

Scenario of electricity trading in South Asia: Perspective and feasibility of trading between India and Bangladesh

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Abstract: Uninterrupted electricity supply is the precondition of economic development of a country. Bangladesh has huge electrical power deficiency and to minimize this lagging, Government is importing 250 MW electrical power from India. India is itself an electricity deficiency country and has already relationship of trading with two south Asian countries, but the policies of those trading are not beneficial for those respective countries. On the other hand Bangladesh is richer than many other south Asian countries in respect to primary energy reserve. Proper management of this primary energy and electricity sector, to produce and use electricity properly could be a good solution of running electricity scarcity problem of Bangladesh. In some context inter-countries trading is important in south Asia to have a sustainable economic growth when it is beneficial and preserve the right for both countries. Purchasing power from India cannot be a fruitful solution because it will increase our dependency on them. By this trading we may reduce the electricity crisis instantly but could be a cause of long term negative effect on our overall economy. Moreover most of the energy specialists and learned people have negative opinion about this electricity trading. This trading cannot be the good and permanent solution to solve power scarcity problem of this country. Bangladesh should try to be self sufficient in electrical power by proper management and utilization of its own resources instead of spending money for purchasing power from India.

Keywords: Electricity Trading, South Asia, India-Bangladesh

1. Introduction

Electricity is an essential element of modern living and key of Economic and social development in an industrial country. Our personal and professional life activities like communication, transportation, basic and luxurious equipments entirely depend upon sufficient supply of electricity at cheap rate. So uninterrupted electricity supply at considerable rate is the precondition of national development and Government's constitutional duty which has not been proved yet. Though electricity is considered as a primary right, the people of Bangladesh are far away from this because of the destruction of electricity sector. The industries are the heart of economy, sometimes it becomes difficult for industrial and developing countries like

Bangladesh to supply sufficient electricity by setting power plant as it needs time, huge investment, and fuel reserve. As Bangladesh is trying to become a middle income country within 2022 [68], Government is taking different strategies to minimize the difference between demand and supply of electricity and importing electricity from India is one of them. The regional cooperation is necessary for development and to strengthen South Asian union, country and their motto of cooperation, long term economic analysis, political assessment and public opinion are important as people are the owner of all resource. People may have different thoughts and argument on 25 MWh electricity import from India from August 2013 [68]. This paper has shown feasibility of this electricity import especially from India on the basis of regional energy and energy exchange

analysis and survey on people opinion.

2. Literature Review

An agreement of power transmission for 35 years between India and Bangladesh for importing 250 MW of electricity to Bangladesh was made in July 2010 by the Bangladesh Power Development Board (BPDB) and Power Grid Company of India Ltd. (PGCIL) [73,67,72]. BPDB will pay power and transmission tariff according to the decision of India's Central Electricity Regulatory Commission (CERC) [73,67,72]. Power Secretary of Bangladesh has declared that the government of Bangladesh is going to import 250 MW of electricity from India at 4 taka per Kwh (without transmission line cost) and the power secretary of India has confirmed the completion of transmission line installation within this July [73,67,72]. As Bangladesh wants to be a middle income country by 2022, Government is importing electricity from India since August 2013. For this purpose grid connection between Bheramara (Bangladesh) and Behrampur (India) has been constructed according to the meeting of Ministers Dipu Moni and Salman Khurshid in Dhaka [74,67]. Bangladesh has to buy this 250 MWh/day electricity from India [74]. Moreover, a joint coal based power plant (Bangladesh-India) of 1320 MW is being constructed at Rampal, Bangladesh and will start in 2017 under the supervision of Bangladesh Power Development Board and National Thermal Power Company of India according to the agreement of August, 2010 at 50% ownership for each [74,69,67,70].

Bangladesh government has constructed 400 KV high voltage transmission line for importing 500MW of electricity according to the decision of Prime Minister Level meeting [69]. On the other hand, the government of India now has committed to supply only 250 MW of electricity from 'Unallocated Resource' at low cost and said that Bangladesh can import another 250 MW of electricity in future from 'Power Pool' of India [69,72]. The length of the transmission line between Bheramara and Behrampur is 125km of which 40km is inside Bangladesh area and transmission voltage level are 230 KV and 400 kV respectively with a capacity of 500 MW [72]. The total construction cost of this transmission line is 82.2 billion INR of which India paid only 17.8 billion INR and Bangladesh had to pay 64.4 billion INR [72].

Most of the existing transmission line of Bangladesh is of 132KV. For supplying the imported power at 230KV voltage level, new transmission line has to be built and a tender was invited by Power Grid Company Bangladesh to construct transmission line of 30km (400Kv and 230 Kv, Ishurdi-Khulna); 165 km (230 kV, Bibyana-Comilla) and a HVDC line at Bheramara [72]. \$100 million loan was approved by Asian Development Bank (ADB) for cross-border transmission line construction [72]. But the loan had not been got because of the problem in power

purchase agreement between BPDB and the NTPC Limited [72]. Moreover, Bangladesh's Planning Commission had to pro pond the project because India did not guarantee the power supply [72]. Power Grid Company Bangladesh is giving 1 billion BDT to a Spanish company to construct the transmission line of Bangladesh portion and \$170 million to Siemens to construct a converter station at Bheramara to convert 400Kv from India to 230Kv to Bangladesh [72]. For greater trade with India, PGCB has constructed another 500 MW substation at Bheramara [72].



Figure 1. proposed construction line from Behrampur to Bheramara

According to the MoU signed by the Government of Bangladesh and Myanmar, Bangladesh will be able to import 500MW of electricity from Lemro river of Rakhain state, Myanmar by 2018 [69].

Nepal is always willing to share of its' hydro electricity resource of 40000 MW with the neighbors for the benefit of this region and Nepalese Ambassador to Bangladesh said that Nepal is interested to export hydro power in Bangladesh [71]. He also said that though Nepal has huge hydro electric potential, Bangladesh cannot use this because of a gap in trade relationship and both countries have to move forward to minimize the gap by establishing physical connectivity [71].

3. Energy Security, Electricity and Fuel Relationship for Economic Development of Bangladesh

The education rate, per capita income and expenses, GDP increment rate, standard of living are the main determinants of human development which entirely depend upon per capita electricity use of a country [1,2]. Only 42% people of Bangladesh get electricity with a rate of only 188 KWh/person [3]. On the other hand, Pakistan (developing country) and USA (developed country) use electricity of 456 KWh and 13640 KWh per capita respectively [3]. 80% rural people of our country depend on agricultural residue for meeting their energy need [76]. Human life security and sustainable development of a country cannot be earned by unrestricted use of national energy reserve [4]. Though electricity is the best form of energy, it cannot be preserve for future use. Moreover, uninterrupted electricity supply

depends on secure transmission and distribution system. Current demand and the generation of electricity are 7500MW and 5063 MW respectively [75,68,74]. The government plans to increase the overall capacity up-to 20000 MW by 2021[9]. Current GDP growth rate of Bangladesh is 6.3% [66]. 7.5% GDP growth rate is necessary to reduce half of the poverty of Bangladesh and energy use increment rate should be 2.5 times [6]. Electricity scarcity is the main obstructer of the development of Bangladesh. From 1973 to 2006, increment of GDP growth rate is lower than increment of per capita electricity use rate in Bangladesh [7]. So it is clear that electricity was used for living only rather than using in production purpose and it is seemed that the trend will continue. The imported electricity will use for increasing living standard only.

4. Comparative Energy Situation and Economics in South-East Asia

The countries of South East Asia have been developed rapidly in last ten years. But most of these countries cannot meet energy demand for sustaining this development growth. Table below represents the condition of primary and secondary energy for different countries of this region.

975 million people of 1330 million of China are electrified [12,23]. GDP growth rate is 11.4% [15]. China had 25000MW of electricity deficiency in 2005-06 [22] and imported 5392 million KWh [25] and exported 11270

million KWh [26] in that year. Generally China import electricity from Russia [27] and Export to Vietnam [29]. Now China has taken different strategy of electricity production such as hydro power by creating Dam in Himalayan Rivers and setting their own plant in Kazakhstan, Kirgizstan, Cambodia and Mongolia [28].

Though Bhutan has surplus hydro electricity reserve, it imported 20million KWh electricity from India in 2006 [25]. On the other hand it exported electricity of 1500 million KWh to India in the same year [30]. The electrification rate is only 60% [32] and the country has to import Oil and petroleum to meet energy demand [31].

Nepal is also endowed with hydro electricity around 83000 MW [10]. Only 40% population is electrified [10] and electricity consumption rate is 66kWh/cap. Instead of having enormous hydro resource, to meet the energy demand it has to import oil (87%), coal and electricity [31]. It imported electricity of 266 million KWh [25] from India and exported electricity of 101 million KWh [26] to India in 2006. Though there is serious scarcity of electricity, Nepal export electricity and it seems that electricity export revenue could not change the economic condition of the country.

Though Sri Lanka does not have sufficient primary energy and hydro potential reserve, 78.1% people are electrified [35]. Sri Lanka does not import electricity; only import primary energy to produce electricity to obtain \$1195/capita GDP [14] which is the second highest in South Asia.

Table 1. Primary and Secondary Energy reserve in South Asian Countries

Country	Population		Primary Energy							Electricity (million KWh)			Per capita consumption		Per capita GDP	
	Population in million [12]	Increment rate % [13]	Oil [17] bbl	Gas (tcf) [42]	Coal (MT) [18]	Nuclear Energy (ton) [19]	toe/cap [13]	Hydro MW [24]	Hydro W/cap [32]	Consumption [76]	Import [25]	Export [26]	KWh [33]	Kg oe [34]	US \$ [14]	growth rate [15]
China	1330.04	0.63	12800	66.54 [42]	114500 [18]	68000 [19]	374.73	165000 [24]	124	2859000	5390	11270	2150	1075 [33]	3174	11.4
India	1148.00	1.58	5848	37.26 [42]	92445 [18]	73000 [19]	448.41	143311 [32]	130	488500	1764	286	426	351 [34]	1078	8.5
Pakistan	167.76	1.81	289.20	30.02 [42]	3300 [18]	6000 [21]	240.32	17369 [32]	248	67060	0	0	400	337 [35]	931	6.3
Bangladesh	153.55	2.02	28	13.77 [42]	2221 [44]	-	10.86	555 [10]	3.6	19490	0	0	127	117 [36]	541	6.0
Afghanistan	32.74	2.63	-	1.678 [16]	100 [39]	-	3.04	183.35 [38]	6	800	100	0	24	12 [37]	393	7.5
Sri Lanka	21.13	0.94	-	-	-	-	-	2000 [10]	95	7070	0	0	335	195 [38]	1195	6.0
Nepal	29.52	2.10	-	-	-	-	-	83290 [10]	2776	1960	266	101	66	45 [39]	428	2.5
Bhutan	0.68	1.30	-	-	-	-	-	30000 [10]	44118	380	20	1500	559	63 [40]	2005	8.8
Maldives	0.38	2.69	-	-	-	-	-	-	-	160	0	0	421	808 [41]	3358	5.5
Myanmar	47.77	0.80	1963	9.59 [16]	258.11 [20]	-	13.51	108000 [32]	2260	3740	0	0	78	82 [42]	287	5.5

Afghanistan imports electricity of 4 MW from Iran, 5 MW from Kazakhstan, 150 MW from Uzbekistan and 8 MW from Turkmenistan [22]. It imported 96 MW of electricity in 2007 [39].

Instead of having no primary energy reserve and hydro potential, the per capita electricity consumption of Maldives is 421 KWh. Moreover, they have planned to generate 232.5 MW wind electricity and to set half kilometer solar panel [40]. So Maldives is developing rapidly without importing any electricity.

Pakistan has sufficient primary energy reserve and the coal reserve is the 6th highest in the world along with nuclear energy reserve [31]. 36.8% produced gas is used in electricity generation and 33.4% generated electricity comes from hydro power plant [31]. Instead of having 40316.08 Mtoe primary energy and 41722 MW hydro electricity reserves [32], Pakistan is going to import electricity from Iran, Tajikistan and Uzbekistan in near future [43].

88.45% electricity generation of Bangladesh is dependent on Natural gas [44] and 0.5 million ton coals is used to produce 250 MW electricity each year [31]. Though Bangladesh has 2221 million ton high grade coal reserve, it cannot be used properly due to lack of technological support [44]. Electricity production from oil and hydro potential is negligible and the government has not taken proper steps to enhance electricity sector yet.

India can meet its 70.73% energy demand by its own energy and it has to import Gas, Coal, Oil and Hydro electricity for other 29.27% [31]. India imported 1764 million KWh and exported 286 million KWh of electricity in 2006-07 [25]. There was electricity deficiency. The above information shows that, India is still not solvent in electricity production for serving its own population.

Myanmar has 10.8 million MW hydro potential reserve

and they are producing 35% (3145 MW) and 55% of electricity from hydro potential and gas respectively [45, 30]. Myanmar is going to export electricity of 360 MW to Thailand and 1200 MW to India in near future [22].

4.1. Energy Exchange in South Asian Region

- Different international monetary organizations think energy cooperation in South Asia will help people to get energy at a cheap rate because of open border energy market which will result technological and economical development of this region [10]. The Energy ministers of SAARC countries decided to create “Energy Ring” for interchanging Gas and Electricity in 2009 in Colombo, Sri Lanka [11]. The decision of energy exchange between South Asian countries has been taken on the basis of following reasons:[11]
- Though some of the South Asian Countries have sufficient energy reserve and there is a possibility of exchanging energy, the countries are amongst the lowest income countries of the world due to low per capita energy use.
- To obtain sustainable development by using these huge amounts of energy resource, internal relation, cooperation and trust is needed among the governments.
- World Bank stated that it is possible to earn 6.6-11% GDP growth rate in SAARC region in 15-20 years if “Cross Border Energy Trade” will complete properly [11].

4.2. Scenario of Existing Cross-Border Electricity Exchange in South Asia

4.2.1 Exchange between India and Nepal

Table 2. Electricity exchange between Nepal and India (1990-2006) [46].

Million KWh	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	Total
Export KWh	23	81	85	46	51	40	87	100	67	64	95	126	134	192	140	113	101	676
Import	61	34	55	82	103	104	37	154	210	232	232	227	238	150	127	241	266	1381
difference	38	-47	38	36	52	64	-50	54	143	168	137	100	104	-42	-13	128	165	704.9

From the above statistics we can see that, Nepal had to import more electricity from India than export to India in each years and the trend was uprising. Nepal imported electricity of 1381 million KWh, where as exported only 676 million KWh electricity in 17 years. In this trade, Nepal spent 70438.51 million INR for importing and earned 3605.82 million INR for exporting [46]. In 1996, electricity exchange rate was 1.67 INR at 8.5% increment rate at 230KV level [46]. According to this, the rate would

be 2.96 INR in 2003, 3.10 INR in 2004 and 3.77 INR in 2008 and 3.96 INR in 2009 [46].

Cross border exchange between Nepal and India was started in 1954 after the sign of Kasi MoU with the installation of a 20 MW hydro-electric power plant [46]. According to the MoU, Nepal can buy 50% (10 MW) of generated electricity at predefined rate. India can get rest of 50% electricity by only minimum royalty [46]. In 2005-06, Nepal bought electricity of 30 million KWh at a rate 2.38

INR from its own available hydro potential [46].

According to Mahakali MoU, India set a 120 MW hydro electric power plant at Nepal which can produce 484.4 million KWh/year among which Nepal can get only 70 million KWh/year of electricity [30]. India will get rest of all [29]. However, Nepal has never got electricity of 70 million KWh from 1990; only get 52.83 million KWh/year of electricity [29].

India agreed to export 150 MW of electricity to Nepal in 2001 but Nepal has to pay extra charge for electricity of

higher than 50 MW [46]. Nepal has to lose \$1.44 million for this trade [46]. Moreover, Snowy Mountain Engineering Company has set a 750 MW hydro electric power plant under West-Seti project and all electricity of this project will be exported to India, Nepal will get 90% royalty money instead of electricity [47]. According to MOU of that project, India imports electricity of 3 billion KWh/year at 0.0496\$/KWh [46].

4.2.2. Exchange Program between India and Bhutan

Table 3. Electricity generation, use and export from Bhutan to India in between 2000-08

year	2000	2001	2002	2003	2004	2005	2006	2007	2008	Total
Generation [49]	1788	1856	1876	1896	1896	2001	1882	2050	2000	17245
Use [54]	345	191	381	389	380	313	250	527	380	3146
excess	1443	1665	1495	1517	1517	1688	1639	1524	1620	14101
Export [77]	1339	1550	1385	1400	1400	1560	1510	1400	1500	13044

Bhutan generated 17245 million KWh, Use 3145 million KWh and exported 14101 million KWh of electricity in 9 years (2000-08). This is a one way trade in which India only imported electricity.

Chukha hydro electric power plant (336 MW) was built by the fund of Indian Government in 1988 [50]. 70% of 1320 million KWh/year of generated electricity is exported to India [50]. Until 2004, the electricity rate was 1.50 INR and after 2005 it became 2.00 INR [50].

Kurichu hydro electric power plant (60 MW) was built by Indian Government Fund in 2002 and the rate of electricity is 1.5 INR/Kwh [48].

1020 MW Tala Hydro electric power plant, capacity 3962 million KWh/year, was funded by Indian Government at 9% interest rate and electricity rate is 1.6 INR [51].

On the other hand, Basochu hydro electric power plant (64 MW) was built by Austrian Government fund without any interest and all electricity is used only in Bhutan [52].

4.2.3. Electricity Exchange between Myanmar and Bangladesh

Myanmar's electricity generation capacity has increased to 1335 MW from 706.82 MW between 1988 and 2005 and in 2008 it generated 6.154 billion KWh of electricity [45, 53]. Myanmar uses only 3.744 billion KWh of electricity annually, so half of the generated electricity remains unused [54]. Myanmar also planned to construct 16 new hydro electric power plant, 5 of which has already completed and 11 are in under construction [30]. At the completion of those power plants, 3445 MW power will be added to the total generation capacity of Myanmar [30]. In 2008, Bangladesh gave proposal to set a power plant in Myanmar with its' own fund [61]. According to the proposal, Bangladesh would get 70% of generated electricity from that plant and Myanmar accepted it at that time [55].

From the Above information it is clear that, India has created electricity trade with Nepal and Bhutan in the name of electricity exchange. According to above statistics, India exported more electricity to Nepal than imported electricity from Nepal. Currently Nepal is facing serious electricity scarcity problem and it is considered as the poorest country of this region having GDP growth rate of 4.6% [77]. Though Nepal has huge hydro electric potential, this electricity could not be helpful in economical development because of not having proper ownership or royalty. Nepal export its' generated electricity. On the other hand it has to import electricity at high rate from India which has a negative effect on economy. Almost all generated hydro electricity of Bhutan, 14101 million KWh of 17245 million KWh, is exported to India.

4.3. India's Policy of Cooperation

All most all main rivers of Himalayan region are international; such as Shindu, Started from Tibet and flows through Pakistan and India, Mohakali, Started from Nepal and flows through India, Ganges, Started from Himalaya and flows through India and Bangladesh, Iraboti, Stars from Himalaya and flows through China and Myanmar and Yamuna flows through Tibet, India and Bangladesh [56]. These are the main source of human living in this region and about 200000 million people depend on these rivers [56]. Bangladesh has 54 and 3 common river with India and Myanmar respectively. The problem with water flow through India has not been solved yet [56]. India and china's thrust for electricity is increasing continuously and they have already started generating electricity by creating dam at Himalayan Rivers which creates serious water scarcity in other downstream countries [32]. India is planning to make huge money from this generated power

[56]. The Government of Arunachal province (India) has said that, Arabian countries are floating on Petro Dollar and their country will float on hydro dollar [32]. 200000 million downstream people's life will be in danger for those electricity generation dams of Himalayan Rivers. That is a question of preserving human primary right, the water. Indian Supreme court stated in a suit that if ecology is hampered for creating a suitable environment of people living, consolation should be given [57]. Four main rivers of Bangladesh, Padma, Brahmaputra, Meghan and Karnafuli come from Himalaya through India. So Bangladesh will be the main victim of Indian's plan of hydro electricity generation and Bangladesh is not getting any consolation for this. India is going to export electricity in near future and the main source of this electricity are those hydro power plants which reflected in 11-15th electricity plan of India [58].

5. Survey on the Opinion of Electricity Trading between India and Bangladesh

Bangladesh government has taken different policy to overcome the barrier of insufficient electricity supply to the people and electricity trade from India is one of the policies. People of Bangladesh have different opinion regarding this matter. From one point of view, it has positive effect on total electricity condition of Bangladesh. On the other hand it may have negative economical effect in far future. However a survey has been done for people opinion about different issue related to this electricity trading. A questioner has been prepared and distributed among 100 teachers of different discipline such as Economics, English, Engineering, Management, Accounting, Marketing, Tourism & Hospitality Management of IUBAT—Internal University of Business Agriculture and Technology for giving their opinion. From that survey we have got the following result. The first question was, “Bangladesh Government will import 250MW electricity from India by August, 2013 which will cost TK 4/Unit excluding transmission expenses. Do you think that it is a right decision?” 58% teachers said no and only 9% teachers said yes. 33% teachers did not give any opinion.

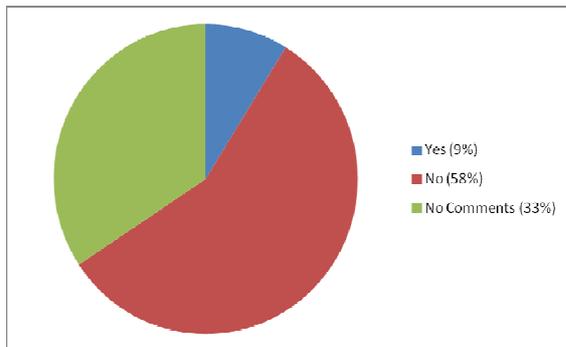


Figure 2. pi chart showing the opinion in % on question 1

40% teachers have given positive answer and 31% teachers have given negative answer to the question 2 which was “Including the transmission and maintenance cost, the total purchase cost of electricity from India will increase far more. Do you think that it will increase the cost per unit of electricity?”

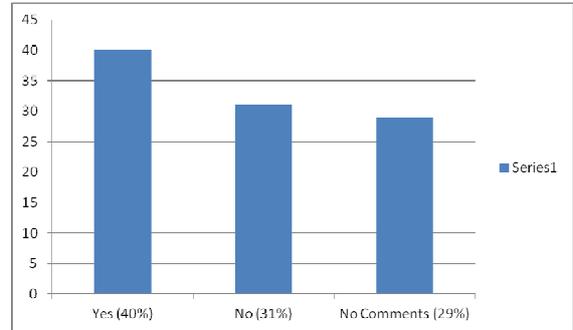


Figure 3. graph showing the opinion in % on question 2

Only 18% teachers agreed and 59% teachers disagreed on question 3, “Do you think importing only 500 MW is enough to solve the load shading problem of our country?”

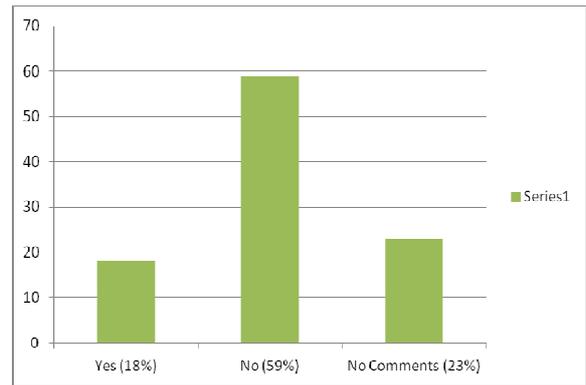


Figure 4. graph showing the opinion in % on question 3

The 4th question was “At present, the government cannot supply electricity to many industries, residential and commercial buildings due to lack of electricity. Do you think that this problem can be solved by this imported extra power from India?” only 35% of the teachers said yes and 43% said no.

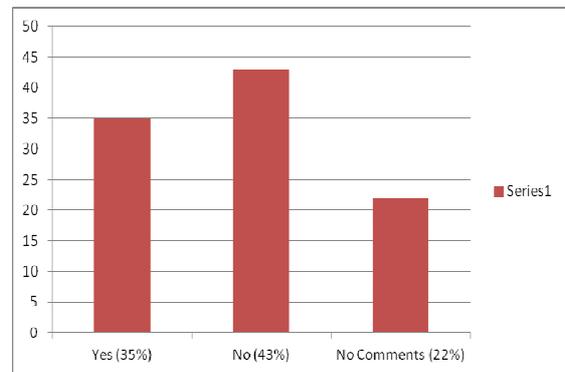


Figure 5. graph showing the opinion in % on question 4

In question 5 we asked that "What can be the reason for purchasing electricity from India. 17.02% teachers think that we have lack of man power to produce enough electricity. 42.55% teachers said that we don't have sufficient money to produce electricity and 40.43% teachers think Bangladesh has limited primary fuel reserve to produce necessary electricity.

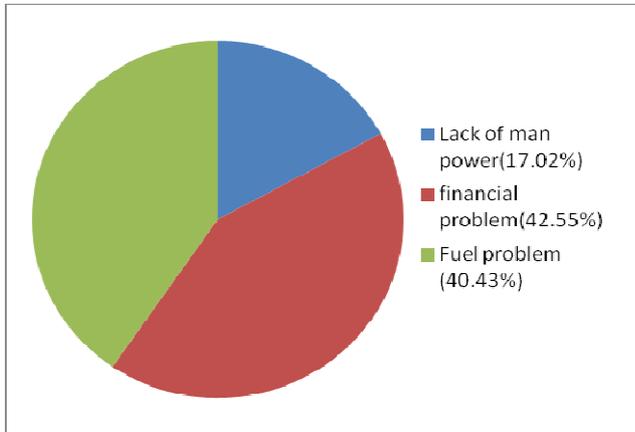


Figure 6. graph showing the opinion in % on question 5

6. Discussion & Recommendation

The main reason of electricity scarcity in Bangladesh is lack of gas supply and 770 MW electricity generations was stopped on 22 October 2008 for this reason [5, 59, 60]. 3115 MW of Electricity supply can be ensured by ensuring gas supply [60]. Total generation of our country will be 7000 MW after the addition of 2130 MW gas power plant in this year (2013) [59]. Bangladesh has sufficient coal reserve also and 37% electricity is generating by coal [59]. Only half of the reserved commercial energy is used to produce electricity in Bangladesh and contribution of renewable energy is only 22 MW [59, 63]. Current minimum electricity rate is 3.33 Taka per KWh [78].

From the survey it is clear that most of the people think electricity import from India cannot solve our electricity problem properly and it has some disadvantages. Including distribution cost the tariff of imported power will be at least approximately Tk 6.41[79] which is far more from our current domestic rate. The history of electricity trade of different south Asian countries with India is not satisfactory and in all cases other countries were dominated. India is non cooperative in case of sharing common resources like water with other countries. Moreover, in 2007-08, India's peak demand was 108886 MW and generation was 90973 MW and in 2027 the demand will raise up to 700000 MW [56]. India is a power deficiency country. So export of electricity by India is quite illogical. It is a matter of question that how effective will be the electricity trade and which country will be the main beneficiary. From the above information it can be said that electricity exchange between two countries is a good idea to solve running electricity problem of Bangladesh. But the trading should be effective,

clear, at the cheapest rate and beneficial to both countries and we should be careful in case of choosing trading partner. However, self sufficiency is the best policy for achieving economic development. Improper policy is the main obstructer in proper electricity generation. The government has not taken effective plan to generate electricity of its own. The government should reform the electricity sector. Bangladesh has mainly one coal based power plant of 250MW and 30 million ton coal remain surplus after the generation of electricity each year [3]. Huge amount of power is lost due to mismanagement of the system and it is considered as system loss where the loss in the transmission system cannot be greater than 10% as Bangladesh has moderate transmission system [64]. In 2008, total system loss was considered 21.25% where transmission loss was only 5.62% and it is possible to save 400 MW of electricity by limiting system loss at 10% [65]. Though the coal mine was identified in Bangladesh before the liberation war, no initiative has been taken yet by the Government for improving this sector [9]. Electricity crisis can be minimized by proper management of power generation and distribution sector of Bangladesh.

7. Conclusion

Though electricity connection is the precondition of sustainable development, 80% of world's un-electrified people live in South Asia [62] and 60% of Bangladeshi people are not connected to national grid [59]. Bangladesh has to earn electricity consumption rate of 383 KWh/capita to be a middle income country [61]. Some experts think that electricity problem of Bangladesh can be solved by exchanging electricity with neighbor countries. But the exchange condition should be logical and favorable for both countries. But Bangladesh is not enough economically solvent to purchase electricity at high rate to support the people. If the country needs to import electricity badly, it can import from Myanmar at a cheap rate. One of the duties of the government is to secure energy and electricity demand and supply at affordable rate and one steps of the government is to import electricity from India. But most of the learned people have negative thoughts about this energy trading. They think that it is not a suitable way to solve our electricity problem which will affect our economy. The problem can be solved by reconstructing energy sector management system and infrastructure to reduce the system loss. Though mutual cooperation among SAARC countries is advantageous in many aspects, right of all country involved in trading should be reserved equally. History of cooperating in such trade in South Asia are not satisfactory, on the other hand electricity rate of Myanmar is low and Bangladesh has a border with Myanmar, it is advantageous to import electricity from Myanmar. Power import from India is not only the solution to solve our electricity problem and may create a negative effect on our overall economy.

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