**ศาสตร์พระราชา 1 มิ.ย. 2561**

 A very good evening to you all.

 There are several health related celebratory occasions in this week i.e. World No Tobacco Day (May 31) and World Milk Day (June 1). The international community agrees that human resource is the most valuable resource of all, thus we need to encourage everyone to do good things for their body such as drinking milk and stay away from smoking, which coincides with a Buddhist teaching “Do good, abstain from evil, and purify one’s mind,” a principle that can be incorporated into our everyday lives for peace, happiness, and prosperity. All Religions have similar teachings and principles, all of which teach followers to be better persons. Smoking might be considered as an act of accepting and bringing a harmful thing into our body. Not only does smoking harms smokers’ health, but also the health of others around them. Also, cigarettes might be a doorway to illicit drug. A pathway that has to be shut down while we still can. Therefore, the Government last year introduced the new Tobacco Control Act, B.E. 2560. The law aims to lower the number of new smokers and protect non-smokers from secondhand smoking related health concerns. The law forbids cigarette sales to children, limits smoking areas, reduce access to tobacco, and raises tobacco prices. If the law is strictly and effectively enforced, the country might be able to spend less on medicines and treatments of 12 cancer types, heart diseases, emphysema, and diabetes. Those looking to quit smoking can call National Quitline Center at 1600 for help and consultation. Drinking milk is a positive thing. The more you drink the better you will become. Bringing good thing into your body. I want to encourage everyone to drink milk, just like I encourage everyone to do positive thing. Very surprising, statistics revealed that Thailand is ASEAN’s largest consumer of carbonated drinks (41 liters/person/ year), and the world’s 5th largest alcohol consumer (52 liters/person/ year), but is the world’s 68th largest milk consumer (only 18 liters/ person/year or 2 glasses a week) which is lower than an average consumption rate at 113 liters/ person/year. This has prompted the Government to set a plan to encourage Thai people to drink at least 25 liters of milk a year by 2026 and has instructed the Agriculture, Public Health, and Commerce Ministries to raise the standards of dairy cow farmers in order to lift the wellbeing of Thai citizens, and to enable Thailand to be able to export milk products to the rest of Asia. Breast milk is best for newborns and babies. There are a variety of milk products to choose from depending on the consumers’ age and needs. For instance, the elderly people are recommended to drink calcium-rich milk which helps strengthen their teeth and bones. Those allergic to cow’s milk can switch to goat’s milk, soy milk, and rice milk. They are easy to drink and have all the nutrients you need.

 At present, the Government encourages rice producers to turn their crop into other products such as rice milk, which is a way to add value for commercial purposes and for export. Overseeing the whole process can help fellow farmers increase their income. In addition, the Government encourages the producers to grow Ghor Khor 43 rice which is affordable, yet high in quality. Low in sugar content, this strain of rice is a viable alternative for healthy gourmets. Ghor Khor 43 rice has been certified by the Ministry of Agriculture and Cooperatives and faculty of medicine in university. Next week, June 5th, will mark National Rice and Farmers’ Day. There is good news for rice farmers who are likened to the nation’s backbone. The price of Hom Mali rice has reached 17,800 baht a ton. Husked rice is sold at 8,200 baht per ton, which is considered a good price. I’d like to invite the farmers and interested individuals to adopt the Farmers 4.0 initiative comprising the market-to-production policy, the large-scale farming concept, a pledging scheme for in-season rice, the processing of rice into health and beauty products, and the combination of technological innovations and Thai wisdom. You can find out more about these methods and practices at Agriculture and Cooperatives offices nationwide. Farmers may be suffering from debt problems. They have both formal and informal debts. Part of their hard-earned money goes to debt payments and everyday necessities which can be expensive. High production cost is another big concern. The Government is determined to eradicate all informal debts.

 My fellow Thais, many factors have contributed to the rising prices of Thai rice, one of which is the Government’s success in managing water resources. Please allow me to inform you how it is done from all angles. The success is indicative that the reform has begun in all areas. Some problems can be fixed in an instance. This is a reform too. Improvement is also a reform. In terms of water, please heed our advice. There are positive developments on the issues of flood. I am going to talk about the overall picture first before going onto details. 2018 is the first year that the Government does not have to declare any area a drought zone. This is the result of coordinated efforts between related agencies which have resulted in a high efficiency integrated system, as evidenced by 4 times faster operations while at the same time requiring 30% less budget. When we talk about “integration,” it starts with integrating efforts of all related agencies, ministries, and organizations responsible for overseeing water consumption in the household sector, the industrial sector, agriculture, and tourism and hospitality. Also, we need to have enough water to push brine water out of farmlands and to maintain ecological balance.

These agencies work with the Pid Thong Lang Phra Foundation and the Office of the Royal Development Projects Board (ORDBP). Both organizations possess a true understanding of the Royal Philosophy and have contributed to the sustainability of water resources. In addition, the Geo-Informatics and Space Technology Development Agency (Public Organization) or, in brief, GISTDA provides satellite imaging services, allowing the country to understand the current water situation. Data sharing is conducted through the synchronized Big Data system which has given us an ability to make good and timely decisions. These undertakings are spearheaded and supervised by the National Water Management Committee appointed by the Office of the National Water Resources. Despite having tens of responsible agencies under the committee, the unit acts as one in order to integrate agencies, working panels, plans, projects, personnel, and funds.

Importantly, we have to work strategically. We also need to draft a 20-year water resources management plan (2017-2036) that in line with the 20-year national strategy plan. The strategy also incorporates royal principles of the late monarch and the resolutions of the latest World Water Forum in March including the participation of all stakeholders in water activities, cross-border and legislative cooperation, the empowerment of the new generation in solving water related issues, and the adoption of the UN’s sustainable developmental goals. In relation to the four-year work results, the Government led by the Office of the National Water Resources has been raising public awareness of the country water management initiative and will organize a water forum on Monday, June 4th, at Santi Maitri Building, Government House. Please stay tuned.

Here is a brief summary.

1. In terms of water management for consumption, irrigation systems have been installed in 97% of 7,490 villages. Almost 2,000 more schools have their own irrigation systems. Nearly 2,000 groundwater wells have been constructed. These operations will continue until our target is achieved.
2. In terms of water stability in production (agricultural and industrial sectors), the government has improved water sources both inside and outside irrigation zones, built retention areas in farm areas, and set up groundwater systems. A total of 3 million households and around 2 million rai have benefited.
3. In terms of flood management, we have dredged and unclogged canals, waterways, and main rivers, covering a distance of 300 kilometers, preventing flood in 63 communities. The dredging will continue.
4. The Government has rehabilitated 300,000 rai of forests and water sources.

On water quality and sustainability, we push forward the Wate Resource Management Act. This Act is in conjunction with the National Reserved Forest Act and the National Parks Act. Impact assessment studies must be carried out.

Under the area-based water management plan (2018), an additional 216 projects worth 4 billion baht have been endorsed, increasing water supplies by 27 million cubic meters and covering 900,000 rai. 3,000 more projects can be expected in 2019. They will be approved based on their urgency. Money will be spent wisely and for the best interest of the public. We have to invest in several systems for completeness and higher efficiency such as the mapping system, simulation system, water data storage, and monitoring/measuring system. These systems will allow us to forecast and follow weather conditions that will help determine on water retention - funneling - the use of detention basins. In essence, this is called integrated (water) management for a more effectiveness.

For example, integrating information received by all agencies will be used to create a water management plan in the rainy season enables us to plan rice cultivation. It provides us with an insight for rice farming of 60 million rai, which will require a total water supply of 88 billion cubic meters. Once the rains are gone, we must have a sufficient amount of water for agriculture during the dry season (2018-2019). Such sufficient amount is 60 billion cubic meters. There are many other activities that have to be done concurrently, such as establishing a flood calendar, determining flood-risk areas based on statistics of past 55 years and the degree of severity, preparing response plans which involve the use of natural waterways and fields to deter floodwater. This includes monitoring reservoirs to prevent overflowing or releasing too much water that there is none left for future use. We may also need to survey our old reservoirs and repair them. We need the locals and farmers to cooperate for projects to be successful. These projects will not succeed if the Government has to do them alone.

 My dear citizens, water management for the manufacturing sectors of the country that require long-term preparation include the Eastern Economic Corridor (EEC) which needs to build confidence of both Thai and foreign investors. This will be an important mechanism for the country’s economic reform in the digital age or at least for the next 20 years. There must be a study on the water pipeline construction route to ensure consistency with the country’s water plan, which includes flood prevention for important areas of the EEC. In the first 10 years, an additional 320 million cubic meters of water per year is required for the EEC water network. This must be undertaken in many parts, such as improving existing water sources, developing reservoirs, linking water sources and diversion systems, pumping back water at the end of the reservoir, flood protection plans, and allocation of reserved water. The 20-year plan will include the development of 104 eastern water reservoirs of 1.9 billion cubic meters. Other projects include water demand management, reduction of water use, repeated water use, production of fresh water from seawater (many countries already have this technology as an important strategy, such as Singapore and Israel) and providing sources of water for the industrial sector. A successful model for the EEC will also become a model for the implementation of the 10 other special economic development zones. This isn’t just about the economy or investments alone, but is for the people in these areas in the 3 provinces.

An example of public participation in water management for the community that I would like to mention is the "Nong Bua Lamphu Model" or the water distribution system project using solar power. This story is from my visit to Nong Bua Lamphu in March. The province proposed solutions to poverty and how to improve people's quality of life by improving water resources for agriculture and developing groundwater sources to provide farmers with water throughout the year. This has resulted in a continuous and stable revenue stream along with the use of solar water pump to reduce the cost of production. They have piloted this program in 58 organic farming areas, including large agricultural areas according to Government’s policy and the new agriculture theory - hybrid crops as a form of alternative farming, and reducing the risk of chemicals to yield safe and profitable crops. This program can also promote alternative occupations during off-season or leisure times, such as supplementary occupations, crafts and product processing. This will involve a budget of around 210 million baht and more than 2,000 volunteers, covering an area of 23,000 rai. When production costs are deducted, farmers earn more than 12,500 baht per rai per month on average or 150,000 baht per rai per year. Based on rough estimates, you will see that we invest about "100,000 baht per person." That means we will receive an immediate return on investment in a year and also create sustainability for the farmers in the area. This is our point of differentiation when addressing agricultural problems. We will be able to reduce the central budget by drawing from the fund for supporting energy conservation by more than half at around 124 million baht. This will be a worthwhile use in accordance with the purpose of the fund as well. This is an example of development by engagement that is a result of the strength of the community who is able to find its own solution while supported by the Government. I hope that other areas will follow this example.

 Farmers suffering from natural disasters and low agricultural prices for many years must depend on informal debt with very high interest rates to the point where they cannot spend money on life’s necessities. The Government has stepped up its assistance measures to urgently address the basics of the problem within 1 month. The original timeframe was 6 months. Deputy Prime Minister Gen Prawit Wongsuwan has assigned provincial governors along with responsible agencies and the NCPO, together with provincial ISOC offices to prepare a database on borrowers of informal debts in order to provide assistance. For the general public and farmers who borrow money from the mills, the state officials I have just mentioned will help mediate the debt with the mills, amend contracts (if it is illegal), and ensure fairness to all parties. As for debtors who have no ability to repay their debts, the Government will push them into more appropriate systems that consist of many measures. This will allow farmers to live and have enough money to invest in agriculture in the next season and have the opportunity to improve the quality of life of their families at the same time. In this regard, the Government would like to seek cooperation from all parties.

Finally, I have 2 issues regarding the public that are of concern. The first is the poll on public awareness of dengue fever (DDC poll) which found that people harbor many misunderstandings. For example, many people think that adults cannot get sick from dengue virus. In addition, some people think that if they come down with dengue fever, they will be able to cure themselves with over-the-counter drugs. This is not true. Moreover, almost 70 percent think that the eradication of mosquitoes in homes and communities is the responsibility of the Government alone. This year, the outbreak trend is in the north and the upper central region. The pattern of outbreaks will change. There are more deaths in adults due to illness such as obesity, diabetes, high blood pressure, heart disease, and blood disease etc. Be on the lookout for symptoms of relentless high fever for 2 days, no cough, no sore throat, no mucus, aches, red eyes, may have rash under the skin, arms, legs, or folds. Should you notice these symptoms in yourselves, children, or people close to you, please hurry to see a doctor. For more information, call the Department of Disease Control at 1422. Don’t forget to get rid of mosquito breeding grounds, watch out for mosquitoes, and cover water containers with lids.

Another story is from having watched the show “Because We Care” that is a crisis-notification show on New 18 channel. I would like to talk about the benefits of cooperation and the public sector’s ability to support the work of the Government to ensure that people can cope with unexpected events. There are also networks on social media, such as the Because We Care page, “Maam Pho Black” page, and Drama-Addict page where complaints can be filed by children, women and victims of violence. The page undertakes an initial inquiry and provides systematic assistance in addition to forwarding the case so that they are provided with the best possible assistance in a timely manner. They can arrive at the location and provide assistance in an urgent manner. I see these as good examples because it integrates work between government agencies that are directly responsible for social issues such as the Ministry of Social Development and Human Security, the Police General Hospital, the Royal Thai Police, and the public through these creative social media pages. Pages that are counterproductive and in violation of the law will be prosecuted. The law is the law. Agencies from the Department of Children and Youth and civic groups will be another source of reliance for the public. I would like to offer my support to these groups and I hope that all social media pages will be working for the greater good.

Thank you and I wish everyone a happy weekend. Tuesday, June 5, is World Environment Day. I would like to invite everyone to use less electricity, dispose waste properly, and separate garbage. Also, please use cloth bangs instead of plastic and foam containers. We will get use to these practices when we do it often.

Thank you. Sawasdee Krub.