

Annual Gas Production and Consumption, 2009-2010

1.0 Summary:

Gas production in this part of the world started 50 years ago. Both Sylhet and Chattak gas fields started gas production in 1960-61 fiscal year. Pakistan Petroleum Ltd (PPL), a subsidiary of former Burmah Oil (BOC) was the operator. About seven years later in 1967-68 both Titas and Habiganj gas fields were open for production. Pakistan Shell Oil Co. (PSOC) was the operator for these two gas fields. After independence of Bangladesh gas demand remained low for several years. Gas demand started to increase slowly from 1984-85. To meet increasing gas demand between 1982-83 and 1985-86 Kailas Tila, Bakhrabad, Kamta and Feni Gas fields brought into production. Later two gas fields are small and within years both were shut down. In order to increase production development wells were drilled and production gradually increased (Figure 1). Simultaneously exploration activities continued to discover new gas fields.

Annual gas production and consumption report is based on data received from production companies and MIS Report of Petrobangla as well as "Gas & Condensate Production and Distribution Report", also prepared by Petrobangla.

In the reported year 17 gas fields of the country produced 703.7 Bscf gas. Average daily production rate was 1927.9 MMcfd. Out of 17 gas fields, one gas field (Feni) was shut down in May 2010. However shutting down of this field had very little effect on total production as average flow rate of this field was too little (1.69 MMcfd).

It may be worth to mention here that according to Wood Mackenzie Report (2006), projected gas demand in 2009-10 was 1983 MMcfd under high demand scenario and 1896 MMcfd under most likely scenario.

In 2008-09 fiscal year 656.6 Bscf gas was produced and average daily production rate was 1799 MMcfd. In 2009-10 gas production registered an increase of 49.7 Bscf or 7.63 percent over last year's production. During the previous year rate of increment of production was 54.62 Bscf or 7.6 percent. During the year maximum daily production rate was recorded at 2036.1 MMcfd and the minimum production rate was 1264.8 MMcfd respectively.

In the reported year International Oil Companies (IOC) produced 374.1 Bscf (1024.9 MMcfd) and national companies contributed 329.7 Bscf (903.4 MMcfd) gas. Out of 17 producing gas fields, average production rate of only four gas fields, Bibiyana, Titas, Habiganj and Jalalabad exceeded 150 MMcfd. Production of these four gas fields account for nearly three quarter of total production. Bibiyana gas field top the list with an average production rate of 659.6 MMcfd. Titas occupied second position with an average flow rate of 404 MMcfd.

During the year 4.23 MMbbl condensate was recovered. In addition to condensate, 1.58 MMbbl refined product was recovered in Kailas Tila Gas Field.

Field wise daily gas production in MMcfd is graphically presented in Figure 2, 2a and 2b. Figure 1 is a stack bar showing field-wise production in MMcfd. Figure 2a shows daily production rate of individual gas fields in MMcfd. It can be observed that daily gas production rate of four gas fields i.e. Bibiyana, Titas, Habiganj and Jalalabad was 1459 MMcfd (532.8 Bscf). These four gas fields accounted for 76 percent of total gas production. In Figure 2b gas fields producing less than 100 MMcfd is highlighted. Production rate of only 3 gas fields was within 50 to 100 MMcfd. Figure 3 shows gas production in MMcfd by national and international companies. Top line represents total production. Effect of Eid Holidays on gas production is quite prominent in Figures 1, 2A, and 3. During two Eid Holidays gas production went below 1300 MMcfd.

Production companies can consider utilizing this period for much needed reservoir pressure survey.

Small negative peaks can be observed throughout the year which reflects low gas demand during weekend holidays (Figure 1, 2a and 3).

Figure 4 shows company wise share in annual gas production in MMcfd and Bscf. This figure highlighted company wise annual production where Chevron top the list with annual production of 321 Bscf (881 MMcfd). BGFCL occupied second position with annual production of 258.3 Bscf gas and average daily production rate was 707.7 MMcfd.

Field wise annual gas production in MMcfd and Bscf is shown in Figure 5. In Figure 6 gas fields are arranged according to daily condensate production rate. Figure 7 show field wise annual condensate production in bbl.

Table below shows company wise annual gas production in Bscf for last two fiscal years.

FY	SGFL	BGFCL	BAPEX	Chevron	Cairn	Tullow	NIKO	Total
2008-09	58.1	257.9	14.2	277.8	17.2	30.6	0.99	657
2009-10	56.6	259.2	13.2	321.5	13.5	38.5	0.62	704

During the year total liquid production including condensate was 3.34 MMbbl. The figure was 2.74 MMbbl in the past fiscal year. Out of 3.34 MMbbl, IOC operated gas fields produced 1.86 MMbbl. Gas fields operated by national companies produced 1.48 MMbbl liquid. Field wise maximum liquid production was recorded from Bibiyana gas field which produced 1.28 MMbbl. Jalalabad gas field was the second largest liquid producer and this

field produced 1.48 MMbbl. Kailas Tila gas field produced 0.24 MMbbl condensate during the year. Apart from condensate, Kailas Tila field also produced 4.07 MMbbl refined product, i.e. MS, HSD, NGL and kerosene. By processing NGL and Condensate, 27 ton LPG, 196,858 bbl MS and 34,504 bbl HSD was produced in Kailas Tila Gas field. Table below shows quantity of liquid produced during 2009-10 and 2008-09.

Liquid Production in bbl		
	2009-10	2008-09
MS	301,652	97,509
HSD	318,038	201,067
NGL	151,094	147,660
Condensate	24,873,731	2,295,168
Kerosene	80,923	55
Total liquid	3,339,024	2,741,459

Data Source: MIS Report June 2010, June 2009, Petrobangla

From the beginning of the fiscal year 17 gas fields were producing. On 1st May Feni gas field was shut down. However this had very little impact on total production as this gas field was producing at an average rate of 2.03 MMcfd.

Gas production, sale and consumption in Bscf for the current year and last year are summarized below.

	Production	Own Use	Gas Purchase by Distribution Cos	Gas sold to Consumers
2009-10	703.4	4.1	699.3	710.4
2008-09	656.6	4.2	652.4	647.7

Figures from MIS Report, June 2010 and 2009.

2.0 Production

2.1 National Companies:

Three national companies i.e. Bangladesh Gas Fields Co. Ltd (BGFCL), Sylhet Gas Fields (SGFL) and Bangladesh Petroleum Exploration & Production Co. Ltd (BAPEX) produced 329.7 Bscf gas in 2009-10 fiscal year. National companies share in annual production was 46.84 percent. Average production rate was 903 MMcfd. Maximum daily production rate was 946.78 MMcfd and the minimum rate was 691.44 MMcfd.

Figure 8 shows company wise gas production in MMcfd by BGFCL, SGFL and BAPEX. Production volume of the state own enterprises is dominated by BGFCL. During the year national companies produced 329.7 Bscf gas and average daily production rate was 903.2 MMcfd. Maximum daily production was recorded at 1023.77 MMcfd and it was only for a day. For remaining 364 days production rate fluctuated within 914.84 to 689.82 MMcfd. Effect of Eid holidays is quite prominent in Figure 8. Daily production in Bscf/MMcfd of three national companies can be seen in Figure 9. Field-wise annual condensate production (0.58 MMbbl) is shown in figure 10.

In following paragraphs production of national companies is briefly described.

2.1.1. Bangladesh Gas Fields Limited (BGFCL)

During pre independence days BGFCL was an international oil and gas company, known as Pakistan Shell Oil Co. (PSOC). After independence of Bangladesh Shell continued production operation for a brief period. The company was purchased by the Government of Bangladesh in 1975. After taking over, the company was renamed as Bangladesh Gas Fields Co. Ltd (BGFCL).

BGFCL is the largest gas producer among state own companies. The company operates five gas fields i.e. Titas, Habiganj, Narshingdi, Bakhrabad and Meghna. Meghna gas field remained suspended during the year for work-over operation. In 2009-10 BGFCL produced 258.3 Bscf gas and daily average production rate was 707.7 MMcfd. During the year 186,589 bbl condensate was recovered from four gas fields operated by BGFCL. Field wise daily production in MMcfd can be seen in figure 11. Figure 12 shows a comparison of production rate of four gas fields in MMcfd. Effect of Eid holidays on gas production can be observed in Figure 12. During the year daily production rate of Bakhrabad and Narshingdi gas fields was quite similar. Figure 13 shows share in production of four gas fields.

In the following paragraphs production of four gas fields of BGFCL is discussed.

2.1.1.1. Titas Gas Field is the largest gas field of the country as well as largest producer among state own enterprises. It is also the main producer of BGFCL. Gas production from this foeld started in 1967-68. In 2009-10 fiscal year Titas field produced 147.6 Bscf gas at an average rate of 404.3 MMcfd. During the year maximum production rate was recorded at 431.08 MMcfd and the minimum flow rate was 313.34 MMcfd. During the year 137,963 bbl condensate was recovered. Condensate recovery rate is 1.01 bbl/MMcf and average daily recovery rate was 378 bbl/day. Out of 16 wells 14 wells were producing at the beginning of the year. Well # 14 was shut down due to water production problem. After completion of remedial work, production from this well #14 resumed in September 2009. It may be mentioned here that earlier well # 3 was permanently killed. Cumulative production on 31 June 2010 was 3143 Bscf.

2.1.1.2. Habiganj Gas Field: Habiganj is the third largest gas field of the country as well third largest gas producer. This field also started production in 1967-68. In 2009-10 this field produced 85.81 Bscf gas and average production rate was 235.1 MMcfd. During the year maximum daily production was 242.38 MMcfd and the minimum flow rate was recorded at 143.08.31 MMcfd. Habiganj Well # 8 and # 9 remained shut down in the year. During the year 422 bbl condensate was recovered. Habiganj gas is quite dry and condensate recovery rate is quite low (0.06 bbl/MMcf). Since start of production this field produced 1714 Bscf gas.

2.1.1.3. Bakhrabad Gas Field: This field started gas production May 1984. During the year this gas field produced 12.87 Bscf gas and average daily production rate was 35.3 MMcfd. During the year maximum production rate was 36.01 MMcfd and the minimum flow rate was 31.71MMcfd. During the year, 7237 bbl condensate was recovered. Daily condensate recovery rate was 19.8 bbl/day and extraction rate was 0.61 bbl/MMcf gas. Cumulative production as on 31 July 2010 was 704.4 Bscf.

2.1.1.4. Narshingdi Gas Field: This gas field started production in 1996-97. In 2009-10 fiscal year average daily gas production rate of Narshingdi was 33.025 MMcfd and total production during the year was 12.05 Bscf. On one occasion gas production was shut down for a day. Apart from this, low production rate (below 10 MMcfd) was recorded on several occasions. At the end of the fiscal year cumulative production logged 110.8 Bscf.

2.1.1.5 Meghna Gas Field: This field started gas production along with Narshingdi gas field. During the year Meghna gas field remained shut down for work-over operation. Cumulative production remained at 36.4 Bscf.

Feni Gas Field: BGFCL operated Feni gas field from 1991-92 to 1997-98. During this period 39.5 Bscf gas was produced. BGFCL shut down production due to high water production.

2.1.2. Sylhet Gas Fields Co. Ltd. (SGFL)

In pre-independence period the company (Pakistan Petroleum Ltd) was a subsidiary of former Burmah Oil Company (BOC) of UK. Gas production in this country started in 1961 from this field. After independence of Bangladesh, PPL abandoned Sylhet and Chattack gas fields and the government took over two gas fields. The company was renamed as Sylhet Gas Fields Ltd (SGFL).

SGFL is producing from four gas fields located within greater Sylhet District. During the year this company produced 56.8 Bscf gas. Average daily production rate was 155.6 MMcfd. In 2009-10 maximum gas production rate was 169.4 MMcfd and minimum production rate was 103.3 MMcfd. During the year the company produced 564,687 bbl condensate. Figure 14 and 15 shows field wise daily production in MMcfd. In figure 14 is stack bar and it shows

total production in MMcfd. Field wise daily gas production in MMcfd can be seen in Figure 15. Figure 16 (Pie chart) shows share in production of 4 gas fields of SGFL. In 2009-10 more than half of the production of SGFL came from Kailas Tila Gas Field.

In the following paragraphs production data of four gas fields are briefly described.

2.1.2.1. Kailas Tila Gas Field: It is the main gas producer of SGFL. This field is also the main producer of condensate and related liquid. In 2009-10 Kailas Tila gas field produced more than half of the production of SGFL. Daily average gas production rate of Kailas Tila gas field was 88.5 MMcfd and this equals to 32.3 Bscf for the year. During the year 135,392 BBL condensate and 150,179 BBL NGL was recovered. Condensate recovery rate was 7.69 bbl/MMcf gas. In addition to this, by processing NGL and condensate 19,686 BBL MS, 4330 Mt LPG and 34.5 bbl HSD was recovered. Cumulative production logged 497 Bscf on 31 June 2010.

2.1.2.2. Rashidpur Gas Field: During 2009-10 this field produced 17.8 Bscf gas and average daily production rate was 48.8 MMcfd. During the year maximum production rate was 51.7 and minimum was 32 MMcfd. However, Low production rate below 40 MMcfd was recorded on three occasions only. During the year 199,775 bbl condensate was recovered. Average condensate recovery rate was 54.7 bbl/day. Rashidpur gas is quite dry and gas condensate ratio was 1.11 bbl/MMcf gas. At the end of the year cumulative gas production logged 467 Bscf.

2.1.2.3. Beani Bazar Gas Field: In 2009-10 fiscal year this gas field produced 5.39 Bscf gas at an average of 14.8. Maximum daily production rate was 16.67 MMcfd and minimum was 7.8 MMcfd. This field is quite rich in condensate. Recovery rate for condensate was 17.66 bbl/MMcf. During the year 95,299 bbl condensate was recovered from this field. Cumulative gas production logged 62.5 Bscf at the end of the year.

2.1.2.4. Sylhet Gas Field: This is the oldest gas field of the country which was discovered in 1955. Production from this field started in 1962. First blow out of the country was in this gas field. In 2009-10 Sylhet field produced 1.1 Bscf gas and average daily production rate was 3.04 MMcfd. During the year 9072 bbl condensate was recovered. Condensate recovery rate was 8.98 bbl/MMcf of gas. On 31 June 2010 cumulative gas production logged 189 Bscf.

2.1.3. Bangladesh Petroleum Exploration and Production Co. (BAPEX)

BAPEX operates three gas fields, i.e. Salda Nadi, Fenchuganj and Shahbazpur. During the year the company produced 39.9 Bscf gas and average production rate was 14.56 MMcfd. Maximum daily gas production rate was 43.21 and minimum rate was recorded at 31.13 MMcfd. During the year 24415 bbl condensate was recovered. Figure 17 and 18 shows field-

wise gas production in MMcfd. Figure 19 shows share in production of three gas fields in MMcfd and Bscf.

2.1.3.1. Fenchuganj Gas Field:

This gas field is the main producer of BAPEX. In 2009-10 fiscal year this field produced 9 Bscf gas at an average rate of 24.7 MMcfd. Maximum production rate was recorded at 43.2 MMcfd and minimum rate was 31.1 MMcfd. During the year 22,671 bbl condensate was recovered, which equals to daily rate of 62 bbl/day. Average condensate recovery rate was 2.18 bb/MMcf.

2.1.3.2. Salda Nadi Gas Field:

BAPEX started production operation with Salda Nadi gas field in March 1998. In 2009-01 fiscal year this gas field produced 3.08 Bscf gas and average production rate was 8.4 MMcfd. During the year maximum flow rate was recorded at 10.67 MMcfd and the minimum figure was 7.67 MMcfd. 1668 bbl condensate was recovered during this period. The gas is quite dry and average condensate recovery rate was 0.54 bbl/MMcf. During the year daily condensate production rate was 4.6 bbl/day. On 31 June 2010 cumulative gas production logged 6.92 Bscf.

2.1.3.3. Shahbazpur Gas Field:

Gas production from Shahbazpur gas field started on 11 May 2009. In 2008-09 fiscal year only 118 MMcf gas was produced. In 2009-10 fiscal year Shahbazpur gas field produced 2.48 Bscf gas and average production rate was 6.78 MMcfd. Maximum production rate was 9.66 MMcfd. On few occasions the field remained shut down and total shut down period was less than 3 weeks. During the year 76 bbl condensate was recovered. Condensate gas ratio was 0.03 bbl/MMcf.

2.2. International Oil Companies:

Chevron, Cairn Energy, Tullow Oil and NIKO Resources are the international oil companies engaged in gas production during the year. These companies produced 374.1 Bscf gas during the year. Average daily production rate was 1024.9 MMcfd. During the year maximum daily production rate was 1115 MMcfd and minimum production rate was 516.9 MMcfd. Share of IOCs in total production is 53.16 %.

During two Eid holidays production from IOC operated fields was significantly reduced and the minimum production rate was 628 MMcfd and 516 MMcfd. IOCs production is dominated by Bibiyana gas field, which account for 64% of IOC production. Figure 20 shows field wise daily production by the international oil companies. NIKO, a joint Venture

operation is included in this figure, but due to low production rate the line is not easily visible. NIKO suspended production on 1 April 2010.

Figure 21 shows relative difference in production rate in MMcfd of the gas fields operated by IOCs. Field wise share in gas production of five companies in MMcfd and Bscf is provided in Figure 22. Condensate production from IOC operated gas fields is quite high. In 2009-10 fiscal year IOCs produced 1.86 MMbbl condensate.

2.2.1. Chevron

This company operates 3 gas fields, Bibiyana, Jalalabad and Moulavi Bazar. These three gas fields are also three companies of Chevron. Average daily production of the company was 880.9 MMcfd and during the year 321.5 Bscf gas was produced. Maximum daily production was 723 MMcfd and minimum production rate was 154 MMcfd. During the year the company recovered 1.79 MMbbl condensate. Chevron produced nearly 72 percent of total condensate produced during the year.

2.2.1.1. Bibiyana Gas field is the second largest gas field of the country and top most gas producer in 2009-10. During the year this field produced 240 Bscf gas at an average rate of 659 MMcfd. During the year maximum daily production was 737 MMcfd and the lowest flow rate was recorded at 154 MMcfd. Low daily production was recorded during Eid holidays. During the year 1.28 MMbbl condensate was recovered from this gas field. Condensate recovery rate was 5.33 bbl/MMcf gas. Cumulative production of this field logged 601.7 Bscf.

2.2.1.2. Jalalabad Gas Field is the second largest field of Chevron. During 2009-10 fiscal year this field produced 59.4 Bscf gas at average rate of 162.8 MMcfd. During the year highest production rate was recorded at 228.4 MMcfd. Minimum production rate was recorded at 130.3 MMcfd. During the year 503,829 bbl condenser was recovered from Jalalabad gas field. Condensate recovery rate was 8.48 bbl/MMcf gas. Cumulative production of this gas field logged 573.4 Bscf.

2.2.1.3. Moulavi Bazar gas field produced 21.25 Bscf gas at an average production rate of 58.5 MMcfd. During the maximum daily production rate was 70.4 MMcfd and the minimum rate was 48.5 MMcfd. During the year 5471 bbl condensate was recovered. Average daily production rate was 15 bbl and condensate recovery rate was 0.26 bbl/MMcf. On 30 June 2010 cumulative production logged 47.8 Bscf.

2.2.2.1. Tullow Oil:

Tullow Oil discovered Bangura gas field and is producing from this field. During the year the company produced 38.5 Bscf gas at an average rate of 105.4 MMcfd. Production remained suspended in June 2010 for 17 days. Production rate fluctuated from 125.2 MMcfd to 16.55

MMcfd. During the month 64,905 bbl condensate was recovered. Average condensate recovery rate was 1.69 bbl/MMcf gas. Daily average condensate production rate was 177.8 bbl/day. Cumulative gas production logged 116.5 Bscf.

2.2.3.1. Cairn Energy:

Cairn Energy operate lone off shore gas field of the country, Sangu Gas Field. During the year average daily production rate was 36.96 MMcfd. Total production during the year logged 13.49 Bscf. During the year daily production fluctuated from 57.9 and 23.9 MMcfd. Sangu gas is quite dry and average condensate recovery rate was 0.22 bbl/MMcf gas. During the year 2,944 bbl condensate was recovered and average daily production rate was 8.1 BBL/day. Cumulative production of this field logged 471.5 Bscf.

2.2.4.1. NIKO Resources:

Feni Gas Field: NIKO Resources operated Feni gas field under a joint venture agreement with BAPEX. The company drilled new wells in Feni Gas field and discovered a number of new gas reservoirs. NIKO started production from January 2009. In 2009-10 this field produced for ten months. On 1 May 2010 production from this field was suspended. During ten months of operation 0.62 Bscf gas was produced at an average rate of 1.7 MMcfd. During the same period 873 bbl condensate was recovered. Average ratio of condensate recovery was 1.36 bbl/MMcf gas.

3.0 Gas Supply and Consumption:

Gas and condensate production data is collected from daily production data prepared by individual production companies. Information on gas sales by the production companies and sector wise gas consumption data is collected also from MIS report and Daily gas production and consumption report of Petrobangla. In the MIS report gas consumers are classified in to seven categories, i.e. Power, Captive Power, fertilizer, Industry, Commercial, CNG, Household and Tea industry..

In addition to MIS Report, Daily Gas & Condensate Production and Distribution Report of Petrobangla was used. In this report gas consumers are classified into three categories i.e. Power, Fertilizer and Other category. This report also includes daily field wise gas production data.

Figure 23 shows daily gas consumption by three categories i.e. Power, Fertilizer and Other categories in MMcfd. Sector wise gas consumption in Bscf and percentage is displayed in figure 24. Consumption data was taken from MIS report of June 2010. Monthly sector wise

gas consumption in plotted as Figure 25. According to this figure consumption for the months February to May 2010 is more than 2000 MMcfd.

According to MIS Report (June 2010) during the year 703.5 Bscf (19919.39 MMSCM) gas was produced. From daily production data prepared by the production companies it was found to be 703.7 Bscf. The difference is very small and can be considered as good match.

As per MIS report 19802.84 MMSCM or 699.33 Bscf (1915.98 MMcfd) gas was purchased by the gas distribution companies from production companies. The difference between gas produced and gas sold to the gas distribution companies can be considered as own use by the production companies. In 2009-10 this difference was 4116.14 MMcf (11.28 MMcfd) and this is only 0.63 percent of total production.

During the year 55.7 percent of total gas supply was used for power generation. Total consumption in Power sector was 395.8 Bscf (1084.38 MMcfd). Sector wise gas consumption for 2009-10 fiscal year can be seen in the table below.

Sector wise Gas Consumption in Bscf and %, 2009-10		
Power plants	283.15	39.87 %
Captive power	112.61	15.89 %
Total Power	395.78	55.72 %
Industry	118.81	16.73 %
Domestic	82.69	11.64 %
Fertilizer	64.72	9.1 %
CNG	39.33	5.5 %
Commercial	8.12	1.14 %
Tea	0.8	0.11 %
Total	710.23	100 %

Data Source: Petrobangla MIS Report June, 2010

Gas consumption figure is 710.23 Bscf is 2.53 Bscf more than the total production.

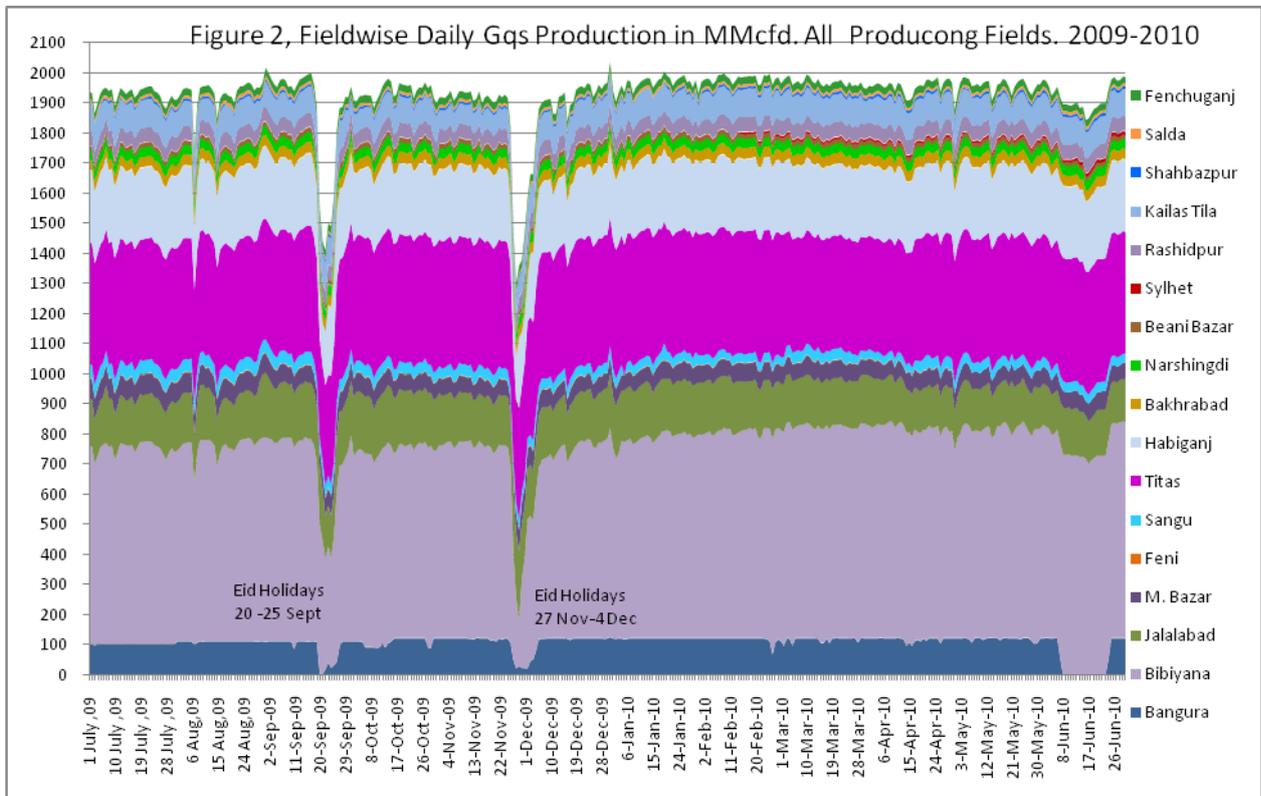
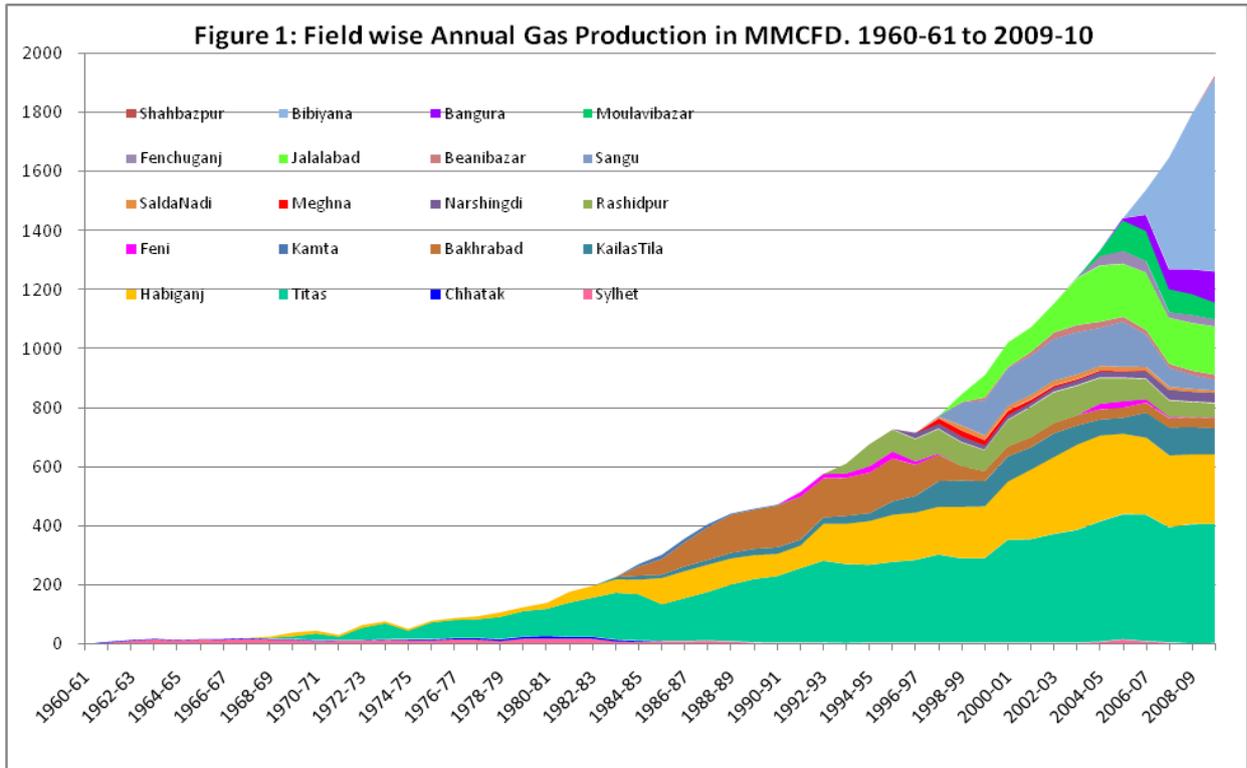
4. Unaccounted for gas (UFG):

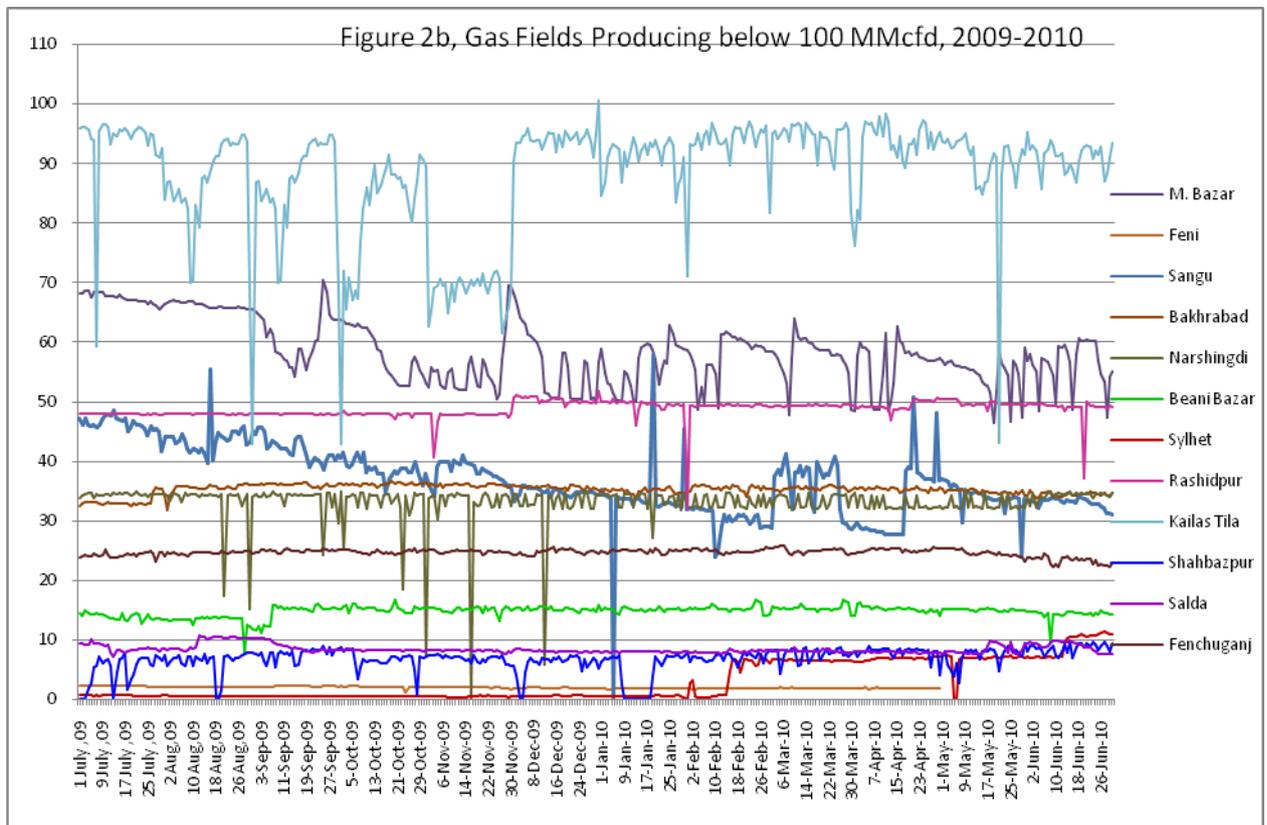
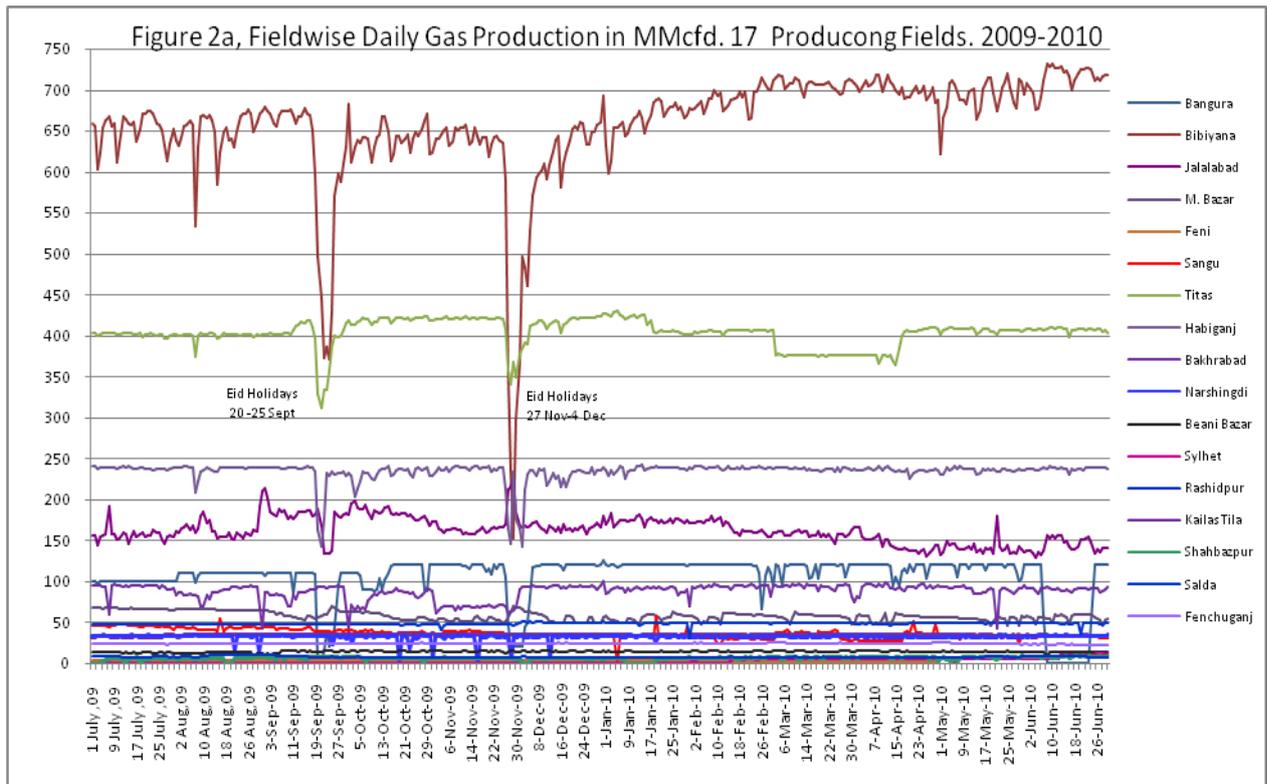
According to MIS Report (June 2010) during 2009-10 fiscal year unaccounted for gas (UFG) of gas distribution companies was only 0.457 MMCM i.e. 16.14 MMcf (0.044 MMcfd). During the previous year (2008-09) UFG was reported at 51.49 MMCM or 181658 MMcf (497.7 MMcfd).

According to MIS Report gas production was 19919.39 Bscf which equals to 703.45 Bscf. Gas purchase by the gas distribution companies was recorded at 19802.84 MMCM or 699.33 Bscf. Gas sale by the distribution companies was recorded at 20111.41, which equals to 710.2 Bscf. It appears that the total gas sale by the gas distribution companies is more than total production.

It was observed in p 32-33 of MIS report, June 2010 of that total gas sale by the distribution companies was 20111.41 MMCM or 710.23 Bscf (1945.83MMcfd). This figure is 308.58 MMCM or 10.9 Bscf (29.86 MMcfd) more than the gas volume available for sale by the production companies. In case this figure is compared with total production than the difference decreases to 6.78 Bscf, still more than the total production.

In Figure 27 it can be observed that in the months of September 09 and from February to May 2010 consumption is more than total production. In the months of July, August and December '09 gas sold to customer is more than the volume sold by the gas production companies.





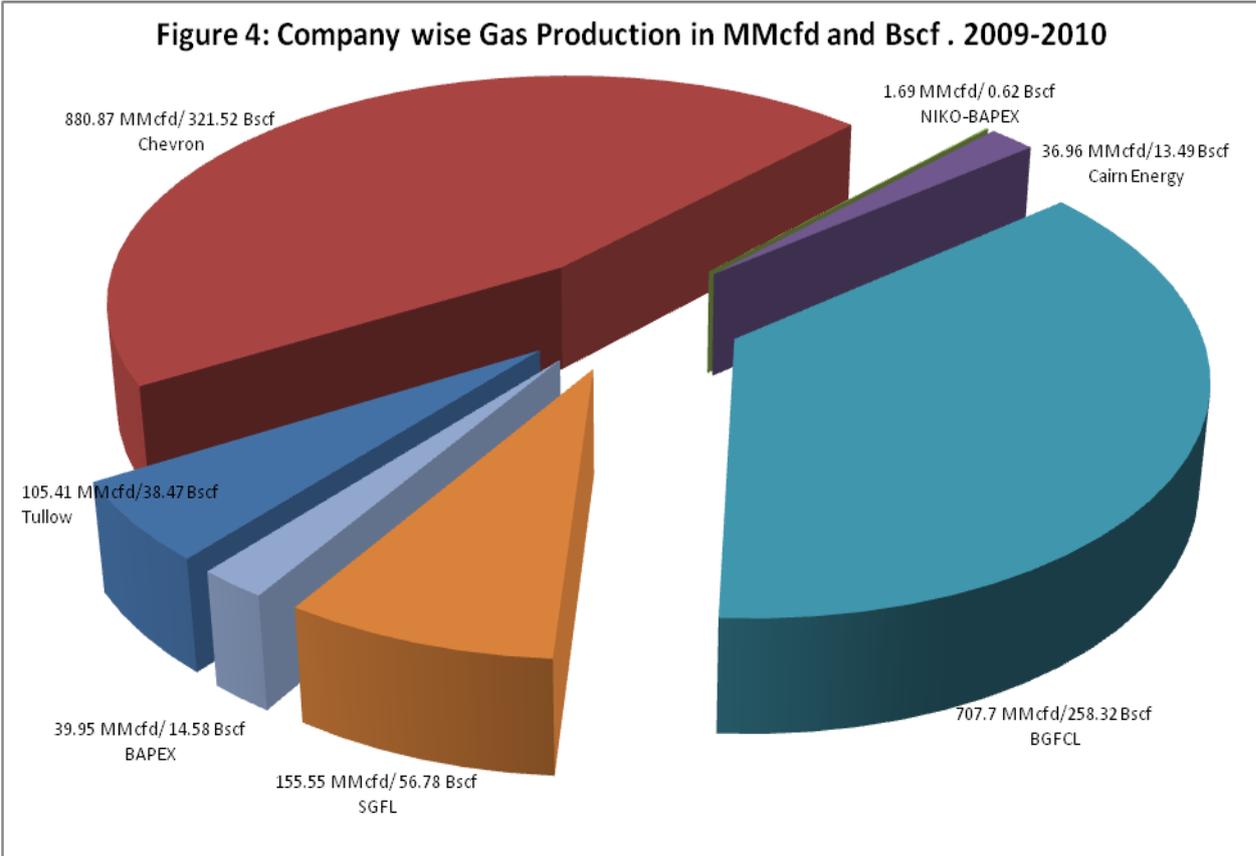
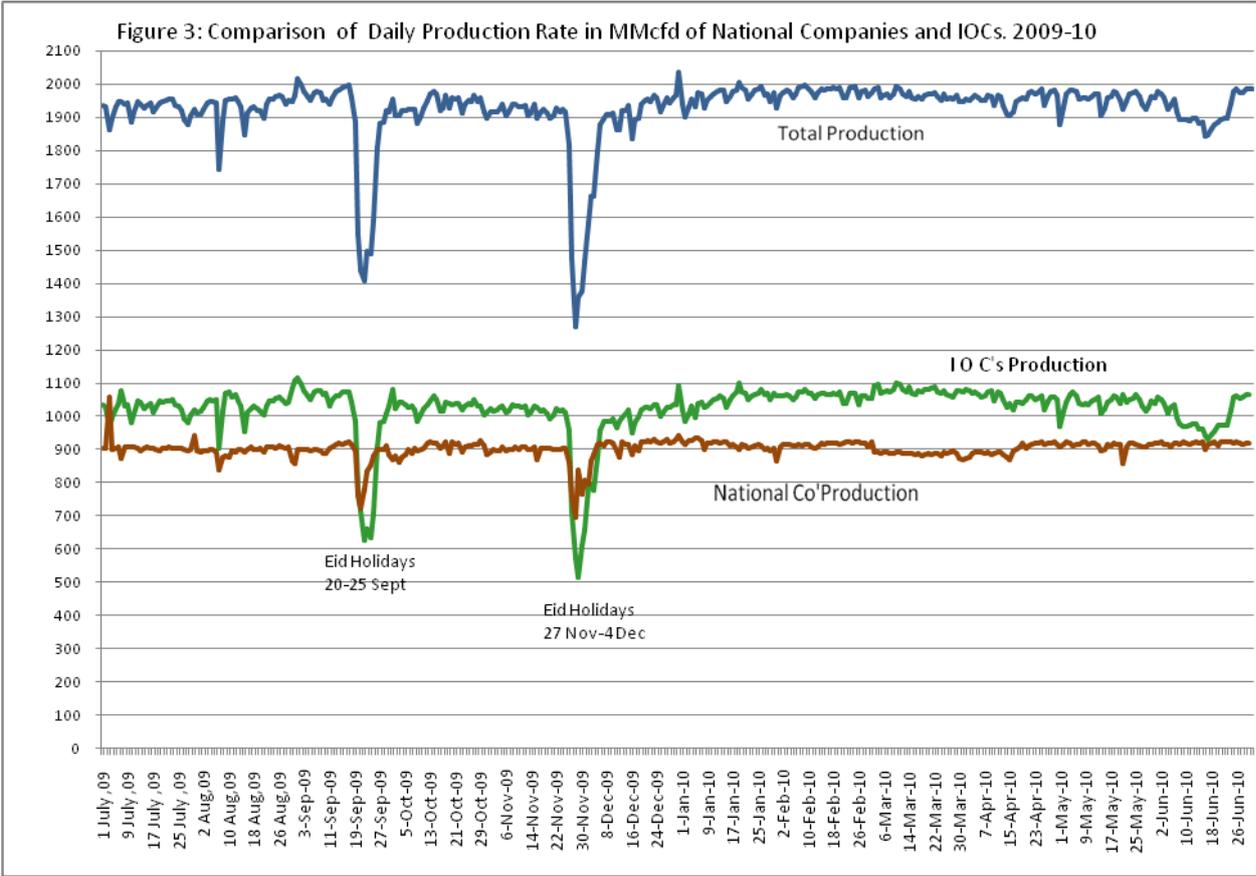


Figure 5: Fieldwise Gas Production in Bscf and MMcfd, 2009-10

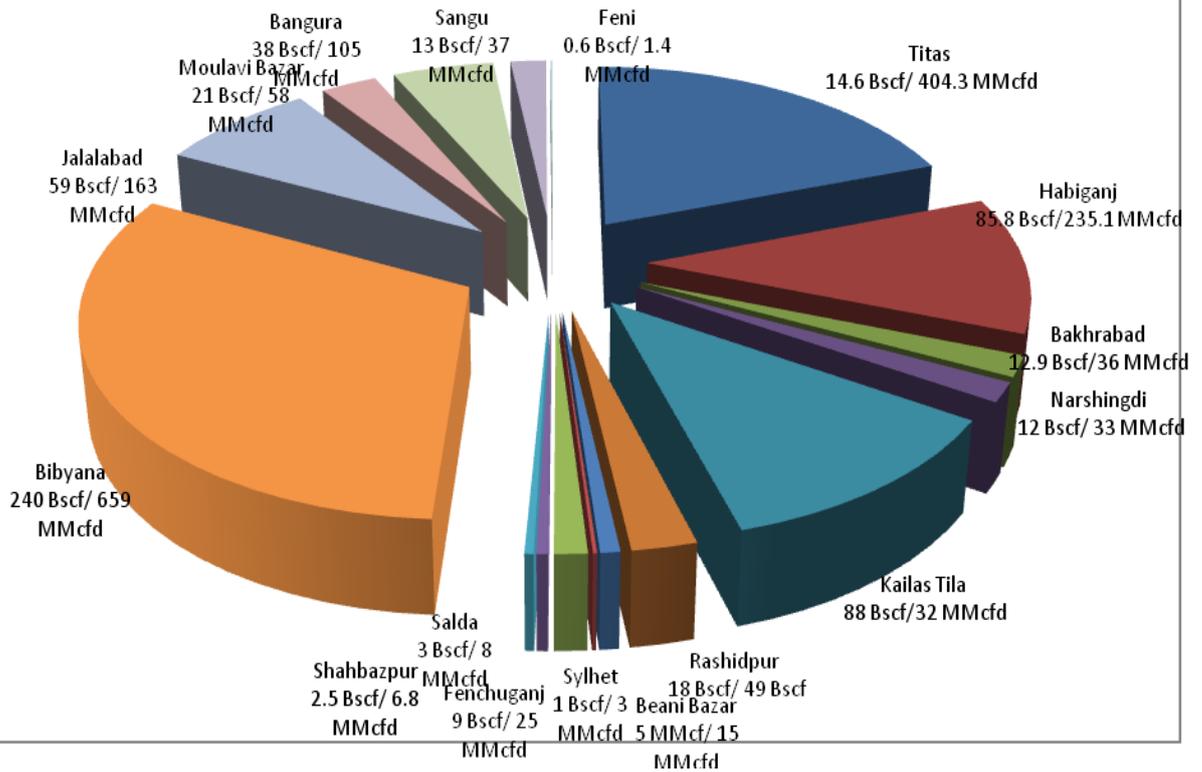
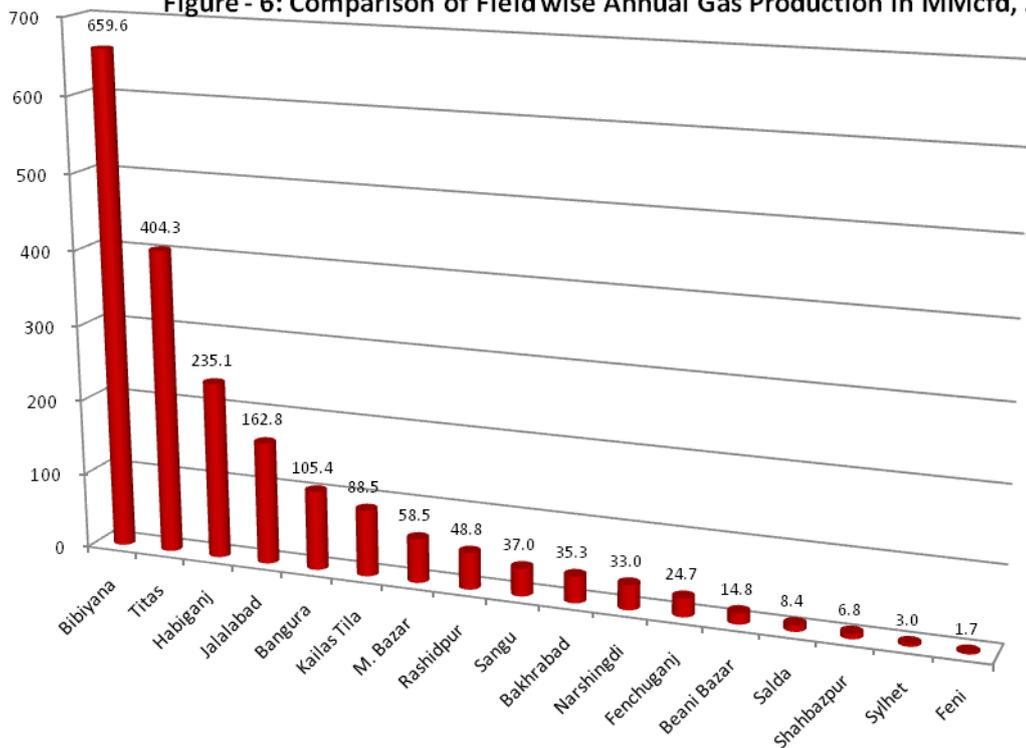


Figure - 6: Comparison of Field wise Annual Gas Production in MMcfd, 2009-10



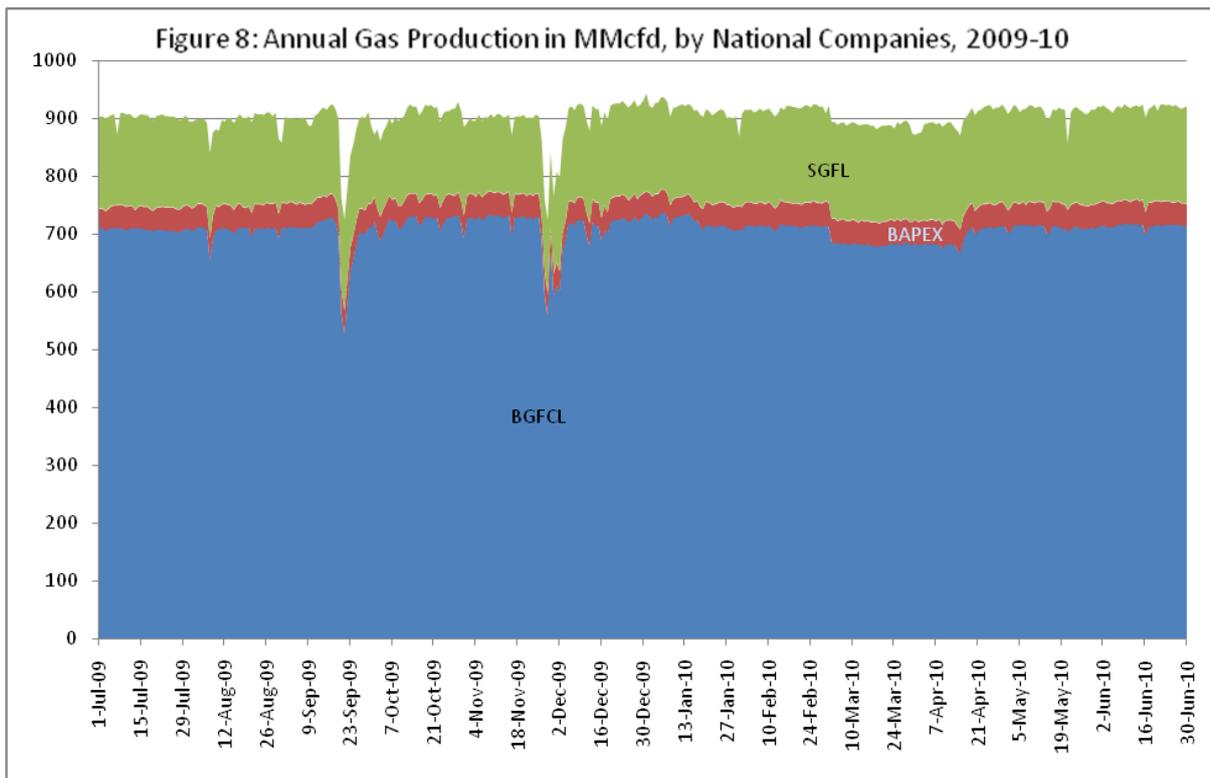
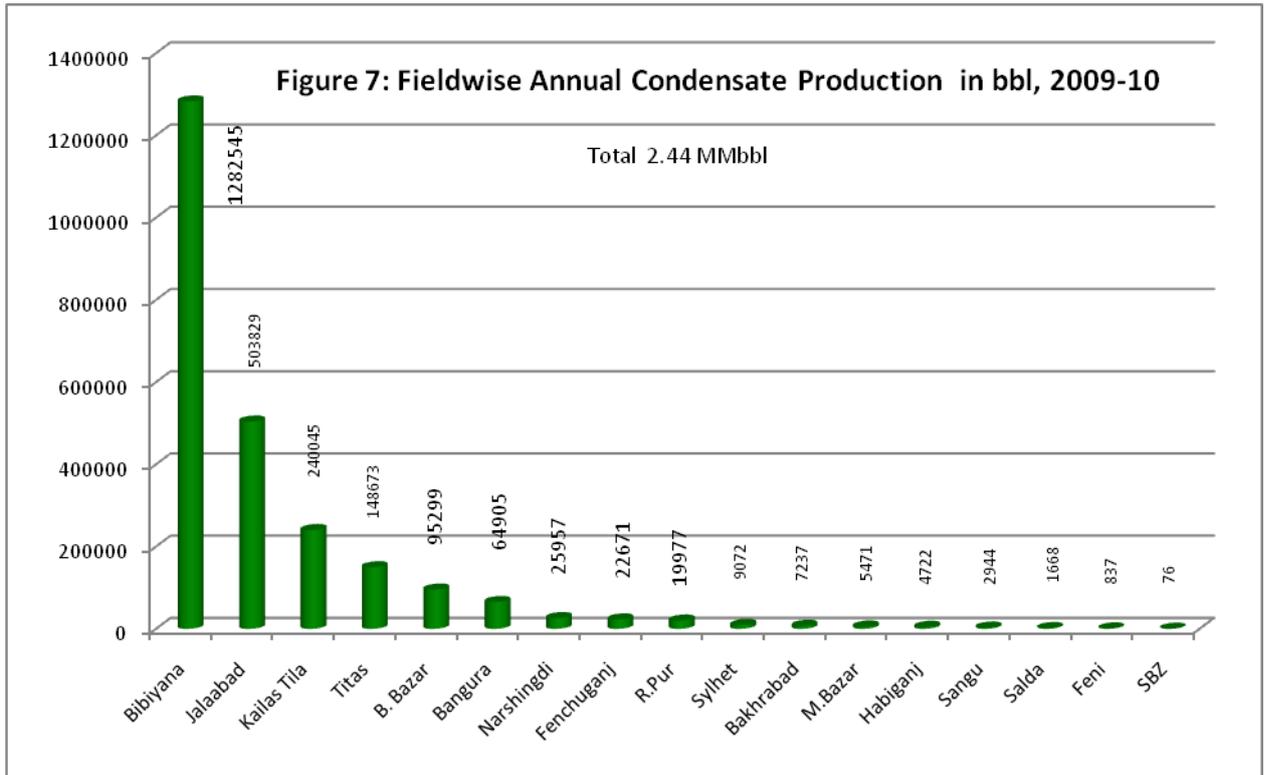


Figure 9: Company wise Annual Gas Production in Bscf/MMcfd. National Companies. 2009-10

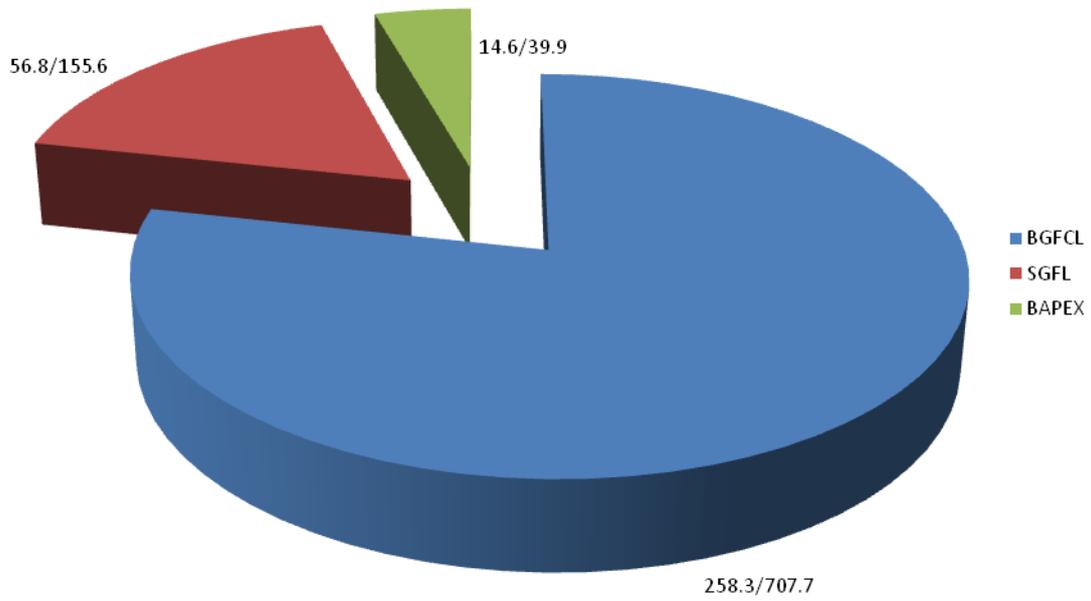
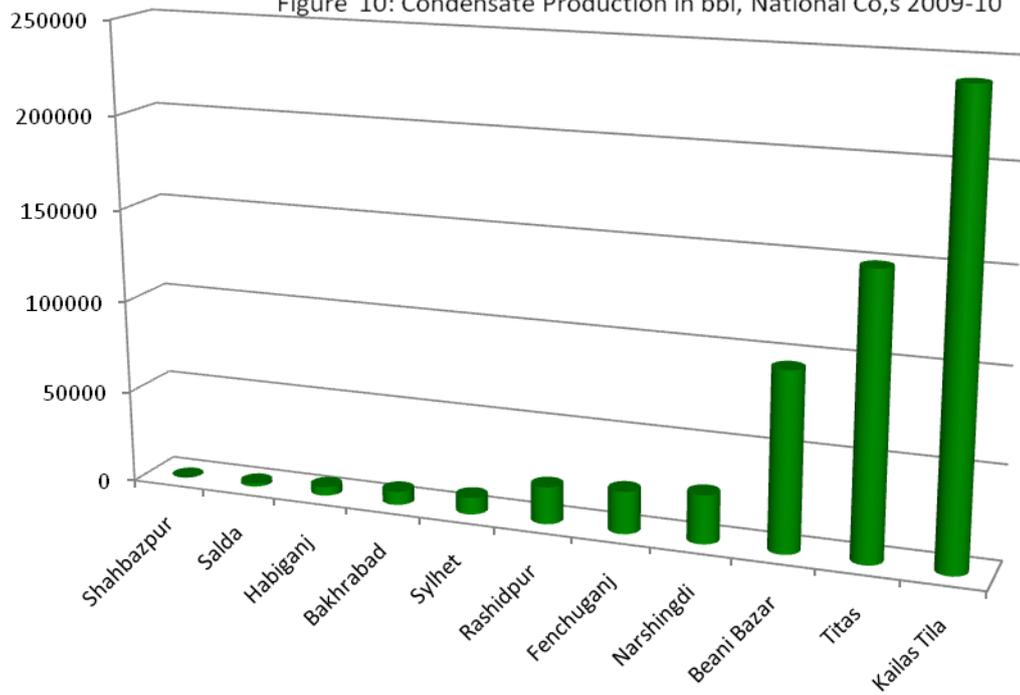


Figure 10: Condensate Production in bbl, National Co,s 2009-10



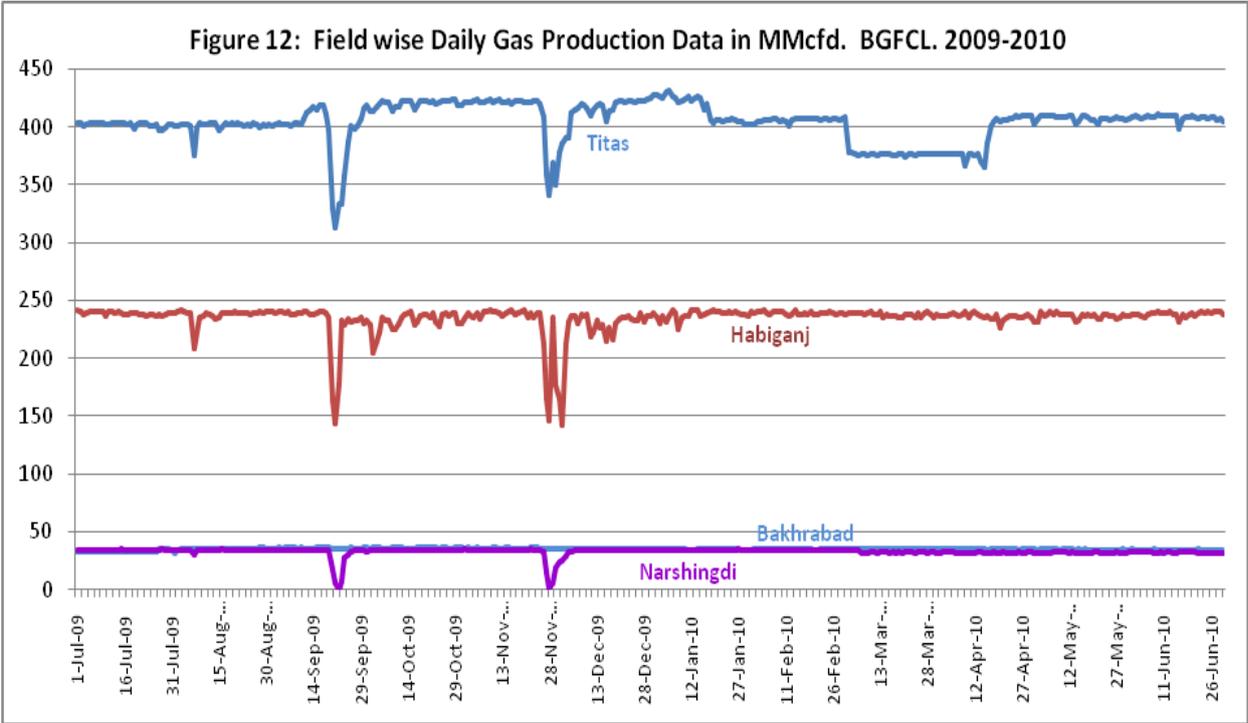
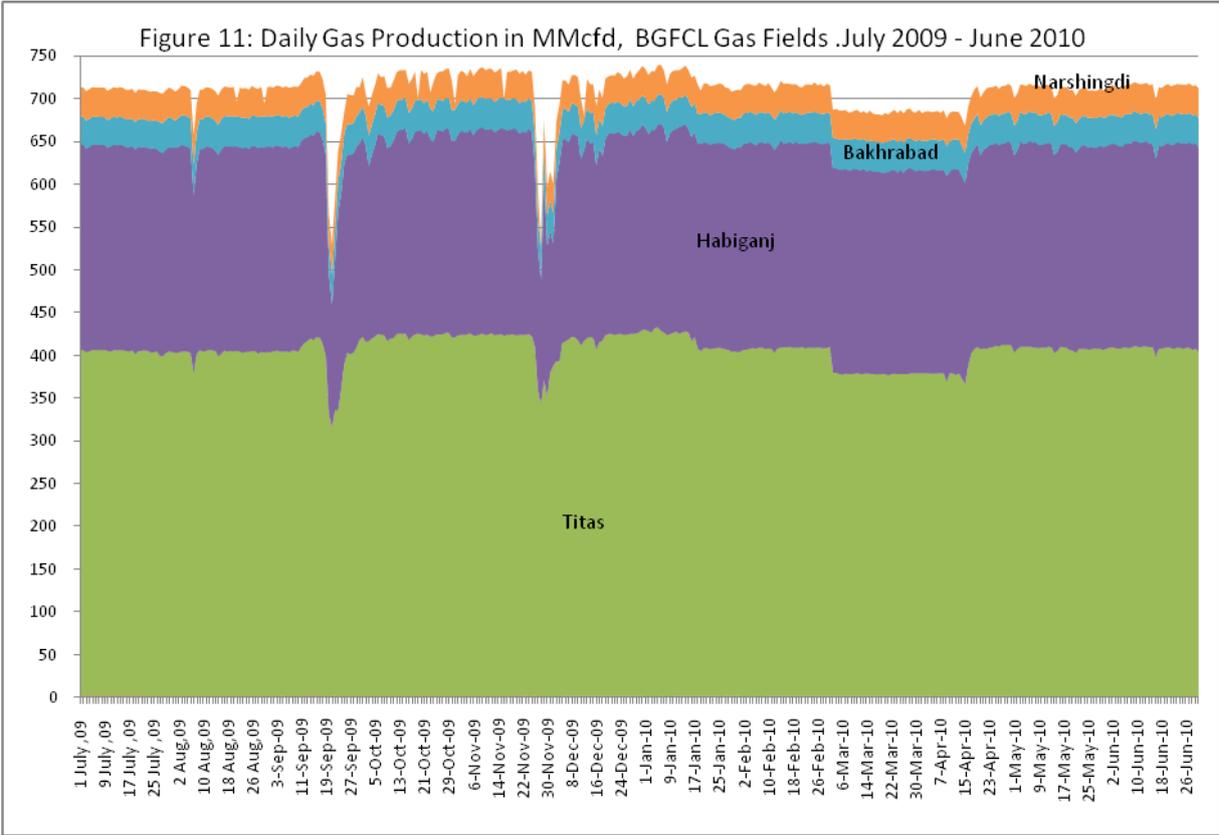


Figure 13 Fieldwise Gas Production in MMcf/d/Bscf. BGFCL. 2009-2010

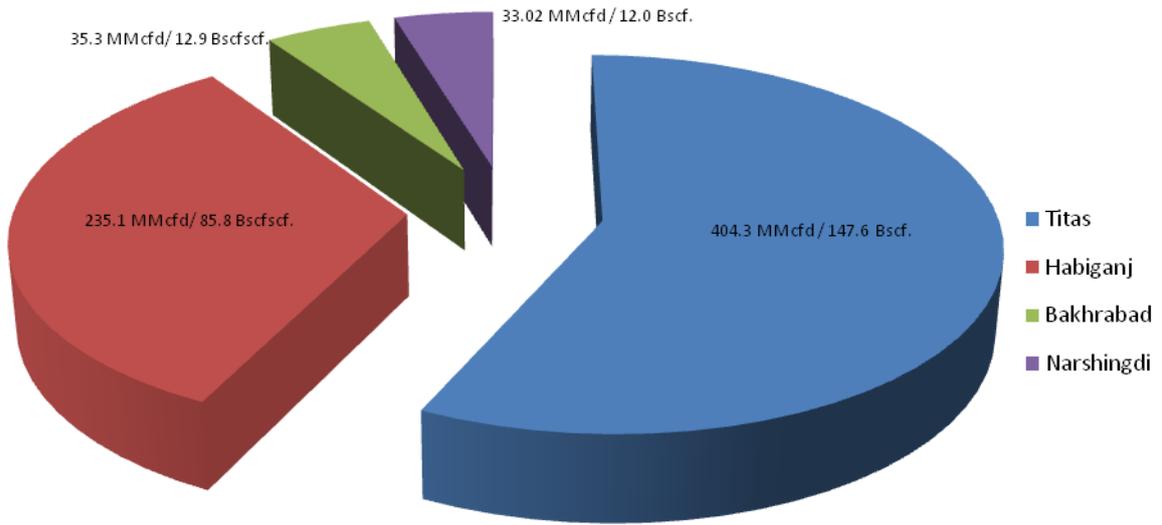


Figure 14, Fieldwise Daily Gas Production in MMcf/d. SGFL. Fields. 2009-2010

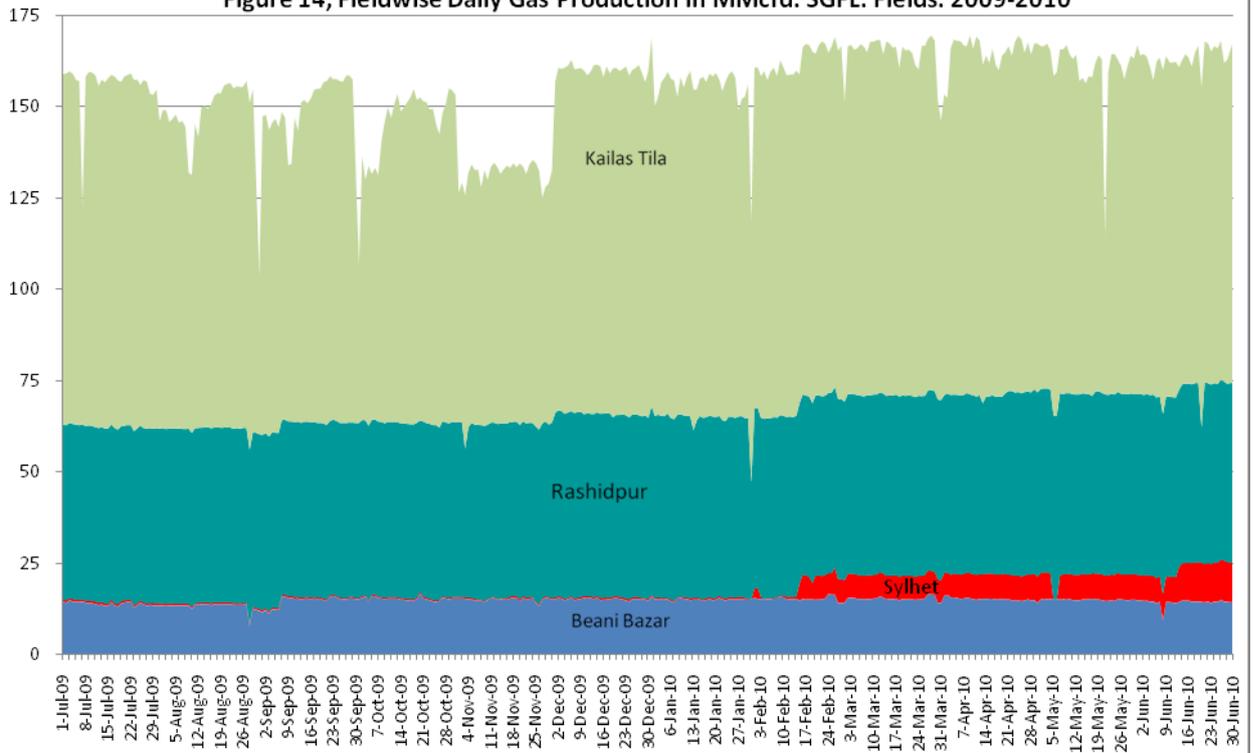


Figure 15: Fieldwise Daily Gas Production on MMcfd, SGFL Gas Fields. 2009-10

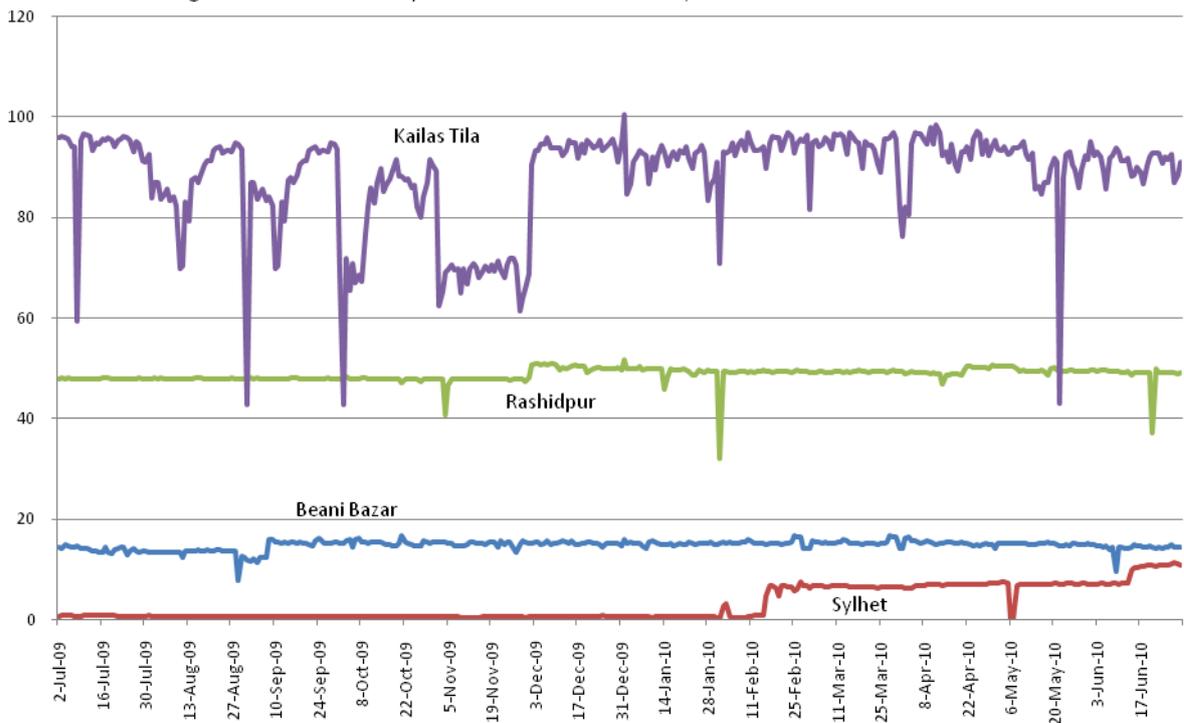
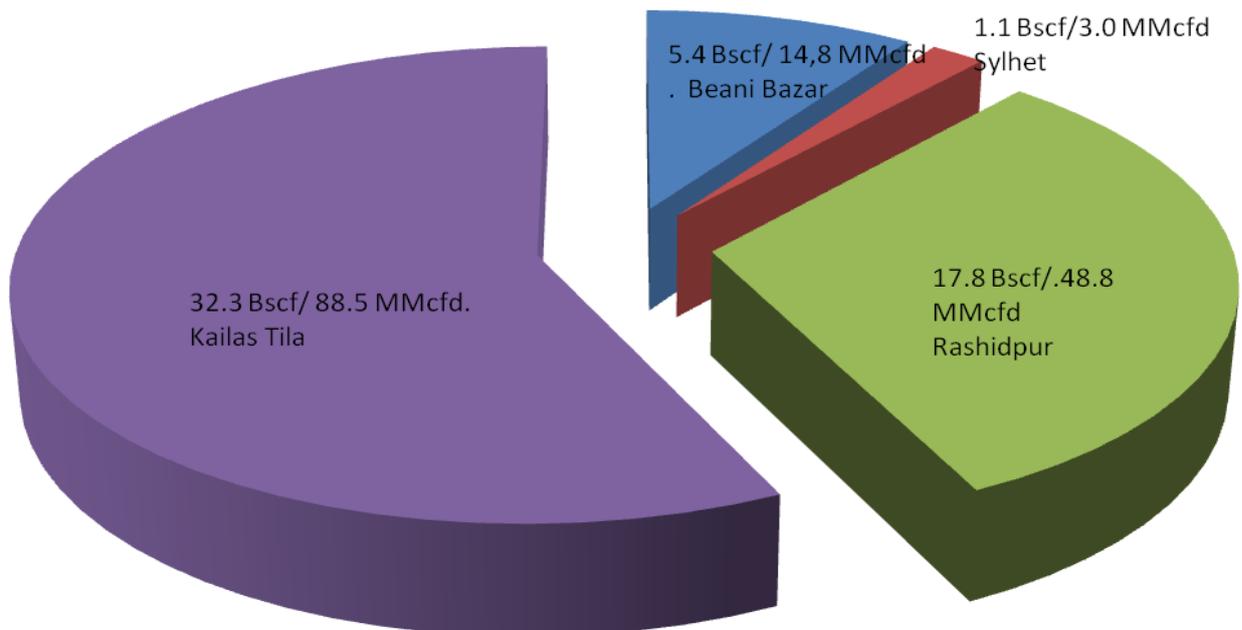


Figure 16: Field wise Annual Gas Production in Bscf/MMcfd . SGFL 2009-10



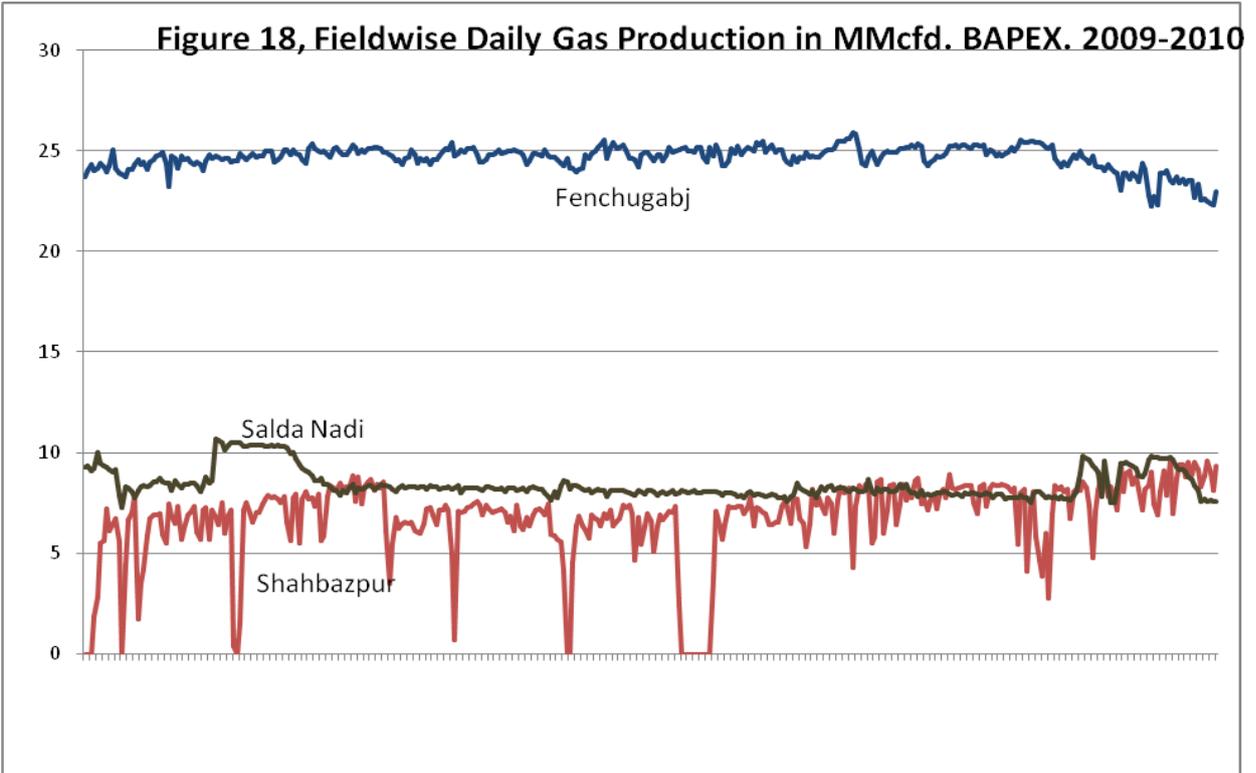
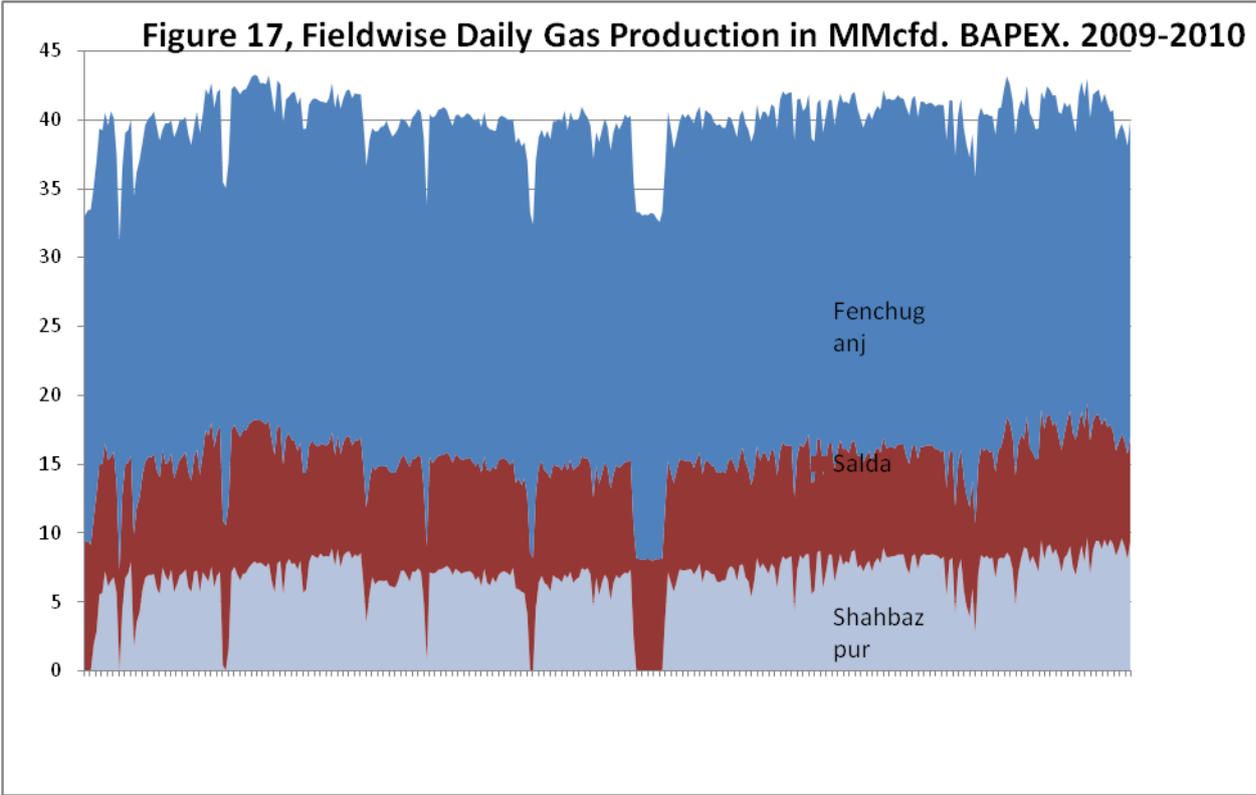


Figure 19 Fieldwise Gas Production in MMcfd / Bscf. BAPEX. 2009-2010

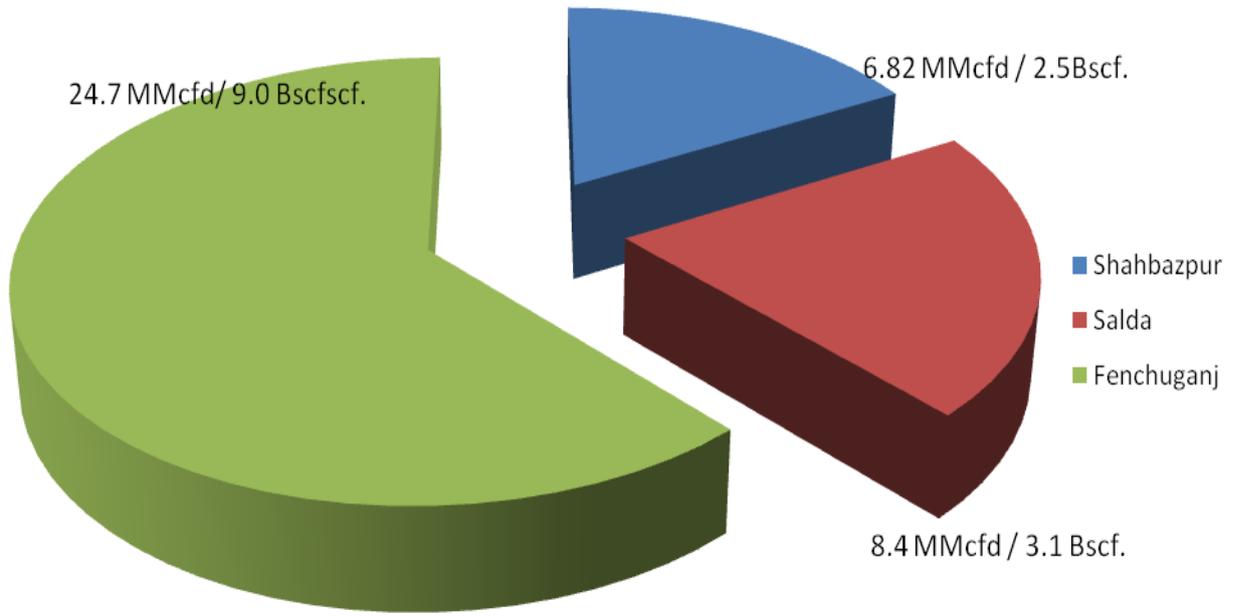
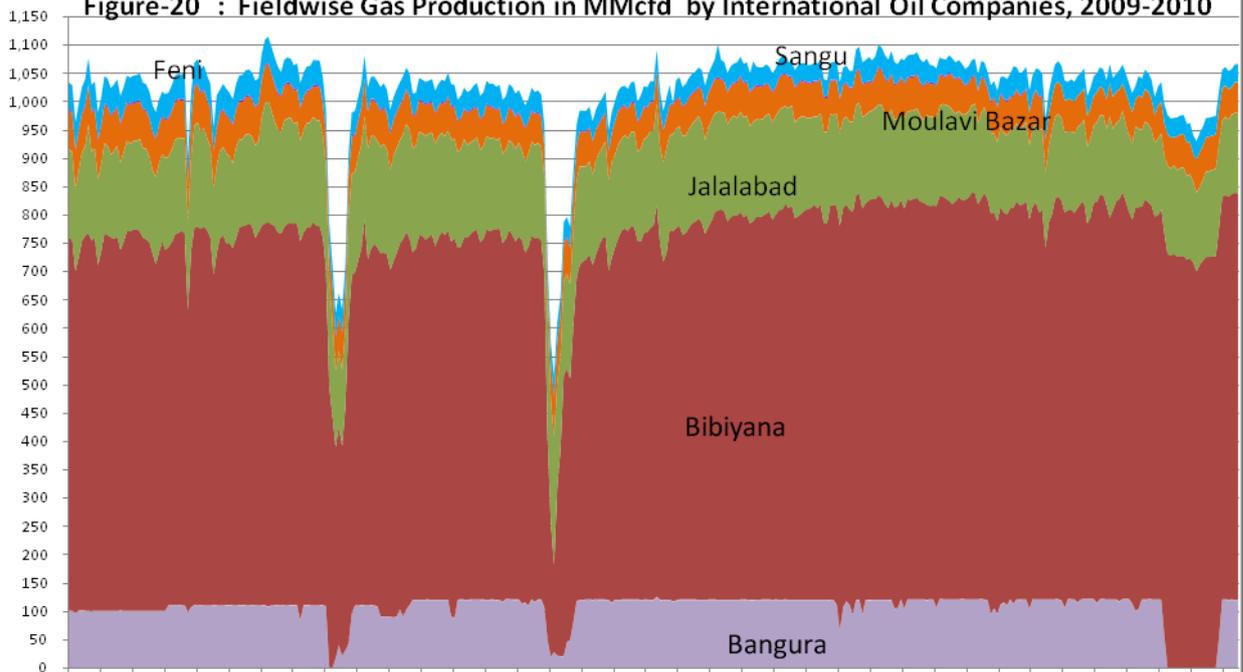
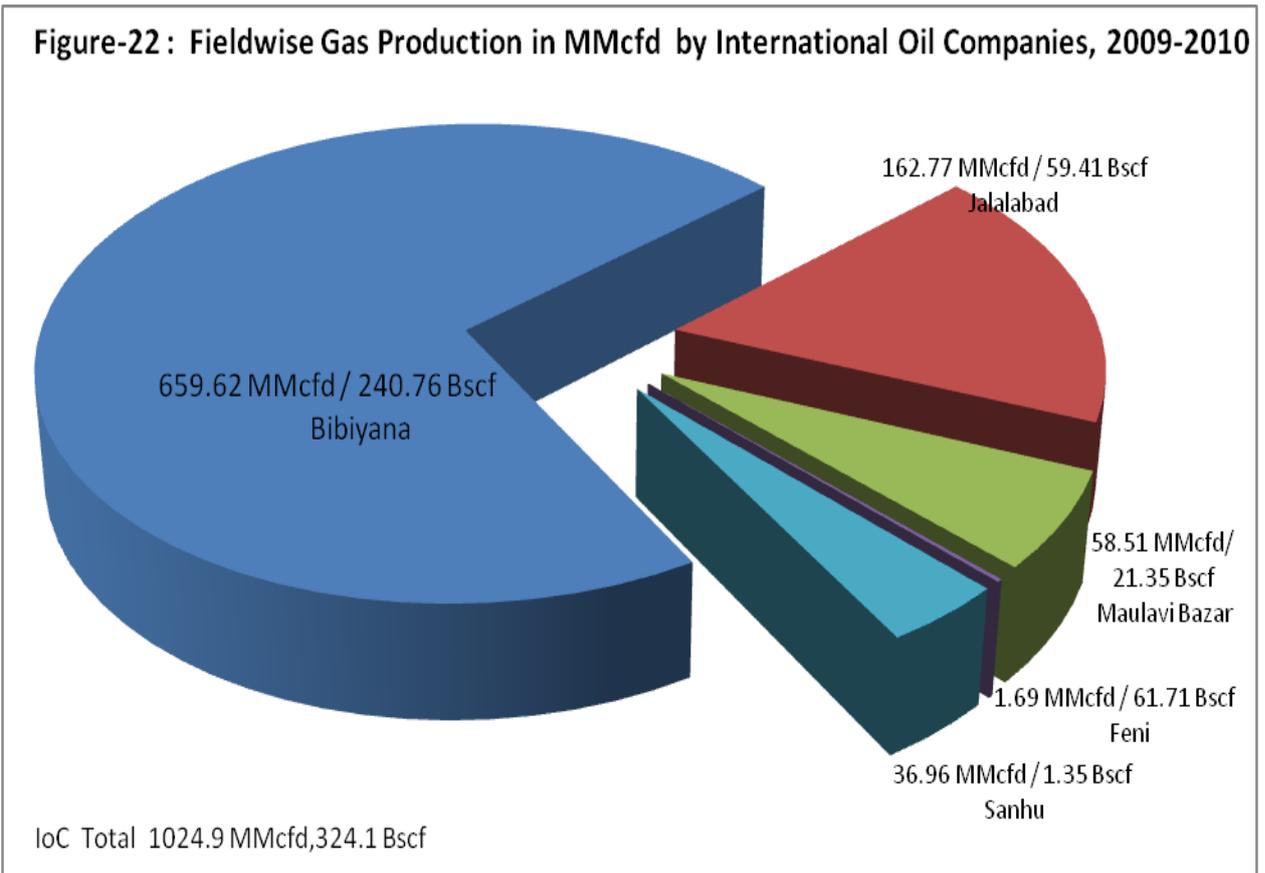
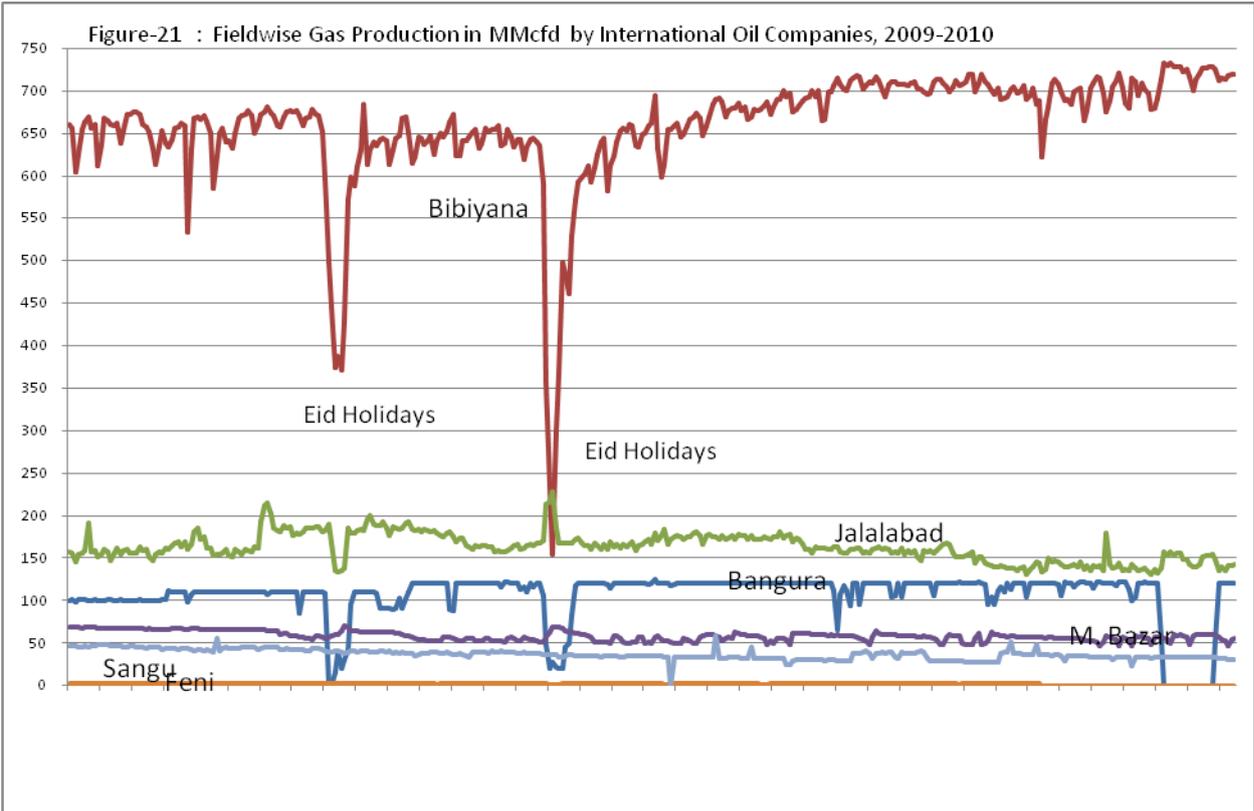
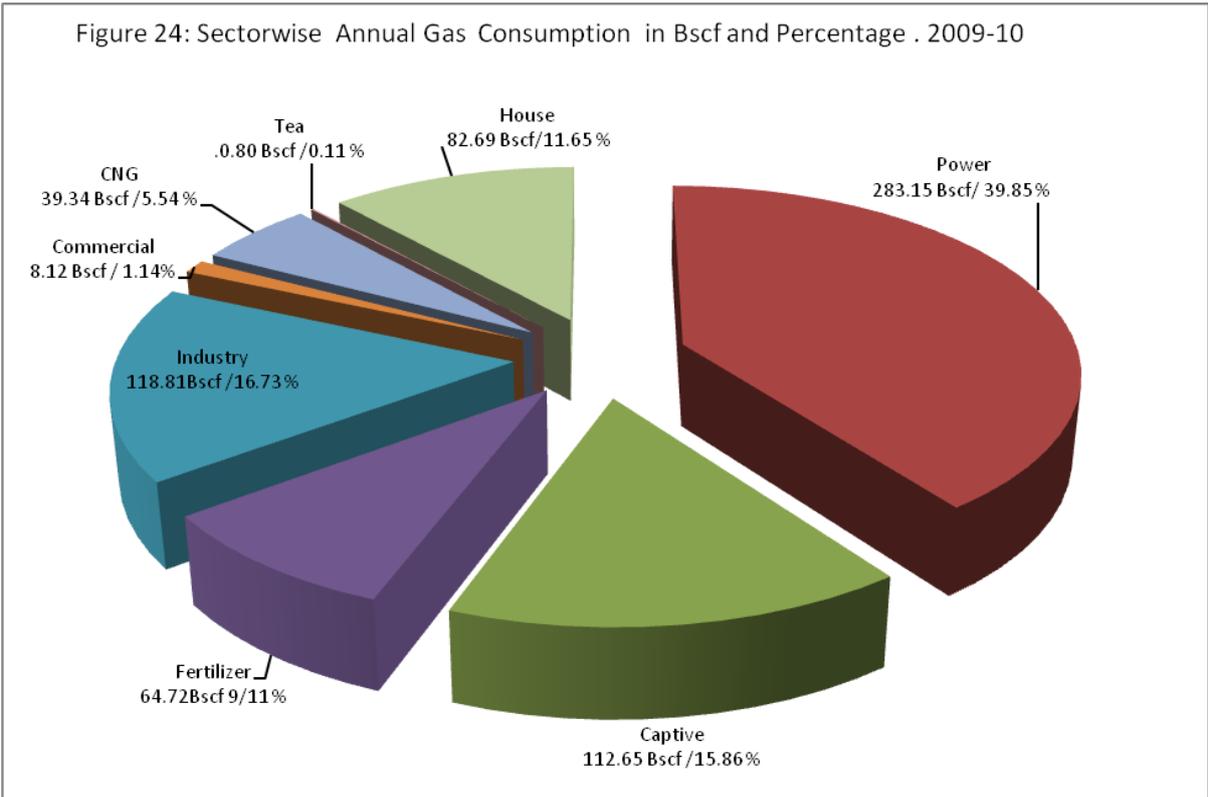
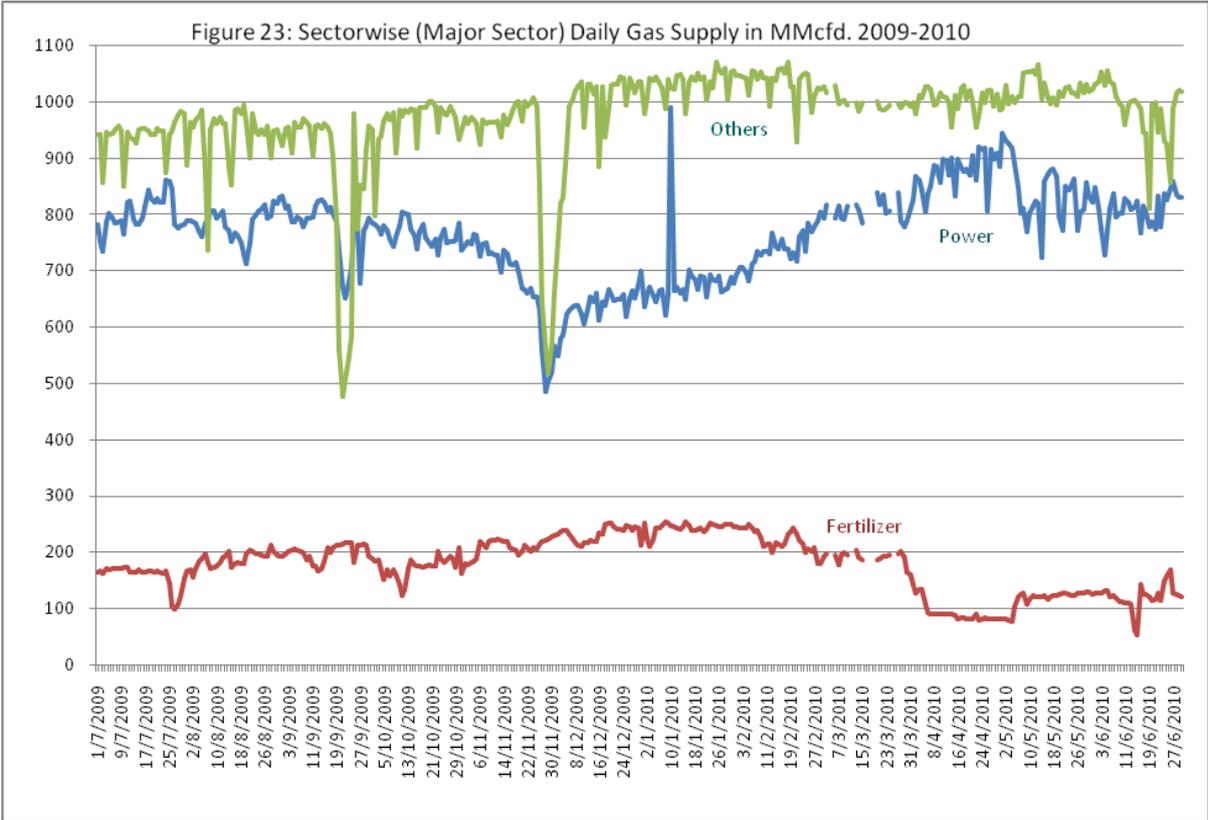


Figure-20 : Fieldwise Gas Production in MMcfd by International Oil Companies, 2009-2010







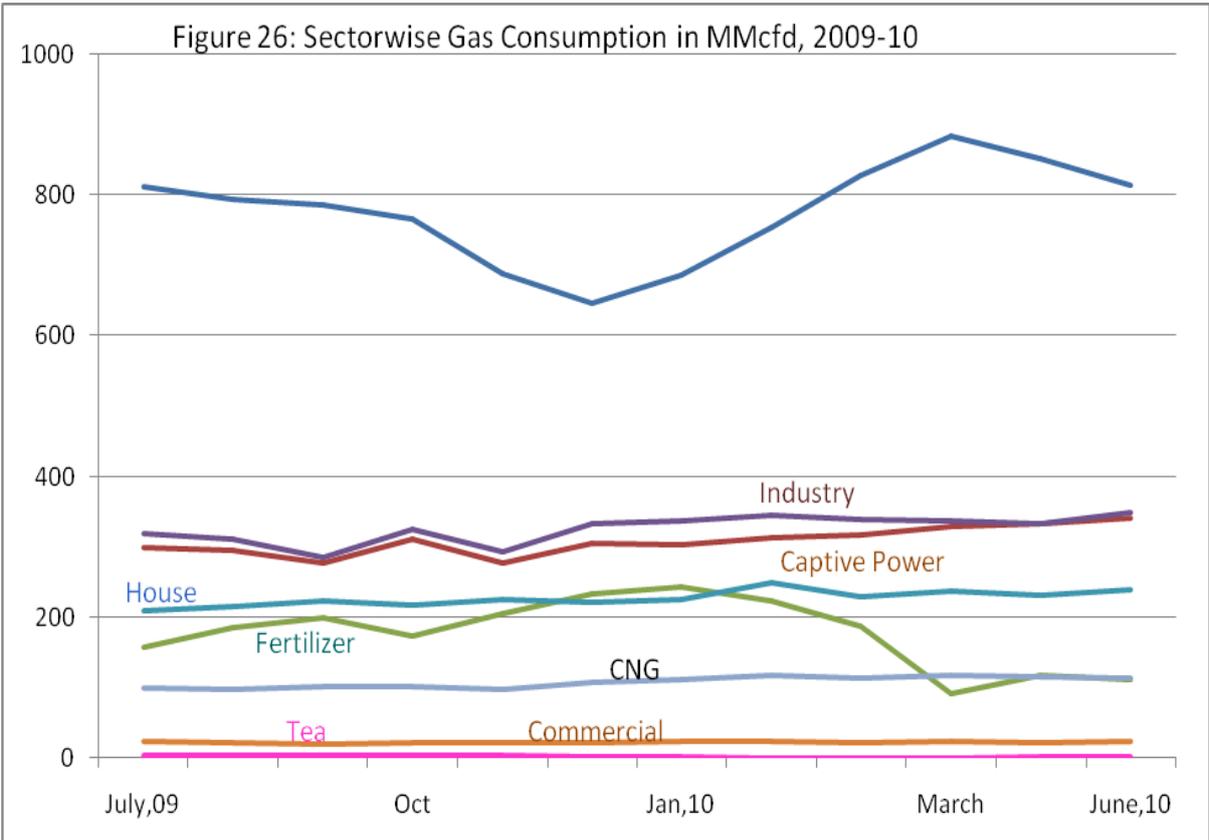
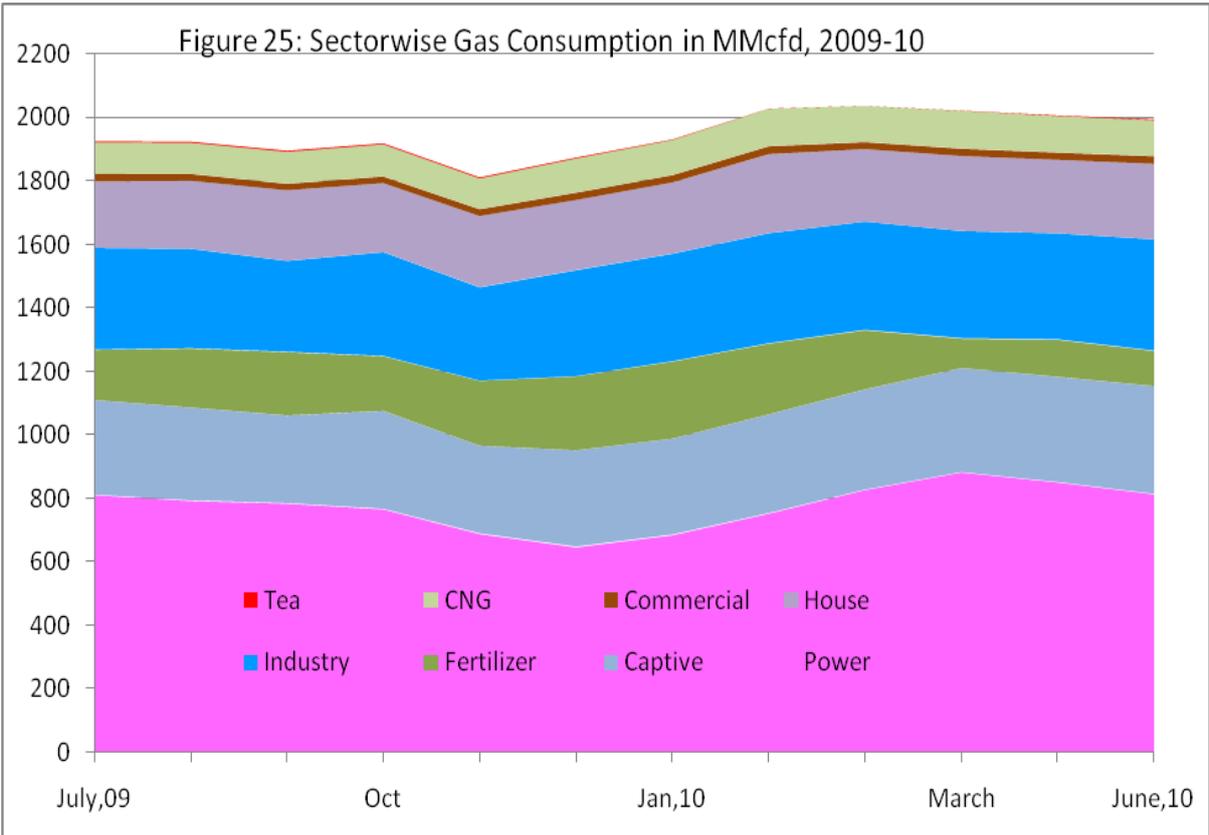


Figure 27: Monthly Gas Production in MMcf, Purchase by Dist Co, Sales by Dist Co, 2009-2010

