



# How Ministers of Foreign Countries See BRI



Hem Vanndy

## Minister of Industry, Science, Technology & Innovation of Cambodia

Hem Vanndy shares his views on how the Belt and Road Initiative (BRI) represents a novel paradigm for equitable science, technology and innovation (STI) cooperation.

*How do you see the role of Belt and Road science cooperation?*

Ministers from 41 countries convened to participate in the second Belt and Road Conference on Science and Technology Exchange (BRST). The message conveyed was unequivocal: a resounding affirmation of support for this initiative, which is designed to facilitate technology transfer, foster knowledge sharing, and strengthen global cooperation in the realm of innovation and technological development. Cambodia stands among the numerous nations firmly committed to this vision.

In addition to endorsing the initiative, Cambodia has proposed four forward-thinking, actionable pathways to

## Exchange Powerful Catalyst for Co-creation

catalyze progress: the Lancang-Mekong Innovation Corridor, shared innovation platforms, inclusive technology governance, and the ASEAN framework.

In my opinion, the BRI in the field of science and technology represents a novel paradigm for equitable STI cooperation, empowering emerging economies to actively influence the trajectory of innovation.

*How is Cambodia working with Chinese partners to ensure that BRI innovations directly address local development needs while maintaining a global vision?*

In 2020, Cambodia launched its STI Roadmap 2030, emphasizing five key pillars: governance, education, research, collaboration, and ecosystem development. Cambodia has opened up cooperation on STI at both the regional and international levels. In my opinion, science should be positioned as a means to facilitate human development through cooperation. Furthermore, I encourage every leader to consider the importance of science diplomacy.

In collaboration with China, Cambodia has adopted a dual-track approach in working with our partners. This approach ensures that innovation outcomes are both locally impactful and globally integrated. Here's how we're achieving this delicate but vital balance:

We focus on demand-driven project design. This means we prioritize joint initiatives that directly align with our national development goals. Consider projects such as digital infrastructure, AI, data science, food, and biotechnology — projects that address the real needs of our people and economy.

We emphasize local capacity building. Technology transfer under the BRI

is not solely about importing hardware; it is also about investing in our people. This includes robust training programs, S&T people-to-people exchange programs, and crucial R&D partnerships designed to build long-term local expertise within Cambodia.

Finally, we champion multi-stakeholder governance. To ensure transparency and mutual benefit, we have established joint committees with our Chinese partners. These committees are crucial because they involve not only government officials but also local businesses, academia, and communities directly involved in the project-planning process.

With the fast Chinese technology development, taking into account Cambodia's local contextual knowledge, we are confidently turning Belt and Road cooperation into a powerful catalyst for sustainable development. This approach respects our unique needs while simultaneously keeping Cambodia competitive on the global stage.

*What are your expectations for future Belt and Road scientific exchanges?*

It's exciting to look ahead at the future of the BRI's scientific exchanges. We see these exchanges evolving into a powerful catalyst for co-creation, moving beyond simple collaboration. Our expectations center on the following transformative shifts: From technology transfer to joint innovation and institutionalizing science diplomacy.

Our ultimate vision for the BRI is an ecosystem where every participating nation brings its unique strengths whether that's raw materials, exceptional talent, or niche expertise to a shared innovation environment.



Supamas Isarabhakdi

## Minister of Higher Education, Science, Research and Innovation of Thailand

Belt and Road scientific cooperation is reshaping the global innovation landscape and creating significant opportunities for developing countries to participate in international science, technology, and innovation (STI) governance. This is the message from Supamas Isarabhakdi, as she sits down with *SET Daily* for this exclusive interview.

*How do you see the role of Belt and Road science cooperation?*

The Belt and Road Initiative (BRI) is playing a significant role in building a global network of STI collaboration, especially by providing developing countries with access to advanced knowledge and technologies.

For example, cooperation in joint

## Scientific Cooperation Reshapes Global Innovation Landscape

laboratories for smart agricultural technology and the development of natural disaster early warning systems in Southeast Asia reflect efforts to share benefits and create a new balance in global STI governance.

*How is Thailand working with Chinese partners to ensure that BRI innovations directly address local development needs while maintaining global objectives?*

Thailand emphasizes establishing a framework for STI cooperation that responds to national-level needs while aligning with global trends and objectives. In collaboration with China, joint working groups have been established in both education and STI development to promote close coordination between relevant agencies from both countries.

Moreover, this cooperation not only focuses on exchanging and transferring needed technologies but also considers elevating the roles of Thailand and China in co-creating knowledge and innovations to address global challenges such as climate change, food security, energy, space technology, and natural resource management. Thus, it is not merely about receiving technology from China, but rather about jointly developing new knowledge applicable within both Thai and Chinese contexts, with potential for regional and international scalability.

*What mechanisms has Thailand found most effective for translating scientific cooperation into tangible benefits for people?*

Thailand has identified several key mechanisms that effectively translate scientific collaboration into tangible public benefits, such as poverty alleviation through STI.

China announced its success in eliminating poverty domestically in 2021 and is willing to share its knowledge and models with other countries in Southeast Asia. Thailand has initiated joint poverty alleviation cooperation with China. When implemented in alignment with Thailand's policies, these mechanisms ensure that BRI-related STI cooperation delivers truly sustainable and inclusive positive impacts to the general population.

*What are your expectations for future BRI scientific exchanges?*

I expect that scientific exchanges under the BRI framework will expand collaborative efforts in frontier technology research areas such as AI, biotechnology, and clean energy, as well as foster cooperation to tackle increasingly severe global challenges like climate change and food security.

Furthermore, the BRI should enhance its role as a cooperative network linking sub-regional cooperation goals with global networks such as UNESCO and the World Economic Forum to advance STI partnerships that are inclusive and ethical.



Blade Nzimande

## Minister of Science, Technology and Innovation of South Africa

There cannot be a technological revolution if African countries are left behind. Blade Nzimande tells *SET Daily* how the Belt and Road Initiative (BRI) is helping secure the sovereignty of developing countries, enabling them to make independent choices for development.

*How do you see the role of Belt and Road science cooperation?*

The BRI is a very important initiative because it aims to foster a different path of development. It's about collaboration and working together among developing countries, along with China itself. What can you learn from the Chinese experience? You can't take the Chinese experience and apply it exactly anywhere else in the world, but there are many lessons we can learn.

This is a different model because

## 'With BRI's Help, Africa Will Also Rise'

it's aimed at forging mutually beneficial relations, unlike what we've had since World War II. Many countries in Africa and the Global South that were colonized have struggled to escape the trap of colonialism in terms of development.

Now, China is saying, through the BRI, we need a different model: mutual respect, mutual benefit, and sharing lessons as equal partners to develop. For me, that's one of the most fundamental lessons and positives of the BRI.

Since 2023, China has extended the initiative to focus specifically on science, technology, and innovation (STI). This focus on STI is crucial because one of the lasting injustices of colonialism is unequal development. Many African and Global South countries remain underdeveloped to serve the interests of developed nations. To create a more equal world, we must change this, and STI is central to that change.

We can't have a new technological revolution while leaving African countries behind. The BRI provides an important platform for developing countries to share in new and latest technologies. Take AI for example, South Africa and China have agreed to establish a joint AI research center in South Africa, which will be hugely beneficial to both countries. We hope this will lead to new innovations, ideas and mutual development.

*Do you think the Belt and Road STI Cooperation and Action Plan will deliver tangible benefits to the people in Belt and Road partner countries?*

I have no doubt the BRI will bring

positive results. It may not be 100 percent perfect, but it's a step forward. For too long, the African continent has only received knowledge from other parts of the world.

Now, we want to produce knowledge not just for Africa, but for the world. For example, South Africa has inventions like the "creepy crawlly" pool cleaner, now used globally. We need more such innovations. Africa has a huge advantage: over 60 percent of our population is under 30. If we empower African youth with facilities, knowledge, and STI infrastructure, imagine the potential innovations that could emerge.

Look at China's auto sector — it's a miracle. Since 1991, I've visited China over 20 times. Back then, Beijing had millions of bicycles. Now, even European carmakers admit that the center of auto innovation is China. Why? Because China invested in the sci-tech sector. If the BRI can help African countries with research cooperation and infrastructure, Africa will also rise.

*What are your expectations for future Belt and Road STI cooperation?*

The BRI covers many areas — agriculture, economy, and more. The future of the world lies in new technologies. Countries that fail to engage in innovation will face major challenges. The less developed nations must build capacity to catch up — producing new ideas, patents, and industries. This is a chance to meaningfully tackle poverty in developing nations.



Dinara Shcheglova

## Vice Minister of Science and Higher Education of Kazakhstan

Kazakhstan considers the Belt and Road Initiative (BRI) a key platform for strengthening international scientific cooperation. In response to a question about Kazakhstan's expectations for future scientific cooperation within the BRI, Dinara Shcheglova gives her answer to *SET Daily*:

Kazakhstan considers the BRI a key platform for strengthening international scientific cooperation. We expect that future scientific exchanges under this initiative will foster deeper joint research, advance technological development, and lead to the creation of shared scientific infrastructure that supports sustainable progress. We

## Opportunity for Shared Future Based on Science

firmly believe that science and technology must become central elements of the next phase of the BRI, and Kazakhstan is ready to take an active part in this process.

We are particularly interested in collaborative research aimed at addressing common challenges such as water resource management, food and energy security, environmental protection, AI development, and advanced materials. For example, Kazakhstan has initiated a Water Research Center in partnership with the Northwest A&F University of China and the University of Arizona (USA). This project focuses on sustainable agriculture and efficient water use.

Rather than emphasizing funding or personnel exchange, our focus is on institutional partnerships. Kazakhstan supports the creation of a Belt and Road Research Alliance that would unite leading universities and scientific institutions. Kazakhstan has already signed strategic agreements with more than 30 foreign universities, including institutions from China, South Korea, the United Kingdom, and the United States. These partnerships include the establishment of joint laboratories and applied research centers in areas such as biotechnology, green energy, and

space technologies.

I would also like to highlight the AI-Sana program, launched in 2024 at the initiative of President Kassym-Jomart Tokayev of Kazakhstan. This national initiative aims to equip all students in Kazakhstan with skills in AI. The program covers students across all fields — from IT and agriculture to medicine, pedagogy, and energy. Training is delivered via localized platforms such as Coursera and Huawei, all fully available in the Kazakh language. More than 350,000 students have already completed the foundational AI course and received certificates.

Kazakhstan is the first country in the world to introduce a mandatory national standard requiring all higher and postgraduate education programs to include a course in AI. This is a powerful example of how Kazakhstan is implementing large-scale digital and scientific programs, a model that can be adapted by other countries.

Overall, Kazakhstan is committed to building an open, inclusive, and forward-looking scientific ecosystem within the BRI. We see it as an opportunity for joint technological advancement and for shaping a shared future based on science, sustainability, and mutual respect.

Interviewed by LONG Yun, ZHONG Jianli, LU Zijian

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