Consolidating Control
Chinese Infrastructure Development in Tibet

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Since the time China established its sovereignty over Tibet followed by the establishment of the Tibet Autonomous Region (TAR) in September 1965, the Chinese government has paid heed to the importance of the region vis-à-vis enhancing security on its western frontier. However, in the initial decades ensuing the founding of the PRC in 1949, undivided attention was given to coastal, thereby leaving Western China stagnated. In fact, Deng Xiaoping declared to the people of Western China, "Let them (coastal China) get rich first, you can get rich later."

Given that during the past decade, the economy of coastal China acquired self-sustaining momentum, the policy-makers under the present leadership of President Hu Jintao have appeared to turn their attention to Western China.[1] The Hu Jintao administration has significantly tightened its policy over Tibet in an apparent attempt to ensure the proverbial Chinese Communist Party's 'long reign and perennial stability' in the restive region with an increasing number of hard-line cadres being appointed to run the TAR.[2] The tough stance adopted by the party and state apparatus towards the ethnic minorities was approved at the January 8, 2010, Politburo meeting exclusively devoted to the Tibetan issue. During the course of deliberations at the meeting, President Hu Jintao, who was party secretary of Tibet from 1988 to 1992, heralded two goals for the TAR in the coming decade namely: seeking a breakthrough-style [economic] development; and maintaining long-term stability.[3]

In the Politburo meeting, President Hu promised that the central government would help Tibet by boosting investment, transferring technology, and sending in more qualified officials as well as 'experts and talents.' Significantly, the region's GDP is set to grow by 12 per cent this year, while fixed-assets investments are projected to grow by a whopping 18 per cent. Under President Hu's dictum of 'going down the road of development with Chinese characteristics and Tibetan

flavour' (zhongguo tese, xizang tedian), additional input has been focused on areas including infrastructure, tourism, mining and manufacturing.[4] In the wake of ethnic violence in both Tibet and Xinjiang in 2008, more soldiers and officers of the paramilitary People's Armed Police (PAP) have been stationed in the two regions[5] - thereby signaling the intent of the PRC's policy towards these capricious regions.

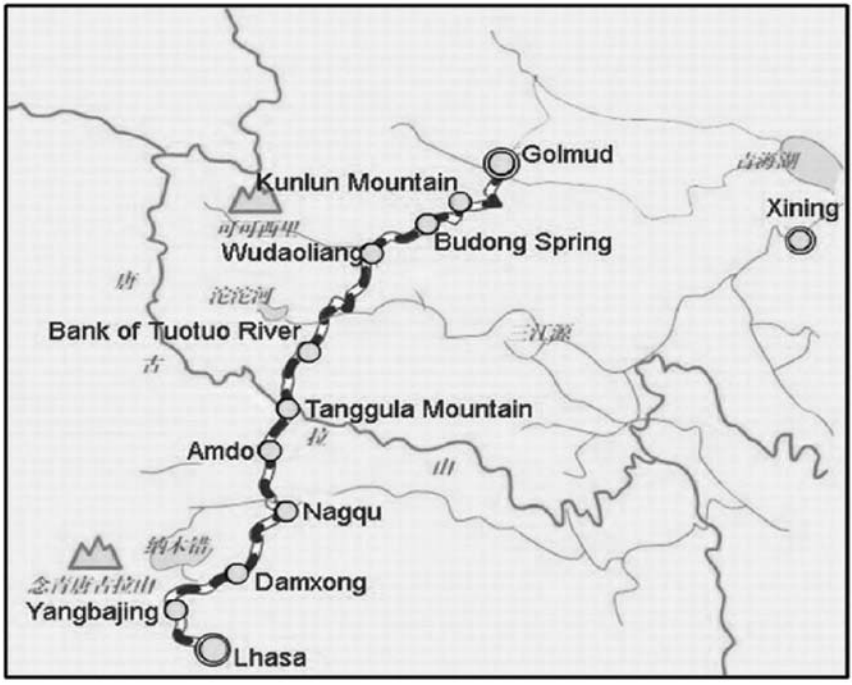
It was noted in the 2008 Chinese White Paper on National Defence where the PRC categorically focused on logistics reform including, upgradation and deepening of logistical support as key objectives.[6] The issues of Taiwan, East Turkistan and Tibet should be read in correlation to the larger concept of Chinese national integration. China reiterated that its concepts of warfare and capability upgradation go well beyond meeting challenges in the form of Taiwan, Tibet and East Turkistan—thus explicitly implying that China's military capabilities shall continue to grow unabated even as the Taiwan issue thaws and that the Chinese national security strategy is set to be focused to look beyond Taiwan. The Chinese government has begun placing priority on infrastructure because they comprehend that the overall health and growth of the economy is increasingly dependent on their logistics capabilities.

Rail Communiqué

Becoming fully operational on July 1, 2006, the 1,142 kms Qinghai-Tibet Raliway (QTR) line from Golmud in the Qinghai province to Lhasa in Tibet became Tibet's maiden railway line connecting and integrating the Tibetan plateau with the rest of China at the cost of a staggering $4.2 billion. Mainly a high and desolate plateau, Qinghai lies in the Tibetan highlands at an average elevation of 9,800 ft (3,000 mtrs). The highest point of the QTR comes in at 5,072 metres (16,640 ft) high Tanggula Pass in the Kunlun mountain range.

Golmud-Lhasa Railway Route

China has also unveiled plans to extend the Chinese National Rail Network to areas bordering India. The railway line would likely reach the Tibetan town of Dromo near Nathu La and Sikkim. Further, up to $1.2 billion is expected to be invested in building new rail lines in the Tibetan region in the coming decade including a line extending west from Lhasa to Shigatse and another heading east from Lhasa along the Yarlung Tsangpo river (Brahmaputra) to Nyingchi (Kongpo). The line to Dromo / Yatung will be an extension of the Lhasa-Shigatse line. Significantly, the double gauging of the railway line from Lanzhou to Golmud will extend to the



Lanzhou Military Region (MR), thus enhancing the Chinese operational logistic capacity crucially.[7]

Besides, the Korla-Lanzhou-Chengdu railway line is also likely to be converted into a double track. The eastern link from Chengdu to Lhasa via Ngiti, Pangta and Markhan Dzong is slated to be completed by 2015. China has built settlements every 60 kms of this 1,118 kms long railway line and it is widely speculated that the QTR will facilitate an increase in the movement of products up to 45 times its current level and cut down transport costs for goods by 75 per cent.

Roads and Highway Networks

The rapid build-up of China's national road and rail transport system has greatly enhanced the PLA's land-based transport capabilities. China has developed 41,000 kms of road network in Tibet, including five major highways and a number of subsidiary roads. The Western, Central and Eastern Highways have leveraged greater connectivity between western and mainland China.[8]

Qinghai-Tibet Highway (Central Highway) – Referred to as the 'lifeline' of the TAR, this highway runs from Xining in Qinghai to Lhasa in Tibet. The 2,122 kms highway carries more than 80 percent of cargo and 90 percent of passengers into

or out of Tibet. It is paved with asphalt and crosses the Kunlun and Tanggula mountain ranges. The entire stretch of the road is black-topped two-way, with proper highway markings wherein vehicles can travel at an average speed of 35-40 kms per hour and can cover a distance of approximately 200-250 kms in a single day.

Lhasa-Kashgar / Aksai Chin / Xinjiang Highway (Western Highway) – Connects Xinjiang to Tibet, by linking Kashgar and Lhasa (3,105 kms). From Quilanaldi, the road branches off to Khunjerab Pass and subsequently becomes the Karakoram Highway right upto Gilgit. In addition, there are a large numbers of lateral roads leading to the passes on the Indian borders.

Sichuan-Tibet Highway (Eastern Highway) – This highway between Chengdu (Sichuan) and Linzhi (Ngiti) is 1,715 kms long (2,413 kms up to Lhasa). There has been a crucial upgradation of the 400 kms stretch from Lhasa to Ngiti (opposite central Arunachal Pradesh)—black-topped and asphalt-surfaced, is primarily aimed at improving lateral mobility between the central and eastern TAR.

Yunnan-Tibet Highway – This 716 kms long highway branches off from the Eastern Highway and is four to five metres wide, prone to frequent landslides and disruptions during the winter and monsoon season. This highway holds special significance in military terminology for India owing to the build-up of the PLA opposite India's eastern theater given China's logistics capacity-building and accelerated facilitation of men and material in the critical sectors of the northern and eastern borders.

A major infrastructure development project in the TAR, including two highway bridges over the Lhasa and Yarlung Tsangpo rivers, and a 2.4 km-long tunnel (total road length of 13.28 kms) costing 650 million Yuan, is underway, which will reduce the travelling distance between Lhasa to Gongga international airport from 98 to 53 kms. With the opening of border trade via Nathu La, additional border trade venues and plans for border trade at Bumla, Demchok and the old Stilvel route, the TAR appears well poised for 'fast-track' holistic development. Move of the logistics resources from townships to the place of application and sustenance of forces during road closure periods (need to dump additional safety stocks for the road closure period) will continue to be a criticality for the PLA.

Upgradation of Airfields

There are five airfields inside Tibet and as many as 15 surrounding it. The main airfields are at Gongga, Donshoon, Hoping, Bangda, Nagchuka and Shiquanhe. The Gonga and Bangda airfields are being upgraded to cater to 1.1 million and 1.0

million transients respectively i.e., 2.1 million transients per year. In fact, Bangda is known to have the highest elevation in the world. Further, ten new airports are planned to be constructed in the next five years. Construction of Nyingtri airport (Linzhi) located in southeastern TAR was one of the key projects completed in the Tenth Five-Year Plan and was made operational in July 2006. It is situated near Nyingtri in the Nyingchi Prefecture, which shares borders with India and Myanmar and is strategically significant to India. Another airfield in central TAR at Bayixincun is also being pursued.

China is also opening another airport at Nyingchi, apart from modernising Lhasa's Gongga Airport. There are 15 airfields in and around Tibet out of which only three are open for civilian activity. Owing to the critical high altitude of its airports in Tibet, the PLA Air Force (PLAAF) encounters problems in terms of fuel, oxygen as well as the length of the runways. The airlift capability, as well as the load that can be carried by these aircrafts is limited and they must decide between fuel and armaments. Further, Su-27s have recently been deployed in the Chengdu MR and they might also be deployed in Tibet in the future.[9]

China's Military Regions

Currently, the China Southwest Airline has 10 domestic air routes in Tibet, including those from Lhasa to Beijing, Chengdu, Shanghai, Guangzhou, Chongqing, Xi'an and Xining, as well as one international air route from Lhasa to Kathmandu. Such developments would progressively increase the air induction capability into the TAR. China has purchased an additional 18 IL-78 aircrafts for developing the existing air-to-air refueling capability, so that the aircraft can take off with added load and use lesser fuel and subsequently can be refueled in the air to achieve greater endurance which shall be crucial as far as the radius of action as well as payload of all aircrafts is concerned.[10]

Construction of the new airfields/upgradation of advanced landing grounds (ALGs) and helipads in and around the TAR (coupled with acquisition of new transport aircraft) is likely to enhance China's strategic airlift capability. The Chinese will be able to induct/concentrate formations in comparatively shorter time-frames and consequently, shorter warning periods. The functional international standard airfields in the TAR (Gongga, Pangta and Nyngchi) would give the Chinese a considerable strategic airlift and logistics advantage. Further, the airfields on the periphery of the TAR can be activated to give additional logistic and operational support. The construction/upgradation of airfields/ ALGs closer to the borders enhances the PLAAF aircraft's striking range and provides the PLAAF, the ability to strike/engage targets in India on a broad front and in depth.

Foremost among infrastructure schemes mooted for the 12th Five-Year Plan period of 2011 to 2015 is what the official Chinese press bills "the world's highest airport." Construction of the 1.8 billion yuan ($263.5 million) airport in Tibet's Nagqu Prefecture, which has an elevation of 4,436 meters (14,639 feet), will begin late this year. According to local media, the Nagqu Airport would, together with ultra modern facilities such as the Qinghai-Tibet Railway, "perfect a three-dimensional transport network that will envelop all Tibet."[11]

Fibre Optic Communication (FOC)

All PLAAF units and sub-units in the TAR have been connected by satellite communication and as many as fifty-eight very small aperture terminal (VSAT) satellite stations are reported to have been installed in the TAR. China is also reported to have laid a fibre optic network in all the 55 counties, which includes Ali, and the border area of Chamdo; additionally, 1,100 kms of optical fibre cable (OFC) have been laid, connecting Lhasa with Nyingchi and Qamdo counties in east TAR. The plans to connect all cities and counties of the TAR by 2005 appear to have been

successful. Another major development has been the inter-connecting of Chengdu and Lanzhou MRs with one another, and both these MRs to Beijing, through secure communications thus ensuring secure and real-time communication, also emphasised during training. FOC is steadily being extended towards military installations along the borders. All military supply depots (MSDs) are connected to Lhasa by radio and OFC.[12] In what could be interpreted as a prudent move by the PLA, the upgrading of the communication networks in terms of fibre optic cables and satellite communication indicates real-time connectivity achieved by the PLA owing to a quantum jump in communication technology. Their upgradation shall enable conducting operations effectively as well as sustaining increased force levels in the future. Additionally, enhanced communication security is likely to continue to tilt the balance in cyber warfare in favour of the PLA.

Ramifications of Logistics Build-up in Tibet

Although estimates vary, but it is speculated that the QTR gives China the capability to mobilise up to 12 divisions (approximately 15,000 troops constitute a division) in a month's time-frame. The infrastructure and logistics build-up shall double up as base support for the PLA enabling it to transfer telecommunications and other command and control facilities which are needed to deploy missiles from launches at a chosen place. Presently, the travel time for troops from Golmud to Lhasa is approximately 72 hours (including night halts and restrictions). The QTR line has reduced this to 16 hours, implying a complete turnaround time of about three days from Golmud to Lhasa.

In fact, Chinese troops were being transformed on this rail network to Lhasa in December 2007 signifying its use for military purposes. The Xinhua news agency cited unnamed sources in the PLA stating that the railway would become 'a main option' for transporting soldiers.[13] As far as movement of men and materials to/from the frontiers is concerned, the QTR has contributed vitally towards reducing PLA's military expenditure. There is a concerted effort to improve the rapid deployment capability of the integrated forces, particularly the ability to quickly maneuver heavy equipment. The PLA would be able to transport approximately 10 light mechanised divisions and some heavy mechanised divisions through the railroad to Tibet from the Lanzhou and Chengdu MRs within 30 days.[14] Assuming that the total weight of the equipment and combat material needed for one rapid reaction division of the Chinese army is around 15,000 tonnes, the QTR could transport a whole rapid reaction division on one average day. In other words, within every one-and-a-half to two days, China could move one rapid reaction division from

the Chengdu MR or one rapid reaction division from the Lanzhou MR to Tibet.

China's air transport capability including additional airborne troops, rapid reaction troops and armed police could be directly delivered to Lhasa from the air. Since airdrop operations would take place in the Tibet region, there would be no need for ground-based air defence firepower. The railway would allow the 61st Plateau Rapid Reaction Motorised Division of No. 21 Group Army under the Lanzhou MR and the 149th Rapid Reaction Motorised Division of the Chengdu MR to promptly enter Tibet.[15] According to the Tibetan Government-in-Exile in Dharamshala, the estimated number of troops in Tibet stands at about 500,000 alone in the form of the People's Armed Police, the Chinese Frontier Guards and the Garrison Duty Forces.

The Chengdu MR houses two Group Armies, two tank brigades and one artillery division. No airborne divisions are present in Chengdu or Lanzhou. The 13 and 14 group armies, present in Chengdu, are called 'monkey troops' in China. They are trained to rapidly climb mountains much in similarity to the Ladakh Scouts in the Indian Army and are very amenable to the weather conditions. In fact the 13 Group Army is a RRF—potentially a significant concern for India. Both the General Headquarters Departments and the Chengdu MR expend great efforts to make sure the forces in Tibet are adequately supplied, primarily by road, but sometimes also by aircrafts.[16]

To conclude, as China is pursuing a strategy wherein it could position itself in a situation of advantage with the larger aim of radically augmenting China's rapid military deployment capabilities in the border areas with India. This is likely to cover a wide range of areas including strategic and tactical mobility, emergency support forces, battlefield repair and support, advanced stockpiling of war materials and logistics mobilisation and reserve forces. This holds special significance in the given backdrop of a sustained double digit growth in its defence budget and pursuance of a substantial military modernisation programme being undertaken by the PLA. India should take cognizance of the strategic challenges that shall be put forth as per the measures undertaken above. As Sun Tzu had famously stated, "For to win one hundred victories in one hundred battles is not the acme of skill… to subdue the enemy without fighting is the acme of skill"—thus implying that in the given state of affairs, China's infrastructure build-up and advanced capabilities amount to be translated as 'power' in the wider sense.

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Notes

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