

Research for Innovations under Sustainable Development Goals

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The Sustainable Development Goals (SDGs) are a collection of 17 global goals designed to be a "blueprint to achieve a better and more sustainable future for all". The SDGs were set in 2015 by the United Nations General Assembly and intended to be achieved by the year 2030. The allocation of the Goals and their major themes in top leading SDG reports in 2019 revealed that the SDG topic of health was the 1st rank. According to the 2019 Global Index Rank of top 20 from 162 countries reported, Denmark was the 1st rank with score of 85.2 from 100, whereas Thailand was the 40th rank with score of 73. Among the ASEAN countries, Thailand had the highest scores. It is interesting to note that the scores of Goal 9: Industry, Innovation, and Infrastructure were lowest with less than 50% for all ASEAN countries, which means that these countries still lacked of created innovations. Nevertheless, the government of Thailand has recently set the 20-year National Strategy, by which will lead to the Thailand's Vision 2037 with scenario of Security, Prosperity, and Sustainability. Two of these six strategies relevant to SDGs' Goal 9: Industry, Innovation, and Infrastructure are Strategy 2: National Competitive Enhancement and Strategy 5: Eco-friendly Development and Growth. It seems that the research for innovations in Pharmaceutical Sciences for National Competitiveness Enhancement Strategy would be under the key development guidelines #2: Developing future industries and services in order to create future industries and services that can be key growth engines designed to push Thailand to become a developed country through advanced innovations and technologies including biological industry, integrated medical industry and service, digital, data, and artificial intelligence industry and service, transport and logistics industry and service, and national security industry. In particular, the mostly potential innovations in the area of Pharmaceutical Sciences are incremental modified drugs (IMD). The IMD could either be chemical modification or drug delivery modification. The drug delivery modification could make use of permeability enhancement, solubility enhancement, modified release, PEGylation to delay drug clearance, and targeted drug delivery.

Keywords: Sustainable Development Goals; Global Index Rank; 20-year National Strategy; Thailand's Vision 2037; incremental modified drugs
The related SDG: 17 Goals of SDGs