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Contribution of Thailand

to the CSTD 2016-17 priority theme on 'New innovation approaches to support the implementation of the Sustainable Development Goals'

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## [New Innovation Approaches

Thank you, Mr. Chair,

Distinguished Delegates,

Ladies and Gentlemen,

On behalf of the Government of Thailand, I would like to share a few remarks on the new innovation approaches to support the implementation of the SDGs.

- 1. Under the current government, new policy initiatives to reform the nation's STI system was launched in 2014. It is part of a bigger picture of the national agenda to transform Thailand towards an innovation-driven high-income country, so called Thailand 4.0 with sustainability and inclusiveness—achieving SDGs by the year 2030. It is clear that innovation is at the center stage of this transformation.
- 2. Promoting startups is one of the policy initiatives that we hope to propel Thailand towards that ambitious goal. Last April, the government organized the first Startup Thailand Expo in Bangkok, followed by smaller regional events later in the year. The series of events were successful at raising public awareness about startups, innovation and entrepreneurship in Thailand and inspiring the young and the talented. While digital and tech startups are highlighted, startups in other areas of innovation, especially agricultural innovation, are also promoted and nurtured as the government sees that startups are key to solving existing lack of innovation challenges in Thailand, including that which will help reduce social disparity. Startups promotion is used as the mechanism to attract the new generations to innovate and then initiate their own businesses, to help improve productivity and create jobs, particularly in their hometowns, slowing down the migration to cities. The Ministry of Science and Technology, which is in charge of startups promotion, is working with 30 universities nationwide in the so-called Entrepreneurial University initiative to assists universities in building up students' entrepreneurial skills and mindset which is necessary for building an innovation ecosystem.<sup>1</sup>
- Besides startups, social enterprise promotion is another mechanism to promote innovation. The Thai parliament has just passed the Social Enterprise Promotion Act, even though this has yet to become fully active the promotional activities leading up to the passing of this important Act have created interesting interests and active social innovation. Founded in 2009 by social entrepreneur Nawee Nakwatchara (นาวี นาควัชระ), Grassroots Innovation Co., Ltd. (บริษัท นวัตกรรมชาวบ้าน จำกัด)<sup>2</sup>,

<sup>1 &</sup>quot;พิเชฐ" คว้ารางวัลผู้นำนโขบาขสตาร์ทอัพระดับชาติของโลก ดันสตาร์ทอัพไทย ผงาดสู่สากล

http://www.matichon.co.th/news/367119

<sup>&</sup>lt;sup>2</sup> เครือข่ายนวัตกรรมชาวบ้าน <u>https://www.facebook.com/Grassroot-Innovation-Network-1407076692849519/</u>

located in the rural province of Buriram, promote integrated organic farming by smallholder farmers in rural Thailand through consultancy, training, lending of production factors, and linking them with markets. By building capacity of small-scale rural farmers, the company is enabling farmers to become their own agents of change and stimulating farmers to experiment and contribute to a growing knowledge of locally appropriate agricultural practices. The Grassroots Innovation Company is one of the social enterprises which have sprung up in the past ten years with support from the Thai Health Promotion Foundation (and.).

Another example is ChangeVentures which was set up by ChangeFusion<sup>3</sup>, a non-profit institute under the Thai Rural Reconstruction Movement Foundation (มูลนิธินูรณะชนบท) under the Royal Patronage. ChangeVentures raises fund from social investors and social investment funds to support social enterprises to scale up social impacts and their operations.

- 4. Public-sector research institution like the National Science and Technology Development Agency (NSTDA) also played role in stimulating grassroots innovation through their STI for Rural Development program speared head by their Agriculture Innovation and Management Institute (AIMI). NSTDA runs an annual agricultural grassroots innovation contest called Thailand Folk Innovation Award in Agriculture<sup>4</sup>, connecting innovative farmers with researchers and scientists to conduct further research, development and diffusion of knowledge and best practices in sustainable agriculture and community development.
- 5. Another grassroots innovation movement which is gaining a lot of attention in Thailand is the maker movement as seen from the opening of several maker spaces in Thailand, such as Home of Maker<sup>5</sup> and FabCafe<sup>6</sup> in Bangkok and Makerspace Thailand<sup>7</sup> in Chiang Mai and from the organizing of Bangkok Maker Faire<sup>8</sup>.

<sup>&</sup>lt;sup>3</sup> ChangeFusion: Growing Social Entrepreneurs <u>http://changefusion.org/</u>

<sup>4</sup> การประกวดนวัตกรรมชาวบ้านด้านการเกษตร <u>http://www.nstda.or.th/folk/</u>

<sup>&</sup>lt;sup>5</sup> Home of Maker <u>http://www.homeofmaker.com/?page\_id=10</u>

<sup>&</sup>lt;sup>6</sup> FabCafe Bangkok https://www.fablabs.io/fabcafebangkok

<sup>7</sup> Makerspace Thailand http://www.creativechiangmai.com/orgview.php?org\_id=44&sorgcate\_id=&stxt=&sort=&order=

<sup>&</sup>lt;sup>8</sup> Bangkok Mini Maker Faire http://www.bangkokmakerfaire.com/

- Home of Maker is both a maker space and a DIY electronics shop aiming to be a hub for makers and inventors where workshops and related activities are held to support makers and inventors to turn their ideas into reality.
- Makerspace Thailand in Chiang Mai, the second largest city in Thailand, as a part of the Creative Chiang Mai initiative. Makerspace Thailand attracts people who like to design and make things both as a hobby and for commercial purposes, providing the tools needed for users to build their own ideas.
- Bangkok Mini Maker Faire, part of the worldwide Maker Faire, is a familyfriendly showcase of invention, creativity and resourcefulness, and a celebration of the maker movement. The first event was organized last year by NSTDA and the Chevron Enjoy Science campaign
- 6. Youth-led grassroots innovation is another area that is being experimented in Thailand. Darunsikkhalai School for Innovative Learning (DSIL) at King Mongkut's University of Technology Thonburi (KMUTT)<sup>9</sup> opened the Bangkok FabLab @ School in January 2013 in conjunction with the 2013 Constructionist Learning Symposium and in collaboration with the Stanford Graduate School of Education. The FabLab@School<sup>10</sup> project in Thailand is a partnership between Stanford and three leading Thai institutions: the Suksapattana Foundation; the Darunsikkhalai School for Innovative Learning (DSIL); and the Faculty of Engineering at Chiang Mai University. It provides a new hub for science, engineering and mathematics learning in Thailand and is fully equipped with cutting edge digital fabrication tools. Professors regularly work with teachers and lab facilitators at DSIL to design project-based activities for students. Design projects are currently underway between students in Nairobi, Moscow and Bangkok. Through its innovative learning program, the school is urged to produce social leaders, technology leaders, startup leaders, and environment conservation leaders.<sup>11</sup> It is served as a model for other schools in Thailand. Through their 20 years of involvement in promoting constructionism based learning, KMUTT is an example of a few Thai Universities which has launched active University-wide Student Entrepreneurship Program.
- 7. In 2015, The Thai government launched the Grand Challenges Thailand, a national initiative to bring together research, development and innovation

<sup>9</sup> DSIL http://e-school.kmutt.ac.th/index.php

<sup>&</sup>lt;sup>10</sup> FabLab @ School <u>https://tltl.stanford.edu/fablabsite/bangkok</u>

<sup>11</sup> คร.พิเษฐ คุรงคเวโรจน์ เยี่ยมชมการจัดเรียนการสอนตามแนวทฤษฐี Constuctionism... ได้กล่าวถึงครุณสิกขาลัย ผ่าน

FACEBOOK http://e-school.kmutt.ac.th/newsDetail.php?NewsID=68

community to tackle key issues for national development and global health. Grand Challenges Thailand will be funded by the Royal Thai Government and managed by the NRCT under the Thailand Research Organization Network (TRON). Research projects under Grand Challenges Thailand will foster innovations with impact for the betterment of those in need and will collaborate with partners in the broader Grand Challenges movement.