OPEN TEXT - BASED ASSESSMENT

ANNUAL EXAMINATION

2014-15

ECONOMICS (030)

Class-XI

CENTRAL BOARD OF SECONDARY EDUCATION

Shiksha Kendra, 2, Community Centre,
Preet Vihar, Delhi-110 092 India

OPEN TEXT MATERIAL

1. Theme – *Oil Pricing Policy in India*

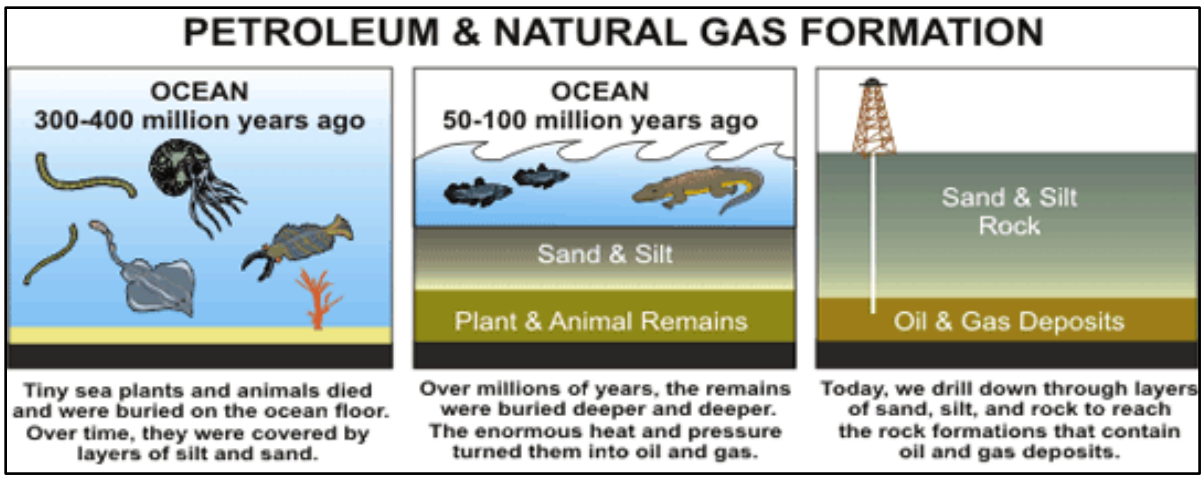
Abstract

We observe that India is richly endowed with crude oil reserves; however these are not being fully utilized. The prices of petrol, diesel, LPG and CNG are often revised. This causes a lot of uneasiness in the economy. The price rise is not taken in well by most sections of society specially the common man. Why do prices of these products rise and how are they influenced by the international prices, these basic questions can be understood in a simple way, although these are very complicated issues. Our economy at present seems to be compelled to import crude oil from the OPEC to meet over 70% of its need. With fluctuating price of foreign exchange in favour of the US dollar, the economy pays a heavy price for its import. It is imperative that ways to be self- reliant in petroleum usage are developed; alternative means of energy need to be used in everyday life. Recently policy decisions have reduced the subsidies provided by the government on petroleum products as these add to its budgetary burden. Fiscal deficit needs to be curbed. One way to reduce the burden of subsidies is to de- regulate the price of petrol and diesel. The need of the hour is to develop refining facilities within the economy, popularize the non- conventional sources of energy like solar, wind and natural gas. Also a lot can be done at home, in place of work, on the roads to reduce energy consumption. It is in the interest of all to consciously adopt ways of conserving energy.

Source: www.telegraph.co.uk

Fig. 1

Crude oil is referred to as petroleum in its unprocessed form. It is a dark sticky liquid as you can see in the picture above. It is scientifically called hydro carbon. As you must have read in your previous classes' crude oil is formed from plants and animals that were buried deep millions of years ago. The remains got converted into oil and gas due to heat and pressure.



Source: Motorcitytimes.com

Fig. 2

After crude oil is extracted it is taken to the refinery by pipelines, ship or barges. At the refinery different components of the crude oil are separated into usable petroleum products like LPG, Jet fuel, diesel and other products. The crude oil is measured in barrels abbreviated as bbls. This unique measure came up as oil was earlier traded internationally in wooden barrels. 1 barrel = 159 litres approximately and one metric ton = little over 7 barrels.

There are many varieties of crude oil like Brent crude oil, Heavy crude oil, Pennsylvania grade, Sweet crude, Synthetic crude, etc. These varieties derive their name from nature of the oil. For example if the sulphur content is less it is called Sweet Crude oil or if it flows freely it is called light crude oil.

What are "heavy" crude and "light" crude?

Light crude is defined as having a high specific gravity. This classification of oil is easier to pump, transport and refine into high value products like petrol, diesel and jet fuel. Because of this, it tends to be more expensive.

Heavy Crude usually contains high concentrations of sulphur and several metals, particularly nickel and high amount of wax. These are the properties that make them difficult to pump out of the ground or through a pipeline and interfere with refining. These properties also present serious environmental challenges.

Heavy oil can be broken into the smaller petrol molecules, through the use of a "catalytic cracker", but this process uses energy and the resulting petrol is thus more expensive. That cost is offset by the cheaper cost per barrel of the heavy crude.

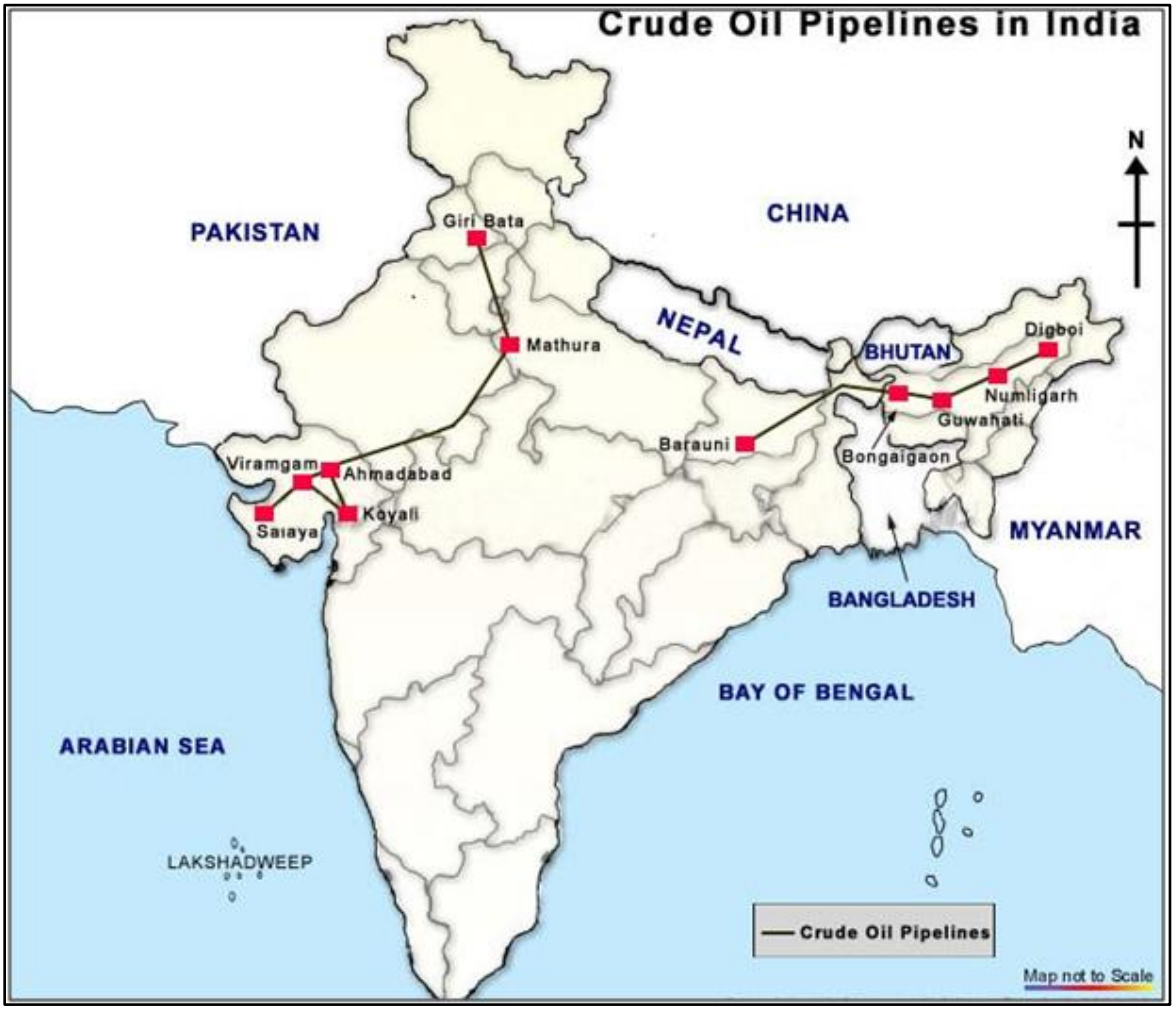
What are "sweet" and "sour" Crude?

Sweet Crude has small amounts of sulphur (mainly in the form of hydrogen sulphide H_2S) (0.5% or less) and carbon dioxide, and is used primarily in the production of petrol. Sulphur does damage to

the equipment when refining and does damage to the environment (and your car's engine) if not removed. If the percentage exceeds 0.5% it is classified as sour. Because of the costs involved in removing the sulphur, sour oil tends to be cheaper than sweet oil.

What kind of crude do Indian refineries process?

Indian refineries process both a mix of sweet and sour. Similarly in India oil reserves are found below the land or sea bed like the Bombay high off shore station or on shore reserves in Andhra Pradesh, Gujarat, etc. The map given below clearly depicts the crude oil pipelines spread across the country.



Source: www.maps of india.com

Fig. 3

According to the *oil and gas journal*, India had 5.7 billion barrels of crude oil reserves in the beginning of 2014, which is 2nd largest in Asia Pacific. It has 136 oil fields. Most of these reserves are in the western part of the country like Rajasthan, Gujarat and Maharashtra as shown in Fig. 3. A lot of crude oil is extracted in our economy as the time series graph indicates, yet it is not enough to

fulfil the domestic needs. The production of crude oil hasn't increased as much between 2003 to 2013, but consumption has nearly doubled and so Government has to import of crude oil. Though indigenous crude oil from Assam and Mumbai High are sweet, they accounts for only 17 per cent of the total processed oil. India has to import the rest, largely from the Middle East and Africa where crude oils are cheaper and involve smaller tanker voyage. Indian imports comprise of sour crudes from the Middle East and sweet crude from Africa.

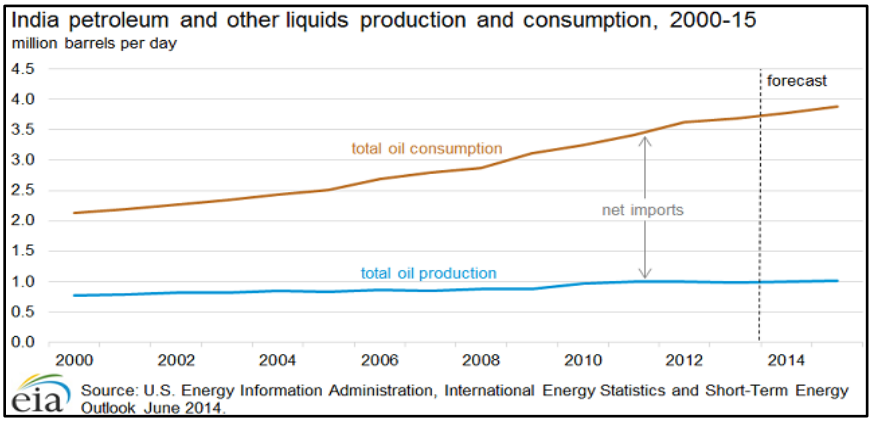


Fig. 4

The time series graph in Fig. 4 shows the gap between production and consumption of crude oil in India.

The reasons for rising demand of petroleum products are many like the Indian economy is in a stage of development where energy requirement is at a phenomenal pace. Since the beginning of New Economic Policy 1991, India's population has increasingly moved to cities, households have shifted away from traditional biomass to other energy consumption, power and transport sectors are fast growing and require increasing consumption. Near about 1.4 million barrels of diesel are used per day in India especially by farmers, trucks and industry. India is ranked 4th in the world after USA, China and Russia. Since the demand can't be met internally therefore India imports over 75% of its crude oil needs from the Middle East, Iran, Nigeria and others. Look at the pie chart given below.

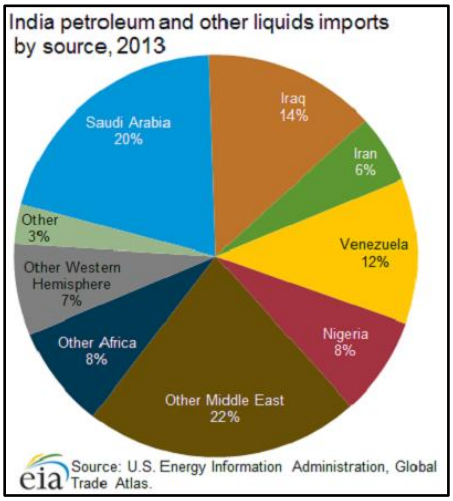


Fig. 5

The pie chart in Fig. 5 indicates the countries from where India imports crude oil. It is clear the majority of India's imports are from the OPEC. OPEC is Organisation of Petroleum Exporting Countries. The organisation came up in 1960 with five founding member countries namely, Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. It has more than 80% of the proven crude oil reserves of the world. Since world over consumption of oil and its products have been increasing, so have the prices per barrel risen. The time series graph shown below indicated this.

Year-wise Average of International Crude Oil Prices per barrel

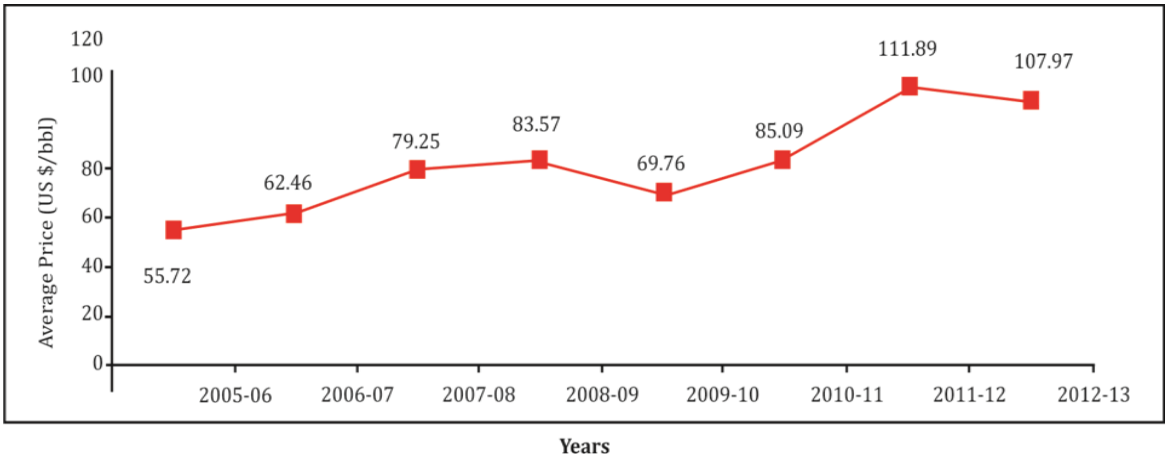


Fig. 6

The current price of crude oil is over $120 per barrel and is expected to soar higher. If as a producer you were importing a raw material and its cost of importing increases then, **what would you do to recover rising cost? Would you not increase the price of the final product you were selling in the market?**

India primarily imports crude oil at rising prices and with the weakening of the rupee lands up paying enormous amounts for crude oil imports. Depreciation of the rupee makes our imports expensive as we have to pay more for every $ of goods bought. For example foreign exchange rate was 52 rupees = 1$ and then rupee depreciates to 60 rupees = 1 $ and if you had to pay 100 $ for importing then earlier you paid (100 x 52) rupees 5200 and now you pay (100x 60) rupees 6000, for the same volume of goods. This burden of rising import prices has to be borne by the Government Being a welfare state it can't pass on the burden of rising prices to the common man. **This is where the Government plays a vital role.** It offers **subsidies** to the Oil and Marketing Companies (OMC's) like the Oil and Natural Gas Commission (ONGC), Indian Oil Corporation (IOC), etc.

What are subsidies? Subsidy is a monetary assistance or tax benefit given by the Government to individuals or institutions to encourage production by reducing cost or encourage consumption. Government provides a variety of subsidies as can be seen in the pie chart given below. While a subsidy on fertilizers is meant to encourage the use of fertilizers by farmers, subsidy on diesel is expected to reduce the cost of transportation for the producers and consumers.

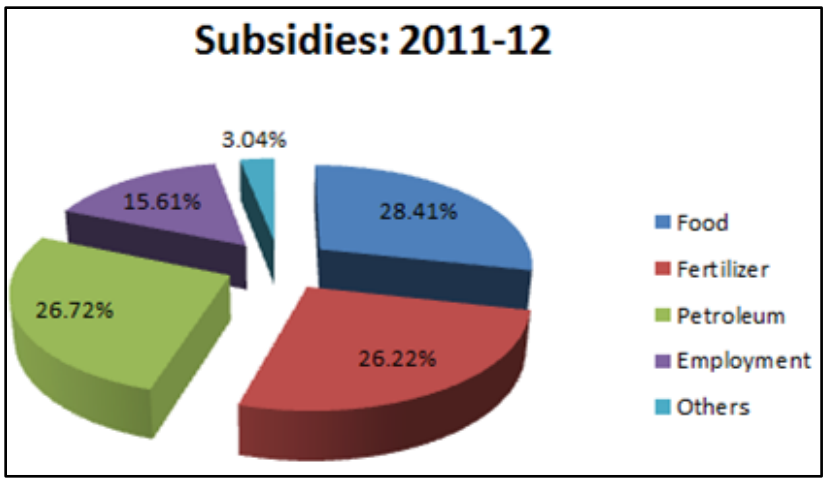
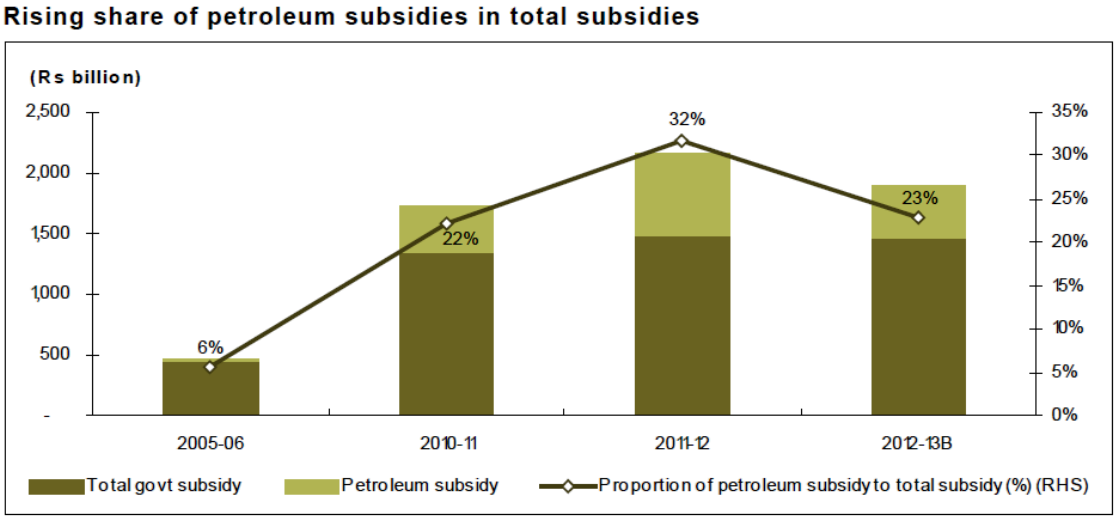


Fig. 7

It is expected that the Government will provide subsidised food articles for poor population, sponsor employment generation schemes and like. As can be seen the maximum subsidy expenditure is provided on petroleum by the Government. This expenditure on subsidies adds to its total budget expenditure and ultimately increases the **fiscal deficit** of the Government Fiscal deficit is the excess expenditure of the Government which has to be funded through borrowings. Borrowings add to the future liability of the country and should be kept to a minimum level. Let us review the bar chart given in Fig. 8. **What does it indicate?**



Note: Other major components of the subsidy bill include food and fertilisers
Source: CRISIL Research

Fig. 8

It indicates that not only is the subsidy bill of the Government risen since 2005-06, the proportion of subsidy given to petroleum has sharply risen. The Government has doled out rupees 1,50,500 crores since 2009-10 to 2011-12 as cash compensation to the oil marketing companies (OMC's).

This compensation is given as the OMC's sell the petrol, diesel and other products at a highly subsidised rate. For example in the 1st quarter of 2012 -13 the price of crude oil per barrel was $ 109.82 and the companies gave a discount of $56 per barrel and therefore they underwent losses to the value of $ 53.82 per barrel. Such losses incurred by selling products at less than market price are called under recoveries (difference between market price and administered price = under recovery). The Government seems to be trapped in the maze of rising subsidies, under recoveries and rising international petroleum prices. To make things better economic advisors (the **Kirit Parikh** committee June 2010) recommended **deregulation** of petrol and diesel prices to liberalise the energy sector in India. **Deregulation is defined as the partial removal of Government control, withdrawal of state interference, encouraging free market operations, simplification of Government rules and regulations.** The **merits** of this strategy are-

- Reduction of the Government burden on subsidies. Cost of subsidy on oil for the year 2012-2013 is estimated to be Rs 43,580 crores. This extra expenditure can be diverted towards health and education sector instead.
- Help the OMC's to overcome their under recoveries.
- The private companies like ESSAR, Reliance etc. will now get a level ground to compete with the public sector OMC's as the administered prices are no longer protecting the OMC's.
- In the long run foreign investment can also feel welcomed to join the oil and petroleum sale and refining sector.
- In the long run the country's need to import will decrease and so would the import bill.
- Aligning the petrol prices to the international market forces.

Is there any relation between the oil prices in India and the world?

Yes petrol price is calculated on the basis of worldwide supply and demand factors. Foreign suppliers sell crude oil to Oil Marketing Companies (OMCs) in India at benchmark prices. Delivery price at the refinery and Brent crude's daily price are considered to calculate actual cost of petrol in India.

One barrel of crude oil contains about 159 litres of oil priced in US dollars. To calculate price per litre, the total amount paid in US dollars are converted to Indian rupee and then divided by 159 litres. For example if each barrel of oil cost $110 and 200 barrels have been ordered for, also the exchange rate is Rs 60 = 1 $. Then the cost per litre will be calculated as follows.

1 bbl x 110 $ per = 110 $.

Rs 60 = 1 $ or 110 $ x 60 = Rs 6600

Cost per litre = 6600 / 159 = Rs 41.509 per lt

After buying, crude oil is transported to refineries in India. India at present has about 20 refineries. Crude oil is then separated into various products like petrol, diesel, coal tar, etc in distillation

towers of these refineries. Cost of distillation and refining is added to the price of petrol. Also custom levy and charges from ports to the refinery is added.

Separated petrol is now ready to be stored in the storage tanks of the oil companies. Oil companies now pay to the refineries and to this is added the cost of transporting petrol from refinery to OMC's tanks. So the actual price of petrol that a consumer pays includes all the above mentioned cost plus commission of a dealer, VAT, excise duty, total duties and taxes.

Thus petrol price is the cost price that includes procuring, refining and marketing plus taxes that include central and state taxes. Suppose if the petrol price per litre in Chennai is Rs 51.90 Rs per litre, here is the break-up of cost calculated by the government:

Basic Price = Rs. 21.93 per litre

Excise duty = Rs. 14.35

Education tax = Rs. 0.43

Dealer commission = Rs. 1.05

VAT = Rs. 5.5

Crude Oil Custom duty = Rs. 1.1

Petrol Custom = Rs. 1.54

Transportation Charge = Rs. 6.00

Total price = Rs. 51.90

So for a Rs 22 litre petrol at pumps, consumers in India pay Rs 29.90 and tax extra. While policy makers view so much merit in deregulating petrol prices the common man can't read between lines and only cribs about the rising prices of petrol, diesel and other cooking fuels.

Fig. 9 (a)

Fig. 9 (b)

Look at the cartoons in Fig. 9 (a) and Fig. 9 (b) what do you understand from the cartoons? Are the two cartoons related? Yes these cartoons are expressing the sentiments of the common man on the rising petrol, diesel and CNG prices. It is becoming difficult for the commoner to understand why are these prices rising and who is going to benefit from such an increase?

The rise in petrol price in turn has a **rippling effect.** As all the commodities are transported across India on vehicles that run on petrol or diesel, so increase in petrol price results in price rise of these commodities as well. The greatest sufferer of all this is a common man. He is already bearing the pressure of inflation and any increase in petrol/ diesel prices will further reduce his disposable income. With the increase in petrol price food item will get costlier; it will result in less of savings and more of expenditure. This in turn will affect the real estate, banking and other sectors of the economy. Eventually, more and more people will be pushed towards poverty line.

It is interesting to know that In USA, at present the fuel price is 3.74$ per gallon, after conversion it becomes Rs 53.80 per litre. They have fixed per gallon taxes. In fact, in US taxes and charges only account for 12-15 percent. In Pakistan fuel prices are 16 percent lesser than ours and in Sri Lanka, they are 15 percent lesser.

While consumers feel frustrated about the heavy taxation on petrol prices, oil companies in India have to struggle to make profits. Fuel pricing in India is an extremely complicated process between the various entities involved. Locally decreasing fuel tax can decrease fuel prices. The VAT or value added tax on petrol or diesel differs from one state to another and is the primary reason for the difference in petrol costs across the country. The revenue generated through VAT on petrol is meant to be used for development within the states. It varies between 15% and 33% depending on the states that have complete control over it. Should they choose to do so, states can reduce or increase the VAT amount. Goa for example, recently reduced the VAT on petrol thereby making it cheaper by Rs 11.

We need a balance where one can enjoy affordable fuel prices. Oil companies are getting reasonable returns whereas our government gets the required revenue.

The entire exercise proves that petroleum pricing is a complex challenge for the Government It is trying to balance between the interests of the consumers, producers and create a pool for renewing poverty alleviation programmes. Following are some methods and strategies which contribute towards solving the problem. Some of these even promote sustainable development. Can you think of more such solutions?

- The refining capacity in the country needs to be increased so that we can use our own indigenous reserves and reduce dependence on imports.
- Modern technology for refining needs to be used like, installation of waste heat recovery system for example reinjecting gas to underground reservoir. This way the wastage of resources is minimized.
- Encourage the development of equipment for household practices like fans, LED lamps, refrigerators, etc. that are fuel efficient. Similarly developing fuel efficient machinery for

industry and agriculture, like fuel efficient pump sets. Making it mandatory for these appliances to carry energy labelling as per international standards.

- Turning towards renewable sources of energy like solar panels, biogas, wind energy etc. using these in everyday life situations like running the traffic signals, using solar geysers, smoke less chulah in rural areas and many more.
- Conducting energy audits in households, offices and other organizations to find out the usage and wastage of energy. Such audits can also keep a check on the use of energy efficient appliances (with 3 stars) and renewable energy equipments.
- Replacing lubricants of lower efficiency with that of higher efficiency, like using unleaded petrol, low sulphur content in diesel, reducing benzene content in gasoline, using CNG for buses, auto and PNG instead of LPG for cooking purposes. These will reduce the environmental pollution.
- Change always begins from "me" we all can contribute by making a conscious effort to switch off lights and fans when not required, use public transport instead of private vehicle, do car pool, write on both sides of paper, reuse our pens and practice the 3 R's of REDUCE, REUSE AND RECYCLE. AS ENERGY SAVED IS ENERGY GENERATED. This is essential for leading a comfortable life today and tomorrow.

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Sample Questions

1. Justify why is it necessary to synchronize traffic lights or use public transport instead of private transport and develop solar panels for household consumption? 5

   Answer: This is necessary to save on energy. If all main traffic lights are synchronized then the fuel wasted by vehicles waiting on the traffic lights can be reduced. Similarly if we consciously use public transport over private vehicles like scooter, motor cycles and cars then it saves fuel. If our homes can use solar panels for lighting up, heating, washing and cooling we would save a lot of fossil fuels used to generate electricity.

   (To be assessed as a whole, 5 marks)

2. Study the cartoon given below and analyse the implications of it. 5

Answer: The cartoon above shows how the developing countries are being bothered by the rising oil prices in the world. They are unable to cope with these rising prices and feel helpless. The rising expenditures lead to problems of deficit financing and inflation in these developing countries. It is true to conclude that if developing countries don't find a solution for themselves then they will be engulfed in this problem.

(To be assessed as a whole, 5 marks)

OPEN TEXT MATERIAL

2. Theme – *A Critical Analysis of Farmers' Conditions in Punjab*

Abstract

Agriculture sector has been recognized as engine of economic growth. Punjab economy is predominant in agriculture and has been a 'forerunner' in green revolution and earned crown of agriculturally advanced state. But, the benefits of green revolution have largely been reaped by the large farmers, leaving behind the small and marginal farmers in the clutches of poverty. The farmers in Punjab are facing problems such as crop failure, continued loss in farming, poor marketing system, pressure of credit agencies, high input costs and small land holdings etc. Agriculture is no more a profitable business and farmers are under a huge debt. Many farmers have committed suicides during the past two decades. This case study attempts to study the reasons behinds this critical situation of farmers of Punjab.

> *It is in the agricultural sector that the battle for long-term economic development will be won or lost.*
>
> (Prof. Gunnar Myrdal, *Nobel Laureate*)

Punjab is popularly known as 'grain bowl' of India. Punjab has been an agrarian economy and self-sufficient in food production, thereby generally crowned as 'bread basket' of Indians. Punjab occupies only 1.57% geographical area of India and it contributes more than 50% grain in the central grain pool. More than 83% of land in Punjab is under agriculture as compared to 40.38% of national average. During green revolution, modern agricultural tools were used and Punjab became the role model for the other States in India. The new technologies of green revolution have provided economic gains in the form of increase in production and productivity.

But today, Punjab is suffering a lot from the ecological point of view. Due to the new agricultural pattern, the demand for water, chemical fertilizers, insecticides and pesticides is increasing very sharply in the State, which is giving birth to many problems like water depletion and water logging, soil degradation and health problems. The productivity of agricultural land is declining and farmers are under the burden of huge debt.

There is a drastic decline in income of farmers due to increasing input costs and low productivity. According to a study conducted by CRRID (Centre for Research for Rural and Industrial Development), annual income of 93 percent farmers have shown substantial decline, while only 3 percent has recorded profitable earning and 4 percent have recorded static earning (Indian Express, Chandigarh, October 20, 2003).

Due to decline in income, the farmers are taking loan to meet their expenses. According to Rawat (2003), about 78 percent of farmers of Punjab have availed credit from non-institutional sources like money lenders, commission agents (aartiyas) and agro-input dealers. They are charging high

rate of interest as the farmers pay a minimum of 2 percent per month compounded rate of interest. It is an interesting fact that commercial banks take about two weeks time to process a loan and corporative banks take about seven days. But, money lenders and commission agents take only half a day to process a loan.

At an estimate, the farmers of Punjab are under debt of a monstrous amount of Rs. 10,000 crores. Further, the farmers who are having less than one acre land, are also burdened under the debt from Rs. one lakh to 11 lakhs (Sharma, 2003).

Problems being faced by farmers of Punjab

The major problems being faced by farmers of Punjab are:

1. **Crop Failure**: Agriculture in Punjab depends heavily on monsoon. Insufficient monsoon results in less production and drought. On the other hand, heavy rainfall damages the crop. Farmers are dependent only on agricultural income. So, in both the cases of crop failure, farmers commit suicide due to insufficient income and being incapable to meet daily needs.

***Source**: http://punjabimohalla.com/drought-situation-in-punjab-state-demands-special-package/*

Fig. 1

2. **Small land holdings:** The land holdings are becoming small. Inherited land is divided among all siblings, which results in small land holdings. The production in small land holdings is not

a profitable business and results in less income. So, small and marginal farmers are forced to live in poverty which sometimes becomes the reason of their suicide.

3. **Unnecessary credit**: With small land holdings, the costly modern tools of cultivation are not affordable. But due to social obligations and show-off, small and marginal farmers in Punjab are indulged in unnecessary purchase of agricultural tools even if they don't afford it. For this, they take unnecessary credit. But due to small land holdings and less production, they are unable to repay the loan.

4. **Depleting water level**: Punjab mainly produces wheat and rice. Cultivation of rice requires a lot of water. Due to less interest of farmers in crop rotation, there is monoculture of rice-wheat rotation only, which has higher requirement of water resulting in depletion of water level in Punjab. The average fall of water table in the central Punjab was 0.55m/year during the last decade. As reported, the ground water level declined at the rate of even 0.75 to 1 m/year at some places of Punjab (Hira and Khaira, 2004). Due to depletion in water level, farmers have to get the *bores* of tube-wells deepened to get sufficient water. Fig. 1 shows a distressed farmer of Punjab in his field suffered by drought.

5. **Pressure of Credit Agencies or Money Lenders**: Agricultural credit is key input for farmers. Due to illiteracy and complex formalities for credit by banks, the farmers get credit from Money-lenders or Commission Agents (*Aartiyas*) as they find it an easy and simple way to get credit. These money lenders charge a higher amount of interest. The farmers live under depression due to insufficient time for repayment, high amount of interest etc.

6. **High cost of inputs**: The rate of chemical fertilizers, pesticides and insecticides are increasing every year. On the other hand, the farm income is not increasing at the same rate. So, due to decreasing profit margin, farmers are becoming poorer.

7. **Less availability of farm labour**: During the last few decades, labour from Bihar, Uttar Pradesh etc. used to come to Punjab as agricultural labour. But after the Indian government has started employment generation schemes like NREGA (National Rural Employment Guarantee Act), NRLM (National Rural Livelihoods Mission) Aajeevika etc., these labourers generally get employment in their home states. It results in lack of farm labour in Punjab. Due to less labour availability, the local labourers are hired at higher cost, which again decreases the profit of farmers.

8. **Poor Marketing of crops**: A stated fact is that farmers do not get a fair price for their crop. The price that consumers pay does not fully go to the farmers and the middlemen and traders get a large chunk. The reason for this is because farmers cannot reach the consumers directly and they have to be dependant on middlemen and traders. Fig. 2 shows the scene of a Grain market *(Mandi)* in Punjab.

Source: *http://www.dailymail.co.uk/indiahome/indianews/article-2767170/MY-BIZ-Farmers-set-harvest-bumper-Basmati-crop-despite-drought-Punjab.html*

Fig. 2

9. **Social Factors**: It includes expenditure on marriages, social functions etc. It is a matter of fact that agriculturalists borrow 53% of their total borrowings for unproductive purposes and due to social obligation, they spend lavishly on marriages, construction of big houses, purchase of expensive cars etc. This results in huge economic burden on farmers.

The above factors make the condition of farmers very critical. They have no other source of income and are thereby compelled to live in clutches of poverty. Due to illiteracy, the farmers are unable to move to other job sectors. Even if some are educated, their mindset is orthodox and they are not willing to move to other jobs. Thus, the unfavourable economical and social factors force the farmers to vicious circle of poverty and financial crunch.

Forced by this financial crunch, about 5,000 farmers and farm labourers have committed suicide in Punjab state during the period 2000 to 2010, with an average of 500 suicides a year or three suicides in every two days. Out of these 5,000 suicides, about 3,000 farmers have committed suicide in just two districts of Punjab i.e. Sangrur and Bathinda. These are the shocking findings of a state government commissioned survey conducted by three universities of the Punjab state – Punjabi University (Patiala), Punjab Agricultural University (Ludhiana) and Guru Nanak Dev University (Amritsar).

NEWS in various Newspapers

Two debt-ridden farmers commit suicide

– May 22, 2014 (Bathinda, Punjab) HTC, ***Hindustan Times***

In Punjab, three farmers kill themselves every two days

– May 26, 2014 (Chandigarh) ***Tribune News Service***

Debt-ridden farmer commits suicide in Punjab

– September 07, 2014 (Chandigarh) ***Outlook***

These types of news regarding farmers' suicides in Punjab could be seen almost every week. According to above mentioned news, a farmer who was allegedly debt-ridden, committed suicide by jumping before a train in Chehlanwala village in Mansa district of Punjab, police said. According to villagers, the farmer Roop Singh (62) was under a debt of Rs. two lakh and was under depression as his crop (about three acres) got damaged due to torrent rains. Fig. 3 shows the protest by family members of the farmers (who committed suicides owing to debt) outside a district administrative complex in Punjab.

Source: http://www.dailymail.co.uk/indiahome/indianews/article-2798501/protesters-slam-apathy-punjab-government-farmer-suicide-compensation.html

Fig. 3

Besides Punjab state, farmers in other states like Maharashtra, Odisha, Karnataka, Kerala and Andhra Pradesh are also committing suicides. According to National Crime Record Bureau (2010), in India, 10720 farmers committed suicide in 1995 and 16603 farmers in the year 2000. Data also shows that in year 2005, total 17,131 farmers committed suicide and 15,964 in the year 2010, with a total of 2,56,913 farm suicides from 1995 to 2010.

Conclusion

The critical situation of farmers puts a big question-mark on the concept of planning for agro-rural development in the country. Agriculture sustains the national economy, but it is still the most neglected sector. No one can afford to remain insensitive to the increasing cases of suicides committed by farmers. Governments at Centre and State level should come forward to take adequate measures in this direction.

Easy availability of credit facilities should be ensured in order to save the farmers from clutches of moneylenders and commission agents. The government should adopt the strategy of Self-Help Groups (SHGs) to provide low cost credit to the small and marginal farmers because these farmers are dependent on the moneylenders and commission agents for their credit needs.

Marketing of crops is a major issue to be solved by government. Role and number of middlemen should be reduced to minimum so that the farmers should be getting large chunk of price given by consumers for their produce. Minimum support price has to be increased and subsidies should be given to farmers on farm inputs. A comprehensive 'Agricultural Insurance Scheme' should also be launched. Organic farming should be promoted to avoid or minimize the cost of pesticides and fertilizers. Agriculture policy needs to shift from its current bias of 'corporates first' to 'farmers first'.

Farmers should be encouraged to adopt allied activities like dairy farming, fisheries, bee-hiving, poultry farming etc. to lower the burden of livelihood on agricultural sector only. Subsidies and low cost loans should be provided for these purposes. Specific attention should be given to cover cash crops – like cotton, sugarcane and edible oils.

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- Nisha Sharma (2003), "Wheat Granary Suffers," *Sahara Times*, 4 October 2003.

Sample Questions

1. Do you think that agriculture could be a profitable business in near future even for small and marginal farmers? Give reasons to support your answer. (5)
2. Write a critical note on situation of farmers in your state. (5)

Marking Scheme

1. Agriculture could be a profitable business in near future even for small and marginal farmers. Following steps are needed to be taken by Centre and State governments:
   - Easy and low cost credit should be provided to farmers.
   - Grants and subsidies should be given to purchase agricultural inputs.
   - Marketing of crop should be channelized and role of middlemen and traders should be reduced to minimum.
   - Minimum support price of crops should be increased.
   - Farmers should be encouraged to adopt allied activities like dairy farming, fisheries, bee-hiving, poultry farming etc. to lower the burden of livelihood on agricultural sector.
   - Any other relevant point written by student (To be assessed as a whole, 5 marks)

2. Students should write about the condition of farmers in their own state:
   - Which crops are being sown in your state? Do the farmers get a fair price for their crop?
   - Are the farmers satisfied with their income from agriculture? If not, why?
   - Do the farmers in your state have easy access to credit at lower rates?
   - What are the main sources of loans to farmers in their state?
   - Any other relevant point written by student (To be assessed as a whole, 5 marks)