



MONTHLY REVIEW

A Monthly Newsletter by Rational Expectations Economics Society (REES) of RTC

REES crowns 2nd Budding Economist of RTC

Phurpa Dema



Chencho Dorji wins the competition

The Rational Expectations Economics Society has finally crowned its 2nd Budding Economist of RTC. Mr Chencho Dorji of ECO&EVS 3rd year won the competition. The competition is inspired from an event in South Asian Economics Students' Meet (SAESM) where the Budding Economist of South Asia is selected based on series of rigorous completion. The title 'Budding Economist of RTC' is awarded to an economics students on yearly basis. Second budding economist of RTC competition started from fall semester of 2014 and final round was held on 3rd April, 2015.

In total, seven participants competed in series of rigorous competitions for the budding economist this year. Five participants were from 3rd year and two from 2nd year. They are Jigme Namgay, Chencho Dorji, Kuenzang Dorji, Choening Zangmo and Pema Chogyal from the final year. Kinley Gyeltshen and Rinchen Zangmo were competitors from second year. The first year students were however not given the opportunity with the understanding that their economics knowledge is minimum. The first round of the budding economist was the visual rounds where the pictures were shown and the participants were asked to talk on that picture for about 2 minutes. The talk should be based on economic theories or in economic term. The essay marks the participants obtained in SAESM 2014 was included the competition as a second round. The final round, budding economist expert panel competition was held on 3rd April, 2015 at the executive center. Cont'd page 2

Dear Teacher,
Thank You for continually inspiring me to do my best, You help me strive for my goals. I found guidance, friendship, discipline, love and everything in one person. And that person is you.
Happy Teacher's Day to all the RTC faculties.
-Pema Choden
BA ECO EVS 1st year

“Those who educate children well are more to be honored than they who produce them; for these only gave them life, those the art of living well.”

— Aristotle

“HAPPY TEACHERS’ DAY”

REES

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Opinion on Nationalization of Natural Resources.*Chencho Dorji**BA ECO&EVS 3rd year***Participants with the judges**

Cont'd from page 1

During the final round there were 5 judges and three of them were from different organizations and two from the economics department of RTC. Every participants were asked a question each by the five judges. The participant had to face the five judges and answer them. It was the toughest challenge. Many of them were quite nervous but still they were able to answer the question and give their own thoughts. The participants were given the marks by the judges on the basis of three different criteria such as ability to answer appropriately, language and confidence. The final round, which is the panel discussion was introduced this year after being inspired by the same event held during SAESM.

After adding all the marks they obtained in three different competitions, the Budding Economist of 2015 was selected. Mr. Chencho Dorji from the final year was the winner of Budding Economist of 2015 and Mr. kuenzang Dorji from final year was the runners up. The winner was awarded with the cash price of Nu. 5000 with certificate and the runners up with cash price of Nu. 3000.

Nationalization of natural resources in Bhutan is a debatable issue and can be justified from two views. Natural resources are free and available to all. It can be in the form of wind, solar, water, sand, minerals, etc. without it; it is very difficult for human to survive and industry to grow. The government of Bhutan is deciding to nationalize the natural resources. According to international law, nationalization is regarded as the sovereign right of nations but, is it sufficient to contribute to diversification and development?

From a socialistic point of view nationalization is good for the economy because it eliminates over exploitation of natural resource by a single firm or business entity, reduces income inequality and focuses on social welfare.

When resources are owned by the state it does not focus on profit maximization. Usually state is involved in maximizing social welfare by sustainable use of resources. For example if a private firm is allowed to mine coal, he will not take care about the externalities and will go on mining to maximize his/her profit but if state does mining of coal they will take care about the negative externalities and will not go for over mining. This will reduce the negative externality by promoting economic activities.

Nationalization will help in reducing income inequality. In case if resources are not nationalized those firms who are having advantages in extracting natural resources will earn high compared to those who does not have. Thus, with help of nationalization it will eliminate those firms with monopoly power and will help in equal distribution by providing equal rights to access the resources.

State main focus is on social welfare instead of individual gains. Therefore nationalization would be a better option sine it focuses on larger group instead of individual gains.

Statistics for University Graduates

Sonal Mehta
Lecturer, RTC

Assessment of academic work is often loaded with concepts such as regression, significance level, and causality. Many people cannot make any sense out of them and it is just a jargon for them. A course in Statistics is usually an integral part of any programme at university level but it is often viewed as something to be taken, passed and quickly forgotten. It creates unfounded terror among a majority and this fear goes against their learning process. Most of these students only realize, at their own peril, at much later part of their professional life that what they have failed to learn. Many times it is imperative to work with large volume of data and make sense out of it. Knowledge of statistics is also important to improve one's ability to understand the methods and concepts that underpin academic studies and judge the quality of a research work. Even if one cannot master statistics, ability to comprehend the basic language can help in critical evaluation of academic work promote deeper thinking. Further, the emerging academic needs requires that students have greater analytical rigor so that they can make sense out of increasingly large amounts of numbers, figures and data available for analysis. Grasping some of the academic theory behind statistics will definitely help.

We can use statistics to explore observed data through **descriptive statistics** or use observed data to make predictions through **inferential statistics**. Statements such as "Since 1990, Bhutan's population has increased at an annual rate of 1.8%" is a descriptive statistics; "1% increase in the level of spending on health and education tends to increase lifelong income of a person by 5%" is an example of inferential statistics. Many times studies try to establish a **correlation** between two variables — for example, what kind of association may exist between the expenditure on health and income of an individual; or, how the weight of a car is associated with fatal collisions. Detecting such a relationship is only a step towards the ultimate goal is to determine **causality**: that which variables affects the other. There is a time-honored phrase to keep in mind: 'Correlation is not causation'. One should also be cautious to not to make use of nonsense correlation which may exist in the data. Finally, we have to use our logic to ensure that we do not fall into a trap.

In this article, I want to introduce some basic statistical concepts that all the university graduates should be familiar with:

A **sample** is a portion of an entire **population**. Inferential statistics seek to make predictions about a population based on the results observed in a sample of that population.

There are two primary types of population samples: **random** and **stratified**. For a random sample, study subjects are chosen completely by chance, while a stratified sample is constructed to reflect the characteristics of the population at large (gender, age or ethnicity, for example).

Attempting to extend the results of a sample to a population is called **generalization**.

Generalizing results from a sample to the population must take into account **sample variation**. Even if the sample are selected randomly, there could be a degree of **variance** within the population that require us to include a **margin of error**. For example, result of a sample study on voters' choices reflects that 47% would vote for the party X, with a margin of error of (\pm) 3%. It means that those who vote for party X can be as low as 44% or as high as 50%.

Sample becomes more representative with increase in its size and the margin of error falls while the **confidence level (how confident one can be with the findings)** rises.

Most studies explore the relationship between two variables — for example, that marks in statistics are not associated with marks in Economics, is called the **null hypothesis**, which is sought to be disproved. **Alternative hypothesis** reflects some association between two variables —for examples, the marks in statistics are associated with marks in economics.

Significance test checks whether the null hypothesis is true; the **p-value** indicates how likely this would be.

The other threat to a sample's validity is the notion of **bias**. Most common source of bias is selection of subjects. If subjects self-select into a sample group, then the results are no longer **externally valid**, as the type of person who wants to be in a study is not necessarily similar to the population that we are seeking to draw inference about.

When two variables move together, they are said to be **correlated**. **Positive correlation** means that as one variable rises or falls, the other does as well. **Negative correlation** indicates that two variables move in opposite directions.

Causation is when change in one variable alters another. For example, income and expenditure are correlated, but causation flows in only one direction (income affects expenditure). This is also known as **cause and effect**.

Regression analysis is a way to determine the **average causal effect**. This means looking at how the graph's dots are distributed and establishing a **trend line**. It is used for making prediction.

While causation is sometimes easy to prove, frequently it can often be difficult because of **confounding variables** (unknown factors that affect the two variables being studied). Studies require well-designed and executed experiments to ensure that the results are reliable.

When causation has been established, the factor that drives change (in the above example, income) is the **independent variable**. The variable that is driven (in above example, expenditure) is the **dependent variable**.

Standard deviation provides insight into how much variation there is within a group of values. It measures the deviation (difference) from the group's mean (average).

Be careful to distinguish the following terms as you interpret results: **average**, **mean** and **median**. The first two terms are synonymous, and refer to the average value of a group of numbers. A median, is the central value.

In descriptive statistics, **quantiles** can be used to divide data into equal-sized subsets. **Quartiles** separate data set into four equal-sized groups.

Note that understanding statistical terms isn't a license to academic enlightenment but using the data base for unbiased analysis is an enlightenment.

Food Security Situation in Bhutan

Wangchuk

BA ECO&EVS 3rd year

Food security has been the concern at the global level to cope up with its ever growing populace from the beginning of post-world war II period of baby boom. The industrial revolution has significantly enhanced the productivity of capital and with the use of improved technology the yield of agriculture also shot up rapidly. The innovation of scientific technology have so far set back the “Malthusian Crisis” but the global climate change which Malthus might not have envisioned in 1798 when he first published his article “Essay on the Principle of Population”, will probably be the determining factor in favor of his theory in which famine will occur if adaptation of crops is not possible against rising global temperature. The issue has been more critical in underdeveloped Asian countries such as Bhutan where there is limited arable land and very susceptible to global climate change which greatly affects agricultural production.

Bhutan was Agrarian self-sufficient economy before the initiation of developmental plans by third King Jigme Dorji Wangchuck. Bhutan relinquished the self-imposed isolation and implemented the first Five Year Plan (FYP) in 1961 to lead the country towards modern economic development with assistance from India both in-terms of Capital and Labour. The introduction of modern development plan suddenly made the country from self-sufficient agrarian to fully aid dependent to carry out the developmental activities. Bhutan started importing rice and other essential goods to sustain the labour force in the country as Bhutanese did not possess the skills and knowledge to carry out the developmental activities.

Therefore, the so called ‘Rupee Crisis’ which is actually the Balance of Payment issue can be traced back to the time of initiation of modern development plans because there was huge negative trade balance which still continues by an escalating amount. The majority of the import today also consist of essential food items from India. The global climate change, inadequate labour supply in agriculture sector and the lack of adequate favorable support from government have seemingly contributed to the slow growth of agriculture in Bhutan which would lead to food security issues.

The general food self-sufficiency rate is 85% as of 2011 (RNR Statistics 2012), which seems to be impressive, however, the self-sufficiency rate of rice is just over 50% which is the staple food of Bhutanese. Therefore, a radical change is necessary in terms of policy so as to produce adequate rice within the country.

An economy with strong agriculture can withstand supply shocks to a certain extent as the essential items will not be affected and thus, economy will have time to react to such situations. Although there are other factors affecting crop production, enabling a level playing field in the market to drive away the comparative advantage enjoyed by the producers across the border would significantly increase the local production as local farmers will have an incentive to produce more and thus enjoy greater share of market. Bhutan could earn from carbon sequestration through carbon trading and invest it in climate resistant crops and other projects to combat global climate change effects. As the agricultural inputs are kept on increasing to produce more, ultimately law of diminishing returns will set in and thus Malthusian crisis might occur. Therefore, Bhutan must relinquish the policy of building towns and other infrastructure in the very limited best productive areas and possibly expand the agricultural land without compromising the 60% minimum requirement of forest cover.

Debate on why Bhutan could not industrialize. Is it due to restrictive government policy or lack of entrepreneurship skills among Bhutanese?

Pema Chogyal.

BA ECO&EVS 3rd year

Bhutan is the small land locked country between two giant nations, China in the north and India in south; despite the neighbor countries are fastest growing economy in the world. Why Bhutan could not industrialize? And factors that contributed to low industrialization could be due to its geographical feature, lack of basic infrastructure in rural area, small size market, government policy and the lack of entrepreneurship skills among the Bhutanese. This paper primarily presents that the restrictive government policy is the main factor that restrict the industrialization in Bhutan rather than lack of entrepreneurship skills among the Bhutanese.

The main factor that controls industrialization in Bhutan is due to lengthy and cumbersome policy framework that individual has to go through to obtain license to carry out business activities. According to World Bank, (2015) it is very difficult do business in Bhutan, because if a person opts to set up industry in Bhutan he/she have to get approvals from different ministries, departments and offices. According to World Bank (2015), "it takes 3 days to obtain a Security Clearance Certificate (SCC) from the Royal Bhutan Police, 4 days to submit project proposal to the Regional Trade and Industry Office, 3 days to register at the Office of the Registrar, 2 days to obtain a business license from the Regional Trade and Industry Office of the Ministry of Economic Affairs, 2 days to Register for taxes and obtain the Business Identifier Code (BIC) Number, 1 day to Make a company seal, 1 day to open a bank account and 1 day to file proof of opening a company bank account at the Office of the Registrar."

According to World Bank, (2015) it takes minimum of 17 days to obtain license and proponent have to pay many registration fees, which amounts to minimum of Nu 5,800.

Moreover, proponents have to follow more than eight procedures to obtain license in Bhutan. Therefore, from the evidence provided by World Bank, it proves the factor that restricts growth of industries in Bhutan is limited by the restrictive government policy in the country rather than lack of entrepreneurship skills among the Bhutanese.

Practically speaking, the foreign direct investment (FDI) is the best option for countries that have less technology, human resources and capital etc... for industrialization. According to Asia Trade hub (2015) government of Bhutan did not allow foreign direct investment to come into country prior to year 2002 and Bhutan government started providing incentive for FDI only after year 2002. Therefore, restrictive policy on FDI prior to 2002 would be another factor that undermined the growth of industries in Bhutan.

Bhutan could not industrialize because of nationalization of all natural resources. According to constitution of Bhutan (2005) Bhutan should at least maintain 60 percent of its land covers under the forest and all the natural resources belong to state. Therefore any development activities or project that are constructed in Bhutan should go through the environmental impacts assessment (EIA) and whichever company, industries or projects that have huge negative impact on environment are not allowed to operate in country. Therefore, restrictive environmental policy would also have impacted adversely on industrialization in Bhutan.

In Bhutan many profitable sectors or industries are owned either by government or by elite people in the country, which gave intense competition to the small investors. Therefore heavy competition given by the public industries would be another factor that limited the growth of private industry in the country, which ultimately impacted the industrialization in Bhutan. Therefore, if Bhutan government could focus on privatization, it would have helped in industrialization of country.

Lack of entrepreneurship skills among Bhutanese is one factor that restricted industrialization in Bhutan but more severely the restrictive government policy would be the factor that limited growth of industries in Bhutan

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Debate on why Bhutan could not industrialize. Is it due to restrictive government policy or lack of entrepreneurship skills among Bhutanese?

Kuenzang Dorji

BA ECO&EVS 3rd year

Bhutan's economy grew by 4% in 2014 which is an increase from 3.5% a year earlier. It is still struggling to grow at its target rate of 8% (Asian Development Bank, 2015). The boost in economy in 2014 however came from growth in hydropower projects which the government has been investing heavily. In fact the economic growth in Bhutan is driven by the hydropower sectors. The other industries however are not able to contribute significantly like hydropower despite being blessed with diverse resources. The two factors, Government Policy and the lack of entrepreneurship among Bhutanese have been considered a major setback to industrialization in Bhutan.

Many attribute lack of Industrialization in Bhutan as policy driven. The role of state in industrialization are providing protectionism to industries during infancy through tax incentives, subsidies, infrastructure and human capital. The state should also assist in procurement and the public sectors should lead the industrialization. The state should provide conducive environment for starting the business and provide stable legal and policy framework that would enable industries to grow. It should invest in sectors where private players are not able to and complement them. The state should also create policies that are favorable for trade.

Having said that, the lack of industrialization in Bhutan is not policy driven. The state has done its part and it is already on its way ahead. The government has already invested so much in making industrialization conducive and favorable. The Bhutanese government has invested heavily on energy, human capital and infrastructure which would complement the private players in setting up industries. The trade policies are liberal proving industries a huge market domestically and abroad.

The role of entrepreneur is to take decisions, take risk, create new products by being innovative and dynamic, recycle the profit and invest in research and development. It is therefore the lack of entrepreneurship that has hindered industrialization in Bhutan. The entrepreneurs in Bhutan has none of the features. Firstly people are not able to take risk and decisions. They always look for an easy way to start the business. There is lack of private players coming up with innovative ideas. An example would be the failure of Economic Stimulus plan. According to Kuensel (2014), there were 393 project proposals after Business Opportunity and Information Centre (BOIC) was opened of which 38 projects were approved. This is because the private players are not able to take risk and decide an innovative business ideas.

The revolving fund the government has created through Economic Stimulus Plan was not utilized effectively as planned. This minimizes industrialization.

There is lack of innovation among Bhutanese entrepreneurs. The entrepreneurs should have the joy of creating new things. They should be dynamic and innovative. Nonetheless most of the Bhutanese are 'copy and paste' entrepreneurs. If a person comes up with a product that attracts huge customers, another person would simply do the same which would eventually affect both the entrepreneurs. There is complete absence of creating new products innovatively.

Most of the Bhutanese entrepreneurs do not reinvest their profit. They would rather go for conspicuous consumption. This is evident by the increasing number of luxury SUVs on road. The entrepreneurs hardly invest in research and development. This also hinders industrialization.

The problem with industrialization in Bhutan is with the entrepreneurs. It has never been the problem with government policies. There is lack of brilliant entrepreneurs taking the country into next level despite the constant government support. There is need for efficient entrepreneurs in starting business that will take care of industrialization in Bhutan.

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“We take pride in having learnt from a teacher like you because now our life has a purpose and a reason. Apart from the grand parties and awesome friends, we will have happy memories of college because of an amazing teacher like you. We may not say this every day but your motivating words are like beautiful footprints that have been imprinted in our hearts and minds forever. We don't owe our professional success to our destiny, courage, luck, belief, confidence or fortune but we owe it to a wonderful teacher like you. We may sometimes behave annoyingly, but deep down in our hearts we know that you care for us lovingly. Thank you for having the smallest of tempers and the biggest of hearts. Thank you for imparting us with life's lessons which we would have never learnt from books. Teachers, if excellence and dignity were to take the form of a human, they would be born as you. You all are the best teacher in the world because you all are incredible, exemplary admirable, commendable, honorable, excellent and respectable. Thank you for everything teachers.

We wish you all a very happy Teachers' day and happy life ahead.”

Pasang Lham and Tshering Pelden

BA ECO&EVS 2nd year

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TEACHERS ARE LIKE OUR FRIEND

YOU ARE NOT ONLY OUR TEACHERS
YOU ARE OUR FRIEND, PHILOSOPHER AND GUIDER
ALL MOLDED INTO ONE PERSON.

I WILL ALWAYS BE GRATEFUL FOR YOUR SUPPORT THAT YOU HAVE GIVEN ME.

YOU ARE A WONDERFUL TEACHER

WHO PROVED THAT LEARNING CAN BE A JOYOUS AND A PLEASANT EXPERIENCE

THANKS TO YOU TEACHER FOR MAKING ME WHAT I AM TODAY.

WISHING YOU A HAPPY TEACHER'S DAY.

Bhadra maya ghalley

BA eco&evs, Third year

Thank you partners!

Rational Expectation Economics Society is hugely indebted to its partners especially the QED, which has been magnanimous to provide financial and logistical support to our efforts. Similarly, REES is also thankful to Royal Thimphu College administration for providing all the necessary support to effectively conduct its duties.