

The Impact of COVID-19 on DPRK's Health System and Future Inter-Korean Biomedical Cluster Cooperation in the Post-pandemic Era

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SNU MEDICINE

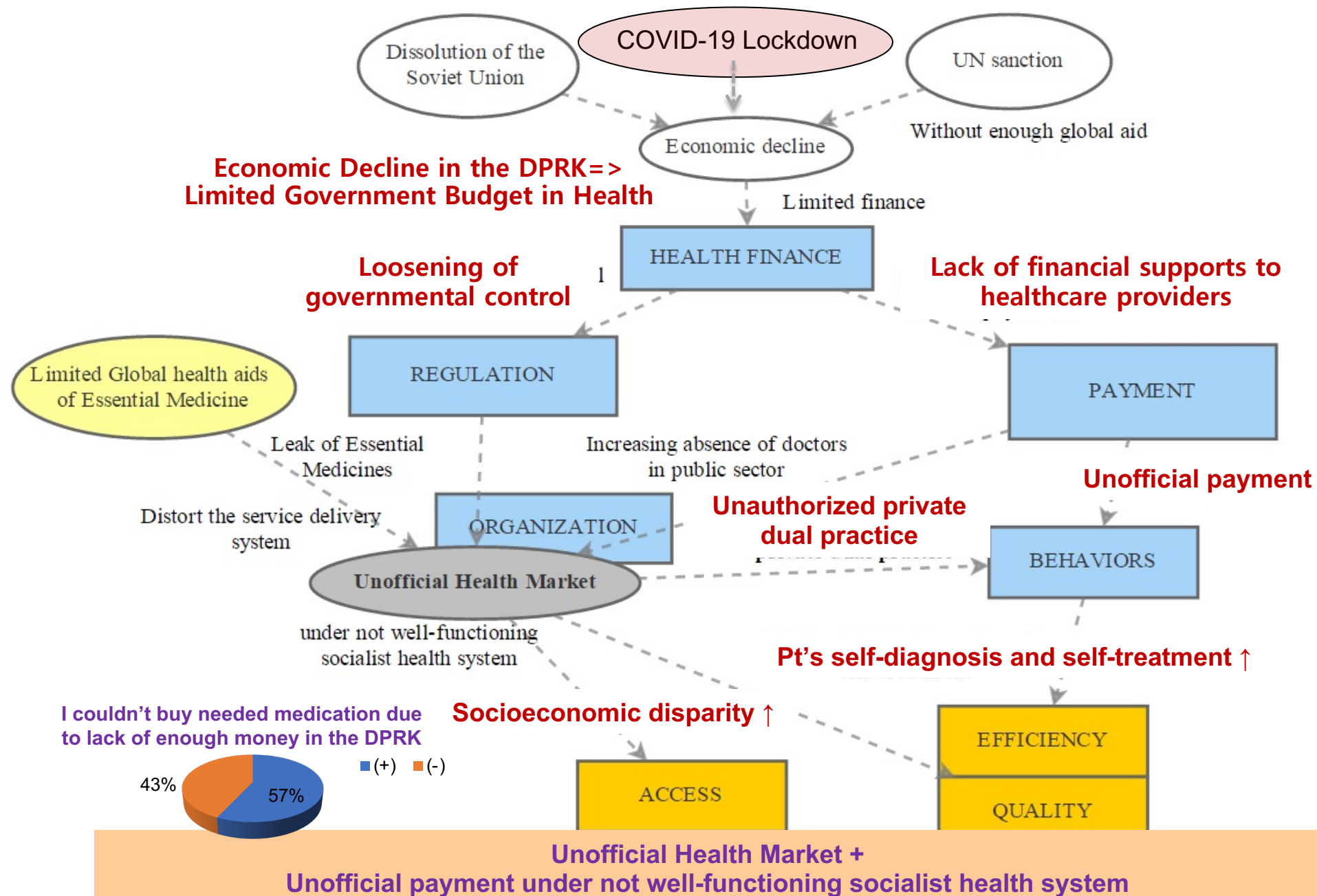


서울대학교 의과대학 통일의학센터
Institute for Health and Unification Studies

1. **Impact of the DPRK Covid-19 Response on the DPRK's Health System**
2. **Trends in Global Health Aid to DPRK During the International Sanction and the Role of the ROK Government in the COVID-19 Pandemic Era**
3. **Future Inter-Korean Biomedical Cluster Cooperation at the Demilitarized Zone (DMZ) or Border Area in the Post-pandemic Era**

1. Impact of the DPRK Covid-19 Response on the DPRK's Health System

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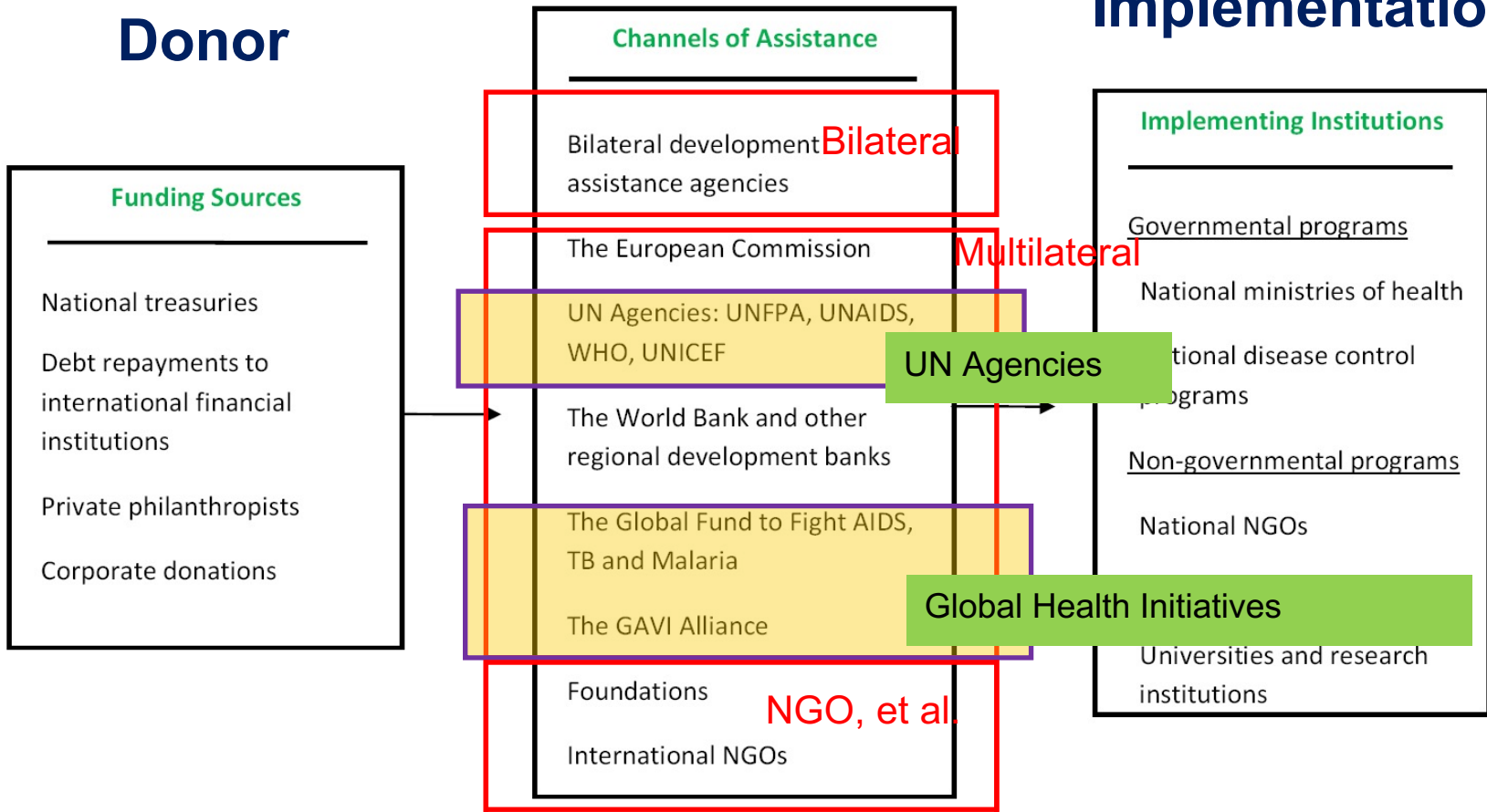
2. Trends in Global Health Aid to DPRK During the International Sanction and the Role of the ROK Government in the COVID-19 Pandemic Era

Flow of Global Assistance for Health

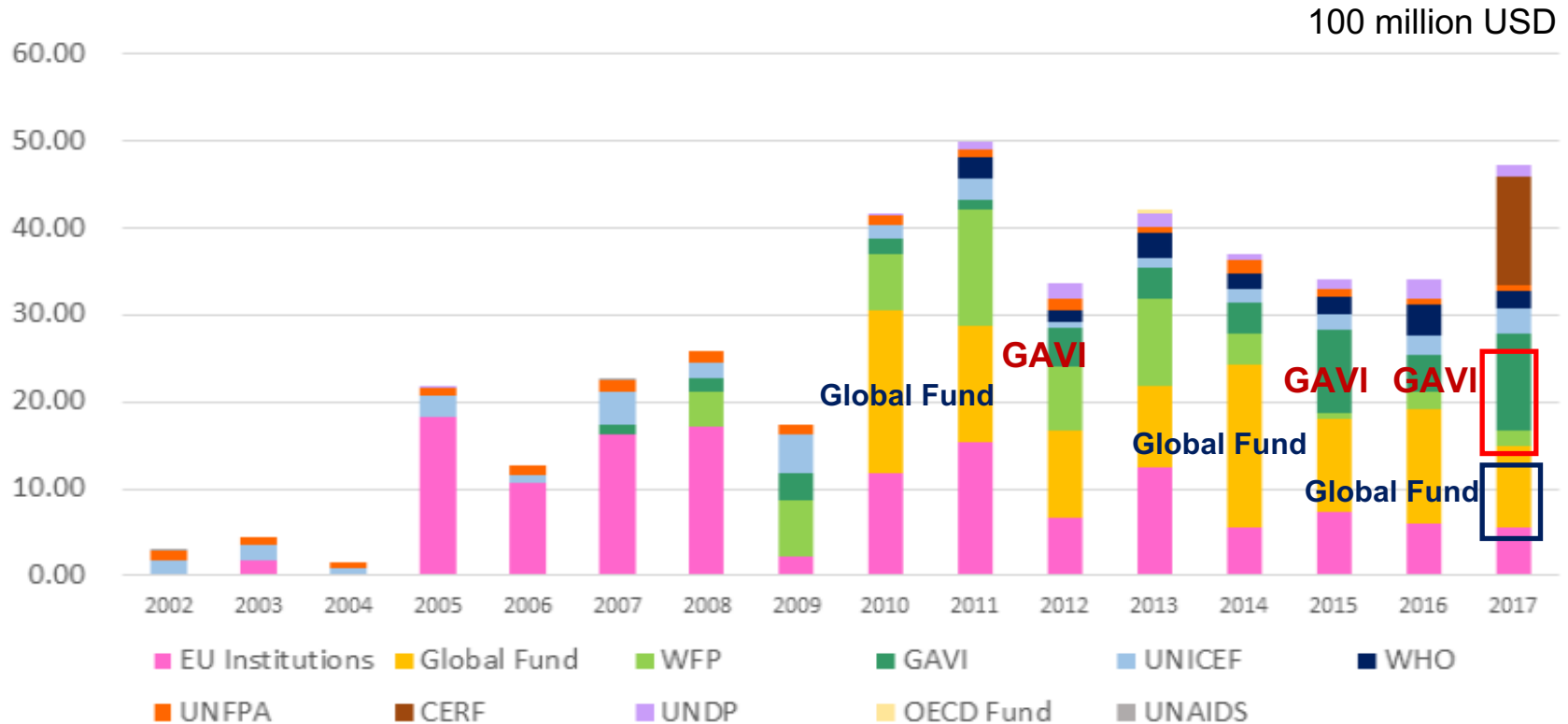
Channel

Donor

Implementation

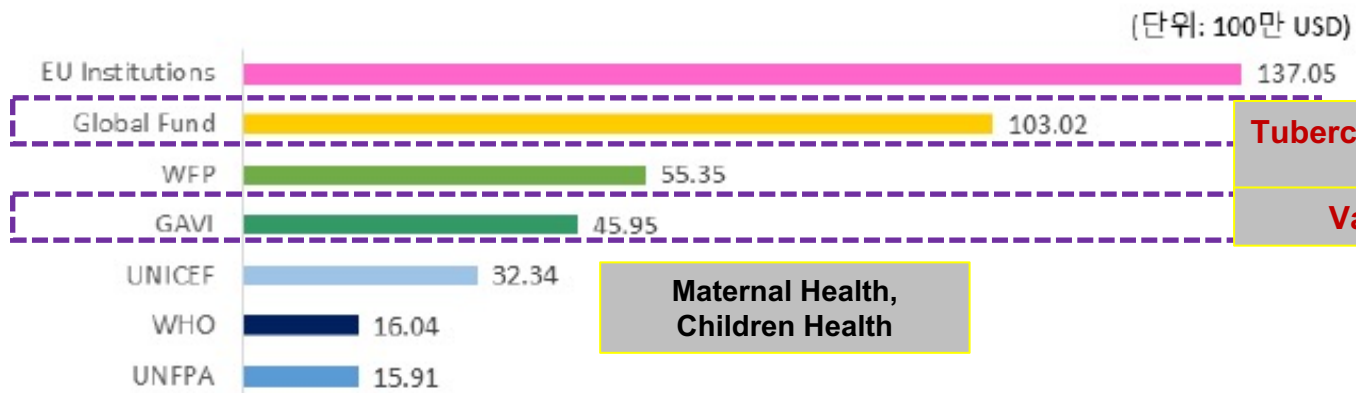


Trends in Global Health Aid to DPRK by Channel



[그림 2-1-22] 연도별 국제기구의 대북 보건의료 지원 총 금액

Total Sum



Global Health Initiatives: GAVI, Global Fund

focus on specific diseases or on selected interventions, commodities, or services

Global Alliance for Vaccines and Immunization (GAVI)

Vaccination

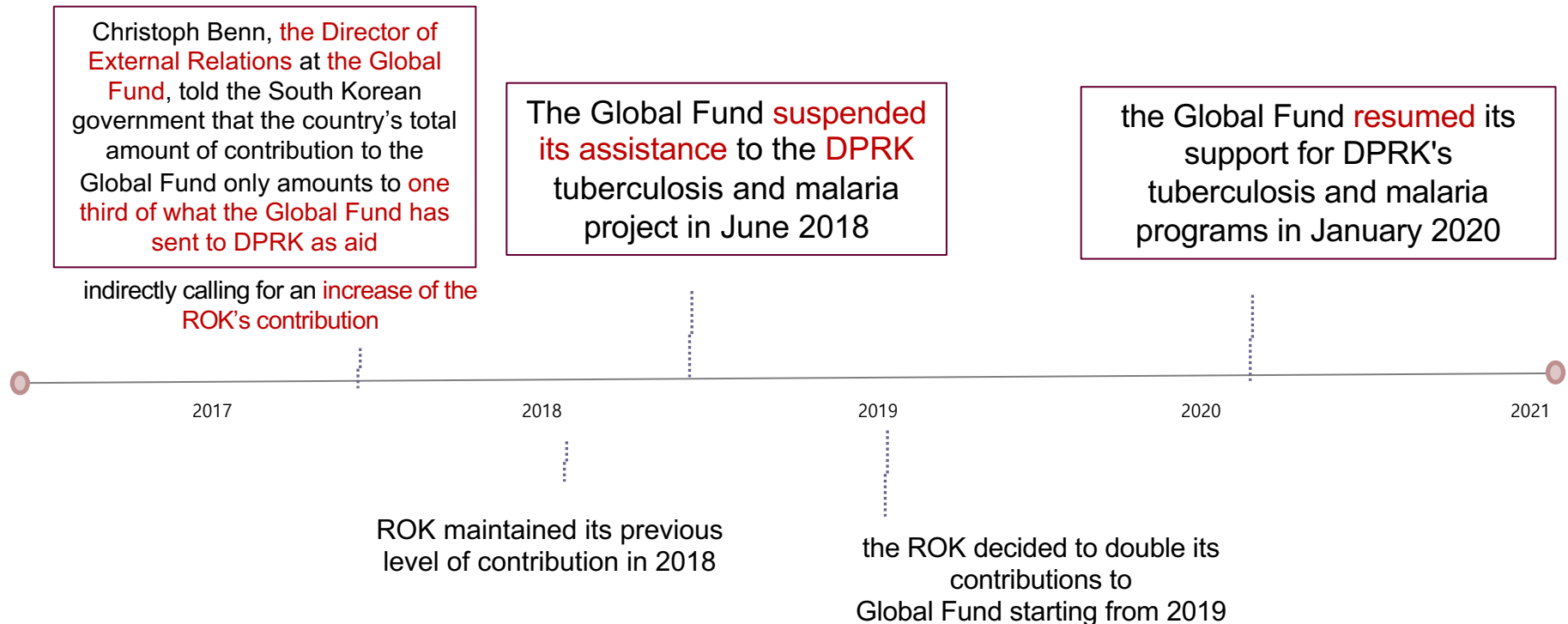
GAVI is co-leading **COVAX** (Covid-19 Vaccines Global Access)

Global Fund

Tuberculosis, Malaria, AIDS

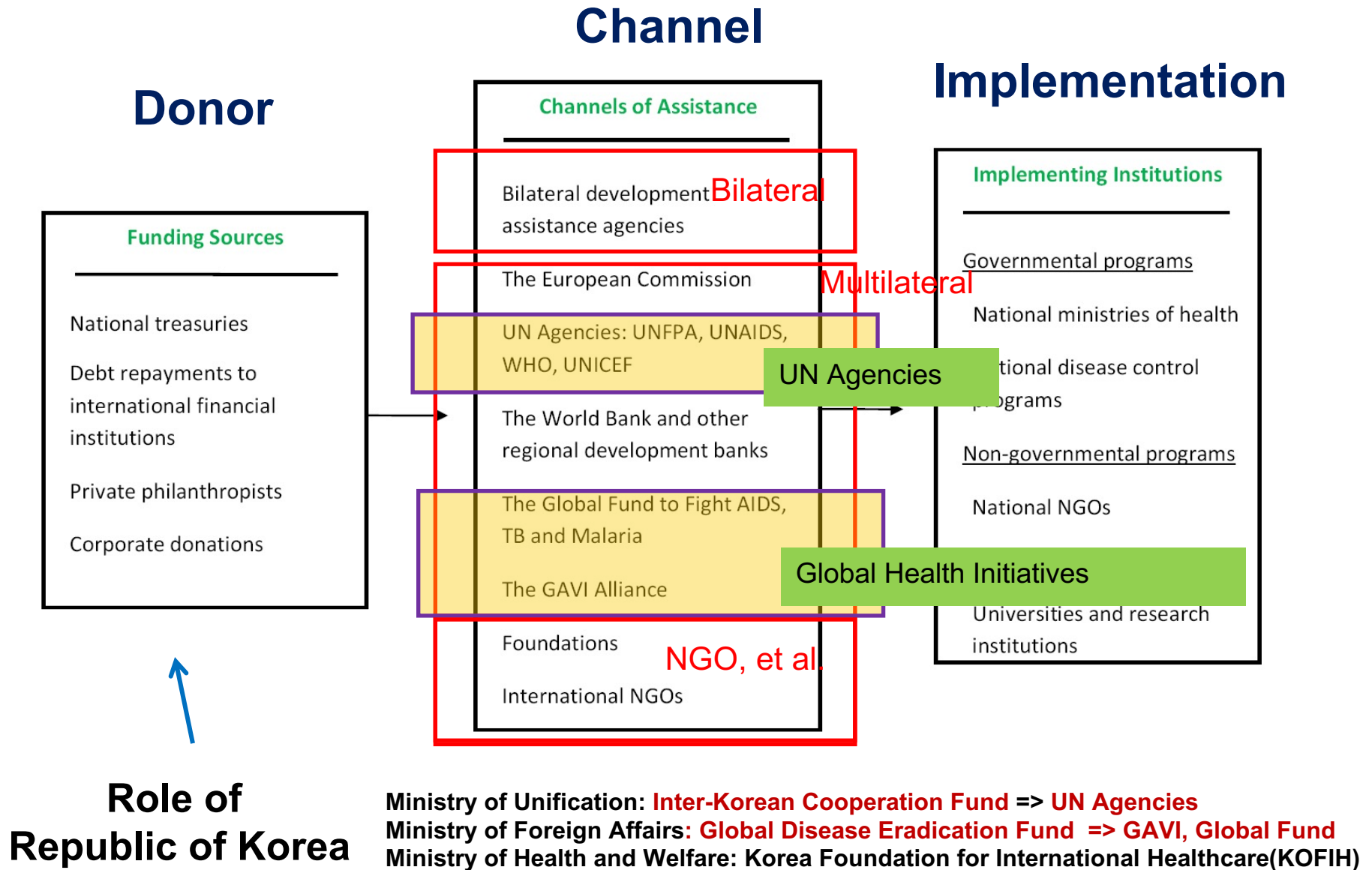
- Public donors' contributions **cannot be earmarked** for specific countries or programs, and the allocation of funding is the responsibility of the Global Fund Board
- **Performance based financing** : inputs linked to performance

Ex> Tuberculosis crisis in the DPRK



This is a classic example of how a country that financially depends on certain external organizations in tackling infectious diseases can become extremely vulnerable to international relations and political decisions.

Role of the ROK for Health Aid to the DPRK



Trends in Global Health Aid to DPRK by Donor Countries

	Source Location	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	계	%
1	Australia	6.66	2.89	3.39	1.74	7.44	-	0.78	1.98	-	-	-	5.51	2.02	1.50	-	-	-	-	-	-	33.91	2.73%
2	Austria	-	-	-	-	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06	0.00%
3	Brazil	-	-	-	-	-	-	-	-	-	-	0.20	-	4.12	-	-	-	-	-	-	-	4.32	0.35%
4	Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.04	2.34%
5	China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.21	0.42%
6	Cuba	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.40	0.11%
7	Czech Republic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	0.01%
8	Denmark	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.60	0.53%
9	Finland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.22	0.50%
10	France	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.51	0.04%
11	Germany	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.81	0.95%
12	Greece	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.00%
13	Hungary	-	-	-	-	0.12	-	-	-	-	-	-	0.02	-	-	-	-	-	-	-	-	0.14	0.01%
14	India	-	-	-	-	-	-	-	-	-	-	-	1.00	-	-	-	-	1.00	-	-	-	2.00	0.16%
15	Indonesia	-	-	-	-	-	-	-	-	-	-	-	-	2.00	-	-	-	-	-	-	-	2.00	0.16%
16	Ireland	0.22	-	-	0.09	3.10	-	0.64	-	-	-	-	-	0.25	-	-	-	-	-	-	-	4.30	0.35%
17	Italy	2.30	7.08	-	6.52	3.66	-	-	1.35	0.93	-	-	0.77	-	0.26	-	-	-	-	-	-	22.87	1.84%
18	Japan	95.66	104.89	0.00	-	46.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	247.25	19.92%
19	Korea, Republic of	0.47	15.79	16.24	16.83	52.40	0.03	7.28	13.31	11.24	14.21	-	-	4.39	12.08	6.57	4.00	4.00	-	-	-	178.84	14.41%
20	Liechtenstein	-	-	-	-	-	-	-	-	-	-	-	0.20	0.11	0.11	-	0.10	-	-	-	-	0.52	0.04%
21	Luxembourg	-	-	0.56	0.44	0.81	-	-	0.10	-	0.35	-	0.64	0.33	0.48	-	-	-	-	-	-	3.71	0.30%
22	Netherlands	-	0.10	-	2.20	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.52	0.20%
23	New Zealand	0.11	-	0.05	0.20	0.87	-	0.19	-	-	-	-	-	-	-	-	-	-	-	-	-	1.42	0.11%
24	Norway	1.70	1.58	0.74	2.62	2.76	-	2.43	4.65	2.86	4.70	0.78	0.88	1.77	0.86	1.00	-	-	-	1.74	0.43	31.50	2.54%
25	Poland	-	-	-	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	0.00%
26	Russian Federation	0.01	-	-	10.00	-	-	-	0.51	-	-	-	-	5.00	3.00	-	-	3.00	-	8.00	-	29.52	2.38%
27	Saudi Arabia	-	-	-	-	-	-	-	-	8.48	0.56	-	-	-	-	-	-	-	-	-	-	9.04	0.73%
28	Singapore	-	-	-	-	-	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.00%
29	South Africa	-	-	-	-	-	-	-	0.08	-	-	-	0.14	0.12	-	-	-	-	-	-	-	0.34	0.03%
30	Sweden	1.21	0.62	0.97	2.26	6.04	1.81	-	1.00	-	-	-	3.83	-	1.69	-	0.64	1.23	0.56	2.65	1.08	25.59	2.06%
31	Switzerland	0.89	2.22	-	0.35	0.10	0.23	-	0.45	-	-	-	4.95	4.91	7.95	-	-	4.59	-	5.32	5.99	37.95	3.06%
32	United Kingdom	0.07	1.71	1.71	-	1.89	-	-	1.01	-	-	-	-	-	-	-	-	-	-	-	-	6.39	0.51%
33	United States	29.23	102.70	63.49	31.52	19.30	-	-	-	-	-	-	-	-	-	-	-	-	1.00	-	-	247.24	19.92%
34	국가 제외 기관	7.08	1.25	25.75	45.39	25.8	1.12	0.45	29.91	-	17.85	11.1	42.49	20.49	15.84	2.99	7.18	11.38	12.35	10.25	-	288.67	23.26%
	계	149.83	247.41	118.34	130.42	184.83	4.75	11.77	55.27	23.51	37.67	12.08	61.70	54.67	45.75	11.46	12.47	27.22	13.91	29.82	8.21	1241.08	100.00%

It is very important for the ROK, United States and other donor countries to maintain its direct and indirect financial support in order to contribute to DPRK's health and medical care, including Covid-19 tests, treatments, and vaccines through various multilateral organizations in spite of difficulties in UN sanctions, inter-Korean cooperation and DPRK's Covid-19 lockdown.

3. Future Inter-Korean Biomedical Cluster Cooperation at the Demilitarized Zone (DMZ) or Border Area in the Post-pandemic Era

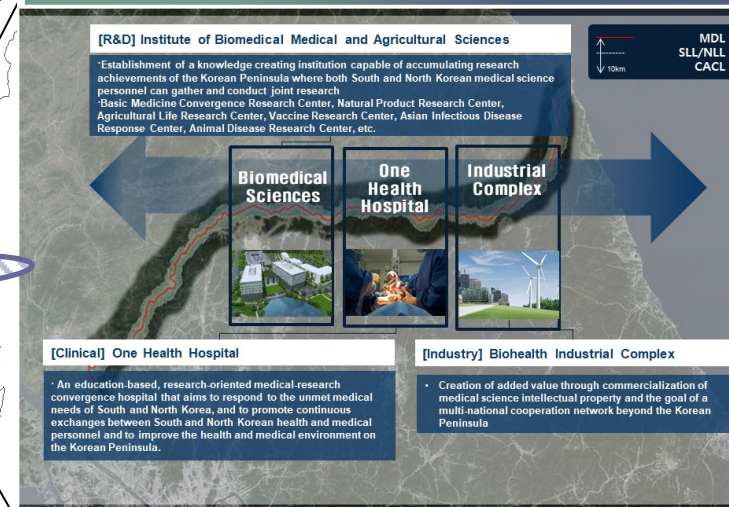
Inter-Korean Biomedical Cluster Cooperation could be accompanied by the Cooperative Threat Reduction Program

A sustainable and synergistic horizontal inter-Korean cooperation model

Biomedical cluster
Medicon Valley
in Sweden and Denmark

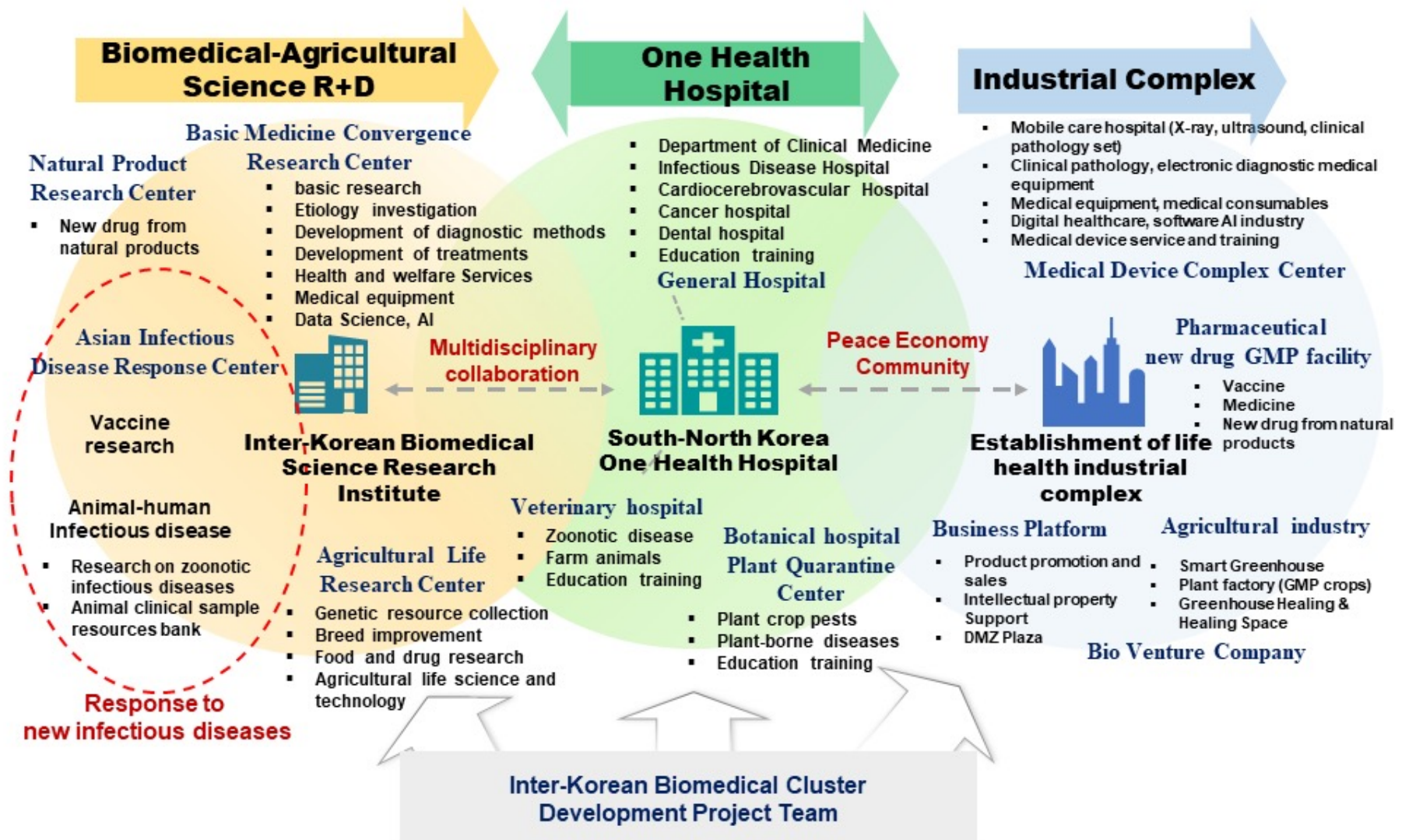
- ❖ Due to an economic crisis in early 1980 the two fellow Scandinavian countries decided to join hands to solve the problem of high unemployment rate in Sweden and high wage problems in Denmark
- ❖ Medicon Valley offers jobs to the Swedish people and an incentive for competition among businesses in Denmark. This benefits both countries and has become a model case of a cross-boundary biomedical cluster.

DMZ



- A model of **coexistence** in which **research, clinic, education, and production** are intertwined in an interdisciplinary network, based on a model of **economic cooperation** that builds upon the notion of “**One Health**”
- **DMZ** would no longer remain a symbol of the Korean war, but **a symbol of life and peacebuilding**

Inter-Korean Biomedical Cluster at the DMZ or Border Area



Administrative, financial, and legal promotion for inter-Korean joint R&D

Thank you



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