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NO DEAD-END AHEAD: PERMEABILITY PATHWAYS BETWEEN TERTIARY VOCATIONAL EDUCATION AND TRAINING AND ACADEMIC EDUCATION

What is permeability?

Historically and traditionally, there has been a rigid segmentation between vocational education and training (VET) and academic education, riven by very different institutional structures. In Europe, the division between the two pathways started in the medieval period and continued until the early 20th century. Until relatively recently, competency-based VET was strongly associated with specific occupational skills and was barely articulated in the academic world (Field and Guez 2018). In making VET more relevant and responsive to rapid and unpredictable changes in the nature of work and unmet demand for workers with higher level skills, recent reforms have focused on improving the diversification and permeability of VET.

In the context of education and training systems, permeability refers to flexible learning pathways, the horizontal and vertical links between education and training programmes.

Permeability, in the context of education and training systems, refers to flexible learning pathways, that is, the horizontal and vertical links between education and training programmes and institutions that enable students to move through different learning environments at different speeds regardless of programme orientation (Cedefop 2012). Permeability helps eliminate the concept that VET is a dead-end pathway, making VET more attractive to students aspiring to pursue their study at higher education either soon or years after graduation. It also contributes to social inclusion and mobility by providing opportunities for students from disadvantaged backgrounds or those whose grades have fallen short access to higher education and the opportunities it offers (Field and Guez 2018).

Permeability can also refer to the movement of students from academic education to VET. This paper, however, mainly reviews the permeability of VET students' pathways towards and at tertiary education level. It discusses the driving forces

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In this Issue

behind endeavours to make the education and training systems more permeable, points out the key policies and instruments in force worldwide, and concludes with some lessons Cambodia can learn from other countries.

Why is there a need for permeability between VET and academic education?

Most European countries see the importance of combining the two institutional structures in response to changing demands in labour markets which require a massive shift in participation patterns in the form of increased emphasis on lifelong learning and widened access to higher education. Towards achieving Europe's ambition to become the most dynamic knowledge-based economy in the world, the European Council has prioritised the following strategic objectives (Spöttl 2013):

- Make lifelong learning and mobility a reality
- Improve the quality and efficiency of education and training
- Promote equality, social cohesion, and active citizenship
- Enhancing creativity and innovation, including entrepreneurship, at all levels of education and training.

Based on these priorities and in response to market demands, many European countries have adopted a system that ensures a smooth connection between VET and academic education. In Switzerland, for example, VET is held with even higher esteem than academic education with two-thirds of the students enrolled in VET programs. The Swiss government takes the promotion of VET seriously as a means to secure economic growth and national prosperity, and has introduced several permeability pathways for VET students (Backes-Gellner and Tuor 2010; Hoffman and Schwartz 2015). VET students who pass the one-year Swiss Federal Vocational Baccalaureate (established in 1997) can move on to study at one of the nine universities of applied science.

What is more, improving the permeability of education can help redress the problem of discrimination, which is an underlying cause of inequality of opportunity in education and employment. Such discrimination mostly affects VET students since there is the perception that students decide to pursue VET as their educational pathway partly because their academic records are not good enough to be admitted at university. A tertiary system that encompasses both academic and vocational education can equip students with knowledge and skills that meet market demand and deal with discrimination in employment (Spöttl 2013).

Technology advancement has created many new jobs but it has also made many types of job obsolete. Although estimations vary greatly, the World Bank (2019) estimates that 47 percent of occupations in the US and 61 percent of those in Cyprus are predicted to be at risk of automation. Strong human capital foundations and lifelong learning are keys to reskilling and upskilling workers in response to job-replacing technologies, according to *World Development Report 2019: The Changing Nature of Work* (World Bank 2019). This emphasises the crucial role of VET as an alternative path to lifelong learning rather than a dead-end track.

How can permeability between VET and academic education be promoted?

Based on global experience, mostly originated in developed countries, this study identifies several effective strategies for making VET and academic education more permeable. Those strategies include the establishment of national qualifications frameworks (NQFs); use of VET as a steppingstone to open access for low-achieving students to higher education; introduction of higher levels or advanced professional tracks in VET equivalent to a bachelor's or a master's degree; and promotion of systematic collaboration between universities and VET institutes.

Establishment of national qualifications frameworks

In European countries, the Bologna Process (1999) and the Copenhagen Process (2002) reshaped essential agenda for education and training reform. These two significant initiatives, aimed at modernising Europe's education and training systems, led to the development of the European Qualifications Framework (EQF). Lester (2015) elaborates that the EQF comprises eight qualification levels, describing through professional and practical-oriented components, learning outcomes (knowledge, skills and competencies),

and learner progress (measured by value added). It came into effect in 2008, with 2010 set as the target year for countries to develop comprehensive NQFs based on the EQF and 2012 as the year for countries to reference individual national qualifications to EQF levels. The EQF and subsequent NQFs have since been a driving force of education and training policy reform in 38 countries.

The adoption of NQFs was deemed a top priority, and they have been implemented consistently for these past five years given the significance of the qualification framework (Elken 2016). According to the European Centre for the Development of Vocational Training Cedefop (2015), NQFs have been officially adopted in 29 countries, while other 34 European countries in November 2014 reported to have comprehensively designed a far-reaching NQF with the inclusion of all levels and typology of qualifications between education and training systems. This is the sizeable impact on reform and changes brought about by the EQF on European education and training. The NQFs in Germany, Romania, and Turkey combined constitute a fundamental instrument for improving permeability in education and training systems to eliminate segmentation in higher education (Cedefop 2015; UNESCO 2015). Lester (2015) further discusses the NQFs have facilitated cross-track transfer in higher education, aided the recognition of prior qualifications, and increased the transparency of different qualifications and levels.

VET as a steppingstone to higher education

Whereas universities are usually located in major cities and draw much attention from highly accomplished students, VET institutes are typically located in the periphery of main urban areas and tend to attract below average disadvantaged students due to the availability, affordability and accessibility of VET courses. Such segmentation is a barrier to permeable education and training. Some countries have made concerted efforts to address this situation and connect their education and training systems. A case in point is Singapore, where technical and polytechnic education is seen not only as an indispensable pathway that imparts practical skills and produces industry-ready graduates but also as a viable alternative route from junior college to university (Agrawal 2013). By connecting its education system, Singapore was able to address the problems of school dropout and failure. Students who did not pass the school-leaving examination, rather than leaving education altogether, could obtain practice-oriented education that led directly to labour market entry and/or higher education. As a result, Singapore has improved equity in educational outcomes and raised standards overall.

Canada, Indonesia, South Korea and Jamaica have adopted the community and junior college system from the United States. School leavers without qualifications can complete a two-year associate degree in order to gain entry to university, where they study for a further two years to complete a bachelor's degree. For students with non-traditional qualifications, such progression routes and articulation arrangements are considered imperative. Prior education or training over an extended period of time and associated qualifications allow them to strengthen and develop their efficacy and capacity before embarking on a university degree. Importantly, not all students are ready to commit to a full four-year degree course from the outset, so the opportunity to study for a diploma or an associate degree can keep them engaged in education (Field and Guez 2018). Some higher learning institutions, however, are reluctant to recognise prior qualifications and demand that students aspiring to pursue a degree study at university level have to start from the beginning.

In Latvia and Estonia, the completion of a two-year VET course does not necessarily make students automatically eligible for direct entry to a degree course (OECD 2016). This is because not all VET courses and qualifications count towards university entry qualifications, as their entry qualification is conditional depending on the courses they completed; otherwise, they are required to undertake additional supplementary courses that prepare them for higher education.

Permeability as a steppingstone is quite perplexing, and the practice of related policies remains stagnant and inconsistent and is widely discussed among practitioners. Considering that the policies such as credit transfer, articulation arrangements and recognition of prior learning have been adopted, the route from VET to higher education is still beset with complications due to institutional barriers. More importantly, VET curricula are occupation-specific, further limiting progression opportunities for VET learners (Field 2017).

VET at higher qualification levels

VET has been traditionally provided in the form of short-cycle courses and in secondary education. Given its growing significance in building human capabilities, the European development discourse has paid increasing attention to the inclusion of VET at tertiary level to bridge the different aspects of education and training systems. However, because it is apparent that a standard terminology does not exist, higher/tertiary VET has been interpreted in different ways in different European countries. Cedefop (2014, 292) defines VET as "education and training which aims to equip people with knowledge, know-how, skills and/or competences required in particular occupations or more broadly in the labour market".

In addition to dealing with different concepts and organisational and institutional structures, the definition presented above serves as an integral tool to delaminate the scope of higher-level VET and how it is regulated. Based on the International Standard Classification of Education (ISCED), tertiary VET encompasses four education levels, from 5 to 8, equivalent to short-cycle tertiary education, bachelor's degree, master's degree and doctoral degree, respectively (UNESCO 2011). The primary objectives of higher VET qualifications are to prepare workforce-ready VET graduates geared towards specific industries or professions and to pave the way for those who aspire to pursue higher learning. To ensure VET learners receive a well-rounded education, higher VET programmes are generally characterised by the consolidation of professionally and academically oriented, but with a dominance of vocationally oriented aspects (Cedefop 2011).

The addition of higher qualification levels in the VET framework in Australia aims to address the needs and shortages of highly competent individuals to spur the country's economic growth and productivity. The Australian government has introduced two higher levels in the VET sector: vocational graduate certificate and vocational graduate diploma. Both qualifications are designed to intersect between VET and higher education and are higher than a bachelor's degree (ISCED level 6) but lower than a master's degree (ISCED level 7). Although different from other countries' NQFs, these higher-level qualifications provide more flexible pathways for learners to access the world of work and/or to further their study (Langworthy and Johns 2012).

Also deserving of mention, many positive experiences can be observed in various European countries as a result of the expansion of higher VET qualifications. Sweden, for example, has scaled up its professional programmes to ISCED level 7, equivalent to a master's degree, attracting more than 50,000 VET learners in 2017 alone (Skolverket 2019). Similar trends of adding higher levels in VET sector are also found in other European counties, including Austria, Belgium, Germany, Denmark, Spain, Finland, France, Ireland, Netherlands and Portugal, which have followed suit (Ulicna, Luomi-Messerer and Auzinger 2016). The flexible learning pathways and delivery modes in higher VET enable learners to pursue a practice-oriented bachelor's degree and postgraduate professional education at universities of applied sciences, where courses such as medicine, law or engineering/technology have a strong emphasis on vocationally oriented aspects. In Southeast Asia, Thailand's VET system three levels, two of which are postsecondary levels (ISCED levels 5 and 6), and rigorous guidelines have been laid out to assist student mobility to ensure the plausibility of lifelong learning (Department of Education Skills and Employment 2020). Therefore, developing flexible learning pathways at tertiary VET levels of VET is considered mandatory as it can evidently result in better removal of various barriers that prevent young people from achieving their potential. These barriers include the segmentation of education and training systems, the misperception that VET is a dead-end pathway, and the absence of uniformity that hinders progress and significant steps taken to improve graduate outcomes.

Inter-institutional collaborative arrangements and partnerships (credit transfer)

It has been long recognized that the persistent and robust efforts, including arrangements for credit transfer and accumulation systems, by many governments as undertaking to promote greater linkages between VET and academic education providers are one of the solutions to permeability. Active involvement from a broader range of stakeholders, such as learners, training and educational institutions, teaching staff and trainers, and employers, in joint efforts, is key to successful transition (Pollard et al. 2017). The recognition of prior learning between postsecondary academic and vocational tracks is an attempt to smooth disparities

and harmonise commonalities in terms of course contents and teaching and learning approaches. This gives students, despite their educational background, the opportunity to pursue higher learning without relearning the knowledge they have acquired.

Aiming to increase the proportion of VET graduates studying in higher education institutions, the Australian government initiated the VET Fee and Higher Education Loan Programme. This initiative has created a dynamic climate, encouraging universities and VET institutions to collaborate or establish partnerships to facilitate seamless transitions from VET to higher education through credit transfer and articulation arrangements as the transfer process can be a daunting experience for students (Smith and Brennan-Kemmis 2014). In another example, in Tajikistan, students who have completed a two-year programme at technical college can transfer directly to the third year of a bachelor's degree program at a partner university (Marope, Chakroun and Holmes 2015). This is similar to the Australian credit transfer systems which enable VET student to continue their study at university through credit transfer systems (Langworthy and Johns 2012).

In principle, the arrangements might make the steppingstone from vocational track to academic track seem uncomplicated and seamless. But in reality, in the words of Harris, Rainey and Sumner (2006), it is more akin to "crazy paving" because the system is complex and inconsistent; specifically, policy and practice vary across institutions and transfer arrangements remain ad hoc rather than systematic (Bandias, Fuller and Pfitzner 2011). Another study conducted by Ambrose et al. (2013) suggests that the absence of uniformity and inadequacy of the academic education content in VET programmes, and disparities in pedagogical and learning approaches between VET institutions and universities, are the main factors impeding arrangements and partnerships for better transition. Some university staff even perceive that credit systems "threaten the integrity of course and as well as the general standards of their particular university" (Bandias, Fuller and Pfitzner 2011, 587).

Conclusion

The paper identifies several strategies that can help pave the way for better permeability between vocational and academic education. Along the road to permeability, it also highlights many challenges, including the differences in nature between the two systems and complexities in the transfer from vocational to higher education. Cambodia has introduced some effective pathways to remove barriers for students to move with more freedom between the two systems. Those pathways include the establishment in 2012 of the Cambodian Qualifications Framework that help develop flexible pathways between the two systems, and the introduction of higher-level of VET (known as TVET in Cambodia) qualifications.

In theory, CQF allows student to use TVET as a steppingstone to pursue higher education at university; in practice, however, students rarely take this path. Most TVET students choose to continue their learning at TVET institutes where higher-level qualifications are available. In this regard, Cambodia can adapt innovations from other countries to diversify pathways for students, in particular the promotion of collaboration between universities and TVET institutions, to ensure that students can move smoothly across learning tracks.

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References

Agrawal, Tushar. 2013. "Vocational Education and Training Programs (VET): An Asian Perspective." *Asia-Pacific Journal of Cooperative Education* 14 (1): 15–26.

Ambrose, Iris, Marie Bonne, Kate Chanock, Clare Cunnington, Sandra Jardine and Janet Muller. 2013. "'Like Catching Smoke': Easing the Transition from TAFE to University." *Journal of Academic Language and Learning* 7 (2): A120–A131.

Backes-Gellner, Uschi, and Simone N. Tuor. 2010. *Avoiding Labor Shortages by Employer Signaling: On the Importance of Good Work Climate and Labor Relations*. Working Paper No. 10. Zürich: Universität Zürich.

Bandias, Susan, Don Fuller and Darius Pfitzner. 2011. "Vocational and Higher Education in Australia: A Need for Closer Collaboration." *Journal of Higher Education Policy and Management* 33 (6): 583–94.

Cedefop (European Centre for the Development of Vocational Training). 2011. *Vocational Education and Training at Higher Qualification Levels*. Research Paper No. 15. Luxembourg: Cedefop.

Cedefop. 2012. "Permeable Education and Training Systems: Reducing Barriers and Increasing Opportunity." Briefing Note. Thessaloniki: Cedefop.

Cedefop. 2014. *Terminology of European Education and Training Policy*. Second Edition. Luxembourg: European Union.

Cedefop. 2015. *Analysis and Overview of National Qualifications Framework Developments in European Countries: Annual Report 2014*. Working Paper No. 27. Luxembourg: European Union.

Department of Education Skills and Employment, Australian Government. 2020. "Thailand: Vocational Education and Training." https://internationaleducation.gov.au/International-network/thailand/Policy Updates-Thailand/Documents/Thailand%20Education%20Policy%20Update_VET_ FINAL.pdf.

Elken, Mari. 2016. "'EU-on-Demand': Developing National Qualifications Frameworks in a Multi-Level Context." *European Educational Research Journal* 15 (6): 628–43.

Field, Simon. 2017. "Virtual Conference Report on Pathways between TVET and Further Education." Bonn: UNESCO-UNEVOC.

Field, Simon, and Ava Guez. 2018. *Pathways of Progression: Linking Technical and Vocational Education and Training with Post-Secondary Education*. Paris: UNESCO.

Harris, Roger, Linda Rainey and Robert Sumner. 2006. "Crazy Paving or Stepping Stones? Learning Pathways within and between Vocational Education and Training and Higher Education." Adelaide: National Centre for Vocational Education Research.

Hoffman, Nancy, and Robert Schwartz. 2015. "Gold Standard: The Swiss Vocational Education and Training System." Washington, DC: National Center on Education and the Economy.

Langworthy, Anne, and Susan Johns. 2012. "Why Is It Important for Higher Education to Connect with the VET Sector?" *Research and Development in Higher Education* 35: 118–28.

Lester, Stan. 2015. "The European Qualifications Framework: A Technical Critique." *Research in Post-Compulsory Education* 20 (2): 159–72.

Marope, Priscilla Toka Mmantsetsa, Borhene Chakroun and K.P Holmes. 2015. *Unleashing the Potential Transforming Technical and Vocational Education and Training*. Paris: UNESCO.

OECD (Organisation for Economic Co-operation and Development). 2016. "Education in Latvia, Reviews of National Policies for Education." Paris: OECD Publishing.

Pollard, Emma, Kari Hadjivassiliou, Sam Swift and Martha Green. 2017. *Credit Transfer in Higher Education: A Review of the Literature*. Manchester: Department for Education.

Skolverket, ReferNet Sweden. 2019. *Vocational Education and Training in Europe- Sweden*. http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Sweden_2018_Cedefop_ReferNet.pdf.

Smith, Erica, and Ros Brennan-Kemmis. 2014. "Credit Transfer from VET to Higher Education: A Pathways Policy Meets a Roadblock." *Research in Post-Compulsory Education* 19 (2): 230–44.

Spöttl, Georg. 2013. "Permeability between VET and Higher Education -–A Way of Human Resource Development." *European Journal of Training and Development* 37 (5): 454–71.

Ulicna, Daniela, Karin Luomi-Messerer and Monika Auzinger. 2016. "Study on Higher Vocational Education and Training in the EU." Brussels: European Commission.

UNESCO (United Nations Educational, Scientific and Cultural Organization). 2011. *International Standard Classification of Education: ISCED 2011*. Montreal: UNESCO Institute for Statistics.

UNESCO. 2015. *Global Inventory of Regional and National Qualifications Frameworks, Volume 1: Thematic Chapters*. Hamburg: UNESCO Institute for Lifelong Learning.

World Bank. 2019. *World Development Report 2019: The Changing Nature of Work*. Washington, DC: World Bank.

COMPARATIVE STUDY ON THE IMPLEMENTATION OF WATER DIPLOMACY: FOCUSING ON THE INDUS AND MEKONG RIVERS

Introduction

Water is an integral part of life inasmuch as it supports livelihoods, prosperity and social stability worldwide. The critical importance of water is enshrined in the eight targets of Sustainable Development Goal (SDG) 6, which emphasises equitable access to and sustainable management of water resources (SDG 2015-2030). The achievement of SDG6 targets requires transboundary water cooperation as set out in target 6.5. However, in the face of growing water scarcity and water mismanagement, transboundary water issues can cause social unrest and spark conflict. Asian Water Development Outlook 2013 reports that water security in Asia and the Pacific is under threat from conflicting water needs, demographic pressures, industrialisation and urbanisation, and climate change, and that such challenges are likely to escalate tension among riparian countries (ADB 2013).

The former UN Secretary General Kofi Annan once ventured that "Fierce national competition over water resources has prompted fears that water issues contain the seeds of violent conflict" (United Nations 2002). Water-related conflict has become one of the most complicated issues in international affairs and security, and has been listed among the top five global risks (World Economic Forum 2020). Research shows that a plethora of conflicts commonly arise in cross-border river basins (Molen and Hildering 2005; Petersen-Perlman, Veilleux and Wolf 2017; Gholizadeh and Niknami 2020). Disputes have broken out over the Nile, Indus and Mekong rivers, among many others. This paper examines and compares the causes of water conflicts and the settlement mechanisms used to resolve them in the Indus and the Mekong river basins.

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Overview of the Indus and the Mekong rivers

Indus River

The Indus River supports a population of about 215 million people and is the eighth longest river in the world. It originates in the Himalaya Mountains of the western Tibetan Plateau and flows largely through Jammu and Kashmir in the north-western part of the Indian subcontinent. The Indus River and its tributaries are crucial for both Pakistan and India as they are major sources for agricultural water. However, because more than 70 percent of Pakistan's population depend either directly or indirectly on agriculture, the Indus is much more crucial for Pakistan (Abbashi et al. 2019).

Conflict between India and Pakistan over the water resources of the Indus Basin is not a contemporary issue. Water-related tensions started in 1947 after the subdivision of the Indian subcontinent into two independent countries, India and Pakistan, and have intensified ever since. There are several reasons for the continuation of the conflict. First, the ongoing territorial dispute over Kashmir has soured India-Pakistan relations, disincentivizing cooperation

Figure 1: Map of the Indus Basin

Source: Zawahri, N. A. (2009). India, Pakistan and cooperation along the Indus River system.

(Haq and Sofi 2019; Qureshi 2017a). Second, the growing list of terror incidents in India has worsened diplomatic relations, especially after the Mumbai attack in 2008, which India claimed was carried out by Pakistan-backed terrorists, an accusation denied by Pakistan (Parashar 2020). Third, and possibly the most pressing reason, is Pakistan's claim that India, in the upstream, selfishly controls river flows, disrupting agricultural activities and affecting lives and livelihoods in Pakistan (Qureshi 2017a; Wani and Moorthy 2014).

Mekong River

The Mekong River is the world's 12th longest river. It flows from the Tibetan Plateau to the Mekong Delta through six countries: China, Myanmar, Laos, Thailand, Cambodia and Vietnam. The Mekong River Basin is one of the largest and most biodiverse in Southeast Asia and provides livelihoods for and feeds more than 60 million people. Over the past decades, Mekong countries have harnessed the benefits of the Mekong's water resources for economic development and industrialisation, allowing them to catch up with more advanced developing countries, reduce poverty and deepen regional integration.

The clashes that flare up over the Mekong River are multifaceted, notably because several countries are involved in Mekong River water diplomacy. Geopolitical rivalry and the ongoing tug of war between powers, especially the involvement of the United States in the region, are considered underlying causes of conflict (Chang 2013). In the process, numerous Mekong cooperation initiatives have been established by China (Mekong-Lancang Cooperation), the United States (US-Mekong Partnership, upgraded from the Lower Mekong Initiative), Japan (Mekong-Japan) and South Korea (Mekong-South Korea), as well as many other regional and international institutions.

Figure 2: Map of the Mekong Basin

Source: Ministry of Natural Resources and Environment 2015 www.mekongeye.com/ wp-content/uploads/sites/2/2016/04/MDS-Final-Project-Report-Eng.pdf

Although Mekong countries, especially those downstream, have benefited significantly from cooperation initiatives, especially through project-based activities, the Mekong region has become a strategic battleground for foreign powers (Hirsch, 2016). Added to that, growing scepticism about China's unilateral dam building in the basin without proper discussions with downstream countries has exacerbated and exposed unequal power relations and mutual distrust in the region (Chang 2013).

Water diplomacy framework to resolve water disputes

Amid increased tensions over shared water, disputes must be countered by effective and sustainable solutions to foster regional integration and cooperation for mutual growth and prosperity. Water diplomacy, a relatively new field of diplomacy, has therefore come to play an increasingly important

role in addressing transboundary water conflict. It is a strategic approach that involves multi-stakeholder dialogue and political engagement to enhance peace, stability and prosperity (Hefny 2011; Molnar et al. 2017). Building on Hefny (2011) and Molnar et al. (2017), this study defines water diplomacy as an attempt to mitigate water conflict, build trust and promote cooperation, regional integration, peace and security by integrating a wide range of instruments including arbitration, legal and practice-based knowledge. The next two sections explore various mechanisms and frameworks used to resolve water conflicts in the Indus and the Mekong river basins.

Indus River Basin

Dispute over the waters of the Indus basin was aggravated after India gained independence in 1947. After an almost decade-long negotiation led by the World Bank to resolve and mitigate the dispute, the Indus Water Treaty (IWT) was adopted in 1960 (Alam 2002). Under the IWT, the rivers in the Indus Basin were partitioned, with the eastern rivers given to India and the western rivers to Pakistan (Sarfraz 2013). The IWT obligates both countries to (1) not restrict water flows or cause potential harm to the other party, and (2) cooperate with each other to exchange hydrological data (Sarfraz 2013).

For over 50 years the IWT provisions have remained intact and applicable, even during the 1965, 1971 and 1999 India-Pakistan wars (Ranjan 2016). It is widely considered one of the most successful treaties for handling water disputes for two reasons. First, its immense success is attributed to the willingness of India and Pakistan to address water-related issues as a technical problem rather than a geopolitical motive. In so doing, they agreed to establish the Permanent Indus Commission (PIC), comprising one high-ranking engineer appointed by each party. The idea was to establish a working group so that the two countries can jointly develop and administer the rivers in compliance with the IWT. Second, in the event that PIC cannot make mutually acceptable decisions or resolve water-related conflicts between the two countries, third party mediation comes into play or the countries can refer to the Permanent Court of Arbitration (PCA).

Notwithstanding that IWT and PIC were established to govern the Indus river, India has constantly constructed more dams, antagonising Pakistan and triggering clashes (Qureshi 2017b). Although PIC has settled many issues between Pakistan and India, there were two issues it was not able to resolve (Sarfraz 2013). As a condition of the IWT, Pakistan's concerns about India's Baglihar and Kishenganga dams were to be looked into by a neutral expert appointed by the World Bank and then by the PCA (Rao 2017). Regarding the Baglihar dam conflict, while Pakistan opposed the dam construction due to its grand scale infrastructure, India contested that this dam would not affect the water flow. With this disagreement, neutral expert was then brought in and decided that the project did not cause harm and required only minor changes for the construction. For the second case, the concerns were on the disruption of the river flow and the depletion of the reservoir levels. Albeit the court final judgement that states can construct dams, India needs to be responsible for the river minimum flow, prevent the depletion of the reservoir levels (except in a case of emergencies), and protect the environment (Balraj K. Sidhu, 2013; Rao, 2017).

PIC has functioned consistently well for five decades regardless of territorial conflicts and hostilities between the two nations (Sinha, Gupta and Behuria 2012). This remarkable achievement is largely due to the transparency and impartiality with which PIC carries out its mandate (Zawahri 2008). Besides, under the IWT, PIC is required to undertake a general tour to inspect the rivers every five years; this does not include the annual meeting of PIC or any special meetings requested by the commissioner of either party (Zawahri 2008). In addition, except for the International Bank for Reconstruction and Development, the IWT does not allow the involvement of public or international institutions (Khan 1990). Strict adherence to the rubrics has meant that conflicts between states in the Indus Basin have been resolved peacefully using diplomatic means, specifically negotiation, consultation and reconciliation by PIC, mediation by the World Bank, and adjudication by PCA.

Mekong River

The Mekong River is a focus of ongoing conflict. Looking at the history of cooperation between the riparian countries of the Lower Mekong River (i.e. Cambodia, Laos, Thailand and Vietnam), conflict first erupted after the creation of the Mekong Committee in 1957. Because of ideological conflicts in the region and civil war in Cambodia,

the cooperation framework established under the Mekong Committee did not function well (Sunchindah 2005). In 1995, with support from the United Nations and international communities, the Mekong Committee was transformed into the Mekong River Committee (MRC) with the same member states, and with China and Myanmar as dialogue partners. The current MRC has the mandate to oversee and implement policy decisions, coordinate the plans of member states for balanced and socially just development, protect the region's environment and ecological integrity, and examine the sustainability of developments on the mainstream and its tributaries including dam construction (Gerlak and Haefner 2017). In addition, in 2003, the Procedures for Notification, Prior Consultation and Agreement (PNPCA)1 was adopted by all parties to the Mekong Agreement.

The MRC has mediated several disputes over water between member states. In the event of a deadlock by the commission, resolution is to be negotiated by the respective governments in accordance with Mekong Agreement. Unlike those promulgated in the IWT, the Mekong Agreement does not highlight the quest for arbitration.

The MRC also serves as a platform for water diplomacy aimed at facilitating water negotiations in the region. A case in point is China's construction of many dams on the mainstream of the Mekong River in the upper basin. To ensure transparency in water data, provide evidence and calm downstream-basin countries, the MRC collects hydrological data from upstream areas for scientific and regulatory purposes and shares it with member states, international development partners and NGOs (Schmeier 2011).

China only recently signed an agreement pledging to share year-round hydrological data with Mekong countries (MRC 2020). Previously, China was willing to provide the MRC water-level and rainfall data from two hydrological stations on the Mekong mainstream for only five months during the flood season (from June to October). To show more active collaboration and interest in the Mekong subregion, in 2015 China launched the Mekong-Lancang Cooperation as a multilateral cooperation mechanism, which includes all the riparian countries in the Greater Mekong Subregion (Biba 2018).

Despite its apparent importance, the MRC seems to have little power and has had little success in dispute resolution (Kittikhoun and Staubi 2018). This perhaps is due to the different vested interests of the member states in utilizing the river and gripping strong hold on their country's national interest (Gerlak and Haefner 2017; Sok 2020). In the case of Xayaburi and Don Sahong dams proposed by Laos in 2010 and 2014, respectively, the MRC was not able to convince member states to follow the PNPCA and had to delay construction (Gerlak and Haefner 2017). Moreover, the lack of political commitment of certain member states has left the MRC unable to proceed with its water diplomacy and legal frameworks. For instance, because of conflicts of interest among political leaders, Thailand did not vote for the agreement on Transboundary Environmental Impact Assessment, Water Sharing and Water Quality proposed by the MRC (Campbell 2011). Because a unanimous vote is required, this agreement could not be concluded.

Conclusion

Water is needed for life to exist. However, as a consequence of increasing water demand, water mismanagement, mistrust, climate change and especially involvement from major powers, water has become a source of conflict. Water-related disputes mostly relate to transboundary waters shared by two or more countries. As this study shows, through water diplomacy, conflicts over shared waters can be prevented and minimised.

Upholding the regional frameworks is believed to help secure peaceful settlements over the shared use of water between riparian states. Establishing an oversight body or a commission to serve as a mediator to monitor and resolve conflicts by providing scientific evidence, promoting trust and fostering cooperation is equally important. As illustrated, water-dispute mediation and resolution in the Indus and Mekong river basins depend on water diplomacy through PIC and MRC, respectively. While PIC presents an overall better success in peacefully resolving water issues over the Indus River, MRC seems to have limited power and success in water conflict resolution. Based on these two case studies, the following suggestions merit consideration.

1 PNPCA is a general principle undertaken by the commission to ensure the flow, quality of water for the basin. The projects include, but not limited to, hydropower, massive irrigation system, among others.

1. It is essential that riparian states build mutual trust and strengthen political commitment to promote synergies, coordinate policies and optimise cooperation on shared waters for mutual benefit. To that end, equalisation and reasonable consumption of water as articulated in international law and regional legal agreements should not be violated.
2. Drawing on successful conflict resolution under the longstanding IWT, water challenges in the Mekong could be minimised and better managed if external actors were less involved and the securitisation and militarisation of the Mekong region suspended. Considering "Mekong Initiative Fatigue" syndrome, meaning a growing number of initiatives, especially those with a focus on dialogue bases led by different state actors, it further complicates the Mekong issues and ignites political rivalries. It would be more beneficial for the Mekong downstream countries, if those initiatives are mainly for the cooperation and development purposes.
3. MRC member countries need to deepen cooperation with upstream neighbours China and Myanmar, especially in the areas of drought management and climate change. China and Myanmar have been dialogue partners since 1996 but until recently have shown little interest in using the MRC as a platform to boost collaboration. It is important to have all six countries on the same platform with effective cooperative mechanism.
4. Mekong countries should agree to treat water disputes as a technical issue, as happens under the IWT, rather than a geopolitical issue. They should also avoid the temptation to involve power rivalries in dispute resolution as doing so could lead to increased securitisation and militarisation of the Mekong region, which would risk making water issues even more complex.

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References

Abbashi, Shakeel Abbasia, Muhammad Zubair Anwara, Nusrat Habiba, Qaisar Khana and Kanwal Waqar. 2019. "Identifying Gender Vulnerabilities in Context of Climate Change in Indus Basin." *Environmental Development* 31: 34–42.

ADB (Asian Development Bank). 2013. *Asian Water Development Outlook 2013: Measuring Water Security in Asia and the Pacific*. Mandaluyong City: ADB.

Alam, Undala Z. 2002. "Questioning the Water Wars Rationale: A Case Study of the Indus Waters Treaty." *Geographical Journal* 168 (4): 341–353. doi.org/10.1111/j.0016-7398.2002.00060.x.

Balraj K. Sidhu. (2013). The Kishenganga Arbitration – Transboundary Water Resources Governance –. *Enviromental Policy and Law*, *43/3*, 150. https://doi.org/10.3233/DEV-2012-12111

Biba, Sebastian. 2018. "China's 'Old' and 'New' Mekong River Politics: The Lancang-Mekong Cooperation from a Comparative Benefit-Sharing Perspective." *Water International* 43 (5): 622–641. doi.org/10.1080/00472336.2012.712257.

Campbell, Ian C. 2011. "Managing International River Basins: Successes and Failures of the Mekong River Commission." In *Water Resources Planning and Managemen*t, edited by R. Quentin Grafton and Karren Hussey, 724–740. doi.org/10.1017/CBO9780511974304.037.

Chang, F. K. 2013. "The Lower Mekong Initiative and U.S. Foreign Policy in Southeast Asia: Energy, Environment and Power." *Orbis* 57 (2): 282–299. doi.org/10.1016/j.orbis.2013.02. 005.

Gerlak, Andrea K., and Andrea Haefner. 2017. "Riparianization of the Mekong River Commission." *Water International* 42 (7): 893–902. doi.org/10.1080/02508060.2017.1376 267.

Gholizadeh, Bahareh, and Mehrdad Niknami. 2020. "The Causes and Effects of Water Conflict: Evidence from Damava." *Bulgarian Journal of Agricultural Science* 26 (3): 598–604.

Haq, Inamul, and Sheeraz Ahmad Sofi. 2019. "Kashmir Conflict and Indus Water Treaty: An Analysis." *Kardan Journal of Social Sciences and Humanities* 2 (2): 44–56.

Hefny, Magdy. 2011. "Water Diplomacy: A Tool for Enhancing Water Peace and Sustainability in the Arab Region." Paper presented in preparation

for the Second Arab Water Forum Theme 3: Sustainable and Fair Solutions for the Trans-Boundary Rivers and Groundwater Aquifers, Cairo, 20–23 Nov 2011.

Hirsch, P. (2016). The shifting regional geopolitics of Mekong dams. *Political Geography*, *51*, 63–74.

Khan, M. Yunus. 1990. "Boundary Water Conflict between India and Pakistan." *Water International* 15 (4): 195–199. doi.org/10.1080/02508069008691649.

Kittikhoun, Anoulak, and Denise Michèle Staubli. 2018. "Water Diplomacy and Conflict Management in the Mekong: From Rivalries to Cooperation." *Journal of Hydrology* 567: 654–667.

Li, Xinlin. 2012. "Hydropower in the Mekong River Basin: A Balancing Test." *Environmental Claims Journal* 24 (1): 51–69. doi.org/10.1080/10406026.2012.663299.

Molen, Irna van der, and Antoinette Hildering. 2005. "Water: Cause for Conflict or Co-Operation?" *ISYP Journal on Science and World Affairs* 1 (2): 133–43.

Molnar, Kata, Rosa Cuppari, Susanne Schmeier and Siegfried Demuth. 2017. *Preventing Conflicts, Fostering Cooperation – The Many Roles of Water Diplomacy*. www.waterandchange.org/wp-content/uploads/2018/02/PUB_Water-Diplomacy_Bericht.p df,

MRC (Mekong River Commission). 2020. "MRC Secretariat Welcomes China's Pledge to Share Mekong Data but Suggests Harnessing Existing Platform." Mekong River Commision. www.mrcmekong.org/news-and-events/news/pr-mrcs-welcomes-china-pledge/.

Parashar, Sachin. 2020. "India Wants Pakistan to Prosecute David Headley for 26/11 Mumbai Terror." *Economic Times,* 20 Sep 2020. https://economictimes.indiatimes.com/news/defence/india-wants-pakistan-to-prosecute-david-headley-for-26/11-mumbai-terror-attacks/articleshow/788862 28.cms.

Petersen-Perlman, Jacob D., Jennifer C. Veilleux and Aaron T. Wolf. 2017. "International Water Conflict and Cooperation: Challenges and Opportunities." *Water International* 42 (2): 105–120.

Qureshi, Waseem Ahmad. 2017a. "The Indus Basin: Water Cooperation, International Law and the Indus Waters Treaty." *Michigan State International Law Review* 26 (1): 45–81.

Qureshi, Waseem Ahmad. 2017b. "The Indus Waters Treaty and the Role of World Bank as Mediator." *Willamette Journal of International Law and Dispute Resolution* 24 (2): 211–232.

Ranjan, Amit. 2016. "Disputed Waters: India, Pakistan and the Transboundary Rivers." *Studies in Indian Politics* 4 (2): 191–205.

Rao, Sahana. 2017. "Governance of Water Resources Shared by India and Pakistan under the Indus Waters Treaty: Successful Elements and Room for Improvement." *NYU Environmental Law Journal* 25: 108–139.

Sarfraz, Hamid. 2013. "Revisiting the 1960 Indus Waters Treaty." *Water International* 38 (2): 204–216.

Schmeier, Susanne. 2011. *Resilience to Climate Change-Induced Challenges in the Mekong River Basin The Role of the MRC.* Water Papers. www.worldbank.org/en/topic/water.

Sinha, Uttam Kumar, Arvind Gupta and Ashok Behuria. 2012. "Will the Indus Water Treaty Survive?" *Strategic Analysis* 36 (5): 735–752.

Sok, Serey. 2020. Transparent Data Sharing among Member Countries: Crucial to Sustainable Management of Mekong River System. *Mekong Connect*, *2*(1), 5–9.

Sunchindah, Apichai. 2005. "Water Diplomacy in the Lancang-Mekong-River Basin: Prospect and Challenges." Prepared for the Workshop on the Growing Integration of Greater Mekong Sub-regional ASEAN States in Asian Region, Yangon, Myanmar, 20–21 Sep 2005.

United Nations. 2002. "World's Water Problems Can Be 'Catalyst for Cooperation' Says Secretary-General in Message on World Water Day." Press Release, 26 Feb 2002. www.un.org/press/en/2002/sgsm8139.doc.htm.

Wani, Khursheed Ahmad, and P. Moorthy. 2014. "Indus Waters Treaty : An Emerging Flashpoint between India and Pakistan." *Pakistan Horizon* 67 (2): 41–59.

World Economic Forum. 2020. The Global Risks Report 2020. WEF_Global_Risk_Report_2020.pdf (weforum.org).

Zawahri, Neda A. 2008. "Designing River Commissions to Implement Treaties and Manage Water Disputes: The Story of the Joint Water Committee and Permanent Indus Commission." *Water International* 33 (4): 464–474.

Economy Watch—External Environment

This section presents economic indicators of major world economies and economies in Southeast Asia during the second quarter of 2020. At the time of writing, data on real GDP growth in Cambodia was unavailable.

Real GDP growth

At first glance, there were falls in real GDP growth across all selected countries, both compared with the same quarter a year ago and the preceding quarter, the only exception being the swift recovery in China. Among the five selected ASEAN countries, Malaysia was the worst hit with GDP growth shrinking to 17.1 percent. GDP growth in Singapore contracted to 13.2 percent, in Thailand to 12.2 percent, Indonesia to 5.3 percent and Vietnam to 0.4 percent. Year on year, Malaysia's economy contracted by 22.0 percentage points, Singapore's by 13.3 percentage points, Thailand's by 14.5 percentage points, Indonesia's by 10.3 percentage points and Vietnam's by 6.3 percentage points. Compared to the preceding quarter, GDP in Malaysia declined 17.8 percentage points, in Singapore 11.0 percentage points, in Thailand 10.4 percentage points, in Indonesia 8.3 percentage points and in Vietnam 3.4 percentage points.

Except China, economic contraction in other selected Asian countries between April and June was worse than in the previous quarter. Compared with the same quarter a year ago, China's economy was also in recession. China, however, is making swift recovery with a 10.0 percentage point increase in GDP since the previous quarter albeit 3.0 percentage points lower than its growth rate year on year. Three of the four selected countries in this group experienced quarterly economic contractions. Hong Kong posted its biggest quarterly contraction ever (-9.0 percent), followed by South Korea (-3.0 percent) and Taiwan (-0.6 percent), whereas China, with a growth rate of 3.2 percent, was on the way to recovery. Year on year, Hong Kong's economy slumped by 9.5 percentage points, South Korea's by 5.1 percentage points and Taiwan's by 3.0 percentage points. Compared to the preceding quarter, GDP in Hong Kong fell 0.1 percentage points, in South Korea 4.3 percentage points and in Taiwan 2.1 percentage points.

More severe recession continued in the three selected industrial countries. The Euro-12 have experienced the lowest growth rate since the first quarter, hitting -15.0 percent this quarter. Economic growth in Japan fell to -9.9 percent and in the US to -9.5 percent. Compared to the same quarter last year, GDP fell in the Euro-12 by 16.1 percentage points, in Japan by 11.1 percentage points and in the US by 11.8 percentage points; compared to the preceding quarter, GDP fell by 11.7 percentage points, 7.9 percentage points and 9.8 percentage points, respectively.

Inflation rates

With regard to inflation rates in the 13 selected countries, compared to the same quarter last year, inflation rose in Cambodia, Vietnam and China and fell in the other 10 countries. Compared to a quarter earlier, all selected countries experienced declining inflation rates. Beginning with the selected ASEAN countries, year on year, the inflation rate in Cambodia increased by 0.7 percentage points to 2.5 percent and in Vietnam by 0.1 percentage point to 2.8 percent, giving the highest inflation rates among selected ASEAN countries. Conversely, Thailand had the lowest inflation rate (-2.7 percent), followed by Malaysia (-2.6 percent), Singapore (-0.7 percent) and Indonesia (2.3 percent). The fall in the annual inflation rate in Thailand was 3.8 percentage points, in Malaysia 3.2 percentage points, in Singapore 1.5 percentage points and in Indonesia 0.8 percentage points. Compared to the preceding quarter, the inflation rate in Malaysia decreased by 3.5 percentage points, in Thailand 3.1 percentage points, in Singapore 1.1 percentage points and in Indonesia 0.6 percentage points.

At 2.7 percent, China had the highest inflation rate among selected other Asian countries this quarter. This figure represents an annual increase of 0.1 percentage points, but a quarterly decrease of 1.7 percentage points. Compared to the same quarter last year, the inflation rate in Hong Kong

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fell by 1.4 percentage points to 1.3 percent, in South Korea by 0.8 percentage points to -0.1 percent and in Taiwan by 1.8 percentage points to -1.0 percent.

Inflation rates in the selected industrialised countries continued to decline, both compared to the same quarter last year and the preceding quarter, in the Euro-12 to 0.3 percent, Japan to 0.1 percent and the US to 0.3 percent. Compared to the same quarter last year, the inflation rate in the Euro-12 fell 1.1 percentage points, in Japan 0.6 percentage points and in the US 1.5 percentage points. Compared to the preceding quarter, the inflation rate in the EU-12 fell 0.8 percentage points, in Japan 0.4 percentage points and in the US 1.8 percentage points.

Exchange rate

Compared to the preceding quarter, the Khmer riel depreciated 0.9 percent, Indonesian rupiah 5.1 percent, Malaysian ringgit 2.4 percent and Thai baht 2.6 percent against the US dollar. In contrast, the Vietnamese dong appreciated 0.5 percent against the US dollar and the Singapore dollar remained stable at 1.4 Singapore dollars/US dollar.

Among other Asian countries, only the Taiwan dollar appreciated against the US dollar by 0.7 percent compared to the preceding quarter. The Chinese yuan depreciated 1.4 percent and the South Korean won 2.4 percent against the US dollar, while the Hong Kong dollar remained stable at 7.8 HK dollars/US dollar.

The euro to US dollar exchange rate, apart from a slight dip in 2018 to 0.8 euros (the average rate in 2013/14) has remained stable at 0.9 euros since 2015. The Japanese yen appreciated 1.3 percent against the US dollar compared to the preceding quarter and 2.1 percent year on year.

Commodity prices

Compared to the same quarter last year, the prices of palm oil, rice and soybeans went up while the prices of other commodities fell; only the price of rice recovered compared to the preceding quarter. Year on year, the price of palm oil rose by 8.1 percent to USD614.0/tonne, rice by 27.3 percent to USD547.5/tonne and soybeans by 0.5 percent to USD349.4/tonne. The prices of maize dropped by 16.8 percent to USD146.3/tonne, of rubber by 26.1 percent to USD1,144.4/tonne, crude oil by 53.5 percent to USD30.3/barrel, gasoline by 55.9 percent to US21.8 cents/litre and diesel by 53.0 percent to US24.0 cents/litre. Compared to the preceding quarter, the price of rice increased by 13.8 percent while those of maize decreased by 12.7 percent, palm oil by 15.3 percent, rubber by 16.7 percent, soybeans by 3.1 percent, crude oil by 38.3 percent, gasoline by 36.3 percent and diesel by 38.8 percent.

Table 1: Real GDP growth of selected trading partners, 2013–20 (percentage increase over previous year)

	2013	2014	2015	2016	2017	2018	2019				2020	
							Q1	Q2	Q3	Q4	Q1	Q2
Selected ASEAN countries												
Cambodia	7.4	7.1	7.0	7.0	7.0	7.5	-	-	-	-	-	-
Indonesia	5.8	5.2	4.8	5.0	5.1	5.2	5.1	5.0	5.0	5.0	3.0	-5.3
Malaysia	4.6	6.0	4.9	4.3	5.9	4.8	4.5	4.9	4.4	3.6	0.7	-17.1
Singapore	3.8	3.0	2.0	2.0	3.8	3.2	1.3	0.1	0.5	0.8	-2.2	-13.2
Thailand	2.8	1.6	2.8	3.2	3.8	4.1	2.8	2.3	2.4	1.6	-1.8	-12.2
Vietnam	5.4	5.9	6.6	6.1	6.6	7.2	6.8	6.7	7.3	7.0	3.8	0.4
Selected other Asian countries												
China	7.7	7.3	7.0	6.7	6.9	6.6	6.4	6.2	6.0	6.0	-6.8	3.2
Hong Kong	3.0	2.3	2.3	1.7	2.8	3.1	0.6	0.5	2.9	-2.9	-8.9	-9.0
South Korea	2.8	3.4	2.6	2.6	3.0	3.0	1.8	2.1	2.0	3.4	1.3	-3.0
Taiwan	2.2	3.5	0.6	1.2	2.8	2.6	1.7	2.4	3.0	3.3	1.5	-0.6
Selected industrial countries												
Euro-12	0.1	0.7	1.3	1.6	2.3	1.9	1.2	1.1	1.2	1.0	-3.3	-15.0
Japan	1.7	0.6	0.3	0.9	1.8	0.6	0.9	1.2	1.7	-0.7	-2.0	-9.9
United States	1.8	2.4	2.3	1.6	2.3	3.0	3.2	2.3	2.1	2.3	0.3	-9.5

Sources: International Monetary Fund; Economist; countries' statistics offices

Table 2: Inflation rates of selected trading partners, 2013–20 (percentage price increase over previous year – period averages)

	2013	2014	2015	2016	2017	2018	2019				2020	
							Q1	Q2	Q3	Q4	Q1	Q2
Selected ASEAN countries												
Cambodia	3.0	3.9	1.2	3.0	2.9	2.5	1.9	1.8	2.0	2.1	3.0	2.5
Indonesia	7.0	6.4	6.4	3.5	3.8	3.2	2.6	3.1	3.4	2.9	2.9	2.3
Malaysia	2.1	3.2	2.1	2.1	3.9	1.0	-0.3	0.6	1.3	1.0	0.9	-2.6
Singapore	2.3	1.0	-0.5	-0.8	0.6	0.4	0.5	0.8	0.5	0.6	0.4	-0.7
Thailand	2.2	1.9	-0.9	0.2	0.7	1.1	0.7	1.1	0.6	0.4	0.4	-2.7
Vietnam	6.6	4.8	0.6	2.7	3.4	3.6	2.6	2.7	2.2	3.7	5.6	2.8
Selected other Asian countries												
China	2.6	2.0	1.4	2.0	1.6	2.1	1.8	2.6	2.9	4.3	4.4	2.7
Hong Kong	4.0	4.4	3.1	2.5	1.7	2.4	2.2	2.7	3.4	3.0	2.0	1.3
South Korea	1.1	1.3	0.7	0.8	2.0	1.4	0.6	0.7	0.1	0.3	1.2	-0.1
Taiwan	0.8	1.5	0.6	1.4	0.6	1.4	0.3	0.8	0.4	0.7	0.6	-1.0
Selected industrial countries												
Euro-12	1.4	0.4	0.0	0.3	1.5	1.8	1.4	1.4	1.0	1.0	1.1	0.3
Japan	0.4	2.8	0.9	-0.1	0.6	1.0	0.3	0.7	0.3	0.5	0.5	0.1
United States	1.5	1.6	0.0	1.2	2.1	2.5	1.7	1.8	1.7	2.1	2.1	0.3

Sources: International Monetary Fund; Economist; National Institute of Statistics

Table 3: Exchange rates against the US dollar of selected trading partners, 2013–20 (period averages)

	2013	2014	2015	2016	2017	2018	2019				2020	
							Q1	Q2	Q3	Q4	Q1	Q2
Selected ASEAN countries												
Cambodia (riel)	4027.2	4037.6	4060.4	4053.6	4047.0	4045.0	4006.6	4052.1	4086.8	4063.7	4064.1	4101.4
Indonesia (rupiah)	10419.2	11850.2	13394.8	13338.3	13379.8	14227.6	14127.8	14246.8	14117.6	14060.5	14220.3	14944.2
Malaysia (ringgit)	3.1	3.3	3.9	4.1	4.3	4.0	4.1	4.1	4.2	4.2	4.2	4.3
Singapore (S$)	1.3	1.3	1.4	1.4	1.4	1.3	1.4	1.4	1.4	1.4	1.4	1.4
Thailand (baht)	30.7	32.5	34.2	35.3	33.9	32.3	31.6	31.6	30.7	30.3	31.2	32.0
Vietnam (dong)	20990.3	21138.2	21917.7	22507.5	22645.9	22663.3	22902.9	23255.5	23258.3	23217.3	23351.0	23244.6
Selected other Asian countries												
China (yuan)	6.1	6.2	6.3	6.6	6.8	6.6	6.7	6.8	7.0	7.0	7.0	7.1
Hong Kong (HK$)	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
South Korea (won)	1095.0	1053.6	1131.9	1161.0	1130.5	1099.9	1125.0	1165.4	1193.4	1174.7	1191.5	1219.8
Taiwan (NT$)	29.7	30.3	31.8	32.3	30.4	30.1	30.8	31.1	31.2	30.5	30.1	29.9
Selected industrial countries												
Euro-12 (euro)	0.8	0.8	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.9
Japan (yen)	97.6	105.9	121.0	108.8	112.1	110.4	110.1	109.9	107.3	108.7	109.0	107.6

Sources: International Monetary Fund; Economist; National Bank of Cambodia

Table 4: Selected commodity prices on the world market, 2013–20 (period averages)

	2013	2014	2015	2016	2017	2018	2019				2020	
							Q1	Q2	Q3	Q4	Q1	Q2
Maize (US No. 2) – USA(USD/ tonne)	259.4	192.9	169.8	159.2	154.5	164.4	167.5	175.9	170.1	166.8	167.6	146.3
Palm oil – northwest Europe (USD/tonne)	856.9	821.4	622.7	643.6	714.7	638.7	586.9	568.1	570.1	680.2	724.7	614.0
Rubber SMR 5 USD/tonne)	2575.3	1755.6	1392.7	1416.1	1688.3	1401.4	1436.6	1549.5	1389.7	1410.1	1374.4	1144.4
Rice (Thai 100% B) – Bangkok (USD/tonne)	533.8	434.9	395.5	406.7	452.3	444.2	426.7	430.0	439.7	442.7	481.3	547.5
Soybeans (US No.1) – USA (USD/tonne)	538.4	491.8	390.4	405.7	400.6	405.4	353.3	347.8	339.7	347.3	360.7	349.4
Crude oil – OPEC spot (USD/barrel)	105.9	96.2	49.6	40.7	52.6	69.5	60.5	65.1	59.7	60.3	49.1	30.3
Gasoline – US Gulf Coast (cents/litre)	71.2	65.6	41.0	35.2	42.4	49.6	40.9	49.4	46.0	43.3	34.2	21.8
Diesel (low sulphur No.2) – US Gulf Coast (cents/litre)	78.4	71.5	41.7	34.8	42.9	53.8	49.5	51.1	48.9	49.4	39.2	24.0

Sources: Food and Agriculture Organisation; US Energy Information Administration

Economy Watch—Domestic Performance

Main economic activities

In the second quarter of 2020, total fixed asset investment approvals decreased by 53.2 percent year on year to USD1,254.1 m, though this figure represents a 36.9 percent increase compared to the preceding quarter. The year-on-year drop, mainly driven by decreases in approvals of 25.7 percent for agriculture, 80.9 percent for services and 92.0 percent for hotels and tourism, was buoyed to some extent by increases in approvals of 548.2 percent for industry and 61.3 percent for garments. The quarterly growth was due to increases in approvals of 215.0 percent for industry and 52.2 percent for hotels and tourism, coupled with approvals of USD35.8 m for agriculture which had zero approvals in the preceding quarter.

International visitor arrivals from all destinations slumped 97.4 percent this quarter compared to the same quarter last year and 93.9 percent compared to a quarter earlier. In this quarter, the largest number of international arrivals was from China (15,941), followed by Thailand (8,430), South Korea (962), US (259), Vietnam (248), Japan (178), the UK (95), Malaysia (69) and France (65) with a further 8,500 from unspecified destinations.

Total exports increased by 25.8 percent year on year and by 19.8 percent compared to the preceding quarter. Annual export growth was mostly driven by increases in automotive exports (136.3 percent), agricultural exports (71.4 percent) and others (239.5 percent). These three exports were behind the rise in total exports compared to the preceding quarter, with increases of 65.4 percent, 15.8 percent and 261.1 percent, respectively. Compared to the same quarter last year, garment exports dropped by 21.5 percent due to declining demand from all major importing countries, except ASEAN. Garment exports to the US decreased by 13.5 percent, the EU by 27.6 percent, Japan by 10.9 percent, the UK by 30.9 percent and the rest of the world by 28.7 percent, whereas garment exports to ASEAN rose by 32.2 percent. Compared to the previous quarter, garment exports to the US dropped by 26.6 percent, the EU by 17.9 percent, Japan by 40.4 percent, the UK by 28.2 percent and the rest of the world by 25.8 percent, while garment exports to ASEAN remained stable. Despite the annual and quarterly falls, garments retained the largest share (46.7 percent) of total exports, followed by unspecified sectors (others) (42.6 percent), agriculture (7.2 percent), electronics (2.6 percent) and automotive (1.0 percent). Rice exports made the largest contribution (34.6 percent) to total agriculture exports, followed by wood (30.8 percent), unspecified agricultural products (21.4 percent), rubber (13.1 percent) and fish (0.03 percent). Disaggregating agricultural exports by sector shows a 5.2 percent decline in rubber exports compared to the previous year, but substantial increases in exports of wood (166.5 percent), unspecified agricultural commodities (131.7 percent) and rice (46.1 percent). Fish exports remained stable at USD0.1 m. Compared to the previous quarter, only rice exports dropped (by 27.7 percent) while other exports rose (wood 113.2 percent, unspecified agricultural commodities 54.3 percent and rubber 29.9 percent) and fish exports remained stable.

Total imports dropped by 18.1 percent year on year and by 16.9 percent compared to the preceding quarter. Unspecified imports took the largest share (86.2 percent) of total imports, followed by diesel (6.1 percent), construction materials (4.9 percent) and gasoline (2.8 percent). Looking at the changes compared to the same quarter last year, imports of gasoline rose by 4.7 percent and of diesel by 6.0 percent. Unspecified imports declined by 20.5 percent and construction materials by 7.7 percent. Compared to the preceding quarter, diesel imports increased by 6.9 percent and construction materials by 20.6 percent, whereas unspecified imports decreased by 19.9 percent and gasoline by 6.7 percent.

The trade balance in the second quarter was still negative with a deficit of USD110.1 m. Even so this figure represents a significant improvement in trade performance compared to the same quarter last year (USD1,990.6 m) and the preceding quarter (USD1,700.9 m).

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Public finance

Government revenue was 12.6 percent lower than the same quarter last year, but 0.2 percent higher than the preceding quarter. Current revenue was 12.9 percent lower year on year, and 0.4 percent lower than the preceding quarter. The year-on-year decline in revenue was because of a 7.5 percent drop in tax revenue driven by decreases of 3.2 percent in domestic tax, 37.5 percent in taxes on international trade and 59.4 percent in non-tax revenue. The sharp decline in non-tax revenue was due to drops of 60.2 percent in sale of goods and services and 49.2 percent in other non-tax revenues that were barely offset by the 8.2 percent increase in property income tax. Capital revenue was 45.1 percent higher than the same quarter last year. Compared to the preceding quarter, however, tax revenue rose by 11.5 percent and capital revenue by 151.5 percent, while non-tax revenue fell by 67.7 percent.

Total government expenditure was 26.9 percent higher than the same quarter last year and 19.6 percent higher than the previous quarter. Year on year, capital expenditure increased by 64.4 percent and current expenditure by 12.4 percent driven by increases of 1.2 percent in wages, 35.2 percent in subsidies and social assistance and 25.1 percent in other current expenditure. Compared to the preceding quarter, capital expenditure rose by 81.8 percent and current expenditure by 0.3 percent due to increases of 11.4 percent in subsidies and social assistance and 6.8 percent in other current expenditure despite a 6.0 percent drop in wages.

Inflation and foreign exchange rates

There was a 0.7 percentage point increase in the overall consumer price index for Phnom Penh compared to the same quarter last year, but a 0.5 percentage point decrease compared to the previous quarter. Prices of food and non-alcoholic beverages rose by 3.3 percentage points and transport costs dropped by 9.3 percentage points year on year.

Compared to the previous quarter, the riel depreciated 0.6 percent against the US dollar to KHR4,087.0 per dollar and 0.6 percent against the Vietnamese dong to KHR17.7 per 100 dongs but appreciated 2.4 percent against the Thai baht to KHR127.5 per baht.

Gold price dropped by 1.5 percent to USD185.5 per chi, diesel by 28.4 percent to KHR2,399.0 per litre and gasoline by 29.8 percent to KHR2,483.8 per litre.

Vulnerable survey

This section describes the situation of vulnerable workers using data from a CDRI survey in August 2020 with 480 vulnerable workers – 120 garment workers and 360 workers from nine other worker groups (see Table 8). Among the 10 types of vulnerable workers, skilled construction workers earned the highest daily income (KHR31,298), followed by small vegetable sellers (KHR19,479), unskilled construction workers (KHR17,870), porters (KHR15,346), motorcycle taxi drivers (KHR15,210), garment workers (KHR14,211), cyclo drivers (KHR10,779) and scavengers (KHR10,742). Rice-field workers and waiters/waitresses earned the lowest daily incomes of KHR8,712 and KHR8,997, respectively.

There are some notable changes compared to the same quarter last year and to the preceding quarter. Year on year, daily earnings increased for four types of vulnerable workers, by 24.0 percent for skilled construction workers, 7.0 percent for motorcycle taxi drivers, 5.1 percent for waiters/waitresses and 1.5 percent for small vegetable sellers, while daily earnings decreased by 18.1 percent for scavengers, 11.6 percent for garment workers, 7.3 percent for porters, 5.1 percent for rice-field workers, 3.0 percent for cyclo drivers and 2.5 percent for unskilled construction workers. Compared to the previous quarter, there were increases in daily earnings of 67.5 percent for motorcycle taxi drivers, 29.1 percent for scavengers, 18.7 percent for cyclo drivers, 16.9 percent for skilled construction workers, 7.1 percent for garment workers and 6.9 percent for waiter/waitresses, whereas the daily incomes of porters decreased by 14.1 percent, unskilled construction workers by 9.5 percent, small vegetable sellers by 3.5 percent and rice-field workers by 1.1 percent. Despite the recovery in the daily incomes of cyclo drivers, motorcycle taxi drivers and scavengers from the preceding quarter, their current earnings remained lower than in the first quarter of 2020 due to substantial drops in their earnings in the second quarter.

Excluding garment workers, in this report, the vulnerable worker types are categorised into three subgroups based on their daily earnings: below

KHR10,000, KHR10,000 to KHR15,000, and above KHR15,000. Changes in earnings for workers in these subgroups and for garment workers are described below.

As mentioned earlier, rice-field workers and waiters/waitresses were the lowest daily earners. Most of them were from four provinces: Kandal (37.5 percent), Kampong Speu (15.0 percent), Kampot (10.0 percent) and Prey Veng (10.0 percent). Half of them (51.3 percent) owned less than 1 ha of agricultural land, 16.3 percent 1 ha, 10.0 percent from 1.5 to 2 ha, and 25.0 percent owned no agricultural land. Most of them (65.8 percent) were from large families with 5 to 8 members, 23.8 percent from families with 4 members and 10.0 percent from families with fewer than 3 or fewer members. Seventy percent of them reported that they were the main income earner in their family, while the other 30.0 percent were not, and 100.0 percent of them migrated alone to work in cities. The vast majority of them (97.5 percent) worked in cities for 12 months a year. More than half (60.0 percent) of them had worked as rice-field workers or waiters/waitresses for 1 to 3 years, 37.5 percent for more than 3 years and only 2.5 percent for less than 1 year. Responding to the question, "can your income support your family?", 78.8 percent said "some", 11.3 percent "yes" and 10.0 percent "no". Their income was mainly spent on food (62.6 percent), unspecified expenses (29.9 percent), health (7.4 percent) and accommodation (0.2 percent).

Cyclo drivers and scavengers fell into the KHR10,000–15,000 per day group. Most of them came from five provinces: Prey Veng (38.6 percent), Takeo (21.3 percent), Kandal (13.8 percent), Kampong Speu (10.0 percent) and Svay Rieng (8.8 percent). Just over half of them (52.5 percent) had no agricultural land, 30.0 percent had less than 1 ha, 8.8 percent 1 ha, 5.0 percent 2 ha and 3.75 percent 1.5 ha. Most of them (62.5 percent) were from an extended family with more than 5 members, 21.3 percent from families with 4 members and 16.25 percent from families with 3 or fewer members. The vast majority of them (92.5 percent) were the main income earner in their family; 51.3 percent migrated alone to cities, while 48.8 percent migrated with their family. The majority of them (86.3 percent) worked as cyclo drivers or scavengers for 10 to 12 months per year. They mainly spent their income on food (73.6 percent), accommodation (12.2 percent), unspecified expenses (9.0 percent), health (5.1 percent) and transport (0.09 percent).

Porters, small vegetable sellers, motorcycle taxi drivers, unskilled construction workers and skilled construction workers earned more than KHR15,000 a day. Mostly, they were from Prey Veng province (30.5 percent), Svay Rieng (24.0 percent), Kandal (7.5 percent) and Phnom Penh (6.5 percent). Most of them either had no agricultural land (28.0 percent) or owned less than 1 ha (27.5 percent), 26.0 percent owned more than 1 ha and 18.5 percent owned 1 ha. They were mainly (43.0 percent) from extended families with 5 to 8 members, 4 members (25.0 percent), 3 or fewer members (13.0 percent), and 9 or more members (3.0 percent). The vast majority of them (91.5 percent) reported that they were the main income earner in their family. About half of those (47.5 percent) working as porters, small vegetable sellers, motorcycle taxi drivers, unskilled or skilled construction workers had work for 12 months a year, 18.0 percent for 10 months, 10.0 percent for 6 months, 7.0 percent 8 months, 5.0 percent 9 months, 4.5 percent 7 months, 3.0 percent 5 months, 4.0 percent 11 months, and only 0.5 percent had worked for just 3 months. They mainly spent their income on food (71.6 percent), accommodation (14.9 percent), unspecified expenses (5.4 percent), health (4.2 percent) and transport (3.8 percent).

Garment workers earned KHR14,211 per day on average. They were from 16 provinces with 25.8 percent from Prey Veng, 13.3 percent from Kandal, 10.8 percent from Takeo, 9.2 percent from Kampong Cham, 9.2 percent from Kampong Thom and 7.5 percent from Kampong Speu. The largest proportion of garment workers either had no agricultural land (39.2 percent) or owned less than 1 ha (25.0 percent), 20.0 percent owned 1 ha, 9.2 percent 2 ha, 4.2 percent 1.5 ha, and 2.5 percent 2.5 to 4 ha. Of the interviewed garment workers, 44.2 percent were from extended families with 5 or more members, 30.0 percent from families with 4 members and 25.8 percent from families with 3 or fewer members. Answering the question "can your income support your family?" 47.5 percent said "some", 28.3 percent "yes" and 24.2 percent "no". Their income was mainly spent on food (67.4 percent), accommodation (24.2 percent), unspecified expenses (5.7 percent), health (2.1 percent) and transport (0.7 percent).

Table 1: Private investment projects approved, 2013–2020

	2013	2014	2015	2016	2017	2018	2019				2020	
							Q1	Q2	Q3	Q4	Q1	Q2
	fixed assets (USD m)											
Agriculture	930.5	56.5	169.8	117.1	62.9	214.9	17.2	48.2	1.9	27.5	0.0	35.8
Industry	3257.0	1002.5	1014.7	1436.4	982.2	1186.2	292.9	113.7	302.0	919.9	234.0	737.0
. *Garments*	324.1	393.5	225.2	380.7	211.1	187.3	73.9	34.4	47.3	74.1	106.0	55.5
Services	140.7	622.6	2734.4	1664.3	3858.6	4351.8	1625.6	2518.2	849.7	1440.4	682.1	481.2
. *Hotels and tourism*	106.0	446.9	98.6	1366.9	2759.6	1584.0	1618.8	2518.2	808.7	1703.8	133.0	202.4
Total	4328.0	1583.9	3918.9	3217.7	4903.7	5752.9	1935.6	2680.1	1153.5	2387.8	916.1	1254.1
	percentage change from previous quarter											
Total	-	-	-	-	-	-	4.9	38.5	-57.0	107.0	-61.6	36.9
	percentage change from previous year											
Total	63.4	-63.4	147.4	-17.9	52.4	17.3	312.5	12.6	8.9	29.4	-52.7	-53.2

Note: Including expansion project approvals. Source: Cambodian Investment Board

Table 2: Value of construction project approvals in Phnom Penh, 2009–2015

	2009	2010	2011	2012	2013	2014				2015	
						Q1	Q2	Q3	Q4	Q1	Q2	Q3
	USD m											
Villas, houses and flats	213.9	220.1	405.1	547.3	658.9	133.6	84.0	33.1	20.4	122.3	-	637.6
Other	227.3	217.8	199.9	463.6	859.6	190.0	141.7	105.6	11.7	49.8	-	252.6
Total	441.2	489.8	605.0	1010.9	1518.5	323.6	225.7	138.7	32.1	172.0	-	897.4
	percentage change from previous quarter											
Total	-	-	-	-	-	34.3	-30.2	-38.5	-77.8	437.3	-	-
	percentage change from previous year											
Total	-60.5	11.0	23.5	67.1	28.1	8.0	-9.2	-64.2	-86.7	-46.8	-	-

Source: Department of Cadastre and Geography of Phnom Penh municipality

Table 3: Foreign visitor arrivals, 2013–2020

	2013	2014	2015	2016	2017	2018	2019				2020	
							Q1	Q2	Q3	Q4	Q1	Q2
	thousands											
China	463.1	560.3	694.7	830.0	1210.8	2024.4	683.4	609.1	572.5	496.9	259.7	15.9
Vietnam	854.1	905.8	987.8	959.7	835.4	800.1	186.9	214.8	235.7	271.5	179.5	0.2
South Korea	435.0	424.4	395.3	357.2	345.0	301.8	95.7	43.6	47.4	68.1	41.7	1.0
Thailand	221.3	279.5	349.9	398.1	394.9	382.3	97.9	76.3	113.9	178.4	152.7	8.4
US	185.0	191.4	217.5	238.7	256.5	250.8	79.0	53.2	45.5	71.2	42.7	0.3
Japan	206.9	215.8	193.3	191.6	203.4	210.5	60.2	40.4	48.9	58.2	39.8	0.2
France	131.5	141.1	145.7	150.3	166.4	170.8	59.4	27.3	32.9	44.5	41.8	0.1
UK	123.9	133.3	154.3	159.5	171.2	162.4	59.4	29.7	28.5	45.6	44.2	0.1
Malaysia	130.7	144.4	149.4	152.8	179.3	201.1	48.7	43.2	46.5	64.6	24.9	0.1
By air	2017.7	2273.5	2476.0	2778.0	3312.7	6405.6	1299.1	1054.8	1039.9	1010.2	663.6	26.3
By land or water	2192.5	2229.3	2299.2	2331.4	2289.4	3242.2	578.7	405.8	436.0	786.1	491.6	8.4
Total	4210.2	4502.8	4775.2	4980.4	5602.2	9647.7	1877.9	1460.6	1475.8	1796.3	1155.2	34.7
	percentage change from previous quarter											
Total	-	-	-	-	-	-	2.9	-22.2	1.0	21.7	-35.7	-93.6
	percentage change from previous year											
Total	17.5	7.0	6.1	4.3	12.5	72.2	9.7	13.2	7.4	-1.6	-38.5	-97.4

Source: Ministry of Tourism

Table 4: Exports and imports, 2013–2020

	2013	2014	2015	2016	2017	2018	2019				2020	
							Q1	Q2	Q3	Q4	Q1	Q2
	USD m											
Total exports	6106.4	8106.0	9256.4	10043.3	10772.9	12783.8	3222.7	3379.0	4263.9	3524.9	3550.1	4251.5
Of which: Garments	5015.4	5960.5	6827.0	7308.0	8020.3	9506.0	2463.4	2526.3	3143.8	2530.9	2647.2	1983.8
. *To US*	2143.3	1963.6	2009.4	1831.5	1923.8	2483.2	739.8	802.9	1006.5	848.0	945.9	694.3
. *To EU*	1716.9	2403.7	2903.9	2928.7	2782.2	3155.3	719.2	801.1	965.4	716.2	706.3	579.9
. *To ASEAN*	39.4	83.3	103.4	98.4	106.9	135.3	38.1	41.3	48.2	53.1	54.6	54.6
. *To Japan*	188.6	383.1	524.2	655.5	701.2	890.8	262.9	175.8	291.2	236.8	262.9	156.7
. *To UK*		-	-	439.8	904.0	1007.0	211.5	197.7	272.9	200.3	190.2	136.6
. *To rest of the world*	927.2	1126.8	1286.3	1354.2	1602.2	1834.3	491.7	507.5	559.7	476.4	487.3	361.7
Electronics	-	-	-	-	380.0	328.7	71.9	123.8	142.3	116.3	113.0	111.0
Automotive	-	-	-	-	11.6	94.4	20.4	18.2	22.7	24.1	26.0	43.0
Agriculture	376.7	624.4	548.8	534.1	706.4	850.9	210.4	177.7	211.0	288.1	262.9	304.5
. *Rubber*	176.6	153.9	165.4	165.3	273.5	217.6	43.8	42.2	60.0	73.3	30.8	40.0
. *Wood*	36.8	132.0	46.3	47.2	100.5	142.3	22.2	35.2	42.4	47.5	44.0	93.8
. *Fish*	2.0	0.8	0.5	0.6	0.6	1.3	0.1	0.1	0.1	0.1	0.1	0.1
. *Rice*	146.4	248.5	315.3	300.8	255.1	413.6	122.4	72.2	84.5	140.2	145.9	105.5
. *Other agriculture*	14.9	89.1	21.3	20.2	76.7	76.2	21.9	28.1	24.1	26.9	42.2	65.1
Others	714.4	1520.1	1880.2	2201.2	1654.7	2003.8	456.6	532.9	744.0	565.6	501.0	1809.2
Total imports	8639.4	10295.4	11494.5	15013.4	16815.4	16904.7	4437.7	5328.6	5091.4	5324.3	5250.9	4361.5
Of which: Gasoline	306.4	334.7	377.3	384.8	256.7	320.5	121.1	117.1	118.6	121.9	131.4	122.6
Diesel	569.1	602.3	607.8	709.1	472.9	594.1	228.2	250.2	166.4	248.9	248.1	265.1
Construction materials	80.8	117.6	164.4	253.2	304.3	564.5	170.8	231.4	271.2	224.4	177.0	213.5
Other	7682.6	9240.7	10345.1	13666.3	15781.6	15425.7	3917.7	4729.9	4535.2	4729.1	4694.4	3760.4
Trade balance	-1610.9	-2184.3	-2238.1	-4970.0	-5974.1	-4120.9	-1215.0	-1990.6	-827.5	-1799.4	-1700.9	-110.1
	percentage change from previous quarter											
Total garment exports	-	-	-	-	-	-	7.0	2.6	24.4	-19.5	4.6	-25.1
Total exports	-	-	-	-	-	-	2.8	7.8	26.2	-17.3	0.7	19.8
Total imports	-	-	-	-	-	-	6.0	27.2	-4.5	4.6	-1.4	-16.9
	percentage change from previous year											
Total garment exports	7.4	10.7	14.5	7.0	9.7	18.5	17.7	12.8	9.5	9.9	7.5	-21.5
Total exports	14.3	16.1	14.2	8.5	7.9	17.9	13.7	12.6	11.8	12.4	10.2	25.8
Total imports	15.4	19.7	11.7	30.6	12.0	0.5	4.6	18.5	28.0	27.1	18.3	-18.1

Note: Import data includes tax-exempt imports. Sources: Department of Trade Preference Systems; Ministry of Commerce and Customs and Excise Department; Ministry of Economy and Finance (website)

Table 5: National budget operations on cash basis, 2013–2020 (billion riels)

	2013	2014	2015	2016	2017	2018	2019				2020	
							Q1	Q2	Q3	Q4	Q1	Q2
Total revenue	8255.2	10543.4	11879.9	14201.5	16582.0	19743.1	5097.5	6357.1	6364.5	6930.3	5544.2	5554.9
Current revenue	8233.2	10359.4	11759.0	14088.7	16481.4	19549.0	5066.8	6322.2	6309.2	6869.7	5524.0	5504.1
Tax revenue	7198.1	8995.2	10502.4	12196.5	14314.3	17019.2	4524.3	5663.5	5415.1	6009.8	4697.1	5236.7
Domestic tax	5728.1	7226.5	8591.7	10185.8	12338.7	14648.3	3904.9	4944.9	4634.1	5215.9	4076.5	4787.8
Taxes on international trade	1470.0	1822.7	1910.7	2010.7	1875.6	2370.9	619.4	718.6	781.0	793.9	620.6	448.9
Non-tax revenue	1035.2	1310.3	1256.6	1892.2	2167.2	2520.9	542.5	658.7	894.1	859.9	826.9	267.4
Property income	84.0	88.5	77.3	116.0	127.2	197.3	177.4	34.0	30.2	22.9	289.6	36.8
Sale of goods and services	750.3	871.2	1047.1	1248.3	1517.0	2075.6	330.7	531.2	798.5	750.0	500.9	211.6
Other non-tax revenue	200.8	350.5	132.2	528.0	523.1	253.9	34.5	93.5	65.5	87.1	36.4	47.5
Capital revenue	73.4	184.0	121.0	113.4	100.5	194.1	30.7	35.0	55.4	60.7	20.2	50.8
Total expenditure	12535.7	13306.5	13849.5	13775.4	17251.0	19027.1	4150.4	4997.6	5386.5	7676.8	5301.7	6342.8
Capital expenditure	5567.5	5590.7	5290.3	3785.3	5207.2	5730.2	1025.0	1392.7	1358.6	3195.4	1259.3	2289.2
Current expenditure	6968.3	7715.8	8544.6	9990.1	12043.7	13297.0	3125.4	3604.9	4027.9	4481.3	4042.5	4053.5
Wages	2997.3	3755.5	4271.9	5381.7	6647.4	7558.4	1820.2	1911.1	2102.0	1883.3	2058.0	1934.4
Subsidies and social assistance	1563.0	1627.0	1742.9	1774.9	2314.8	2505.4	729.2	1061.9	855.5	1620.3	1288.2	1435.6
Other current expenditure	2408.0	2333.4	2529.8	2833.5	5394.3	5738.6	1305.2	1693.8	1925.8	2598.1	1984.4	2119.2
Overall balance	-160.8	-2763.1	-1969.6	426.1	-669.1	-205.4	947.1	1,359.6	978.0	-746.4	242.4	-787.9
Foreign financing	-4280.6	3972.1	3729.4	1878.9	3358.1	716.1	652.8	895.5	608.8	1383.3	369.5	1180.5
Domestic financing	4326.2	-1428.7	-2034.9	-1858.7	-2454.1	2513.5	-44.4	-7.6	11.9	-18.0	3.2	18.7

Source: Ministry of Economy and Finance website

Table 6: Consumer price index, exchange rates and gold prices (period averages), 2013–2020

	2013	2014	2015	2016	2017	2018	2019				2020	
							Q1	Q2	Q3	Q4	Q1	Q2
	consumer price index (percentage change from previous year)											
Phnom Penh – All Items	3.0	3.9	1.2	3.1	2.9	2.5	1.9	1.8	2.0	2.0	3.0	2.5
- Food and non-alcoholic beverages	3.9	4.9	4.0	5.6	3.4	2.5	2.1	1.6	2.2	2.4	3.7	4.9
- Transport	-0.6	-1.0	-9.2	-6.9	4.1	2.9	-3.8	-1.5	-2.5	-1.4	2.6	-10.8
	exchange rates, gold and oil prices (Phnom Penh market rates)											
Riels per US dollar	4037.3	4036.2	4060.4	4053.7	4047.5	4045.0	4006.6	4052.1	4086.8	4063.7	4064.1	4087.0
Riels per Thai baht	133.1	124.9	119.4	115.5	120.0	125.9	127.4	128.9	133.7	134.9	130.7	127.5
Riels per 100 Vietnamese dong	19.3	19.1	18.7	18.2	17.9	17.7	17.4	17.5	17.7	17.6	17.6	17.7
Gold (US dollars per chi)	175.9	152.3	140.6	151.2	151.5	152.8	156.6	157.1	175.7	178.1	188.3	185.5
Diesel (riels/litre)	5019.0	4852.1	3771.3	3004.0	3385.8	3808.7	3413.9	3595.4	3499.7	3499.5	3343.5	2393.0
Gasoline (riels/litre)	5264.2	5083.3	3951.7	3336.8	3716.0	3982.5	3405.7	3770.2	3629.3	3685.9	3538.8	2483.8

Sources: National Institute of Statistics, National Bank of Cambodia, CDRI

Table 7: Monetary survey, 2013–2020 (end of period)

	2013	2014	2015	2016	2017	2018	2019				2020	
							Q1	Q2	Q3	Q4	Q1	Q2
	billion riels											
Net foreign assets	21260.1	26699.7	26665.5	31814.5	42575.3	55214.3	58148.8	55238.0	58667	60182.9	57001.8	63515.6
Net domestic assets	11508.3	15859.8	22157.6	25802.3	28743.5	33228.9	33997.2	55274.0	34814.3	34856.1	62221.0	60598.8
Net claims on government	-2794.9	-4359.1	-6428.8	-8148.5	-11066.5	-14803.7	-17381.0	-19828.0	-21574.8	-23884.4	-24650.6	-24152.1
Credit to private sector	27608.8	36244.6	46071	56458.8	66922.6	82419.3	86575.2	111686.0	119358.9	125629.4	131815.3	132849.9
Total liquidity	32768.4	42559.5	48823.1	57616.6	71318.9	88443.2	92146.0	110512.0	116766.5	118436.4	119222.8	124114.4
Money	4878.2	6308.4	6741.4	7273.0	9428.4	10226.8	10782.0	9883.0	11933.4	11906.3	12880.5	12650.4
Quasi-money	21260.1	26699.7	42081.7	50343.8	61890.4	78216.4	81364.0	95196.0	98378.3	99650.6	99700.8	103956.6
	percentage change from previous year											
Total liquidity	14.6	29.9	14.7	18.0	23.8	24.0	24.0	22.6	21.3	20.4	29.4	12.3
Money	20.6	29.3	6.9	7.9	29.6	8.5	8.5	12.6	18.0	32.7	19.5	28.0
Quasi-money	13.6	30.0	16.1	19.6	22.9	26.4	26.4	24.1	21.7	18.8	22.5	9.2

Source: National Bank of Cambodia

Table 8: Real average daily earnings of vulnerable workers (base November 2000)

	Daily earnings (riels)									Percentage change from previous year		
	2017	2018	2019				2020			2020		
			Feb	May	Aug	Nov	Feb	May	Aug	Feb	May	Aug
Cyclo drivers	10793	10793	11764	10567	11114	12046	10997	9081	10779	-6.5	-14.1	-3.0
Porters	14942	14942	15882	17323	16560	18802	18246	17856	15346	14.9	3.1	-7.3
Small vegetable sellers	17015	17015	18912	21472	19197	18651	15207	20181	19479	-19.6	-6.0	1.5
Scavengers	11591	11591	12941	12685	13123	13099	14759	8322	10742	14	-34.4	-18.1
Waitresses*	22901	22901	8299	8348	8564	8724	8706	8420	8997	4.9	0.9	5.1
Rice-field workers	17341	17341	8209	7909	9180	9376	9154	8812	8712	11.5	11.4	-5.1
Garment workers	14231	14231	16073	15166	16076	16578	16483	13271	14211	2.6	-12.5	-11.6
Motorcycle taxi drivers	8093	8093	14705	15104	14219	14904	17748	9081	15210	20.7	-11.9	7.0
Unskilled construction workers	8055	8055	19820	17987	18322	18814	22916	19741	17870	15.6	9.7	-2.5
Skilled construction workers	14093	14093	26265	24743	25235	27225	27164	26778	31298	3.4	8.2	24.0

Notes: * Waitresses' earnings do not include meals and accommodation provided by shop owners. Surveys on the revenue of waitresses, rice-field workers, garment workers, motorcycle taxi drivers and construction workers began in February 2000. November 2015 data are not available. Source: CDRI

Continued from page 28 **CDRI UPDATE**

inclusive economic growth, specifically towards achieving the targets of the Cambodia Social Development Goals and Cambodia Visions 2030 and 2050, and in adjusting to the new normal post Covid-19.

13 Jul, CDRI, Phnom Penh

CDRI and NGO Forum discussed collaboration. CDRI's executive director and director of research met with Dr Tek Vannara, executive director of the NGO Forum on Cambodia. They discussed opportunities for collaborative research to inform policy and legislation within Cambodian government agencies.

22 Jul, MOEYS, Phnom Penh

CDRI and the Ministry of Education, Youth and Sport (MOEYS) discuss a partnership and cooperation framework to bridge the gap between education and youth policy researchers and policymakers. As a follow-up to the courtesy visit on 11 May of CDRI's executive director to HE Dr Hang Chuon Naron, Minister of Education, Youth and Sport, CDRI's director of research, director of CERI, and external relations officer met with Dr Bo Chankoulika, deputy head of the Education Research Council and director of Policy Planning at MOEYS, and her colleagues. The purpose of this framework is to promote evidence-based education and youth policy and development.

28 Jul, MOEYS, Phnom Penh

Education Minister briefed CDRI delegation on priorities in education. HE Dr Hang Chuon Naron met with CDRI's executive director, research director, director of CERI, and senior communications officer to discuss the plan to establish a partnership and cooperation framework between MOEYS and CDRI. The minister briefed the CDRI delegates about the ministry's vision and strategic focus on innovative education and curriculum, including e-learning for soft skills. Quality education and training are ever more critical given the current rapid economic and social changes and extraordinary circumstances caused by Covid-19. Citing the minister, "the best way to equip children and youth for the future is to place their learning at the centre".

30 Jul, Phnom Penh

CDRI delegation led by the Chair of CDRI's Board of Directors paid a courtesy visit to HE Chea Chanto. HE Chea Chanto, governor of the National Bank of Cambodia (NBC), co-founder of CDRI and honorary chair of CDRI's Board of Directors, welcomed a CDRI delegation comprising HE Dr Mey Kalyan, chair of CDRI's Board of Directors, CDRI's executive director and director of research. He recalled with great pride and pleasure the establishment of CDRI by Prime Minister Hun Sen, Mme Eva Mysliwiec and himself in 1990.

11 Aug, MOEYS, Phnom Penh

Signing of MOU on cooperation and partnership between CDRI and MOEYS. The objective of this MOU is to support the efforts of MOEYS in pursuing inclusive and equitable quality education for all by ensuring the accomplishment of the goals set out in Education Strategic Plan 2019–23, Cambodia's Education Roadmap 2030 and National Policy for Youth Development, and adjusting to the new normal post Covid-19. Areas of cooperation include joint research for evidence-informed policymaking; research capacity development in national and subnational institutions; data collection, management and sharing; assessment of the immediate and long-term effects of Covid-19; policy dialogues, training workshops, academic conferences and other high-profile events; and regular consultations, staff exchanges and visits. The parties will use collaborative research, mutual learning, individual and institutional capacity building models to draw on and share expertise, knowledge and skills within their organisations and strengthen evidence-based policy research capacity.

13 Aug, Hotel Cambodiana, Phnom Penh

Dissemination workshop on the Contribution of Vocational Skills Development to Inclusive Industrial Growth and Transformation: An Analysis of Critical Factors in Cambodia. Organised by CDRI, the workshop was presided over by CDRI's executive director and HE Hing Sideth, director general of Technical and Vocational Education and Training, Ministry of Labour and Vocational Training. The three presentations covered the Introduction to the Research Project; the Contribution of Vocational Skills Development to Inclusive Industrial Growth and Transformation:

An Analysis of Critical Factors in Cambodia; and Exploring Insights into Cambodia's Industry: Skills and Transformation. The first two were delivered by CDRI researchers and the third by a PhD Student at Paññāsāstra University of Cambodia. In the afternoon, participants went on a study visit to Confirel Co. Ltd.

14 Aug, Phnom Penh

CDRI and the General Department of Administration of the Ministry of Interior (MOI) signed an MOU. HE Prak Samoeun, director general of the General Department of Administration of MOI, and CDRI's executive director signed an MOU to cooperate in research, experience and information sharing, and capacity development, with a focus on governance and reform, economic development, welfare and education, and the environment. Cooperation activities are to include joint research and publications; workshops, conferences and training; sharing research resources, statistics and information; dissemination of research findings; and capacity development for subnational administrations.

24 Aug, web conference

CDRI co-hosted a regional dissemination web conference. CDRI, in partnership with research partners from China, Thailand and Vietnam, co-hosted a web conference for the research program Enhancing Research and Dialogue on Contract Farming in the Mekong-Lancang Region. The project was funded under the Mekong-Lancang Special Cooperation Fund. The study has deepened understanding of the situation and limitations of contract farming in Mekong countries, identified success and failure factors, assessed risks and benefits, and documented best contract farming practices across a range of agricultural commodities (rice, mango, pepper, cashew nuts, coffee, Cavendish bananas and durian). Building on the findings, CDRI plans to conduct a more detailed study with the Department of Agro-Industry (Ministry of Agriculture, Forestry and Fisheries), NGO Forum on Cambodia and other civil society organisations with a view to informing policy and legislation.

2 Sep, CDRI, Phnom Penh

CDRI welcomes Yon Sovann, CEO of Bayon Cereal and board member of the Cambodian Rice Federation. Yon Sovann visited CDRI to brief researchers and managers on the low to mid glycaemic index rice products being developed and promoted by his company in collaboration with the Glycaemic Index Foundation in Australia and the Glycaemic Index Research Unit in Singapore.

3 Sep, CDRI, Phnom Penh

CDRI welcomes Zhang Bao, a new member of CDRI's Board of Directors. CDRI's executive director, staff representative, director of CDRI's Centre for Policy Research on Agriculture and Rural Development (CPARD), and the secretary of CDRI's Board of Directors welcomed Zhang Bao, who was appointed to the Board in August. He is Chief Correspondent for the *China Economic Daily* and based in Cambodia, and has experience of development research in China and internationally.

3 Sep, CDRI, Phnom Penh

Consultation workshop on the draft National Agriculture Master Plan 2030. CDRI's executive director and a senior researcher from CPARD participated in the consultation workshop on the draft National Agriculture Master Plan 2030, hosted by the NGO Forum on Cambodia and supported by Oxfam Cambodia. The workshop was attended by representatives from local and international NGOs, development banks, thinktanks and other academic institutions. CDRI delivered a keynote address on the impacts of Covid-19 and other natural and anthropogenic changes on agriculture.

9 Sep, Phnom Penh

CDRI met with UN Resident Coordinator. CDRI senior managers and research centre directors met with Pauline Tamesis, the new UN Resident Coordinator to Cambodia, and Kongchheng Poch, Senior Economist at the Cambodia UN Resident Coordinator Office. Both sides shared their views, frameworks and workplans for contributing to the Covid-19 recovery process in Cambodia and explored how CDRI could work with the UN system to support the Cambodian government in "building back better" from the pandemic. Regular update meetings will enable synergies between CDRI's research and UN programs, and a series of joint policy dialogues with partners and key decision makers will inform policy.

10 Sep, CDRI, Phnom Penh

The Asia Foundation (TAF) paid a courtesy visit to CDRI. Meloney Lindberg, country representative of TAF, and Heang Sophea, program manager for TAF's Ponlok Chomnes Program, paid a courtesy visit to CDRI. Supported by DFAT, the partnership between TAF and CDRI focuses on research, policy dialogue and capacity development in higher education. Ongoing research projects under this partnership include adoption of educational technology during the Covid-19 pandemic, STEM literacy and major choices, internationalisation of higher education in Cambodia, and typology of Cambodian higher education institutions.

11 Sep, CDRI, Phnom Penh

CDRI staff social event for recreation, team building and effective communication. We started by welcoming our new librarian, who brings to CDRI her experience of knowledge management and language teaching. We then listened to presentations by junior researchers on data management tools and their personal and professional experience as CDRI researchers. CDRI staff and managers bid a fond farewell to Chhim Chhun, a long-serving research fellow, and expressed their appreciation for his valuable contribution to CDRI's research.

11 Sep, Phnom Penh

CDRI met with Dr Gong Sen, executive vice president of the Centre for International Knowledge on Development (CIKD), China. CDRI senior managers and researchers met with Dr Gong Sen via Zoom. The parties briefed each other on their strategic directions and missions and explored areas for cooperation and partnership, including exchange of research findings on international development issues, knowledge development and management, and knowledge application. Areas of mutual interest are industrial parks and special economic zones, urbanisation (China's experience), poverty reduction, resilience to withstand social and economic stressors resultant of the pandemic and other shocks and stresses to wellbeing, workforce development, and technology and infrastructure.

14 Sep, Phnom Penh

CDRI delegation paid a courtesy visit to Wang Dexin, director at the Political Office of the Chinese Embassy in Cambodia. A CDRI delegation comprising the executive director, director of research, and two centre directors paid a courtesy visit to the Chinese Embassy. CDRI over the last five years has developed strong links with the Chinese Embassy through scholarly exchange and collaborative research under the Mekong-Lancang Cooperation.

29 Sep, via Zoom or in person at CDRI's Knowledge Centre

Policy talk on Teaching and Learning during the Covid-19 Pandemic: School Responses and Student Experiences. CDRI co-hosted with TAF a policy talk on Teaching and Learning during the Covid-19 Pandemic: School Responses and Student Experiences. Discussion centred on the responses of MOEYS and educational establishments to the pandemic and student experiences with online learning. Key questions included: To what extent are schools and universities and students prepared to shift to the new mode of teaching and learning? How have schools and universities responded to the constraints posed by the pandemic? And what have we learned from the response efforts and student experiences with the new learning environment?

30 Sep, MEF, Phnom Penh

Steps for implementing the MOU between CDRI and MEF. CDRI's executive director and external relations officer met with HE Vongsey Visoth, secretary of state, MEF, to discuss the steps for carrying out collaborative research and policy analysis under the MOU. He encouraged CDRI to be responsive to information/knowledge needs and to adopt a timely strategic outlook and long-term planning.

Research Highlights

Centre for Development Economics and Trade (CDET)

The centre, in collaboration with the National Institute of Posts, Telecoms and ICT, is undertaking a *Digital Skills Assessment Survey*. The project receives financial support from the Capacity Building Research and Development Fund of the Ministry of Posts and Telecommunications. An online consultative workshop was held on 1 July to gather additional inputs to strengthen research design, questionnaires and survey tools. Enumerator

training started after the workshop. Data collection for the student survey was completed in August, whereas that for the firm survey is ongoing.

The team has completed the draft report on *Street Vendors, Youth Employment and Poverty Reduction*. The report is being modified based on feedback from an internal review and will then be published as a CDRI working paper. Phase I of the project *Contribution of Vocational Skills Development to Inclusive Industrial Growth and Transformation: An Analysis of Critical Factors in Six Countries,* funded by a grant from Zurich University of Teacher Education, concluded with a dissemination workshop on 13 August at Cambodiana Hotel, Phnom Penh, and the release of a CDRI working paper. The project *Agricultural Trade between China and Mekong-Lancang Countries: Value Chain Analysis,* carried out under the Mekong-Lancang Special Cooperation Fund, also concluded with a virtual dissemination workshop involving research partners, relevant government ministries and other stakeholders in the Greater Mekong Subregion. A book proposal was submitted to the ISEAS-Yusof Ishak Institute, Singapore, which has agreed in principle to publish the edited volume of country research papers. The team has been working to resubmit the manuscripts; the book should be published in 2021.

The centre also received a grant from Canada's International Development Research Centre (IDRC) to work in partnership with the Faculty of Economics and Business Management at the National University of Laos, Centre for Economic and Social Development, Myanmar, and Centre for Analysis and Forecasting, Vietnam, to implement a three-year research project on *The Impact of Covid-19 on Inclusive Development and Democratic Governance: Rapid and Post-Pandemic Assessment in the Mekong Subregion*. CDRI is the consortium coordinator.

Centre for Educational Research and Innovation (CERI)

The centre published two working papers – C*haracteristics and Issues of Internship at Cambodian Private Firms* and *Understanding Cambodian Deans' Conceptions and Approaches to University Accountability,* and two articles in the Cambodia Development Review titled "A Review of the Development and Implementation of Competency-Based Education and Training" and "No Dead-End Ahead: Permeability between Tertiary Vocational Education and Training and Academic Educations". These papers were funded by the Swiss Agency for Development and Cooperation (SDC), Swedish International Development Cooperation Agency (Sida), and Australia's Department of Foreign Affairs and Trade (DFAT) through The Asia Foundation (TAF).

Given the unprecedented times denoted by the Covid-19 pandemic, CERI is conducting a study titled *Forced Adoption of Educational Technology during the Covid-19 Pandemic: The Case of Higher Learning Institutions in a Developing Economy*. This study aims to measure technological readiness and preparedness and the adoption of online learning technologies in Cambodian higher education. The data collection has been completed, and the data is being analysed. The write-up stage starts in the fourth quarter. This nationally representative study is co-funded by DFAT through TAF and the Mekong-Lancang Cooperation Special Fund. The findings will contribute to policymaking and discussions on post-Covid-19 adaptation at the Ministry of Education, Youth and Sports (MOEYS) and Ministry of Labour and Vocational Training (MOLVT).

A series of in-house capacity building training courses was organised. The training covered an array of topics, from fieldwork preparation and organisation, data collection and analysis, to report writing and dissemination of findings. The training was aimed at interns and junior researchers.

On 29 September, at CDRI's Knowledge Centre, CERI co-hosted with TAF a policy talk on Teaching and Learning during the Covid-19 Pandemic: School Responses and Student Experiences. The discussion centred on the responses to the pandemic by MOEYS and educational establishments and student experiences with online learning. With speakers coming from the National Institute of Posts, Telecommunications and Information Communication Technology (NIPTICT), the Department of Policy of MOEYS, and CDRI, discussion focused on such key questions as: To what extent are schools and universities and students prepared to shift to the new mode of teaching and learning? How have schools and universities responded to the pandemic and subsequent restrictions? And what have we learned from the

response efforts and student experiences with the new learning environment?

Centre for Governance and Inclusive Society (CGIS)

Researchers participated in several cross-centre research projects. Three female researchers undertook data collection for the study *Gender and Inclusive Development Analysis,* which is led by the Centre for Policy Research in Agriculture and Rural Development. The team also worked with researchers from the Centre for Natural Resources and Environment for the study on the *State of Gender Equality and Climate Change in Cambodia*. The final cross-centre research project, led by CGIS with education researchers and economics researchers is the study on *Development Cooperation of Cambodia's Major Partners* with a focus on collaboration opportunities for achieving aid harmonisation and local leadership.

Responding to Covid-19 research calls, CGIS submitted two research proposals: one to IDRC on *Wide-scale Communication between Government and Communities to Counter Mis- and Disinformation in Cambodia*, and the other to the UK Research and Innovation/Newton Fund on *Social Protection and the Gendered Impact of Covid-19 in Cambodia*. The latter proposal was successful, and work is already well underway with the design of a worker survey, which will be implemented in the next quarter. This research is a collaboration with Royal Holloway, University of London, and the University of Nottingham.

The centre welcomed a new female researcher, San Sophany, a knowledgeable and experienced gender studies researcher.

Centre for Natural Resources and Environment (CNRE)

CNRE has produced good quality research, which has helped build CDRI's reputation as a trustworthy and credible leading policy thinktank, especially in the fields of natural resources, environment and climate change. The team has been undertaking a study on *Ecosystem Services in Community-Based Ecotourism: Challenges and Potential for Livelihood Improvement.* In addition, CNRE researchers have been engaged in various studies on climate change, including the *Impact of Climate Change Programs in Cambodia: Vulnerability, Poverty and Gender*, and the *State of Climate Change in the ASEAN Region: Cambodia Study.* Regarding agricultural development, CNRE researchers have conducted assessments for a study – *Benefits of Rice Contract Farming,* and *Contract Farming in the Mekong-Lancang Region*.

CNRE submitted two proposals, one to the University of Chicago which is the study about *"Becoming Urban: Understanding the Urban Transformation of Migrants to Phnom Penh"* and the other to the Canada Fund on the topic of *"Empowering Women Ethnic Groups in Commune Council for Women and Children (CCWC) and Commune Council for Disaster Management (CCDM) in Cambodia through capacity building training workshops".*

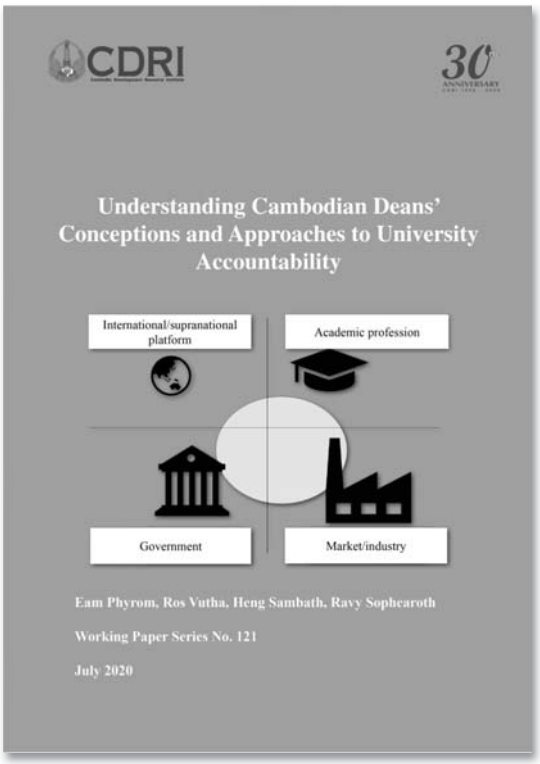
After compiling the research report for *Contract Farming in the Mekong-Lancang Region*, CNRE hosted a regional dissemination webinar conference, which provided fruitful results for the project team.

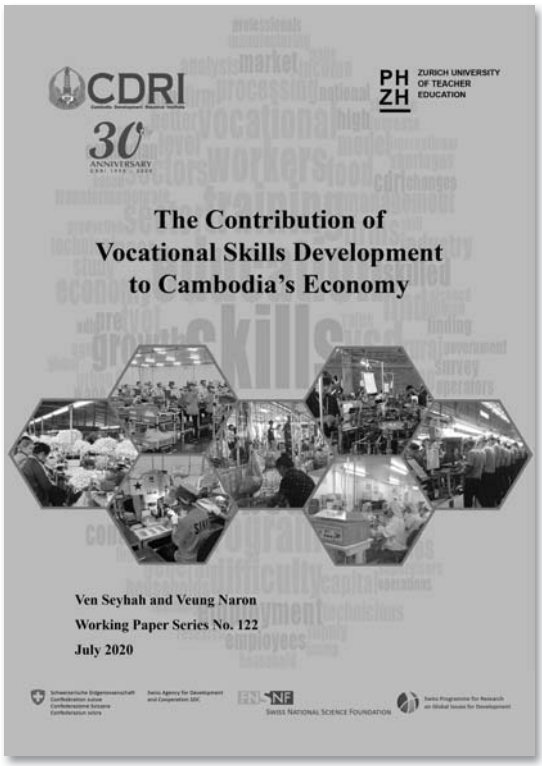
The centre welcomed a new female researcher, Keang Saren, an experienced gender and development studies researcher, and two new research interns, Kim China and Seng Sokunpiseth.

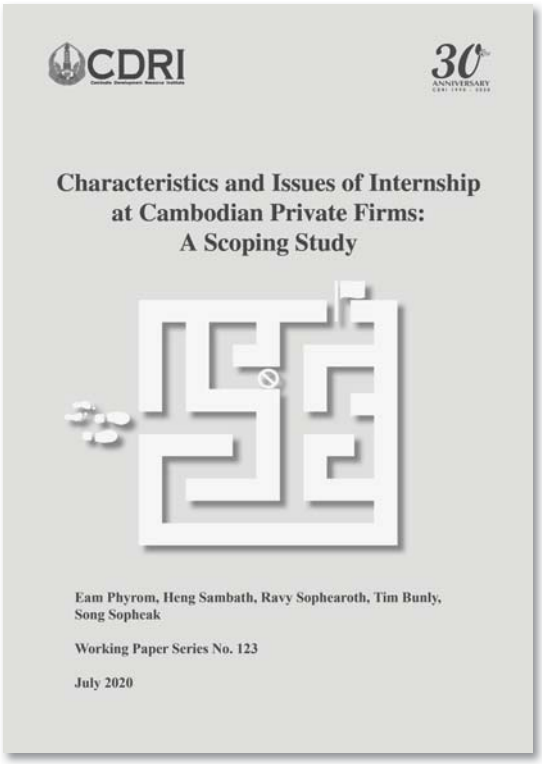
Centre for Policy Research in Agriculture and Rural Development (CPARD)

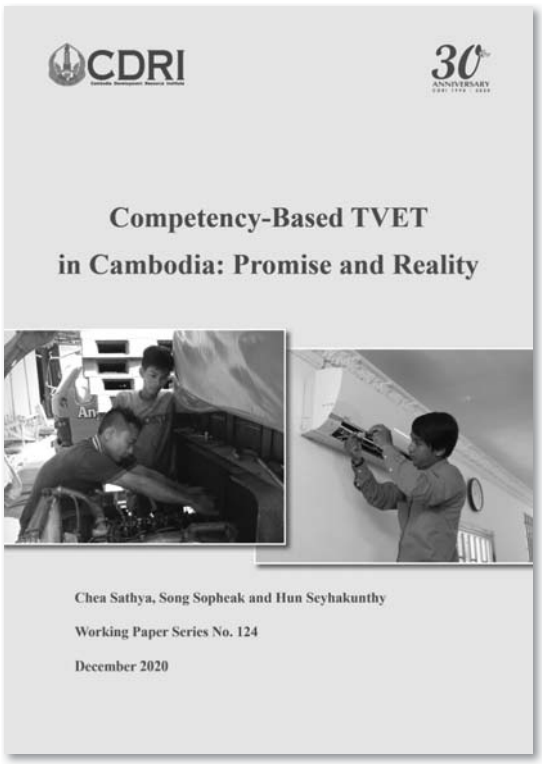
Five projects are being implemented. Data collection for *Gender and Inclusive Development Analysis (GIDA)*, a USAID-funded project, was completed in early August. Data analysis and report writing have made good progress. Data analysis and report writing for the Sida-funded project *On-farm Food Safety in Horticulture in Cambodia: The Case of Vegetable Farming* was completed and sent for peer review and editing. The concept note was finalised for *Integrating Smallholders into Commercialisation through Public-Private Partnerships,* the first study under the regional project *Network for Agriculture and Rural Development Thinktanks for Countries in the Mekong Subregion,* which is funded by the International Fund for Agricultural Development. Report writing for *Mango Value Chain Analysis,* a Sida-funded project, has been postponed because the team members are busy with the GIDA project. A concept note for a study on the *Current Situation of Agro-Processing Industry and Potential for Future Investments*, a Sida-funded project, is in train.

New CDRI publications









CDRI Update

Major Events

1 Jul, Phnom Penh

CDRI co-organised a policy dialogue on the Covid-19 response in Cambodia. CDRI's executive director participated in a policy dialogue on lessons learned from Covid-19 mitigation and management in Cambodia. The dialogue was organised by the National Institute of Diplomacy and International Relations in partnership with CDRI and the Asia Vision Institute. Three women on the frontlines in the fight against Covid-19 – Dr Or Vandine, secretary of state for the Ministry of Health, Dr Li Ailan, head of the WHO Country Office in Cambodia, and Dr Laurence Baril, director of the Pasteur Institute in Cambodia – shared their experiences of the emergency response to Covid-19 and their thoughts on what the "new norm" will be and what must be done to prepare public health institutions and the economy for that future. They have been involved from the beginning in national televised briefings on Covid-19. It was enlightening to hear their insights and talk with them. They are our heroes.

9 Jul, Phnom Penh

CDRI and the Institute of Technology of Cambodia (ITC) discussed ways to deepen mutual collaboration. CDRI's executive director and the director of CDRI's Centre for Education Research and Innovation (CERI) met with the director and senior managers of ITC. They discussed potential collaboration in the areas of skilled workforce development, artificial intelligence, digital skill needs across firms and labour markets, partnerships to promote the development and use of technology, and evidence-based practice for higher education in the digital age.

10 Jul, Phnom Penh

CDRI signed a memorandum of understanding (MOU) with the Ministry of Economy and Finance (MEF) and the Supreme National Economic Council (SNEC). The MOU was signed by HE Dr Aun Pornmoniroth, Deputy Prime Minister, Minister of MEF and Chair of SNEC, and CDRI's executive director. It sets out the agreement to conduct and publish rigorous collaborative research for evidence-based policymaking, organise policy dialogues and foster continued stakeholder engagement, provide capacity development support to national and subnational institutions, and build strategic alliances with regional and international institutions for gaining and sharing knowledge. Areas of cooperation include the socioeconomic implications and the consequences for international relations of Covid-19, governance reforms, food security and self-reliance, multilateralism, and workforce development. The aim is to support the government's efforts in pursuing sustainable and

Continued on page 22

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