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For kind attention of:

The Hon'ble Prime Minister's Office, the Ministry of Agriculture and Farmers' Welfare, and all others interested

# Emerging Critical Situations and Threats in India's Agricultural Economy

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# The Increase in Convergence in MGNREGA

# **Key Highlights**

- As the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), 2005, completes 15 years of its existence, the expenditure behind it is often debated upon with respect to the assets it has created for addressing rural challenges.
- Convergence promotes decentralized development when the work of MGNREGA is combined with local area development programs. Besides improving the quality of assets by increasing the limit of material cost, convergence has a multiplier effect on asset creation in various development programs.
- In order to take maximum benefit of convergence, some problems in the system like personnel management, delay in payment of dues, arrangement of quality materials, monitoring system transparency need to be addressed while designing a further action plan for MGNREGA.

#### **Observations**

 Under the MGNREGA (2005) Act, unskilled workers are provided a wage in turn for some work leading to different kinds of asset creation, some examples of which are drought proofing, flood control and protection, renovation of traditional water bodies, and water conservation. This also includes

- micro-irrigation and land development in community as well as private land.
- The quality of assets created under MGNREGA has improved in recent years, so has the convergence of the act. The quality of assets in MGNREGA was affected due to component-wise restrictions on expenditure, labor, and material in the ratio 60:40.
- While constructing a road in MGNREGA, the kaccha road laid can utmost be brick solid given its material cost, but its convergence with road making departments like Public Works Department (PWD) and Panchayat Engineering Department (PED) improves the quality of roads with a black-topping.
- Under Prime Minister Awas Yojana, 20 mandays from MGNREGA and Rs. 95,000 from the Department of Housing contribute to the construction of a rural house. Similarly, in the construction of rural toilets, six mandays from MGNREGA and Rs. 20,000 from Swatch Bharat Abhiyan are combined on individual land.
- Table 1 shows the convergence of MGNREGA with the Agricultural Marketing Department in its programmes (Amar Fasal Amar Gola, and Amar Dhan Amar Chatal) in West Bengal for the creation of different kinds of storage structures for an individual.

**Table 1: An Illustration of Convergence of MGNREGA with State Agri-marketing Department in West Bengal** 

S.No.	Name of the Scheme	Beneficiary Contribution (Rs.)	Department Contribution (Rs.)	MGNREGA Contribution (Rs.)	Man days	Estimated Cost/Unit (Rs.)
1	Traditional Small Storage Structure	3057	5000	2112	12	10169
2	Improved Structure	15983	12000	7040	40	35023
3	Storage structure for onion	33157	25000	7920	45	66077
4	Paddy Drying Platform (Big)	28088	23000	11264	64	62352
5	Paddy Drying Platform (Small)	17031	10000	9328	53	36359

Source: Undocumented files from field visit in Illambazar, Birbhum, West Bengal.

- The convergence also improves the quality of assets created in MGNREGA on community land by changing its proprietorship. Adoption of assets created in MGNREGA help upkeep assets by timely investment. Though convergence started in 2009, it remained less than nine percent till 2015 after which it subsequently increased to around 20 percent.
- Secondary information shows that the

- convergence of MGNREGA assets varies widely across states.
- Besides the macro-level contestation, studies found that micro-level settings have a significant influence on the convergence. In some districts, convergence is more than 50 percent of assets created in MGNREGA (IEG study, 2018). Table 2 shows states and their level of convergence of MGNREGA.

**Table 2: States with Convergence of MGNREGA** 

High Convergence (>20%)	Bihar, Jharkhand, Odisha, MP, Telangana, Tripura
Moderate Convergence (5-20%)	Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Tamilnadu, UP, and Uttarakhand
Low Convergence (<5%)	Punjab and Hilly states other than Uttarakhand

Source: MGNREGA website (MIS).

# **Actions Suggested**

- During a field visit to Nalhati-II block in Birbhum, West Bengal, it was found that there was one technical person (engineer) for five Gram Panchayats which encloses around 20 Gram Sabhas. Assets should be monitored once in every stage of asset creation which is possible only if there are adequate technical personnel.
- Digitalization has improved the transparency of work in MGNREGA, but at times it also affects the work. For any asset creation under MGNREGA, photographs are required at three stages of work (before, intermediate, and final stage). It is inoperable in some cases like rural sanitization which requires six mandays but the muster roll for MGNREGA work is, however, generated after six days which

affects payments. Such glitches need to be fixed.

- The convergence and quality of assets also suffers because of low quality material being supplied since sellers get delayed payments.
   This issue needs immediate attention.
- In MGNREGA work, the material cost received from union and state governments in the ratio of 75:25 which frequently delays the receipt of material cost. While designing an action plan to fix problems in MGNREGA, this must be highlighted.
- · The field visit suggests that the contract

staff engaged in MGNREGA work are overburdened, as they have to maintain many registers and files where the digitalization of MGNREGA should reduce such work.

• The changes in the act usually happen by ministerial orders, and at times people engaged are not aware of the status. Therefore, an updated guidelines that incorporate all changes may be published regularly.

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# The Plight of Tomato Cultivation in Tamil Nadu

# **Key Highlights**

- In Tamil Nadu, tomato cultivation covers an area of about 29,000 hectares. Although it grows through all seasons, the most preferred months are January and February known as *Thai Pattam*. Nowadays, cultivators dumping their produce on roadside is becoming frequent in the state.
- Being a highly perishable commodity, tomato is extremely susceptible to price variations in the market implying that the produce should be cleared without any delay. Hence, the prices are highly volatile and dependent largely on the current supply and demand.
- Farmers in major tomato markets are dumping tomatoes in nearby lakes and on roadside as they are unable to recover even their harvesting cost which is attributed to this long-pending issue coupled with changing

weather patterns which hastens the ripening process.

#### **Observations**

- Majority of farmers opt for tomato cultivation as it is a short season crop and easy to grow using drip irrigation or with limited water supply. The subsequent excess supply of tomatoes led to a fall in its selling price.
- The perishable nature of tomatoes demands proper preservation. Even if the market price is stable, many farmers incur a loss due to storage issues. Tomato crop takes 90 days to yield and the production cost per acre works out to nearly Rs. 30,000 to 35,000.
- According to farmers, due to high harvest and rains, the price of tomatoes dropped drastically. Tomatoes were being procured for as low as Rs. 3/kg and traders were

demanding Rs. 1/kg. Most of the cultivators in the region are small scale farmers. The farmers had to spend Rs.600-1000 on transporting the produce. It becomes tough for farmers to pay their labourers when they get such low returns.

- Some farmers reportedly did not even bother to pluck the ripe tomatoes in their farms given the prevailing low prices. Many are just feeding the tomatoes to their cattle while others dump them on the roadside.
- In day markets such as Tiruchi, Madurai or Theni, tomatoes are being supplied from neighbouring states like Karnataka and Andhra Pradesh. With the cultivation of hybrid varieties, tomatoes arrive all through the year from different areas.
- Officials at the markets state that the low prices were due to seasonal fluctuations, and it is common for prices to drop when there is a glut in supply. This year, the rains from the South-West greatly aided farmers with a successful harvest but then the increased supply caused a drop in prices. Officials also state that at *Uzhavar Sandhai* (marketplace for farmers) prices were as low as Rs. 4-5 per kg. There was only so much they could do to help farmers in negotiating with the wholesale traders.
- Farmers have been demanding the construction of large cold storage units in each block. However, such massive undertaking is not favourable for farmers as tomatoes ripen between six to eight weeks. Even if such units are built, it is impossible to accommodate all farmers in the district.

- According to data from the district horticulture department, the drought-prone district Dharmapuri is accommodating over 50,000 small and large scale tomato farmers and has government-run cold storage units in (a) Palacode (50 tons capacity), (b) Harur (30 tons), and (c) Pennagaram (30 tons). Private players are still reluctant to enter.
- Five mobile tomato puree vending machines have been provided by the state agriculture department which are leased out to Farmer Producer Organizations (FPOs). The farmers can contact the district collector or an official of the State Agricultural Marketing for availing the mobile unit. This mobile unit will go to the farms and make puree out of the tomatoes.

# **Actions Suggested**

- To counter the challenges, it is important to build a value chain for tomatoes. Farmers should be encouraged to form FPOs.
- Like other crops, there can be a price support mechanism for tomatoes. Otherwise, the government could fix the procurement rates for farmers to gain profit.
- As tomatoes are available in large quantities due to oversupply, entrepreneurs must be encouraged to set up processing plants that can pulp, puree, or paste so that it is purchased by tomato product manufacturing companies.
- Awareness and training programmes regarding processing and value addition could fetch better and stable income to farmers and help improve their livelihood.

 Both the central and state governments should support the farmers by providing storage facilities. The government can initiate action by directing institutes of higher learning associated with food processing to take up more research regarding this issue.

#### **Information Sources**

Various published sources, media reports, and

telephonic discussions with officials of State Horticulture Department, Government of Tamil Nadu, and tomato growers in Dharmapuri district, Tamil Nadu.

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# **Prospects of Ethanol Blending Program (E20) in India**

# **Key Highlights**

- The demand of petroleum has been rising due to economic expansion, population growth, increasing urbanization, changing lifestyles, and increase in purchasing power. In order to address these issues and to reduce the import dependency, India has launched a pilot scheme of blending ethanol with petroleum. In 2003, Government of India (GoI) decided to launch Ethanol Blended Petrol (EBP) in selected states and union territories.
- The initial target was to achieve five percent mixing of ethanol with petroleum. But later, the deadline for meeting the target was launched under E20 program which aims to blend 20 percent ethanol with petroleum. The major purpose is to reduce the rising import of the crude oil and avail the benefits of using a relatively cleaner fuel.
- It is expected that a successful E20 program can save the country \$ 4 billion i.e., Rs. 30,000 crores per annum. However, the expansion of ethanol production capacity requires large tracts of cultivable land, surplus food grains, sugarcane production which are very challenging and involve environmental costs.

#### **Observations**

- Due to constraints in domestic production, India has been highly dependent on crude oil imports. This makes it vulnerable to the political and economic events in the oil producing countries. A huge chunk of the foreign exchange is dedicated to meeting the crude oil requirements of the country.
- The price for ethanol produced from sugarcane sources is fixed by the government and approved by the Cabinet Committee for Economic Affairs (CCEA), whereas the price of ethanol derived from damaged food grains or rice is fixed by the Oil Marketing Companies.
- Several departments and agencies of the government have made changes to provide a suitable ecosystem for effective blending and usage of blended petrol.
- Interest subvention incentives for grain-based distilleries have been introduced recently which will help in achieving the set target of 20 percent blending of ethanol by 2025.

 Sugarcane and rice are the most lucrative options for feedstock in ethanol production.
 The major environmental concern in this case is that both are water intensive crops. It is estimated that sugarcane and rice combined are using 70 percent of the India's irrigation water, thus depleting water availability for other crops.

# **Actions Suggested**

- In order to meet the targets of E20 project, the ethanol production needs to be ramped up significantly. This will have a positive impact on solving the complex issue of excessive grains.
- The increased need of ethanol will compel sugar factories to increase the distillation capacities which will foster timely payment of dues to the farmers.
- The government is encouraging the use of excess food stocks to be used for fuel production, but there is a necessity to move ahead carefully to safeguard the food security of the country.
- For the pan-India availability of alcohol, measures must be taken to promote ethanol

production from food sources like maize. Maize is a less water intensive crop for ethanol production compared to other specified feedstock in the program.

- There is a need to reduce dependence on crops and move to more environmentally sustainable crops for ethanol production.
   More area under maize cultivation will be a step to replace the traditional rice monocropping and rice-wheat cropping system.
- Set up of new distilleries will also provide better opportunities to farmers since there will be an increased purchase of sugarcane.

#### **Information Sources**

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- Roadmap for Ethanol Blending in India 2020-25 (2021), NITI Aayog & Ministry of Petroleum and Natural Gas

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