

“New Industrialization” in Turkmenistan: Background, Substance and Priorities

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Abstract – This paper examines the phenomenon of “new industrialization” in Turkmenistan, the most insulated and understudied of the post-Soviet states. The researchers identify the reasons why Turkmenistan’s leadership has made the policy choice in favour of a “new industrialization,” and conclude that this choice was inevitable in the given historical environment. They furthermore identify the key phases of the “new industrialization” process in Turkmenistan (the starting phase ran from 2011 through 2016, the current phase is expected to continue until 2020), and provide a detailed description of each of the two phases. The writers analyze the legal framework in place to regulate Turkmenistan’s economic modernization, emphasizing the singular role that the Turkmen government, and President Gurbanguly Berdimukhamedov personally, have played in the process. They contend that the “new industrialization” process in Turkmenistan is unlikely to manifest a marked national flavour. On the level of the key precepts and goals, it is also unlikely to be much different from “new industrialization” in any other modern nation. In the view of the authors of this paper, Turkmenistan’s “new industrialization” may be defined as all-round modernization of Turkmen economy by way of “smart” industry, relying on high-tech, cutting-edge, ultimately diversified production existing in harmony with the natural environment, meeting the needs of Turkmen society to a maximum extent. In conclusion, it is stated that although Turkmenistan is, at this time, quite prepared to usher in the era of “new modernization,” the steps that are necessary for this to happen will require a considerable effort on the part of the national leadership and citizenry.

Keywords – *Turkmenistan, Gurbanguly Berdimukhamedov, new industrialization, Turkmenistan’s economy, Turkmenistan’s industry, Turkmenistan’s domestic policy, Turkmenistan’s foreign policy.*

I. INTRODUCTION

With the advent of the technological revolution, the leading industry sectors worldwide switched to qualitatively

new principles of production. The economies successfully adopting these new principles have ascended on a higher economic development trajectory, achieving much better living standards, resolving the more challenging domestic issues, and boosting their international clout. Conversely, the economies that found themselves beyond the pale of the technological revolution, or absorbed its benefits to a limited degree, began to regress, facing the risk of eventually degenerating into the role of “raw commodity appendages” of global economy.

It is unfortunate but true that the Soviet Union followed the latter trajectory. Its economy was characterized by a pronounced raw commodity emphasis, while its industrialization had failed to benefit from the latest achievements in science and technology, resulting in an ever-expanding technological gap in relation to the leading western economies. Things only became worse following the dissolution of the Soviet Union. In the 1990s, economic reforms in all the post-Soviet states were, in essence, forms of ravenous deindustrialization that brought the industrial potential of many of these newly independent states virtually to naught. As the 21st century drew near, all these post-Soviet states faced the imperative need to initiate a “new” industrialization or, in other words, to reindustrialize. As well as reconstructing their devastated industry, the new industrialization would compel these nations to reformat it through comprehensive, all-encompassing modernization.

The authors of this paper propose to examine the phenomenon of “new industrialization” in Turkmenistan, the most insulated and understudied of the post-Soviet states. In the process of their study, the authors will analyze the background that underlies Turkmenistan’s policy choice in favour of “new industrialization,” define what “new industrialization” means to the incumbent Turkmen leadership, taking into account Turkmenistan’s national

specificity and economic nuances, and identify its priorities, guidelines, challenges and prospects of success.

II. METHODS

This study is based upon a fairly broad array of analytical methods drawn from humanities and social sciences, applied in an intermixed fashion.

Some of the core methods employed by this study are:

- the evolutionary approach, which allows for a historical hindsight perspective on the specificities of post-Soviet economic development in Turkmenistan, and makes it possible to distinguish its key phases;
- document analysis, which means that, in analyzing the different aspects of the agenda under study, these researchers intend to invoke the texts of national programmes, doctrines, Turkmenistan's economic development visions, and statements of top Turkmen officials;
- the statistical method, meant to inform a bigger picture of what is special about the development of Turkmenistan's industry, agriculture and foreign trade dynamic;
- common research methods of analysis and synthesis: comparison, generalization and conceptualization, combined to process the findings of the study so as to understand, as comprehensively as possible, the nature of the phenomenon of "new industrialization" in Turkmenistan.

III. RESULTS

As part of the Soviet Union, Turkmenistan served as a "raw commodity appendage" of the union's economy, supplying natural gas, oil, cotton, fruits and vegetables to the "centre." Its own processing industries being weak, Turkmenistan received all the necessary industrial supplies from other republics of the union. Imports from elsewhere in the union covered as much as 85% of Turkmenistan's heavy engineering needs and up to 100% of its needs for metallurgical products. Turkmenistan imported up to 70% of its chemical products and more than 50% of its food and consumer goods. In the manufacturing sector, 60% of Turkmenistan's fixed assets were imported. Turkmenistan independently processed only 3% of its cotton and 8% of the fruits and vegetables it grew. No portion of the hydrocarbon commodities mined in Turkmenistan was ever exported out of the Soviet Union. While Turkmenistan had no infrastructure to export its raw commodities independently, the key consumers of Soviet oil and gas were located in Europe, thousands of miles away from Turkmenistan.

In the first years following the dissolution of the Soviet Union, Turkmen authorities were in no hurry to embrace the free market, and instead continued to manage the republic's economy by fiat, using the methods they had inherited from Soviet time. This explains why Turkmen economy did not see a steep slump in production until 1994.

In 1996, Turkmenistan's industrial output came to 73% of the 1991 figure. Specifically, its fuel output was down 52%, and its chemical and petrochemical production had decreased by 56%. Turkmenistan extracted 58% less natural gas, 20% less oil, and generated 33% less electricity. Heavy engineering and metal processing were all but dead in Turkmenistan.

That was the place where Turkmenistan was when it embarked on the course of full self-reliance in solving its economic problems. In 1992, Turkmenistan adopted a national programme named "10 Years of Prosperity," which was never fully implemented, and was eventually renamed "10 Years of Stability." Pursuant to that programme, Turkmenistan saw 120 new industrial and agricultural enterprises and social assets inaugurated in the early years of independence. Turkmenistan was able to invest in its economy as much as US \$5 billion of its own funds over the first decade of its independent existence, while foreign investment in Turkmenistan added up to only US \$600 million during the same period. A Presidential Fund was established, tasked with financing Turkmenistan's reform – 50% of the nation's revenues from the export of energy utilities accumulated in that fund.

A new national priority programme, "Socioeconomic Transformation Strategy for the Period until 2010," was signed into law in Turkmenistan in 1999. The programme envisioned structural and technological changes in the manufacturing sector of the economy to boost efficiency and competitiveness in a number of industries and create a massive amount of new jobs. This vision was implemented only partially, to the extent of the part that dealt with cutting unemployment, creating new jobs, and keeping living standards as high as possible in Turkmenistan.

In 2003, Turkmenistan adopted its "Economic, Political and Cultural Development Strategy for Turkmenistan over the Period until 2020," which set truly epic targets for the national economy. Achieving those targets looked like a tall order from the very beginning. Indeed, Turkmenistan's GDP was supposed to increase 14.6 times by the year 2015, and 28.4 times by 2020. The problem was, however, that while the Turkmen government planned to continue to rely on natural gas exports as the main revenue stream for the national coffers, all attempts made by Ashgabat to secure a steady and solvent western client base for its gas exports had failed. And so Turkmenistan, a country blessed with enormous resources of hydrocarbon commodities, ended up with no real opportunity to export them anywhere, except in the direction of Russia.

This state of affairs only began to change in 2007, when the Chinese government came through with funding for the construction of a Turkmenistan-China gas pipeline, which had sufficient capacity to absorb practically the entire natural gas output of Turkmenistan. This, combined with the market reform initiated in Turkmenistan at around the same time, contributed to accelerating the nation's GDP growth rate to 10% per annum. (However, this growth proved short-lived. The global financial meltdown that hit in 2008 undermined Turkmenistan's macroeconomic performance. Turkmenistan's GDP grew only 6.1% in 2009, according to official data).

As the economy struggled to overcome the fallout from the 2008 economic crisis, Turkmenistan enacted a new ambitious “National Programme for Socioeconomic Development in 2011–2030.” For Turkmenistan, this was the first strategic framework to envision a system of measures to modernize the national economy, which included technical retooling and technological rejuvenation of production, formation of a number of new industry sectors, and incentivizing industry with a more favourable investment climate. From this time on, in our view, it is appropriate to say that Turkmenistan had crossed the threshold into the era of “new industrialization.”

The first phase of “new industrialization” in Turkmenistan, from 2011 through 2016, happened to coincide with the period when hydrocarbon prices plummeted globally. This setback impeded many of the initiatives planned by the Turkmen government. At the same time, Turkmen economy showed the beginnings of a few welcome trends: the share of raw commodities as GDP contributor shrank while the contribution of processing industries increased; the manufacturing industries benefitted from a greater influx of highly qualified professionals; and the government focused its attention on the upgrade of the national education system. The government sponsored hundreds of Turkmen students and young professionals from many industry sectors to study or retrain abroad, mainly in Russia and in the West. Meaningful changes occurred in Turkmenistan’s international trade. For example, the share of raw commodity exports in Turkmenistan’s trade with Russia sizably diminished while the percentage of industrial products and services increased.

The second phase of Turkmenistan’s “new industrialization” drive commenced in September 2016. Speaking before Turkmenistan’s Council of Elders one day in September 2016, President Gurbanguly Berdimukhamedov declared strategic commitment to reinventing Turkmenistan as a modern industrialized economy within the shortest time possible. In the vision of the national leadership, this industrialization phase, with a planned timeline of 4 years, would see the national economy develop in accordance with a set of guidelines. Namely, the manufacturing industries would undergo a deeper structural reform, involving the establishment of advanced market-economy institutions on the ground at manufacturing assets, and strengthening the role of the private sector overall. A broad vista would be opened for the latest in science, technology and innovation to inform and empower all sectors and fields of industrial production. The national economy would reduce its reliance on energy exports. The national economy would further diversify as new manufacturing businesses and services emerged, driven by cutting-edge technology. Vigorous steps would be taken to pave the way for industrial businesses with circular production processes, and to upgrade production facilities with science-intensive, resource-efficient and greener technologies, products and services.

At this time, several industrial assets, including an LNG plant, high density polypropylene and polyethylene factory and oil refinery to produce high-grade petrol (Euro 5),

are under construction in Turkmenistan in collaboration with multiple international partners. The government is committed to promoting development in the agricultural sector, raising productivity by deploying automation and mechanization solutions throughout the rural value chain. A sweeping modernization of Turkmenistan’s existing electric power plants is underway in a bid to enhance the industry’s export capacity. Turkmenistan’s electricity output is anticipated to reach a total of 33 billion kWh by 2024 – 27.4% above the 2017 figure – enabling the country to substantially increase its electricity export.

Alongside these developments, having learned a bitter lesson in the 1990s and 2000s, when Turkmenistan had to cut hydrocarbon mining due to the absence of a good export infrastructure, Turkmenistan’s authorities use their best endeavours to further diversify the nation’s gas transit system. Turkmenistan currently exports large quantities of natural gas to China and Iran. The trans-Afghan gas pipeline, currently under construction, will be used to deliver Turkmen gas to Pakistan and India. Turkmenistan’s ambition is to position itself as a hub straddling the shipping arteries between Europe and East/Southeast Asia, and between Russia and Iran. Turkmenistan uses world-class, state-of-the-art technology in new pipeline construction and in upgrading its existing natural gas transit infrastructure.

IV. DISCUSSIONS

It is noteworthy that no substantial corpus of research has shaped up to date, relating directly to the “new industrialization” agenda in Turkmenistan.

In the meantime, “new industrialization” appears to be a highly relevant topic, and there is no dearth of research papers discussing it. The existing publications on the subject may be subsumed under two large categories, namely:

- Theoretical analytical papers discussing “new industrialization” as a global process and a global economic development priority (for example, see articles by O.A. Romanova [12], Ya.P. Silin, E.G. Animitsa, and N.V. Novikova [15]); and
- Publications discussing some aspects of “new industrialization” in specific countries or regions (articles by A.R. Adewale [1], G.G. Hamilton and S.I. Shin [4], E.V. Romanov [11], Zou Yonghua and Zhao Wanxia [19], books by H. McKay and L.G. Song [9], P.G. Sampath [13]).

Meanwhile, all research on Turkmenistan tends to boil down to a few key aspects: domestic policy (papers by V. Clement [3], E. Sherstoboeva [14], A. Polese and S. Horak [10], C.J. Sullivan [16]), socioeconomic development (article by E.T. Hofmann [5]), environmental issues (articles by S. Kaplan, D.G. Blumberg, E. Mamedov, and L. Orlovsky [6], N. Thevs, K. Ovezmuradov, L.V. Zanjani, and S. Zerbe [17]), and foreign policy analysis (papers by Y. Lee [7], Q. Mammadov [8], U. Yapici [18], D. Carle and J. Carle [2]).

Therefore, this study emerges as one of the earliest attempts to make sense of the “new industrialization” phenomenon in its Turkmenistan edition. It opens the

floodgate for academic debate on a broad gamut of subjects concerning Turkmenistan's economic modernization as it leaves many questions open: is a "new industrialization" really feasible in a country like Turkmenistan? Is the Turkmen leadership's idea of "new industrialization" aligned with international best practice? What are some specific national features of Turkmenistan's "new industrialization"?

V. CONCLUSION

The newly independent Turkmenistan's embarkation on the path of "new industrialization" was an inevitable, historically predicated choice, critical to overcoming the nation's economic backwardness inherited from its Soviet past.

The inception of "new industrialization" in Turkmenistan fell on the years 2010 and 2011, when the Turkmen leadership set the course for an all-round modernization of the nation's economy with a view to ridding it from its pre-existing negative characteristics. These latter included insufficiently diversified industry, outdated structure of industrial production with a strong dominance of raw commodity sectors, poor raw commodity processing capacity, narrow specialization of the industrial and agricultural sectors, technically and technologically outdated production assets, their poor economic efficiency, low competitiveness and adverse environmental impact. In the end, Turkmenistan's industry was utterly incapable of providing the national economy with the required range or quantity of manufactured products.

Thus far, we have observed two phases in the process of Turkmenistan's "new modernization," namely:

(1) Phase one (2011–2016): Turkmenistan's leadership conceptualized the priorities facing the national economy in the context of forthcoming modernization, and aligned these priorities with the economy's realistic capability;

(2) Current phase (2016–2020): it is assumed that, during this phase, the targets and priorities of Turkmenistan's "new industrialization" will acquire a finer level of detail, and Turkmenistan's industry will be subjected to a reform package that has seen no precedent in the nation's history, designed to expeditiously propel Turkmen economy along a new development trajectory.

Turkmenistan's domestic policy chemistry shows pronounced national specificity that sets Turkmenistan apart, qualitatively, from the rest of the post-Soviet realm, and makes an indelible mark on every aspect of Turkmen life. That notwithstanding, Turkmen leadership's perception of the goals, principles and guidelines of "new industrialization" is, to all intents and purposes, the same as it would be in any other modern country. This perception defines "new industrialization" as all-round modernization of Turkmen economy by way of "smart" industry, relying on high-tech, cutting-edge, ultimately diversified production, existing in harmony with the natural environment, meeting the needs of Turkmen society to a maximum extent. At the same time, certain peculiarities, which are traditionally embedded in Turkmenistan's political system, leave no doubt that this "new industrialization" will, in the main, proceed according to the general pattern of top-down command and control, and

responsibility for its success or failure will primarily rest with the national leadership and, personally, the head of state.

Given modern Turkmenistan's relatively low level of economic and technological development, the question necessarily presents itself: is a "new industrialization" fundamentally possible in Turkmenistan, or are we looking at some sort of misconception here? In the opinion of these researchers, there is no evidence of a misconception. Indeed, the Turkmen leadership has no plans to build industrial technology from scratch, being aware that the necessary array of resources is not available for this. For a start, Turkmenistan obviously intends to import and deploy cutting-edge foreign technology, which already exists. (Which explains why Turkmenistan currently stresses the training of its students in foreign schools, and works to expand its network of international economic partners). Turkmenistan may well develop state-of-the-art industrial facilities "with a national face" somewhere down the line. In this case, the nation would have every opportunity to emerge as yet another "newly industrialized economy." But this is a probable scenario for a distant future. In the next few years, if not decades, the leadership of Turkmenistan and the entire Turkmen society need to brace themselves for some hard, painstaking work coping with the challenges the "new industrialization" puts on the table.

References

- [1] Adewale A.R. (2012) "Does Import Substitution Industrialisation Strategy Hurt Growth?, *New Evidence from Brazil and South Africa*", in *African and Asian Studies*, Vol. 11(3), pp. 288-314.
- [2] Carle D. and Carle J. (2013) The Edge of China and Turkmenistan, in *Traveling the 38th Parallel, A Water Line Around the World*, pp. 65-74.
- [3] Clement V. (2014) Articulating national identity in Turkmenistan: inventing tradition through myth, cult and language, in *Nations and Nationalism*, Vol. 20(3), pp. 546-562.
- [4] Hamilton G.G. and Shin S.I. (2015) Demand-responsive industrialization in East Asia: A new critique of political economy, in *European Journal of Social Theory*, Vol. 18(4), pp. 390-412.
- [5] Hofmann E.T. (2018) Labor market integration of returned educational migrants in Turkmenistan, in *Post-Soviet Affairs*, Vol. 34(1), pp. 1-34.
- [6] Kaplan S., Blumberg D.G., Mamedov E., and Orlovsky L. (2014) Land-use change and land degradation in Turkmenistan in the post-Soviet era, in *Journal of Arid Environments*, Vol. 103, pp. 96-106.
- [7] Lee Y. (2014) Opportunities and risks in Turkmenistan's quest for diversification of its gas export routes, *Energy Policy*, Vol. 74, pp. 330-339.
- [8] Mammadov Q. (2015) Turkmenistan positions itself as Eurasian natural gas power, *Oil & Gas Journal*, Vol. 113 (12), pp. 76-83.
- [9] McKay H. and Song L.G. (2013) Chinese Industrialisation: Path Dependence and the Transition to a New Model, *A New Model For Growth And Development, China Update Book Series*, pp. 75-96.
- [10] Polese A. and Horak S. (2015) A tale of two presidents: personality cult and symbolic nation-building in Turkmenistan, *Nationalities Papers, The Journal of Nationalism and Ethnicity*, Vol. 43(3) SI, pp. 457-478.
- [11] Romanov E.V. (2017) What Capitalism Does Russia Need? Methodological Guidelines of the 'New Industrialization, *Economic and Social Changes - Facts Trends Forecast*, Vol. 10(2), pp. 90-108.
- [12] Romanova O.A. (2017) The Innovation Paradigm of New Industrialization in the Conditions of the Integrated World Economic Way, *Economy of region, Centre for Economic Security*, Institute of Economics of Ural Branch of Russian Academy of Sciences, Vol. 13(1), pp. 276-289.
- [13] Sampath P.G. (2016) Sustainable Industrialization in Africa: Toward a New Development Agenda, 2016, *P.G. Sampath, B. Oyelaran-Oyeyinka*

- (eds.) *Sustainable Industrialization in Africa*, Palgrave Macmillan, London, pp. 1-19.
- [14] Sherstoboeva E. (2014) Media Law Reform in Post-Soviet Turkmenistan: The Illusion of Democratization, *Problems of Post-Communism*, Vol. 61(5), pp. 32-45.
- [15] Silin Y., Animitsa Y., and Novikova N. (2017) Regional Aspects of New Industrialization, *Economy of region, Centre for Economic Security*, Institute of Economics of Ural Branch of Russian Academy of Sciences, Vol. 13(1), pp. 684-696.
- [16] Sullivan S.J. (2016) Halk, Watan, Berdymukhammedov! Political Transition and Regime Continuity in Turkmenistan, *Region*, Vol. 5(1), pp. 35-51.
- [17] Thevs N., Ovezmuradov K., Zanjani L.V., and Zerbe S. (2015) Water consumption of agriculture and natural ecosystems at the Amu Darya in Lebap Province, Turkmenistan”, *Environmental Earth Sciences*, Vol. 73(2) SI, pp. 731-741.
- [18] Yapici U. (2018) From Positive Neutrality to Silk Road Activism? The Continuities and Changes in Turkmenistan's Foreign Policy, *Journal of Balkan and Near Eastern Studies*, Vol. 20(3), pp. 293-310.
- [19] Zou Y.H. and Zhao W.X. (2018) Searching for a new dynamic of industrialization and urbanization: anatomy of China's characteristic town program, *Urban Geography*, Vol.39(7), pp. 1060-1069.