How can we and should we promote the private sector's contribution beyond an 'established' global health community?

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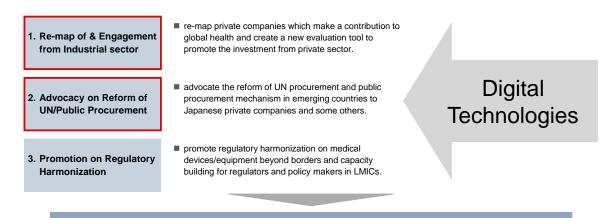
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Mitsubishi UFJ Research and Consulting (MURC) is a comprehensive think tank/consulting arm of the Mitsubishi UFJ Financial Group (the MUFG Group, a universal banking group that represents Japan) and based on in the three major cities in Japan. MURC established "Center on Global Health Architecture" in 2017 and organize the public private collaborative action-oriented research meeting on global health issues. We are aiming to promote the relationship among stakeholders, that is, "break down silos," and take an interdisciplinary approach to create a new and innovative project.

Our prioritized areas are i) re-map private companies which make a contribution to global health and create a new evaluation tool to promote the investment from private sector, ii) advocate the reform of UN procurement and public procurement mechanism in emerging countries to Japanese private companies and some others, and iii) promote regulatory harmonization on medical devices/equipment beyond borders and capacity building for regulators and policy makers in LMICs..

Of these focused areas, we are commencing the specific projects on the first 2 items. In this paper, we will share the knowledge and our insight for future solution to global health issues from the perspectives of the effective promotion of Public Private Partnerships (PPPs) for the first 2 items.

Overview of our problem awareness by Center on Global Health Architecture, MURC



Improve/Solve the Global Health issues more effectively and efficiently

i) re-map private companies which make a contribution to global health and create a new evaluation tool to promote the investment from private sector

Despite advances in global health, including improved access to medical technologies such as medicines, vaccines, medical devices and equipment, and Al-

driven systems, the world is still facing anxiety and uncertainty over future pandemics and the threat of new infectious diseases. In recent years, new types of global health issues have emerged. For example, antimicrobial resistance (AMR) is attracting a high level of attention. In terms of AMR, standard treatments are becoming ineffective, which means that infections persist and may spread to others. The World Health Organization (WHO) estimates that antibiotics treatments add an average of 20 years to all of our lives, but in the 80 years since the discovery of penicillin, the overuse of antibiotics has put pressure on bacteria to evolve resistance, which has led to the emergence of untreatable superbugs that threaten the basis of modern medicine.

Malnutrition remains a major issue and affects health in developing countries. To make matters worse, now we must also confront the rampant increase in various non-communicable diseases (NCDs) such as diabetes and obesity. These NCDs are currently an issue not only in developed countries, but also in developing countries. In some countries where the population is aging, brain-related diseases such as Alzheimer's disease and dementia are becoming serious issues. All of these diseases are intertwined with each other in complex ways.

When looking at the amount of investment flowing into global health, can we say that it is sufficient? The purpose of this report is not to show accurately whether it is or not. If we then focus discussion on how to secure a stable budget for health, information can be gleaned from several global health metrics. One article collected budget data on the primary agencies and organizations that provided financial assistance to low- and middle-income countries (LMICs) for global health issues from 1990 through 2014. During this period, \$458.0 billion was distributed through the major channels for health funding from donor countries to LMICs for global health issues. Annual disbursements increased substantially from \$6.9 billion in 1990 to \$35.9 billion in 2014.

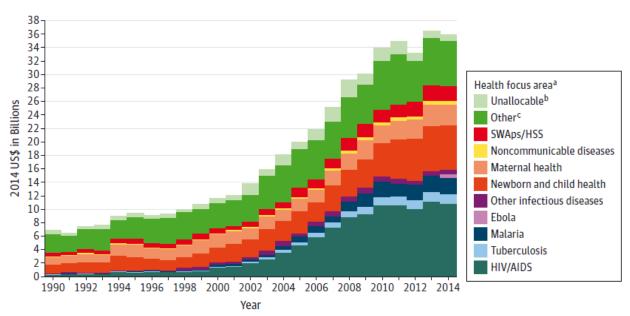
However, following the transition to a new administration in the United States in 2017, it is likely that the public funding for global health will face new difficulties. On the other hand, the UN adopted its Sustainable Development Goals (SDGs) in 2015, and the new international framework for global development emphasizes the importance of the private sector in driving solutions for global development, including for global health issues. Now is the time for us to think about how we can stabilize or increase global funding for global health issues by inducing greater commitment from the private sector.

¹ Bryan Walsh, "The World Is Not Ready for the Next Pandemic", TIME, May 15, 2017, http://time.com/magazine/us/4766607/may-15th-2017-vol-189-no-18-u-s/

 $^{^2}$ Joseph L. Dieleman et al., "Sources and Focus of Health Development Assistance, 1990-2014", JAMA Vol.313, no. 23 (June 2015):2362

Development assistance for global health (2014 US dollars)³





In terms of investment in the private sector, increasing attention is being paid worldwide to environmental, social, and governance (ESG) investment. ESG investment criteria are a set of standards for a company's operations that socially oriented investors use to screen investments. The "E" in "ESG" looks at how a company performs as a steward of the natural environment; "S" examines how a company manages relationships with its employees, suppliers, customers, and the communities; and "G" deals with a company's leadership and the adequacy of its management and administration, including relationship-building with various stakeholders. In 2016, globally, \$22.89 trillion in assets were invested from the perspectives of ESG, which was an increase of 25% compared with 2014. In 2016, ESG investment accounts for 26% of all outstanding assets under management. 4 There are several possible reasons for the increase in ESG investment. First, the advent of Principles for Responsible Investment (PRI) in 2006 is having a meaningful impact on decision making by investors and is supported by an international network of investors who have pledged to incorporate ESG into their investment and ownership (asset manager) decisions. Second, ESG indices themselves have become diversified and more detailed. Therefore, it is becoming easier for investors to evaluate companies from the perspective of ESG or similar criteria. Third, research has confirmed the positive correlation between ESG and corporate financial performance.6

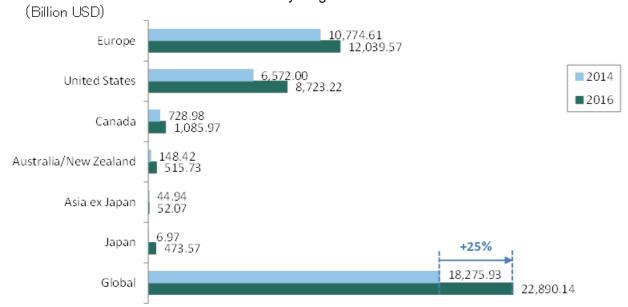
³ Joseph L. Dieleman et al., "Sources and Focus of Health Development Assistance, 1990-2014", JAMA Vol.313, no. 23 (June 2015):2362

⁴ Global Sustainable Investment Alliance, "Global Sustainability Investment Review 2016", 2016 Global Sustainable Investment Review, (2017):3, http://www.gsi-alliance.org/wp-content/uploads/2017/03/GSIR Review2016.F.pdf

⁵ "PRI: Home," The PRI, accessed March 19, 2018, https://www.unpri.org/

⁶ Gunnar Friede, Timo Busch and Alexander Bassen, "ESG and financial performance: aggregated evidence from more than 2000 empirical studies", Journal of Sustainable Finance & Investment.

Growth of ESG Assets by Region 2014–2016⁷



The social aspect of the ESG framework ("S") has a high "affinity" for global health issues and their associated businesses and activities, and it has the potential to induce investment from private companies. Some corporations might have anxiety about rising costs and being negatively evaluated under the framework. However, we believe that ESG will generate opportunities for companies to enhance their value.

As for ESG investment, ESG rating agencies and their rating frameworks for private companies, such as the Dow Jones Sustainability Index and FTSE4Good, can be useful tools. Looking at global health-related industries, the Access to Medicine Index is one of the most well-known implementations within the ESG-related framework. It is managed by Access to Medicine Foundation based in Amsterdam. There is also the Access to Nutrition Index. These indices are categorized as human rights-focused frameworks.⁸ According to a survey by GlobeScan and SustainAbility, the Access to Medicine Index was ranked as one of the most credible indices by respondents.⁹

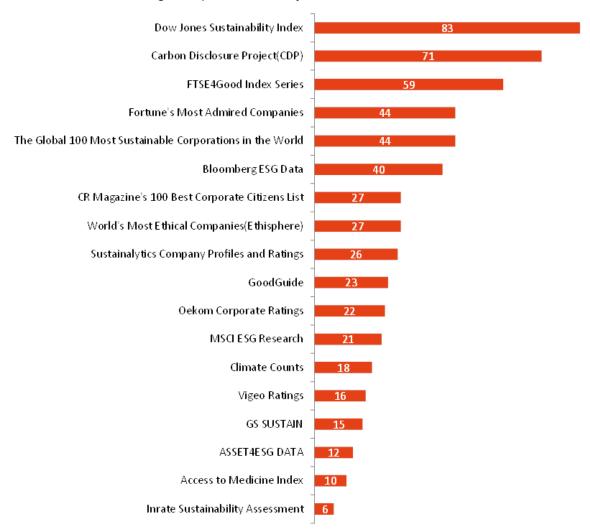
Vol.5, no. 4 (2015):225

⁷ Global Sustainable Investment Alliance, "Global Sustainability Investment Review 2016", 2016 Global Sustainable Investment Review, (2017):27, http://www.gsi-alliance.org/wp-content/uploads/2017/03/GSIR Review2016.F.pdf

⁸ Casey O'Connor and Sarah Labowitz, "Putting the 'S' in ESG; Measuring Human Rights Performance for Investors", PUTTING THE "S" IN ESG, (2017):11, https://static1.squarespace.com/static/547df270e4b0ba184dfc490e/t/58cad912e58c6274180 b58b6/1489688854754/Metrics-Report-final-1.pdf

⁹ GlobalScan and SustainAbility, "The 2013 Ratings Survey: Polling the Experts", A GlobeScan/SustainAbility Survey, (2013):8, https://globescan.com/wp-content/uploads/2017/07/Rate the Raters 2013-Polling the Experts-GlobeScan SustainAbility-3.pdf

Ranking of experts' familiarity with ESG-related indices¹⁰



Here we would like to discuss if we remap the contributors working on global health issues, and establish another index for global health contributors/industries, what happens to the global health investment in the world. As already mentioned, the Access to Medicine Index is a framework mainly for the pharmaceutical industry, and the Access to Nutrition Index is mainly for the food and beverage industry. However, the manufacturers that make contributions to global health issues are diverse.

For example, diagnostic devices are indispensable at the first stages of health interventions. To monitor and control diseases, important roles in global health are being played by information and communication technology-connected devices, the internet of things (ICT/IoT) and, more recently, artificial intelligence (AI). Personal protective equipment (PPE) has long been provided to promote patient safety as well as protect medical workers themselves.

As such, there is no direct framework for evaluating these varied industries from an ESG perspective, especially from the perspective of "S". As we mentioned in the first paragraph, we are now facing a wide variety of issues in global health, ranging from infectious diseases to NCDs. These growing issues are matters of worldwide concern.

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¹⁰ GlobalScan and SustainAbility, "The 2013 Ratings Survey: Polling the Experts."

When we think about how we can secure diverse investment to resolve or mitigate these complex issues, again we must stress the need to review and map the private sector (industries and companies) that are contributing to global health promotion. We call this approach "corporate taxonomy." Under this type of corporate taxonomy for global health, multiple stakeholders who are willing to work for global health internationally should collaborate to establish several new indices for ESG. The purpose should not be just to measure it, but also to have the index disseminated and utilized by stakeholders such as investors, asset managers, shareholders, NGOs, and companies themselves. Of course, we need to understand that it is not the only approach to make such a new index to bring more engagement from private sector with the global health issues, however, this kind of approach could make an impact on that.

Consciousness of problems on private engagement with global health and ESG index



< Examples of existing Indices >

Access to Medicine Index

"for Pharma industries"

Access to Nutrition Index

"for Food/Beverage industries"

- The Access to Medicine Index is a ranking system published biennially since 2008 by the Access to Medicine Foundation.
- The foundation is funded by the Bill & Melinda Gates Foundation (BMGF), the UK Department for International Development (DFID) and the Dutch Ministry of Foreign Affairs.
- It ranks the world's 20 largest pharma companies biennially
- The evaluation framework is composed of the ability to make their pharmaceutical drugs more available, affordable, accessible and
- The purpose is to stimulate pharma industry to improve access to health in developing countries by sharing the info of the peers, and to encourage the stakeholders to improve the situation.
- The Access to Nutrition Index was founded in 2009.
- The methodology was developed by GAIN (Global Alliance for Improved Nutrition), and is jointly funded by GAIN, BMGF and the Wellcome Trust.
- The purpose of the index is to improve the access of consumers to more nutritious products, and make a contribution to address the serious global problems such as undernutrition and obesity.
- That will allow food/beverage enterprises to benchmark their performance on nutrition by sharing the information of their peers.
- It will also play a role as a platform to share the useful information and promote better decision making by the stakeholders.

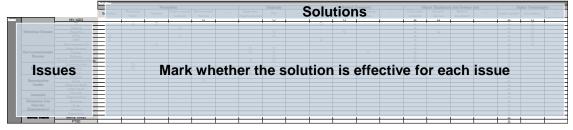
Mapping global health issues and its solutions – "Corporate Taxonomy"

- Corporate Taxonomy: The Center on Global Health Architecture, MURC analyzes the complexity of the global health issues as the following matrixes.
 - Regions and issues: categorized the global health issues and scored its seriousness in the regional level by the statistics from international institutions
 - Issues and solutions: mapped the issues analyzed above and possible solutions
- The Center is currently preparing the mapping of solutions and its providing enterprises

< Regions and issues >

Issues Seriousness of the issue in regional level based on the statistics Regions

< Issues and solutions >



Mapping of regions and issues

	Infectious Diseases			NCDs		Nutririon		Reproductive Health		Mental Health
	HIV/AIDS	ТВ	AMR	Heart diseases	Cancer	Under- nutrition	Anemia	Maternal death	Infant death	Depressio
Africa	×	×		×	×	×	×	×	×	Δ
America	Δ	0	ation	Δ	Δ	0	Δ	0	0	0
Southeast Asia	0	×	estig	×	×	×	×	Δ	Δ	Δ
Europe	Δ	0	r inv	Δ	Δ	0	Δ	0	0	Δ
Eastern Mediterranean	0	Δ	Undei	×	×	×	×	Δ	×	0
West Pacific	0	Δ		Δ	Δ	0	Δ	0	0	0

Mapping of issues and solutions, and future development of new index

	Prevention			Diagnosis		Medical Treatment		Digital Tech.		Others	
		Sanitation	Vaccine	Nutritious foods	Dx imaging	IVD	Antibiotic	Antiviral	Health system	Surveil. monitoring	Cold chair
//Ds	HIV/AIDS	_	_	0	_	0	-		0	0	0
	ТВ	_	Index	Index	0	× ©	<u></u>		0	× ©	0
	AMR	0	1 - 1		0			-	0		_
NCDs	Heart diseases	_	Medicine	ıtriti			_		-	٥ څ	0
	Cancer	_	to M	to Nutrition	0	SS 10	_ 2		0	os to	0
Nutrition	Under- nutrition	_	1 1	9 7 6	_				0	Acces	_
	Anemia	_	Access	Access	_	4	_ 8	- P	0	0	_
alth	Maternal death	0			_	_			0		_

Notes: 1. we categorized antibiotics and antivirals as an indirect solution in the sense of stopping overuse and misuse of them prevents the expansion of AMR

Finally, we would like to highlight three essential points so that the new index is broadly recognized and used. First, the index framework should be established by several players, specifically including a human rights-focused agency, a corporate rating agency focused on financial performance, and different types of organizations that would work together and bring together their different skillsets to create the index. In addition, the index should be operated in a neutral manner, with the index itself managed apart from the commercial base. Finally, these indices typically target large, multinational conglomerates that are constantly seeking external funding and a large amount of investment. However, separately from such an index, it is more important for us to focus

on the new technologies and businesses operated by small and medium-sized corporations all over the world. While there may be some negative impact from increasing the number of indices, it is more important to pursue ways to improve the situation on global health by establishing some new tools.

ii) advocate the reform of UN procurement and public procurement mechanism in emerging countries to Japanese private companies

The World Bank Group (WB) introduced a new procurement framework and regulations called the "New Procurement Framework" in 2015 ¹¹. Although implementation of the new scheme began in July 2016, a couple of years will be needed before it covers the whole range of procurement-related programs of the WB.

The most significant change in the New Procurement Framework is the shift from seeking the "lowest evaluated compliant bid" to seeking the bid that "provides the best overall value for the money," which allows the WB to balance quality, cost, and other factors as needed when selecting suppliers.

By transitioning to the new framework, the WB is expected to play a more active role in contract management of procurements to pursue greater overall value, even though this strategy requires it to account for additional risk factors in order to ensure the best possible outcomes. However, receiving greater value in procurements can allow the WB to make a better contribution towards its development goals.

The most important characteristic of the new system is its greater focus on value for money (VfM). This change will influence how global procurement throughout the WB is conducted. The greater focus on the VfM principle will also result in changes in its standard bidding document forms, including the request for bid (RFB) and request for proposal (RFP) forms. The RFP form now allows greater flexibility when responding to the "specification" and "design" options.

In addition, other significant changes have been made to the evaluation criteria. The WB is adopting a more comprehensive framework for evaluation that incorporates mid- and long-term maintenance costs, safety, environmental and social considerations, and various qualitative factors in its criteria. Although such evaluation criteria have commonly been used in national Private Financial Initiative programs, the new WB procurement framework also applies these concepts to the international development field. Thus, greater attention must be paid to balancing life-cycle impacts of programs and their multidimensional cost.

To give a direct comparison, under the previous RFB system, "cost-related" criteria accounted for 70% of the bid evaluation and "quality" criteria for the remaining 30%, whereas under the new scheme "quality" accounts for up to 50% of the bid evaluation. This change will apply to all types of procurements from goods and services to consultancies. Given that the annual amount of the WB's procurement is about 64 billion USD, the new scheme will have a huge impact on affected businesses and suppliers. 12

organization," 2015 Annual Statistical Report on United Nations Procurement, 2016, https://www.unops.org/SiteCollectionDocuments/ASR/ASR_2015_Major_purchase_orders_and_contracts.pdf, accessed on July 31st, 2017

 ^{11 &}quot;The World Bank: New Procurement Framework and Regulations for Projects After July 1,
2016", The World Bank, accessed March 19, 2018, http://www.worldbank.org/en/projects-operations/products-and-services/brief/procurement-new-framework#framework
12 United Nations Office for Project Services, "Major purchase orders and contracts by UN

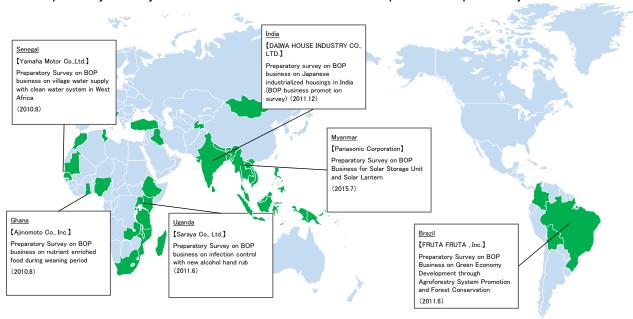
On the other hand, the annual procurement volume of the United Nations (UN), and its funds, programs, specialized agencies, and other divisions totals about twenty billion USD, of which half is for the procurement of goods. In the coming years, the total UN budget is likely to decline. However, the volume of the UN-related procurement is still large, existing as "a global marketplace."

The WB and the UN, to a large extent, have a shared agenda and have many collaborative projects. The WB has some influence on the UN's agenda setting, policy making and on-site implementation. In cases where the two or more organizations implement a joint procurement, the procurement policy of one organization could be used by other collaborative partners in some situations. Therefore, the new scheme of the WB could affect the procurement policies of other international agencies as the Sustainable Development Goals (SDGs) become more widespread.

From a think-tank standpoint, we expect that the new WB scheme creates a good opportunity for us to support international agencies, governmental policy makers and multinational private corporations and to help reconsider the meaning of "sustainable development" and ways that "sustainable procurement" can be pursued as part of the SDGs.

Looking at the policy on international development and PPP by the government of Japan, since 2009, the Government of Japan has renewed its strategy on publicprivate partnerships for international development and began accepting proposals by private companies, organizations, and universities that plan to enter into the market in developing countries. In doing so, these private entities intend to pursue not only profit, but also social objectives to contribute to international development and cooperation. The Ministry of Foreign Affairs, the Japan International Cooperation Agency (JICA) and the Ministry of Economy, Trade and Industry are working collaboratively as the core members implementing and managing public private partnerships. The new scheme was originally called the "Preparatory Survey for BoP Business Promotion" (BoP: Base of Pyramid) and was renamed the "Feasibility Survey for SDGs Business Promotion" in 2017. It has already adopted more than 100 projects by private entities, ranging from infrastructure-related projects to projects with social objectives to improve development issues and introduce innovative solutions in developing countries in areas such as the prevention of hospital-acquired infections, vector control, the improvement of malnutrition, and the introduction of renewable energy sources. This program is a framework to sponsor financial assistance for feasibility studies.

Preparatory Survey for BoP Business Promotion: Examples of Adopted Projects¹³



Several private entities that have received support are providing their own products to contribute to solving and improving development issues in developing countries. When we look at the sales models of these businesses, one of their targets is public procurement, including by the UN and its concerned parties.

As is well known, Japanese products tend to be "high quality but high cost," and this has long been a characteristic of goods "made in Japan." Recently, some Japanese companies have been trying to cooperate with local and foreign companies to create a new type of products that are "made with Japan." However, they are just in the beginning stages of these efforts. It is important to note, as previously mentioned, that the approval of the new procurement framework by the WB will potentially increase the use of the VfM concept in the procurement systems of international agencies. In the future, these practices will spread to current emerging and developing countries. Because of this, more "high cost but high quality" goods and services will be purchased and will make an even greater contribution to "Sustainable Procurement for Sustainable Development" than ever before. Of course, businesses must continuously push to control costs without reducing quality.

On the other hand, now an initiative on "Open Contracting" in emerging countries is going forward. "Open Contracting" is the reform of public procurement mechanism to improve the transparency and accountability for sustainable development. Actually the reform of public procurement system was conducted in Ukraine for the last 3 years. In addition, most of the countries in MERCOSUR are also joining the initiative proactively. Behind the discussion on "Open Contracting," there is a motivation to encourage local authorities to be more accountable including clarifying their attitude of anti-corruption, and promote the e-procurement to achieve higher efficiency/effectiveness of their system.

Getting more details on Ukrainian case, in 2013, the price for anticancer drugs in the public procurement in Ukraine was 40% higher than market price. Only a few

¹³ Japan International Cooperation Agency, "Preparatory Survey for BOP business promotion – List of Projects," 2017, https://www.jica.go.jp/english/news/press/2017/8/1, accessed July 31st, 2017

suppliers were operating. Minister of Health made a fundamental reform on medicines to assign UNDP, UNICEF, Crown Agents as the procurement agency for anti HIV drugs, anti TB drugs and anticancer drugs to promote the reform in 2016. Through sticking the knife into vested interests, 38% of the procurement cost got reduced compared with in 2015. On the other hand, the number of suppliers increased from 2-3 to 29. They improved the quality of goods, strict observance of delivery time, too. Ukrainian Ministry of Health is discussing internally to set a new division to manage a new comprehensive system for public procurement to install it in 2020. With this political reform, new foreign invested companies are also joining the public tender in Ukraine.

Editorial by the Lancet on Ukrainian Reform on Public Procurement¹⁴

- "The health-care reforms, led by US-born Uluana Suprun, profiled in this week's issue, include the introduction of an internal market structure, a shift of care from a hospital to a community-based service, and the elimination of corruption and bribery."
- "Patients currently make up the 45.6% shortfall of the 7.6% of GDP spent on health with out-of-pocket and informal payments."
- "Bed numbers and patients' average length of hospital stay will be reduced. Western-backed support for the reforms comes from the UN Development Programme, UNICEF, and the UK procurement agency, Crown Agents, now responsible for purchasing 5.9 billion Ukrainian hryvnia (about US\$ 212 million) of medicines for the country."
- "The service— developed from the Soviet Semashko system—is seen by many as inefficient and inequitable; nevertheless some politicians and doctors remain opposed to the changes."
- "More generally, the World Bank has also endorsed Ukraine's efforts to achieve lasting economic recovery."

Finally, we would like to summarize the points of issues related to the discussion described above.

As mentioned in the opening sentence, MURC started the public-private collaborative consortium, working on global health issues, in 2017. Our aim is to contribute to solving the global health issues through dialogue and co-creation. Since we believe in the importance of tackling the issues of global health with a comprehensive approach, our target issues are broad, including nutrition, NCDs, health systems, and universal health coverage(UHC).

At this moment, we focus on infectious diseases, with a value "we should get along/coexist with infectious diseases by 2030". We investigate how we should invest in R&D for innovative and appropriate products and deliver them to the market, how we could improve the health system and health-related infrastructure, and how we could develop global health workforce through capacity building.

In addition to the above-mentioned issues, we also explore use of new technologies and products from private industries— such as artificial intelligence, machine learning, blockchain and drones—in the field of public health, and examine how they would affect the future of global health.

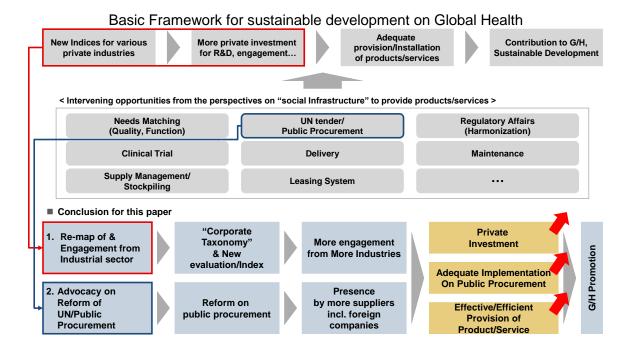
Today we have more than 100 members from a wide variety of entities: United Nations agencies/partnerships, Japanese governmental agencies, international NGOs, private companies, academia, funding agencies, etc.

In this consortium, we are doing research on various themes such as public procurement guideline in the world as we described above, and have some workshop and discuss with the consortium members to further obtain deeper insights so that we can take practical actions and create business contributing to the situation improvement surrounding global health issues by the Japanese private sector.

We end this paper with sharing several key factors including the points abovementioned to discuss with the concerned parties including UN agencies to think how we

¹⁴ The Lancet, "Measles, war, and health-care reforms in Ukraine", the Lancet Vol392(September 2018)

can and should promote the "Sustainable Development for the SDGs", especially for global health issues beyond an 'established' global health community.



<Re-mapping>

- The pharmaceutical industry was at the center of argument on global health issues when we discuss the responsibility taken by the private sector. However, players for global health issues are more diverse. Especially for the last 10 years, NCDs have been becoming rampant all over the world. Now we need to "rediscover" the diversity of the contributors. We have diagnostic tools, Point-of-Care Testing/Rapid test, medical devices, food/beverages, personal protective equipment, hand sanitizers, mosquito nets, ICT systems, and more recently, new technologies such as AI, blockchain, drones, virtual reality/augmented reality are coming on stage.
- To consider the methodology how we can and should promote the private sector's contribution, first we re-map the actors for the domain.

<Engagement>

- After re-mapping, the tactics to extract the effective engagement from those various industries is also important. As mentioned above, ESG evaluation index/framework seems to be one of the efficient approaches.
- Actually, the sophisticated framework has the potential to draw a lot of engagement from private companies such as R&D investment, innovative and unprecedented business solutions, partnership with public sectors, pro-bono and so on.

<R&D>

To bring innovations and drastically change the social situation surrounding global health issues, we have to develop a new type of products/solutions. For that, we need to promote the R&D investment and support R&D with the private sector. For some industries, we have already established several Product Development Partnerships(PDPs) to collaboratively work together with private companies to obtain new products, especially for medicines and diagnostic devices.

However, PDPs could be set up for other products, too. In some cases, accelerator program to seek and support scaling-up of new disruptive solutions might be more effective.

<Clinical Trial>

- To promote R&D, establishing network and collaborative environment with local institutions in emerging and developing countries for clinical trial is also indispensable. In addition, International NGOs and local NGOs could be a strong partner for the clinical trial.
- In that sense, private companies should have more deep understanding of their culture and their way of thinking.

<Regulatory Harmonization>

- To install the products/solutions into the field, we also face with the regulatory affairs. Recently, the harmonization of regulations among countries and regions are going forward.
- It is not simple, however, to provide the products/solutions more efficiently, regulatory harmonization is not inevitable. What ultimately matters to take regulatory harmonization one step further is to invest capacity building for regulators and policy makers in LMICs at the same time.

<Delivery>

- "Last-mile" interventions should be prioritized to reach underserved populations to minimize negative factors affecting sustainability.
- In particular, Japanese players have been establishing distribution systems in ASEAN countries to some extent; however, there has not been enough done in African countries.
- In such areas, Japanese players must collaborate with partners in European countries and the United States.

<Maintenance>

- As products and services used become more high-tech, maintenance in developing countries becomes more important.
- ➤ To pursue sustainable development, we should not accept a culture in which products are disposable and thrown away and then similar goods are repurchased again.
- It is vital to determine how to provide maintenance through the private sector and how to foster the use of local agencies.

<Supply Management/Stockpiling>

- Stockpiling strategies, such as supply division storage by UNICEF in Copenhagen for development and emergency situations, and the international depot by The United Nations Humanitarian Response Depot (UNHRD) for emergency relief, enable prompt action when emergency demands are a major focus.
- Although the Japan Disaster Relief Team is utilizing the UNHRD Depot for emergency cases, the Japanese private sector does not fully understand its existence and importance.
- For both developmental and emergency purposes, a more efficient and effective system for supply management based on a PPP approach will be required.
- < Public Procurement System, Governance and Capacity Building>

- We need to improve the public procurement system itself in the emerging and developing countries.
- In some cases, the system and governance of public procurement do not fully work in an efficient and effective way. Now an initiative on "Open Contracting" is going forward as the reform of public procurement system was conducted in Ukraine for the last 3 years.
- In addition, capacity building for administrative officers including procurement officers is also vital as a social infrastructure to pursue the sustainable procurement.

<Leasing>

- The use of leasing will become more common as we seek to reduce procurement costs in a precise way and to promote adequate maintenance.
- For example, leasing systems for automobiles, agricultural machines, and construction machines could be applied to the UN procurement system and penetrate into the field.
- In addition to that, sophisticated Japanese photocopiers, which can be utilized in back-office roles in UN-related agencies, are also future candidates for lease arrangements.
- We believe that Japanese entities can foster a leasing culture with international organizations as a way to promote sustainable procurement.

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