

Agro-Economic Alerts

Aiding the future of India's farmers and agriculture



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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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Promotion of Farmer Producer Organizations Related to Cattle Feeds

Key Highlights

- The feed given to cattle comprises of dry fodder (major share), green fodder and concentrates. The availability of feed and fodder vis-a-vis the requirement for green-fodder, crop residues and concentrates shows a huge gap between its demand and supply in the state of Madhya Pradesh¹.
 - Cattle feed is an essential component in obtaining the desired level of milk production. Round-the-year planning supported by technological interventions is required for making cattle feed available to dairy owners in order to sustain their milch animals with six-seven litres/day potential via minimum use of concentrates. Cheaper cattle feed helps in bringing down the overall cost of milk.
 - To address the critical problem of availability and accessibility of cattle feed at reasonable prices, various Farmer Producer Organizations (FPOs) with cattle feed outlets were established in the state. Arrangements were also made to provide door-to-door cattle feed to the member's producer².
- (Datia), and Dhanvantri Vegetables Producer Company Limited (Sehore)³ were explored.
 - It was found that training facilities related to cattle feed, cattle health and artificial insemination were being provided by the FPOs. They were also providing animal husbandry and dairy development related services to 763 producer members from 72 villages of Gwalior, Datia, and Sehore districts.
 - The production of milk increased for the producer members but they did not receive remunerative prices for their produce due to the absence of government or co-operative milk collection centres. Local vendors purchased their milk at lower rates.
 - FPOs were also found to be distributing mustard oil cakes, arhar chuni, mashoor chuni, poha, chana, kapila pashu aahar and chapad to members in Gwalior, Datia and Sehore (2016-20).
 - Around 116 buffaloes (29/year) were distributed by Dhanvantri Vegetable Producer Company Limited, Sehore during 2017-20.
 - Producers seem to face difficulties in rearing animals due to high price of green fodder, straw and cattle feed as well. Other constraints faced by the members are highlighted in Table 1 given below.

Observations

- Producer members of Ummeed India Producer Company Limited (Gwalior), Jyotsana India Producer Company Limited

¹www.thehindubusinessline.com/opinion/focus-needed-on-fodder-shortage-in-india/article31453079.ece.

²Sharma, H. O. and Raghuwansi, N. K. (2011). Economics of production, processing and marketing of fodder in M.P. Agro Economic Research Centre, JNKVV, Jabalpur. Pp-1-95.

³ Sharma, H. O., Rathj, D., Niranjana, H. K., Thakur, S.S., Pandey, P.R., Bareliya, R. S., Kuril, A, Patidar, P.K., and Aske, S. (2021). Impact Evaluation of Farmer Producer Organization Projects in Madhya Pradesh. Agro-Economic Research Centre, JNKVV, Jabalpur. Pp 1-60.

Table 1: Constraints Faced by Farmers Producer Members in Enhancing Milk Yield

• Lack of sufficient fodder and medical facilities
• insufficient infrastructure facilities
• Low milk yield
• Shorter lactation periods and poor reproductive performance of local breeds
• Poor credit facilities
• Water scarcity during dry season
• Inadequate profit
• Non-availability of green fodder
• Lack of knowledge about balance feeding and preservation
• Non-availability of mineral mixture
• High cost and non-availability of concentrate
• Inadequate area for fodder cultivation

Source: Authors' survey

Actions Suggested

- The price of cattle feed material given by FPOs to the producer members could be kept below the market price so that the members won't have to bear the burden of rising inflation. Quality fodder seed material should be made available at a subsidized rate to the producers rearing animals either by FPO or by the Department of Agriculture & Farmer's Welfare.
- Support for cultivated forage, improved and efficient feed practices, treatment of straws, and feed processing is required.
- Strengthening the capacity of community animal health workers and farmers in diagnosing common animal diseases, their prevention and treatment is required.

- Producer members must take advantage of government and non-government animal husbandry and dairy development schemes.
- Milk Producer Unions/Milk Producer Committees must be set up by FPOs in their rural clusters to aid the farmer in getting a fair price for the produce.
- Farmers engaged in animal husbandry through FPOs or Madhya Pradesh State Livestock and Poultry Development Corporation must be provided technical information on animal health, adequate quantity and quality of animal feed, milk and milk products through training programmes from time to time which will help to make animal husbandry a good business model. The concept of FPOs must be explained using easy ways to the milk producers.

Information Sources:

- Madhya Pradesh State Livestock & Poultry Development Corporation.
- Ministry of Fisheries, Animal Husbandry & Dairying, Government of India.
- 20th Livestock census.

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Impact Evaluation of Farm Debt Waiver Scheme on Farmers' Livelihood in Uttar Pradesh

Key Highlights

- The government of Uttar Pradesh (U.P.) formulated 'Farm Debt Waiver Scheme' to alleviate hardships and rejuvenate agriculture by redeeming crop loans up to Rs. one lakh each of small and marginal farmers whose crop loans were disbursed by lending institutions in line with the Reserve Bank of India (RBI) norms which came as a relief measure for the farmers.
- The impact of the scheme was found to be higher on marginal farmers. The capital investments on irrigation structures and farm buildings increased considerably showing a positive impact of the scheme.
- The increased dependence of farmers on credit to meet the rising cost of cultivation and the decreased returns due to additional costs have been identified as the main reasons for their indebtedness in the state.

Observations

- A study was undertaken to examine the socio-economic characteristics of the beneficiaries, nature and extent of indebtedness. The study was confined to the western region of U.P. where from the three distinct agro-climatic zones, areas were selected randomly. They were (1) Western Plain Zone located between the Ganga and Yamuna, (2) Mid-Western Plain Zone mainly Rohilkhand division, and (3) South-Western Semi-Arid Zone.
- Three districts were selected randomly from each of the three agro-climatic zones. These were Bulandshahar, Moradabad, and Agra. Field surveys were conducted in two clusters of villages selected from two blocks each from the three districts. The total sample comprised of 180 beneficiary farmers – 15 from each of the village clusters.
- By April 2019, total beneficiaries of the scheme in U.P were 44,54,064 and the total amount paid was around Rs. 24,821.23 crores. The maximum i.e., more than 26 percent of the sample farmers were illiterates and among literates, the maximum i.e., 24 percent were matriculates only. Farmers having graduate and post-graduate degrees were only about six percent.
- The annual household income had increased after redemption of debt on all farms. The small farmers benefited significantly in the area under study. There were considerable changes in the operational cost of cultivation during kharif and rabi seasons.
- In rabi season, the operational cost of cultivation on marginal farms had increased by 31 percent, confirming the impact of the scheme on marginal farms.
- The capital investments on machine, implements, irrigation structures and cattle sheds had increased after redemption of debt. On all the sample farms the change in amount borrowed as well as in the amount outstanding was (-) 25.28 percent.

- The percentage change in the amount borrowed was (-) 28.95 percent and in the outstanding loan amount was (-) 28.95 percent after the redemption of debt showing the decrease in debt on marginal farms. There was a change in the amount borrowed by 13.21 percent and in the outstanding loan amount by 9.20 percent in case of loans from cooperative banks.
- Table 1 shows the votes by all the farmers on various constraints faced during the scheme implementation. Table 2 reports votes by all the farmers on a scale of huge to

none on various components depicting the effectiveness of the scheme.

Table 1: Votes on Various Constraints Faced by Farmers*

Constraints	Total Farmers (180)
Time Consuming	100
Cost Incurring	8.88
Losing Man-Days	24.44
Facing Humiliation	12.77
Other Constraints Like Bribery	32.77

*Note: Figures denote percentages.

Table 2: Votes on Various Components Showing Effectiveness of the Scheme*

Components	Huge	Low	Moderate	Less	None
Agrarian Distress Reduction	0.00	27.22	23.89	12.22	36.67
Increased Farm Profitability	4.44	35.56	38.33	8.89	12.78
Decreased Indebtedness	6.11	17.78	52.22	18.33	5.56

*Note: Figures denote percentages.

Actions Suggested

- Status of education among both marginal and small farmers must be elevated for proper awareness about the government schemes for them to benefit. The scheme must be implemented more transparently avoiding discriminations with the farmers who repay instalments of loan regularly.
- Both marginal and small farmers must be encouraged and assisted to take on allied and secondary occupation apart from their primary occupation of agriculture to increase their incomes.
- To alleviate indebtedness, farm profitability must be increased through modern and

improved techniques of farming. The subsidies on farm machines particularly tractors, electric motors, rotavators, diesel engines and power threshers must be increased so that genuine farmers benefit.

- Both marginal and small farmers must be facilitated and encouraged for rearing crossbred cattle, buffaloes and improved breeds of goats on their farms.
- Both type of farmers must minimize their operational cost of cultivation by opting for modern techniques of farming as per their resource availability. They must be provided incentives to diversify their farms for increasing the cropping intensity from 200 to at least 300 percent.

- For profitable disposal of their produce, marginal and small farmers must be adequately sensitized to take safeguards against malpractices or illegal demands from any quarter. They must try to minimize their domestic expenditures on litigations and other consumptions.
- For better credit facilities, Regional Rural

Banks must be strengthened in the far off and remote villages for the poor farmers to benefit. Loans taken from money lenders might also be considered by the government for a waiver.

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Collective Livestock Farming Model of 'Vishwas Group'

Key Highlights

- The collective milk production initiative by Vishwas group in Aroli village, 65 km away from Nagpur, provides a good example of effective production and marketing which can help reduce the cost of production of milk and provide an assured market with higher returns to dairy farmers/owners.
- The drought prone Vidarbha and Marathawada regions of Maharashtra have underdeveloped dairy co-operative network. In Aroli, the villagers changed their cropping pattern to paddy, soybean, and vegetable crops. After adopting cultivation of fodder crop and collectively marketing chaffed fodder near and around Nagpur district, Dr. Ulhas Chandrabhan Nimkar, a veterinary doctor, and his group decided on collective production and marketing of milk.
- It assured quality milk production and its availability at reasonable rates which helps combat the problem of consumption and malnutrition in children. Necessary support

from state governments can prove vital for such groups.

Observations

- Vishwas group used pure Rathi breed cows to propagate them in western India and planned to make the village like Aroli self-sufficient in producing biogas, Compressed Natural Gas (CNG), Jivamrut (natural organic plant growth booster), and bio-manure to make the units sustainable.
- The three groups formed under 'Vishwas Group' to manage production, cutting and marketing of fodder are listed in table 1. Besides, a fourth group was formed to look into the production and marketing of milk.
- The group has 45 founder members (farmers), along with 45 additional members from the same village and ten farmers/members from in and around Nagpur city. Each member contributed Rs. 10 lakhs to form a pooled fund of Rs. one crore.

Table 1: Details on Farmers' Vishwas Groups Formed in Aroli

S. No.	Groups
1	Scientific Co-operative Farming Development Aroli Union "Vishwas" (Vaigyanik Sahakari Sheti Vikas Aroli Sangh "Vishwas")
2	Vishwas Agricultural Produce Distribution and Supply Agency Aroli (Vishwas Krushi Utpanna Vitaranwa Puruvatha Sanstha Aroli)
3	Vishwas Agricultural Produce Management and Marketing Organisation Airoli (Vishwas Krushi Utpanna Vyavasthapan wa Vipanan Sanstha Aroli)
4	Vishwas Collective Cow Conservation and Dairy Project (Vishwas Samuhik Go Sanwardhanva Dugdhashala Prakalp)

Source: Vishwas Group.

- Vishwas group purchased 62 pure productive Rathi cows (dual purpose breed) from Rajasthan. One of the members of the group leased out land for the shed and a fodder storage/dutchbar was constructed using the investments. The milk produce was initially sold to local villagers and Mother Dairy.
- In December 2020, Vishwas group started its own milk market in Nagpur with the brand name 'Vishwas Dudh'. The milk is being sold at a rate lower than the market rate considering the quality parameters and for gaining buyers' trust.
- Emphasis is required in promoting indigenous breeds due to climate variability and lack of availability of feed. The data on animal genetic resources need to be generated and preserved for future use.
- Public investment in the dairy sector could be enhanced to help the small producers, who derive their larger share of income from the livestock sector.
- If the Vishwas group model is replicated, the dairy industry can bring in continuous flow of income which can complement the income from agricultural industry. It can compensate for unexpected losses faced in agriculture, especially for poor small and marginal farmers.

Actions Suggested

- The livestock services like artificial insemination/natural service, vaccination, deworming etc., are time-sensitive for which the government institutions require reorientation because of certain financial and bureaucratic constraints as it is a major stakeholder.
- Strategies need to be worked out for sufficient good quality feed and fodder for efficient utilization of genetic potential of the various livestock species and for sustainable improvement in productivity.

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