Export Price of Electricity in Bhutan: The Case of Mangdechhu Hydroelectric Project

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Abstract

There has been substantial cost escalation on the ongoing hydropower projects in Bhutan, exerting pressure on already ballooning national debt. This has raised concerns on whether the benefits of hydropower projects outweigh the costs and on the preciseness of its costing. Based on data available in the detailed project reports and the agreement signed between India and Bhutan, this paper examines the financial viability of Mangdechhu project by employing two different methods: cost-plus method and financial cost-benefit analysis. The results show that cost-plus method undervalues the total cost of the project. The impact of changes in several parameters and cost overrun on tariff is also analyzed in this paper.

Introduction

For more than three decades one of the main drivers of the economy of Bhutan has been hydroelectricity, and it continues to play a bigger role in the economy. In financial year 2012-2013, 17.3 percent of the total revenue was generated from electricity sector¹ and it comprised of 14.18% of nominal GDP in 2013².

The construction of first hydropower plant - Chhukha Hydroelectric plant - commenced in 1979, which has an installed capacity of 336 MW^3 . The total installed capacity

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¹ National Revenue Report 2012-13, Department of Revenue and Customs, Ministry of Finance, Thimphu, p. 22, 2013

² National Accounts Statistics 2014, National Statistics Bureau, Thimphu, p. 36, 2014

³ Chhukha Hydropower Plant. Retrieved on January 5, 2015 from

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as of 2015 is 1606 MW (336 MW Chhukha Hydropower plant, 64 MW Basochhu Hydropower Plant, 60 MW Kurichhu Hydropower Plant, 1020 MW Tala Hydropower Plant, and 126 MW Dagachhu). Some are in advanced construction phase such as Punatsangchu I (1200 MW), Punatsangchu II (990 MW), and Mangdechhu (720 MW). Bhutan has potential to generate 30,000 MW of electricity of which 23,760 MW is technically feasible in Bhutan.

Chhukha Hydroelectric project was fully funded by the Indian government with 60 percent grant and 40 percent loan at 5 percent interest rate per annum; however, for Tala Hydroelectric project the interest rate on loan was increased to 9 percent. For Puntshangchu I project, the funding modality was reversed, that is, it composed of 40 percent grant and 60 percent loan, with 10 percent interest rate on loan. Now the funding modality has worsened to 70 percent loan and 30 percent grant at 10 percent interest rate for recent projects such as Mangdechu project. As the loan component and interest rate increases debt obligation naturally increases with lesser returns on equity. These projects are based on Inter-Governmental (IG) mode which means that these projects would be taken over by Druk Green Power Corporation (DGPC) when they are commissioned. For project under Joint Venture (JV) mode, such as Wangchu, Bunakha, Kholongchu and Chamkharchhu I, DGPC will have only 50 percent share.

In 2013, Bhutan exported about 74% of the total production of 7549.84 million units of electricity while importing 112.26 million units during lean seasons⁴. However, the net export of the country as a whole from year 2000 onwards has been negative except in 2007, and this trend has been deteriorating in recent years. In 2013, Bhutan exported goods and services worth Nu 42,636.41 million while importing goods and services

DGPC website <u>http://www.drukgreen.bt/index.php/chp-menu/</u> <u>about-chp</u>

⁴ National Accounts Statistics 2014, National Statistics Bureau, Thimphu, p. 51, 2014

worth Nu 65,625.05 million⁵. The GDP growth rate mirrored the declining export; the real GDP growth rate was 2.05% in 2013, the lowest since this century (2000s). With weak export and growth rate, the total government debt has soared in 2013 to 96.33% of GDP⁶. The share of hydropower debt to the total external debt is 65.2% as of 30th June, 2014⁷. Since the sale of electricity generates revenue to service national debt, it is important to study the nature and structure of pricing in order to arrive at optimal tariff.

Although export tariff is based on power purchase agreement in the case of inter-governmental (IG) projects, where the surplus power from the project will be bought by India, the negotiation to set the rates of parameters is in the hands of negotiators for which understanding the derivation of the tariff is an indispensible prerequisite. By knowing how to calculate the tariff, insights can be drawn when different parameters and its rates are used to examine the changes in tariff.

Electricity should be priced at competitive rate in order to secure comparative advantage and for economy to gain as a whole. Cost escalation and delay of hydropower project will only shoot up the price. When the export price increases domestic price will naturally increase since the domestic price is set higher than the export price. Local industries, especially power intensive industries, may barely breakeven while a few may even run at a loss if domestic price is high.

Price can be made competitive by reducing the cost of building the plant and increasing its output. This will require installing efficient technologies and doing things in new ways. For instance, EcoSmartHydro project, which does not require a dam and a tunnel, is cost effective than both runoff the river and dammed projects⁸. A hydropower plant that

⁵ Ibid., p. 33

⁶ Ibid., p. x

⁷ National Budget Financial Year 2015-16, Ministry of Finance, Thimphu, p. 85, May 2015

⁸ See EcoSmartHydro pilot project joint venture. Available at

does not need to have a dam and a tunnel will have very less environmental damage to forest and river systems, and also to agricultural land and religious sites.

Preempting cost escalation is imperative given that glaciers are retreating fast - Bhutan has lost 23.3 percent of its glacier area in the last three decades⁹ - as it would reduce output. Most of the rivers in Bhutan and Asia in general are fed by glacier. It is estimated that by 2100, glaciers in the Hindu Kush-Himalayan (HKH) region could see a reduction of 70%-99%¹⁰ of its volume. In the short term, retreating glaciers causes flood, which would cause severe damage to dams; in the long term, there will be reduced melt-water. Bhutan has a history of cost escalations: from the initial estimate (given in the Detailed Project Report) Chukha's cost has escalated by 197 percent and 193 percent for that of Tala¹¹. Whether Bhutan should not invest in hydropower energy will not be examined in this paper, although Mitra et al. (2014) found that there will be diminishing marginal returns to capital investment in hydropower.¹²

This paper will first study the method of cost-plus tariff

http://www.kuenselonline.com/ecosmarthydro-pilot-project-joint-venture/#.VXfJ2s-qqkr

⁹ See 'Longevity of Bhutan's glaciers questionable" at <u>http://www.kuenselonline.com/longevity-of-bhutans-glaciers-questionable/#.</u> VXfD2s-qqkq

¹⁰ See "Most glaciers in Mount Everest area will disappear with climate change – study" at <u>http://www.theguardian.com/</u>environment/2015/may/27/most-glaciers-in-mount-everest-area-will-disappear-with-climate-change-study?CMP=share btn fb. See also Shea, J. M. et al. (2014), Modelling glacier change in the Everest region, Nepal Himalaya, *The Cryosphere Discuss.* 8, 5375–5432.

¹¹ See "Council questions hydropower policy" at <u>http://</u> www.kuenselonline.com/council-questions-hydropowerpolicy/#more-122692

¹² See Mitra, Sabyasachi; Carrington, Sarah; Baluga, Anthony (2014). Unlocking Bhutan's Potential: Measuring Potential Output for the Small, Landlocked Himalayan Kingdom of Bhutan. ADB South Asia Working Paper Series No. 32 calculation (also known as levellised tariff method) and then use financial cost-benefit analysis to examine whether the project is viable from financial perspectives when the tariff derived from cost-plus pricing is imputed in the benefit stream. Cost-plus pricing method, the terms and conditions of which is specified by the Central Electricity Regulatory Commission (CERC), India, is used for calculating export price of electricity in Bhutan. As cost-plus method takes into account only financial cost of hydroelectric projects, the calculation of economic cost-benefit analysis will not be presented in this paper. It will discuss the differences between the two methods, and identify what should be and should not be taken into account while calculating the tariff. This paper will not discuss the domestic pricing of electricity as the aim is to study only the export price of electricity.

Methodology

Data Source

The main sources of data are Detailed Project Reports (DPRs), March 2010, of the Mangdechhu Hydroelectric Project prepared by NHPC (National Hydroelectric Power Corporation) and the Agreement between the Government of the Republic of India and the Royal Government of Bhutan regarding the Mangdechhu Hydroelectric Project (hereafter AIBMP) dated 30/4/2010.

Cost-Plus Method and Financial Cost-Benefit Analysis

In cost-plus method whatever cost is incurred in the development of the project will be captured by the tariff, which will be derived when the project is commissioned. The tariff is levellised using an appropriate discount rate. Financial costbenefit analysis, on the other hand, will examine whether the project is worth undertaking after assessing its financial costs and benefits. Cost-benefit analysis is essentially designed to quantify the costs and benefits of an investment project. In financial cost-benefit analysis, economic costs such as pollution and benefits such as travel time reduced due to construction of roads are not taken into account. In the DPR, financial cost-benefit analysis is not shown; therefore, this paper intends to fill this gap.

Cost and Assumptions

Fixed cost and interest on working capital is recoverable at an annual generation of 2925.25 million units of electricity in a 90% dependable year.

Fixed Cost: The components of fixed cost are given below:

1. *Interest on loan*: The interest on loan is assumed to be fixed at the rate of 10% per annum to be repaid in thirty equated semi-annual installments. The first repayment has to be made one year from the date commercial operation. Interest during construction is not included in the total cost of this project.

2. Depreciation: According to the Agreement signed between India and Bhutan regarding Mangdechhu Project, the depreciation rates has to be equal to similar projects in India. In the DPR of Mangdechhu Project, the depreciation rate works out at 5.67% for the first 12 years and the rest amount [{5.67% of 90% of total cost less cost of land (excluding Rehabilitation & Resettlement)} minus {amount booked for initial 12 years}] has been considered uniformly over balance life of the project (23 years). Depreciation is allowed up to 90% of the capital cost of asset which has a salvage value of 10%. It is highly likely that there will not be any changes to this depreciation rate.

3. Operation and Maintenance Cost: The O&M cost is fixed at 2% of the total cost with escalation factor at 5.72%. This escalation factor is Indian inflation rate. Indian inflation rate is used as almost all the equipments and goods for the plant will have to be purchased from India without applying tax and duty.

4. Return on Equity: The post tax return on equity has

been taken as 16% as per DPR and CERC norms.

5. Taxes: Taxes are allowed only as pass through to the tariff so as to let a nominal return on equity after taxes. For this project at 2008 price level, Minimum Alternate Tax (MAT) of 11.33% is applied to the tariff. The concept of MAT has been introduced in India in order to curb the malpractice of companies paying very low tax or no tax to the government although high book profits are declared by these companies. MAT is a form of corporate tax in India, where "where the income tax computed under the Act [Finance Act] in respect of any previous year relevant to the assessing year, is less than 18.5 percent of its book profits, such book profit shall be deemed to be the total income of an assessee and tax payable on such total income shall be 18.5 percent of the same" (Finance Act 2011 cited in Kumar 2011). MAT rate was 10 percent from 2007-2010, 15 percent in 2010-2011, and 18.5 percent in 2011-12 (Kumar 2011). In Bhutan, corporate tax is 30% of the net profits (Ministry of Finance 2001).

Working Capital

Interest on Working Capital: An interest rate of 12.5% is charged on working capital. Working capital is composed of three elements: O&M expenses for one month; maintenance spares at 15% of O&M expenses; and receivables equivalent to two months average billing.

Other costs and assumptions are given in Table 1. The allocation of project cost across three major activities are shown in Appendix Table A1. Until the commercial operation of the project, goods (such as construction materials and machineries) and services imported from India for use in the construction of the project are to be exempted by Bhutan. Further, taxes and duty on goods and services exported to Bhutan are to be exempted by India.

Parameter	Value
Generating capacity	720 MW
Total project cost	28,962.93 million Nu
Construction time	7 years (including infrastructure works)
Annual energy generation	2925.25 Million Units
Auxiliary consumption	1.2%
Free power	12%
Net saleable energy	2543.33 Million Units
Debt : Equity ratio	70:30
Cost of R&R (Rehabilitation & Resettlement)	120 million Nu
Cost of Land (Excluding R&R)	21.23 million Nu
Interest on loan	10%
Depreciation	5.67% for the first 12 years and the rest amount uniformly over 23 years
O&M cost	2%
O&M escalation factor	5.72%
Return on Equity	16%
Тах	11.33%
Interest on Working Capital	12.5%
Discount rate	12%
Useful life of the Project	35 years

Table 1. Basic Assumptions

Source: DPR and AIBMP

Results and Discussions

Comparison of Cost-plus Method and Financial Cost-Benefit Analysis

Table A2 in Appendix shows the calculation of tariff based on cost-plus method. The total cost at March 2008 price level in Table A2 is the sum of interest on loan, depreciation, return on equity, MAT, O&M cost, and interest on working capital. The tariff calculated using cost-plus method has to be levellised using appropriate discount rate in order to derive the export price of electricity. Discount rate is used to discount the tariff to the net present values of year 2017. For the base case, using assumptions in Table 1, the levellised tariff is Nu 1.9591 per unit (1 unit=1 kWh) at 12% discount rate. The tariff is exclusive of duty, surcharge and any other form of levy. The tariff is to be reviewed at the end of every three years as per AIBMP.

The opportunity cost of capital may increase by 2017 when the project is scheduled to be commissioned. Hence, keeping the basic assumptions in Table 1 unchanged, the tariff at 14% and 16% discount rates comes to Nu 1.9911 and Nu 2.0206 respectively.

The financial cost-benefit analysis is shown in Table A3 to examine the viability of the project. The financial cost-benefit analysis requires setting up annual estimation of revenues (inflow) and expenses (outflow). The total cost is the sum of capital cost, O&M cost and investment in working capital. The revenue is calculated using tariff rate at Nu 2.3036 per unit in order to obtain IRR of 12%, net present value (NPV) of 0.03 and B/C ratio of 1. Nu 2.3036 per unit is the optimal tariff in order to make the project financially viable and feasible. Any project or investment is viable only if NPV is greater than equal to zero and B/C ratio greater than equal to one.

If the tariff of Nu 1.9591 per unit, calculated from cost-plus method, is imputed into the revenue part, it results in IRR of 9.98%, NPV of -8022.48 and B/C ratio of 0.85, which does

not make the project at all viable. Therefore, this shows that cost-plus method undervalues the cost of the project and hence results in lower tariff compared to the tariff that is optimally required in the financial analysis. What this implies is that export price of electricity should be fixed at Nu 2.3036 per unit at 2008 price level, which is the optimal tariff, and not at Nu 1.9591 per unit. Having pointed out how cost-plus method undervalues the project cost, the paper will next discuss the effects of changes in parameters on levellised tariff, as an alternative to cost-plus method is not foreseeable anytime soon.

The Effects of Changes in Parameters on Levellised Tariff for Cost-plus Method

The relationship among debt:equity ratios, discount rate, useful life of plant, interest rate of loan in relation to tariff will be explored in this section.

Figure 1 summarizes how varying debt:equity ratios and discount rates affects levellised tariff keeping other basic assumptions given in Table 1 unchanged. As the proportion of equity increases in relation to debt, tariff increases. This is because the interest on loan decreases while the return on equity and tax increases. Figure 1 also shows that levellised tariff increases when discount rates increases. However, the marginal increase in tariff decreases as discount rate increases for 8:2 and 7:3 debt:equity ratios. The effect of discount rate on tariff is negligible when debt:equity ratio is 0:1 (that is when equity is 100% without any loan).



Figure 1. Levellised tariff based on varying debt:equity ratios and discount rates

Source: Author

The effect of increase in useful life of the project on tariff is minimal. An increase in the useful life of the project by 10 years increases tariff only by a very small amount (Nu 0.01) to Nu 1.9699 per unit using basic assumptions given in Table 1.

The effect of interest rate of loan on tariff is slightly greater: 1 percent increase in interest rate increases tariff by Nu 0.04. From Table A2, it is evident that tariff is higher in the early years of operation because the duration of the loan is shorter than the life of the plant. Increasing the duration of the loan decreases tariff, albeit by a very small amount. Therefore, interest on loan is more important than loan repayment period. Also, it is not difficult to see that delaying the construction of the plant will increase the cost of the project, thereby increasing the tariff.

Sensitivity Analysis

Given that cost-plus method is used for determining tariff, sensitivity analysis based on cost-plus method will now be performed in order to understand the changes in tariff when inputs or parameters seem to be uncertain.

From the sanctioned cost of Nu 28,962.93 million at March 2008 price level the overall project cost has increased upward by 38.82% to Nu 40,206.303 million (or Nu 40.206 billion) at March 2014 price level, which is the latest available figure. Nu 40,206.303 million is the vetted and finalized project cost, examined by Central Electricity Authority and Central Water Commission of India, although the revised cost estimate submitted by Mangdechhu Hydro Project Authority (MHPA) was Nu 42,812.63 million. If the project meets the expected commissioning date, that is March 2018, the project cost is likely to rise by at least 55% to Nu 45 billion (*Kuensel* May 9, 2015). For sensitivity analysis, cost overrun of 55% and 65% will be used.

Dams may have to be decommissioned after the useful life of the plant if it has silted up, degraded river ecosystems, have become unsafe, or when it has become expensive to maintain the dam. Sediment disposal is one of the most expensive costs while decommissioning the dam. The cost of dam decommissioning typically cost between 5 to 50% of construction costs (Oldham 2009). Sometimes it cost more than the cost of building the dam. For sensitivity analysis, 50% of construction cost is used as decommissioning cost.

As time passes by the cost of capital will increase as the cost of equity and tax rate increases. Hence, it is reasonable to assume that by 2018 discount rate may hover around 14%.

MAT rate was 18.5 percent in 2011-12. If the project is commissioned in 2018, MAT rate to be applied to the tariff should be higher than 18.5%. The effective rate will increase when surcharge and cess is applied. Hence, for sensitivity

analysis, MAT rate of 20% and Bhutan's corporate tax of 30% will be used.

5.72% O&M cost escalation is low considering that average annual inflation, at wholesale prices, of India for the last 6 years, from 2008 to 2014, is 6.53% (Office of the Economic Adviser 2015). For spares, repairs and maintenance wholesale prices needs to be applied but for employment and administration costs consumer prices is more appropriate. Consumer prices of Bhutan should be applied instead of that of India because employment cost and administration expenses will be incurred in Bhutan. The consumer price inflation of Bhutan from 2008 to 2014 is 8.08% (NSB 2015). Therefore, taking the average from India's wholesale price inflation of 6.53% and Bhutan's consumer price inflation of 8.08% will be used for the calculation of tariff: that is 7.31%.

Sl.no	Project cost	Levellised tariff
1	Base case	1.96
2	Cost increased by 55%	3.08
3	Cost increased by 65%	3.29
4	Cost increased by 65% and 50% decommissioning cost	3.31
5	Cost increased by 65% and 14% discount rate	3.33
6	Cost increased by 65% and MAT rate of 20%	3.37
7	Cost increased by 65% and tax rate of 30%	3.46
8	Cost increased by 65% and 7.31% rate of increase of O&M	3.42
9	Cost increased by 65%, MAT rate of 20% and 7.31% rate of increase of O&M	3.5

Table	2.	Sensitivity	Anal	vsis
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As shown in Table 2, the levellised tariff projects to Nu 3.08 per unit when the total project cost increases by 55% from the base case; it is Nu 3.29 per unit when the cost increases by 65%. The projected tariff for cost overrun of 65% and 50% decommissioning cost is Nu 3.31 per unit. Keeping 65% increase in project cost same, 2 percent increase in discount rate and 1.59% increase in O&M from the base case increases tariff by a higher margin compared to comparable rate of increase in tax rate and decommissioning cost. Considering 65% cost overrun, MAT rate of 20% and 7.31% rate of increase of O&M should be taken into account at a minimum, which will give a tariff of Nu 3.5 per unit.

Conclusions

This paper showed that cost-plus method undervalues the cost of building the hydropower project in that the levellised tariff derived from the cost-plus method when imputed in the financial cost benefit analysis returns negative NPV and B/C ratio less than 1, making the project unviable. Therefore, some provision should be kept to set the tariff that is amenable to both buyer and seller.

Given that cost-plus method will not be supplanted by another method, sensitivity analysis based on cost plus method with a realistic 65% cost overrun, MAT rate of 20% and 7.31% rate of increase of O&M keeping all other parameters unchanged from the base case generated a tariff of Nu 3.5 per unit.

The power purchase agreement spells out that carbon revenue generated from clean power shall be shared between India and Bhutan. The percentage of share should be higher for Bhutan as the dams are being built in Bhutan. Before discussing the issue of sharing mechanism, the implementation of the project on a sustainable manner, conforming to best practices, will determine whether the project is eligible for carbon revenue.

The cost of generation of power in Bhutan is one of the lowest in the world. In North America the levellised cost of electricity is USD 0.09/kWh which translates to Nu 6.03 per kWh (1

USD=Nu 67) for large hydro and USD 0.10/kWh or Nu 6.7 per kWh in Europe (IRENA 2015). The cost of power generation is Nu 3.8 per kWh in India for small hydro projects (5MW to 25MW) for financial year 2014-15, according to CERC. Therefore, the average cost of generation in Bhutan, which is Nu 1.99 per unit as of 2013 (DGPC 2013), is lower than India. Hence, power generation is competitive in Bhutan; however, if the project cost is undervalued and if optimal tariff is not derived then hydropower debts will not be self-liquidating. It is imperative that escalation of project cost be prevented as far as possible to make it price competitive. A colossal cost escalation will render it uncompetitive in regional and international markets. Judging by the competitive cost of power generation in Bhutan at the moment in international market, hydropower projects should be advanced from economic point of view but the scale and timing of exploitation is another matter that merits a separate paper.

References

- Agreement between the Government of the Republic of India and the Royal Government of Bhutan regarding the Mangdechhu Hydroelectric Project dated 30/4/2010.
- Bhutan Electricity Authority (2015). Druk Green Power Corporation. Retrieved on January 5, 2015 from <u>http://</u> www.bea.gov.bt/?page_id=28
- CERC (2012). Terms and Conditions for Tariff determination from Renewable Energy Sources Regulations, 2012. New Delhi
- Druk Green Power Corporation Limited (2013). Proposal for Revision of Generation Tariff, April 2013. Thimphu: DGPC
- International Renewable Energy Agency (2015). Renewable Power Generation Costs in 2014.

Kuensel (2015). 'Longevity of Bhutan's glaciers questionable.

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April 21, 2015.

_____ (2015). MHP cost shoots up to 45 billion. May 9, 2015.

_____ (2015). Council questions hydropower policy. May 28, 2015.

_____ (2015). EcoSmartHydro pilot project joint venture. June 8, 2015.

Kumar, Sanjay (2011). Minimum Alternate Tax: Is there any alternative? *NUJS Law Review* 4 NUJS L. Rev. 595

Ministry of Finance (2001). *Income Tax Act of the Kingdom of Bhutan 2001*. Thimphu: Royal Government of Bhutan

_ (2012). National Budget Financial Year 2015-16. Thimphu: Ministry of Finance, May 2015

- Mitra, Sabyasachi; Carrington, Sarah; Baluga, Anthony (2014). Unlocking Bhutan's Potential: Measuring Potential Output for the Small, Landlocked Himalayan Kingdom of Bhutan. ADB South Asia Working Paper Series No. 32
- National Statistics Bureau (2014). National Accounts Statistics. Thimphu: National Statistics Bureau.

_____ (2015). Consumer Price Index. Thimphu: National Statistics Bureau. Retrieved from <u>http://www.nsb.gov.</u> <u>bt/publication/publications.php?id=6</u>

- NHPC (2010). *Detailed Project Reports (DPRs)*, March 2010, of the Mangdechhu Hydroelectric Project. Haryana
- Notes on first revision of Project Cost Estimate at March 2014 price level of Mangdechhu Hydroelectric Project in Bhutan by Mangdechhu Hydro Project Authority
- Office of the Economic Adviser (2015). Key Economic Indicators. Government of India: Ministry of Commerce

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& Industry. Retrieved from <u>http://eaindustry.nic.in/key_</u> economic_indicators/Key_Economic_Indicators.pdf

- Oldham, Kevin (2009). Decommissioning dams costs and trends. 20 February 2009. Retrieved on May 20, 2015 from <u>http://www.waterpowermagazine.com/features/</u> featuredecommissioning-dams-costs-and-trends/
- REConnect Energy (2014). An analysis of CERC determined RE tariffs, Open Access, Volume 38.
- Shea, J. M. et al. (2014). Modelling glacier change in the Everest region, Nepal Himalaya. *The Cryosphere Discuss*. 8, 5375–5432.

Appendix

	ABSTRACT OF COST	
S1. no.	Description	Amount in Nu million
A	CIVIL WORKS	March 2008 Price level
1	DIRECT CHARGES	
	I - Works	
	A. Preliminary	674.22
	B. Land	141.23
	C. Works	5073.31
	J. Power Plant Civil Works	10721.14
	K. Buildings	635.64
	O. Miscellaneous	539.77
	P. Maintenance during construction	170.1
	Q. Special Tools & Plants	63.06
	R. Communication	580.4
	X. Environment and Ecology	300
	Y. Losses on Stock	42.53
	Total of I - Works	18941.41
	II – Establishment (6% of I - Works - B Land)	1128.01
	III - Tools and Plants	20
	IV – Suspense	0
	V - Receipts and Recoveries	-59.61
	Total Direct Charges	20029.81
2	INDIRECT CHARGES	

Table A1. Abstract of Project Cost (March 2008 Price Level)

I	Capitalised value of abatement of land revenue (5% of Cost of Culturable Land)	0.16
II	Audit & Account Charges (0.25% of I - Works)	50
	Total Indirect Charges	50.16
	TOTAL COST OF CIVIL WORKS	00070 00
	IUIAL COST OF CIVIL WORKS	20079.98
В	ELECTRICAL WORKS	6032.95
В	ELECTRICAL WORKS Total Cost (Civil + Electrical)	6032.95 26112.93
B	ELECTRICAL WORKS ELECTRICAL WORKS Total Cost (Civil + Electrical) TRANSMISSION WORKS (with cost	6032.95 26112.93
B	ELECTRICAL WORKS ELECTRICAL WORKS Total Cost (Civil + Electrical) TRANSMISSION WORKS (with cost of land)	20079.98 6032.95 26112.93 2850

Source: Detailed Project Report (Amended Volume II) Cost Estimates and Project Planning, 2010, p.6.8

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Dis- counted tariff (Nu per unit)	2.33	2.04	1.78	1.55	1.35	1.18	1.03	06.0	0.78	0.68	09.0	0.52	0.31
Charges/ unit (Nu)	2.33	2.28	2.23	2.18	2.13	2.08	2.03	1.99	1.94	1.89	1.85	1.81	1.22
Total cost	5934.66	5801.63	5670.58	5541.63	5414.89	5290.50	5168.59	5049.30	4932.77	4819.18	4708.68	4601.45	3102.12
Interest on Working Capital	140.46	138.65	136.94	135.33	133.83	132.44	131.17	130.03	129.02	128.16	127.44	126.89	97.43
2 months average billing	989.11	966.94	945.10	923.60	902.48	881.75	861.43	841.55	822.13	803.20	784.78	766.91	517.02
Mainte- nance spares	86.53	91.48	96.71	102.24	108.09	114.27	120.81	127.72	135.03	142.75	150.91	159.55	168.67
O&M for 1 month	48.07	50.82	53.73	56.80	60.05	63.49	67.12	70.96	75.01	79.31	83.84	88.64	93.71
O&M cost	576.86	609.85	644.74	681.62	720.61	761.82	805.40	851.47	900.17	951.66	1006.10	1063.65	1124.49
MAT	157.51	157.51	157.51	157.51	157.51	157.51	157.51	157.51	157.51	157.51	157.51	157.51	157.51
Return on equity	1390.22	1390.22	1390.22	1390.22	1390.22	1390.22	1390.22	1390.22	1390.22	1390.22	1390.22	1390.22	1390.22
Depre- ciation	1642.20	1642.20	1642.20	1642.20	1642.20	1642.20	1642.20	1642.20	1642.20	1642.20	1642.20	1642.20	275.70
Interest on loan	2027.41	1863.19	1698.97	1534.75	1370.53	1206.31	1042.09	877.87	713.65	549.43	385.21	220.99	56.77
Year	1	2	с	4	ъ	9	7	8	6	10	11	12	13

Table A2: Calculation of tariff based on cost-plus method

Export Price of Electricity in Bhutan

			Retirn			M&O	Mainte-	2 months	Interest			Dis- counted tariff
Year	Interest on loan	Depre- ciation	on equity	MAT	O&M cost	for 1 month	nance spares	average billing	Working Capital	Total cost	Charges/ unit (Nu)	(Nu per unit)
14	29.20	275.70	1390.22	157.51	1188.81	70.99	178.32	523.59	100.12	3141.56	1.24	0.28
15	1.63	275.70	1390.22	157.51	1256.81	104.73	188.52	530.81	103.01	3184.88	1.25	0.26
16		275.70	1390.22	157.51	1328.70	110.72	199.30	543.13	106.64	3258.78	1.28	0.23
17		275.70	1390.22	157.51	1404.70	117.06	210.71	556.44	110.53	3338.66	1.31	0.21
18		275.70	1390.22	157.51	1485.05	123.75	222.76	570.52	114.63	3423.11	1.35	0.20
19		275.70	1390.22	157.51	1569.99	130.83	235.50	585.40	118.97	3512.40	1.38	0.18
20		275.70	1390.22	157.51	1659.80	138.32	248.97	601.13	123.55	3606.79	1.42	0.16
21		275.70	1390.22	157.51	1754.74	146.23	263.21	617.76	128.40	3706.57	1.46	0.15
22		275.70	1390.22	157.51	1855.11	154.59	278.27	635.35	133.53	3812.07	1.50	0.14
23		275.70	1390.22	157.51	1961.22	163.44	294.18	653.93	138.94	3923.60	1.54	0.13
24		275.70	1390.22	157.51	2073.40	172.78	311.01	673.59	144.67	4041.51	1.59	0.12
25		275.70	1390.22	157.51	2192.00	182.67	328.80	694.36	150.73	4166.17	1.64	0.11
26		275.70	1390.22	157.51	2317.39	193.12	347.61	716.33	157.13	4297.95	1.69	0.10
27		275.70	1390.22	157.51	2449.94	204.16	367.49	739.55	163.90	4437.27	1.74	0.09

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-	1.80	1.86	1.93	2.00	2.07	2.15	2.23	2.31	nit
	4584.57	4740.28	4904.91	5078.95	5262.95	5457.47	5663.11	5880.53	1 201 202
Working Capital	171.06	178.62	186.62	195.07	204.01	213.46	223.45	234.02	- N., 1 OF
months average billing	764.09	790.05	817.48	846.49	877.16	909.58	943.85	980.09	- \.L /I JJ:**
Mainte- nance spares	388.51	410.73	434.23	459.07	485.32	513.09	542.43	573.46	1:cod To
O&M for 1 month	215.84	228.19	241.24	255.04	269.62	285.05	301.35	318.59	I OTTO
O&M cost	2590.08	2738.23	2894.86	3060.44	3235.50	3420.57	3616.23	3823.07	
MAT	157.51	157.51	157.51	157.51	157.51	157.51	157.51	157.51	
Return on equity	1390.22	1390.22	1390.22	1390.22	1390.22	1390.22	1390.22	1390.22	
Depre- ciation	275.70	275.70	275.70	275.70	275.70	275.70	275.70	275.70	
Interest on loan									
Year	28	29	30	31	32	33	34	35	

Levellised Tariff (LT) = Nu 1.9591 per unit

Note: Amount in million Nu at March 2008 Price Level Source: Author's calculations

Export Price of Electricity in Bhutan

Table A3: Financial cost benefit analysis

Discounted net benefit	-3193.82	-3485.51	-7003.37	-8138.84	-11604.19	-9005.49	-1307.39	4185.03	4699.47	4167.53	3694.18	3273.05	2898.46	2565.34
Net benefit	-1444.72	-1765.87	-3973.90	-5172.38	-8259.63	-7179.12	-1167.31	4185.03	5263.40	5227.75	5190.05	5150.20	5108.07	5063.54
Total revenue								5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79
Total cost	1444.72	1765.87	3973.90	5172.38	8259.63	7179.12	1167.31	1673.76	595.38	631.04	668.73	708.58	750.71	795.25
Investment in working capital								1096.90	-14.47	-13.70	-12.89	-12.03	-11.11	-10.15
O&M cost								576.86	609.85	644.74	681.62	720.61	761.82	805.40
Capital cost	1444.72	1765.87	3973.90	5172.38	8259.63	7179.12	1167.31							
Year	-7	9-	Ϋ́	-4	۰. ع	-2	-1	1	7	3	4	ъ	9	7

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	Discounted	net benefit 2269.19	2005.95	1772.05	1564.28	1379.76	1275.67	1065.29	936.93	822.32	721.49	632.23	553.20	483.27	421.43	366.78	318.52
	Net	benent 5016.45	4966.67	4914.04	4858.40	4799.58	4969.99	4648.39	4578.89	4501.00	4423.04	4340.91	4254.09	4162.30	4065.26	3962.67	3854.22
	Total	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79
	- - -	10tal cost 842.34	892.12	944.75	1000.38	1059.21	888.80	1210.39	1279.90	1357.79	1435.75	1517.87	1604.70	1696.48	1793.52	1896.11	2004.57
Summer 2015	Investment in working	capital -9.13	-8.06	-6.92	-5.71	-4.44	-235.69	21.58	23.09	29.09	31.05	32.82	34.70	36.69	38.78	41.00	43.35
ies, Vol.32,	O&M	cost 851.47	900.17	951.66	1006.10	1063.65	1124.49	1188.81	1256.81	1328.70	1404.70	1485.05	1569.99	1659.80	1754.74	1855.11	1961.22
l of Bhutan Stud	-	Capital cost															
Journa		Year 8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23

Export Price of Electricity in Bhutan

Discounted net benefit	275.93	238.38	205.30	176.19	150.60	128.12	108.41	91.15	76.05	62.87	51.38	102.83	
Net benefit	3739.55	3618.33	3490.18	3354.70	3211.46	3060.04	2899.95	2730.70	2551.77	2362.61	2162.63	4847.51	rate at 100/
Total revenue	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	5858.79	4 41:0001104
Total cost	2119.23	2240.45	2368.61	2504.09	2647.32	2798.75	2958.84	3128.08	3307.01	3496.17	3696.15	1011.28	oo lorrol on
Investment in working capital	45.83	48.45	51.22	54.15	57.25	60.52	63.98	67.64	71.51	75.60	79.93	84.50	5400 4040
O&M cost	2073.40	2192.00	2317.39	2449.94	2590.08	2738.23	2894.86	3060.44	3235.50	3420.57	3616.23	3823.07	N + O LIN CH
Capital cost												-2896.293	monut in millio
Year	24	25	26	27	28	29	30	31	32	33	34	35	Noto.

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Source: Author's calculations

Enhancing Bhutanese Rice in the Domestic Market through increased Production and Favorable Pricing Regime

Ngawang Chhogyel^{*}, Mahesh Ghimiray^{**}, Kencho Wangdue^{***} and Yadunath Bajgai^{****}

Abstract

Rice (Oriza sativa L.) is one the most important food crops in Bhutan. Due to its national importance the Department of Agriculture (DoA) under the Ministry of Agriculture and Forests initiated technical interventions in the major rice growing dzongkhags (districts) to improve rice vield and production from 2008-2009. The aim of the program was to commercialize domestically produced rice through enhanced vield. production and rice value chain. The program involved increased investment for intensified promotion of higher vielding varieties of rice, farm mechanization, post harvest and marketing, capacity building, nutrient management and crop protection as the software component. The hardware part saw the constructions and renovations of many irrigation schemes and construction of rice processing units. As a result of the intensified interventions the productivity of rice yield has increased to 3.88 t/ha in 2013 from about 2.81 t/ha in 2009. Favourable pricing mechanism is essential for both farmers and the consumers although farmers want higher prices and the consumers the lower. To facilitate smooth trade the DoA has recommended prices for different varieties of paddy for farmers by maintaining reasonable margins

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besides associated costs. Therefore, adjusted farm-gate prices have been worked out so as to serve as the recommended paddy procurement prices or basis for calculation. The formal domestic rice trade has come to mainstream markets by involving the Food Corporation of Bhutan Limited. Due to the strategic interventions the domestically produced rice in circulation is estimated to be 255 t currently (as of June 2015) and it is expected to increase further with the prioritized investments, good pricing mechanism and policy support. In conclusion, the commercialization program brought about the increase in yield and overall production and has successfully main streamed trade of domestically produced rice in Bhutan.

Background

Rice is the most important cereal crop of Bhutan and it is often equated with food security of the country. It constitutes the main source of calorie and Bhutanese people, in general, consume rice three times a day. However, the domestic production barely meets 50% of the country's requirement, and rest is imported, mainly from India. Starting from the 10th Five Year Plan (FYP) in 2008-2009, the Department of Agriculture (DoA) has successfully piloted a rice commercialization program in Chuzargang geog under Sarpang dzongkhag (Chhogyel et al. 2014a). However, the actual implementation of rice commercialization activities commenced in 2010 under the aegis of Accelerating Bhutan's Socio-economic Development (ABSD) Initiative for Rice Productivity improvement. The ABSD was then continued into the 11th FYP as the Rice Commercialization Program. The objectives of rice commercialization program were: (1) to enhance rice production and productivity; (2) to enhance profitability of rice farmers through enhanced income and employment generation; and (3) to formalize marketing of local rice in the country. The rice commercialization program began with initial target of about 15,000 ha in area covering potential rice growing dzongkhags or clusters such as Sarpang, Samtse, Samdrup Jongkhar, Wangdue-Punakha, and Tsirang-Dagana (Chhogyel et al. 2014b; DoA 2012, RNR RDC-Bajo 2012). The activities undertaken under the program included vigorous promotion of high yielding varieties and quality seeds, promotion of balanced application of NPK nutrients, farm mechanization, crop protection from insect pests and diseases, capacity building, establishment of modern rice processing units for enhanced quality of milled rice, and marketing (RNR RDC-Bajo 2013; DoA 2012). Initially, a modern rice mill of 1.5 t per hr capacity was installed in Chuzargang geog under Sarpang dzongkhag with required facilities for cleaning and packaging the milled rice for marketing. This intervention was the beginning of formal marketing of local rice in the country through the involvement of Food Corporation of Bhutan Limited (FCBL).

Following the success of pilot project at Chuzargang, rice commercialization program is being continued into the 11th FYP with increased budgetary outlay and ambitious target of covering all rice potential dzongkhags (PPD 2014). In 2012-2013, three more modern rice processing units (0.5 t per hr capacity) have been installed, one each for rice potential dzongkhags or clusters of Wangdue-Punakha valley, Tsirang-Dagana and Samdrup Jongkhar (Chhogvel et al. 2014a). Additionally, another 3 ton per hr capacity modern mill has been installed at Phuntsholing to cater to the need of Samtse and adjoining dzongkhags. This is, however, being taken up by a private firm through a tripartite agreement signed with the Ministry of Agriculture and Forests. With the installation of such modern rice processing units, availability of local rice is expected to increase in the mainstream domestic markets. Thus, there was an urgent need to have a proper pricing system for different categories of domestically produced rice. Accordingly, the DoA initiated a cost analysis of different categories of rice for two generalized regions of the country, southern and northern regions. The purpose behind the exercise was to regulate paddy procurement and selling prices of milled rice through price recommendation by the Ministry of Agriculture and Forests. Proper pricing system was essential to benefit both the farmers (producers and sellers) and to protect the consumers against over-pricing.

The current prices are based on the generalized cost of production within the agro-ecological zones. The cost of rice production including rice milling, processing and marketing was undertaken to understand the costing at different levels. Such an understanding is necessary in recommending paddy procurement prices and the final cost of milled rice in the local markets. By doing so, DoA was able to recommend paddy procurement and milled rice prices of domestically produced rice to the FCBL which was entrusted to take up rice marketing in the country. Globally, the volatility of rice production output and price trends are dependent on the political decisions and are markedly affected by climate change (Subramanian 2013). As our food security issue largely hinges on the domestic production of rice grown under varied ecosystems, uncertainties and price shocks are imminent. Although the domestic rice trade in the country is small, it should be encouraged and formalized because it is the main food grain of national importance. The best that we could do is to regulate price regime through incentivized production strategies and policy frameworks. For a country like Bhutan which depends on import of mostly medium quality Indian rice, strategic policy framework on rice commercialization is imperative for enhanced production and reduction in importation of rice. Price regulation is very important. Lower rice prices will not only increase consumption, but also increase importation (Mohanty et al. 2010) which is not favourable for Bhutan. Increase in rice trade is crucial for reducing price volatility which mainly affects poorer sections of the society. This is because rice stocks and supply in the market actually affects price volatility and availability of rice (Subramanian 2013). Thus, there should be an improved marketing system including proper pricing mechanisms backed by rice development policy.

Trends in rice processing and sale

To start with, a total of 8.698 t of paddy of 8 different varieties was collected in 2008-2009 in Chuzargang, Sarpang dzongkhag. This was worth Nu. 113,533. The collection was basically for test run of the new rice mill which was

inaugurated in late 2009. The actual paddy collection began in early 2009-2010 with the involvement of FCB through signing of Memorandum of Understanding (MoU) with the Department of Agriculture. In the same year, a total of 56.609 t of paddy was collected, yielding a marketable 34.236 t of head rice. Based on prescribed selling prices of FCB for different varieties, the revenue generated was Nu. 1.08 million. In addition to head rice, there were also other products or by-products viz. broken rice, rice bran and hull which generated additional revenue. Initially, most of the rice was sold in urban markets like Thimphu and Gelephu. This was just the beginning of formalized rice marketing in the country.

From 2010-2011, paddy collection, milling and marketing of rice in the project area was undertaken by a newly formed farmers' cooperative called Chuzagang Agricultural Farmers' Cooperative (CAFCO). Although the CAFCO planned to collect 120 t of paddy that year, it could collect only 56.578 t due to inadequate working capital. In 2011-2012, the total paddy collection was 53 t which resulted in about 38 t of milled rice, although the target was much higher (RNR RDC-Bajo 2013). In the following year (2012-2013), the CAFO's collection was a meager 23 t as against the DoA's hope of doubling the paddy collection and enhanced trade. This was a major concern for the DoA which ultimately led to signing of another MoU with the FCBL to take up the processing and marketing of domestically produced rice in the country. The CAFCO's performance was unsatisfactory and the DoA had to involve the business experience and expertise of the FCBL. Currently, the FCBL has started paddy collection, milling and marketing of rice in Sarpang, Wangdue-Punakha valley and Samdrup Jongkhar. The records with the DoA showed that the 2014-2015 collection was 386 t paddy which is equivalent to about 255 t milled rice and is over 700% more than the averages of the preceding 6 years (Figure 1). It included different varieties of rice produced and branded from these regions. The milled rices were made available to the consumers at the FCBL outlets throughout the country. DoA and FCBL is also all set

to supply domestically produced rice to the school feeding program of the Ministry of Education in the near future. This is a already a huge success and milestones are in the offing with strategic plans to ensure supply of adequate quantities of rice to the schools. Such schemes would ensure availability of local rice in the domestic market. According to Ghimiray *et al.* 2007, the proportion of domestic rice in the urban Bhutan was just 26% of the total rice consumption, all of which were marketed informally. Opportunities thus exist for greater domestic sale of rice through organized marketing.





Projection of marketable surplus

As per the initial plans, DoA initiated various interventions to improve rice productivity and production in WangduePunakha valley, Tsirang-Dagana, Samtse, Sarpang, Samdrup Jongkhar and Thimphu-Paro clusters. The rice yields are calculated to be increasing at the rate of 5-10% per annum (DoA 2013b; DoA 2012; DOA 2011). With the national rice yield average of just 3.88 t /ha (DoA 2013b) as against the global average of 4.49 t/ha (FAO Stat 2013), there lies tremendous scope to increase total production through interventions like promotion of modern varieties and management practices. Although the rice yields are already quite high in the midaltitude regions of Wangdue-Punakha valley and high altitude regions of Thimphu - Paro, the DoA's target is to increase productivity to bring about two fold yield increase especially in Southern Bhutan, where yields are the lowest (PPD 2013).

According to the DoA (2013b), rice was grown on an area of 48,361 acres with a total production of 75, 228 t in 2013. The six cluster dzongkhags together constituted about 75% of the total area which corresponded to 36,209 acres. Currently, these cluster dzongkhags account for more than 77% (58,024 t) of the country's total production. To enhance rice productivity and production, the DoA initiated major interventions such as construction and renovation of irrigation channels, farm mechanization, promotion and supply of improved seeds, and intensified capacity building programs (DoA 2013a; RNR RDC-Bajo 2012). With such interventions, the rice yields are projected to increase by at least 10% giving an increase of about 25,000 t from that of 2013 production figure. According to the DoA's 11FYP target, rice production should cross over 100,000 t in 2018 to attain rice self sufficiency of 65% (Figure 2). For such a trend in production, increase of 4955 t should follow every year and strategies are in place to support this target.



Figure 2. Rice production target of the Department for the 11th Five Year Plan

Based on the DoA's projection, from the cluster areas, where modern rice processing facilities exist, a modest 20% surplus collection from farmers would amount to 14,571 t of paddy for milling every year. For rest of the dzongkhags, the yield projection and percent collection were estimated at 5% and 10% respectively (Table 1). Considering milling recovery of 65%, the projected 14,571 t paddy would yield about 9,471 t of head rice for sale which is worth over Nu 4735.7 million (cost of milled rice calculated @ Nu.50/kg). The amount of paddy for milling and hence milled rice for sale should increase every year as rice farming becomes more marketoriented. Investment on the rice commercialization program would increase availability of local rice in the domestic market, thereby reducing import from India, thus reducing outflow of the Indian currency reserve. This would bring about a positive impact of agriculture to the national economy.

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Currently, domestic rice trade which happens informally is worth just about Nu. 124 million with about 1,667 t rice in circulation (DoA 2013b). This informally marketed rice is just about 2% of the projected rice trade envisaged through formal marketing involving the FCBL. Globally, the rice trade is on the increase with about 9% of the total production traded annually as against mere 4% in 80s (Mohanty 2015).

Dzongkhag/ cluster	Current production (t) (2013)	Projected Production 2014 @10% yield increase (t)	Market surplus @20 collection (t)	Head rice @ 65% milling recovery (t)	Revenue Generation@ Nu.50/kg (million)
Sarpang	5518.000	6070.000	1214.000	789.000	39.450
Samtse	8969.000	9866.000	1973.000	1282.000	64.100
S/ Jongkhar	2663.000	2929.000	585.000	380.000	19.000
Wangdue- Punakha	19390.000	21329.000	4265.000	2772.000	138.600
Tsirang- Dagana	10526.000	11578.000	2315.000	1505.000	75.250
Thimphu- Paro	10958.000	12053.000	2410.000	1566.000	78.300
kest of the dzongkhags	17204.000	18064**	1806*	1174.000	58.700
	75228.000	63825.000	12762.000	9468.000	473.400

Table 1: Projection of production (t) increase and additional rice for domestic market

 $n^{**:}$ 5% increase over the current projection; $n^{*:}$ 10% collection from the projected production.

Cost of production

The unit cost of production for domestically-produced rice varies from dzongkhags to dzongkhags and regions to regions. Although the cultivation practices in different parts of the country are similar, the variations in labour costs and yield differences results in the variation on the cost of production in different parts of the country. Average cost of production of rice is higher in Northen regions of Punakha-Wangdue in comparison to the southern dzongkhags of Sarpang, Samdrup Jongkhar and Samtse (Table 2 & 3). The higher costs of rice production in the Northern part of the country (Punakha and Wangdue) could be attributed to higher labour costs and comparatively higher quantities of inputs use, such as farmyard manures, chemical fertilizer and weedicides. Generally, the farmers use fertilizers and plant protection chemicals in the Northern regions whereas the farmers in the Southern part hardly use them. Some of the important factors of cost of production are listed below:

1. Cost of labour wages: This forms an important component as wage rates in Northern varies between Nu.350-500 per day, while it was about Nu.150-200/day in the South.

2. Mechanization: Mechanization has been assessed to not only reduce cost of production but also increase the farm efficiency. It has potential to reduce cost of production by about 10-20%.

3. Use of higher yielding varieties reduces the cost of production due to increased production at same level of costs due to the productivity gains.

4. Other factors include use of modern inputs such as plant protection chemicals to control diseases and insect pests, herbicides and fertilizers determine the harvestable yield of crop.

One of important interventions undertaken by the DoA is promotion of mechanization which has slightly reduced the cost of production. Partial mechanization of rice cultivation could lower the cost of production by about 10%. However, for our analysis here, the averages of the traditional and partial mechanization figures were used (Table 2 and 3). The cost of producing a kg of paddy grain in Wangdue-Punakha valley ranged between Nu.19.00 to 36.00 depending on the variety. Similarly, the cost of producing a kg of rough rice ranges Journal of Bhutan Studies, Vol.32, Summer 2015

between Nu. 12.00 to 23.00 depending on the variety grown by the farmers in the Southern region (Table 3). Yeshey (2012) also reported that the cost of producing a kg of rough rice (Bajo Maap) in Wangdue under full mechanization was about Nu.14.00 which is close to Nu. 17.47 recorded in the current analysis under partial mechanization. The difference could have been due to added labour cost in partial mechanization as compared to reduced labour cost in the fully mechanized field.

in Northern region.			
Variety	Traditional method (Nu./kg)	Partially mechanized (Nu./kg)	AVERAGE (Nu./kg)
IR 64, BajoKaap, BajoMaap	19.55	17.47	18.51
KhangmaMaap	21.25	18.99	20.12
Tan Tsheri & DawYangkum	30.55	27.3	28.92
Local Kaap & Local Maap	32.58	29.12	30.85
Ngabja & Bondrey	37.59	33.59	35.59

Table 2: Generalized rice production costs (Nu.per kg rough rice) for some of the popular improved and local rice varieties in Northern region.

Table 3.Generalized rice production costs (Nu.per kg rough rice) for some of the popular improved and local rice varieties in Southern region.

Variety	Traditional method	Partially mechanized	AVERAGE
	(Nu./kg)	(Nu./kg)	(Nu./kg)
Bhur Rey kaap	13.38	11.09	12.23
Bhur kamja	15.17	12.57	13.87
---------------------------------	-------	-------	-------
Ranjit, Mama	16.25	13.46	14.86
Champa & Khamti Masino, Bhog	22.75	18.85	20.8
and other local varieties	25.28	20.94	23.11

Adjusted paddy procurement prices

Looking from the economic point of view, neither very high prices nor very low prices are desirable or suitable, although the producers want higher prices and the consumers the lower. While higher paddy procurement prices are going to be favorable for the farmers, there is going to be proportional increase in prices of milled rice hurting the consumers negatively. Therefore, adjusted farm-gate prices have been worked out so as to serve as recommended paddy procurement prices keeping a reasonable margin for farmers besides the associated costs (Tables 4 and 5). The pricing strategy is quite sensitive given the fact that Bhutanese people heavily depend on rice for their daily calorie requirement. Fluctuations in commodity price will be accompanied by both economic and un-economic situation such as the rice crisis of 2007-2008 (Clarete et al. 2013). As for other commodities, a strategic pricing is likely to drive production and adoption of rice technologies. Globally, higher prices are said to stimulate rice cultivation (OECD-FAO 2008) and specifically for Bhutan. higher prices should drive expansion in areas and spread of improved rice varieties.

Farm-gate prices have been adjusted to make it more attractive for the farmers to sell their raw paddy to the rice millers. The adjusted prices shown in Tables 4 and 5 would give the farmers' a margin of at least 10 percent. These adjusted prices not only benefit the farmers with higher margin but would also ensure that the mills would have enough raw materials (paddy) supplied by farmers. Thus the adjusted farm gate prices are the prices recommended for the procurement of paddy from the farmers.

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Table 4: Farmers' margin and adjusted farm-gate prices in the Northern region

Variety	Farm- gate price	Production Cost	Currer Farmeı margin	it r's	Adjusted Farmers' margin		Adjusted Farm Gate price
	Nu/kg	Nu/kg	Nu/ kg	%	Nu/kg	%	Nu/kg
IR- 64	22	18.51	3.49	19%	7.49	40	26
Bajo Maap (other Maaps, improved)	22	20.12	1.88	6%	5.88	29	26
Tan Tsheri	25	28.92	-3.92	-14%	5.08	18	34
Local Kaap (Yangkum, Shenga Maap, etc.)	25	30.85	-5.85	-19%	5.15	17	36
Local Kaaps (other than aromatic)	25	30.85	-5.85	-19	1.15	04	32
Ngabja & Bondrey	30	35.59	-5.59	-16%	1.77	05	37

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Table 5: Farmers' m	larein and	adiusted farn	n-gate pric	tes. Sou	thern regio	n (Sarna	ng-Samtse)
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Variety	Farm- gate price	Production Cost	Current Farmer's margin		Adjusted Farmers'	margin	Adjusted Farm Gate price
	Nu/kg	Nu/kg	Nu/kg	%	Nu/kg	%	Nu/kg
Bhur Rey kaap	15	12.23	2.77	53	9.77	62	22
Bhurkamja	13	13.87	-0.87	9-	8.13	58	22
Ranjit, Mama	10	14.86	-4.86	-33	5.14	34	20
Champa&Khamti	18	20.8	-2.8	(9.20	7	30
Masino, Bhog and other local varieties	19	23.11	-4.11	-13	6.89	44 29	30

Enhancing Bhutanese Rice in the Domestic Market

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Farm-gate prices of milled rice

Traditionally, farmers mill their rice at the village rice mills and whatever surplus they have is then transported to the markets for sale. Some quantity of the surplus is sold at the farm at farm-gate prices. Normally, the farm gate prices are lower by Nu. 5/kg than market prices.

Computing the break-even selling price is an important calculation while establishing a selling price. It is the minimum price at which one can sell the product for and still re-cover the costs. Here the break-even prices are presented in two ways - one based on the prevailing farm-gate prices and the other on the recommended farm-gate prices, or the production costs. The break-even prices based on prevailing farm gate prices of paddy are apparently lower compared to the break-even prices based on the recommended farm gate prices. The recommended selling prices of rice are presented in the Table 6. These prices were based on both the prevailing prices and recommended farm-gate prices. Another very important consideration for price recommendation was the market demand and quality of certain rice varieties and brands. This is why the recommended prices of some rice varieties are above the recommended farm gate prices. The forces of market demand for certain varieties due to their quality led to increased prices. At the government prescribed recommended rate, the farmers would not be willing to sell their produce and therefore, in order to have such varieties in the market, the rates are increased in accordance with forces of market. However, the recommended selling prices, in general were derived in a simple and straightforward way by adding a certain percent (5% or more on the break-even price).

Northern Region		Southern Region	
Variety	Rate (Nu./kg)	Variety	Rate (Nu./kg)
IR 64 and Bajo Kaap	50	Bhur Rey kaap	50
Bajo Maap	55	Bhurkamja 1	50
Tan Tsheri & DawYangkum	61	Ranjit, Mama	35
Local Maap	64	Champa&Khamti	60
Local Kaaps	64	Choti Masino Bhog and other	65
Ngabja & Bondrey	70-74	premium local varieties	65

Table 6: Recommended Farm-gate Prices of milled Rice for the Northern and Southern region

Conclusion and recommendations

As the rice commercialization program of the DoA gains momentum, increased rice trade in the domestic market is imminent. This would generally reduce price volatility which would otherwise hurt the consumers, specially those in the lower rung of the income group. The DoA's rice commercialization program is a success as it enabled availability of domestically produced rice in the formal urban markets in the country. Thought the formal rice trade is small, it has made a beginning and the 2014-2015 collection showed that there is a tremendous potential in improving domestic rice trade in the country. As we continue with interventions to enhance rice value chain, pricing policy would assume greater significance and would require strategic regulations based on the market forces and technical considerations. The government pricing mechanism should be looked at both from the perspective of producers as well as the consumers aimed at striking a balance. A small country like Bhutan cannot afford to keep the prices of domestically-produced rice low, because that would discourage domestic production and favour importation. Therefore, the best approach is to enhance domestic rice production through all possible support to the farmers backed up by a well organized efficient rice marketing system. Though Bhutan imports over 50% of its rice requirement, an improved rice value chain has potential to offset volatility of rice price and sustain requirements. However, the domestically produced rice varieties will still sale at a premium price and are superior to imported rice. With increased support for rice commodity program, a sustained production is possible for the DoA. The figures presented especially on the prices should be guided as of 2014 and the figures should change with changes in costs of production. However, it would serve as an important basis for the formulation of pricing structure for the marketing of rice in the country.

References

- Chhogyel, N., Ghimiray, M., and Dorji, Cheku. (2014a). Installation of new rice processing Units In Sonam Drupdey, Annual RNR Magazine 1(5): 24-25.
- Chhogyel, N., Ghimiray, M., Dorji, C., Gyem, L., Dema, Y. and Legjay (2014b). Impact of Decentralized Rural Development Project on Rice Program in Wangdue-Punakha Valley. Renewable Natural Resources Research and Development Centre- Bajo. Department of Agriculture, Ministry of Agriculture and Forests.p.80
- Clarete, R., Adriano, L. and Esteban, A. (2013). *Rice trade* and price volatility: *Implications on ASEAN and global* food security. Asian Development Bank Working paper Series No. 386. Manila, Philippines. p.35
- Department of Agriculture (2013a). Annual Report 2011-2012. Agriculture Development Highlights. Department of Agriculture, Ministry of Agriculture and Forests. Thimphu Bhutan.p.63

_____ (2013b). *Agriculture Statistics*. Agriculture Extension and Information Management Section, Department of Agriculture, Ministry of Agriculture and Forests. Thimphu, Bhutan. p 85

(2012). Agriculture Statistics. Agriculture Extension and Information Management Section, Department of Agriculture, Ministry of Agriculture and Forests. Thimphu, Bhutan. p.123

(2011). *Agriculture Statistics*. Agriculture Extension and Information Management Section, Department of Agriculture, Ministry of Agriculture and Forests. Thimphu, Bhutan.

- Food and Agriculture Organization statistics ((FAOSTAT) (2013). Food and Agriculture Organization of the United Nations Statistics. United Nations Development Program. Retrived July 10, 2014 from <u>http:///-faostat.fao.org/</u> <u>site/339/default.aspx.</u>
- Ghimiray, M., Wangdi, K., Chhetri, G.B., Bockel, L. and Punjabi, M. (2007). *Rice commodity chain analysis*. FAO-Netherlands partnership program (FNPP). Ministry of Agriculture, Thimphu, Bhutan. 49p.
- Mohanty, S. (2015). Trends in Global rice trade. In *Rice Today* (*January-March 2015*). International Rice Research Institute, Los Banos, Philippines 14(1): 40-42.
- Mohanty, S., Wailes, E. and Chavez, E. (2010). The global rice supply and market outlook: The need for greater productivity growth to keep rice affordable. Pandey, S., Byerlee, D., Dawe, D., Dobermann, A., Mohanty, S. and Rozelle, S. (ed). In Rice in the Global Economy, Strategic research and Policy Issues for Food Security. International Rice Institute, Los Banos, Philippines. p175-187.
- Organization for Economic Cooperation and Development-Food and Agriculture Organization (OECD-FAO) (2008). Agricultural Outlook 2008-2017. Organization for Economic Cooperation and Development-Food and

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Agriculture Organization of the United Nations. Oecd/ fao 2008. Rome, Italy.233p.

Policy and Planning Division (2014). *RNR Sector Eleventh Five Year Plan 2013-2018*. Policy and Planning Division of the Ministry of Agriculture and Forests, Thimphu Bhutan. 305p.

_____ (2013). *Bhutan RNR Statistics*. Policy and Planning Division, Ministry of Agriculture and Forests, Thimphu Bhutan.355p

Renewable Natural Resources Research and Development Centre Bajo (RNR RDC – Bajo) (2012). *Annual Report* 2011-2012. Department of Agriculture. Ministry of Agriculture and Forests. WangduePhodrang. Bhutan.

____ (2013). *Annual Report 2012-2013*. Department of Agriculture. Ministry of Agriculture and Forests. WangduePhodrang. Bhutan.

- Yeshey (2012). Economics of mechanizing rice cultivation at RNR RDC Bajo. *Journal of Renewable Natural Resources of Bhutan. Council for RNR Research of Bhutan.* Ministry of Agriculture and Forests, Thimphu Bhutan 8(1): 42-52.
- Subramanian, S (2013). Global Rice trade faces uncertainty in 2013. In *Rice Today January March 2013*. International Rice Research Institute, Los Banos, Philippines 12 (1) 38-39.

The Role of Deliberative Mini-Publics in the Quest for Gross National Happiness in Bhutan

Gerard W. Horgan*

Abstract

Political participation is recognized as a component of Bhutan's multidimensional development framework, 'Gross National Happiness' (GNH). In recent years, Bhutan has instituted a conventional system of liberal democratic, representative democracy. However, this system has supplanted an earlier, indigenous system of village-based participatory democracy. This paper builds on the premise that, to be true to the goal of good governance encapsulated in GNH, Bhutan needs to embrace a deeper level of political participation than that embodied by representative democracy. The deficits of the new representative system are identified via the utilization of Liphart's majoritarian versus consensual democratic framework. It is suggested that a form of 'deliberative polling' should be institutionalized as part of the parliamentary policy-making process, as a complement to the existing representative system.

Introduction

Collective happiness as a goal of government policy has deep historical roots in Bhutan.¹ It is only in the modern era, however, that this rather nebulous aspiration began to take a more concrete form. The fourth hereditary monarch of Bhutan, Jigme Singye Wangchuck, is credited with coining the term 'Gross National Happiness' (GNH) in the early 1970s.² By the late 1990s, the idea of GNH as a multidimensional development framework was becoming established; while

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² McDonald, 2010, p. 1.

what are now referred to as the four 'pillars' of GNH were still in flux, it was clear that 'good governance' would be one of these.³ As the GNH framework was further specified in the 2000s, 'good governance' was included as one of nine 'domains' of GNH to be measured via the GNH Index; one of the measures within that index is 'political participation'.⁴

One can construct a narrative that would characterize the political history of Bhutan since the 1950s as an inexorable movement toward greater citizen participation in decisionmaking. The founding of the National Assembly in 1953 gave representatives from all districts in Bhutan, the monastic establishment, and the bureaucracy a consultative role in government. The introduction of decentralization via the establishment of semi-representative Dzongkhag Yargve Tshogdue (DYT) (District Development Committees) in 1981, and the 1991 extension of decentralization via the Gewog Yargye Tshogchungs (GYT) (Block Development Committees). elected on a household basis, brought some decision-making on development issues closer to the general population.⁵ The first universal adult suffrage elections in Bhutan, for GYT executives or 'gups', took place in 2002, while the first parliamentary elections, on the same basis, were held in 2007-08.⁶ With the re-organization of the Development Committees into multi-functional regional local governments after 2009, and the election of municipal (Thromde) governments in 2011, Bhutan can be said to have developed representative government at the country-wide, regional, county, and municipal levels.⁷ Finally, given that the second

³ Thinley, 1998, p. 16. The other three pillars are now listed as: equitable social and economic development; environmental conservation; and cultural preservation and promotion.

⁴ Ura, Alkire and Zangmo, 2012, pp. 111-112, 121.

⁵ Rapten, 2009, p. 67.

⁶ Ura, 2004, p. 2. The upper chamber, or National Council, elections were held on 31 December, 2007, while the lower chamber, or National Assembly, elections occurred on 24 March, 2008.

⁷ DYTs became Dzongkhag Tshogdu (DT); GYTs became Gewog Tshogde (GT). For details regarding DTs, GTs, and Thromdes, see

parliamentary elections were held successfully in 2013, and produced a peaceful handover of power to the former principal opposition party, it appears that Bhutan has a consolidated representative democracy.⁸

There is an alternative interpretation of this narrative, however. This interpretation would characterize these developments as an evolution away from a previously existing, highly participatory, grassroots democratic system. In the early 1990s, Wangchuk documented a traditional form of participatory democracy that still operated at the village level:

Decisions affecting the community are made in the village meeting (*zomdu*), where at least one representative - male or female - from each family partici-pates. Because the average village size ranges from 20 to 200 households, the problem of handling the logistics of an unmanageably large village meeting is seldom encountered. Decisions are made once a consensus is reached, and all differing viewpoints are debated....The village *zomdu* embodies what Dahl terms "primary democracy" occurring at the village level.⁹

Wangchuk lamented the loss of local control embodied in the move to a conventional, representative democratic structure, calling for the *zomdu* tradition to be incorporated in the new democratic framework.¹⁰ Similarly, Dessallien praised Bhutan's "indigenous form of 'natural democracy", noting that "the liberal democratic system as practiced today does not appear particularly adept at ensuring public involvement in decision-making".¹¹ She concluded that, in the face of the institution of conventional representative structures,

Bhutan, 2010a; Bhutan, 2014.

⁸ Gallenkamp, 2013; Turner and Tshering, 2014a; Turner and Tshering, 2014b.

⁹ Wangchuk, 2004, p. 841.

¹⁰*Ibid.*, pp. 844-848.

¹¹ Dessallien, 2005, pp. 59, 69.

"[i]t may...be necessary to engineer greater political space for, and promote more vigorously the involvement of, citizens in discussion and decision-making."¹²

This paper takes up Dessallien's challenge. It is built on the premise that, to be true to the goal of good governance encapsulated in GNH, Bhutan needs to embrace a deeper level of political participation than that embodied by representative democracy. It seeks to analyze the new representative system, and 'engineer' a complementary system of citizen participation in the policy-making process.

The paper proceeds as follows. First, it argues that, to be effective, citizenship must entail practices that go beyond representative democracy. Second, it argues that Bhutan is at a 'critical juncture', during which the opportunity exists to construct an understanding of Bhutanese citizenship that includes greater participation. Next, it argues that greater participation should be seen as a complement to, not a replacement for, representative democracy. Fourth, the Bhutanese system as currently constructed is considered in the context of Liphart's majoritarian democracy versus consensual democracy framework, thus exploring its strengths and weaknesses. The results of this consideration are then used to determine what sort of participatory mechanisms would be appropriate to complement the currently existing Bhutanese system. After a brief survey of available mechanisms, the paper then selects one – deliberative polling - and proposes that it be institutionalized as part of Bhutan's legislative process.

'Effective' Citizenship

It has been argued that part of the reason for the successful consolidation of the neo-democracies that have emerged since the mid-1970s is that representative democracy itself is rather inconsequential.¹³ If successful consolidation of

¹² *Ibid*, p. 69.

¹³ Schmitter, 2009, pp. 19-21.

representative democracy is compatible with persistent, or indeed increasing, inequality among citizens along ruralurban, class, gender, or other lines, then the effectiveness of representative democracy itself must be questioned. A common characterization of this lack of effectiveness is as a 'democratic deficit'.

One way of thinking about the democratic deficit in developing countries is to consider it as a gap in "effective citizenship"; i.e., a "gap between formal legal rights in the civil and political arena, and the actual capability to meaningfully practice those rights".¹⁴ It appears that Bhutan has succeeded in establishing a link between representative democracy and the *status* of citizenship. However, Somers has argued that we should regard citizenship not as a status but as "a set of institutionally embedded social *practices*".¹⁵ It is because many have concluded that the institutionally embedded practices of representative democracy are inadequate for the construction of effective citizenship that they have sought other, or additional, methods for consequential democratic participation. Thus, as Heller notes:

These participatory efforts...have included a wide range of movements and initiatives to transform the nature of state institutions by making them more responsive and more open to direct citizen involvement. Participatory politics has been explicitly about *making citizens* and as such is integrally linked to ongoing struggles to deepen democracy.¹⁶

Indeed, Bothe has argued that the phase of citizen construction in Bhutan associated with the promulgation of the constitution that provided the framework for parliamentary representative democracy created local citizens as "spectators", rather than as active participants.¹⁷ Subsequently, citizens have been

¹⁴ Heller, 2012, pp. 645, 646.

¹⁵ Somers, 1993, p. 589. Emphasis added.

¹⁶ Heller, 2012, p. 648. Emphasis in original.

¹⁷ Bothe, 2012, p. 55. See also Bothe, 2011; Bothe, 2015.

encouraged strongly to participate as voters, as is conventional in representative democracies. Just as conventionally, however, participation rates in elections are declining.¹⁸ It would thus appear that additional work is necessary if the Bhutanese are to achieve the sort of effective, participatory citizenship which would accord with GNH principles.

Why Now?

Before we proceed further, we need to consider briefly why it is important that modifications or additions to the representative structure of Bhutan's democracy be undertaken soon. For this, we turn to the comparative theoretical framework of historical institutionalism.

Historical institutionalism stresses the long-term implications of institutional design choices. An essential element of historical institutionalism is the concept of 'critical junctures'. Capoccia and Kelemen explain their importance:

Manv causal arguments in the historical institutionalist literature postulate a dual model of institutional development characterized by relatively long periods of path-dependent institutional stability and reproduction that are punctuated occasionally by brief phases of institutional flux - referred to as critical junctures - during which more dramatic change is possible. The causal logic behind such arguments emphasizes the lasting impact of choices made during those critical junctures in history. These choices close off alternative options and lead to the establishment of institutions that generate selfreinforcing path-dependent processes.¹⁹

While the period of 'modernization' in Bhutan began in the early 1950s, it is clear that, regarding democracy and the meaning of citizenship, it is the period since 2001, when the

¹⁸ Turner and Tshering, 2014a, p. 418.

¹⁹ Capoccia and Kelemen, 2007, p. 341.

King announced that a new, democratic constitution would be developed, has been a 'critical juncture' in Bhutan's political history. With the promulgation of the constitution in 2008, and the subsequent political developments noted above, one would anticipate that the new representative institutions would now evolve in an incremental, 'path dependent' fashion.

It is not clear, however, that the critical juncture for the understanding of the meaning of citizenship in the democratic era has yet closed. Still, it is not theoretically possible for the juncture to remain open indefinitely. Thus, while there may still be an opportunity to construct a more participative understanding of citizenship in Bhutan, it is an opportunity that must soon be seized.

Representation

It is not the intention of this article to argue that the representative system constructed to date is itself misconceived. Rather, the position here is closely aligned with that advanced succinctly by Plotke:

[T]he opposite of representation is not participation. The opposite of representation is exclusion. And the opposite of participation is abstention. Rather than opposing participation to representation, we should try to improve representative practices and forms to make them more open, effective, and fair. Representation is not an unfortunate compromise between an ideal of direct democracy and messy modern realities. Representation is crucial in constituting democratic practices.²⁰

Thus is not that representative democracy is here rejected, but rather that the construction of a more participative representative democracy in Bhutan is both *possible* and *desirable*. That is, *possible* because there is now a plethora of more participatory models extent which can be adopted

²⁰ Plotke, 1997, p. 19.

and modified for local circumstances, and because, as argued above, Bhutan remains in a 'critical juncture' during which institutions and practices remain in flux. *Desirable* because Bhutan's over-riding goal of GNH, which includes within it aspirations for socio-economic equality and citizen participation in governance, would be more likely to be accomplished in a more participatory system. Indeed, models of more participatory representative democracy developed elsewhere often have the explicit aims of increasing both participation and social justice.²¹

What are the Shortcomings?

It would be convenient if all representative systems were sufficiently similar to allow us to apply a 'one size fits all' participatory solution for their shortcomings. Unfortunately, this is not the case. Perhaps the most accurate method for discovering the shortcomings of representative democracy in Bhutan would be to let the system run for some time – say, a decade or two – and then retrospectively identify the democratic deficits. However, as discussed above, critical junctures are not open-ended, so by the time this approach yielded definitive results, the opportunity for innovation offered by the current juncture would have passed. The effects of path dependency would make both institutional innovation and innovation regarding the meaning of Bhutanese citizenship more difficult.

Fortunately, between the 'one size fits all' approach and the retrospective approach lies a third way. We can use the insights provided by the comparative analysis of existing political systems to inform a reasonable analysis of where the deficits are likely to emerge, given the design characteristics of the Bhutanese system. We can then check that analysis against the limited data available from the operation of the Bhutanese system to date. To begin, we turn to Lijphart for our comparative framework.

²¹ See, for example, Wampler, 2012.

Briefly, Lijphart set out two ideal-type patterns of democracy: majoritarian and consensual.²² Lijphart illuminated these two patterns by comparing democracies according to ten different variables; while any particular country might lie anywhere along a continuum for each variable, in practice countries' positions tended to cluster, thus allowing them to be characterized as 'majoritarian' or 'consensual'.²³ Our interest in this paper is not to determine in a precise mathematical way where the Bhutanese system would fit in Lijphart's classification, although that would be an interesting exercise in itself, but rather to characterize it more generally so that we may make some rational conclusions regarding its likely deficits.

It is clear that the current Bhutanese system, as designed, adheres more closely to the 'majoritarian' than the 'consensual' pattern. For four of Lijphart's variables, it fits squarely in the majoritarian camp. First, it is constitutionally mandated as a two-party system.²⁴ While any number of parties may compete in the primary round of a general election, the purpose of this round is to identify the two parties that will compete in the general election. Thus, the lower house, the National Assembly, will only contain two parties, designated as the 'ruling party' and the 'opposition party'. Second, it thus follows that members of the National Assembly are elected via a majoritarian electoral system. Only representatives of the two parties identified in the primary round are allowed to compete, in single member constituencies, in the general

²² Lijphart, 1999.

²³ In summary, the poles of the ten variables are: single party majority cabinets versus multi-party cabinets; executive dominance of legislature versus executive-legislative balance; two-party versus multi-party system; majoritarian versus proportional electoral system; pluralist versus corporatist interest group system; unitary versus federal government; unicameralism versus balanced bicameralism; flexible versus rigid constitution; legislative versus judicial supremacy regarding constitutionality of legislation; central bank dependence on executive versus independence from executive. ²⁴ Bhutan, 2008. Article 15, ss.5-8.

election. Thus, one of the two contenders will gain a majority of the votes cast in each constituency.²⁵ Third, it again follows that governments will be composed of single-party majority cabinets, rather than coalitions. Fourth, Bhutan has a unitary, rather than federal, system of government.

For two further variables, Bhutan is on track to develop in a majoritarian direction, based on initial design and development to date. First, regarding executive dominance of the legislature, Liphart uses cabinet durability as his metric.²⁶ Given that only the period since 2008 is relevant, it is early to come to a definitive conclusion on this variable. However, it is the case that single-party majority cabinets of the type fostered by Bhutan's electoral rules generally exhibit the highest levels of executive dominance.²⁷ As both the cabinets formed in 2008 and 2013 have been stable, nothing in the experience in Bhutan since 2008 contradicts the conclusion that it will follow the majoritarian pattern in this regard. Second, Liphart contrasts the pluralist model of interest group organization, associated with majoritarianism, with the corporatist model, more often associated with consensualism.²⁸ An interest group system in Bhutan is only beginning to develop.²⁹ While it seems premature to come to firm conclusions as to its future evolution, developments to date are certainly in a pluralist, rather than a corporatist, direction

Bhutan best fits the consensual category for two variables. First, the parliament does exhibit balanced bicameralism, inasmuch as, by Liphart's definitions, the second chamber (the National Council) is both symmetrical and incongruent.³⁰

²⁸ Ibid, pp. 158-173.

²⁵ *Ibid.* Ch.2, s.3. Procedures for breaking ties are provided in Ch.19, ss.463-4.

²⁶ Lijphart, 2012, pp. 105-129.

²⁷ Ibid, p. 124.

²⁹ For a very brief survey, see Asian Development Bank, 2013.

³⁰ For an explanation of Liphart's terms in this regard see Liphart, 2012, pp. 193-194.

Second, the constitution is relatively rigid, requiring an affirmative vote of three-quarters of members in a joint sitting of the two houses to confirm an amendment proposed in a previous parliamentary session.³¹

For one variable, Bhutan seems to be on track for the consensual category. It is certainly the case that Bhutan has judicial supremacy regarding constitutionality of legislation.³² It is also the case that the Supreme Court has, in at least two high-profile instances, shown itself as independent of the executive.³³ However, to characterize judicial review in Bhutan as 'weak', 'medium-strength' or 'strong', according to Lijphart's categorization, would seem premature at this stage.³⁴

Finally, regarding central bank independence, it is not possible to make a determination at this point. First, the extant literature on Bhutan concerning this variable seems to place the country in an intermediate position.³⁵ Second, this literature does not appear to take account of recent changes to legislation governing the Royal Monetary Authority, changes which might affect its position.³⁶ As a result, it would seem inappropriate to characterize Bhutan's position on this variable at this time.

Overall, however, it seems clear that Bhutan adheres more closely to the majoritarian pattern. It clearly exhibits majoritarianism on four variables, and appears on track to manifest majoritarianism on two more. On balance, it seems fair to characterize the Bhutanese system as more majoritarian than consensual.

³¹ Bhutan, 2008. Article 35, s.2.

³² *Ibid.* Article 1, ss.9-11.

³³ Turner and Tshering, 2014a, pp. 419-420.

³⁴ Lijphart, 2012, pp. 214-218.

³⁵ Ashan and Skully, 2009, p. 20; Dincer and Eichengreen, 2014, p. 217.

³⁶ Bhutan, 2010b.

What are the consequences of this? As Fung has pointed out, "[t]he discipline of elections is thought to create two dynamics – representation and accountability – that ensure the integrity of the link between citizens' interests and policy outcomes."³⁷ Fung goes on to show how less than favourable conditions can undermine the ability of elections to ensure government responsiveness according to these two dynamics. For us, however, the question is in which area – representation or accountability – is the newly institutionalized system in Bhutan to prove most vulnerable.

As Powell has pointed out, the strength of the type of majoritarian system institutionalized in Bhutan – an electoral system which provides the opportunity for "an occasional all-or-nothing rejection of the incumbents"³⁸, combined with single-party control of the executive and the confidence chamber of parliament – is that it allows for retrospective accountability of office-holders.³⁹ As it is abundantly clear who is responsible for policy, the line of accountability is clear, and voters are able to either reward or punish office-holders via a majoritarian electoral system that, unlike the proportional systems characteristic of the consensual pattern, facilitates complete turn-overs of office holders. This is, of course, exactly what occurred in the second Bhutanese elections for the National Assembly in 2013.

If retrospective accountability is the strength of majoritarian systems, however, their weakness lies in representation; as Lijphart concludes, "the consensus democracies do clearly outperform the majoritarian democracies with regard to the quality of democracy and democratic representation".⁴⁰ The ability of representatives to affect policy outcomes in majoritarian, or 'Westminster' type legislatures has long been belittled.⁴¹ They were at least, however, acknowledged as sites

³⁷ Fung, 2006, p. 671.

³⁸ Powell, 2000, p. 50.

³⁹ *Ibid*, pp. 50-53.

⁴⁰ Lijphart, 2012, p. 295.

⁴¹ See, for example, Mezey, 1979; Polsby, 1975.

of legitimation, as government policy was deliberated upon. With the increasing concentration of power in the hands of senior executives, however, even their abilities as sites of democratic deliberation is being criticized.⁴²

Thus, while there has been a comprehensive criticism of late of the failings of representative democracy as a type, majoritarian systems with the characteristics of that institutionalized in Bhutan tend to be strongest on retrospective accountability, and weakest with regard to representation. Thus, while we may have concerns regarding accountability, we should set these aside in order to focus our efforts on the aspect of the system that is most prone to be found wanting in majoritarian systems. Therefore, if we are to propose complementary democratic processes intended to compensate for the most probable shortcomings of the Bhutanese system as designed, we should focus on measures calculated to improve representation.

Which Sort of Mechanisms?

Fung has suggested that the various mechanisms utilized to complement, or even to a degree supplant, representative democracy may be classified as to which aspects of democratic deficit they apply.⁴³ He lists three areas to which such mechanisms may be applied as a complement to the role of elected representatives: preference formation, representation, and accountability. A fourth set of approaches "seek to reduce the role of political representatives by making agencies and state action more directly responsive to citizens."⁴⁴ This latter approach, as Fung notes, is designed to deal with problems of state capacity, rather than representation.⁴⁵ For our purposes, then, we will set aside these latter mechanisms, as well as those dealing with accountability, and focus on those to do with preference formation and representation.

⁴² Setälä, 2011, p. 208; Warren, 2009, pp. 25-27.

⁴³ Fung, 2006, pp. 673-682.

⁴⁴ *Ibid*, p. 673.

⁴⁵ *Ibid*,, p. 682.

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The issues around preference formation are coherently explored by Fung; it is worth quoting him at length as an introduction to the topic:

On policy matters for which there are prominent, diverse, and developed perspectives in the public debate...citizens may have policy preferences that are clear and stable. On many other matters-where one or a few perspectives dominate, where misinformation abounds, those that are remote from the perceived interests, where having a sensible opinion requires substantial cognitive and informational investments, or issues that simply fail to capture the attention of many citizens—popular preferences may be unclear or unstable....On such matters, institutions that contribute to the development and stabilization of preferences by making them more clear, coherent, rational, and reasonable therefore deepen democracy and potentially make government more responsive to citizens' interests 46

It is certainly the case that the institutions of the larger public sphere – such as the media and civil society organizations (CSOs) – play a prominent role in informing and educating citizens on public issues. As we know, there has been much diversification in both media and CSOs in Bhutan in recent years.⁴⁷ Notwithstanding this, however, it is undoubtedly the case that, just as in the media- and CSO-rich environments of countries that have had much longer experience of representative democracy, there are many issues upon which many Bhutanese citizens have unclear or unstable preferences. Indeed, it is the case that citizens are more apt to have clear preferences in areas in which they perceive that they have real choices, but to have less well articulated preferences in areas that they perceive to be outside their influence. Prior to the recent establishment of elective

⁴⁶ *Ibid*, p. 673.

⁴⁷ Asian Development Bank, 2013; Avieson, 2015.

representative democracy, public policy choices above the village level were outside the influence of ordinary Bhutanese, so one would expect that citizens would have had unclear preferences on a wide range of topics.

While the recent era has undoubtedly been a time of rapid preference formation, it likely remains the case that many Bhutanese still have unclear and/or unstable preferences on a wide range of public policy questions. The democratic challenge, therefore, is to provide opportunities, beyond those provided by the media and CSOs, for citizens to educate themselves on policy issues in an environment that encourages a sense of collective effort to improve the quality of policy preferences. A number of mechanisms have been developed in recent years – often referred to collectively as deliberative mini-publics – specifically for these purposes. We shall consider these in more detail below.

The second aspect of democratic deficit we want to address is representation. There is a range of commonly used mechanisms to gauge the public temperament and communicate it to elected representatives that have significant flaws. Public opinion surveys, for instance, are large-scale and may feature sophisticated selection methods, but as they are not deliberative, do not assist in improving the quality of preferences. Focus groups, which feature the soliciting of uninformed opinions, are neither deliberative nor selected in a fashion designed to produce a representative sample of the population. Similarly, public hearings and noticeand-comment requirements, often features of legislative processes, are normally small-scale, structured so as to allow self-selected, well-organized groups on opposing sides of an issue to provide evidence and comment, and non-deliberative, inasmuch as they do not generally facilitate genuine exchange of views between the groups.⁴⁸

Indeed, the method of selection of a public participation

⁴⁸ Kemmis, 1990, pp. 52-53.

mechanism is directly related to its representativeness. While the openness of public hearings, for example, is attractive, the downside is obvious:

[T]hose who choose to participate are frequently quite unrepresentative of any larger public. Individuals who are wealthier and better educated tend to participate more than those who lack these advantages, as do those who have special interests or stronger views.⁴⁹

Some mechanisms attempt to compensate for this tendency by selectively recruiting among those groups that are less likely to engage in the process on a self-selection basis. However, "the best guarantee of descriptive representativeness" is to select participants randomly from among the general population.⁵⁰ Several of the deliberative mechanisms developed, based on mini-publics, have adopted random selection as the fundamental method of selecting participants, sometimes in combination with an aspect of self-selection, targeted recruitment, or stratification in the random selection.⁵¹ As we are particularly concerned with the representational deficit associated with the majoritarian system, it would seem sensible to prioritize representativeness in our choice of deliberative mechanism, and thus to select only from among those that utilize some form of random selection of participants.

Mechanisms

A number of mechanisms have been developed for the purpose of providing opportunities for citizens to improve the quality of their preferences via small-group deliberation. While it lies beyond the scope of this paper to describe the available mechanisms in detail, a summary of a few of the more common of these is provided in Table I.⁵²

⁴⁹ Fung, 2012, p. 615.

⁵⁰ Ibid.

 $^{^{\}rm 51}$ Chappell, 2012, pp. 141-160; Commission on Fair Access to Political Influence, 2013. Annex D

⁵² For more on these mechanisms and others see: Elstub, 2014, pp. 167-170; Fung, 2006, pp. 674-676. For regularly updated

I able I: Summa	IN - SUITE CUI		MITHI-FUDIIC M	echanisms	
	Citizen Jury	Planning Cell	Study Circle	Consensus Conference	Deliberative Poll®
Participants	12-26	25-600	3-300	10-20	100-500
Meetings	4-7 days	4-7 days	Once/week over 10-15 weeks	4-8 days	2-3 days
Selection Method	Random Selection	Random Selection	Targeted Recruitment	Random & Self Selection	Random Selection
Output	Collective Position Report	Survey Opinions & Collective Position Report	Collective Position Report	Collective Position Report	Survey Opinions
Distribution of Output	Sponsor & Mass Media	Sponsor & Mass Media	Sponsor & Mass Media	Parliament & Mass Media	Sponsor & Mass Media
Sources: (Elstub,	2014, p. 170; 1	http://www.participe	edia.net. Table la	ayout adapted fro	m that of

Deliberative Mini-Public Mechanisms ć (Ċ Table I. Sur

Elstub.)

As will be seen, each has its own characteristics, for example, regarding duration, the method of selection of participants, or the degree to which the outcomes are integrated in the policymaking process. Collectively, however, all these mechanisms have at their heart small-group discussions, generally with fewer than 15 members per group, some involving a facilitator to prompt the discussion and maintain its focus. The latter point raises the question of scale.

The fact that these mechanisms rely on small-group discussion does not necessarily mean that they are necessarily entirely small-scale in nature. In Sweden, for example, Study Circles have involved up to 750,000 participants in a single year, while in the U.S. another mechanism, the Twenty First Century Town Meeting, has convened up to 4,500 participants at a single gathering.⁵³ In practical terms, however, there are reasons why it is not generally held that large numbers of citizens need to be directly involved in these processes in order for them to have a beneficial effect.

First, the outcomes of these mechanisms may provide important cues for non-deliberating citizens.⁵⁴ As deliberative mini-publics are designed to be non-partisan, they can be used to articulate the relevant advantages and disadvantages of policy options in an unbiased fashion, thus providing information in which other citizens can have confidence. As noted in Table I, the involvement of the mass media in publicizing the results of such deliberative processes is critical. Second, participation in mini-public deliberations may increase both the political knowledge and deliberative capacity of the participants.⁵⁵ To the degree that such processes are routine, such that a significant minority of the population has improved skills, this may have a beneficial effect on the larger political culture.

information see http://www.participedia.net

⁵³ Larsson and Nordvall, 2010; Lukensmeyer and Brigham, 2005.

⁵⁴ Bächtiger, Setälä and Grönlund, 2014, pp. 240-241.

⁵⁵ Niemeyer, 2014, p. 194.

It is the case, however, that if mini-publics are to have a significant effect in the policy process, they must become a routine aspect of that process. It is only with "institutionalisation of their use and the development of forms of public communication between mini-publics and elected representatives and other policy-makers" that mini-publics will be able to fulfil their representative and deliberative roles in the policy process.⁵⁶ Otherwise, if the decision as to whether to organize a mini-public on an issue is made in a 'top-down' fashion, by public servants, political representatives, or other policy makers, the decision may be made on strategic grounds.⁵⁷ Alternatively, if mini-publics are only loosely connected to the policy-making process, their work may simply be sidelined if its results do not accord with the preferences of policy-makers. As Setälä concludes, the key to strengthening the influence of mini-publics is to embed them in the legislative decision-making process at a relatively early stage.58

How Should Deliberative Democracy be Integrated with Representative Democracy in Bhutan? A Modest Proposal

It is common practice in many democratic political systems – such as the UK, the Commonwealth countries, the United States, and the European Union – for the executive to produce a public consultation document prior to formulating specific legislative proposals. Such documents, often referred to as 'green papers', generally describe the policy issue with which a new piece of legislation would deal, and set out a range of possible policy responses. The purpose of the green paper process is to stimulate debate and launch a process of consultation *before* the executive commits itself to any particular policy direction. In the systems noted above, those most likely to respond to such consultations are stakeholders and CSOs.

⁵⁶ Bächtiger, Setälä and Grönlund, 2014, p. 241.

⁵⁷ Ibid, p. 236; Setälä, 2011, p. 204.

⁵⁸ Setälä, 2011, pp. 209, 211.

It is here suggested that such papers be made a routine part of the legislative process in Bhutan. A sufficiently detailed green paper would be produced for every issue upon which legislation is proposed by the executive department concerned. This document would be sent to a stand-alone office of parliament constituted specifically with the mandate to administer deliberative processes. This office would, then, instead of simply awaiting responses from a self-selecting group of stakeholders and CSOs, institute a deliberative process involving mini-publics, using the green paper as the basis for the discussions. The office would be particularly concerned to invite the media to publicize this process.

Once the deliberations had been held, the parliamentary office would collate the results and prepare a comprehensive report. This report would be provided not only to the executive department concerned, but also simultaneously to parliament itself, for the information of all members of parliament and most especially to the parliamentary committee tasked to shadow the executive department in question.

Which deliberative mechanism should be used? While each of the methods noted above has its strengths and weaknesses, it is here suggested that the 'deliberative poll' mechanism be chosen^{.59} There are several reasons for this. First, as noted by Mansbridge, this method is the "gold standard" in terms of deliberative mini-publics, including being the "strongest in representativeness".⁶⁰ As representation has been identified as the most significant weakness of the Bhutanese system as currently designed, selecting the mechanism that is strongest in this regard would seem appropriate. Second, in order for the proposed mechanism to be institutionalized as a routine part

⁵⁹ The originator of this mechanism, Professor James Fishkin, has registered both 'Deliberative Poll' and 'Deliberative Polling' as trademarks in order to supervise the quality of polling experiments. The suggested use of the mechanism here relates to the methods involved, rather than a recommendation of the specific, trademarked mechanism.

⁶⁰ Mansbridge, 2010, p. 55.

of the policy-making process, it must not make undue time demands on the participants. While there is a very significant work load in preparation for a deliberative poll, the portion of the process involving the citizens is comparatively brief, often only two days. As noted above in Table I, comparable mechanisms place much greater time demands on the citizen participants. Third, the deliberative poll mechanism has been successfully utilized in a wide variety of economic and cultural contexts.⁶¹ While some mechanisms depend on participants reading extensive background material, for example, deliberative polls have been run using video presentations to overcome literacy issues.

It may be argued that the fact that the output of a deliberative poll is a survey result, not a specific policy recommendation, is a disadvantage. However, part of the reason other mechanisms demand more time is that this is necessary in order to deliberate to the point of consensus on a policy recommendation. To a degree, then, there is a trade-off to be made between time demands on participants and the output of the process. It is here suggested that to make greater time demands on the participants, with all the logistical and thus financial repercussions that this would imply, would make routine use of the mechanism impractical. Therefore, it is argued that, for Bhutan, this trade-off is appropriate, given the gains to be made from establishing the deliberative mechanism as a normal stage of the policy-making process.

How extensive would the process be? Historical data to date indicate that approximately ten legislative proposals are being dealt with by the Bhutanese parliament each year.⁶² The demands of the random sampling process would mean

⁶¹ See the Center for Deliberative Democracy website at: http://cdd. stanford.edu/

⁶² During the five-year (2008-2013) term of the first parliament of Bhutan, a total of forty-three legislative proposals were dealt with: twenty-nine new Acts were passed; nine previous Acts were amended; and a further five proposed Bills were either withdrawn or lapsed. See Bhutan, 2013, pp. 74-77.

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that a total of 100-150 individuals would be involved in the deliberative phase of each deliberative poll. This would result in approximately 1000-1500 Bhutanese citizens being consulted each year, or 5000-7500 over the course of a fiveyear parliament.

The Election Commission of Bhutan maintains the Electoral Roll, which would represent the population from which the samples could be drawn. Regarding the meetings themselves, the government is in the process of establishing Community Centres across the country that incorporate videoconferencing facilities; more than forty of these have already been established. These could be used as sites for the small-group discussions, with the videoconference facilities used for the plenary sessions of the meetings. Obviously, this would diminish the logistical complexities and financial demands associated with transporting participants to a single site.

Introduction of any new process to an established system does, of course, require adjustments by all those concerned. Research in the field to date indicates that, beyond the institutionalization of participatory processes themselves, complementary adjustments are necessary in order for such processes to be consequential.⁶³ The professional development work already ongoing for civil servants and elected representatives would, for instance, need to foster an understanding of the contribution of participatory processes to democracy. Similarly, ongoing training for parliamentary committee members and staff would need to stress the role of such committees in holding the executive to account regarding its policy responsiveness to citizen input. Again, however, Bhutan is advantaged in this regard as, at this early stage in its representative democratic development, elected representatives and civil servants serving both the executive and parliament are still in the process of learning their roles. Compared to other, long-established political systems, the Bhutanese environment should be much more open to

⁶³ Woodford and Preston, 2013, pp. 357-360.

innovation.

Conclusion

As one of the world's newest representative democracies and the only country to as yet have embraced Gross National Happiness as a guide for state development, Bhutan is in a unique position. It has the opportunity at this critical juncture to fashion a political system that, while embracing the representative principles of other liberal democracies. seeks to establish a participatory democratic system more in keeping with GNH values. Embedding the systematic use of deliberative polls within the Bhutanese parliamentary processes could improve the understanding among elected representatives of the policy preferences of those they serve. Reflexively, it would undoubtedly help those citizens involved in these processes develop their policy preferences. More widely, it would help the Bhutanese population to deepen its understanding of what democratic citizenship entails. Ultimately, the success of such a scheme would demonstrate to other countries, democratic or not, what GNH values mean in the field of democratic government.

Bibliography

- Ashan, A. and Skully, M. (2009). 'Central Bank Independence and Governance in the South Asia', Paper presented at the Asian Business Research Conference, Dhaka, Bangladesh, 11-12 April.
- Asian Development Bank (2013). *Civil Society Briefs: Bhutan.* Manila: Asian Development Bank.
- Avieson, B. (2015). 'From Mani Stones to Twitter: Bhutan Creates a Unique Media Matrix for a 21st-Century Democracy', International Journal of Communication, 9: 2487-2506. Retrieved from <u>http://ijoc.org/index.php/</u> ijoc/article/view/3186/1435.
- Bächtiger, A., Setälä, M. and Grönlund, K. (2014). 'Towards a New Era of Deliberative Mini-Publics', in K. Grönlund, A.

Journal of Bhutan Studies, Vol.32, Summer 2015

Bächtiger and M. Setälä (eds), *Deliberative Mini-Publics: Involving Citizens in the Democratic Process*, Colchester, UK: ECPR Press, pp. 225-246.

Bhutan (2008). *The Constitution of the Kingdom of Bhutan*. Retrieved 30 July 2015 from <u>http://www.nationalcouncil.</u> <u>bt/business/pages/constitution of bhutan</u>.

(2010a). Local Government Act 2009. Retrieved 15 July 2015 from <u>http://www.nab.gov.bt/assets/</u> <u>uploads/docs/acts/2014/The_Local_Government_Act_</u> <u>of_Bhutan, 2009eng1stextraordinary.pdf.</u>

____ (2010b). The Royal Monetary Authority Act of Bhutan 2010. Retrieved 30 July 2015 from http:// www.nationalcouncil.bt/assets/uploads/docs/ acts/2014/Royal_Monetary_Authority_Act_of_ Bhutan, 2010eng5th.pdf.

_____ (2014). Local Government (Amendment) Act 2014. Retrieved July 15 2015 from <u>http://www.nab.gov.bt/</u> <u>assets/uploads/docs/acts/2015/local_Government_</u> <u>Act.pdf.</u>

- Bhutan, Parliament of Bhutan, National Council of Bhutan (2013). Proceedings and Resolutions (Translation) of the 10th Session of National Council of Bhutan. Retrieved 24 August 2015 from <u>http://www.nationalcouncil.bt/</u> <u>assets/uploads/docs/resolution/2014/10th_Session_</u> <u>Resolution_English.pdf</u>.
- Bothe, W. (2011). Forming Local Citizens in Bhutan: The Traditionalization of Participation - Empowerment, Domination or Subjugation? Ph.D. Thesis, Department of Political Science. Copenhagen: University of Copenhagen.

____ (2012). 'The Monarch's Gift: Critical Notes on the Constitutional Process in Bhutan', *European Bulletin of Himalayan Research*, 40(Spring-Summer): 27-58. (2015). 'In the Name of King, Country, and People: On the Westminster Model and Bhutan's Constitutional Transition', *Democratization*, Advanced access: 1-24. Retrieved from <u>http://dx.doi.org/10.1080/13510347.2</u> 014.959437.

- Capoccia, G. and Kelemen, R. D. (2007). 'The Study of Critical Junctures: Theory, Narrative, and Counterfactuals in Historical Institutionalism', *World Politics*, 59(3): 341-369.
- Chappell, Z. (2012). *Deliberative Democracy: a Critical Introduction*. Basingstoke: Palgrave Macmillan.
- Commission on Fair Access to Political Influence (2013). *Final Report of the Commission on Fair Access to Political Influence: Annex Document.* Biggar, Scotland: Reid Foundation. Retrieved 21 August 2015 from <u>www.</u> <u>reidfoundation.org.</u>
- Dessallien, R. L. (2005). Democracy, Good Governance and Happiness: Some Views from the Kingdom of Bhutan. Thimphu: Centre for Bhutan Studies. Retrieved from <u>http://www.bhutanstudies.org.</u> <u>bt/publicationFiles/OccasionalPublications/</u> <u>DemocracyGoodGovernanaceAndHappiness.pdf</u>.
- Dincer, N. and Eichengreen, B. (2014). 'Central Bank Transparency and Independence: Updates and New Measures', *International Journal of Central Banking*, 10(1): 189-253.
- Elstub, S. (2014). 'Mini-Publics: Issues and Cases', in S. Elstub and P. McLaverty (eds), *Deliberative Democracy: Issues and Cases*, Edinburgh: Edinburgh University Press, pp. 166-188.
- Fung, A. (2012). 'Continuous Institutional Innovation and the Pragmatic Conception of Democracy', *Polity*, 44(4): 609-624.

Journal of Bhutan Studies, Vol.32, Summer 2015

(2006). 'Democratizing the Policy Process', in M. Moran, M. Rein and R. E. Goodin (eds), *The Oxford Handbook of Public Policy*, Oxford & New York: Oxford University Press, pp. 669-685.

- Gallenkamp, M. (2013). Triumph of Democracy: Bhutan Elections 2013. IPCS Special Report No. 144. New Delhi: Institute of Peace and Conflict Studies. Retrieved 16 July 2015 from <u>http://www.ipcs.org/pdf file/issue/</u> <u>SR144-Marian-BhutanElections.pdf.</u>
- Givel, M. S. (2015). 'Gross National Happiness in Bhutan: Political Institutions and Implementation', *Asian Affairs*, 46(1): 102-117.
- Heller, P. (2012). 'Democracy, Participatory Politics and Development: Some Comparative Lessons from Brazil, India and South Africa', *Polity*, 44(4): 643-665.
- Kemmis, D. (1990). *Community and the Politics of Place*. Norman, Oklahoma: University of Oklahoma Press.
- Larsson, S. and Nordvall, H. (2010). Study Circles in Sweden: An Overview with a Bibliography of International Literature. Department of Behavioural Sciences and Learning Studies in Adult, Popular and Higher Education no 5. Linköping, Sweden: Linköping University Electronic Press. Retrieved 7 August 2015 from <u>http://liu.divaportal.org/smash/get/diva2:328351/FULLTEXT01</u>.
- Lijphart, A. (1999). Patterns of Democracy: Government Forms and Performance in Thirty-six Countries. New Haven, Conn., & London: Yale University Press.

_____ (2012). Patterns of Democracy: Government Forms and Performance in Thirty-six Countries. 2nd ed. New Haven: Yale University Press.

Lukensmeyer, C. J. and Brigham, S. (2005). Taking Democracy to Scale: Large Scale Interventions - for Citizens', Journal of Applied Behavioral Science, 41(1): 47-60.

- Mansbridge, J. (2010). 'Deliberative Polling as the Gold Standard', *Good Society*, 19(1): 55-62.
- McDonald, R. (2010). Taking Happiness Seriously: Eleven Dialogues on Gross National Happiness. Thimphu: Centre for Bhutan Studies. Retrieved from <u>http://</u> <u>archiv.ub.uni-heidelberg.de/savifadok/2965/1/</u> <u>ElevenDialoguesonGrossNationalHappines.pdf</u>.
- Mezey, M. L. (1979). *Comparative Legislatures*. Durham, N.C., USA: Duke University Press.
- Niemeyer, S. (2014). 'Scaling Up Deliberation to Mass Publics: Harnessing Mini-Publics in a Deliberative System', in K. Grönlund, A. Bächtiger and M. Setälä (eds), *Deliberative Mini-Publics: Involving Citizens in the Democratic Process*, Colchester, UK: ECPR Press, pp. 177-202.
- Plotke, D. (1997). 'Representation is Democracy', *Constellations*, 4(1): 19-34.
- Polsby, N. W. (1975). 'Legislatures', in F. I. Greenstein and N. W. Polsby (eds), *Handbook of Political Science*, Menlo Park, Calif., USA: Addison-Wesley, pp. 257-319.
- Powell, J., G. Bingham (2000). Elections as Instruments of Democracy: Majoritarian and Proportional Visions. New Haven: Yale University Press.
- Rapten, P. (2009). Good Governance and Gross National Happiness. Thimphu: Centre for Bhutan Studies & GNH Research. Retrieved 26 June 2015 from <u>http://</u> www.grossnationalhappiness.com/9-domains/goodgovernance-and-gross-national-happiness/.
- Schmitter, P. C. (2009). 'Defects and Deficits in the Quality of Neo-Democracy', in G. Bland and C. J. Arnson

Journal of Bhutan Studies, Vol.32, Summer 2015

(eds), Democratic Deficits: Addressing Challenges to Sustainability and Consolidation Around the World, Washington, D.C.: Woodrow Wilson International Center for Scholars, pp. 19-35. Retrieved from <u>http://</u> www.wilsoncenter.org/sites/default/files/Democratic_ Deficits2.pdf.

- Setälä, M. (2011). 'The Role of Deliberative Mini-Publics in Representative Democracy: Lessons from the Experience of Referendums', *Representation*, 47(2): 201-213.
- Somers, M. R. (1993). 'Citizenship and the Place of the Public Sphere: Law, Community, and Political Culture in the Transition to Democracy', *American Sociological Review*, 58(5): 587-620.
- Thinley, J. Y. (1998). 'Values and Development: 'Gross National Happiness'', Speech given at the Millennium Meeting for Asia and the Pacific Conference, Seoul, South Korea, 30 Oct.- 1 Nov.
- Turner, M. and Tshering, J. (2014a). 'Is Democracy Being Consolidated in Bhutan?', Asian Politics and Policy, 6(3): 413-431.

_____ (2014b). 'Second Elections and Democratic Consolidation: the Experience of Bhutan', Asian Journal of Political Science, 22(3): 315-334.

- Ura, K. (2004). The First Universal Suffrage Election, at County (Gewog) Level, in Bhutan. Discussion Paper No.
 4. Chiba, Japan: Institute of Developing Economies. Retrieved 15 July 2015 from https://ir.ide.go.jp/ dspace/bitstream/2344/200/3/ARRIDE_Discussion_ No.4_Ura.pdf.
- Ura, K., Alkire, S. and Zangmo, T. (2012). 'Case Study: Bhutan
 Gross National Happiness and the GNH Index', in J.
 Helliwell, R. Layard and J. Sachs (eds), World Happiness Report, New York: Earth Institute, Columbia University,
pp. 108-158.

- Wampler, B. (2012). 'Participation, Representation, and Social Justice: Using Participatory Governance to Transform Representative Democracy', *Polity*, 44(4): 666-682.
- Wangchuk, T. (2004). 'The Middle Path to Democracy in the Kingdom of Bhutan', Asian Survey, 44(6): 836-855.
- Warren, M. E. (2009). 'Citizen Participation and Democratic Deficits: Considerations from the Perspective of Democratic Theory', in J. DeBardeleben and J. H. Pammett (eds), Activating the Citizen: Dilemmas of Participation in Europe and Canada, London: Palgrave Macmillan, pp. 17-40.
- Woodford, M. R. and Preston, S. (2013). 'Strengthening Citizen Participation in Public Policy-Making: A Canadian Perspective', *Parliamentary Affairs*, 66(2): 345-363.

Use of Social Media and Digital Technology from the Perspective of Citizen Engagement and Democratic Participation in the Works of Centre for Bhutan Studies & GNH Studies: A Positioning Paper

Dendup Chophel*

Background

Promotion of socio-economic and political dialogue, and engagement of citizens in the process of governance are essential features of a democracy. Public think tank organizations have a key role to play in this regard and thus, as the only state research organization, the Centre for Bhutan Studies & GNH Research (CBS) should be at the forefront of innovations in engaging with the public through policy dialogue by exploring various communication forums like social media. According to the Act for the Centre for Bhutan Studies (2001) by which it was established, the CBS is an autonomous government organization charged with conducting multi-disciplinary research into the history. culture, economy and policy of the country among others. It is mandated with promoting the culture of scholarship and public education through dissemination of timely and quality scholarly research findings. It is also aimed at influencing public policy by providing state institutions with informed and researched inputs. For these purposes, the CBS not only conducts independent research works, the results of which are published as scholarly books, but also organizes national and international conferences, public talks, promote collaboration with global research institutions and represents

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the country in various scholarly international forums to present the country's policy positioning. For example, in just the area of media and governance, the CBS has organized various conferences like the major international conference on "Media and Public Culture in Bhutan" (June 2006) and "Deepening and Sustaining Democracy in Asia" (October 2009).

Definition and Rationale for Adopting Social Media

As a public institution in a privileged position to not only promote public awareness on democracy, but also influence state policy as the country's foremost academic and lobbying agency, the Centre for Bhutan Studies must explore multiple channels of communication for its institutional positioning. As the driver of not only social and political change, but also of institutional innovation, the CBS must adopt communication strategies as it becomes "essential as organizations evolve from rigid structures to adaptive, internally and externally connected and even predictive business models" (Linke and Zerfass 2013, p. 272). According to researchers, spending on technologies has increased over recent years and will reach 4.6 billion US\$ globally by 2013 (Young et al. 2008). In 2009, 43 percent of the fastest growing private companies in the USA (Inc 500) judged social media to be "very important" for their business, while 91 percent used at least one social media tool, most commonly social networking platforms (Barnes and Mattson 2009, as cited in Linke and Zerfass 2013, p. 271). But proliferation of social media usage is not limited to just big corporations. In fact, organizations from government departments to small businesses are increasingly adopting social media for strategic communications and public relations. According to Macnamara and Zerfass (2012), this is seen by many as a positive development because the openness of the social media environment "potentially democratizes voice and affords participation, dialogue, and communitybuilding" (p. 287). Their study found out that social media are being widely cited as enabling of, if not transformative for, democratic societies and cite the example of the 2008 U.S. presidential election which showed that social media are

increasingly used to engage youth and marginalized groups.

Before further exploring why the CBS must adopt social media, it would be opportune to understand what social media and information technology is, and how it affects democracy and civic engagement. The Department of Information and Media ([DIM] 2015) defines social media as "Internet-based tools for sharing and discussing information" and differentiates it from traditional media, such as newspaper, TV and radio, by stating that unlike the latter, social media is not a broadcast medium. Social media is a Web 2.0 platform for collaboration and co-creation. Social media has also become a tool for good governance. Governments around the world are using social media to reach out to their citizens to get feedback on service delivery, seek inputs into policy making, and create community based programmes. Social media enables policy processes and issues to be debated by the public that has primarily focussed on social dynamics (Bjuremalm, Gibaja and Molleda 2014).

On occasion of the launch of the social media guidance for civil servants in UK, the Minister for the Cabinet Office Francis Maude noted (as cited in Coleman 2012) that "when civil servants, policy makers and service delivery units alike, open themselves to dialogue with the public, they can glean a much better understanding of the real needs and concerns of citizens." Social media is already being used in communicating the policies of the elected democratic government of Bhutan with smart phones and 3G networks reaching out to even remote areas. For example, the Prime Minister of Bhutan has over 46,000 followers in Facebook, and nearly 27,000 followers in Twitter – not an insignificant number in a country with a population of just over seven hundred thousand (UNDP 2015).

But while the argument for adopting social media in CBS's functioning is undeniable, care must be taken that possible pitfalls must be avoided. As was the case with UK's adoption of the of social media, their will be technical barriers in use of

the new technologies available at both the user and creator's end. Threats and vulnerabilities of indiscriminate usage of social media includes introduction of viruses and malware to the organizational network, exposure to customers and the enterprise through a fraudulent or hijacked corporate presence, unclear or undefined content rights to information posted to social media sites, among others (Linke and Zerfass 2013, p. 273). But as an organization that seeks to set the standard for scholarship and civic engagement through enlightened public debate, the CBS must realize that the greatest threat to use of social media would not be technical, but in the appropriation of the platform by the overwhelming threat of the lowest common denominator. The UNDP (2015) which is supporting use of social media as a tool of good governance in Bhutan acknowledges that high media illiteracy among the Bhutanese means that some elements of the social media users can hijack constructive public debate and bring in vicious and partisan agenda into public discourse, thus misleading the general public. To counter this, through research data and well-informed opinions, the CBS must foster civic responsibility and engender a knowledge-based society using social media forums. In this regard, a quick analysis of social media as a transformative agency as propounded by Kent (2013) will be useful. He explores how technology and our recent access to, and abundance of information, are affecting democracy, and the role of public relations professionals in a post mass media society. Kent warns against pandering to the lowest common denominator in the social media platforms. According to him, communication professionals (like CBS researchers are on behalf of the elected government) need to stop seeing new technology as simply a sales tool and consider how it can be used in more robust activities: relationship building, problem solving, crowd sourcing, design improvement, etc. He argues that "going back thousands of years to the ancient Greeks, dialectic and dialogue were considered important tools of democracy" (p. 341). Thus, according to him, scholars must not pander to the lowest common denominator, but uplift the standard of discourse in the public forum by making scholarship more attractive and safeguard democracy against demagoguery and irrational impulses. Promoting a knowledge society must involve a dialogue between creators and users of knowledge, but that dialogue should represent a "relational give and take that occurs between two people, or in small groups, that observe strict rules of decorum to maintain fairness, trust, and the opportunity for all involved to express their opinion" p. 341). Kent introduces us to the principles of "Long Now" among which are: serving the long view, fostering responsibility, rewarding patience, minding mythnic depth and living up to heroic standards, allaying with competition, and taking no sides. Use of social media to produce public engagement must focus on these broad principles and CBS must not stoop to the level of corporate tweets.

Case Studies of Social Media Usage

Two case studies will be briefly discussed here as CBS adopts social media for its official communication purpose and they will try to answer how beneficial or otherwise social media is, and how should organizations adopt it. The first case of a study was done by Linke and Zerfass (2013) which attempted to depict the status quo of strategic social media communications in German corporations and political and non-governmental organizations with the underlying research question, "how is social media communications strategically applied in German organizations?" (p.276). In order to answer the research questions, the concept of "Social Media Governance" was used as an umbrella term. The focal areas of this research were therefore: strategies for the launch of social media communications; skills and responsibilities within the organization; tools and applications in corporate communications; the relevance, opportunities and risks of communications in the social web; and the existing regulatory frameworks for interactive communications. An online survey was conducted across Germany, in June 2010. The response was 1,007 fully completed questionnaires and consisted of communications professionals in joint-stock companies (17.8 percent) and private companies (44.7 percent), public sector organizations and associations (23 percent), as well as nonprofit-organizations (14.5 percent). The results indicate that although many organizations claim to have strategies for social media communications, nine out of ten had no explicit regulatory frameworks. Strategic pillars, such as managerial commitment and a participative corporate culture, were reported by one third of the organizations. This research indicates that public relations (PR) practices should focus on developing basic structures for social media communications and should not be limited to communications activities. Communication departments were most commonly in the lead with regard to using social media, followed by the advertising/marketing communications, sales and human resources departments. The most frequently applied tools were video sharing and micro blogging (Twitter), and the most popular communities were Facebook and Xing.

The second case relates to how an anonymous website, Bhutanomics.com, changed the nature of public discourse in Bhutan, and how it complemented and replaced the lackadaisical conventional media because the latter was struggling to sustain itself as viable business models. Kent (2013) argues that for more than a century in the United States, "citizens obtained the information that was needed for the maintenance of democracy, the pursuit of commerce, the protection of the nation, our cultural beliefs, and our personal values from the mass media" (p. 337). This was the case in Bhutan too. In the lead up to Bhutan's democratization in 2008 when multiparty elections were held for the first general elections in the country, there were numerous newspapers and community radio services. These were propped up by increased advertising from the government and other subsidies that the media industry got. But by 2013, at the end of the first government's tenure, these media houses closed down as suddenly as they appeared, thus failing to live up to the standards of a watchdog. However, through its undercover network of social media journalists and activists, bhutanomics.com exposed a number of high profile corruption cases by way of critical political satires and anonymous investigative journalism that received unprecedented prominence in the public through word-ofthe-mouth communication in the highly oral society that Bhutan is. The first elected government lost two cabinet rank members to such cases, and thus, social media buoyed by the support of conventional media could effect changes that conventional media alone with its many limitations could not. The rise of bhutanomics.com, which was picked up even by the conventional media and law enforcing agencies of the government, not only helped to keep the democratic government honest, but it also made them more mindful of being accountable to the people with whom they have tried to communicate using the same social media forums.

Social Media Strategy of the Centre for Bhutan Studies: Fostering Meaningful Democratic Dialogue so that Public Policy becomes Responsive towards the Real Needs of the Citizens

CBS is a government budgetary office that is staffed by civil servants. Therefore, instituting a social media strategy, in view of the above evidence for the need of social media, must take into account relevant government policies in this matter. The Royal Government of Bhutan (RGoB) has, with the support of UNDP Country office, already come up with its draft social media policy for civil servants (DIM 2015). Thus, the Centre's social media policy must be formulated within the RGoB guidelines, while being mindful that the Centre's function as a research organization makes it different from routine civil service works. The Centre, as its motto suggests, works "under the patronage of His Majesty the King" and therefore in formulating its social media policy, it must remember His Majesty the Fourth King's message which he delivered when mass Internet was first introduced in the country on June 2, 1999:

I would like to remind our population that the Internet provides a whole range of possibilities which can be both beneficial as well as negative for the individual and the society. I trust that you will exercise your good sense and judgement in using the Internet. In line with the RGoB policy, the CBS social media policy should be the following:

1. Goals and objectives: The goal and objectives, as discussed above and in line with the Centre's own mandate, should be to create a knowledge based society through timely, effective and rigorous public debate by disseminating and making researched data and informed opinion available to the public that is aimed at heightening their awareness on the issues of state policy on the one hand and on the other, to make the government amendable to enlightened public interests as expressed in their engagement through social media platforms regulated with wisdom and in good faith.

2. Target audience(s): The use of social media should use the public as both the source of information and target of the processed information that the Centre generates. The aim of the Centre's social media usage must also be to inform public policy decision of the government. It should also include communicating and collaborating with both the national and international scholarly communities, besides working with other interest groups in the society.

3. Risks: There are various risks associated with the use of social media. Technical limitations include the unskilled CBS staffs who will need training in the use of social media tools, the risk of compromising sensitive data system of the Centre through hacking or data corruption, etc. Management risks include the unavoidable leakage of office time and resources through unscrupulous and injudicious usage and addiction of staffs to social networking sites in name of communication. But one of the real risks as users of social media for the Centre is the exposure of communication officers to scrutiny from disgruntled enforcement agencies which are affected by the Centre's critical works. For example, Section 3.2.18 of the Royal Civil Service Commission of Bhutan Act

states that "[A] civil servant shall refrain from making any statement of fact or opinion in the media or in any document which may have adverse effects against policies or actions of the Royal Government." Social media content can be very critical and once in public domain, the Centre will have little control over the course of the ensuing public discourse. Therefore, highly critical public debate may lead to staffs being opened up to scrutiny in line with a narrow interpretation of the civil service act. One final risk is that because social media is inhabited by enlightened and frivolous people in equal measures, the high standard public debate that CBS wants to create may not be always possible.

4. Resources required: Apart from upgrading its current website which needs to incorporate features for more two-way communications, the Centre can use any of the existing commercial/third party platforms, or create its own social media platforms. In both cases, the Centre should consider the scalability of the system and make sure that its choice of platform has the ability to meet growing demand and spikes in demand.

5. Information quality standards and content creation: The Centre should ensure the quality, objectivity, utility, and integrity of information and services provided to the public.

6. Responsiveness: The Centre should be responsive to the feedback of the public while at the same time, retain some control over the course and quality of the nature of public engagement.

7. Measure for success: The Centre should define objective and verifiable measurements of success. One of the common approaches in this regard is tracking user traffic through features like 'hits,' 'likes,' 'shares' and 'comments.'

8. Governance structure/mechanism: In line with the RGoB policy, the Centre should appoint a senior official to serve as Social Media Lead who is supported by an appropriate unit or individuals (e.g. ICT Officer and/or IMO) in the organization.

Conclusion

As an agent of positive and transformational change, the CBS must not be afraid of assuming a high moral ground, and setting the standard and defining the nature of public discourse on governance and democratization through mediums to which the public have access and are keen participants of. Thus, the Centre must adopt a social media strategy, which will act as a platform for highly informed, constructive and meaningful dialogues with all stakeholders in the nascent Bhutanese democracy. This will not only be in line with the Centre's own mandate, but also help bridge the gap between the government and the people. CBS can thus act as an enlightened medium which enable meaningful dialogue.

References

- Bhutan Civil Service Rules and Regulations (BCSR), 2012 (Bt). Retrieved from http://www1.rcsc.gov.bt/BCSR2012.pdf
- Bjuremalm, H., Gibaja, A. F. and Molleda, J. V. (2014). Democratic Accountability in Service Delivery: A practical guide to identify improvements through assessment. Stockholm, Sweden: International Institute for Democracy and Electoral Assistance.
- Coleman, E.(2012, May 17). Cabinet Office launches social media guidance for civil servants [Web log post]. Retrieved from https://gds.blog.gov.uk/2012/05/17/ cabinet-office-launches-social-media-guidance-for-civilservants/

Department of Information and Media (2015). Social Media

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Policy of the Royal Government of Bhutan. Thimphu, Bhutan.

- Gatehouse, J. (2014, May 15). America dumbs down [Web log post]. Retrieved from http://www.macleans.ca/politics/ america-dumbs-down/
- Kent, M. L (2013). Using social media dialogically: Public relations role in reviving democracy. *Public Relations Review*, 39, 337–345.
- Lamzang, T. (2014, August 22). JAB study finds poor state of media in Bhutan. *The Bhutanese*. Retrieved from http:// www.thebhutanese.bt/jab-study-finds-poor-state-ofmedia-in-bhutan/
- Linke, A. and Zerfass, A. (2013). Social media governance: regulatory frameworks for successful online communications. *Journal of Communication Management*, 17(3), 270 – 286.
- Macnamara, J. and Zerfass, A. (2012). Social Media Communication in Organizations: The Challenges of Balancing Openness, Strategy, and Management. *International Journal of Strategic Communication*, 6(4), 287-308.
- United Nations Development Programme (2015, January 14). Bhutan forms its first social media policy [Web log post]. Retrieved from http://www.undp.org/content/bhutan/ en/home/presscenter/articles/2015/01/14/bhutanforms-its-first-social-media-policy.html