Resisting freebies; on the gradation of Indian farmer's attitude

Dr. MOHAMMED SHAMEEM P
Dr.Krishna Reddy Chittedi

Summary

- The 24-hour free electricity program in Telangana state of Southern India is analyzed from the perspective of farmers at the receiving end.
- The study is based on a field survey conducted in the Nalgonda district of the state after the completion of three years of the program.
- The primary survey result shows that farmers are driven by the promises of the government of free electricity supply and replaced their automatic motor pumps with manual motor pumps.
- The farmers' attitude and consumption behavior of free electricity endorse the success of government awareness drives and the possible sustainability of the program in the state in which they are satisfied. Even after three years of the program, the prevalence of motor pumps with the power of 5 HP and sensible usage inscribes the sensibility of farmers in Telangana state.
- The willingness to accept usage-based tariffs and concern for electricity conservation in the absence of any incentive indicates a drastic change in the attitude of Indian farmers towards freebies.

Introduction

- The Indian agriculture sector is one such domain where different orientations and approaches were employed in making policies.
- The failure of periodic upgradations in the production process and the emergence of the service sector as a major revenue-generating sector pulled the agriculture sector on the back foot in the policy tables. However, the higher share of the rural population engaged in the sector ensured political parties did not ignore the sector but started grooming the sector into a benefit-receiving one.
- The massive input augmentation carried out in the mid-1960s as the much-celebrated green revolution helped meet higher output targets, but the rapid growth in the agricultural sector ushered then did not sustain.
- Along with the regional imbalances in the delivery of the benefits of the green revolution in terms of infrastructure development and other production capability enhancements, the agricultural sector started losing its prominence as the leading sector in the majority of regions in the country.

Context

- The farmers' unions and groups that enjoyed higher political bargaining power earlier also lost their strength as the political environment of the country was majorly driven by communal forces from the 1980s.
- The policies and schemes that are operated on ‘incentive for farming’ habituated the farmers to different production and allied activities supported by the government. From fuel and fertilizer subsidies to loan waiver schemes, the underline approach of the government was to rely on temporary solutions ignoring real supply-side constraints in the sector.
- In the recurrence of high food inflation episodes, the government depended on populistic measures in the sector, which can be believed to be aimed only at securing votes.
- These incentives which are in all their character appear to be ‘freebies’ have shaped the aspirations of farmers in the country over the years. The demands of major agrarian protests in the country in recent years validate this shift in the approach of farmers themselves toward the majority of their solutions for the problems in the sector.
- Subsidized electricity schemes are one of the most sorted such schemes that have multi-level implications. Beginning in 1980, after irrigational facilities progressed in Indian farming, electricity demand for agricultural uses started rising.
- The mechanization of the production process also further increased the role of electricity in the farmers' lives. As the rural electrification was low, the percentage of Agricultural users was comparatively low in the sectoral composition of electricity connections in the initial years.

- Identifying this fact political parties started subsidies for electricity. The extent of subsidized electricity progressed after every election as it became a major promise in the election manifestos. States like Andhra Pradesh, and Punjab came up with evidence of election successes that free electricity schemes can produce. Ignoring the damage that these schemes created to state-owned Electricity distribution companies the schemes continued as farmers were acclimatized to this free electricity.
- Along with the potential vote gaining it was also inevitable for the government to ensure the cost of production stays low, considering the pressure they exert on the food prices and thus on the food security of the country itself.
- The Telangana state government launched a scheme of 24-hour quality free power supply to the agriculture sector on 1st January 2018 to around 23 lakh agriculture pump sets in this south India state.
- The current study is to analyze farmers' attitudes toward the 24-hour free electricity program in Telangana state. As the first of its kind program introduced in a newly formed agrarian state attracts questions in many aspects. This study is based on the results of the primary survey conducted on farmers from Nalgonda districts of Telangana state regarding their preparedness for the 24 hours free electricity program which was their first experience along with the sustainability and conservation concern.

Existing literature

- The holistic agricultural productivity enhancement efforts of the 1960s in the name of the Green Revolution included subsidizing key agricultural inputs as a major implement (Badiani et al. (2012); Rosegrant & Evenson (1992).
- The governments started the scheme of subsidies on various agriculture inputs to facilitate the farmers considering their weak entitlements (Kaur & Sharma, 2012).
- Recognizing as an essential input groundwater irrigation was encouraged by the government to develop needed infrastructure and distribution of pump sets with the supply of subsidized electricity (Briscoe & Malik, 2006; Repetto, 1994).
- From this point two distinct expeditions were forwarded, first, the farmers who benefited from the free electricity supply and other input subsidies organized themselves and started demanding more such state support. Second, the competing political parties, recognizing the desires and strength of organized farming sections began to use electricity subsidies as campaign material for their elections.
- Beginning in Andhra Pradesh in 1977, electricity subsidies appeared in all major election manifestos of political parties in agricultural states after that (Dubash & Rajan, 2001). The progression of electricity from Subsidized production input to a freebie was not slow.

- In 1991 Tamil Nadu government started providing electricity free to farmers, which was followed by Punjab around the same period. About one-third of the total states in India provide electricity free of charge, while the remaining states offer large subsidies to farmers (Badiani et al. (2012); Rasul, (2016); Badiani-Magnusson & Jessoe (2018)
- The findings of different studies on the effects of electricity subsidies on the agricultural sector show the positive impact on (through their expansion of irrigation) agricultural production (M. R. Badiani & Jessoe, 2018), food security (Singh, 2000), and rural incomes (Briscoe & Malik, 2006). In combination with irrigation technology, electricity subsidies have played a vital role in the expansion of irrigation, especially groundwater irrigation.
- The introduction of agricultural electricity subsidies increased the net irrigated land from 21 million hectares in 1950-1951 to 56 million hectares in 2001-2002 (Fosli et al. (2021); Gandhi & Namboodiri (2009). Based on a field survey in the state of United Andhra Pradesh (AP), Fosli et al. (2021) stated that free electricity for agriculture is the lifeline in drought-prone areas as it helped them to expand the area under irrigation and increase incomes.
- The appraisal of electricity subsidy schemes in different states exposed the several flows in the operation and delivery of the scheme. Mukherji et al. (2010) and Jain (2006) found that electricity subsidies benefit only big farmers more than the small-category farmers in West Bengal. This was similar in the case of Karnataka state, as large-category farmers are much more likely to have pump sets than small-size category farmers because large size category farmers with pumps use more electricity than small size category farmers with pumps (Howes & Murgai, 2003). Both studies suggested that subsidies should be targeted at marginal and small-size farmers.

- In the case of Andhra Pradesh, Dossani & Ranganathan (2004) explains that despite being massively subsidized, electricity tariffs are, on average, 15 percent of the income of farmers. Jain (2006) exposed the existence of disparities in the flow of electricity subsidy between the advanced and backward regions in Punjab. While the medium and large farmers reap the major benefits of the subsidy, the poor small farmers, especially in the backward areas, remain excluded due to their non-possession of electricity connections. Badiani-Magnusson & Jessoe (2018); Kaur & Sharma (2012) also concluded similar findings in Punjab which suggested imposition of flat rates on electricity supply to farming households as the study uncovered the willingness of farmers to pay for the electricity. Badiani-Magnusson & Jessoe (2018) assessed the impact of electricity prices on groundwater extraction and agricultural productivity. Using district-level panel data for the period 1995 - 2004, The estimated results show that groundwater extraction will be lowered by 4.3% if the electricity subsidy is reduced by 10%.
- Beyond the productivity rise and other positive externalities, electricity subsidies also cost heavily to the state governments and the environment. The heavy burden of these subsidies out of public funds restricts real capital expenditures for the sector and funds available for other social programs (M. R. Badiani & Jessoe, 2018; Fosli et al., 2021) (Birner et al., 2011). The primary environmental costs are higher groundwater extraction for irrigation that resulted in higher depletion in the groundwater levels, expanding water-guzzling crops like paddy even in water-scarce areas, and failure of borewells leading to farmer’s distress (M. R. Badiani & Jessoe, 2018; Fosli et al., 2021; Kaur & Sharma, 2012).

Why Telangana

- The current study on 24-hour free electricity scheme draws special attention due to many factors.
- Firstly, in June 2014 the Andhra Pradesh state of Southern India was bifurcated to form Telangana state. It was the victory of long-standing demands and protests for autonomy in the socio-economic and political realm of the people in the region (Melkote et al., 2010). So, with the creation of the new state, especially with the large and significant agrarian sector in terms of workers employed and households engaged, the expectations on agriculture policies are high (Rao, 2015).
- Secondly, Telangana which was part of Andhra Pradesh till 2014, was the first state where subsidized electricity schemes were introduced in India. In the 1984 election campaign promised to implement a slab system based on the horsepower (HP) of the irrigation pump set replacing the metering-based charges that deconstructed the electricity policy in the state, as that helped the Telugu Desam Party to win the election. This shift to populistic policies marked the beginning of the transformation of electricity from a subsidized production input to a free service provided by the government (Price, 2011).
- This reached its expected stage in 2004 when the Indian National Congress Party promised free electricity to farmers and won the election with huge support from rural voters. The current scheme under this study is the next phase as a 24-hour supply to farmers is a first-time experiment in the country.
- Thirdly, the history of subsidies and free electricity schemes in the region makes the attitude of farmers towards the scheme worth an evaluation. This study attempts to tap the mindset of farmers towards the free electricity program in general and sustainability and conservation concerns in particular.

Profile of study area – Telangana

- The geographical area of 112,077 km2 is divided into 33 districts with a population of 3,50,03,674 (Census, 2011).
- 213.95 lakh people live in rural areas, or **61.12% of the state's population.**
- The state's agricultural sector holds prominence as the leading sector of the state economy despite its share in the state's gross domestic product.
- **More than fifty percent of the state's workforce** is employed in the agriculture and related sectors for sustenance (Periodic Labor Force Survey, 2019-20).
- **54.2 percent of total rural households are agricultural households** in the state; thus, the rural agrarian economy is highly significant for the political economy of the state.
- After the new state's formation, the agriculture and allied sector followed a progressive growth of 9.75% for the last seven years, from 2014-15 to 2021-22 (Planning Department, 2022). The major food crops produced in the state are paddy, followed by maize, cotton, mango, and sugar cane.

- The primary survey for the study was conducted in the Nalgonda district of Telangana.
- The geographical area of the district is 7,122 sq. km. with a population of 161846 people.
- The selection of the Nalgonda district for the primary survey was based on different criteria. As the fundamental objective of the study is to evaluate the 24-hour free electricity supply to the farmers,
- The first criterion was the number of agricultural electricity connections in the district. Nalgonda district has the highest number of agriculture connections in the state (203323 - 27% of total connections).
- The gross area irrigated and area irrigated more than once are also highest in the Nalgonda district. Considering the irrigation facilities like a tank and total wells (including medium tube wells, shallow tubes, and dug wells), Nalgonda is one of the top 3 districts in the state.
- Among districts with more rural agricultural economic activities, the Nalgonda district generates the highest GDP (at the constant 2011-12 prices).
- One among the oldest districts as part of former Andhra Pradesh, the experience and approach of farmers towards consequent agriculture policy changes are also worth noticing.

Profile of study area

- The study was conducted in the Mandra village located in the Narketpally Mandal of Nalgonda district.
- According to Census 2011, the total population of the village is 1533 with 385 households majorly engaged in agriculture and allied activities.
- Data was collected from 340 households that were willing to respond to the field investigators, out of which 90.8% were male-headed households. More than 60% of respondents are aged above 40 years, whereas above 50 years old 33 percent.
- Even though the total literacy rate of the village is 55.5%, the education qualification of 68.5 of the households is below metric and 20% is metric level.
- The caste composition of the village is as follows; backward caste (61.6), general category (21.7), and SC/ST category (16.8). The major crops cultivated are paddy and cotton whereas vegetables and pulses are also produced as secondary crops, which explains why 64.8% of farmers cultivate in both the Rabi and Kharif periods.
- The major agricultural allied activities that farmers in the village are involved in are livestock and poultry. The major source of irrigation in the village is the borewell (82%), which makes the study results ideal for evaluation.

Examination of farmers' attitudes

- Farmers’ preparedness for 24-hour free electricity program.
- Ease of doing farming.
- Appraisal from a farmer's perspective.
- Sustainability and environmental concerns.
- The election results in Telangana's post-24 24-hour free electricity program.

- The effectiveness of any program primarily depends upon the existing structure on which the program will be implemented and how that will work with the change.
- Secondly, how positively the people at the receiving end address the changes expected to be delivered by the program.
- The existing structure of agriculture power usage was based on a 9-hour power supply, where farmers were equipped with automatic water pumps. The Automatic pump starts working when the power supply is switched on from the distribution line, for which the time of supply varies.
- The first operational challenge to the 24-hour electricity supply was to change these automatic motors to manual motors; otherwise, usage would not be under control and result in wasteful usage.
- The government took initiatives to encourage farmers to change these water pumps before the announcement of the 24-hour power supply program, which continued even after the program was in action.

Farmers' preparedness for 24- hours free electricity program

Fig.1:Type of Water pump used

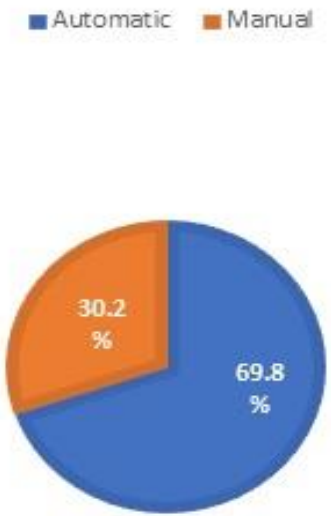


Fig.2:Power of Water Pumps Used

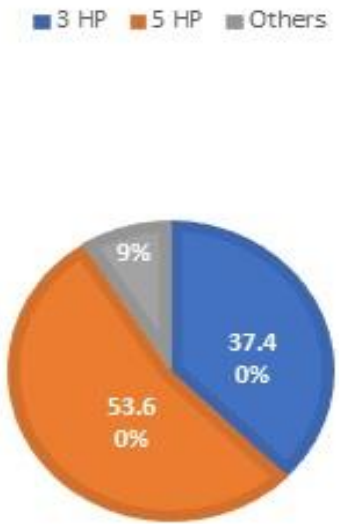


Fig.3: Farmers who changed Automatic Water Pump

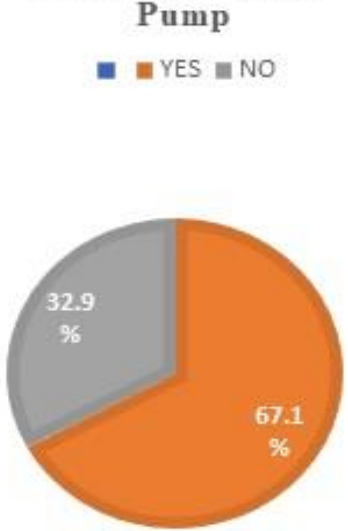
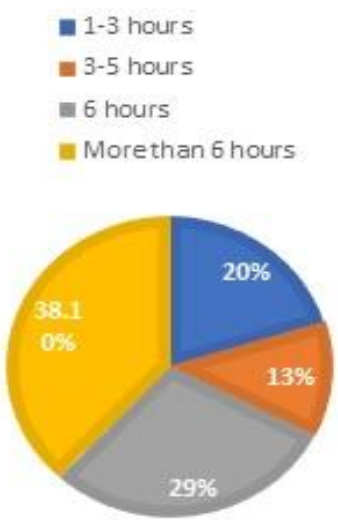


Fig.4: Number of hours water pumped per day



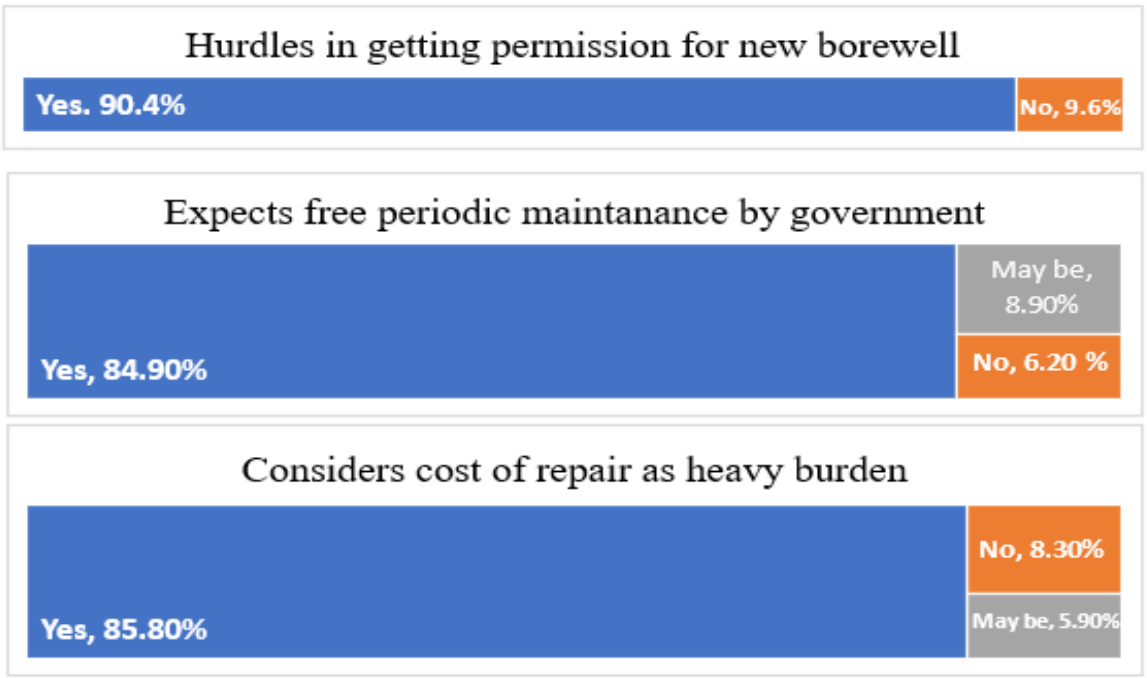
- It can be concluded that when a farmer changes the motor, they trust the government with the new policy change, where they expect this to be a permanent change in the electricity supply's functioning.
- This positive acceptance of change comes with a cost where government support is insignificant.
- The cost of new motor pumps was 3 to 5 lakhs on average, as a significant 32.9% of farmers hesitated to change whatsoever the reason it explains a distrust which will have a severe impact on the environment regarding groundwater depletion and wasteful consumption.
- This was evident from the pilot program of a 24-hour free electricity program in 2017 in the Medak and Nalgonda districts, where motor pumps working around the clock resulted in the groundwater level drop.
- The majority of water pumps used are 5 HP power or 3 HP power in the village, even after 3 years of program deserves appreciation.

Ease of doing farming

- We evaluate the facilitation by government machinery in implementing the scheme and farmers' attitudes towards the scheme's functioning, monitoring, and appraisal.
- The implementation of a 24-hour power supply makes farmers realize the potential productivity augmentation, which encourages them to dig more borewells.
- Prior permission from the village and water authorities is needed to dig new borewells for the existing ones. It is also true that borewells used for years may face dry-up, necessitating farmers to dig new borewells. Ninety percent of farmers face problems in getting this permission. This administrative hurdle without ample reasons has resulted in digging illegal borewells by farmers, which is common in villages.

Ease of doing farming

Figure no. 2: Ease of doing farming - farmers perspective

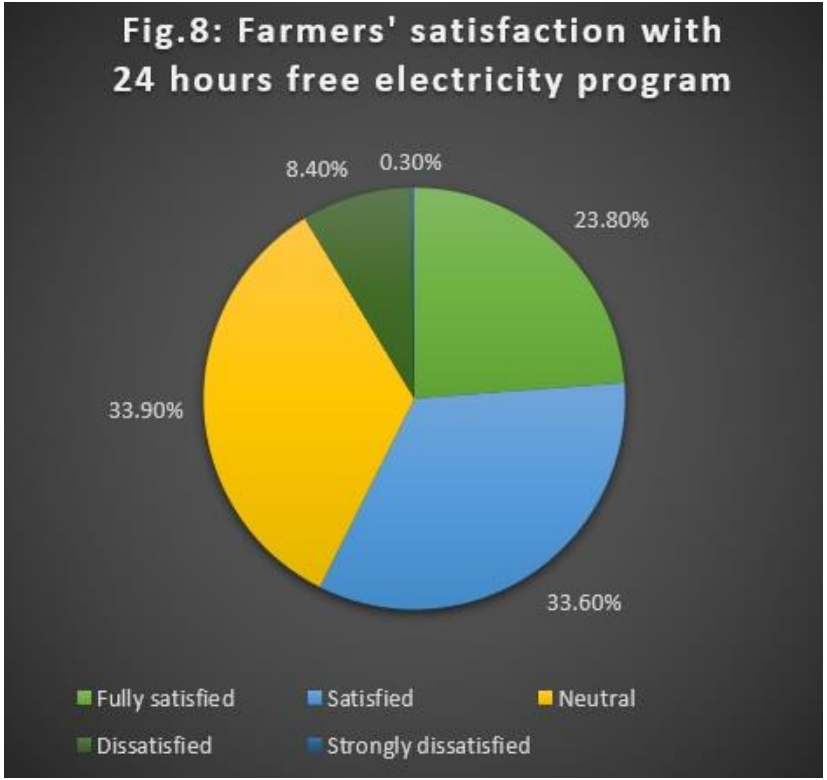


24-hour power supply appraisal from a farmer's perspective

- How satisfied farmers regard the 24-hour free electricity program is relevant to understanding their attitude.
- Fully satisfied 23.8 percent and Satisfied 33.6 percent validate the positive impact of the scheme and favor the government initiative.
- Even though 33 percent of farmers are neutral about the program, the absence of a strictly dissatisfied category indicates the general acceptance and behavior of farmers towards the freebies.
- 48.7 percent of farmers think electricity should be fully free for farmers.
- In addition, the reluctance towards a common or usage-based tariff and unwillingness to pay more than the current rate for electricity used can also be considered as evidence of freebies expecting or seeking behavior of farmers (Table 1(B & C).
- However, from another perspective, farmers' willingness to pay (21.3 per cent) or accept common or usage-based tariffs (49.6%) should be accepted as evidence of change in the attitude of farmers.

24-hour power supply appraisal from a farmer's perspective

Table No.1: Farmers' attitudes on free electricity supply.		
A. Farmers' presumption of fully free electricity supply		
Yes	No	Neutral
48.70%	42%	9%
A. Farmers' acceptance of common tariffs or usage-based tariff		
Yes	No	Neutral
49.60%	37.50%	12.90%
A. Farmers' willingness to pay more than the current rate for electricity used		
Yes	No	Neutral
21.30%	68.70%	9.90%



Sustainability and environmental concerns

- In the first phase of concern, the program's sustainability resulted from the misuse of subsidized electricity supplied to farmers, commonly reported along with the theft in agrarian regions in states like Punjab and Uttar Pradesh (Gaur & Gupta, 2016). The farmers' assessment of fellow farmers and general perspective on farmers regarding the misuse of freebies is eloquent.
- Thirty-one percent of farmers see possible misuse of freely provided electricity, whereas 36 percent of farmers think in the opposite direction. With an optimistic approach, following the neutral 35 percent with a positive 36 percent category, it is relevant to know whether these farmers practice energy conservation in using the free electricity program.
- Here our optimism is uprooted, as the majority of farmers are either not following any energy conservation practices or are very minimal

Sustainability and environmental concerns

Table No.2: Sustainability and environmental concerns of farmers				
A. Farmers' perception of misuse of the 24 hours free electricity?				
Very likely	Likely	Neutral	Unlikely	Very Unlikely
12.50%	14%	35.80%	36%	1.70%
A. Farmers following any energy conservation practices in usage of 24 hours free electricity				
Not at All	Little	Moderately	Very Much	
35.40%	26.40%	34.20%	4.00%	
A. Farmers' apprehension about the need for government-organized awareness drives energy conservation.				
Very much needed	Needed	Neutral	Not needed	
42.30%	31.30%	21.40%	5.00%	
A. Famers' intuition about the end of the scheme after some time.				
Very likely	Likely	Neutral	Unlikely	Very Unlikely
16.70%	19.60%	40.10%	19%	4.60%

- The surveyed farmers' attitude towards governments' responsibility in providing needed awareness among farmers on energy conservation adds their merits as 42.3 percent and 31.3 percent of them realize the urgency and need of such awareness on energy conservation.
- This implies that farmers value the worth of electricity the government supplies them freely.
- This positive attitude of farmers, along with their willingness to pay for the energy they will consume, should be recognized as evidence of behavioral transformation in Indian farmers towards freebies provided to them.

The election results in Telangana post-24 24-hour free electricity program

- The election results as a complete manifestation of peoples' impression of economic policies are yet to be established in India.
- Claiming an instrumental role in the Telangana state movement, the Telangana Rashtra Samithi (TRS) emerged as the strongest party in the state after the formation, which secured 63 out of 110 seats in the state legislative assembly.
- In a series of populist policies, the first government tried to meet the expectations of people on the government. The 24-hour free electricity program was also one among them which was announced on January 1, 2018.
- The first major election that came after the implementation of the program was the second state legislative assembly election which was held in January 2019, in which TRS won with a thumping majority.
- In 2019, the general election to the parliament of India also witnessed this trend where TRS became the leading party in the state. Even though this result can't be comprehended directly as an appraisal of a scheme, it certainly testifies to a general notion of people that they accept the policies and programs of the incumbent government.

- The Mandra village where the primary study was conducted comes under Nakrekal legislative constituency and Bhongir parliament constituency. The election results contradict the general current as the opposition party Indian National Congress (INC) won the constituency in the state legislative assembly elections in 2019 which had a TRS legislative member earlier. In the parliamentary election also the candidate from the opposition party won the constituency.
- On a district level, in the Nalgonda district, 9 out of 12 constituencies were won by candidates of TRS which shows peoples' mandate in favor of the previous government.
- The first Panchayat election, which is to the grassroots level governing body, was held in the newly formed state in January 2019. The TRS candidate was elected from the village in this local self-government election which can be considered acceptance of the pro-farmer policies of the ruling party like the 24-hour free electricity program.

Conclusion

- The foundational rationale for state governments with subsidized or free electricity programs including Punjab, Karnataka Andhra Pradesh, Telangana, Tamil Nadu, etc needs evaluation as the question of sustainability of such programs are under threat for various reason.
- A notable change in the attitude of farmers towards a freebie like free electricity is observed.
- A significant percentage of farmers are willing to pay a common usage-based electricity tariff. Along with their concern for energy conservation, this willingness deserves endorsement from the government side, which should be embraced in future policy-making.
- The studies on various free electricity programs in the country show there are three major impacts of the programs.
- First, the operation cost of these programs increases over the years which becomes a huge burden on the State exchequer and deteriorates the financial health of electricity transmission companies.

- Secondly, free electricity-induced irrigation impelled change in cropping patterns, followed by heavy depletion in groundwater, and finally the rise of disparities or inequalities in the delivery of the service in the program. The classic example of all these is the case of Punjab where the burden of the free electricity program on the state exchequer is one of the reasons that made the state among the top indebted state in India.
- The increase in the number of tube wells in the state throughout the free electricity scheme is also a caution board for states like Telangana, where it increased from 2.8 lakhs in the 1980s to 14.5 lakhs last year. This pattern is visible in the case of the power of motors used also, where farmers moved from 5 HP to 20-25 HP motors in the same period.
- Even though farmers studied in this study expressed their dissatisfaction regarding the bureaucratic hurdle in getting permission for new tube wells, Telangana state is urged to have a high level of monitoring on these implements for the sustainability of the program.

Policy perspective

- The political economy around the freebies is inspired by the potential vote gaining power and that is not expected to stop in the near future. The freebies-based agriculture policies are getting greater reception from the public as their financial status is hurt by various reasons including the COVID-19 crisis.
- The political leadership in India has already inducted freebies as a solution for the poor status of the Indian agriculture sector starting from energy and fertilizers subsidies to loan wavier in the last few decades. The recurrence of freebie announcements especially before elections ends up public policy into a ‘populist trap’ where despite the problems they invite, no one will be able to amend or withdraw from such programs.

- The basic nature of freebies, considering the Indian realities like the fiscal position of states, is unsustainable. However, a one-time withdrawal from these programs will be a hard decision for these states. An ideal plan will be to replace these programs with high-technology induction and infrastructure development that will cut down farmers' fixed costs.
- A more pragmatic approach will be based on mitigation measures like a gradual removal which allows a smooth transition. For example, conditional services like restricting free electricity to farmers who own less than 4 hectares of land or pay Income tax, as proposed in the draft policy of the Punjab State Farmers and Farm Workers' Commission in 2018.
- Even though the definition and motivation of freebies are fluid, the attitude of benefit-receiving farmers is critical. The conscience among them on these types of freebies, moving above the short-run positive impacts will be the stage where the government can come out of these populist traps. But that could be attained by collective action led by genuine political leadership who sails the people's minds.

THANKS