Amrop India Thought Leadership



Reversing the Brain Drain

BY:Amrita Dutta
Shubham Apte



THE PHENOMENON CALLED "BRAIN DRAIN"

ver the past few decades, there has been a significant increase in the number of Chinese students studying in the United States, particularly in higher education. Many of these students choose to stay in the US after graduation and pursue careers in

academia, with a significant number of them achieving great success. This had caused significant "brain drain" from the country. To reverse the phenomenon, the country undertook interesting measures which resulted, in recent years, in a reversed trend of Chinese academics returning to China, driven by various factors – internal which are propelled by the government and external which are propelled by the sociopolitical market dynamics.

In this white paper, we will explore the reasons behind this trend, the potential impact on US higher education, and what steps universities and policymakers can take in India to address a similar situation that is rampant in our country.



REASONS FOR CHINESE ACADEMICS RETURNING TO CHINA

There are several reasons why Chinese academics are returning to China:

- One of the main reasons is the rise of China as a global economic power, with many universities and research institutions in China offering attractive opportunities and generous funding to attract top talent.
- The Chinese government has launched several initiatives to encourage overseas Chinese academics to return to China, including the "**Thousand Talents Plan**" which provides financial incentives and research support for Chinese scientists and scholars who work overseas.
- Another factor driving the trend is the increasingly challenging environment for foreign researchers in the US, especially for those with ties to China. In recent years, the US government has raised concerns about intellectual property theft and espionage by Chinese researchers in the US. This has led to increased scrutiny and restrictions on Chinese scholars and scientists, including:
- Tighter visa regulations
- Restrictions on access to research funding
- Increased surveillance and monitoring



Impact on US Higher Education through the reverse brain drain:

The trend of Chinese academics returning to China has the potential to impact US higher education in several ways:

First, it could lead to a brain drain of top talent, especially in STEM fields, which could have a negative impact on the quality and competitiveness of US research and innovation.

Second, it could impact the diversity of perspectives and experiences in US universities, as Chinese academics bring unique perspectives and insights to academic discourse.

In addition, the trend could also have economic implications, as universities and research institutions may struggle to fill key positions and attract top talent. This could lead to a loss of funding and prestige, as well as reduced competitiveness in the global academic market.





Objectives and Incentives:

innovation, research, and development in

key ustries and sectors.

The primary objective of the Thousand Talents Plan is to tap into the expertise, knowledge, and networks of overseas Chinese professionals and encourage them to bring their skills and experience back to China. The program seeks to attract high-caliber individuals in various fields, including science, technology, engineering, mathematics, medicine, and business.

To entice participants, the Chinese government offers a range of incentives, including:

- Financial support, research funding, access to state-of-the-art facilities, and preferential policies.
- Scholars and scientists who join the program may receive substantial salaries, research grants, housing allowances, and other benefits.
- Additionally, participants have the opportunity to collaborate with leading Chinese research institutions, universities, and enterprises, and contribute to significant scientific and technological advancements in China.

Detailed information on the various benefits for these scholars is elaborated later.

Implementation and Focus Areas:

The implementation of the Thousand Talents Plan is primarily overseen by the central government of China, particularly through various ministries and agencies who play a crucial role by tailoring it to their specific needs and priorities.

The plan focuses on key areas of national development, such as strategic emerging industries, advanced manufacturing, energy, information technology, biotechnology, and environmental protection. By attracting top talent in these areas, China aims to enhance its competitiveness and achieve breakthroughs in scientific research, innovation, and economic growth.



Under the Thousand Talents Plan, the exact benefits offered to participants can vary depending on their specific qualifications, expertise, and the needs of the host institution in China. However, the program generally provides the following benefits:



Controversies and Concerns:

While the Thousand Talents Plan has been successful in attracting a significant number of talented professionals back to China, it has also faced criticism and controversy. Some concerns revolve around intellectual property theft and espionage. There have been cases where individuals affiliated with the program have been accused of transferring proprietary information or technology from foreign institutions to Chinese entities. These allegations have led to increased scrutiny by foreign governments and institutions regarding collaborations with individuals associated with the program.

In response to these concerns, many countries, including the United States, have implemented stricter regulations and oversight measures to protect intellectual property and prevent unauthorized transfers of sensitive information.

Financial Support: Participants may receive a competitive salary package that is often higher than the average salary in China. The specific salary amount can vary based on the individual's qualifications, experience, and the institution they join.

Research Funding: The program offers generous research funding to support the participant's scientific or entrepreneurial endeavors. The amount of funding provided can vary and is typically allocated based on the participant's research proposal and the needs of their project.



■ Research Facilities and Resources:

Participants have access to state-of-the-art research facilities, laboratories, and equipment in their host institutions, which are often well-funded and equipped to facilitate cutting-edge research.

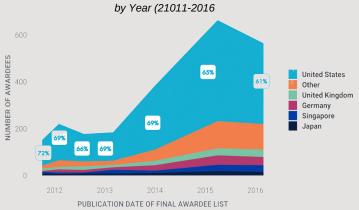
■ Housing Allowance:

Participants may receive a housing allowance to help cover the cost of accommodation in China. The amount of the allowance is often based on factors such as the participant's family size, location of the host institution, and prevailing housing prices in the area.

■ Preferential Policies:

The program offers various preferential policies to make the transition and integration of participants smoother. This can include assistance with visas, work permits, and other administrative procedures.

Figure: Awardees' Countries of Employment (at Time of Award)



Source: CSET Youth Thousand Talents Awardee Dataset (2,350 awardees with known employment at time of award).

Focus on NEP:

India's National Education Policy (NEP) is a framework that outlines the government's vision for the education system. lt focuses on holistic development, early childhood education, multidisciplinary learning, skill development, teacher training, technology integration, language policy, higher education reforms, and equity and inclusion. The NEP aims to transform education in India by promoting a learnercentric and inclusive system. The focus establishment should be on multidisciplinary universities, increased focus on research and innovation, flexibility in curriculum design, and the introduction of a credit-based system.

Start-up Support:

For participants engaged in entrepreneurial activities, the Thousand Talents Plan may provide start-up support, including access to laboratory facilities, equipment, and resources necessary to launch and grow a business venture.

■ Career Development Opportunities:

Participants have the opportunity to collaborate with leading Chinese researchers, scholars, and industry experts in their respective fields. They can engage in meaningful scientific and academic exchanges, establish research partnerships, and contribute to significant advancements and discoveries.

■ Networking and Collaboration:

The program facilitates networking opportunities with other participants of the Thousand Talents Plan as well as professionals and experts in relevant fields in China. This enables participants to build connections, exchange knowledge, and foster collaboration.

What can India do?

Study in India:

Campaign launched by the Government of India to promote India as a preferred destination for higher education among international students. The campaign aims to showcase the country's academic excellence, diverse culture, and rich heritage to attract students from around the world. The focus is on:

- Enhancing Global Perception
- Attracting International Students
- Simplified Admission Process
- Promoting Cultural Exchange
- Collaboration with Institutions
- Financial Support

Emphasizes the preservation and promotion of regional languages while ensuring proficiency in both English and Hindi. It encourages the use of the mother tongue or local language as the medium of instruction in early education