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Forum IAS

# GS Advanced Program 2023

## Generic Booklet

Test Name/Code/No. : #27 (693027)

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| Name | |
| Email ID. | |
| Roll No. | |
| Mobile No. | |
| Date | |

Allotted Time : 60 Minutes

**Instructions to Candidates –**

- There are 7 Questions in this Question paper.
- All Questions are Compulsory.
- For all updates, please visit the noticeboard – https://noticeboard.forumias.com/gsap-2023/

**Important –**

- Answers must be attempted in the QCA Booklet only.
- To upload the Answer Copies please visit to "My Course" section on – https://academy.forumias.com/
- Only those copies will be evaluated which will be submitted before the next class.

| Q. No. | Grade/Score |
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| 1 | |
| 2 | |
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| 6 | |
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| Overall Grade/Score | |

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Q.1) Zero Budget refers to no use of credit for procurement of input (seed, irrigation, fertilizer etc).

Natural Farming refers to use of natural inputs and zero use of chemical fertilizer.

**Zero Budget Natural Farming**

**Positives**

- → Ecological benefit.
  - → Crop diversity maintained
  - → Soil & water conservation (low irrigation reqd. & no chemical fertilizer.
  - → Use of microbes increases the fertility of soil.

**Limitations**

- → productivity is lower than hybrid crops.
- → lower self life.
- → Colour, shape less appealing
- → Non-seasonal crops cannot be produced.

→ Economic benefit
- → farmers income increases as expenses of input decreases.
- → decreases import dependence for raw material of fertilizer.
- → Efficient utilisation of PSL loans for expansion of farms.

→ Suitability to ~~AB~~ ZBNF to Indian condition
- → Different agro-climatic zones - provide moisture ~~and~~, microbes growth.
- → Input for farming available. e.g. - cowdung, neem etc part of Indian culture.
- → Traditional knowledge and more than 80% marginal & small farmers with low income.

Indian Agriculture and its marginal farmers faces issues of skewed development. ~~If~~ Shift to ~~z~~ ZBNF by certain SHF farmers can on pilot basis can help toward improving income.

Overall Grading ( √ )

| Poor | | | Average | | | Good | | |
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Q.2) Organic farming refers to use of organic materials in farming and also includes rearing of livestocks.

**Benefits of Organic farming**

- Decreases farm debt. - as reliance on fertilizers decreases.
- Increases income of farmers through low ~~demand~~ expense on ~~to~~ agriculture input.
- Increases export potential - as organic products have high demand in international market.
- Protects crop diversity as it promotes crop rotation, crop diversification.
- Protects soil biodiversity and enhances soil fertility naturally.
- Environment protection - ~~as~~ reduction in chemical fertilizer use.

Challenges in promoting organic farming

① Productivity is low.
② Off season crops can't be produced.
③ Lower self life and ~~no~~ less appealing in colour, shape as compared to hybrid crops.

Steps taken by Government

→ Paramparagat Krishi Vikas Yojana (2015) - to promote organic farming through financial incentive 20,000/acre/farmer

→ Certification of organic products.

→ Budget 2022 - promotion of natural farming around 5 km corridor of ganga basin.

Organic farming has a potential to achieve SDG 2 which directs nations to protect natural variety of plants and India Vision 2022 which ~~t~~ talks about increasing farmers income.

Overall Grading ( √ )

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Q.3) Although agriculture contributes to only 18% to GDP but 42% employment in agriculture. And agriculture itself depends on the vaggeries of nature. Insurance penetration is very low.

Pradhan Mantri ~~Bh~~ Fasal Bima Yojana

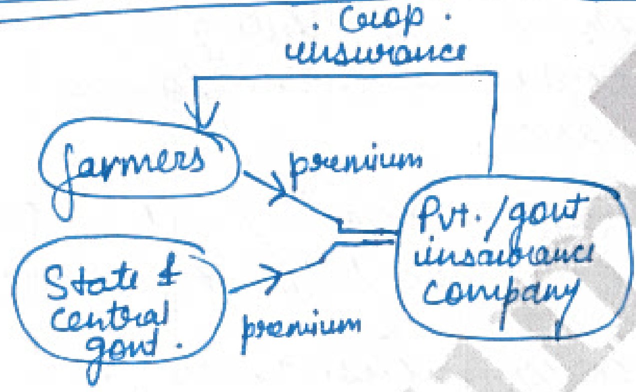


Fig: Mechanism of PMFBY

① Premium – farmers pay 1.5% (rabi rainy crops), 2% (kharif winter crops) and 5% (horticulture excluding oilseeds and pulses) and rest is paid ~~to~~ by union & state government.

② Insurance. – by government general insurance company or any empanneled private insaurance company.

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**Risks covered under scheme**

- Crop damage due to pest attack or natural calamity.
- covers pre-during and post harvest damages.

**Issues**

- State government not giving its share so unsaurance companies deny insurance.
- State government comming up with own schemes. e.g. W.B & Gujarat.
- Does not cover insurance for micro-irrigation technology damage.
- PMFBY 2.0 - decreased central government's premium contribution might aggrevate situation.

Insurance in agriculture sector to farmers plays an important role as climate change related extremes are increasing and more than 50% area is still rainfed. Cooperative federalism can help solve the issues associated with insurance.

Overall Grading ( √ )

| Poor | | | Average | | | Good | | |
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Q.4) Green GDP refers to calculation of GDP excluding the environmental damages.

Recently Uttarakhand adopted Green GDP to include the environmental services.

Positives

→ A move from mere ~~development~~ growth and income based GDP calculation.

→ Help realise the goal of Paris agreement

→ Decrease in environmental damage.

Challenges

→ Difficult to calculate - as environment services are intangable.

→ 'One size fit all approach' - not applicable as ~~di~~ inter-country, intra-regional diversity.

→ will re-initiation development Vs environment debate.

→ Challenge for ~~a~~ now developed nations ~~to~~ and their economic development.

→ choice of base year difficult.

Way forward.

→ Tailor based method can be used according to nations.

→ Developed ~~co~~ nations can lead the way.

→ India can try on pilot basis in certain areas.

Green GDP becomes an important parameter in the background of climate change and environmental degradation. It can be explored and multinational insitutions like UNEP, WWF can dwell more on it.

Overall Grading ( √ )

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Q.5) WTO's Trade Related Aspects of Intellectual property Rights (TRIPS) have provisions for protection of patents, copyrights, trademarks, trade secrets etc.

TRIPS

→ formed in 1995 – recognised product patent for drugs, chemicals and food.

→ directed developed countries to allign their patent protection law in accordance with Trips in 1995

→ directed developing countries to allign their patent laws by 2005.

Provisions of TRIPS for patent waivers

→ Voluntary licencing – the original company gives suo-moto rights to other company to produce drugs.

→ compulsory licencing – in this case the government allows some domestic company to manufacture drugs by overridding the patent rights of original company.

→ In both the cases royalty and compensation is given to the original manufacturer of drugs.

→ Also, both VL & CL are applicable only when there is public health emergency

**Fight of developing countries for Patent waiver**

→ Doha round – developing countries demanded for lenient patent laws.

→ COVID-19. – South-Africa and India demanded for patent waiver for drugs, vaccines, diagnostic and therapeutics essentials.

→ Developed countries only allowed vaccine patent waiver and that too without technology transfer.

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**Positive effect of Patent waiver**

1. will decrease the price of drugs - increase accessibility to lower income countries.

2. Promote generic medicine.
3. will counter vaccine hegemony and hoarding by developed countries.
4. will help fight diseases in 3rd world nations.

**Limitations & negatives**

→ will disincentivise research and development.

→ Quality may be compromised.

IP rights such as patents should not become a barrier to accessibility, availability and affordability of essential life saving vaccines and equipments. Patent waiver by TRIPS can help towards equity between 3rd world and 1st world nations.

Overall Grading ( √ )

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Q.6) Fertilizer is an artificial chemical prepared in factories to enhance soil nutrients. Post green revolution average fertilizer consumption in India is 133kg/hectare (one of the highest in the world).

Issues plaguing the fertilizer sector

1. Huge financial burden — around 1L Cr on government.

2. Huge backlog in subsidy allocation to industries.

3. Huge import dependence — as raw material for N (30% imported), P (80-88% imported) K (100% imported)

4. Inefficient and disproportionate use of Urea — Ideal N:P:K ratio is 4:2:1 while in India it is 8:3:1 and in States like Punjab it is 31:5:2

(5) Inefficient production in industries lead to shortage which is aggrevated by smuggling to Nepal and Bangladesh.

(6) Used in non-agricultural purpose - e.g. Textile, chemical industries. (41% subsidised fertilizers go here).

Measures taken by Government

→ Nutrient based subsidy (2015)
- gives subsidy to industries based on weight proportion of different nutrients. (Urea not covered).

→ Neem coated urea (2015)
- to avoid use in non-agriculture industries.
- increased absorption by plants as it slowly mixes with soil.
- decreases the use of pesticides.

→ Soil health card.
- assessment of soil according to 11 parameters including macro nutrient, micro nutrient,

physical features. Recommend quantity to fertilizer to be used.

→ DBT to factories – after pos to farmers by noting their identity proof.

Way forward.

→ Use of Nano urea to enhance efficiency of fertilizer (Economic Survey 2022).

→ Explore DBT to farmers using e-RUPI technique.

→ Bringing urea under NBS scheme.

→ Promoting natural / organic fertilizers.

An efficient fertilizer usage in India can help decrease fiscal deficit (by decreasing fertilizer subsidy burden) and import bill on crude oil (raw-material for fertilizers).

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Q.7) Gross Domestic Product refers to the total value of goods and services produced within the territory of a country in a given time period.

$\boxed{\text{GDP}}$

→ It is calculated by NSO

→ ~~meas~~ an indicator of a country's growth.

**Difference between computing methodology**

| Parameter | Pre 2015 | Post 2015 |
|---|---|---|
| Base Year. | 2004-05 | 2011-12. |
| Market Price & Factor Cost. | Calculated on ~~Ho~~ Factor Cost. | Calculated on Market Price (which includes taxes & exclude subsidies). |
| Industrial Data. | From IIP and ASI | from the data filled by corporates to M.O.C.A. |

| | | |
|---|---|---|
| Weight to Labour | a uniform weight to labour | Effective labour Price – different weights to owners, high income ~~labours~~ workers, labours. |
| Agriculture | On the production of agri output. | → Considers other factor e.g. livestock. |
| Manufacturing sector. | Only few sectors covered. | multiple sectors covered. |
| Financial Sector | Inclusion of few sectors like mutual funds etc. | multiple Sectors like stock market, mutual funds, stocks with brokers etc. |

The methodology that was adopted in 2015 represent multiple sectors and is in accordance with the changing economic model of the nation now.

Overall Grading ( √ )

| Poor | | | Average | | | Good | | |
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