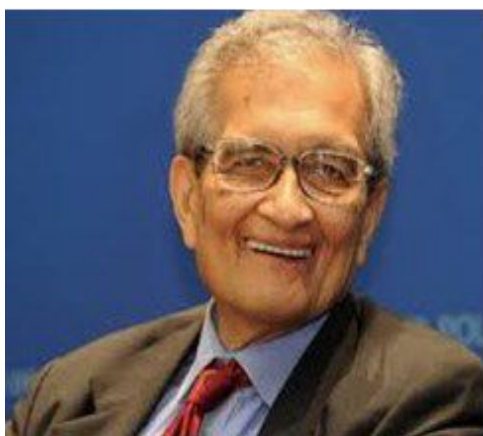


# RATIONAL EXPECTATIONS ECONOMICS SOCIETY MONTHLY REVIEW

ISSUE- 12 | AUGUST | 2016

## Known an Economist

### Amartya Sen: The Philosopher Economist



Amartya Sen is perhaps the greatest economist born in Asia. Sen can be easily categorized as a welfare economist. He took a normative stand on the direction of economic policies that aim to promote human capabilities, an approach to development that became popular as *'the capability approach'*. His philosophy is succinctly encapsulated in his work *'Development as Freedom'*, which is a must-read for any student of development studies. The central argument of this philosophy is that freedom is essential to development both as the primary end and as the principal mean. This idea provided a major push to the alternative approach to development which has led to consolidation of what is widely known as Human Development approach. The Human

development Index and Millennium Development Goals are the closest embodiment of the Sen's philosophy of development. His work has greatly influenced international organizations such as the United Nations agencies, the ILO, and the World Bank. Sen gained academic prominence through his work on famine. He firmly believed that famines are rarely the result of a lack of food and they represent breakdown in people's ability to access or produce food. He maintained that famines are the result of political failures, not natural ones. Time magazine included Amartya Sen in the list of *'World's 50 most influential people who matter'*.

Sen is the winner of many prestigious awards. He was awarded with Nobel Prize in Economics in 1998 for his remarkable contributions in the field of Welfare Economics. He also won Adam Smith Prize (1954), Leontief Prize (2000) and Charleston-EFG John Maynard Keynes Prize, 2015. Sen's work is recognized through many felicitations, mainly, including the highest civilian award in India "Bharat Ratna" (1999), "Order of Companion of Honour", UK (2000) and "Commander of the French Legion of Honour" (2013). Yet, the list is not finished.

Sen is a highly prolific writer which is remarkable even by the standards of Nobel

Prize winners. He has authored 23 books and more than 250 journal articles. His books have been translated in more than 30 languages. Some of his noteworthy publications are - *'Development as Freedom'*, *'Inequality Reexamined'*, *Poverty and Famines: An Essay on Entitlements and Deprivations'*, *'Collective Choice and Social Welfare'* and *'An Idea of Justice'*.

Sen has spent the larger part of his working life at institutions in the UK and the US. He is a philosopher cum economist who never chose to consult any government. He once stated in LSE's notes, *'I have never counseled any government, preferring to place my suggestions and critiques – for what they are worth – in the public domain.'*

Amartya Sen (1933–) was born in Shantiniketan, West Bengal, India. After being educated in India and Great Britain, Sen commenced an illustrious career, becoming well known for his research in social choice theory, political philosophy, and development economics. Sen has held professorships at Jadavpur University, the University of Delhi, the London School of Economics, Oxford University, and Harvard University. Sen's Philosophy influenced many around the world but Sen himself is greatly influenced by John Rawl and Martha Nussbaum.

~ Professor Sanjeev Mehta

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## REES Editorial

Pema Choden  
Email- ablepema@gmail.com

Purna Maya Gurung  
Email- 102566pur@rtc.bt

Purna Bdr. Subba  
Email- 102792pur@rtc.bt



# RATIONAL EXPECTATIONS ECONOMICS SOCIETY MONTHLY REVIEW

## Are Bhutanese happier?

~Kaka Choden

RTC Graduate

The GNH survey results of 2015 revealed a significant increase in the happiness from the 2010 to 2015. The GNH index in 2010 was 0.743% while it improved to 0.756% in 2015; consequently, GNH index has increased by 1.7 % over the mentioned time period. In short, people residing in Bumthang, Lhuntse, Pema Gatsel, and Samdrup Jongkhar have experienced significant improvements in their happiness level. In addition, people are identified as unhappy and narrowly happy have reduced.

	Definition of group-sufficiency	GNH 2010	GNH 2015	Remarks
Deeply happy	77%-100%	8.3%	8.4%	Increased
Extensively happy	66%-76%	32.6%	35.0%	Increased
Narrowly happy	50%-65%	48.7%	47.9%	Decreased
Unhappy	0%-49%	10.4%	8.8%	Decreased

Table 1.0 category of GNH index, head counts, and sufficiency (source: CBS & GNH research, 2015)

### How are we happier?

This question demonstrates how domains and indicators has improved or worsened and how it has affected the trends of happiness of people. It shows that there are social and lifestyle changes that are bound to happen, owing to the development course of the country. GNH Indicators such as services, ecological issues, healthy days, cultural aspirations, housing, wildlife damage, sleep, assets, household per capita, income, literacy, and mental health has considerable improvements among 10% of the population between 2010 and 2015. However, some indicators such as self-reported health, community vitality, Driglam Namzha, spirituality, and negative emotions has worsened while no major change was found in urbanization issues, knowledge, and artisan skills. In brief, traditional values are losing its place particularly in urban areas and there were no significant improvement in vital indicators such as knowledge and artisan skills. Therefore, there is a need for either Policy makers or the relevant departments to scrutinize before it hinders the wise development strategy of the country.

The GNH survey 2015 revealed that percentage contribution of community vitality domain has reduced to 11.61% from 12.88%, good governance to 10.18% from 10.32%, and health has improved from 12.88% to 13.21 %.

## Early Dawn

### - to Get Much of Dew

- *Purna Bdr. Subba*  
*2nd Year, BA Eco Evs*

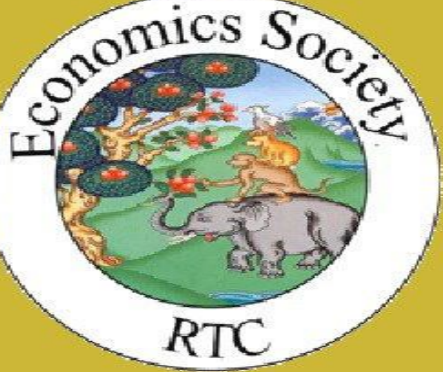
Gather you the first daffodils of early spring while you may,  
By old days to new - the time is still a-flying.  
And the same flower that blooms today  
Will tomorrow be dying...

That time is the best when sun shines for play  
Where must you go outside - make your play again,  
But at the same time, you let yourself delay,  
We may not know if it may rain.

Wait not only for good things to happen - they may not come,  
'Cause you walk by the sad stories that great men say,  
Wish everything was perfect - they would recoil from  
The life-long battles and not as they live today.

While you live in lusty youth, work for today as there's no tomorrow,  
For this be not coy, but be brave  
Thereby success is your carved work, while others borrow  
So you will not regret though you go old to the grave.





# RATIONAL EXPECTATIONS ECONOMICS SOCIETY MONTHLY REVIEW

## Public Debt

- Chenchu Dorji (RTC Graduate)

### Background

Public Debt is a situation in which public expenditure exceeds public revenue. It is the debt that the central government owes to its public and international lenders, i.e., other central governments, international organizations and financial institutions. Public Debt can be either external or internal. Government's borrowing money is not a new phenomena, it is a fiscal measure to raise revenue for expenditure when raising revenue through taxes is not the most availing option. Borrowing is necessary to economic growth and most literature on Public Debt show that countries have continuously borrowed from one another in different forms. This trend of borrowing can be seen throughout the world: in 2015, Public Debt of United States was recorded at 73.6% of GDP, similarly India's Public Debt stood at 51.7% of GDP and China's Public Debt was at 16.7% of GDP (World Fact book, 2015)

Bhutan's total external debt stood at 98.9 percent of the GDP in the fiscal year 2014-2015 (RMA, 2015). This is a decrease of 1.4 percent (as a percentage of GDP) from 2013-2014 fiscal year. Government of India is Bhutan's largest creditor with 67.8 percent of overall external debt which is Nu. 80.2 billion followed by Asian Development Bank (ADB) at USD 259.2 million, World Bank with USD 165.4 million and the Government of Austria with USD 81.0 million (RMA, 2015).

The total outstanding government debt as of June 2015 is Nu. 120,783.002 million. The domestic debt of the Government was Nu. 2,106.813 (million) which is about 1.7 percent of GDP as of June 2015 on account of Overdraft with BoBL and Government equity participation in the purchase of new aircraft for Druk Air Corporation Limited. The total external debt as of June 2015 stood at Nu. 118,676.189 million (approx.94.8 percent of GDP) (RMA, 2015). A trend of Internal and External Public Debt in Bhutan is shown in Graph 1 from 2003-2015.

### A. External Borrowings

External Borrowings for capital expenditure was mostly focused towards infrastructure building (roads, buildings and other structures), followed by expenditure for strengthening the power sector (including electrification programs), training and consultancy, telecommunication, agriculture development, health, electoral equipments purchase, renovation of Dzongs. An increase of 14.4% in borrowing was incurred in the fiscal year 2010-2011.

This is attributed to increase in expenditure on structure and professional services (for pre-construction activities of power projects of Chamkharchu, Kholongchhu, Sunkosh, Kuri-Gongri, Amochhu, Mangdechu, Punatsangchu II and Urban Development) and costs for reconstruction of infrastructure damage caused due to Cyclone Alia and earthquake which increased expenditure on structure buildings.

Capital Expenditure further increased by 22.7 percent in 2011-2012 which is attributed to increase in acquisition of immovable property like buildings, human resource development trainings, expenditure on structures such as roads, buildings, irrigation channels, water supply and sanitation, on purchase of vehicles and capital grants to individuals/non-profit organizations. The total capital expenditure during the fiscal year 2014-2015 was Nu. 16,668.752 million, a decrease of 9.6% over the previous year. The 11<sup>th</sup> FYP was just initiated, so the expenditure incurred was less. About 75% of the total capital expenditure and principal loan repayment of Nu. 19,245.607 million Was financed by the receipts in grants and borrowings (MoF, 2015).

Debt to GDP Ratio.

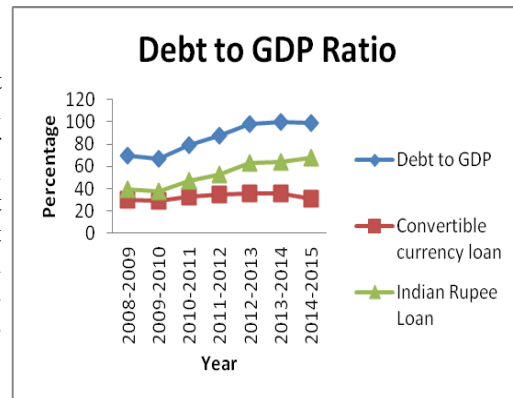


Figure 1 (Source: MOF, 2016)

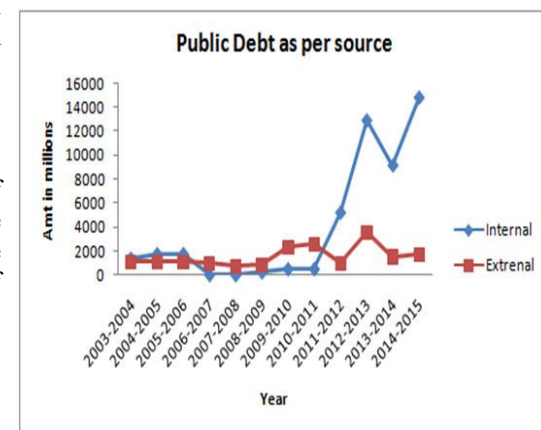


Figure 2(source: MOF, 2016)

Hydro and Non-hydro Power Debt Outstanding (in percent of GDP)

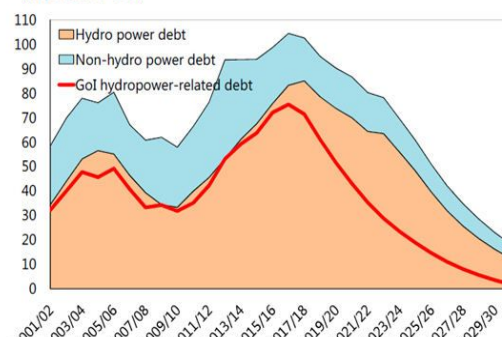


Figure 3 Hydro and Non-Hydro Debt(source: MoF,



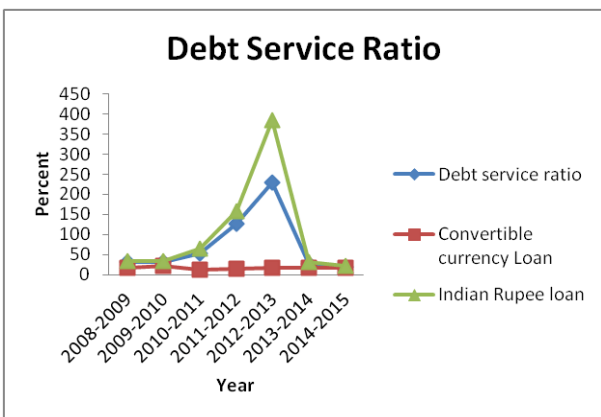
# RATIONAL EXPECTATIONS ECONOMICS SOCIETY MONTHLY REVIEW

## B. Internal Borrowing

The internal creditors of the central government of Bhutan include Bank of Bhutan (BOB), Bhutan National Bank (BNB) and National Pension and Provident Fund. Major sources for recurrent expenditure over the years include subsidies to Druk Air Corporation, Bhutan's membership to international organizations, supply of food assistance to schools, grants to financial institutions and allowance to civil servants. 2011-2013 fiscal years recorded a sharp expenditure rise which is attributed to the civil service pay revision, high level international meetings and national celebrations (MoF, 2015).

Public Borrowings in Bhutan are mainly carried out for investment purpose. Majority portion of the borrowings are undertaken for hydropower construction which is a self liquidating in nature. Meaning once the hydropower is in operation its going to generate revenue which will help in repaying it. At present fiscal year the public debt for hydropower is at peak and it is going to decrease in future decades as per projection by the Ministry Of Finance indicating hydropower debt is not a burden for future generation. This fulfills the constitution requirement of the country for not making debt burden for the future generation.

### Debt Service Ratio.



Debt service ratio can be understood as the debt service payment of a country to that country's export earnings (Principal+ Interest/export earning). Normally lesser debt service ratio is considered to be good. If the debt service ratio of the country is higher it is a concern for the government and the citizens of the nation. The debt service ratio (2014 -2015) for Bhutan is high for Indian Rupee (20.7 percent) compared to Convertible currency (17.1 percent). This means that Bhutan has more debt to India and Bhutan's export earnings are not enough for repayment. As a result the debt are paid from convertible currency which is a major component to monetary base which determines money supply. None-the-less the external borrowings from India are project tight loans on hydropower construction and thus in long run once the hydropower plants are in operation it will be able to earn Indian currency which can be used for debt servicing on Indian Rupee. The convertible currency debt are at constant rate on average and is low compared to Indian rupee. Since Bhutan has a high convertible currency reserve debt servicing will not pose any major problem.

Figure 4 Debt Service Ratio (Source: MOF,2015)

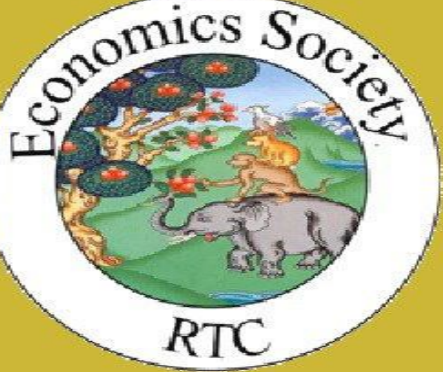
### Conclusion

Bhutan's Public Debt is 98.9 % of GDP as 2015 and expected to rise further in future. Increase in Public debt can be mainly due to construction of Hydropower as the major contributor and other related to investment on infrastructure in the country. As per the projection and the data majority chunk in public sector is from hydropower loans. Hydropower being self liquidating in nature its does not possess any threat to the security of the nation and debt sustainability. Therefore, it is not going to be major challenge for the government of Bhutan.

### References

- Central Intelligence Agency. (2016). *The World fact book*. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/fields/2186.html>
- Ministry of Finsnce. (2016). *Annual Financial Statement*. Retrieved from <http://www.mof.gov.bt/publications/reports/annual-financial-statements/>
- Royal Monetary Authority.(2015). *Monetary Policy Statement*. Retrieved from <http://www.rma.org.bt/RMA%20Publication/MPS/MPS%202015.pdf>





# RATIONAL EXPECTATIONS ECONOMICS SOCIETY MONTHLY REVIEW

## A Perspective on the Bhutanese Economy

~Sanjeev Mehta

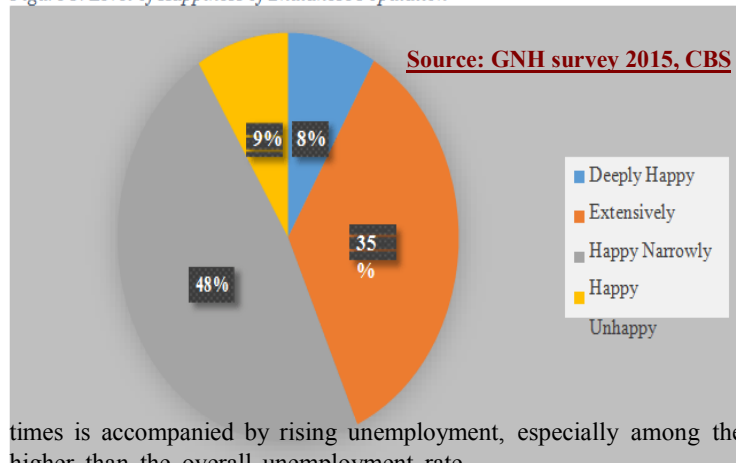
*Professor of Economics Royal Thimphu College*

A case study of Bhutan's development process brilliantly depicts the challenges faced by a small, mountainous and landlocked country. The Bhutan's real GDP in 2014 at current exchange rate was US\$ 0.9 billion. The size of Bhutanese economy, in terms of GDP, is even smaller than the stated construction cost of the Mukesh Ambani's house- Antilia. Geographical size of Bhutan is 38,394 sq. km which is almost of the same size as that of Jaisalmer District of Rajasthan. Bhutan's population in 2014 was 745,143, which is a less than a medium sized city in India. Despite its small relative size, Bhutan enjoys relatively higher level of living standard in South Asia with a per capita income of US\$ 2611, which is only surpassed by Maldives and Sri Lanka. Today, Bhutan is known as a Gross National Happiness (GNH) economy and GNH has created a brand image for Bhutan.

The process of modern economic growth in Bhutan began in 1961 with the introduction of development planning. Major elements of Bhutan's development strategy have been redistribution through growth, scaling up the rate of investment by seeking development assistance form outside, inducing people's participation through decentralization of planning. Because of the geographical proximity, historical relations, sound political relations and free trade arrangement, India occupies a central place in the functioning of Bhutanese economy. Despite diversification of Bhutan's international trade over past sixty years, India remains dominant trade and development partner of Bhutan. Bhutan has followed a mixed approach towards integration with the rest of the world- limited restriction on the movement of goods and services, more restrictive approach on the movement of labor and capital and strong regulatory framework on the private investment. This policy led to creation of strong monopoly of state owned enterprises in all the vital sectors of the economy – generation and distribution of electricity, air transportation, banking and finance, communication, health, education and cement. Presence of state in agro and forest based industries was also very significant. Bhutan also followed a very restrictive approach towards tourism. Since late 1990s Bhutan started liberalizing its economy and expanded the pace of globalization. Private sector was slowly allowed to enter some of the sectors like- banking and finance, communications, air transportation and intermediate goods like cement. The process of liberalization and globalization stated with a series of new policy initiatives, mainly through Foreign Direct investment policy 2001 and 2010, Economic Development Policy 2010 and Cottage Small and Medium Policy 2012. The first decade of the current millennium also witnessed a peaceful transition of Bhutan from a benevolent monarchy to a constitutional democracy.

Bhutan's development philosophy is defined by GNH, which seeks to maintain a balance between material and spiritual progress of the citizens of Bhutan. The GNH orientation aims to promote those policies, processes and institutions that promote collective happiness defined in terms of a social contract. The social contract on GNH seeks to strengthen four aspects of development processes in Bhutan, classified as four pillars-equitable socio economic development, protection of environment, preservation of culture and good governance. The central planning body, GNH commission, uses GNH screening tools to select development policies and projects that direct the economy in the desired direction. Greatest challenge to the application of this philosophy was its quantification. A group of experts have constructed a GNH index which is derived using 9 domains and 33 indicators. In 2015, a survey was undertaken by the Centre for Bhutan Studies and GNH Research (CBS) to measure the level of happiness on Bhutanese people. Finding of this survey is shown in the figure 1.

Figure 1: Level of Happiness of Bhutanese Population



The Bhutanese economy has grown rapidly over the period of time and its long term GDP growth rate has accelerated from 6% in 1980s to about 8% in the first decade of 2000 AD. Even in the post financial crisis period, the growth of Bhutan did not decline very significantly. The period of high growth rate since year 2000 was also characterized by sharp decline in the poverty rate from 36% in 2000 to 12% in 2012. Alongside increase in per capita, major social indicators, such as, literacy rate, infant mortality rate, under five mortality rate and life expectancy at birth also improved significantly (Refer table 1). Bhutan's success in translating growth into improved social indicators helped it to achieve MDG goals. Hidden behind this improvement is large gender, rural-urban and inter-regional divides. Inequality of income distribution (gap between rich and poor) is very large- as reflected by the Gini Coefficient value of 0.512. Growth in re-

times is accompanied by rising unemployment, especially among the youths. The rate of youth unemployment is 12%, which is almost 6 times higher than the overall unemployment rate.



# RATIONAL EXPECTATIONS ECONOMICS SOCIETY MONTHLY REVIEW

Table 1: Social Indicators in Bhutan

Indicator	1981	2015
Life Expectancy at Birth (in years)	46	69
Adult Literacy Rate (in %)	20	63
Infant Mortality Rate (per 1000)	164	27
Under Five Mortality Rate (per 1000)	195	45

Source: UNICEF

Given high energy deficiency in India, The Government of India has agreed to buy all the surplus electricity from Bhutan. The hydro sector has been major factor behind high growth performance of the Bhutanese economy as it contributes to about 15% of GDP and 60% of Bhutan's exports. Construction sector contributes to about 17% of GDP. These largest, as well as, fastest growing sectors of the economy do not contribute much in term of jobs creation for various reasons. Hydro sector is capital intensive and does not create many jobs after it is commissioned. Construction is labor intensive but Bhutanese people, and, especially the youth, do not prefer to take up these jobs. Tourism sector has large potential but due to restrictive policy and inadequate infrastructure, the country is not able to tap this. Agriculture still employs 62% of the population but contributes about 16% of GDP. Long term decline in food grain output (from 241,000 metric tons in 1991 to 164,445 metric tons in 2014) is one of the major development challenge faced by Bhutan, as it adversely affect long term national food self-sufficiency. Bhutan imports about 60% of its demand for rice and also a majority of other food items. Industrial sector in Bhutan is very weak and highly localized. Small size of domestic market, strong infrastructural bottlenecks, restrictive policy framework, limited entrepreneurship, shortage of skilled manpower and absence of protection to the domestic industries have strangled both the private sector and industrial development. Till recently Bhutan was ranked poorly in the ease of doing business. Even though Bhutan's ranking has improved, its benefits are only virtual. The government has attempted to push up the rate of industrial growth by promoting cottage, small and medium enterprises but its impact is not visible yet.

Most critical challenge faced by the Bhutanese economy is rising macroeconomic instability measured in terms of rising trade deficit, mounting external debt burden and rising youth unemployment. Rising trade deficit is the biggest source of macroeconomic instability for the Bhutanese economy and is reflective of structural weakness of the economy. Bhutan's exports have declined by 15% since 2010 and its imports increased by 45% during this period. Bhutan's current account deficit as a ratio of GDP has gone up by four percentage points to 24% during this period. Since India is a predominant trade partner of Bhutan, the problem of chronic deficit in the current account has led to critical shortage of Indian Rupee reserve- widely known as rupee crisis in Bhutan. Shortage of Indian rupee requires action to match the demand supply gap in order to maintain the exchange rate parity system with Indian Rupee. Rising current account deficit and hydro sector borrowing from India has also led to rise in external debt of Bhutan which is close to 125% of its GDP. The government firmly believes that it is a self-liquidating debt-once the projects are commissioned the hydroelectricity exports to India will pay for it. Many skeptics, including myself, believe that there is a great risk involved in it due to delay in the completion of many ongoing projects, threat from climate change impact and possible shift in India's energy policy in the favor of nuclear energy. If India becomes a member of nuclear suppliers group (NSG) this threat may be real. There is an urgent need to diversify the base of Bhutanese economy. A stable political system, relatively clean public administration and existence of strong institutions create confidence in the system's ability to set things right.

In the changing global order where India is emerging as a key player and Asia is likely to be the engine of global economy, Bhutan can benefit immensely if it creates right linkages with the regional economies. Key to the success will be a policy reorientation that support and strengthen the capacity of private sector.

## The welcome event

On 11<sup>th</sup> of August, 2016 we welcomed our 1<sup>st</sup> years with a tea party. We began the event with a self introduction with the Faculty of the Department of Economics, Executive board members and the Editorial team of Journal and Monthly Newsletter. We also organized a game for the students and the game was of "The International Trade" with regard to absolute cost advantages. The groups were divided among the 5 countries namely Developed countries (Germany and Japan), Middle income country (Russia) and the Under Developed countries (Nepal and Ivory Coast).

Initially countries had no idea of what to produce, how much to produce and for whom to produce with the limited resources. However groups representing developed countries had an advantage over the capital goods and technologies. On the other hand, developing countries had raw materials but no capital goods and technologies. What we observed is that developing countries has a hard time producing goods and developed countries were not willing to lend or sell their materials.

At the end of the game:

Countries	Starting of the game	End of the game
Japan	600	5450
Germany	600	5216
Russia	300	2900
Nepal	200	780
Ivory coast	200	280

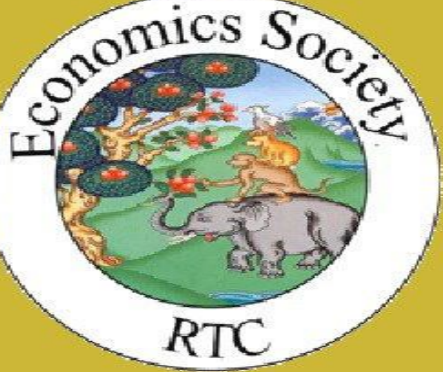
Game helped to understand the dynamics of the international trade- developed countries who are endowed with large capital base and technology gain much more from the trade than the under developed countries and specialize in the production of more sophisticated goods.

Developed countries maintain monopolistic control over resources make disproportionate gains. In the absence of complementary capital goods, developing countries are not able to use their resources efficiently and end up exporting primary goods without value addition.

Policy challenge is to fix these gaps and the 11th five year plan (2013-18) is directed towards this objective by imparting inclusiveness to the growth process.

Consumption both private and public is the major drivers of economic growth in Bhutan, which together contribute to about two thirds of GDP. From the supply side perspective-Construction, hydroelectricity and tourism are the major contributor to GDP. Bhutan has potential to generate 30,000 MW of hydroelectricity and currently it taps only 7% of this. Hydroelectricity is produced by projects developed through Indian aid.





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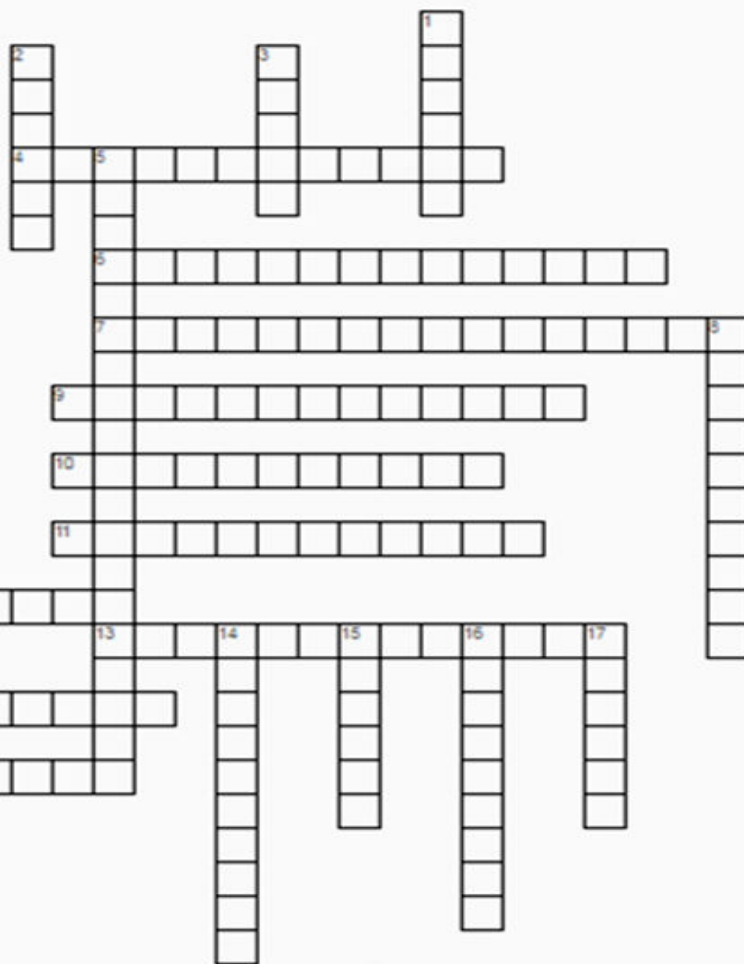
## Economics terms Crossword

### Down

1. An arrangement that allows buyers and sellers to exchange things.
2. Financial gain made in transaction.
3. Transforms inputs or factors of production into outputs or products.
5. The power of consumer to decide what gets produced.
8. The point at which quantity demanded and quantity supplied are equal.
14. An expectation that encourages people to behave in a certain way.
15. The direct exchange of one set of goods or services for another.
16. Owns factors of production.
17. Desire to win something and the ability to pay for it.
20. The amount of goods available.

### Across

4. Firms purchase the factors of production from households.
6. The concentration of the productive efforts of individuals and firms on a limited number of activities.
7. Anything that is used to determine values during the exchange of goods and services.
9. Households purchase the goods and services that firms produce.
10. The struggle among producers for the dollars of consumers.
11. One's own personal gain.
12. The cost of something.
13. A term used to describe the self-regulating nature of the marketplace.
18. When goods price is lower, consumer will buy more of it.
19. The higher the price, the larger the quantity.



## Events for REES—Fall 2016-17

1. Welcome Event to the Fresher
2. Coffee Table discussion
3. Monthly Lunch
4. Budding Economist of RTC
  - A. Visual 1<sup>st</sup> round
  - B. Written test and panel discussion ( will be held next semester)
5. Eco- Festival
6. Academics guidance by Senior classes
7. Guest lecture