

Open Text- Based Assessment 2015-16



Social Science Class-IX

Themes:

1. Together We Rise
2. Food Security in India

Page

1
10



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OPEN TEXT BASED ASSESSMENT

SOCIAL SCIENCE CLASS-IX

Theme-1: Together We Rise

Abstract

India has been a land of milch animals and milkmen since ages. Our historical accounts clearly mention domestication of cows and buffaloes nearly 4000 years ago. Dairy farming has been an integral part of our culture and civilization from the Harappan times and remains so even today. Currently, dairy farming - especially through cooperative societies, has become an effective platform for providing growth and development to the rural areas with regard to supplementing farmers' income, generating employment opportunities and creating new avenues for youth progression besides contributing towards maintenance of food security.

This text enables the learner to enrich their knowledge about Operation Flood and White Revolution in India. The working of Cooperative Societies, especially Dairy Cooperatives in India and the causes of emergence of dairy industry in India are also given. It also gives the relation between dairy farming and food security and the link between Dairy Industry and Science and Technology. The students can assess the role of Dairy Cooperatives in rural and national economic growth by understanding the concepts of cooperation, self-help and democracy.

A. Dairy Cooperatives in India

Emergence of dairy industry in India, the way it has come up today, would not have been possible in the absence of the cooperative societies like Kaira District Cooperative Milk Producers Union of Anand, popularly known as - AMUL. Over the period of time, under Operation Flood, all these milk cooperatives of the country have driven India to become the largest producer of milk in the world. From being a milk deficit country at one point of time to being a top producer in the world is no doubt a great achievement.

Beginning of the saga:

In 1940s, dairy sector in British India was dominated by a firm known as Polsons, established by Mr. Pestonjee Eduljee at Bombay (now Mumbai) in 1915. Polsons supplied milk to the city when it was a part of Bombay Presidency under Bombay Milk Scheme. Farmers of Kaira district in Gujarat produced milk in plenty and the firm decided to procure milk from them. Polsons collaborated with private contractors, the middle-men who actually went to Kaira and purchased milk from the farmers at a very low price. A regular supply of quality milk started in Bombay leading to huge profits for Polson and the milk contractors. Now Polson, which earlier produced coffee, started producing cream and butter also. It established total monopoly in the dairy sector with support of the British government. Farmers were unable to sell their milk to any other merchant in the market

and were forced to sell it to Polson only, that too at a very low price. Dairying involved hard labour and a lot of expenditure on cattle feed and fodder, so the farmers were quite unhappy and dissatisfied with the payments made by the company. The system benefitted both, the company and the middlemen but the farmers remained bare handed.

Exploited and dejected due to unfair trade practices, these farmers approached popular nationalist leader Sardar Vallabh Bhai Patel. He advised them to unite and take charge of their own resources by getting rid of the middlemen, stopping milk supply to Polson and forming a cooperative society of their own - giving a big blow to Polson and its contractors by controlling procurement, processing and marketing in their own hands, being the owners of the co-operative society.

This is how the Kaira District Cooperative Milk Producers' Union of Anand (later known as AMUL) was born, in 1946 with just two village dairy cooperative societies and 247 litres of milk. The spark of this unusual revolution was ignited where milk became the symbol of change. After the initial phase of struggle, the cooperation and mutual trust of these farmers bore benefits. Their success soon spread across the neighbouring districts of Gujarat where a number of milk co-operatives were setup.



Milk Revolution across the nation under Operation Flood. To support these dairy societies and to expand their activities, State Milk Marketing Federations were set up in various parts of the country, which worked in association with NDDB.

The then Prime Minister Lal Bahadur Shastri wished to replicate the success of AMUL to other parts of the nation. Hence, the National Dairy Development Board (NDDB) was set up in 1965 and Dr. Varghese Kurien, as its Chairman led the



Think and discuss

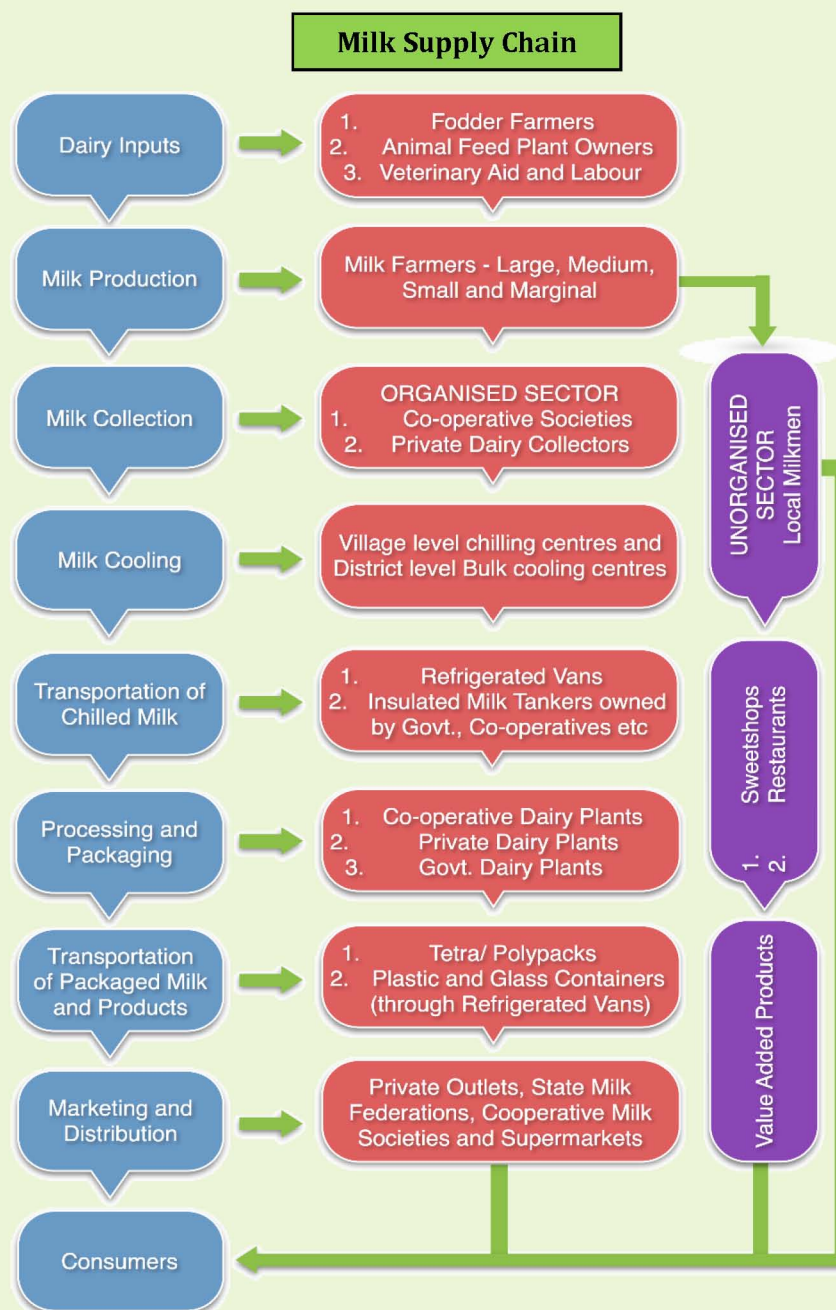
How did milk revolution help the small and marginal farmers?

Current Status

Today Milk Cooperatives form the key portion of processed liquid milk sold in the nation. There are 22 State Co-operative Milk Marketing Federations, 190 District Milk Unions, 1,60,000 Village Dairy Co-operatives and more than 15 million milk producers in India. Together, they produce, procure, process and market milk and milk products in the local, national and international markets.

National Cooperative Dairy Federation of India (NCDFI), based at Anand (Gujarat), is the apex body that heads cooperative dairy sector. Federal dairy cooperatives of states and union territories are its affiliates. Its principal aim is to facilitate the working of dairy cooperatives through coordination, networking and encouragement. One of its highly significant

activities is coordinating sale of milk and milk products to the defence forces and other para military organizations as well as to Indian Railway Catering and Tourism Corporation (IRCTC) through its member co-operatives. It works in coordination and with the support of NDDB which promotes the growth and expansion of dairy cooperatives by extending financial help, technical assistance and medical expertise to farmers to ensure their welfare and well-being of their cattle.



Think and discuss

How has Science and Technology given a big boost to Milk Revolution? Which streams of science are directly related to production, procurement and processing of milk? How?

Over the years, milk cooperatives have earned excellent reputation that is synonymous with quality, merit and value for money. Brands like Amul (Gujarat), Mother Dairy (Delhi), Vijaya (Andhra Pradesh), Verka (Punjab), Vita (Haryana), Saras (Rajasthan), Nandini (Karnataka), Milma (Kerala), Gokul (Kolhapur) and Aavin (Tamil Nadu) are among those that have become household names now.

Today, India as world's largest milk producer, contributes more than 18% of world's total milk produced. It is also the world's largest consumer of dairy products like milk, milk powder, curd, cream, butter, ghee, cheese, lassi, ice-cream, etc.

Did you know?

- ★ *Operation Flood was implemented in three phases – I - 1970-80, II - 1981-85 & III - 1985-96.*
- ★ *India became the largest milk producing nation in 1999 and continued to be at this position in 2013-14 by producing 137.6 million tonnes of milk.*

B. Success story of Hardeep Singh and Sukhjeet Kaur

In a small village Dharamkot, under Batala tehsil, district Gurdaspur in Punjab lived Hardeep Singh, a small farmer who had a very small patch of land to cultivate and three cows who provided milk to the family which comprised of his old parents, wife Sukhjeet Kaur and two children – a son and a daughter.

Being a small farmer, Hardeep Singh always remained hand to mouth as farm production was meagre and became almost nothing during dry phase adding on to his family's miseries. At such times, the family had to starve or sustain just on cows' milk, in whatever amount it was available.

The
Consumers



State
Co-op.
Milk
Federation



District
Milk Co-
op. Union




Village
Dairy
Co-op.



Milk
Producers





In normal days, he sold surplus milk to the nearby dhabas and a few households in the locality. This supplemented his income but not on regular basis as these buyers never made the payments on time and paid very less price as compared to the market rates.

Hardeep Singh tried hard but could not make both the ends meet single handedly. Worries of fulfilling family needs troubled him as his resources were scarce. It was at this time that he approached his friend Gurpreet Singh to seek monetary help. Gurpreet Singh was the member of village Dairy Cooperative Society (DCS) and advised Hardeep to join the society instead of taking loan from here and there. "After all, self-help is the best help", he said. "A milk farmer can become a member of any Dairy Co-operative Society by just buying a single share at the minimum and by committing sale of the milk to the respective co-operative society," he informed.

With his friend's help, though having many apprehensions in mind, Hardeep Singh became the member of DCS the very next day. He took a few litres of milk along to sell at the society's milk collection centre, from where milk was to be dispatched in refrigerated vans to the district milk unions for further processing. The milk was tested and to his utter surprise, the payment was made instantly as per the quality of milk. Rate per litre was almost the double of what he used to get from the dhaba owners. Hardeep thanked his friend for guiding him in the right spirit and started selling milk to the society which collected it twice a day. This provided him with a regular income and he could somehow cater to the needs of his family now. Things went fine in the flush season but his cows could not get fodder in the lean season. They became weak and the milk supply reduced.

He again contacted Gurpreet Singh. "We as shareholders are one of the owners of the Co-operative, when we work together with other members towards its growth, we also grow in return. It is nothing, but attaining self-reliance through self-help" Gurpreet said. I didn't understand what you are saying friend, Hardeep whispered.

"The village DCS is associated with District and State co-operative federations my dear, which procure, process and market milk" Gurpreet explained. "The profits they earn are shared with all of us and are also invested in setting up milk processing and animal feed plants, buying other equipments and training members in advanced methods of dairying. Hence, the DCS provides its members with factory made animal feed in the lean season and also extends veterinary help for animal breeding and keeping them healthy. Not only this, it also provides loans to the members on very nominal interest rates in order to allow them to secure and expand their endeavours. You should also avail this opportunity," he said.

"Can I take charge of the dairy activities at home and be a member of the DCS?" asked Sukhjeet Kaur. "Why not, in fact, many women are successful members of the dairy co-operative and are doing really well. In this way, you would be empowered to be an equal partner in increasing the family income and would feel good on being economically independent. This would also enable Hardeep to earn some more for the family by giving extra time and focus to farming," Gurpreet answered.

The couple felt enlightened and followed their friend's advice. Today after fifteen years, Hardeep Singh and Sukhjeet Kaur are the joint owners of five hectares of farm land, where Hardeep follows multiple cropping and mixed farming using modern scientific methods. Sukhjeet runs a dairy with forty five cows and owns a good number of shares in the village DCS. Their son has graduated in Dairy Management. He helps his mother and also works in Verka milk processing plant owned by the Punjab State Milk Co-operative federation. Their daughter studied Bio-technology and works in the field of animal husbandry. The economic status and purchasing power of the family has increased manifolds. Gone are the days of starvation - they are food secure. They have created their own resources and are self-reliant now.

☆ Try to find out the link between Couple's decision to follow Gurpreet's advice and family becoming prosperous. How would have co-operation and collaboration at local level helped them reach the current status?

☆ Things cannot always be good as happened in the case of Hardeep Singh. There can be a number of problems faced by the members of Dairy Co-operative Societies. Try to identify and analyse these problems. Also suggest practical solutions to solve them.

C. Women's Group ensures payments in dairy farming



"I have to get back my payment of Rs. 22,000 for supplying milk which is pending from my earlier milk vendor. Even after two years he is not ready to pay. Every time when I go to ask for the amount, he gives some excuse and sometimes he is not in his shop," says Ms. Chellam from Thiruvannakoilpatti village, Illupur taluk, Pudukottai district in Tamil Nadu.

Like her, there are many people in different villages with the same story — pending payments from the local milk vendor or tea stall for the milk they supplied. But today, after the Rural Women's Entrepreneur Federation (RWEF) has been inaugurated in Pudukottai by the M.S. Swaminathan Research Foundation (MSSRF), Ms. Chellam can be confident of getting back her due since there is a group to support her.

The group was started in 2012 with an initial membership of about 450 women members after a survey in the village revealed that cattle rearing was not a popular off-farm activity because of irregular monthly payments, faulty milk analysis, and lack of knowledge in animal health care and management. Based on a request from the members, a federation called Komatha Milk Producer Association (KMPA) was started, consisting of 375 women dairy entrepreneurs managed by RWEF.

The objective was to promote an integrated system of credit access for animal purchase, create quality and cost effective fodder banks, and establish vermi-composting units, manufacture bio products from cow urine and maintain animal health care and insurance.

To ensure a transparent management system, a committee consisting of nine members was elected from KMPA who meet once a month to discuss various matters related to their milk business. KMPA has established six milk collection centres till date and has provided a revolving fund loan for Rs. 13 lakh for purchase of milch animals to its members.

Constant efforts of the group have resolved the issue of delayed payments and the milk supply has increased from initial 100 litres per month to 12,000 litres per month with an annual gross income of Rs. 25 lakh. The long term strategy for the RWEF is to increase the milk producers to 1,000 members by the end of 2015.

Source: The Hindu, April 30, 2014

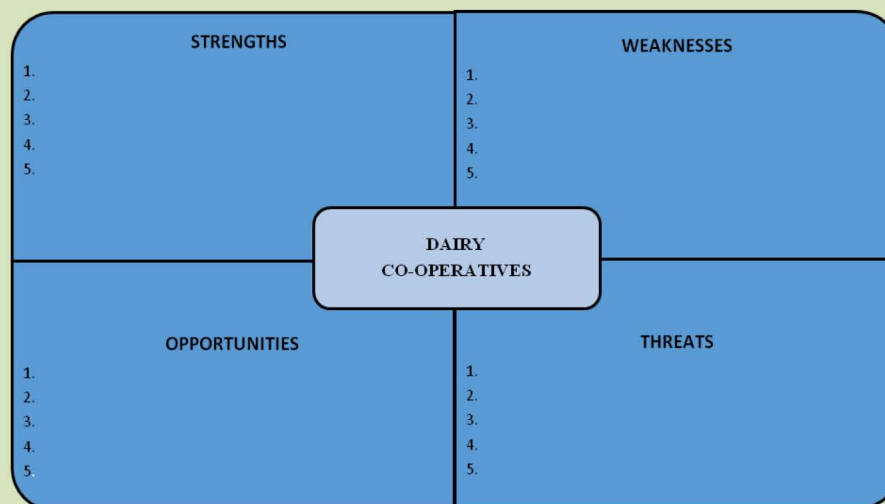
Did you know?


According to the Annual Report of NDDB - during 2013-14, the number of all-women Dairy Co-operative Societies in the country increased to 26,700. As on March 2014, there were 4.38 million women members in dairy cooperatives across the country.

Think and Discuss

- ★ Reasons for which a large number of women have entered the field of dairying.
- ★ The relation among women empowerment, food security and nation building.
- ★ About other fields which have led to women empowerment / upliftment on a large scale.
- ★ Contribution of all-women Dairy Co-operative Societies in the rural areas.

On the basis of the given content do a SWOT Analysis of the Dairy Industry in India.





Besides dairying, co-operative societies are working in various fields such as agriculture, fisheries, industry, housing, marketing and finance etc. Grain Co-operatives, Sugar Co-operatives, Fruit and Vegetable Co-operatives, and Textile Co-operatives are some of the common examples. They not only contribute towards socio-economic uplift of the rural areas but are very active in urban sector as well.

Things to discuss and do

- ★ *Find more about the co-operative societies in at least four different fields and find out the basic principles on which they work.*
- ★ *Also try to figure out as to how they help in providing food security in the country.*

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SAMPLE QUESTIONS AND MARKING SCHEME

1. **How do Milk Co-operative Societies contribute towards nation building? Explain. 5 Marks**

Answer: Milk Co-operative Societies contribute towards nation building by–

- a) Making people self – reliant and promoting entrepreneurship,
- b) Providing Employment in rural as well as urban areas,
- c) Providing food security and health,
- d) Promoting use of science and technology,

- e) Promoting Research and Development,
- f) Contributing to Nation's Economy.

2. Elucidate any five limitations of the Co-operative societies.

5 Marks

Answer: Limitations of the Co-operative societies–

- a) Insufficient capital
- b) Inefficient management
- c) Lack of unity and coordination among members
- d) Limitations of size
- e) Inadequate motivation
- f) Delays in decision making and decision implementation,
- g) Government interference.

OPEN TEXT BASED ASSESSMENT

SOCIAL SCIENCE CLASS-IX

Theme-2: Food Security in India

Abstract:

The World Food Summit of 1996 defined food security as a situation “when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life”. Primarily, the concept of food security is defined as availability (of food production in the country), accessibility (reach ability of food to all) and affordability (capacity to buy food of the population) to buy food that meets people's dietary needs. In many developing countries like India, health problems related to dietary deficits are an ever increasing threat. This text gives information about how India made its attempts since independence to ensure greater food security.

The text helps the students to understand the meaning and concept of food security, the importance of agricultural reforms in India, the role played by land reforms and green revolution in the development of the Indian agriculture and the meaning and implication of food self sufficiency. They shall be able to evaluate the agricultural policy and its implementation in post independence period of India.

Food Security in India

Shiksha, a student of class IX, was reading about the colonial period in India, the chapter on the Great Bengal Famine of 1943 which is estimated to have killed more than 30 lakh people in the province of Bengal. She decided to ask about the issue from her father who is a Professor of Economics at a foreign university.



- ☆ How could the British do this to us, not paying heed to millions of Indian dying of starvation and malnutrition?
- ☆ Have we experienced any such disaster in the post Independence era?
- ☆ Are we prepared to handle such a situation if it occur now?

She mailed these questions to her father and went to her school. Whole day she was thinking of the topic and was looking around her class-mates throwing the remaining food from their tiffin-boxes in dustbins (how many times she herself has done so?). She suddenly realised how much food is wasted in marriage parties in India. Are we not criminal in wasting food? After reaching home, she skipped her lunch to switch on the laptop and started reading the mail from her father. She had a smile on her face looking at the mail, which read:

Dear Shiksha,

Your mail had left me wondering how soon you have grown up enough to critically think on such a complex issue of 'food-security' in the pre and post-independence era. Yes, you are right, the role of Britain and its Parliament was disturbing enough not just from an Indian perspective but also from humanitarian perspective as well. However, I was thinking more about your last question, how grim is the situation prevailing in contemporary India on the issue of food-security. I would concentrate in what the Independent India has achieved and rather beating the chest over the past where we had no control over the decision making and policy formation – either political or economic. We must start our journey since 1947 to understand the present status of food situation.

The agricultural sector in India remained stagnant and largely neglected under the British rule. This called for some urgent reforms to put it on the road to recovery after the independence of India.

PROBLEMS FACED BY INDIAN AGRICULTURE		
INSTITUTIONAL PROBLEMS 1. Defective Tenancy Reforms 2. Poor Credit Facilities 3. Inadequate marketing facilities 4. Size of Land Holdings	TECHNICAL PROBLEMS 1. Obsolete Technique of production 2. Lack of irrigation facilities 3. Cropping pattern	GENERAL PROBLEMS 1. Social Environment 2. Pressure of population and land 3. Land Degradation 4. Subsistence farming 5. Crop losses.

To tackle these problems, the government introduced a variety of reforms over this period of time, such as:

- i) Land Reforms (Institutional Reforms)
- ii) Green Revolution (Technical Reforms)
- iii) General Reforms

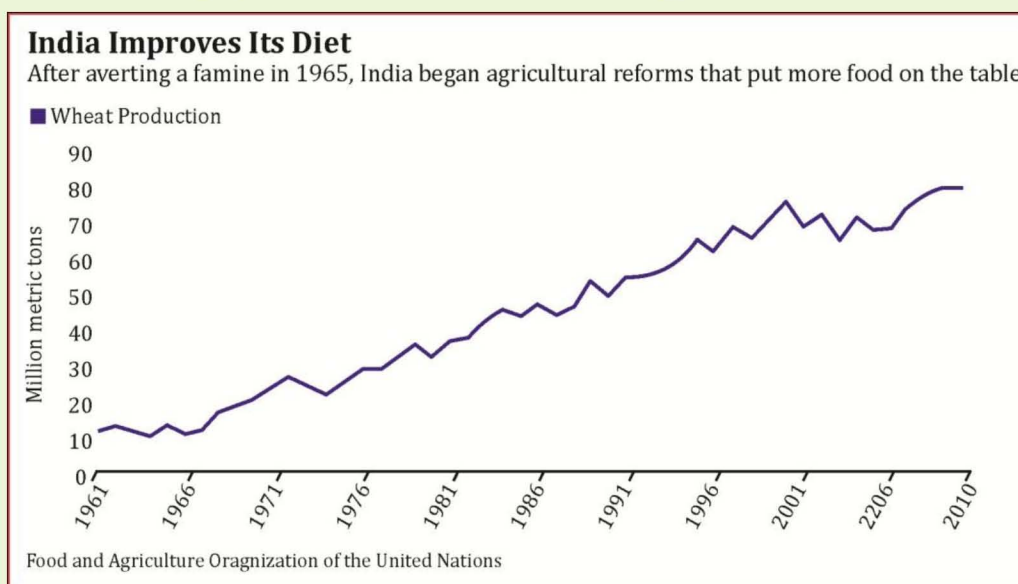
★ **Land Reforms (Institutional Reforms)** – After the independence, land reforms were introduced with a view to remove all obstacles arising out of land ownership, tenure and tenancy systems. These reforms included steps like abolition of intermediaries (zamindars, mahalwaris etc.), tenancy reforms (regulations of rent, security of tenure, ownership rights for tenants), land ceiling, land consolidation, co-operative farming etc. Such land reforms were not a grand success in India due to misuse of loopholes of the law by the rich and powerful landlords.

★ **Green Revolution (Technical Reforms)** - The primary target of the first five year plan was to give priority to the development of agricultural sector. This was necessary to ensure that no Indian should die of hunger and starvation and to a very large extent, we have been successful as well. Second and third Five Year Plans saw considerable public investment

towards mechanisation and technological upgradation of the agricultural sector particularly irrigation facilities across the nation, although we had experienced two consecutive bad harvest years (1965-67).

To overcome the aftermath of droughts and the slow agricultural production, a new strategy of 'Green revolution' was formulated. The new policy package included availability of following at subsidised prices:

- i) High yielding varieties of seeds.
- ii) Chemical based fertilizers (popularly known as NPK – Nitrogen, Phosphorus and Potassium) along with pesticides.
- iii) Sufficient water supply and commercial sources of energy to farmers



Source: Food and Agricultural Organization of UNO

This New Agricultural Strategy, which was also termed as 'SEED-FERTILIZER-WATER' was clubbed with a 'price support policy' and subsidies (a subsidy is an economic benefit granted by the government) to the farmers which has resulted in catering to the food needs of our country and pushing us towards 'self-sufficiency' in the direction of food-requirements. It was under the Mexican scientist Prof. Norman Borlang, that the HYV seeds for wheat were developed which actually converted the food-scarce country to food-surplus country. The results of Green Revolution can be presented with the following data:

Table showing rise in Food - Production (all values in million tonnes)

S. No.	Production	1965-66	2011-12
1.	Wheat	11.1	93.9



2.	Rice	35.1	92.8
3.	Coarse Cereals	26.1	32.5

Source: Economic Survey, 2012-13.

The above table shows the magnificent growth of the food production from the above data in the targeted areas of wheat, rice and coarse cereals. Later on, similar growth was also registered in pulses and oil-seeds ensuring sufficient availability of these articles in the country. However, there have been some reasonable points of criticism on account of Green Revolution, which must not be ignored, such as:

- i) It was restricted to states like Punjab, Haryana, western Uttar Pradesh and Andhra Pradesh. This increased regional imbalance in the country, over the years.
- ii) As a result of Green Revolution, most of the rich and wealthy farmers got the better part of the benefits keeping the poor farmers devoid of the benefits of the revolution.
- iii) Increased mechanization resulted in increased ecological degradation due to chemical fertilizer, pesticides, insecticides etc.

As per the 11th Five Year Plan report, the Second Green Revolution is the urgent need of this country to raise the contribution of Agriculture in the GDP to 4% from the present 2% status.


★ **General Reforms** – some of the other/general reforms like irrigation facilities, credit facilities, marketing facilities and above all support price policy were also taken up by the government.

Dear Shiksha, by now you must have understood how much we have travelled and progressed since we attained independence. However, you must concentrate on the contemporary conditions as well. The irony of our country is that on one hand, we are primarily an agrarian country while on the other hand, we have places in India like Kalahandi and Kshipur (Odisha), Palamu (Jharkhand), Baran (Rajasthan) and some more areas where still there are random starvation deaths reported in recent years. Although nothing like the magnitude of Bengal famine has ever occurred in this country after independence.

I hope you know the basic concept of food security, which includes three aspects

- i) Availability (food production in the country),
- ii) Accessibility (reach ability of food to all) and
- iii) Affordability (capacity to buy food).

From a conceptual and a historical stand point, India's buffer stocking policy worked on an insurance approach (buffer stock is the stock of wheat, rice and coarse cereal grain procured by the government through FCI), the buffer stock is kept as an insurance against a reduction in supplies in



the times of falling production. The evolution of food policy and thus, of buffer stocking in free India, is the story of a calamity-oriented policy being transformed into an instrument of delivering equitable development.

However, we must not jump on to the conclusion that all is well with Indian food distribution system due to the steps taken by the government by now. The food grain procured by FCI is distributed by the government using its Fair Price Shops/Ration shops, this system is known as Public Distribution System (PDS). In the beginning, PDS was universal in nature i.e. for all without any discrimination between poor and non-poor. However, from the year 1992, it has witnessed series of changes like:

- ★ **Revamped PDS** (most remote and backward 1700 blocks of the country) in the year 1992,
- ★ **Targeted PDS** (with a motive to serve poor in all areas of the country) from June 1997, it was the first time that a differential price policy was adopted by the government for poor and non-poor,
- ★ From December 2000 onwards, **Antyodaya Anna Yojana** (targeting one crore poorest of the poor among the 'Below Poverty Line' families) and **Annapurna Scheme** (targeting indigent senior citizens), were started.

The Government has recently enacted Right to Food Act, 2013 (National Food Security Act, 2013) which aims to provide subsidized food grain to approximately more than 70 million people in India. Under the major provisions of the act, beneficiaries of the PDS (Public Distribution System) are entitled to 5 kilograms per person per month of cereals at the following prices:

Rice	Rs. 3 per kg
Wheat	Rs. 2 per kg
Coarse grains	Rs. 1 per kg.

PDS system has been used by the government as a vital tool to ensure price stability and availability of food at affordable prices, thus ensuring the essence of food-security to common man. In spite of all such benefits, the PDS system has faced severe criticism on the fronts of corruption, poor quality food supply etc. Instances of hunger are still prevalent despite overflowing granaries and rotting away of food supplies.

I hope by now you must have been very much assured that nothing like the 1943, Bengal Famine situation can arise in the present day Indian Economy. However, we must never be wasteful in utilization of our resources be it natural resource or financial resource.

Lovingly, looking forward to your reply and learnings.

Papa

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- ☆ Five Year Plan documents.

SAMPLE QUESTIONS AND MARKING SCHEME

Q.1 Critically examine the results of Green Revolution in India.

5 Marks

Suggested Answer:

1. Restricted to limited crops.
2. Neglect of land reforms.
3. Rise in regional imbalances.
4. Rise in unemployment.
5. Ecological degradation.

Any other valid point given by the students.

Q.2 Comment upon the following sketch, in relation to the food availability in the world.

5 Marks



Suggested Answer:

The world is increasingly facing the scarcity of food resource with relation to its rising population over the years. This would lead to greater possibilities of starvation over the time period to come.

Any other valid explanation given by the student.



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