

Significant Role of STB Developing in Malawi

Letter to the Editor

By Donasius Pathera

Science and Technology Backyard (STB) is a novel approach for nurturing postgraduate students studying agriculture who will be sent to the frontline of agricultural production to deal with practical challenges impacting farmers daily. The concept has gained recognition and importance in recent years, especially in the context of developing countries like Malawi. These nations, often grappling with challenges related to agricultural productivity, food security and economic development, can significantly benefit from adopting and adapting the STB approach.

Most developing countries, including Malawi, predominantly rely on agriculture for their livelihoods and economies. However, they often face challenges such as low crop yields, limited access to modern farming techniques, and susceptibility to climate change. The STB approach facilitates the development and dissemination of locally adapted technologies, farming practices and innovations, which can directly address these challenges.

Food security remains a pressing issue in many developing countries. By implementing STB systems, these nations can improve agricultural productivity, reduce post-harvest losses, and ensure a stable food supply. This is espe-



A postgraduate student explains corn planting to a farmer in Quzhou county, Hebei province where the first Science and Technology Backyard is established. (PHOTO: XINHUA)

cially crucial in Malawi, where seasonal variations and droughts can threaten food security.

Developing a robust STB system encourages innovation, entrepreneurship and the growth of small and medium-sized enterprises in the agricultural sector. This, in turn, contributes to economic development and job creation, vital for developing countries' overall prosperity.

China's success story in implementing STB provides valuable insights for Malawi and other developing countries in terms of government commitment, collaboration and knowledge transfer, and tailored solutions.

China's government has consistent-

ly prioritized investment in research and development, agricultural innovation and technology transfer. Malawi can learn from China's commitment to allocate adequate resources and political will to its STB system.

China has actively promoted collaboration between research institutions, universities and private enterprises. Malawi can emulate this approach by fostering partnerships between research institutions and local farmers, in order to promote knowledge adoption and technology transfer.

China's STB system is tailored to local conditions, taking into account the diversity of climate, soil and crops across the country. Malawi should simi-

larly develop context-specific STB models that cater to its unique agricultural landscape.

Leveraging the "latecomer's advantage," which refers to the opportunity for countries to catch up and leapfrog more technologically advanced nations, in the context of STB, can be a strategic approach for many developing countries.

Malawi can use the latecomer's advantage in STB by adopting existing technologies strategically, learning from the experiences of others, and focusing on priority areas for development. By building human capital, creating a conducive ecosystem, fostering collaboration, and supporting indigenous innovation, the nation can accelerate its progress and leverage technology for sustainable development and economic growth.

The STB concept holds immense potential for developing countries to address agricultural challenges, enhance food security and promote economic growth. Drawing lessons from China's successful implementation of STB systems, Malawi can tailor its approach to its unique context, fostering collaboration, investing in research and capacity building, and ensuring knowledge transfer to farmers. By doing so, Malawi can model its STB system to empower farmers and contribute to the nation's sustainable development.

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International Cooperation

China-Uzbekistan Sericulture Collaboration Proceeds Smooth as Silk

By Staff Reporters

Uzbekistan, with its long history of mulberry tree cultivation and silkworms raising, is now the third largest silk producer in the world. The cooperation between China and Uzbekistan in sericulture is blossoming under the Belt and Road Initiative (BRI) framework. There is especially extensive sericulture trade and technological exchange between the Central Asian country and Zhejiang province, east China.

Wang Yongqiang, director of the Institute of Sericulture, Zhejiang Academy of Agricultural Sciences, said Zhejiang and Uzbekistan sericulture complement each other as they have different advantages.

Silkworm eggs from Zhejiang are of high quality and yield whereas the traditional Uzbek silkworm eggs can resist coldness and drought. Also, China has a clear advantage in silkworm raising techniques whereas Uzbekistan has lower land and labor costs, Wang said.

The Institute of Sericulture and Tea has been working closely with its coun-

terparts in Uzbekistan for win-win results, including selecting high-quality varieties of sericulture appropriate for Uzbekistan, developing promotional technologies, building local demonstration bases in major production areas, conducting training for technicians, and facilitating the complementation of each other's advantages in technologies, resources and markets.

Shamsiddinov Navruzbeq, director of Research Institute of Sericulture and Tea, Uzbekistan, said the cooperation in sericulture between the research institutions of the two countries has been going on for years, optimizing sericulture varieties and enhancing the technological level of gene analysis. Investments by enterprises have also been introduced to increase the income of silk farmers.

Wang said his team is conducting whole genome analysis of 45 representative sericulture germplasm resources of Uzbekistan to find the best resources and important functional genes, which would lay a solid foundation for future cooperation in variety breeding.



The cooperation between China and Uzbekistan in sericulture is blossoming under the BRI framework. (Designed by PAN Yufei/S&T Daily; PHOTO: VCG)

Delivering Benefits to More Countries and People

Voice of the World

Edited by QI Liming

The Belt and Road Initiative (BRI) has shown significant fruitful cooperation in the decade since its inception.

Contributions across Central Asia, Middle East and North Africa

With more than 3,100 projects across almost 150 countries, "[The] Belt and Road Initiative has lifted the Global South," David Dodwell, executive director of the Hong Kong-APEC Trade Policy Study Group, told *South China Morning Post*.

The BRI has contributed to the reshaping of relations between the rich and the poor, with the developing world's share of the global GDP rising in the process. China sees that infrastructure investment paves the way for development.

Thanks to the BRI, infrastructure is being built that would never have been built otherwise, and consequently, the economic prospects of many in the developing countries have improved.

Dodwell said the overriding priori-

ty for China in conceiving and developing the initiative was economy. "Reviving these once-vibrant ancient trade routes would not only lift the fortunes of many people, but also build stronger trading links across Asia and Africa," he said.

Positive impact on partner countries

According to a research report released this year by the South-South Research Initiative, the BRI has made positive impacts in several ways. The report, Impact Assessment on BRI on Partner Nations, says:

The BRI's contribution to increase the income of partner countries and the real income of participating economies reported great gains.

With the help of the BRI, some participating countries have expanded their foreign trade substantially. There are numerous examples of the BRI contributions to increasing foreign investments in participating countries.

The BRI has contributed massively to infrastructure improvement in the participating countries. BRI power and energy projects have helped a lot of countries overcome their energy crises.

The BRI has created new job opportunities and brought technical, social,

educational and cultural benefits.

Expectations for BRI's second decade

According to the South-South Research Initiative, the BRI has the potential to be the world's largest development project and already covers more than 60 percent of the global population. In the coming decade, its scope and application is expected to grow.

The London-headquartered online publication Third Pole talked to experts from around the world about their expectations as the BRI enters its second decade.

Lina Benabdallah, associate professor of politics and international affairs at the Wake Forest University in the U.S., said the first batch of African countries signed BRI agreements as early as in 2017.

Surveys conducted in 2021 by Afrobarometer, a pan-African research network, found 63 percent of the respondents believed China's economic and political influence on their countries to be positive. The political elite regarded the BRI's prospects of bringing in investments and infrastructure projects as attractive.

Since its inception, the BRI has in-

creased its aid, loans and investments for developing countries.

Oyintarelado (Tarela) Moses, data analyst at the Boston University Global Development Policy Center, said, "Future BRI financing will likely change form and scope by refocusing more on financial and environmental sustainability, as it pairs with other initiatives like the Global Development Initiative."

Chen Yunnan, a research fellow of the Overseas Development Institute's Development and Public Finance program, said "Going forward, we may see a move towards more innovative means of green finance."

China's low-cost clean technology can be a huge boon for developing countries aspiring to low-carbon growth. This is an area where new development cooperation initiatives such as the Global Development Initiative, can play a role in tandem with the evolving BRI.

The BRI will continue to advance modernization in the participating countries, make economic globalization more dynamic, inclusive and sustainable, and ensure that more of the fruits of its projects will be shared more equitably by people across the world.

Photo News

Foreign Journalists Experience Chinese Intangible Cultural Heritage



Foreign journalists try out Chinese intangible cultural heritage techniques such as painting Beijing opera masks, cloisonné production and ancient porcelain production (from left to right) at the third BRF Press Center. (PHOTO: HONG Xing/S&T Daily)