified students with the requisite bachelor's degree. For students who already have the requisite MS degree their PhD curriculum is designed for completion within three years. It was reported earlier that the 835 PhD graduates of UP Diliman between AY 2003–2004 and AY 2014–2015 (12 years) spent an average of 7.88 ± 1.57 years in their respective programs (Saloma 2016).

8. Over a 34-year period ending in AY 2024-2025, the CS and CoE produced 12.82 ± 3.88 and 6.06 ± 5.4 PhD graduates per year, respectively. Their total accounted for 29.19% of the UP Diliman output. From AY 2000-2001 to AY 2023-2024 (24 years) the graduation rates in UPD, CS, and the CoE increased at a measly 0.3, 0.15, and 0.49 PhD graduate per year respectively, even though the number of CS PhD faculty grew from 150 in June 2012 to 168 (+11.33%) in July 2018 and to 211 (+40.67%) in September 2024 while that of CoE rose from 66 in June 2012 to 97 (+46.97%) in July 2018 and then to 110 (+66.67%) in 2022. The CoE PhD graduation output improved markedly with the implementation of the DOST ERDT in 2006. The same could not be said of the DOST ASTHRDP scholars in CS.

9. PhD Physics graduates (118 at 3.37 ± 2.21 per year) made up 27% of the total CS production (436) from AY 1990–1991 to AY 2023–2024. Graduation increased at measly rates of 0.12 (CS) and 0.18 (NIP) per year. The NIP employed 13.74% of the entire CS PhD faculty. The other ten programs produced less than one (0.93 ± 0.35) graduate per program per year. CS has not produced a PhD Geology graduate since AY 1999–2000.

10. The PhD: Master's (M): Bachelor's (B) graduation ratios of UP Diliman (1 PhD:5.43 M:904.6 B), UP Los Baños (1:3.11:26.82), UP Manila (1: 38.7:1,927.7), CoE (1:9.74), and CS (1:5.67) to reveal that a significant percentage of the master's graduates did not get a PhD degree. Still a much larger percentage of bachelor's graduates did not obtain a master's degree – one (1) order of magnitude more for UP Los Baños, two (2) for UP Diliman and three (3) for UP Manila. The PhD: MS: BS graduation ratio of NIP is 1:4.02:37. Many BS Applied Physics graduates are not proceeding to the MS Physics program because the NIP does not offer an PhD/MS degree program in Applied Physics.

11. Underperformance of the STEM PhD programs of UP has affected the success of the ASTHRDP and the ERDT advanced manpower development programs. Since 2006, 57.73% of all ASTHRDP PhD scholars studied in UP Diliman, UP Los Baños, UP Manila, and UP Visayas, while 44.48% of ERDT scholars were in UP Diliman and UP Los Baños. As of 2023 the running PhD graduation efficiency had settled to the subpar values of 39.92% for the ASTHRDP and 36.97% for the ERDT. Less than four out of every ten ASTHRDP or ERDT scholars were able to graduate since 2006.

Recommendations

The financial incentives (e.g., International Publication Awards, One UP Professorial Chairs, Balik PhD Program) and faculty merit recognition system that were adapted in the last 35 years did not impact significantly on the production of PhD graduates and the following actions are recommended to increase the number of PhD faculty mentors and to incentivize successful mentoring of PhD students:

1. Require for graduation the successful defense of an individual undergraduate thesis in all STEM undergraduate programs. It will provide undergraduates with the opportunity to join research groups early and learn the proper conduct of meaningful scientific research – from attending weekly research meetings and presenting technical seminars and research progress reports, to delivering their first conference presentation to an audience of peers and experts and defending their thesis research findings to an examination panel. The training of a successful PhD student start in his/her undergraduate years.

2. Enlarge the talent pool of potential Filipino scientists and researchers by increasing the number of admission slots per year in proportion to the number of UPCAT applications. Strengthen the capability of STEM undergraduate programs in CUs other than UP Diliman. In 2012, 2014, and 2015, 56.9 ± 2.18% of UP Diliman qualifiers were residents of the NCR where only 12.4% of the PH population lived in 2020. The NCR accounted for 31.93 ± 0.16% to the annual Philippine gross domestic product from 2018 to 2020. Admitting more UPCAT applicants will slow down the rising economic inequality in Philippine geographic population (Saloma 2021).

3. Adapt in a calibrated manner the tenure policy of NIP to other UP units that offer STEM PhD programs. It resulted in PhD Physics graduates accounting for 26.6% of the total CS output from AY 1990–1991 to AY 2023–2024 (34 years). The minimum mentoring requirement for tenure in selected UP units is the graduation of an MS student with the tenure-candidate serving as thesis research supervisor. Raise the bar to one PhD graduate as sole dissertation supervisor.

4. Require the graduation of at least one PhD student as sole dissertation supervisor in the promotion of a tenured PhD faculty to the rank of full professor. CS produced only 12.82 ± 3.88 PhD graduates per year in the last 34 years ending AY 2023–2024, even though the CS PhD faculty complement grew from 150 in June 2012 to 211 (+40.67%) in September 2024. If one CS PhD faculty can produce one PhD graduate in every five (5) years, then on average the number of PhD graduates will increase to 42 per year (+229%).

5. Require candidates for the title of professor emeritus (PE) to graduate at least six (6) PhD students as sole dissertation research supervisor. Professor emeriti are a benchmark of exemplary achievement in teaching, scientific research, and academic mentoring. A total of 202 emeriti (8.1 ± 6.8 per year) were appointed from 2000 to 2024 with 65.84% of them made after 2011. Recipients from UP Diliman (49%), UP Los Baños (21.3%), and UP Manila (22.3%) accounted for 92.6% of total. To qualify for PE appointment a retired faculty must have rendered at least 20 years of active service to UP [2003 UP Diliman Faculty Manual, Sec 8.5.3]. The proposal will result in the graduation of at least one PhD student per 3.3 academic years on average when the PE candidate only satisfies the minimum service requirement. For a longer duration of service (e.g., 30 years), it will be one PhD graduate per five (5) years.

6. Formulate a transparent, efficient and collegial process of discontinuing unproductive PhD programs. At present a program is abolished only when the concerned unit requests for it and often with the aim of replacing it with a new one. This is hindering the efficient streamlining of existing PhD programs for the purpose of re-allocating limited resources for better utilization. Each CU shall conduct a regular evaluation of the graduation performance of PhD programs with implications on faculty merit promotion and future appointment as professor emeritus.

7. Direct the NIP and CS to develop a PhD/MS degree program in Applied Physics which is long overdue. The BS Applied Physics program with concentrations in Instrumentation Physics and Materials Science was first implemented forty years ago in AY 1983–1984. By the end of AY 2023–2024, it already produced a total of 649 BS Applied Physics graduates which is 19% more than the number of BS Physics graduates. Applied physicists at NIP are the country pioneers in data analytics, information and data processing, complex systems analysis, and artificial intelligence.

8. Avoid assigning non-tenured PhD faculty members to administrative positions that uproots them away from their home units. Their energies are best spent directing and supervising the dissertation and thesis research of student-advisees. If unavoidable then assign them to administrative chores that directly affect the successful implementation of undergraduate and graduate programs in their home units.

9. Allow capable PEs to serve as sole PhD dissertation research supervisors until the age of 70, if their time-bound appointments are duly endorsed by the concerned Graduate Committee and approved by the College Dean. At present PEs can only serve as dissertation co-supervisors.

Increasing the PhD graduation rate to approach that of bachelor's graduation and in proportion to the number of regular PhD faculty members will enable UP to accomplish its stated purpose as the national university. It will boost its track record as a highly capable research institution and fulfill a core and unique public service function which is the authority to grant PhD degrees to qualified students.

UP needs to entice more of its undergraduate students and prepare them for a productive life in graduate school. Young STEM talents want to collaborate with competent and committed PhD supervisors. Their success means more research problems being examined and solved thereby enhancing our own capability to address complex national challenges from rising income inequality and widespread poverty, dwindling natural resources, increasing population pressure, food and energy insecurity, inadequate health care system, natural calamities and crippling government red tape. New scientific knowledge is empowering. It is the fuel that drives the technological innovation engine.

Having more ASTHRDP, ERDT, CHED, and other government scholars succeeding in their mission to graduate implies more of them being spared from the debilitating stigma of failure and the heavy burden of reimbursing the government of the cost of their academic training. The best practices that UP will constantly develop, validate and refine through time can be shared with other HEIs to improve their own advanced manpower development programs.

The recommendations if adapted will be implemented in a deliberate prospective manner that considers the existing faculty demographics and administrative culture of the concerned academic units.

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ARTICLE

Leveraging Higher Education to Resolve Healthcare Constraints

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Abstract

Health workers are those who are engaged in actions with the primary intent of enhancing health – serving as the backbone of any functioning health system. Improving health service coverage and realizing the right to the enjoyment of the highest attainable standard of health is dependent on health workers' availability, accessibility, acceptability, and quality. Many highly skilled human resources for health (HRH) professionals continue to migrate locally and internationally for higher salaries, better work conditions, opportunities, or quality of life. This requires comprehensive strategies, investment, and international cooperation to manage migration and skills distribution. On the supply side, high attrition rates among Higher Education Institutions (HEIs) offering health care related courses were also observed. Although there are initiatives in place to address the HRH issues, achieving the Sustainable

Development Goals (SDG) targets in 2030 and implementing the Universal Health Care (UHC) Act remains challenging.

Focus group discussions (FGDs) were conducted to draw up actionable solutions and policy reforms to address these challenges. Data analysis and outputs of the FGDs led to the conclusion that the country is in a crisis with regard to the health workforce. Based on the discussions, three major clusters of issues must be addressed: (1) retention and reintegration; (2) migration management (domestic and international); and (3) supply, demand, and the health labor market. In view of the crisis on the country's health workforce, the paper recommends the following: (1) creation of a multi-agency high-level Council/Center/Office to formulate and coordinate the implementation of priority policies endorsed by the HRH network towards supply, retention, reintegration, and migration management of health workers; (2) enforcement of mandatory data entry by government and non-government agencies dealing with management of health professionals, through an interactive information portal for analysis needed for real-time harmonized policy decision making; and (3) provision of a synchronized dynamic HRH development (pre-service and in-service programs) and allocation of needed health workforce to ensure universal access to healthcare.

Keywords: health workforce, retention, reintegration, domestic migration, international migration

Introduction

Health workers are those who are engaged in actions with the primary intent of enhancing health – serving as the backbone of any functioning health system (WHO 2016b; WHO 2022b). Improving health service coverage and realizing the right to the enjoyment of the highest attainable standard of health is dependent on health workers' availability, accessibility, acceptability, and quality (WHO 2013). This includes all of those who provide direct personal care services in the home, in health care and residential settings, assisting with routine tasks of daily life, and performing a variety of other similar routine tasks (WHO 2022a). Healthcare workers are instrumental in driving innovation and advancements in medical treatment protocols, medical technologies, pharmaceuticals, and patient outcomes (Barchielli et al. 2021).

The Global Health Workforce Alliance (GHWA) identified some of the global issues in HRH such as workforce distribution disparities, challenges in recruitment and retention, impact of global health challenges, and health workforce education and training (WHO 2014). Additional issues in HRH include gender discrimination and inequality (Newman 2014), skill mix imbalance (WHO 2017), workforce financing (WHO 2016a), and workforce burnout (Dyrbye et al. 2017). The COVID-19 pandemic highlighted the role played by the healthcare workers but also heightened the global issues in health care where around 115,000 health workers died of COVID-19 (WHO 2021), one in three had anxiety and depression and as many as half experienced burnout (Abdul Rahim et al. 2022).

The World Health Organization (WHO) estimates a projected shortfall of 10 million health workers by 2030, mostly in low- and low-middle income countries. However, countries at all levels of socioeconomic development face, to varying degrees, difficulties in the education, employment, deployment, retention, and performance of their workforce (WHO 2024). According to Walton-Roberts and Bourgeault (2023), migration of the health workforce is a global problem with local implications. Based on their study, in Britain and North Ireland, 47 percent of the new general practitioner trainees in 2021 were international medical graduates; and the National Health Service (NHS) aims to recruit more than 51,000 international nurses by 2024. Additionally, the NHS survey revealed that 33 percent of the doctors were from India (9,435); Pakistan (4,257), Egypt (3,451), and Nigeria (2,493). In terms of nurses and health visitors, there are 86,349 who did not have British nationality and the leading source countries were: India (23,334), the Philippines (22,071), Nigeria (5,537), Ireland (4,419), and Zimbabwe (3,380). Agyeman-Manu et al., (2023) indicated that high income countries have 6.5 times more health workers per population than low-income countries. The growing migration of health workers is expected to further weaken the health systems of 55 countries in the 2023 WHO health workforce support and safeguard list (WHO 2023).

To address global HRH issues, the role of international collaboration plays a crucial role. Initiatives like the GHWA (WHO 2014) and partnerships between countries for knowledge exchange, capacity building, and resource sharing are essential in globally strengthening HRH, along with emerging solutions such as task-shifting, telemedicine, community health worker programs, and technology for education and training. The global strategy for HRH outlines a framework for countries to strengthen their healthcare workforce, ensuring equitable access to quality healthcare services which include among others

policy development and planning, education and training, recruitment and retention strategies, and regulation and licensing (WHO 2016b).

In the Philippines, as with the rest of the world, HRH plays a crucial role in delivering healthcare services and achieving national health goals. However, the country faces several challenges and issues related to its healthcare workforce, such as shortages and maldistribution (WHO 2016b), migration of healthcare workers (Robredo et al. 2022), quality of education and training (Guinto et al. 2018), underinvestment in healthcare workforce, health workforce policy and regulation (WHO 2016b), and retention problems (Dussault & Franceschini 2006). An important emerging issue especially in the pursuit of UHC is the clarification of the role of community health workers at the primary care level. Traditional roles such as providers of health information seem to be inadequate and need to be replaced with more strategic roles such as health system navigator to assist patients and their families better.

Several other barriers contribute to HRH issues such as transportation costs, long travel distances, and limited healthcare infrastructure, disproportionately affecting residents of rural and marginalized communities (Rural Health Information Hub 2024). Addressing these barriers requires targeted interventions to improve access to healthcare workers and facilities.

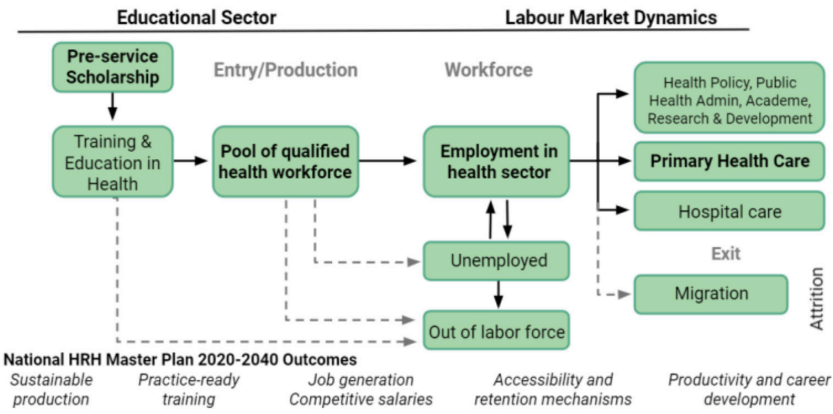
The Philippine government has already enacted policies such as the Republic Act (R.A.) No. 11223 or UHC Act and implemented various initiatives to address HRH challenges, including scholarship programs, deployment incentives, and rural health practice programs. These initiatives encompass education and training programs, deployment strategies, retention incentives, and regulatory reforms, such as: Doctor to the Barrios Program or the Philippine National Rural Physician Deployment Program (Leonardia et al. 2012), Registered Nurses for Health Enhancement and Local Service (Senate of the Philippines 2011), Philippine Health Agenda (DOH 2016), the Health Human Resource Deployment Program (Abrigo et al. 2021), and reintegration of returning migrant healthcare workers (Moncatar et al. 2023).

R.A. 11223 has mandated the formulation and implementation of a national master plan for human resources for health. The plan is expected to provide policies and strategies for the "appropriate generation, recruitment, retraining, regulation, retention, and reassessment of the health workforce based on population health needs". The National Human Resources for Health Master Plan (NHRHMP) 2020–2040 (DOH 2021) was developed to address the

(1) absence of accurate information on the health workforce to guide policy and planning, (2) limited collaboration among stakeholders, (3) fragmented HRH governance, and (4) poor implementation of policies. The Master Plan is aligned with the vision of "Filipinos have long and healthy lives by 2040" as stated in AmBisyon Natin 2040 (NEDA 2016).

The education sector, composed of higher education and skills training institutions, plays a pivotal role in building the national HRH through the health education market for the appropriate supply of quality and committed health workers and professionals. In the NHRHMP, it is envisioned that HRH production will be sustainable and evidence-informed, leading to the training of quality and practice-ready HRH responsive to local health needs. At the same time, the health education curriculum needs to be re-oriented towards primary health care (Figure 1).

Figure 1. Health Labor Market Framework for UHC. Source: National Human Resources for Health Master Plan 2020-2040 (DOH 2021)



Another issue is the retention of the health workforce in the local health sector. Both internal migration and outmigration further drive the inadequate and inequitable distribution of healthcare workers (HCWs) in the country. The country has been experiencing brain drain with the migration of skilled physicians and mid-level professionals (Alburo and Abella 2002). They have recommended that new information and communication technologies, in the level of higher education and in the practice of the profession, may address the international migration by providing opportunities to reduce attractiveness of outward migration. Data from 1990 to 2017 have shown

that the number of healthcare migrants has been steadily increasing (USAID HRH2030 2020). The total number of migrants from the period reached 60,000, wherein the majority were nurses. Some health professionals have also taken non-health jobs due to compensation differentials. Further, 2015 to 2020 data extracted from the Philippine Overseas Employment Administration Overseas Filipino Workers Statistics has also shown a steady number of HRH migrants totaling to 131,607 for 36 professions in 134 countries (DMW n.d.). Based on the Global Strategy on Human Resources for Health: Workforce 2030 by the World Health Organization (WHO 2016b), a ratio of 44.5 per 10,000 population is recommended to reach the 12 Sustainable Development Goals indicators. The recommended HRH skill mix consists of 14.3 for physicians, 27.4 for nurses, and 2.8 for midwives.

Thus, it is important to address the shortage of health professionals in the country with evidence-informed policies and programs addressing healthcare worker migration and focusing on the critical role of higher education and training institutions in HRH generation.

The study aims to (1) assess the country's human resources for health deficits considering the current international and local migration trends of healthcare professionals and the supply and demand based on the health labor market; (2) identify gaps, opportunities in higher education, and health workforce retention; and (3) recommend policy reforms on the retention and reintegration, and migration management (domestic and international), based on available data on the health workforce supply, demand, and the Philippine health labor market.

Methodology

Study design and subjects

A core group representing key agencies was established to review existing materials from various sources. Due to gaps in the information from printed and official websites, three FGDs were organized, in collaboration with the National Academy of Science and Technology (NAST), to elicit more recent information on the ground on the following themes: human resources for health retention and reintegration; migration management; and supply, demand and the health labor market. Questionnaires were developed for each of the themes and sent to invited participants prior to the FGD to give them an opportunity to discuss their responses with their respective groups. Responses

were discussed during the FGDs. Each of the FGDs had themed plenary talks prior to the breakout sessions. The participants were informed during the forum that the FGD sessions will be recorded. To maintain confidentiality, all identifiers of the participants and respondents were removed.

The participants were representatives from the professional societies from 15 health and allied professions (dental hygienists, dental technologists, dentists, medical technologists, midwives, nurses, nutritionist-dietitians, occupational therapists, optometrists, pharmacists, physical therapists, physicians, radiologic technologists, respiratory therapists, and x-ray technologists), the education sector, government, and non-government agencies (Table 1). Purposive sampling was implemented to ensure that each of the disciplines have representation primarily based on professional societies, government agencies (e.g., CHED, DOH, DOLE, DMW) relevant in addressing HRH issues, education sector with health-related courses, non-government, civil society, and private groups relevant to primary healthcare delivery.

Table 1. List of Organizations Invited to the Focus Group Discussions

PROFESSIONAL SOCIETIES
Association of Respiratory Care Practitioners Philippines, Inc.
Dental Technologists Association of the Philippines
Integrated Midwives Association of the Philippines
Midwives Foundation of the Philippines*
Mother and Child Nurses Association of the Philippines*
National Association of Public Health Nurses Inc.
Optometric Association of the Philippines*
Philippine Academy of Occupational Therapists, Inc.
Philippine Association of Medical Technologists, Inc.
Philippine Association of Nutrition, Inc.
Philippine Association of Radiologic Technologists Inc.
Philippine Association of Speech-Language Pathologists
Philippine Dental Association
Philippine Dental Hygienists' Association
Philippine League of Government and Private Midwives Inc.*
Philippine Medical Association
Philippine Nurses Association
Philippine Pharmacists Association Inc.
Philippine Physical Therapy Association, Inc.
Philippine Society of Public Health Physicians*
Philippine Stakeholders for Nutrition and Dietetics, Inc.

EDUCATION SECTOR
Association of Deans of Philippine Colleges of Nursing
Association of Philippine Medical Colleges
College of Medicine, University of the Philippines Manila
Philippine Association of Schools of Medical Technology and Public Health
Philippine Association of State Universities and Colleges
GOVERNMENT SECTOR
Commission on Higher Education
Department of Health
Department of Labor and Employment
Department of Migrant Workers
Second Congressional Commission on Education
Technical Education and Skills Development Authority
Union of Local Authorities of the Philippines
NON-GOVERNMENT, CIVIL SOCIETY, AND PRIVATE ORGANIZATIONS
Philippine Hospital Association
Private Hospital Association of the Philippines

*no representative sent to FGD

Data collection and analysis methods

Data on HRH was obtained from the Health Human Resource Development Bureau (HHRDB) of the Department of Health (DOH) on the following professions: dental hygienists, dental technologists, dentists, medical technologists, midwives, nurses, nutritionist-dietitians, occupational therapists, optometrists, pharmacists, physical therapists, physicians, radiologic technologists, respiratory therapists, and x-ray technologists.

Responses to the questionnaires were tallied. Raw data from FGDs were analyzed using NVivo (Version 14), a qualitative data analysis tool, for developing the themes and finding connections from the responses, mapping these connections, and providing the reports related to the number of connections in each of the major and sub-themes.

A qualitative research method design was employed using Thematic Analysis. Thematic analysis is a flexible method for identifying, analyzing, and reporting patterns (themes) within qualitative data. It emphasizes understanding the data's meaning through the lens of participants' experiences and perspectives (Braun and Clarke 2006).

Inclusion, exclusion, and ethical considerations

Only professions regulated by the Professional Regulation Commission (PRC) with licensure examinations were included in this study. All baccalaureate courses are Philippine Qualifications Framework (PQF) Level VI except Medicine which is PQF VII. Representatives of their respective professional societies were invited to the FGDs. All government and non-government agencies relevant to health were invited to send representatives to the FGDs.

Results and Analysis

In this paper, only data for physicians, nurses, and midwives were available for review. Figure 2 shows the data consolidated by the DOH from the following sources: Commission on Higher Education (CHED) for numbers on enrollees, dropouts, and graduates; PRC for number of takers, number of passers, passing rates at board examinations, number of health workers with active licenses; and health facilities for the number of employed health workers. There was an attempt to get information on the number of health workers in non-health professions (i.e., industry) but without success.

The following observations were drawn from Figure 2:

1. In Part 1. HEI Section, dropout rates were significantly high for Medicine (74 percent), Nursing (79 percent), and Midwifery (66 percent).

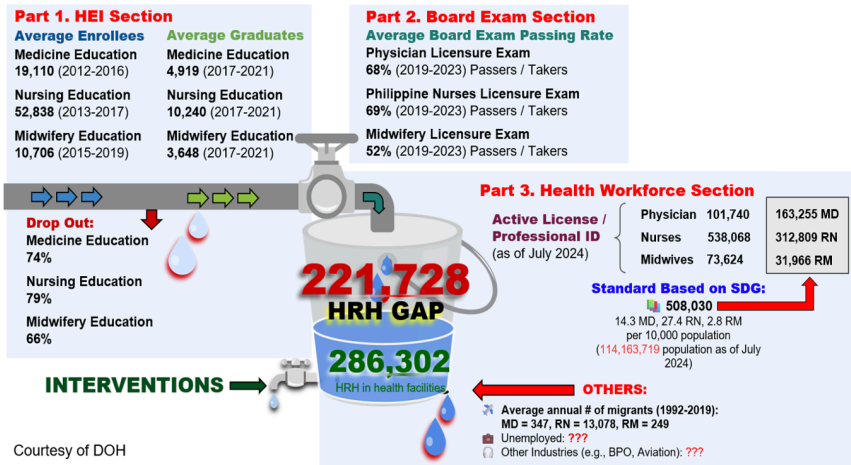
2. In Part 2. Board Exam Section, board examination passing rates were low for Medicine (68 percent), Nursing (69 percent), and Midwifery (52 percent).

3. In Part 3. Health Workforce Section, the number of active licenses shows adequate number of nurses (538, 068) and midwives (73,624) based on standards set by WHO.

   The average annual number of migrants refer to international migration. There is no data for domestic migration (rural to urban; health profession practice to non-health jobs such as in the BPO industry, army/navy, etc.). There are no data for unemployed physicians, nurses, and midwives.

These data did not consider geographic assignment.

Figure 2. Enrollees, graduates, dropout rates, passing rates, licensed workers, employment and migration of physicians, nurses, and midwives



Prior studies focused on migration and retention, have provided various recommendations such as improvement of information and communication technologies, creation and implementation of policies on the said concerns.

Although there is recent data for 2024 from the PRC on the average board exam passing rates and active license/professional ID holders (Appendix 1), the figure above used the earlier dates to show continuity in the tracking of enrollees until they are expected to graduate and take the licensure exams.

Considering the minimum expectation for SDG requirements, the Philippines needs 508,030 health workers for a population of 114,163,719 (July 2024). Compared to the number of HRH with active licenses at the PRC, there is a shortage of physicians and a seeming surplus for nurses and midwives. Yet, it actually ends up in shortages because of migration and other leaks in the health labor market. Out of 508,030 needed HRH, only 286,302 comprised the employed HRH in health facilities (Figure 2, Part 3. Health Workforce Section), reflecting a shortage of 221,728 in the country. There is no reliable information on the working location of physicians, nurses, midwives, and other licensed health professionals.

The PRC is currently consolidating data on passing rates in licensure examinations of all health professions in the past 10 years to help forecast

how many HRH professionals will be produced in the coming years (Supply Side). Another challenge is determining the actual number needed for other health professions outside of medicine, nursing, and midwifery (Demand Side).

The FGDs presented issues of the health workers. Based on participants' responses during the breakout sessions, there are three major themes under which HRH issues can be categorized: (1) Education and Training Gaps; (2) Retention, Reintegration and Migration; and (3) Shortage and Maldistribution. Retention and Migration have the greatest number of connections (223) with the participants followed by Education and Training Gaps (101) as the major issues in HRH. The number of connections refers to the number of times a particular topic has been mentioned during the breakout sessions. Results of the FGDs on HRH issues are presented in Table 2 and Table 3 with issues according to the three major themes.

Table 2. Results of Focus Group Discussions on HRH Issues

THEMES	ISSUES
Theme 1: Education and Training Gaps	High attrition and low passing rates
	Variable quality of higher education institutions and lack of Higher Education Institutions (HEIs) offering specific HRH programs
	Current health sciences education curricula seem to fail to produce practice-ready HRH
	Contentious retention and Return Service Agreements
Theme 2: Retention, Reintegration, and Migration	Weak Positive Practice Environment including appropriate recognition and valuing of some HRH staff
	Inadequate HRH Workforce Financing (salaries, benefits, infrastructure)
	Weak job Security and Career Pathways (Plantilla, career advancements, training pipelines)
	Weak Reintegration system for returning HRH
Theme 3: Shortage and Maldistribution	Skill mix imbalance (encroachment in other professions, lack of delineation in practice, some professions not fully integrated)
	Unresolved challenges in HRH rural practice
	Concentration of HRH distribution in urban areas
	Inadequate staffing resulting in overwork, overload, and stress

Table 3. FGD Results on Number of Connections of HRH Issues According to Themes and Sub-themes

HUMAN RESOURCE FOR HEALTH ISSUES	NUMBER OF CONNECTIONS
Theme 1. Education and Training Gaps	101
1. Education Gaps	85
a. Support for Passing Exams	8
b. Enrolment and Retention at Colleges	6
c. Lack of Data	21
d. Lack of Faculty	7
e. Lack of HEIs Offering the Programs	12
f. Limited Production of HRH	6
g. Passing Rates	4
h. Return Service Agreement	20
i. Support for Passing Exams	1
2. Training Gaps	16
a. Lack of Continuing Education Programs	9
b. Lack of Support for Training	7
Theme 2. Retention and Migration	223
1. Easy Migration Pathways	6
2. Family and Personal Reasons	31
3. Health Workforce Financing	67
a. Benefits	14
b. Facilities and Resources	7
c. Salaries	46
4. Lack of Position and Career Growth	46
a. Lack/No Position of Plantilla	16
b. No Career Growth of Pathways	27
c. No Job Security	3
5. Skill Mix Imbalance	12
a. Encroachment in Other Professions	4
b. Lack of Delineation in Practice	4
c. Some Professions are Not Fully Integrated	4
6. Unethical Recruitment Practices	5

HUMAN RESOURCE FOR HEALTH ISSUES	NUMBER OF CONNECTIONS
7. Workforce Burnout	45
a. Overwork, Overload, Stress	20
b. Poor Working Conditions	18
c. Undervalued, Unrecognized	7
d. Working in Other Fields	11
Theme 3. Shortage and Maldistribution	9
1. Challenges in Rural Practice	1
2. Concentration in Urban Areas	4
3. Inadequate Staffing	4

Policy Discussion

During the preliminary meetings of the core group, three major clusters of HRH issues were identified: (1) retention and reintegration, (2) migration (domestic and international) and (3) supply, demand, and the health labor market. Data from the DOH, PRC, and United States Agency for International Development (USAID) HRH 2030 study were presented. It revealed gaps in information especially in the allied health professions such as dentists, therapists (physical, occupational, speech pathologists), radiology technologists, and medical technologists. These professions were also contributing to the HRH migration issues in addition to the more commonly addressed professions such as the physicians, nurses, and midwives. Because of these gaps, the FGDs were organized to actively engage the various professions in the discussion of HRH issues to elicit new information, provide more context, and derive perceived solutions from the ground.

Analysis of relationships of HRH Issues - lack of prioritization on investment on health workforce

The paper identified direct and indirect relationships among issues legitimately derived from the FGD responses. There are seven issues discussed by the FGD participants: (1) education and training gaps, (2) health workforce financing, (3) lack of position and career growth, (4) retention and migration, (5) workforce burnout, (6) shortages and maldistribution, and (7) skill six imbalance.

Analysis of their responses under each theme revealed that retention and migration are the effects of the other six contributory issues (probable causes). This cause-and-effect relationship is presented in Figure 3 and explained further. Interestingly, retention and migration also cause shortage and maldistribution (effect) as presented in Figure 4.

The country needs a health workforce that is available and equitably distributed, competent and practice-ready, and highly motivated, enjoying decent work environments in order to address the seven contributory issues.

Figure 3. Healthcare Issues Contributing to Retention and Migration

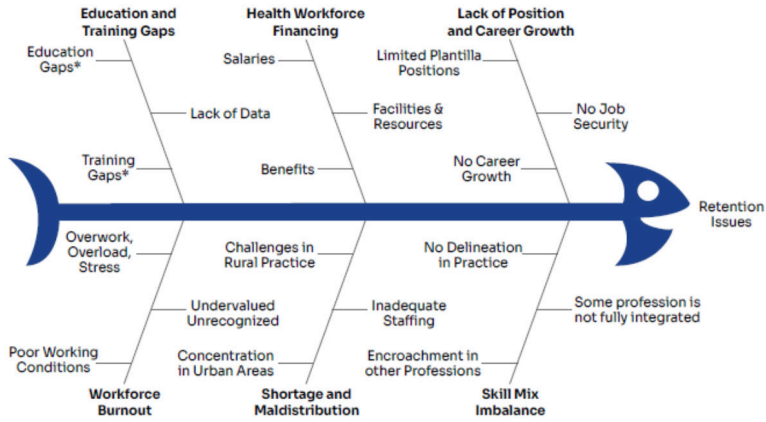
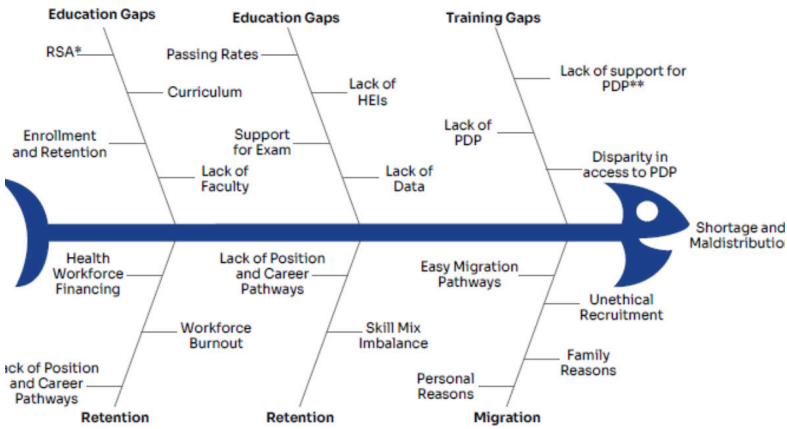


Figure 4. Healthcare Issues Contributing to Shortage and Maldistribution



Major challenge - data generation and data sharing

This paper demonstrated the value of good data for an accurate analysis of the health workforce situation. Figure 2 gave the alarming status of three professions—physicians, nurses, and midwives. It showed the weaknesses of our system—high dropout rates, low passing percentage of board examinations, and lack of location of practice.

This is the first published data on comprehensive labor market information with analysis from pre-service (enrollment, graduation, board exam) to in-service (registered professionals with active license/professional IDs, migration). The high attrition rate per stage was instrumental in drafting of recommendations.

The data generated for migration is only for international movement but we realized during the core group meetings and FGDs that there was also domestic migration – from rural to urban setting and from health profession to non-health professions such as the BPO industry engaged in non-active healthcare delivery. There is also a recent observation of movement of health workers from the private to public health facilities.

The situation is alarming because the numbers reflect seemingly adequate numbers of nurses and midwives renewing licenses at the PRC and yet, we know that there are many parts of the country without health workers. Issues on demand and supply also affect the maldistribution of available health workforce. At present, there is no accurate practice location map for all physicians, nurses, and midwives. In addition, data on the graduates of medical, nursing, and midwifery courses working in non-healthcare institutions are not readily available. These findings reinforce the existing literature on the lack of data for further analysis.

Alarming also are the attrition rates in medicine, nursing, and midwifery courses. The 22 medical schools in state universities are currently providing a supply of physicians, but decreasing the attrition rate will be a bigger factor in increasing the number of physicians rather than establishing additional medical schools. This is an indirect measure of the quality of the schools and this can be remedied with focus on institutional accountability and responsibility in producing high quality, competent and committed health professionals.

No conclusions could be made about the other professions because the data was not yet available for analysis. It will not be a surprise if similar observations will be gathered.

During the FGDs, it was evident that not all professional groups have the capacity for data generation and storage. The professional groups also expressed security concerns on data sharing. Recognizing now the importance of data sharing for policy generation, the professional groups agreed to attend a two-day workshop to be hosted by the National Academy of Science and Technology (NAST) on data issues. The goal is the creation of a secured common data portal compliant with the existing laws, rules and regulations on data privacy for the various groups to use for data entry and storage.

A country in crisis!

The country's health workforce is definitely in a crisis. Based on the status of the three health professions, the Philippines will have great difficulty in achieving the SDG targets for 2030. More importantly, it will be very challenging to implement the Universal Health Care Act without an adequate, competent, practice-ready, and highly motivated workforce.

There are attempts from concerned agencies to alleviate the problem in recognition of the seriousness of the issue as well as the need for the explicit articulation of the direction of HRH Management. The HHRDB of the DOH is coordinating with other agencies for generation of data on enrollees, dropouts, passers, and location of practice for a real-time situation of the health workforce. The Department of Foreign Affairs is leading the Inter-Agency Body to develop a Joint Memorandum Circular (JMC) on Strengthening Bilateral Labor Agreements for all Healthcare Workers. The JMC will have a five-pronged framework for Strategic Management of the Philippine Health Workforce aligned with the National Human Resources for Health Master Plan:

1. Rational Responsive Production. HRH production for a country (supply side) should be responsive to the country's needs. It should also be driven and informed by data from the demand side with all factors such as demographics, burden of disease, risk and hazard profile of the country, and domestic and international migration taken into consideration.

2. Managing the Flow. Once HRH are qualified (i.e., in the case of licensed health professionals), they are expected to stay in the country and ideally, contribute to the health labor market as providers of health services, administrators/managers of health systems, academicians, or researchers for a number of years to allow the "production" of their "replacement" should they decide to leave the domestic health labor market.

3. Sustained and Sustainable Retention. Retention is the priority of this framework. This means developing the country as a "green pasture" that will be attractive enough and competitive for HRH to want to stay and serve. This requires a whole-of-society and whole-of-government effort, as well as the establishment of financial and non-financial incentives from all levels of governance. Retention efforts should be attractive enough to make health workers want to stay and serve where the need is greatest such as Geographically Isolated and Disadvantaged Areas (GIDAs) or Socioeconomically Disadvantaged Areas. This can be achieved by utilizing a combination of benefits, creation of more tenured, permanent (plantilla) items, nudging the private sector to pay better, housing, scholarships, etc.

4. Managed Migration. Migration should be a matter of choice and not necessity. Should HRH decide to seek work abroad despite the efforts for sustained and sustainable retention, the government should ensure that the rights and welfare of Filipino HRH are protected and upheld through the government by means of government bilateral labor agreements that are enforceable and can be monitored with accountabilities. The bilateral labor agreements should be mutually beneficial for both the receiving country and the Philippines at the health system level.

5. Reintegration. The government should create space for returning HRH to contribute to the health sector in order to maximize the experience and expertise they have gained while working outside of the country.

Policy Recommendations

In view of a crisis as regards its health workforce, we strongly recommend the following urgent measures:

1. Creation of a high-level multi-agency Council/Center/Office to formulate and coordinate the implementation of policies recommended by the HRH Network towards rational responsive production (supply), sustained and sustainable retention, managing the flow of health workers across the health labor market, equitable distribution of health workers and migration management of health workers and reintegration.

   The purpose of the creation of a high-level Council/Center/Office is to establish a body with adequate authority for effectively and responsively addressing health workforce issues including recruitment, training, retention, and equitable distribution of healthcare professionals in the country in a timely manner. In coordination with existing agencies tasked to address workforce issues (DOH, DOLE, Department of Migrant Workers, etc.), the council will be responsible for overseeing and guiding the timely resolution of health workforce issues with the following objectives:

   a. Evaluate the current workforce status, project future needs, create actionable plans to address identified challenges and opportunities (strategic oversight and workforce planning), and produce timely, regular national and local assessments and actionable recommendations (e.g., quarterly reports);

   b. Engage policy makers to support effective workforce-related legislation and funding (policy advocacy and development) both at the national and local levels to ensure the provision of decent work conditions;

   c. Promote diversity (skill-mix, gender, community workers vs. health professionals, generalists/primary health care workers vs. specialists) and equity within the healthcare workforce to ensure community access to quality care (equity and inclusion); and

   d. Foster collaboration among healthcare providers, educational institutions, government agencies, and community organizations (stakeholder engagement) to solve HRH issues such as inequitable distribution, competency enhancement, and the like.

2. Enforcement of mandatory data entry into an accessible and interactive information portal for real-time analysis needed for responsive and harmonized policy decision making.

A National Portal for Healthcare Workforce Data will serve as a centralized and comprehensive platform for collecting, storing, and disseminating critical workforce information. This is provided by R.A. 11223 (Section 25) which mandates the development of a national health worker registry. By consolidating data from diverse sources into a single, accessible portal, this initiative aims to enhance transparency, facilitate data-driven decision-making, and support the development of timely targeted interventions to address workforce challenges. The following will be the objectives:

a. Provide a unified platform that will aggregate workforce data from various sources (centralized data);

b. Offer ease and secure access to up-to-date information (enhanced data access);

c. Support evidence-based decision-making (data driven insights);

d. Aid in the development of strategies and policies by providing comprehensive data (workforce planning and policy development); and

e. Promote transparency to serve as basis in holding stakeholders accountable in addressing workforce challenges (transparency and accountability) in accordance with R.A. 11223.

3. Urgent provision of synchronized dynamic HRH development systems (pre-service and in-service), to ensure the availability of a competent, practice-ready, highly-skilled, and motivated health workforce that is responsive to population needs, equitably distributed, and sustainably retained across the country, especially in underserved areas to ensure universal access to health care.

   The Philippines is considered to have the ability to produce an adequate number of health workers, enough to address its population's needs as well as to sustain health worker migration to other countries. However, health labor market data shows that there are massive shortages of health workers in many areas across the nation that hamper the achievement of desired Philippine health care outcomes. Among the reasons for this paradox is the wide variance in the quality of health sciences education that results in a large number of dropouts and low number of licensure examination passers (Appendix 1). From 2017–2023, the highest passing percentage was registered by Optometry with 82.3 percent. Medicine

was second with 71 percent, 56.9 percent for Nursing and 45.7 percent for Midwifery. However, taking into consideration the year 2023 alone, Nursing had 74.9 percent passing percentage while Medicine went down to 54.5%. Midwifery still had 47.3 percent. There are more than enough schools in Nursing and Midwifery (529 and 304, respectively in 2023). Further, the number of medical schools has increased with the passage of the Doktor Para sa Bayan Act (R.A. 11509).

The current HEIs also have curricular and training capacity issues that sometimes result in graduates who are not practice-ready, nor competent or highly skilled. There are tried and tested higher education health science programs that produce practice-ready health workers of different cadres specifically, doctors, nurses and midwives that show remarkable retention results over the years that should be replicated faster with government subsidy and attention. One such program is the University of the Philippines Manila School of Health Sciences programs (University of the Philippines Manila—School of Health Sciences, 2025) that are now in four provinces. Replication of these programs in both the public and private sector, through the mechanisms provided by Doktor Para sa Bayan Act and UHC Act, can improve the supply of practice-ready graduates who are ready and willing to serve the underserved communities that need them most.

Post-graduate issues of ensuring career progression through continuing education and lifelong learning approaches abound so that work motivation and career development become demotivators rather than motivators. Practice acts are not updated to ensure meaningful career progress such as nurses moving into advanced practice nurses within the ambit of the Philippine Nursing Act of 2002 (R.A. 9173). The Medical Act of 1959 (R.A. 2382) has also not been updated. Professional practice legislations have not provided the impetus and evolution of roles and spurred professionals to innovate their roles and practices. A case in point is the proposed Comprehensive Nursing Act of 2023 that has not been enacted even while it was submitted to Congress since 2016 with similar bills filed in the succeeding Congress a such as the House Bill No. 3298 and Senate Bill No. 1447 in the 19th Congress. Key but contentious components of the legislation provide for Advanced Nursing Practice of nurses which will be especially helpful for UHC realization in doctorless areas or in primary care of highly urbanized areas that are underserved; provision for National Chief Nursing Officer as promulgated by WHO to hold a person accountable to coordinate the solutions for nursing issues

within a country; bringing the salary levels of nurses in private health facilities up to par to government compensation levels to achieve equity and retention. In addition, the current practice laws are disparate and promote professional turfing rather than teamwork which is necessary for high quality health care.

By improving HRH development systems from rational production to equitable deployment towards retention of available competent, highly skilled, and highly motivated health workers, the following recommendations are espoused:

a. Ensure the meaningful regulation of HEIs offering health sciences education for them to produce high quality, practice-ready, committed health workers who appreciate teamwork (inter-professional) in providing primary services to the population they serve;

b. Secure the balance between producing more health workers and developing quality health workers by ensuring that health sciences education is neither politicized nor commercialized;

c. Develop and cascade supervision and work enhancing strategies across health facilities and health care settings to motivate and improve health worker performance in improving health outcomes;

d. Pass proposed health professional practice laws such as the current Comprehensive Nursing bill (e.g., House Bill No. 3298 and Senate Bill No. 1447 of the 19th Congress) that have languished in the legislature for three congresses now because of the unwillingness of legislators to approve increases in compensation and other decent work provisions, and to make these positive work environments the norm rather than the exception.

e. Endorse proposed bill on Career Progression and Specialization Program and Credit Accumulation and Transfer System submitted to the Second Congressional Commission on Education 2 (EDCOM II). It will upgrade the qualification and competency level of professionals which could later translate to better career prospects and opportunities, promotion, and higher salary for professionals. It also reinforces quality assurance in the provision

of professional service and keeps the professionals at par with their international counterparts.

Conclusion

The crisis of the health workforce in the country was evident in the data and FGD outputs presented in this study. In assessing the country's HRH deficits, the creation of a National Portal for Healthcare Workforce Data compliant to data privacy laws, rules and regulations is imperative. Another factor contributing to the gap in the HRH is the high attrition rates among HEIs offering health care related courses. Improving HRH systems from pre-service to service will not only allow the country to produce competent, highly skilled, and highly motivated health workers but retain the workforce to narrow the projected gap in healthcare. Further, aggressive policy measures at the national level must urgently address retention and reintegration, migration (domestic and international), supply, demand, and the health labor market. To promote accountability, ensure continuity, and respond to the concerns of the health workers, creation of a high-level multi-agency Council/Center/Office is essential.

All sectors, both public and private, engaged with health must be involved in the planning, implementation, supervision, and review of creative strategies to address the deficit in the health workforce. A multisectoral collaboration with a systemic approach anchored in sound policies can avert a country in crisis and make universal health care for all Filipinos a reality.

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Declaration of Conflict of Interest

The authors did not declare a conflict of interest.

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Appendix 1

Statistics on Human Resources for Health Registration and Licensure Examinations

Number of Registered HRH Professionals as of August 21, 2024*

	PROFESSION	REGISTERED PROFESSIONALS	ACTIVE PROFESSIONALS (WITH VALID PROFESSIONAL ID)
1.	Medicine	170,563	102,220
2.	Medical Technology	123,979	74,415
3.	Midwifery	188,082	73,397
4.	Pharmacy	99,403	62,245
5.	Dentistry	62,620	33,766
6.	Optometry	12,394	6,234
7.	Nutrition and Dietetics	22,484	10,459
8.	Nursing	999,467	538,960
9.	Physical Therapy	38,714	17,621
10.	Occupational Therapy	5,762	3,265
11.	Radiologic Technology	28,104	22,257
12.	Respiratory Therapy	7,454	6,520

*Courtesy of Professional Regulation Commission

Statistics on Licensure Examination for HRH Professions from 2017–2023*

PROFESSION	NUMBER OF EXAMINEES	NUMBER PASSED	PASSING PERCENTAGE
1. Medicine	41,354	29,375	71.03%
2. Medical Technology	50,335	35,034	69.60%
3. Midwifery	23,127	10,577	45.73%
4. Pharmacy	37,616	22,944	61.00%
5. Dentistry	6,948	3,536	50.89%
6. Optometry	1,455	1,197	82.27%
7. Nutrition and Dietetics	6,773	4,476	66.09%
8. Nursing	138,023	78,583	56.93%
9. Physical Therapy	13,758	8,603	62.53%
10. Occupational Therapy	3,070	1,925	62.70%
11. Radiologic Technology	22,252	9,837	44.21%
12. Respiratory Therapy	5,614	3,727	66.39%

*Courtesy of Professional Regulation Commission

Number of participating schools in the Licensure Examinations (2023–2024)*

PROFESSION	NUMBER OF PARTICIPATING SCHOOLS IN THE LICENSURE EXAMINATIONS (2023–2024)
1. Medicine	81
2. Medical Technology	150
3. Midwifery	304
4. Pharmacy	117
5. Dentistry	34
6. Optometry	10
7. Nutrition and Dietetics	52
8. Nursing	529
9. Physical Therapy	93
10. Occupational Therapy	25
11. Radiologic Technology	108
12. Respiratory Therapy	29

*Courtesy of Professional Regulation Commission

ARTICLE

Lives Behind the Numbers: Lived Struggles of 4Ps (Pantawid Pamilyang Pilipino Program) Beneficiaries in Accessing Higher Education

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Abstract

This qualitative case study examines why many senior high school graduates from *Pantawid Pamilyang Pilipino Program* (4Ps) households do not access benefits under the Universal Access to Quality Tertiary Education Act (UAQTEA), notably the Free Higher Education (FHE)[1] and the Tertiary Education Subsidy (TES)[2]. Drawing on semi-structured interviews with four 4Ps senior high school graduates and their mothers in Barangay Payatas, Quezon City, complemented by key informant interviews and documentary review, the study identifies how household economic precarity, limited social and cultural capital, geographically concentrated and competitive

1 Free Higher Education in SUCs and LUCs: A program that exempts all eligible Filipino students enrolled in undergraduate programs at State Universities and Colleges (SUCs) and Local Universities and Colleges (LUCs) from paying tuition and other school fees, contingent upon meeting admission and retention requirements (Republic Act No. 10931, 2017).

2 Tertiary Education Subsidy (TES) for Filipino Students: A program that provides financial support for undergraduate and post-secondary education in SUCs, LUCs, private HEIs, and TVIs, administered by the UniFAST Board, with funding included in the budgets of CHED and TESDA, and prioritization given to students from lower-income households (Republic Act No. 10931, 2017).

higher education supply, and constrained UAQTEA funding interact to limit higher education access. Findings suggest these factors jointly reduce the likelihood that 4Ps senior high school graduates will enter and complete higher education. The paper recommends targeted transition supports, enhanced information on tertiary pathways within Family Development Sessions (FDS), pilot quota measures for 4Ps graduates paired with bridging supports, and a multi-year plan to raise education spending toward the 4–6 percent of GDP benchmark.

Keywords: higher education access; Pantawid Pamilyang Pilipino Program (4Ps); Universal Access to Quality Tertiary Education Act (UAQTEA); education inequality; political economy of education.

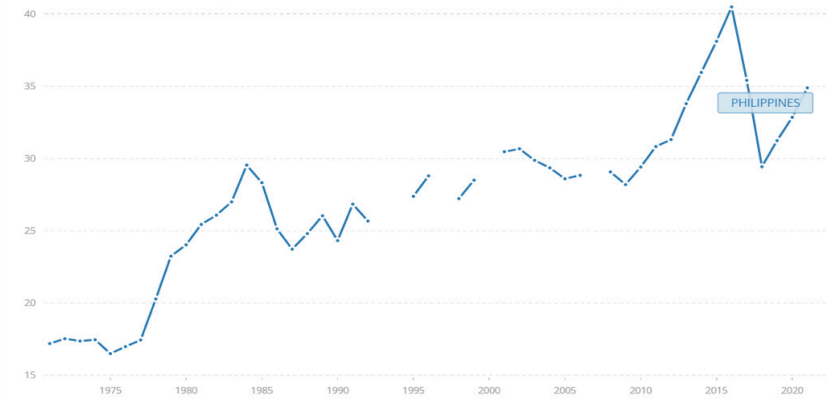
Introduction

Education is widely recognized as a pathway to upward social mobility and poverty reduction. The World Bank (2025) reports that each additional year of schooling is associated with a roughly 9 percent increase in hourly earnings, contributing to long-term economic growth and social cohesion. Over the last two decades, participation in tertiary education has expanded worldwide, with the gross enrollment ratio (GER) rising from 19 percent in 2000 to 40 percent in 2020. The East Asia and Pacific region recorded an even sharper increase, from 16 percent in 2000 to 51 percent in 2020, underscoring the region's momentum in higher education expansion (UNESCO Institute for Statistics 2024). Reflecting these trends, Figure 1 shows that tertiary enrollment in the Philippines has generally increased since 1975, albeit with fluctuations (World Bank 2024). Yet access remains uneven across socioeconomic groups, indicating that wider availability has not translated into equitable participation.

To address persistent educational inequalities, governments have implemented policy reforms to expand access to education and reduce the cost burden on poor households. One such reform is the Conditional Cash Transfer (CCT) program. Implemented in more than 60 countries, including the Philippines, CCTs provide financial support to poor households, tied to education and health-related conditions, to improve current welfare while building human capital for the future (Ferreira et al. 2009). In Latin America, for instance, Peru's *Juntos* program has increased enrollment in technical-vocational schools (Patel-Campillo and García 2022, 10). Meanwhile,

Colombia's *Familias en Acción* has improved educational aspirations among vulnerable households (Garcia and Cuartas 2019, 55).

Figure 1. The Philippines' tertiary school enrollment rate, 1971–2024. Source: World Bank

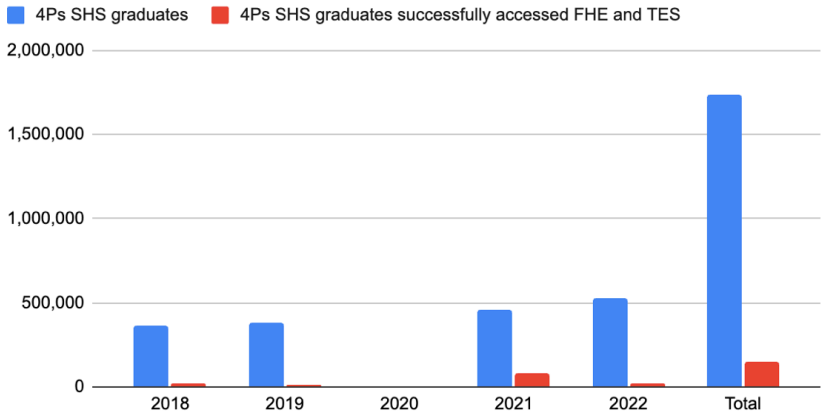


In the Philippines, the *Pantawid Pamilyang Pilipino Program* (4Ps) has strengthened the motivation of children beneficiaries to succeed in school despite the challenges posed by poverty (Orbeta, Jr., Melad, and Araos 2023, 142-3). Institutionalized through Republic Act No. 11310 in 2019, the 4Ps serves as both the country's flagship poverty reduction strategy and as its core human capital investment program (DSWD 2021, 249). While its education grants cover children only up to senior high school, mechanisms such as the Kilos Unlad case management strategy and referrals to other government programs were designed to help sustain household resilience and encourage further education (DSWD 2021, 160). Complementing these efforts, the Universal Access to Quality Tertiary Education Act (UAQTEA) provides pathways to tertiary education through programs such as Free Higher Education (FHE) and the Tertiary Education Subsidy (TES), thereby extending the continuum of support from basic to higher education for poor households, such as 4Ps beneficiaries.

Yet, despite the strategic alignment between the 4Ps and UAQTEA, evidence indicates that tertiary education access for 4Ps senior high school graduates remains limited. As Figure 2 shows, the cross-matched CHED–Unified Financial Assistance System for Tertiary Education (UniFAST) and 4Ps data presented to the House Committee on Higher and Technical Education indicate that between 2018 and 2022, only 146,511 (8.44 percent) of the 1,736,722 4Ps senior high school graduates accessed either FHE or TES. These

figures underscore the persistent gaps in translating subsidies and cash transfers into actual increases in higher education access for the poorest cohorts.

Figure 2. Trends in the participation of Pantawid Pamilyang Pilipino Program (4Ps) beneficiaries in Free Higher Education (FHE) and Tertiary Education Subsidy (TES) under UAQTEA, 2018–2022 Source: 4Ps National Program Management Office

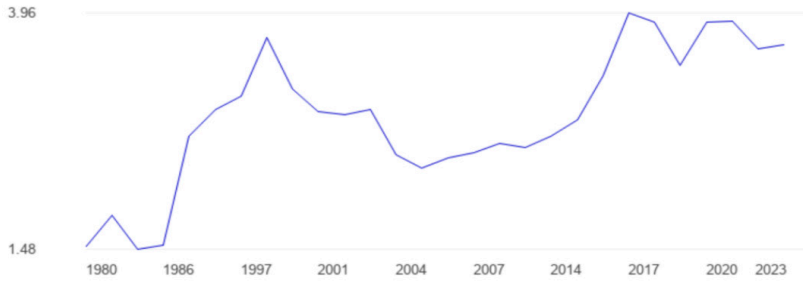


The persistence of such inequities indicates that the barriers confronting 4Ps beneficiaries may extend beyond household-level disadvantage or program design. These barriers can be understood in relation to broader systemic conditions that influence who is positioned to participate in higher education. As Marginson (2016, 413) notes, the expansion of tertiary education does not necessarily translate into more equitable access, particularly for disadvantaged groups, as structural and institutional mechanisms continue to shape the distribution of public subsidies.

In the Philippine context, chronic underinvestment in education has historically constrained the system's ability to expand equitable access. The

pattern shown in Figure 3 reflects how the Philippine government's education spending has remained below four percent of the country's GDP since 1980 (TheGlobalEconomy.com 2023), trailing the international benchmark of 4-6 percent (UNESCO 2024, 1-2).

Figure 3. Philippine Education Spending as a Percentage of Gross Domestic Product (GDP), 1980–2023 Source: TheGlobalEconomy.com



Although underinvestment affects the entire education sector, its effects are felt most sharply by poor students, including those from 4Ps beneficiaries. With limited public resources, schools serving disadvantaged populations often suffer the most significant deficits in facilities, including classrooms, water, sanitation, and hygiene (WASH), as well as Information and Communication Technology (ICT) (Navarro 2022, 40). This may have contributed to weak foundational learning, as reflected in the 2022 Programme for International Student Assessment (PISA), where Filipino learners ranked among the lowest in reading, mathematics, and science, with their performance lagging by five to six years behind that of peers in higher-scoring countries (Ombay 2023).

Underinvestment also appears to affect the supply of affordable public higher education. According to CHED, of 2,396 HEIs in AY 2019–2020, only 667 (27.84 percent) were public institutions funded by the government, generally offering free tuition or subsidized higher education costs, while the remaining 7 out of 10 were private institutions that rely primarily on student fees. This creates intense competition for limited public slots. Geographic disparities further shape this landscape: nearly 39 percent of HEIs are concentrated in Megapolis Manila (NCR, Central Luzon, and CALABARZON). For students from low-income households, these conditions may result in fewer nearby school options, higher transportation costs, and reduced chances of securing admission, indicating that education investment gaps continue to shape access to higher education.

Seen in this light, the low uptake of FHE and TES among 4Ps beneficiaries is not simply a question of individual or household-level capacity, choice, or awareness. Rather, it reflects the cumulative weight of systemic conditions, such as chronic underinvestment, uneven distribution of institutions, and weak foundational learning, that disproportionately constrain poor students' pathways to higher education. Confronted with persistent resource limitations, some government officials are pushing for measures focused on efficiency and cost control. In 2023, for instance, the former Finance Secretary proposed a nationwide qualifying exam to 'rationalize' UAQTEA spending and reduce the number of beneficiaries. Critics, however, warned that such stricter screening could exclude the very students the program is meant to help (Jaymalin and Sarvallos 2023). This tension, between efficiency framings that prioritize fiscal discipline and selectivity, and equity framings that emphasize inclusiveness and poverty reduction, highlights how systemic constraints filter into policy discourse and institutional practice (Ball 1993, 14-15).

This study investigates why selected 4Ps senior high school graduates in Barangay Payatas, Quezon City, did not access UAQTEA benefits despite policy availability. Specifically, it examines how multi-level barriers (i.e., individual and household conditions, institutional arrangements, and systemic policy environments) intersect to shape their transition to higher education. This paper contributes to the growing literature on education access inequality in the Philippines.

Conceptual Framework

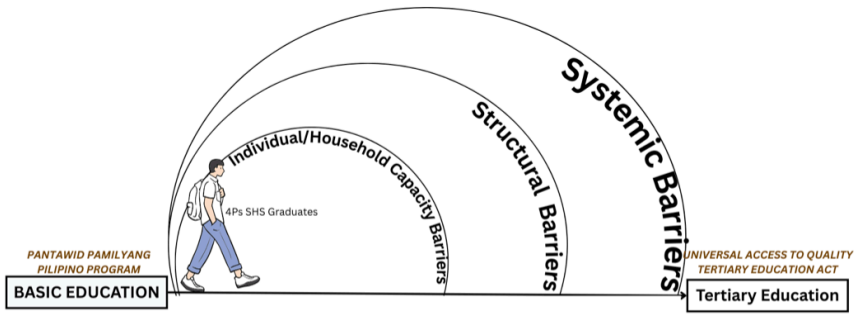
This study conceptualizes barriers to tertiary education access among 4Ps beneficiaries across three interrelated levels: (1) individual and household capacity, (2) structural (i.e., institutional) barriers, and (3) systemic (i.e., policy and fiscal) constraints. At the individual and household level, this study draws on Bourdieu's (1986, 16) forms of capital, which are economic (e.g., household income, employment stability, ability to finance non tuition costs), social (e.g., parents' education, networks, mentoring), and cultural (e.g., academic preparedness, study practices, familiarity with university procedures). These represent observable deficits that limit students' competitiveness and capacity to navigate higher education pathways.

Structural barriers refer to institutional rules and everyday practices in HEIs and UAQTEA implementation. These include admissions criteria, student prioritization, scheduling, remedial support, and administrative procedures,

among other institutional rules and practices, which shape how policies are implemented to ensure access.

Systemic barriers encompass macro-level factors, such as chronic underinvestment in education, the supply and geographic distribution of public HEIs, and broader political-economic arrangements that determine funding, capacity, and the design of policies and programs like UAQTEA. As illustrated in Figure 4, the conceptual framework offers a layered perspective on analyzing how systemic constraints, institutional actions, and individual and household experiences collectively contribute to the accumulation of disadvantages for 4Ps senior high school graduates.

Figure 4. The Three-Level Barriers to Higher Education for 4Ps Beneficiaries



Methodology

This study employed a qualitative design to capture in-depth, contextually grounded insights into the barriers that 4Ps households face in accessing higher education, illuminating experiences across individual, household, structural, and systemic dimensions. A case study approach was adopted to explore how and why these barriers influence 4Ps beneficiaries in pursuing higher education and accessing UAQTEA programs. Case studies are most suitable when the research centers on “how” and “why” questions and when the context is essential to understanding the phenomenon (Baxter and Jack 2008, 545). By examining a small and clearly defined group, this study prioritizes depth rather than breadth, aligning with the notion of a case as a phenomenon situated within a specific, bounded setting.

Barangay Payatas was selected as a critical site for examining the intersection of poverty, education, and social protection as it has the highest number of

4Ps beneficiaries in Quezon City (3,327 as of April 2024, according to a 4Ps City Link). Participants who were most directly affected by the research problem were purposively selected using the following criteria: (1) senior high school graduates from 2018 to 2022 who belonged to 4Ps households, constituting the first cohort eligible for UAQTEA following its 2017 enactment; and, from this group, (2) those who did not access any UAQTEA programs were included in the study.

A 4Ps City Link assigned to Barangay Payatas, endorsed by the Department of Social Welfare and Development (DSWD)-Field Office National Capital Region (NCR), identified and endorsed four eligible participants based on the study's selection criteria. Although this study initially targeted only the graduates as primary respondents, the interviews were conducted in small household spaces where other family members, such as their mothers, fathers, siblings, and even neighbors, were also present. Among them, the mothers chose to participate voluntarily. Their participation provided valuable insights into household perspectives on the barriers these students face in accessing higher education.

Data collection combined in-depth semi-structured interviews with the four students and their mothers, each lasting between 45 minutes and two hours, with Key Informant Interviews (KIIs) involving representatives of the 4Ps National Program Management Office (NPMO), City Links assigned to Barangay Payatas, and a representative of Kabataan Partylist, a principal proponent of UAQTEA. Documentary sources were also examined, including official DSWD and CHED reports, written responses from CHED-UniFAST, and policy documents related to the implementation of 4Ps and UAQTEA. This triangulation of household narratives, institutional perspectives, and policy documents strengthened the analysis and enhanced the validity of the findings.

Lives Behind the Numbers: Profiles of Participants

Barangay Payatas is among Quezon City's most densely populated barangays, ranking seventh nationwide in the Philippine Statistics Authority's (PSA) 2020 Census of Housing and Population. It is widely recognized as home to large urban poor communities, where government and non-government programs are concentrated—most notably, the 4Ps.

Among thousands of 4Ps households in Payatas are the families of Kit (age 21), Elen (age 21), Jeboy (age 20), and Jinky (age 20). As 4Ps households in Payatas, these families share several characteristics: They reside in modest homes built from either concrete or plywood, containing essential household furnishings. All four completed their secondary education in a nearby public high school during the height of the COVID-19 pandemic (2021–2022). Kit, Elen, and Jeboy's families continue as 4Ps beneficiaries through younger siblings in elementary or secondary school, though they themselves no longer receive grants after completing high school. Meanwhile, Jinky's household exited the program in 2022 after reaching the maximum number of eligible children, with Jinky as the last monitored child to finish senior high school. The four participants were purposively selected; their experiences illustrate persistent multi-level barriers–individual/household, institutional, and systemic – that together constrain access to higher education.

Individual and Household Capacity Barriers

Economic Capital: Financial Instability as a Key Barrier to Higher Education Access

The parents of Kit, Elen, Jeboy, and Jinky are low-income earners. They are either employed in low-paying jobs or engaged in informal work. Elen and Jinky's parents hold similar jobs. Their mothers are informal workers taking *rakets*[3] from neighbors and clients, such as accepting laundry washing and house cleaning. Jinky's mother received a rice-selling livelihood grant from the Department of Labor and Employment (DOLE) in December 2023. She mentioned that this grant was awarded after they graduated from the 4Ps, as DOLE does not allow active 4Ps beneficiaries to participate in their program. However, they were unable to sustain it due to the high level of competition in their neighborhood. Elen and Jinky's fathers are both construction workers.

Kit's mother sells *ukay-ukay* (second-hand clothes) in the nearby market, while his father works as a security guard in a distant city. Meanwhile, Jeboy's mother, a former call center agent, is now a housewife due to health issues, and his father, their family's breadwinner, works as a messenger.

3 *Raket* is a colloquial term used in the Philippines to refer to a side job or hustle. It often implies informal work.

These insecure economic circumstances directly shaped the educational trajectories of Kit, Elen, Jeboy, and Jinky. Their families' low and unstable incomes meant that even with 4Ps support, they constantly face trade-offs between daily survival and school-related expenses. As Jinky's mother explained:

> *Malaking tulong din ang 4Ps para sa katulad naming mahirap kahit every two months lang siya. Kasi kung hindi ako nakasali sa 4Ps ay hindi ko alam kung makakatapos iyan sila, kasi iyong mga anak ko makapasok sila na busog ang tiyan. Kung walang 4Ps, wala kaming mapapala.*
>
> (The 4Ps is a big help for poor families like ours, even though the grants are only every two months. If we were not in 4Ps, I don't know if my children would finish school; at least they could attend classes with full stomachs. Without 4Ps, we would have nothing.)

This pattern echoes a wider concern raised by a Kabataan Partylist spokesperson, who observed that fewer than ten out of every 100 children who begin kindergarten make it to college, and even fewer graduate. The spokesperson cautioned that although UAQTEA reduces tuition burdens, the obstacles to continued education go far beyond fees. Families still face recurring costs (e.g., books, transportation, food, and secure housing, among others) that households like those of Kit, Elen, Jeboy, and Jinky can scarcely afford. This observation highlights the economic fragility at the individual and household levels among 4Ps families, a fundamental barrier that tuition subsidies alone cannot resolve and that constrains sustained access to higher education for marginalized youth.

Their economic struggles help explain why the COVID-19 pandemic, which disrupted informal livelihoods and added extra costs for distance learning, was particularly damaging for these students, who were in high school at the time. Prolonged lockdowns disproportionately affected low-income earners and informal workers, including their parents, as economic activity slowed and opportunities for supplemental income vanished. For example, Kit recalled that his mother lost her *ukay-ukay* livelihood because only essential goods were allowed to be sold. Meanwhile, his father faced difficulties commuting between home and work amidst mobility restrictions. These disruptions compounded existing financial vulnerabilities, highlighting how crises like the pandemic can directly limit educational access for students from marginalized households.

The COVID-19 pandemic posed a particular challenge to these students. Their financial constraints made it difficult to adapt to online and modular class setups. Lacking laptops, all four students relied on cellular phones for online classes. Jeboy even had to borrow his mother's phone because his own device was faulty. Their dependence on cellular data further hindered learning. As Jeboy described:

> *Noong online class, wala kaming knowledge na nakukuha, puro comply lang... maraming sabay-sabay na deadlines, tapos iyong gadget pa problema. Nanghihiram lang ako ng phone sa nanay ko... Iyong cellphone na gamit ko, sira iyong mic... Kaya madalas din ako napapagalitan noon e. Minsan akala nila nagsisinungaling ako na sira yung mic ko.*
>
> (During the online class, we weren't gaining any knowledge; it was just about complying... There were numerous deadlines all at once, and then the gadget was also a problem. I would just borrow my mother's phone... the phone I was using had a broken mic... that's why I often get scolded for it. Sometimes, they thought I was lying about the mic being broken.)

The modular setup seemed ineffective in maintaining these students' interest in staying in school. Jeboy noted that the distance learning approach required students to study new subjects independently, as teachers had limited opportunities to interact with them and explain the lessons. He shared that understanding the module contents is particularly difficult for new senior high school students, as they are faced with subjects that differ from those taught in junior high school. The challenges of distance learning during the pandemic prompted Jeboy to consider forgoing college. He said he would postpone his studies to work and support his family if the distance learning setup were to continue. In his words:

> *That time kasi, post pandemic, parang wala akong ganang mag-aral since nabuhay kami sa online. Madali akong maka-pick up, pero sa tingin ko magiging hadlang iyong online talaga. Kasi mas gusto ko iyong may nagsasalita sa harap ko. Marami rin po kasing factors sa online, kagaya na lang ng internet, kapag nawalan ng internet connection, tapos iyong bayad pa roon. Unlike kapag face-to-face, naroon iyong mga professor, nagsasalita sa harap mo.*
>
> (At that time, post-pandemic, it felt like I had no motivation to study since we lived through online classes. I can pick things up quickly, but online learning has become a hindrance. I prefer having someone speak in front of me. Factors such as unreliable or intermittent internet connections also affected online learning. Its cost also added to our financial burden. Unlike face-to-face classes, where the professors are there, speaking in front of you.)

The economic challenges, exacerbated by the COVID-19 pandemic, forced Kit, Elen, Jeboy, and Jinky to make the difficult choice between continuing their education and entering the workforce to support their families. Jeboy, for instance, considered deferring college to work as a call center agent in a Business Process Outsourcing (BPO) company, a decision influenced both by his struggles with distance learning in high school and his mother's past employment experiences. His plan, however, was halted when his mother cautioned him against rushing into work, worried that earning a salary too soon might discourage him from returning to school. As he explained:

> *Binalak kong pumasok sa mga BPO companies. Pero kinausap ako ni mama na huwag kong madaliin iyong pagtatrabaho ko kasi kapag naka-graduate ako, may mas magandang trabaho pa akong makukuha.*
>
> (I planned to work at a BPO company. But my mother talked to me and told me not to rush into working because once I graduate from college, I can get a better job.)

Kit's mother also recalled Kit's discouragement in continuing his education after senior high school due to the shift to online learning. She said that Kit was initially content working at a canteen after graduation and had no plans to enroll in college. As she puts it:

> *Wala pa siyang balak mag-aral noon kasi nasisiyahan pa siyang magtrabaho noon sa canteen pagka-graduate niya. Noong tinanong ko siya kung mag-eenrol pa ba siya sa college, e online naman sabi niya, huwag na lang.*
>
> (He had no plans to study back then because he enjoyed working at the canteen after graduating high school. When I asked him if he was going to enroll in college, he said, It's online anyway, so I am skipping it.)

Even before graduating from senior high school, Jinky had decided not to pursue college because of her family's financial situation. She planned to look for a job to contribute to her family's daily expenses. However, despite their economic struggles, her mother strongly encouraged her to continue her studies. As Jinky describes it:

> *Naisip ko pong magtrabaho muna, pero ayaw naman po ni mama. Kesyo tapusin daw muna iyong college, para raw po mas maganda iyong trabaho.*
>
> (I thought about working first, but my mother did not want me to. She insisted that I should finish college first so that I could get a better job.)

Meanwhile, Elen worked after senior high school instead of going straight to college. She was employed as a housekeeper before pursuing higher education due to their financial struggles.

The economic situation of 4Ps families places them at a significant disadvantage, limiting their children's access to higher education, as their parents' salaries barely cover basic living expenses. A 2022 Commission on Audit (COA) report found that 90 percent of 4Ps beneficiaries remained below the poverty threshold, highlighting the persistent financial struggles of these families. Despite their precarious economic situation, the mothers of 4Ps students showed strong determination for their children to pursue and complete higher education, seeing it as a crucial opportunity to break the cycle of poverty. As Marginson (2016, 419) notes, higher education is often viewed as a pathway to upward mobility, a means to maintain social status, or protection against downward mobility. However, despite parental encouragement, economic pressures forced the students to balance work and studies, or pause their education to earn income. All four students intended or actually engaged in work at some point: Jeboy considered deferring college for work, Kit has become a full-time canteen staff, Jinky is now a working student, and Elen works full-time as a tutor.

The persistent unemployment or lack of decent-paying jobs among the parents of student respondents highlights the vulnerability of 4Ps beneficiaries to economic shocks such as COVID-19. It was evident during the pandemic's peak, as the students struggled to adapt to the new mode of conducting classes, primarily due to resource limitations. This suggests that any circumstance that would cause financial disruptions to 4Ps families further limits their ability to support their children's college aspirations.

Social Capital: Networks and Relationships as Gateways to Higher Education

The narratives of Kit, Elen, Jeboy, and Jinky illustrate how deficits in social capital intersect with structural barriers, constraining their higher education opportunities. In Bourdieu's framework (1986, 21), social capital refers to the aggregate of actual or potential resources linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition, which can provide crucial support in navigating educational opportunities.

All four students' parents have access to 4Ps City Links, guiding them with information on transitioning to tertiary education, as Jinky's mother shared:

> *Bago kami grumaduate sa 4Ps, may binabanggit naman sa FDS pero ikaw na ang maglalakad. E kaso ikaw din ang maghahanap ng CHED accredited schools.*
>
> (Before we graduated from 4Ps, they did mention some things in the FDS, but you're the one who has to do all the legwork. And you're also the one who has to look for CHED-accredited schools.)

Because none of the parents completed college, they cannot supplement institutional guidance with firsthand knowledge or social networks that would ease their children's transition to tertiary education. Parents and students reported that Family Development Sessions (FDS) provide only basic information and do not equip them to navigate the more complicated realities of applying to state and local universities and colleges. Some college application requirements may include early application deadlines, limited slots, program-specific requirements, and admission testing procedures. Consequently, the lack of supportive networks leaves families to shoulder the legwork themselves, which contributes to the uncertainty and delays experienced by students such as Jinky and her peers.

The intense competition for limited public-university slots reflects not only systemic underinvestment but also the unequal advantage enjoyed by students who can draw on broader networks, such as parents who are college graduates, mentors, alumni, or peers familiar with university procedures. Without these connections, Kit, Elen, Jeboy, and Jinky face compounded challenges: their precarious economic situation and limited social capital restrict their opportunities, despite their aspirations and the modest support provided by 4Ps.

Cultural Capital: Embodied, Objectified, and Institutionalized Assets Shaping Access to Higher Education

Cultural capital significantly shaped how Jinky, Kit, Elen, and Jeboy navigated the path to higher education, influencing both their preparedness and confidence in pursuing competitive opportunities. Embodied cultural capital shaped the experiences of 4Ps beneficiaries. This refers to students' long-standing attitudes, dispositions, and ways of thinking that influence how they perceive and pursue education. For Jinky, Kit, Elen, and Jeboy, this manifested as self-doubt, hesitation, and limited long-term academic

planning. These dispositions are likely shaped by experiences within the education system, including its limitations, which may leave students unsure of their preparedness for higher learning. Jinky, for instance, admitted:

> *Sabi po nila, grades ang basehan sa pagpasa, pero hindi naman po ako confident na maabot ko iyong line of nine... Saka sabi po kasi nila kapag magka-college ka, dapat pinaplano mo na kung saan ka papasok, anong course ang kukunin mo. Sa akin po kasi hindi e; walang ganung nangyari.*
>
> (They said that grades are the basis for passing, but I'm not confident that I can reach the line of nine... And they also said that when you're going to college, you should already be planning where you'll enroll and what courses you'll take. But for me, that didn't happen; there was no such planning.)

Her mother echoed this anxiety. She pointed out that government support, one of their very few options to access affordable higher education, comes with strict grade requirements:

> *Ang ine-expect niya kasi kapag napasok ka ng iskolar, may maintaining grade. Iyon ang lagi niyang tinatatak sa utak niya. May maintaining grade, baka hindi niya kayanin.*
>
> (What she expected was that when you become a scholar, there's a minimum grade. That's what she always keeps in mind that there's a maintaining grade, and she might struggle to manage.)

Similarly, Kit doubted his ability to meet the academic standards of SUCs. At the same time, Jeboy described himself as "just an average student," recalling that he merely complied and went along with his peers in elementary and high school. These narratives illustrate how limited confidence and inadequate preparation constrain students' aspirations long before they apply to college.

In sum, the experiences of Jinky, Kit, Elen, and Jeboy demonstrated how individual and household-level capacities shape access to higher education. Economic constraints, reflected in low family income, precarious employment, and the financial impacts of crises such as COVID-19, directly limited their ability to pursue college. Social capital deficits, manifested in limited parental guidance and weak networks, further constrained their educational choices despite nominal support from 4Ps advisers. Meanwhile, disparities in cultural capital, including confidence, academic preparedness, and recognition through grades and scholarships, shaped both their aspirations and perceived eligibility for competitive institutions.

Structural Barriers

Intense Competition for Slots, Stringent Admission Criteria, and Inaccessible HEI Facilities

Higher education remains largely inaccessible due to structural constraints in accessing UAQTEA programs, including intense competition for slots, limited HEI facilities, and strict admission requirements. Entrance examinations and high general weighted averages in SUCs and LUCs pose significant obstacles, often forcing students and their families to turn to private HEIs despite the higher costs.

For instance, due to the various barriers they encountered in accessing SUCs and LUCs, Kit, Elen, and Jeboy eventually enrolled in Bestlink College of the Philippines, which they referred to as Bestlink. Its main campus in Novaliches, Quezon City, is approximately seven to eight kilometers from their homes, making it a geographically accessible option. Bestlink is perceived as more lenient than SUCs and LUCs because it does not impose stringent admission requirements, such as entrance examinations or high general weighted averages. It also has less competition for slots, further easing the enrollment process for students who struggle to secure admission in public HEIs. Although it is more expensive than tuition-free SUCs and LUCs, it remains a comparatively affordable option for poor students relative to many well-known private HEIs. As Kit's mother recalled:

> *Ang alam ko lang talaga, sa PUP sa Sta. Mesa, sa UP mag-eexam ka hindi ba... Hindi siya nakapag-exam doon, kahit sa QCPU hindi na abot kasi nag-exam doon October pa lang. Kasi noong time na iyon, one week na nag-start ang school year. Tinatanong ko pa siya kung gusto niyang mag-aral. Sasagutin na nga raw ng hipag ko para sa isang semestre. Doon pa lang siya nag-pursige. Ang naging sistema kami ang nagpa-enroll sa Bestlink, hindi namin siya kasama.*
>
> (In PUP and UP, you have to take an entrance exam. He could not take those exams. At QCPU, the tests were scheduled for October, and by then the school year had already begun. I was still asking him if he wanted to study. My sister-in-law even offered to pay the tuition for one semester. That is when he started to push himself. We were the ones who enrolled him in Bestlink. He was not with us.)

Jeboy attempted to apply to Eulogio Amang Rodriguez Institute of Science and Technology (EARIST), a relatively distant public HEI in Manila, to pursue a criminology program. However, its online admission slots filled quickly, leading him to suspect that his poor internet connection affected his

application. He also applied to Quezon City University (QCU), but his preferred course was unavailable. Undeterred, he applied for Civil Engineering, intending to enter the Philippine National Police (PNP) through lateral entry; however, the available slots were filled up immediately. Although 4Ps guided other colleges that they could explore, his mother left the final decision to him, considering the distance to most state universities and the limited slots at nearby institutions. In the end, Jeboy, like Kit, enrolled at Bestlink. His mother shared:

> *Pinapa-attend kami ng mga seminar at orientation. Kaya lang ang sabi ko kasi, ang anak ko na lang ang mismong mag-decide kung saan niya mismong gustong pumasok. Kasi kung mga universities karamihan dito mga malalayo. Dito sa Quezon City iilan lang naman ang universities dito tapos wala nang slot. Sa Manila naman malayo naman, mahal sa pamasahe at yung pagod lang. Actually, ayoko talaga din siyang mag-aral sa EARIST kasi napakalayo. Sabi ko iyong oras ng pagpasok mo saka pag-uwi, pagod ka na. Pili ka na lang ng malapit na school dito. So doon na lang sya nag-enrol sa Bestlink.*
>
> (We attended seminars and orientations. However, I said my child should go where he wants to study. Most of the universities here are far from our house. In Quezon City, there are only a few universities, and they have no more slots. The ones in Manila are far, the transportation costs are high, and it is tiring. I did not want him to go to EARIST because it was very far. I told him that traveling back and forth from our house to the school would make him exhausted. I told him to choose a nearby school. So, he enrolled in Bestlink instead.)

Elen applied to the University of Rizal System (URS), a nearby state university in Rodriguez, Rizal, a first-class urban municipality adjacent to Barangay Payatas. However, the Tourism Management program she wanted was unavailable there. She decided to apply to Bestlink, which offers her desired course, even though it is both farther from her home and more expensive than URS.

Meanwhile, when Jinky's former school introduced PHINMA Saint Jude College Manila, she immediately seized the opportunity, despite initially being surprised by the PHP 15,000 program fee. She and her mother were relieved and appreciative upon learning that this amount was already discounted through the institution's scholarship program. As Jinky stated:

> *Sabi po kasi ng nanay ko, basta may pumasok lang na scholarship, kung ano na lang iyong school na papasukan. Kaya kung ano na lang po yung napuntahan kong school, dun na lang po ako nag-aral.*

> (My mother said that as long as there's a scholarship I can get, it doesn't matter which school I go to. So I just attended whichever school I ended up at.)

Meeting UAQTEA's admission and retention criteria already poses a barrier for low-income students who barely have economic, social, and cultural capital. The limited number of nearby HEIs compounds this challenge. In Barangay Payatas, only QCU, UP Diliman, and RSU are relatively accessible, which limits options and intensifies competition for available slots. These overlapping structural barriers place 4Ps students at a clear disadvantage. Marginson (2016, 413) similarly observes that expanding higher education does not eliminate unequal access to elite institutions, leaving disadvantaged groups, including 4Ps beneficiaries, at the margins.

Systemic Barriers

Chronic Underinvestment in Education

The CHED-UniFAST recognizes the decline in 4Ps beneficiaries across all UAQTEA programs, including FHE, TES, and Free Technical Vocational Education and Training (TVET).[4] CHED-UniFAST attributes this decline to reduced government funding for the implementation of the UAQTEA, which has limited student coverage and intensified competition. Statements from 4Ps NPMO and City Links in Barangay Payatas support this claim. They noted that merging the Expanded Students' Grants-in-Aid Program for Poverty Alleviation (ESGP-PA)[5] into TES reduced available slots for 4Ps senior high school graduates.

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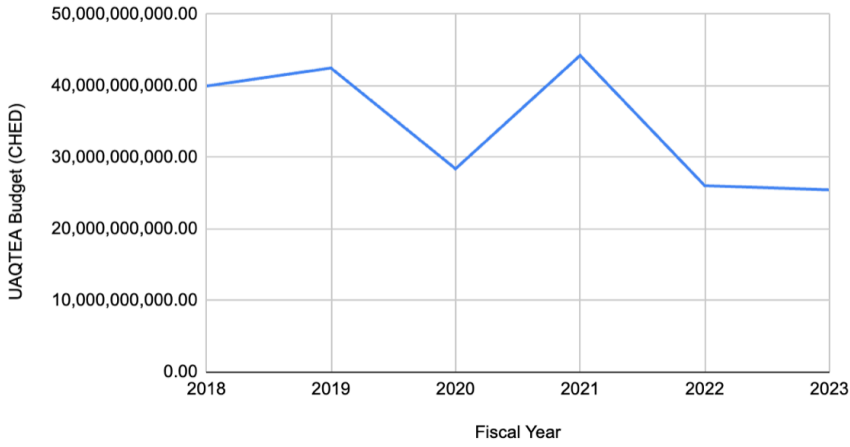
4 The Technical Vocational Education and Training (TVET) refers to the education process designed a post-secondary and lower tertiary levels, officially recognized as nondegree programs aimed at preparing technicians, paraprofessionals and other categories of middle-level workers by providing them with a board range of general education, theoretical, scientific and technological studies, and related job skills training;

5 The Expanded Students' Grants-in-Aid Program for Poverty Alleviation (ESGP-PA) is a Philippine government initiative designed to provide financial assistance for higher education to students from low-income households, particularly those enrolled in the Pantawid Pamilyang Pilipino Program (4Ps). Implemented by the CHED in partnership with the DSWD, DOLE, DBM, and the PASUC, the program aims to increase the number of graduates in higher education among poor households and to help these graduates secure employment in high-value-added occupations, thereby contributing to poverty alleviation and national development (CHED, DBM, DSWD, DOLE 2014)

According to CHED-UniFAST, before the full implementation of UAQTEA in 2018, 4Ps beneficiaries were prioritized under the ESGPPA, aiming to reduce poverty by increasing the number of graduates from low-income households and promoting employment. With the rollout of UAQTEA, ESGPPA beneficiaries became eligible for TES. Initially, 4Ps beneficiaries were classified as "other poor," separate from *Listahanan* beneficiaries and students enrolled in private HEIs located in places (cities or municipalities) without State or Local Universities and Colleges (PNSL). However, due to budget constraints, TES coverage was limited to PNSL and Listahanan categories, with 4Ps beneficiaries previously placed under the "other poor" category subsumed within the Listahanan classification. This intensified competition among students from various categories for TES inclusion. CHED-UniFAST data highlights the reduction in budget allocation for the UAQTEA from PHP 39.98 billion in 2018 to PHP 25.47 billion in 2023.

Figure 5. Allocated Budget for UAQTEA, 2018–2023 Source: CHED-UniFAST



The funding reduction has spurred advocacy efforts by youth organizations. A Kabataan Partylist member interviewed for this study highlighted that they closely monitor budget hearings and actively lobby against cuts to education funding. As the member explained:

> We monitor budget allocations to make sure cuts to SUCs and pre-higher education programs don't go through. We advocate for legislation that recognizes education costs beyond tuition, such as the Basic Student Services Bill, modeled after the University of the Philippines system, because many families are compelled to use their cash transfers on food

and utilities rather than on schooling. Broader macroeconomic policies, compounded by the government's mismanagement of the pandemic, further worsened the situation for 4Ps households.

Conclusion

Summary of Findings

This study examined the barriers hindering 4Ps beneficiaries from pursuing higher education and availing UAQTEA programs. The experiences of Jinky, Kit, Elen, and Jeboy illustrate how individual, household, structural, and systemic obstacles intersect to restrict access to higher education. At the household level, economic precarity, low social capital, and limited cultural capital reduce students' readiness and motivation to pursue college. Structurally, intense competition for scarce SUC/LUC slots, stringent admissions criteria, and geographically inaccessible institutions further constrain opportunities. Systemically, constrained UAQTEA funding intensifies competition and limits enrollment for the poorest students. Together, these barriers create compounded disadvantages that go beyond free or subsidized tuition.

Policy Recommendations

1. Consider prioritizing 4Ps senior high school graduates as eligible cash-for-work grantees under DSWD's Tara, Basa! Tutoring Program. The program engages college students to teach struggling readers and non-readers, as well as to facilitate parenting sessions for their guardians. Involving 4Ps senior high school graduates as tutors would not only help address early grade learning gaps but also provide them with a modest yet meaningful income source. This could reduce their economic vulnerability while fostering a sense of contribution and supporting skill-building. To operationalize this, the DSWD could reallocate resources within the existing program or advocate for additional funding to include 4Ps senior high school graduates.

2. Strengthen information dissemination on the transition of 4Ps senior high school graduates to tertiary education by integrating this topic into FDS. Specific FDS modules may be designed to actively engage graduating 4Ps senior high school beneficiaries, together with their parents, in discussions on higher education pathways, including available programs, application procedures, scholarships, and support services. Since the FDS is already a core conditionality of the 4Ps,

this intervention would not entail additional budgetary requirements, but rather a strategic enhancement of existing sessions. Beyond information sharing, the FDS platform could also serve as a space for youth organizing within the 4Ps, enabling graduates to broaden their access to information while advancing advocacies that promote their right to tertiary education. In this way, the FDS framework can raise awareness, strengthen social capital, and empower 4Ps graduates with the knowledge, networks, and collective agency necessary to navigate the transition to higher education successfully.

3. Targeted quota/affirmative action for 4Ps senior high school graduates in FHE and TES (pilot to scale). CHED-UniFAST may consider piloting a targeted quota or affirmative-action measure that reserves a modest share (e.g., 10–15 percent) of FHE and TES slots in a certain number of SUCs/LUCs for recent 4Ps senior-high graduates. On top of the admission, the reserved slots would be more helpful to the 4Ps students if paired with short bridging courses or early semester tutoring, as well as basic support (e.g., device/data lending, mentor/admissions navigation, and modest transport or living stipends) to improve the likelihood of retention. To limit immediate fiscal pressure, the initiative could be implemented as a time-limited pilot (e.g., two to three years) funded from existing UAQTEA allocations with potential supplements from local government units (LGUs) or donors; if pilot evidence suggests improved retention and graduation, phased budget augmentation could be requested for scale-up. Selection and allocation should be transparent and verifiable (by verification against DSWD Pantawid registries and school records). Pilot sites should be chosen where capacity exists or where a small, planned slot expansion is feasible so as not to displace current applicants.

   The pilot should be publicly reported and subject to an integrated monitoring and evaluation plan (a midline review at 12–18 months and a summative evaluation at three years). Suggested core indicators to inform the scale-or-sunset decision include the share of intake from 4Ps senior high school graduates, first-year retention, bridging test gains, graduation rates, and post-graduate employment; use those results to determine whether, how, and under what conditions the measure should be continued or adapted.

4. Adopt and sustain a 4–6 percent of the GDP education financing target. The national government should commit to allocating between 4-6 percent of the GDP to the education sector as a core pillar of a long-

term strategy to remedy systemic weaknesses in both basic and higher education. Greater budgetary space would enable the expansion of UAQTEA (including FHE, TES, and related programs), thus raising the number of disadvantaged 4Ps graduates who can enter and thrive in higher education. The proposed FY2026 allocation of PHP 1.224 trillion—equivalent to 4 percent of GDP (DBM 2025)—is a historic and welcome first step, but it should be treated as a baseline rather than an endpoint. The government should adopt a multi-year financing plan that gradually increases the education share from the current 4.0% toward the 4–6% benchmark over succeeding fiscal years, with clear interim targets and accountability mechanisms.

Gradual, sustained increases in public investment, paired with explicit spending priorities and governance reforms, would help address multiple interlocking problems: under-resourced schools, teacher shortages and low pay, inadequate learning materials, and insufficient support for disadvantaged students to enter and remain in tertiary education. Strengthening foundational schooling and remediation would also create the conditions for improved internationally comparable learning outcomes (e.g., PISA reading, mathematics, and science indicators) and increase students' cultural capital and readiness to transition into higher education.

Limitations and Directions for Future Research

This study focuses on a single community. Therefore, its findings may not be readily generalizable to other settings. Future research may replicate this inquiry across multiple communities, at regional and national levels, to determine which barriers are widespread and which are context-specific. In addition, the study relied on cross-matched data from 2018 to 2022. Participation rates of 4Ps beneficiaries in UAQTEA may have experienced either improvements or setbacks in the succeeding years. Thus, studies that utilize more recent data may offer clearer insights into whether the access of 4Ps beneficiaries to UAQTEA programs, and to higher education in general, has improved or further declined.

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POLICY INSIGHT

Building the "Suprastructure"

Elevating Philippine Innovation through Science and Technology Human Capital Development

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The Philippines faces significant national challenges, including poverty, hunger, malnutrition, and their detrimental effects on human development, which are largely attributed to marginal agricultural productivity and food insecurity exacerbated by climate change. This persistent cycle has hindered the development of high-value commercial products from agriculture and natural resources, leading to stagnation in the manufacturing sector and limiting job creation and poverty alleviation, particularly for farmers and fisherfolk, who remain among the poorest communities. A primary reason for these enduring problems is the historical lack of investment in S&T-based knowledge, R&D, innovation, and governance, causing the Philippines to lag considerably behind its ASEAN neighbors in scientific and technological capabilities over the past half-century.

Recognizing that sustained technological development and economic progress, as well as an improved quality of life, are critically dependent on S&T human capital development, the proposal highlights that all technologically advanced nations prioritize investing in the advanced education and training of their brightest youth. Data from international organizations like WIPO, UNESCO, and the World Bank consistently show a strong positive correlation between gross expenditure on higher education (GEHE), gross expenditure on R&D (GERD), and national economic prosperity, global competitiveness, and innovation rankings.

Drawing inspiration from successful models in Asian countries such as Japan, South Korea, China, Taiwan, India, Pakistan, Singapore, Thailand, Malaysia, Indonesia, and Vietnam, which have heavily invested in S&T human capital by sending thousands of students abroad for advanced studies, the proposal aims to bridge the gap between S&T knowledge creation and its utilization for

commercialization and economic prosperity in the Philippines. Models like Germany's Fraunhofer system, with its strong public-private partnerships and direct links between research and industry, and Taiwan's universities with integrated innovation hubs and industrial parks, offer blueprints for fostering entrepreneurial growth and ensuring that public expenditure in R&D yields significant returns in GDP. The proposal acknowledges past Philippine programs that failed to make a lasting impact due to a lack of massive, sustained investment in postgraduate studies abroad and issues with scholars returning home. The goal is to learn from these experiences and from foreign models, including the success of Small Business Innovation Research (SBIR) grants in the U.S. and Singapore's investment in MIT's SMART program, which led to the establishment of the Singapore University of Technology and Design (SUTD), to create a robust and sustainable innovation ecosystem in the Philippines. This includes adopting new intellectual property (IP) regimes that incentivize commercialization and generate revenue for research institutions, demonstrating a direct link between R&D, innovation, and economic growth.

Powering Progress: Investing in Research and Innovation

At the heart of the NIASD are clear, aggressive targets designed to rapidly scale up the Philippines' innovation capabilities:

- Growing Our Research Talent: The country aims to dramatically increase its pool of researchers. From a modest 174 full-time equivalent (FTE) researchers per million people in 2022, the goal is to reach 500 by 2028 and an impressive 1,500 by 2032. This significant boost is crucial for the Philippines to close the gap with regional peers like Thailand, which boasts approximately 1,790 researchers per million people, and Vietnam, with about 757.

- Boosting R&D Spending: The Philippines is committed to a substantial increase in its national spending on research and development (R&D). In 2022, only 0.3% of the nation's Gross Domestic Product (GDP) was allocated to R&D. The NIASD targets an increase to 1% of GDP by 2028 and 1.6% by 2032. Given that the Philippines' GDP was approximately $400 billion US Dollars (USD) in 2022, achieving the 1% target by 2028 alone translates to an additional $2.8 billion USD poured into R&D. This substantial financial commitment is viewed as the fundamental "suprastructure"

– the essential human and knowledge capital – required to ignite and sustain high-level innovation for the long term.

Bridging the Gap: Cultivating Expertise and Commercializing Ideas

Despite a good number of college graduates, the Philippines faces a critical challenge: slow graduation rates for Master's and PhD degrees in Science, Technology, Engineering, and Mathematics (STEM) fields. This results in low research output and minimal success in transforming academic discoveries into marketable products. Unlike many advanced economies where universities are vibrant centers of innovation that fuel industrial growth, the Philippines needs to forge stronger links between its academic institutions and industries.

To address this, the NIASD proposes a two-pronged strategy:

- Global Education for Local Impact: A major program will send the country's brightest young minds to leading universities and research centers worldwide, primarily in the United States, for advanced Master's and PhD studies. These scholarships are not for individuals alone; they are strategically planned for groups of students to specialize in complementary disciplines critical to the Philippines' priority industries. Scholarship packages will be highly attractive, offering incentives and assured employment upon their return to universities, research institutes, or private industries in their home regions. Reintegration will be a collaborative effort, secured through partnerships with foreign mentors, the Department of Foreign Affairs (DFA), and inter-governmental agreements on science and technology education.
- Establishing the Philippine Advanced Technology Innovation Institute for Industry (PATIII): This new, independent institute will be a cornerstone of the innovation ecosystem. As an attached unit of the National Economic and Development Authority (NEDA) and the Department of Trade and Industry (DTI), PATIII will be strategically located in a Philippine Economic Zone Authority (PEZA) zone. This location will streamline administrative processes, including procurement and hiring, and allow for internationally competitive salaries and incentives, making it attractive to top talent.

PATIII will feature state-of-the-art R&D facilities and will focus on high-level, industry-driven research to serve both Micro, Small, and Medium Enterprises (MSMEs) and large industries. A key innovation will be a new intellectual property (IP) regime allowing for the outright sale of IP to industries, rather than relying solely on royalties. This approach, inspired by successful models in Australia and the U.S., aims to generate significant revenue for PATIII, thereby creating a sustainable cycle of innovation and commercialization. PATIII will actively recruit world-renowned Filipino expatriate scientists and engineers with innovation management expertise to lead the institute and attract entire world-class research teams (not just individuals) to join. It will also foster strong links with universities by offering joint Master's and PhD degree programs with an industry-focused thesis, provide postdoctoral opportunities for young faculty, help establish innovation hubs, and manage Small Business Innovation Research (SBIR) grants to universities, serving as a vital link to industries.

Strategic Innovation for National Prosperity

The Philippines' innovation efforts will be concentrated on three vital and interconnected priority areas, all while prioritizing environmental sustainability and leveraging digital and Artificial Intelligence (AI) technologies:

- Agriculture and Fisheries Technologies: Crucial for enhancing food productivity and ensuring national food security. This focus directly impacts poverty alleviation by improving livelihoods in marginalized farming and fishing communities, thereby increasing the GDP per capita in these sectors.

- Renewables and Nuclear Energy Technologies: Essential for securing clean, cheap, and continuous energy. This aligns with addressing the adverse impacts of climate change and ensures a stable energy supply for industrial growth.

- Metallurgical and Materials Technologies: This area focuses on developing new materials for metal industries (like stainless steel, iron, and other metals), for energy storage/batteries, semiconductors ("green metals"), and for chemical and health industries (petrochemicals and organic chemicals). This leverages the Philippines' natural resources to produce high value-added

products, making them attractive to export-oriented industries and enhancing the country's manufacturing sector.

Bridging the Academia-Industry Divide and Fostering Commercialization

The document acknowledges the current disconnect between academic research and its practical application in Philippine industries. The proposed PATIII is designed to directly address this by:

- Industry-Focused Research: The institute will undertake contract research and provide consulting services to both Micro, Small, and Medium Enterprises (MSMEs) and large industries, as well as government agencies, including Local Government Units (LGUs). This will ensure that research directly addresses industry needs and problems.
- New Intellectual Property (IP) Regime: The PATIII will implement a system where intellectual property developed at the institute can be outright sold to industries, rather than relying on royalty payments. This model, inspired by successful practices in Australian universities and United States research laboratories, is designed to incentivize commercialization and generate substantial revenue for the PATIII, creating a self-sustaining innovation ecosystem.
- Direct Linkages with Academia: The PATIII will partner with leading universities to offer joint Master's and PhD degree programs and postdoctoral fellowships. These programs will focus on industry-relevant thesis and dissertation research, ensuring that postgraduate students contribute directly to solving real-world industrial problems. The PATIII will also help establish innovation hubs and provide Small Business Innovation Research (SBIR) grants to universities, mirroring successful programs in the United States.

A Holistic Vision for a Developed Philippines

This comprehensive innovation strategy is designed to achieve more than just economic growth; it is a holistic approach to national development that seeks to directly address the Philippines' most pressing challenges:

- Alleviating Poverty and Improving Quality of Life: By creating more jobs and livelihoods, particularly in the agricultural and fisheries sectors, the goal is to significantly increase the GDP per capita of the poorest communities. This aims to combat hunger, malnutrition, and the resulting physical stunting and mental disabilities, ultimately enabling Filipinos to achieve a "matatag, maginhawa at panatag na buhay" – a stable, comfortable, and secure life.

- Enhancing Global Competitiveness: The strategy aims to transform the Philippines from a raw material exporter to a producer of high-value, competitive commercial products. This will revitalize the manufacturing industry, provide massive jobs, and reduce trade deficits.

- Promoting Environmental Sustainability: The plan integrates waste reduction, recycling, and increased use of renewable energy to achieve net-zero carbon emissions. This includes establishing agricultural biotechnology and industrial parks that serve as models for environmentally sustainable corporate farming and fisheries, contributing to a circular social economy.

- Fostering Social Innovation: New paradigms of social innovation will be pursued, focusing on empowering regional communities through technology-driven training for people-centered governance. This includes linking large industries with local supply chains involving MSMEs and cooperatives, and connecting them to local and foreign markets through digital and material connectivity. The strategy also promotes a nationwide niche-based creative ecotourism industry, utilizing technology to preserve culture and nature and create high-standard international ecotourism destinations.

This ambitious agenda, drawing inspiration from successful models in Germany (Fraunhofer), Taiwan, Japan (RIKEN), South Korea (KAIST), and the United States (SBIR grants), represents a definitive, massive investment in Science and Technology (S&T) human capital development. It underscores the conviction that this "suprastructure"—the advanced education and training of its brightest youth—is the singular, most critical investment for driving and sustaining innovation-based competitiveness and overall societal progress for the Philippines.

BOOK REVIEW

Securing a Continuum of Care: The Challenges of a Fragmented Health Sector

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Introduction

Securing a Continuum of Care: The Challenges of a Fragmented Health Sector (2020) is a critical examination of the structural inefficiencies plaguing the Philippine healthcare system. Published shortly after the passage of the Universal Health Care (UHC) Law (RA 11223) in 2019, the book provides a prescient analysis of the systemic barriers that could impede UHC's success. Written by experts in public health, economics, and policy, the work dissects how fragmentation—rooted in decentralization, financing gaps, and governance disarray—undermines the ideal of seamless healthcare delivery. While not a direct evaluation of RA 11223's implementation, the book's themes offer a vital framework for understanding the law's challenges and opportunities.

Introduction: The Problem of Fragmentation

The opening chapter defines fragmentation as the misalignment between governance, financing, and service delivery, exacerbated by the 1991 Local Government Code's decentralization. It highlights how disjointed systems lead to duplicated programs and inequitable resource distribution—issues RA 11223 seeks to resolve through recentralization of key health functions. The authors introduce the Continuum of Care (CoC) framework, emphasizing

seamless transitions from prevention to rehabilitation, a principle central to UHC's integrated care networks.

The Philippine Health System: Structure and Challenges

This chapter dissects the tensions between public (DOH, LGUs) and private providers, alongside PhilHealth's failure to shield Filipinos from catastrophic health spending. The maldistribution of healthcare workers (urban vs. rural) and reliance on out-of-pocket payments are identified as structural flaws—challenges RA 11223 addresses through automatic PhilHealth enrollment and equity-focused funding. However, the book warns that without addressing governance fragmentation, UHC's equity goals may remain unmet.

Continuum of Care: Global Lessons

Here, the authors analyze integrated care models (e.g., UK's NHS, Thailand's UHC) to argue that strong primary healthcare (PHC) is the backbone of CoC. For RA 11223, this underscores the need to bolster rural health units—a priority in the law's design—but the book cautions that PHC expansion requires sustained financing and political will, areas where Philippine reforms have historically faltered.

Fragmentation in Service Delivery: Case Studies

Empirical data reveals how siloed systems disrupt maternal care, chronic disease management, and mental health services. For instance, poor referral systems lead to preventable maternal deaths—a gap UHC's integrated service delivery networks aim to close. Yet, the book stresses that without interoperable health information systems (e.g., electronic health records), referrals under RA 11223 may remain inefficient.

Financing and Health Insurance

The book critiques PhilHealth's low reimbursement rates and slow claims processing, which persist despite RA 11223's mandate for expanded coverage. It proposes tax-based financing to reduce reliance on premiums—a relevant but politically contentious solution for UHC's sustainability.

Governance and Policy Coordination

Overlapping mandates between the DOH and LGUs create inefficiencies, a problem RA 11223 tackles by recentralizing select LGU health functions. However, the book argues that without clear accountability mechanisms, recentralization could replicate top-down weaknesses. It advocates for a whole-of-government approach, aligning with UHC's interagency coordination mandates.

Recommendations for Integration

The authors propose the following: 1) PHC strengthening which mirrors UHC's focus on rural health units as primary care facilities; 2) Digital health solutions which include electronic medical records (EMRs), health information system (HIS) as UHC priorities; And 3) PhilHealth reforms for streamlined and accelerated reimbursements and expansion of benefit packages with emphasis on Primary Health Care (PHC). These align with RA 11223's pillars but highlight implementation risks, such as bureaucratic inertia, which is actually presently happening already in PhilHealth and DOH.

Conclusion: UHC's Prospects

The book concludes that fragmentation must be resolved for UHC to succeed. While optimistic about RA 11223's potential, it emphasizes that systemic change requires political will, adequate funding, and stakeholder collaboration—lessons echoing global UHC experiences.

Critical Analysis: Strengths and Gaps in Addressing RA 11223

The book's greatest strength lies in its prescient diagnosis of systemic barriers that continue to hinder Universal Health Care implementation. Published at the dawn of RA 11223's rollout, its multidisciplinary analysis of PhilHealth's reimbursement inefficiencies, governance fragmentation, and primary care gaps reads like a playbook of today's UHC challenges. The authors' policy recommendations—from electronic health records to performance-based LGU incentives—remain strikingly relevant, demonstrating how rigorous health systems research can anticipate real-world obstacles years before they manifest.

Yet this forward-looking analysis comes with inherent blind spots. Frozen in the pre-pandemic landscape of 2020, the book cannot account for COVID-19's

catastrophic disruption of healthcare resources or the subsequent corruption scandals that eroded public trust in PhilHealth. While its systemic approach provides enduring insights, readers seeking assessments of automatic enrollment outcomes or recent benefit package expansions must look elsewhere—a reminder that even the most incisive policy analysis has an expiration date.

The most consequential limitation may be what's omitted rather than what's dated. By focusing predominantly on top-down reforms, the authors did not highlight grassroots innovations that could humanize UHC implementation—community health worker networks, indigenous healing systems, or local government pilot programs. This oversight reflects a broader pattern in health policy literature: brilliant structural analysis that occasionally loses sight of the patients and providers navigating these systems daily. For UHC to truly succeed, future editions might bridge this gap by marrying systemic rigor with on-the-ground realities.

Securing a Continuum of Care is an indispensable read for UHC implementers, offering a roadmap to navigate fragmentation. Its warnings about financing, governance, and equity remain urgent as RA 11223 rolls out. However, readers should supplement it with newer studies on UHC's real-world progress.