

## Future of Economic Science: From Ethical Perspective

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**Abstract:** *Economic Science is a branch of social science deals with production distribution and consumption of goods and services and their management. Ethics in production is a subset of business ethics ensuring that production function and activities are not damaging to the consumer or the society.*

*In future, economic science will affect the production value chain by 2018-20 for the use of AI and robotics in production sector and by 2030 it will affect the global economy because of the use of sophisticated technology in production sector like, 3D printing, Biotechnology, Genetic Engineering Technology, Nanotechnology, Computer and Internet Technology, to transform production system in a profitable way.*

*By and by, the use of RFID, Drones, Driverless Trucks, and Automated Warehouse will affect the product distribution system over the world.*

*The use of “Paradigm Shift” model upon the consumption habit of the peoples of different nation will divert the consumption trend of the world.*

*The developed nation, for their healthy economic growth can afford to use these above-mentioned technologies. But the developing nation are trying to use different types of innovation to maintain consistency with the global production value chain which will effect trade, global growth, unemployment, sustainability and environment over the world by 2030.*

*The United Nations has taken Agenda-2030 for sustainable development, which is targeted to balance social and environmental interests and sustainable growth over the world.*

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*To mitigate this global problem and to remain on track we should ensure Production System Integration for a Planned Surplus Production for the betterment of our society.*

### **Future of Economic Science**

Economic Science is a branch of social science that deals with production, distribution and consumption of goods and services and their management.

Ethics in production is a subset of business ethics ensuring that the production function and the activities are not harmful for the consumer or the society.

**21st century** is a revolutionary century for the industrial revolution which is called the age of 4<sup>th</sup> industrial revolution.

The industrialists are moving around the world for the sophistication of their production system to reduce their production cost to meet the challenge of 2030, which is the major factor for the production to remain competitive among the competitors. The integration of technological innovation and production system is the only way to be competitive in the global production market.

Future of economic science is relevant with the production value chain. To reduce production cost developed nations are using the technologies like Artificial Intelligence, Ultra intelligence, Next Generation Robotics, 3D Printing, Biotechnologies, Genetic Engineering Technologies, Nanotechnologies, Computer and Internet Technologies to transform manufacturing and production system to boost up production speed and lessen the production cost, which will impact the business model, economic growth, employment and sustainability over the world.

The United Nations has taken Agenda-2030 for sustainable development, which is targeted to balance social and environmental interests and sustainable growth over the world.

In future, the use of sophisticated technology in production sector will help the industrialists to diversify the raw materials according to the requirement of the production process which is another system to reduce production cost and to remain risk free in competitive market.

Ability to capture and store energy will be another advantage for the developed nations in future, and the availability of low cost energy would be a compound upon the advances in technology and diversified raw materials.

In the future distribution system the use of technology will impact upon the cost of good to reach the user and the technologies are: RFID, Drones, Driverless Trucks, Automated Warehouse etc.; all these sectors need very few skilled human labors who can affect employment situation.

The world consumer behavior has been changed. The information about the products are available and purchase of the products from anywhere of the world is now very easy. The companies directly involved with the global marketing are well informed about the customer demand and they know very well about how to do it.

So, a “New Paradigm Model” is very easy for the industrially developed nations to apply in the developing nations. This will be a new way of thinking about consumption. Moreover, in business, the idea is the same, a new way of looking at things.

For example, computer business spread over the globe for automation, E-business and almost all the countries of the world has made their infrastructure as their own, despite there are some flaws about their security issues.

But now the world is moving towards Cloud Computing and is going to be a big deal, because of its low cost service, at any time any place access via web browsing, rapid scalability, incremental cost and load sharing can forgot the need of local IT.

Some ethical questions have already aroused in the globe about the cloud computing issue. These may create dependency upon one another, which would limit the flexibility and innovation in this sector. Security issue can be a big issue; policy issue can be affected].

According to the report of World Economic Forum, the factors which will impact upon global business model by 2018-2020 are:

1. Advanced Robotics and Automatic Transport.
2. Artificial Intelligence and Machine Learning.
3. Advance material, Bio Technology and genomics.

World industrial leaders are looking for their profit maximization in industrial sector and emphasizing on new modern technologies, low cost energy, diversified raw materials for their expected goal. But here is a worry about employment and the new skilled labor for the technologically advanced production sector.

The developed nations are shifting the business paradigm for the new job opportunities and economic growth which is going to depend upon more

advanced technologies and skilled work force. In the future economic growth and job creation, the developed nations are emphasizing upon Space and Ocean economy.

The global space sector is dependant upon High-Tech and complex ecosystem. The trend towards globalization is having an impact upon space economy from R&D and design, manufacturing and services. There is a small market for space craft and launchers and the part is going to be a huge investment area. To expand the market and creating jobs, the incumbents are focusing on innovation in industrial process and development of small satellite, which require high skilled workforce. But the aerospace and electronic industrial

Groups are addressing new national market, where fresh public investment are being made, can affect human resources.

To strengthen the global value chain in space sector the developed nations are influencing the world to invest more in space program. But the new comer in this sector are still thinking about their capabilities and return of investment. The incumbents and new comers are still thinking about the ethical model for space commercialization, and fair distribution of space resources.

The world is worried about space preservation, space conservation, and space stewardship.

The developed nations are trying to shift their economy towards Ocean economy for the growing trend in market growth, capacity and employment. Ocean is a wide source for energy and with growing concern over climate change and increasing global interest in renewable energy.

- Ocean Economy is attractive for the developed nations because Ocean based energy have a long term potentiality.
- Offshore and deep water extraction of marine mineral resources.
- Marine Aquaculture.
- Marine Bio-Technology.
- Medicine.
- Enzyme and Polymer for synthetic raw materials.
- Algae bio fuel production.

These sector would be highly potential for growth and job creation sectors. But it is to be specially realized about the ocean side environment and health over the world.

It is not avoidable the expenses in military sector for the both developing and developed nations. A huge amount of money are being expended here due to the

development of military strength. Stratocratisation will affect the production value chain in future. Because the developed nations are trying to expand their weapons market in the different areas of the world. Developed nations are also inspiring the developing countries for stratocratisation for the low cost military weapons from the developing countries for a sustainable growth in their military economy which will effect economic science in future.

Energy is a big factor for production. Acquiring and capturing of energy sources is a big issue in global political economy, where there is more military involvement. To strengthen the military power the developed nations are producing and testing the military weapons and other supporting equipments like, nuclear warhead, unmanned aircraft, fighters, tanks rockets, launchers etc.

The developed nations are selling these products within their block chain to strengthen themselves for the business and trade and to secure their energy and geography.

Here is a worry about the free access in energy resources for different nations.

Developed nations are now and in future will grow more competitive market in military sector like, Autonomous military weapons, to make themselves stronger by using this advanced technology. But the autonomous military weapons are not yet successful in operation because many civilian had died all over the world due to autonomous military operation.

In the global industrialization race both in military and civil industrial sectors, the developed nations are rapidly shifting their production, distribution, and consumption policy to stay at risk free position in the competitive market and to maximize their profit.

But here is a concern about the requirement of extra skilled labor, jobless condition for the less skilled labor and the question of affordability at the changed consumption trends and its expenses for their own.

On the other hand, developing nations depending upon different level of innovation to stay on the global production value chain.

Developed nations are trying to decentralizing their future production plant towards the developing nations because of their low cost work force. So developing nations will be the highest energy consuming countries in future. For the excessive use of different types of energy for the production process there will be an anxiety about the environmental effect upon the developing nations in different areas like, accelerated destruction of forest, destructive mining method, lack of clean fresh water, heat generating, air pollution.

Moreover, some of the countries in the Asian region are not behaving well upon the natural water flow within the region, which is a disquiet about heat generating, damage of agricultural and fisheries sectors, rising sea level, and ecological problem in the region. Because the environmental effect is not for a static area, it started from a specific area and spread over a wide area in future in different ways.

Cloud seeding in the world is very much unethical, because the clouds are gathered artificially for artificial raining which may affect the environment of another nation.

Testing of weaponry system and the proxy war for the developed nations around the world, a part of military production and consumption, is another presentiment about environmental pollution.

Despite these, the countries involved in global production value chain are trying to minimize the environmental problem by using more renewable energy production but the investment are very few. Developed nations are now trying to shift some part of their economy towards Green Economy to mitigate the environmental problem by establishing environment related projects, which are the another profit maximization area for the developed nations. And these modern technologies are far to reach by the developing nations due to their establishment cost.

From the above-mentioned discussions we can easily understand that the developed nations are trying to become uncompetitive by using sophisticated technology in production value chain and want to give some priorities to the developing nations to be relevant for their profit maximization policy which will be helpful for their sustainable growth and profit maximization.

To mitigate this situation of global production value chain, some developing nations are using frugal innovation process in their production sector, which is a process of reducing cost of goods and its production by removing nonessential features from durable goods. Some are using indigenous innovation, which is a process of investment upon science and innovation related projects which is self-driven unique scientific and technological capabilities, knowledge and intellectual properties. Some developing nations are using Psychedelic Business Mastermind along with their intended innovation process. Some countries are emphasizing upon contract theory which is a major portion of the system development effort that typically involves the integration of the existing system. All these prefer low cost and high intensity, asymmetric information and law and economics. Some countries has started calendar production for better products. Some countries are

adopting the policy of stratocratisation in their economic policy for economic dumping.

Here is an anxiety about one dimensional view of the world, for centralizing the production in a single country which can build up the uncertainties in production sector during the period of rising income and consumption trend in a lower labor cost and consumption trend area. We will lost the new possible areas from our global investment decision for one dimensional view of lower labor cost.

### **Conclusion**

Bangladesh is a country where there are a good political-economic-social and military adjustment which have no negative influence upon the superpowers and have a non militaristic democracy. We have enough English speaking people, global transportation facilities, low cost workforce, available energy, tourism facilities, local and diversified raw materials, flexible business policy and advanced market as we are the transit to combine and connect the market of India. Shortly, we are connecting with one belt connectivity.

We have to find a new way to be relevant with the global production value chain for a sustainable development and growth of our nation in future. For a liberalized production value chain we should have to take a cooperative decision both in government and private sector for a future production policy to make a sustainable production circuit within the starter and with the intermediate and final producers, to achieve the production system integration for a planned surplus production for the betterment (socially and environmentally) of our country and the world.

### **Recommendations**

1. National online marketing development initiative, showing the highest possible profit possibilities in Bangladesh.
2. Special views upon the products for investment decision who have the longer product life cycle and to reduce complex economic interdependency.
3. Government regulatory authority should act positive to inspire new innovation.
4. Government and private sectors should take responsibilities to inspire the Emerging Individuals and human ThinkPad to control BRAIN DRAIN.
5. We should establish a strong relationship between ethics, science,

economics, law and anthropology to acquaint our nation with the post modern society of the world.

6. National consumption trend should increase step by step according to the national guidance by using the marketing media and import controlling.
7. Government and Private sectors should take special responsibilities to upgrade the present skill set of our nation, through institutional development.
8. Small and medium size industries should be relevant with the global production value chain by upgrading their present production system.
9. Find new opportunities and market for our global production, available skilled and unskilled manpower and for our military for peace mission with their production around the world.
10. New technologies should pass our socio economic requirement like national priorities, goal oriented innovation, healthier and economically prosperous and socially approved.
11. From agricultural to space industrial production system we should be relevant by using our skilled and unskilled manpower, available energy for production, basic and diversified raw materials and new innovation knowledge of our talents.
12. Government and non government sector should take special responsibilities upon the innovation like reverse innovation which will be the turn back from the complicated technological business environment.
13. Our industrial leader should immediately start R&D more and more for new innovation for their particular products and production system to be competitive over the world.
14. Government should engage in cognitive infiltration not to develop any area of conspiracy theory at any institutional level except intelligence and concern areas to compete with the world.
15. UN, WTO, ILO and the World Environmental Authorities should take special responsibilities for the global unemployment, environmental and trade imbalance.
16. Campaign against global arms race should be raised by the politician, ethicist, scientists, university and college teachers to aware the society about the negative global effect of arms race.
17. Empirical technological innovation should be prioritized highly to fill the technological gap between developing and developed nations.



18. Recycling issue should be emphasized in different sectors of production for diversified raw material and renewable energy, which is the final disposal of production value chain.
19. ICT committee to meet the challenge of Y2K 2038 problem.
20. Initiatives to increase trade dynamism both in government and non government sectors.
21. Initiatives to borrow new technologies without developing the developed technologies, to increase product value to attract new consumers.
22. Include more anthropological agencies in national economic development planning.
23. Global committee for a sustainable production value chain.

### *References*

1. International Economics. Kindleberger; New Edition.
2. Advanced Economic Theory. H.L Ahuja.
3. Theories of Surplus Value. Karl Marx.
4. Economic Development. Michael p. Todaro & Stephen C. Smith.
5. Artificial Intelligence. A Modern Approach. Russel Norvig.
6. Business Decision with Computers. Daniel Schuter.
7. Sustainable Development and Neo- Liberalism. Joseph E. Stiglits.
8. Some Paradoxes of Sustainability. Empirical and theoretical. Kenneth J. Arrow.
9. Nuclear Strategy and World Security. Joseph Rotblat & Sven Hellmen.
10. Contemporary Indian Philosophy. R.N Sharma.
11. Cultural Anthropology. Conrad Phillip Kotak.
12. Catastrophe Alert. Stafen Engel.
13. Technology and Economic Growth: The White House. November 8, 1995.
14. Marxist International Relation Theory. Wikipedia.
15. Neo- Marxian Economics. Wikipedia.
16. The political Philosopher and Marxism. [www.theopoliticalp.wordpress.com](http://www.theopoliticalp.wordpress.com).
17. Lithuanian Companies in Emerging Markets. Internationalization motives and Barriers. Jurgita Sekliuckiene. Economics and Management 2013, 18(1)
18. Economic Science and Postmodernism: Ethics Returns. Cosmin Marinescu. Theoretical and Applied Economics. Volume 18(2011), No 5 (558).
19. Space Future-lunar Ethics and Space Commercialization. [www.spacefuture.com](http://www.spacefuture.com).
20. The Future of Ocean Economy. Exploring the prospects for emerging ocean industries to 2030. OECD.
21. Space Economy at a Glance 2014.OECD.
22. Economics. Wikipedia.
23. Philosophy of Science. Wikipedia.
24. Cognitive Science. Wikipedia.
25. Conspiracy Theory. Wikipedia.

26. China's Drive for Indigenous Innovation. James Mc Gregor.
27. Regulatory Reform and Innovation. Organization for Economic-Cooperation and Development.
28. Science Technology and Innovation for sustainable Development in the Global Partnership for Development beyond 2015. Thematic Think Piece. ITU, OHCHR, UNCTAD, UNEP, UNESCO, UNFCCC, UNIDO, WIPO, WMO.
29. Moving up The Value Chain: Staying Competitive in The Global Economy. Main Findings. OECD.
30. Public Private Partnership for Agricultural Business development. FAO.
31. World Economic Outlook. April, 2016.
32. Bangladesh ADB: 40 Years of Development Partnership.
33. World Economic Forum, Annual Meeting 2017, system Initiatives Program.
34. Influencing Consumer Behavior. Improving Regulatory Design. Australian Government.
35. Manufacturing the Future: The Next Era of Global Growth and Innovation. McKinsey Global Institute.
36. Future of Jobs. World Economic Forum.
37. The Shifting geography of Global Value Chain. World Economic Forum.
38. Discounting the Future. Economics and Ethics. Timothy J. Brennan.
39. Economic Science in The Future. James M. Buchanan. George Mason University.
40. Sustainability. [www.mdpi.com](http://www.mdpi.com).
41. Ethics. William Frankena.

