

Forum:	Advisory Panel on the Question of the Asia-Pacific Economic Cooperation
Issue:	Developing human capital through education
Chair:	Sarah Huang

Introduction

As technology continues to grow and replace human labor, higher skilled labor that cannot be completed by machines has become a valuable asset to companies. The benefits of developing human capital includes not only better educated employees who can complete high-skilled labor, but also encourages innovation. Although often used interchangeably with human development, there are slight differences between human capital and human development. While human development aims to improve people's overall well-being through a rights-based approach, human capital development focuses on making employees more productive workers/entrepreneurs through various skill developments. This can be achieved by increasing access to basic social services such as education to enhance productivity. In the long run, a higher quality of human capital can result in overall economic growth and poverty reduction in a nation.

The main purpose of the Asia-Pacific Cooperation (APEC) is to promote sustainable economic growth in the Asian-Pacific region. Thus, "cooperation on human resource development is important to fulfilling APEC's trade and investment goals...[as it leads] to economic growth and greater social cohesion and wellbeing in member economies" (APEC). The APEC sub-branch responsible for human resource development is the Human Resources Development Working Group (HRDWG) which meets annually to set a plan for human development.

Definition of Key Terms

Human Capital

- “the skills the labor force possesses and is regarded as a resource or asset” - Oxford Dictionary

Human Capital Investment

- Human capital investment are ways companies use to further develop the skills of an employee. This can come in the form of education or additional training.

Education Disparity

- Education disparity refers to unequal access to or distribution of academic resources that includes funding, teachers, and books. When discussing human capital, education disparity can refer to unequal access to education for citizens within a nation but can also refer to the large advancement gap between the education systems of more industrialized nations and a developing nation's.

Vocational Training

- Vocational training trains individuals to specialize in a specific field or trade. It can take place at any level of education and differs from general academic education. Instead of focusing on all traditional subjects, vocational training creates highly trained individuals for a certain occupation, contributing to human capital by increasing the number of skilled laborers in a field.

General Overview

Measuring human capital development

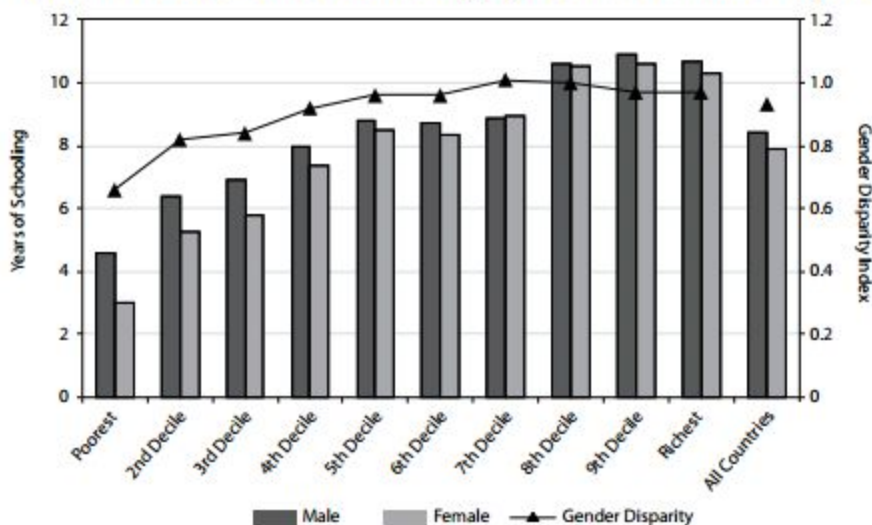
As it is difficult to measure an individual person's skill, cross evaluating individuals across countries is even harder. Several attempts have been made through methods such as literacy rates, which measure the proportion of a population but does not measure the skill level of the workforce. Similarly, school enrollment rates is only relevant for school-age children so it cannot accurately relay educational attainment. Although years of schooling is a reasonable method for deriving human capital stock, it only reveals the quantity of human capital and not skill level. As a result, a more reliable method is to use the average years of schooling. However, years of schooling differ from each country according to government policy.

Current education systems

Length & quality of education

Studies show that nations that provide more years of basic education have been linked with greater economic growth.

Figure 2: Average Years of Schooling by Distribution of Per Capita GDP



Source: Author's calculation based on Barro and Lee's (2010) data set.

Figure 1.

In a similar trend, higher education can boost a nation's economy as it creates a more innovative citizens who can work higher-skilled jobs and create more efficient technology. As a result, human capital has become a critical factor in national competitiveness. Education overall provides a strong long-term investment with benefits that has both a positive institutional and national impact. However, this depends on factors such as the quality of education, accessibility, and the adaptability of education to the market demand.

Gender gap

Furthermore, reports/studies such as Klasen (2002) argue that gender disparity in education can actually slow down economic growth. However, in many countries women do not have access to the same education resources as their male counterparts.

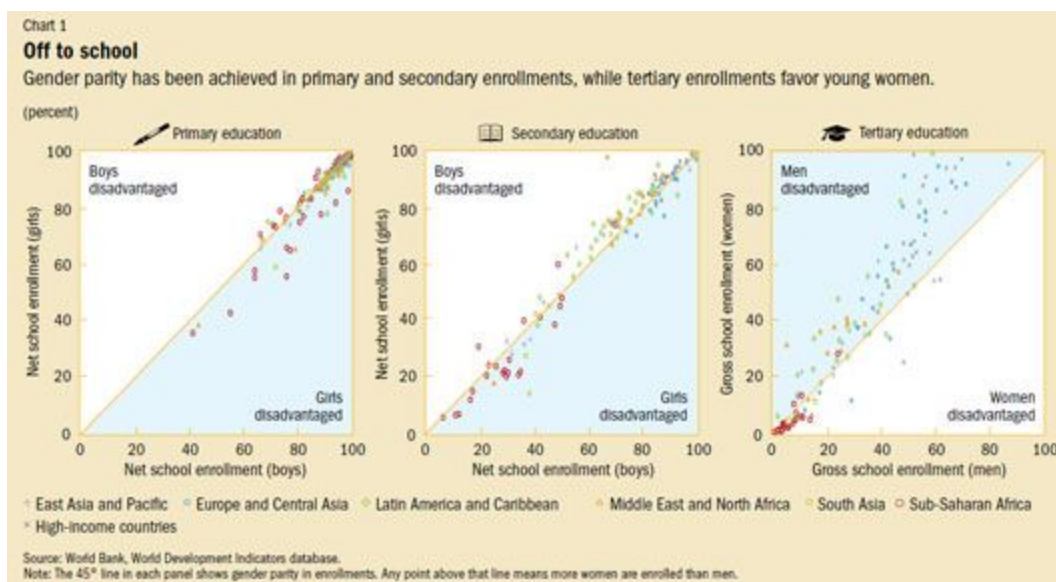


Figure 2.

Improving education systems

Education disparity

Education disparity stands as a major obstacle to a standardized education system. As the economic situation and available resources for each nation varies, some nations may not be able to provide the same level of education to their citizens that another nation with a more developed educational system can. This brings back the question of whether still developing nations can catch up to the more advanced education provided in already industrialized and economically developed nations. Countries need to be able to receive the necessary resources from external sources according to their current education systems in order to further advance education as a whole.

Furthermore, developing a standardized education system leads to the debate whether there is a point where education will no longer benefit employees. While studies show that basic education is beneficial towards employers and the economy, there is no

certainty that providing the maximum amount of education (especially in fields that do not deal with higher skilled labor) is the most efficient way to develop human capital.

Special training programs

Workshops and special training programs are vital for extending human capital beyond basic education. Delegates should consider in less developed nations who will be providing these training programs and how the quality of training can be insured. Equal opportunity for minority and disadvantaged groups as well as women should be stressed. Furthermore, there is the possibility of choosing workshops on general skills or more specialized programs. While general skills may be easier to standardize and find a larger amount of experts to lead workshops, specialized programs are necessary for high-skilled labor that correlates with economic growth. Specialized programs may also benefit trainees more by allowing them to develop a diversity of skills that will allow them to enter various fields and industries.

The HRDWG

APEC's Human Resources Development Working Group (HRDWG) implements initiatives on education, labor and capacity building to develop human resources. In order to do so it collaborates with other sub-branches of APEC such as the Economic Committee and Committee on Trade and Investment. Recently, the HRDWG has been focused on the economic benefits of human capital for the business sector, implementing the APEC New Strategy for Structural Reform (ANSSR), and evaluating human capital levels in nations.

The HRDWG is essentially a platform for nations to plan and share information regarding how to further develop human capital. In 2016, the HRDWG emphasized the development of human capital through education in various workshops focused different aspects of this issue: the youth, disabled, women, mature-age workers. In reference to the international aspect of human capital, the HRDWG also focused on finding more efficient ways to implement programs and workshops in nations as well as considering the implications of using a standardized method of evaluating human capital.

Timeline of Events

Date	Description of event
2013	Gyeongju Initiative – Education Cooperation Project (ECP)
2015	HRD Ministerial Action Plan (2015-2018) that outlines the plan for human resource development for the next few years is set
2015	Port Moresby Joint Statement on the 2015 High-Level Policy Dialogue on Human Capacity Building

Possible Solutions

Government vs. Market driving action

When considering workshops and extending education to develop human capital, there is an underlying question of who will oversee and implement such actions. Should governments lead the initiative by directly intervening and creating policies or should it play a supporting role by providing incentives for companies/the market to develop human capital? How should the government deal with private companies that do not follow government policy because of their own agendas?

Vocational Training

Education systems can be extended but the means to do so is open to interpretation. Employers could focus on having employees receive a more standard, uniform education or only have a few more promising specialized employees receive an extremely high level of extra training. Employers could also incentivize their employees to receive higher levels of education through ways such as reimbursing education fees as an investment.

Nations may need to provide incentives or promote equal access to education and higher level workshops. This could include government subsidies as incentives for companies or setting a quota for how many more disadvantaged people should attend each workshop. Governments could also promote workshops for women pursuing education in STEM or other fields that have lower women participation.

Funding

In certain cases, LEDCS may need support in terms of funding which can come from a variety of sources such as domestic companies, MEDCs, and organizations. A reporting system in collaboration with the HRDWG or other methods to increase transparency is highly advised.

The method of distribution to companies within a nation should also be considered. Nations should ensure that Small and Medium Enterprises (SMEs) have equal access to funds as they will need more resources than larger private companies.

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Forum:	Advisory Panel on the Question of the Asia-Pacific Economic Cooperation
Issue:	Addressing illegal and unregulated maritime activity and promote sustainable practice in such regions
Chair:	Emily Hsu and Jenny Lee

Introduction

More than 70% of the earth's surface is covered by water, 80% of the world's population live near a coast and 90% of international commerce travels by sea. Fish provide 2.9 billion people with at least 15% of their average per capita animal protein, and it also provides numerous jobs for people, especially in island countries. Clearly, the issues pertaining to maritime activity greatly affect the economy, global politics and almost everyone living in today's world. With the rise of globalization, oceans have become an integral part of our society and the use of the ocean for transport, trade, and travel has become indispensable. Unfortunately, this had led to violations against sea regulations, threatening maritime security and the long-term sustainability of oceans. The challenges of addressing these problems have increased dramatically as people look towards the sea for financial opportunities and corporations find loopholes in the legal system.

Definition of Key Terms

Maritime piracy

According to the UN Office of Drugs and Crime (UNODC), the term "piracy" encompasses two types of offences. The first is robbery or hijacking in order to steal a maritime vessel or its cargo. The second is kidnapping, where the vessel and crew members are threatened until a ransom is paid. Piracy involves the attack being launched in international waters for private ends.

Armed robbery at sea

According to the UN, armed robbery against ships consists of any illegal act of violence, depredation, or threat against a ship or persons/property on board. It occurs within territorial waters, where a State has jurisdiction over such offences.

Fish stock

According to the UN Food and Agriculture Organization (FAO), “fish stock” means the “living resources in the community or population from which catches are taken in a fishery”. It usually implies that the population is isolated from other stocks of the same species, so that it is self-sustaining.

Sustainable Use

According to the UN FAO, “sustainable use” means “the use of components biological diversity in a way and at a rate that it does not lead to the long-term decline of biological diversity”, thereby maintaining their potential to meet the needs of present and future generations.

Flag states

According to the UNCLOS, flag states are “the countries that issue the flag that all maritime vessels are required to fly”, making the respective flag state responsible for enforcing international guidelines on marine environment protection that are established by international laws or RFMOs.

General Overview

Illegal and unregulated maritime activity

IUU fishing

IUU fishing is a significant transnational crime conducted by established organized crime groups or commercial fishing operations. This type of violation continues for many different reasons. First, there are too many fishers catching too few fish. Fishing industries invest too much capital into vessels that they must operate to

achieve a return. As more boats remove more fish from the sea, it doesn't give the marine animals enough time to reproduce. Another reason is that one can easily find loopholes in the complex administration systems in order to circumvent regulations and extra costs. Common practices of IUU operators include the harvesting of prohibited species, overfishing, falsifying catch weights, fishing without a license, utilizing banned fishing gear and high-grading. IUU fishing has harsh effects on the marine environment, depleting fish stocks and damaging marine habitats. Along with that, it has harsh detrimental social and economic effects on developing coastal countries who don't have alternative food sources.

Piracy and armed robbery at sea

The issue of piracy recaptured international attention in the first decade of 2000s. Until 1994, reports of piracy and armed robbery against ships were relatively equally distributed around the world. As global trade increased throughout 1990s, piracy also increased in key shipping lanes of the South China Sea, the Strait of Malacca and the Indian Ocean. Piracy and armed robbery at sea endanger the welfare of seafarers and security of navigation and commerce. Along with resulting in loss of life, and physical harm and financial loss to seafarers, these violent acts also increase insurance premiums and security costs, costs to consumers and producers, and cause major disruptions to trade. Pirate attacks can also obstruct humanitarian assistance and increase the costs of shipments to the areas that need it the most.

Transnational organized crime in the maritime domain

Drug trafficking is a global illicit trade involving the cultivation, manufacture, distribution and sale of illicit substances. According to the UNODC, cocaine is typically transported from Columbia to Mexico and Central America by sea, and cocaine is also trafficked to Europe mostly by sea, often in container shipments. Fishing vessels are integral to the transshipment of illicit drugs as they provide refueling services for these ships, the transport of illicit drugs from larger ships to remote landing sites or commercial ports, and direct point-to-point delivery of illicit drug shipments.

Human trafficking in the maritime domain often occurs for the purpose of forced labor on fishing boats, and also result in sexual exploitation, brutal working conditions, physical abuse. Refugees may also resort to human traffickers as channels to flee the challenges in their home country. However, people are often squeezed into exceptionally small spaces on unseaworthy boats, and migrants might be raped, beaten en route and even left to die in the ocean. Once they reach their destination, the smugglers often hold migrants captive until they or their family pay ransom.

Major nations and organizations involved

Somalia (Western Indian Ocean and the Gulf of Aden)

In 2009, more than half of global piracy attacks were attributed to Somali pirates with estimated profits of at least \$50-100 million. The recent increase in piracy is a direct product of social and political chaos in Somalia. After, the central government collapsed in 1991, foreign vessels from Europe, Asia and Africa moved into tuna-rich Somali waters in great numbers, and unauthorized fishing resulted in the loss of nearly 30% of their annual catch. In addition to the conflict, the country has suffered four years of drought and three million Somalis depend on food aid. About 95% of international air is shipped by sea to Somalia and as a result of the pirate attacks, it has become more expensive and dangerous to ship food assistance to the people in Somalia.

Small Island Developing States (SIDS)

“SIDS” refer to a distinct group of low-lying coastal countries that face specific social, economic and environmental challenges. These states are especially vulnerable to the effects of illegal maritime activity seeing as they are extremely dependent on the exploitation of fishery resources and many IUU operators deliberately target these developing nations that lack monitoring, and control and surveillance (MCS) capability. Therefore, issues such as IUU fishing result in heavy economic losses that SIDS don't have the capacity to address, threatening the inhabitants' livelihoods and stability of these states as a whole.

Distant Water Fishing Nations (DWFNs)

According to the UNCLOS, DWF fleets can harvest surplus fish in countries that cannot use their fishery resources to its full potential, as long as compensation is provided to the host country. However, the fishing capacity of DWFNs have grown enormously, jeopardizing the health of global fisheries due to unsustainable fishing practices such as overfishing. For example, most illegal fishing in the South African region is perpetrated by DWFNs like Spain, China, Taiwan, Indonesia, Russia, and Korea.

Regional Fisheries Management Organizations (RFMOs)

According to the European Commission, RFMOs are “international organizations formed by countries with fishing interests in an area” to be responsible for the management of high seas fisheries. RFMOs play a major role in facilitating intergovernmental cooperation in fisheries management and they perform tasks such as collecting data, assessing resources, making management decisions and monitoring maritime activity. However, challenges exist in enforcing CMMs adopted by RFMOs due to insufficient data and inadequate administration systems. This issue is further exacerbated in areas that are not governed by RFMOs, where management measures are left to the discretion of individual flag states.

International Maritime Organization's (IMO)

The IMO is a body of the UN with the mandate of enhancing the safety and security of trade and travel by sea. The organization develops suitable regulations and guidance for countries, and works to facilitate regional cooperation. For example, it has provided and continues to provide assistance to the regional anti-piracy agreement in the Straits of Malacca.

Timeline of Events

Date	Description of event
2001	110 nations endorsed the U.N. FAO International Plan of Action to Prevent, Deter and Eliminate IUU fishing (IPOA-IUU)

January 2009	The Djibouti Code of Conduct (DCoC) concerning the Repression of Piracy and Armed Robbery against Ships in the Western Indian Ocean and the Gulf of Aden was adopted by the states in the region
10 November 2015	UNSC unanimously adopts resolution 2446, renewing measures to combat piracy and armed robbery off the Somali coast
15 December 2016	Somali pirates attack on the chemical tanker CPO Korea 300 nautical miles off the coast of Somalia

UN Involvement, Relevant Resolutions, Treaties and Events

- 1982 United Nations Convention on the Law of the Sea (UNCLOS):
This convention establishes rules governing all uses of the oceans and their resources. It includes guidelines on freedom of navigation, high-sea fishing, and sovereignty over territorial seas. Today, it is the globally recognized regime dealing with all matters relating to the law of the sea.
- Sustainable Fisheries, 7 December 2016 (A/RES/71/123):
This resolution calls upon all States that has not yet done so to become parties to the UNCLOS, and urges them to intensify efforts to assess and address the impacts of climate change and ocean acidification on the sustainability of fish stocks and marine habitats.
- Measures to Combat Piracy, Armed Robbery off Somali Coast, 10 November 2015 (S/RES/2246)
Adopting resolution 1446 (2015):
The UN noted improvements in Somalia, but recognized the further need to prevent and suppress piracy and tackle its underlying causes. This resolution calls for relevant nations to continue investigating and prosecuting those who planned, organized or financed pirate attacks.
- International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU):

The IPOA-IUU is a voluntary instrument that applies to all States, entities and fishers. The action plan establishes measures to prevent, deter and eliminate IUU fishing such as trade restrictions, port enforcement actions, vessel registration and licensing systems, and implementing MCS measures.

Possible Solutions

Sealing jurisdictional loopholes

Flags of Convenience (FOCs)

The purpose of the FOC system is to allow vessels to reduce operating costs or avoid the regulations of the owner's country. Some states operate "open registries" that allow foreign-vessels to fly their flag for a very small fee. Thus, the issue of "flag-hopping" occurs where IUU operators constantly re-flag to cut operating costs associated with legal practices. This also makes it very difficult to identify and penalize the owners of vessels that fish illegally. Many nations that have open registries are the developing nations that depend heavily on fisheries and are often victims of IUU fishing, themselves. To address this issue, financial support and resources must be provided to developing nations that lack the MCS capability to effectively police their waters. An effective alternative would be to simply close off registries for foreign-owned fisheries vessels seeing as the profit made from granting flags does not account for economic losses that IUU fishing causes.

Catch documentation schemes

The traceability of fish and fish products is central to catch documentation and regulation. Therefore, private fishing enterprises can develop appropriate tracking systems such as assigning barcodes to individual fish and establishing advanced databases to track distribution. Companies can look towards innovative solutions such as what one company implemented that allows consumers to track seafood back to the precise fishing vessel, location and fisherman by entering a unique gill tag number on a website.

Role of international institutions

Regional organizations

States should work to strengthen the capacities of RFMOs to address IUU practices more effectively, and establish new RFMOs to cover regions that aren't yet covered. Because vessels may choose to register in States that are not members of RFMOs to avoid stringent rules, other regional mechanisms become exceedingly important. Regional organizations such as Commonwealth and the European Union (EU) can take a stronger position to further explore negotiations on an international legally-binding convention to end problems such as FOCs, and make specific agreements that target illegal activities through ways such as working with member states that have open registries to enforce necessary regulations.

Non-Governmental Organizations (NGOs)

NGOs greatly contribute to the data collection, research and advocacy of this issue. For example, Global Fishing Watch aggregates the world's fishing vessel data into one system by combining satellite imagery with data points voluntarily submitted by fisheries, giving an overview of the activities of law-abiding fishermen as well as IUU operators. Building off this mechanism, authorities should take this data to make further investigations into illegal maritime activity and efficiently allocate resources to regions in need. This model also shows that countries and NGOs should make further advancements into research and gathering more accurate data on ongoing maritime activity.

Ensuring sustainable fishing practices

To ensure if a fish stock is sustainable, it requires data such as catch records and stock surveys to be collected. This data collection should be ongoing to ensure that the fishery can respond to declines in fish populations by reducing the level of fishing. Addressing environmental impacts would involve actions such as reducing bycatch, "the incidental catch of non-target species such as other marine animal species, juveniles and corals". These incidences should be investigated and minimised wherever possible. Another aspect of

sustainable fishing, effective fisheries management, includes ensuring that fisheries abide by relevant laws and having a management system that efficiently responds to changing circumstances. Regulations and proper enforcement should also be taken to end destructive fishing practices such as cyanide and dynamite fishing seeing as these indiscriminate fishing methods have devastating impacts on marine species and habitats.

Addressing maritime piracy

Pirates need substantial mainland support in order to operate and they often bribe community officials, elders and clan leaders. Therefore, this issue can be tackled through effective law enforcement at a local level to cut off the mainland support piracy desperately needs. Furthermore, locating a particular ship at sea requires inside information; therefore, the information of vessels traversing the danger zone should be better secured in order to prevent it from falling into the wrong hands. Measures should also be taken to prevent the pirates' outflow of money and inflow of products such as arms, maritime craft and parts, and vehicles. In addition, relocating fishermen who were previously fishing in illegal regions into more sustainable maritime programs would reduce the opportunity for fishermen to resort to piracy.

Response of the general public

Governments can raise awareness on this issue and encourage consumers to choose fish from well-managed, sustainable fisheries. Consumers could also get notified about where the fish comes from and how it is caught by resources such as the Seafood Decision Guide. If fishing products are labeled, consumers could actively support fishermen and companies whose practices are sustainable, thus providing an incentive for the fishing industry to become sustainable.

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