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TREND OF CREDIT BY NABARD FOR FARM MACHINERIES IN CHANDRAPUR DISTRICT FROM 2018 TO 2022

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Abstract

Mechanizing farms is essential to boosting productivity and output at a faster rate. In addition to saving labor and time, farm mechanization lowers post-harvest losses and crop production costs. It also encourages the sustainable use of natural resources by enabling resource-conservation farming practices like drip or sprinkler irrigation, raised beds, zero-tillage, and precision farming. In addition to making agricultural operations more efficient, timely, thorough, and cost-effective, it also helps to raise the standard of living for farm families and the workforce in rural areas. Furthermore, by reducing labor-intensive tasks related to different farm activities and optimizing input use, mechanization helps to maximize the potential of the resources that are already accessible. Furthermore, it acts as a stimulant for the advancement of the rural youth's skill set, entrepreneurship, and ability to earn a living. This study aims to comprehend the ways in which NABARD facilitates agricultural growth in Chandrapur District by providing funding for farm machinery in the years 2018–2022. The study's data was taken from NABARD's five years of publicly available financial reports in order to analyze the credit flow to agricultural machinery and how it affects crop productivity.

Keywords: Farm mechanization, NABARD, farm machinery, Agricultural operations

Introduction

As the premier developmental financing bank for promoting rural prosperity, NABARD is linked to a thorough credit planning procedure that starts at the local level and ends at the state level. The procedure entails creating Potential Linked Credit Plans (PLPs) at the district level, which serve as the foundation for district credit plans and branch credit plans at the block level.

The Wainganga and Wardha river basins, which form the western and eastern borders of a portion of the Godavari drainage basin, are where the Chandrapur district is located. The Chandrapur district spans 11,443 square kilometers. The district's forest cover covers over 4808.97 square kilometers, or 42.00% of its entire land area. The district has 5.26 lakh ha of cultivable land and 4.79 lakh ha of net sown/cultivated land, respectively. The district's principal crops are wheat, gram, pulses, linseed, and chilli in the Rabi season and paddy, cotton, soybean,

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jowar, tur, and other pulses in the Kharif. In the district, crop intensity is 110%. The district must stabilize the double cropping system due to the sluggish development of irrigation facilities.

The Chandrapur district must employ more farm machinery and implements due to the lack of labor and high expense of doing so, as well as the declining number of draught animals in the community. Due to the district's need for combined harvesters, power tillers, paddy reapers, and other off-farm equipment, there is more room for financing tractors. A growing amount of funding is also required to buy agricultural tools because the irrigated area is consistently growing. Small agricultural tools are typically funded by the owner or through incidental components of KCCs due to their low outlay, even though farm machinery is typically financed by banks as independent pieces. Even though farm mechanization has a lot of potential for funding, the district of Chandrapur's Ground Level Credit (GLC) flow to the industry is not encouraging. The funding for farm mechanization is anticipated to rise given the district's strong network of tractor dealers and repair facilities, as well as the assistance provided by the government through various initiatives.

Objectives of the study

(i) To study the pattern of Credit in farm mechanization in Chandrapur district.

(ii) To study the financial assistance of NABARD for farm Machineries in Chandrapur District during 2018-19 to 2022-2023

Research Methodology

The present study based on secondary data available in books, various reports, magazines etc. The five years' publicly accessible financial reports from NABARD were used as the main source of data for this study.

Infrastructure and linkage support available, planned & gaps

According to the statistical handbook for 2018, the district has the following number of agricultural tools and machinery:

Agricultural tools and machinery	**Physical Units**
Seed cum Fertilizer Drill	10195
Equipments	32322
Thresher	2368
Cultivator	565
Harrow	351
Leveller	307
Reaper	246
Combine Harvester	36
Trailer	299
Paddy Thresher	305

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According to the district's most recent statistical handbook (2018), there are 11447 registered tractors. Nevertheless, it is unknown how many of those are utilized for agriculture and related uses.

The following lists the current state of the support services and infrastructure that are typically needed by the industry.

1) 1) All farmer types need to be made aware of the availability of various agricultural machinery and equipment as well as their advantages.
2) **Dealer Network:** The district has a robust and sufficient dealer network for tractors. As a result, the dealer network for combine harvesters needs to be strengthened.
3) Fuel that is needed to run tractors and other machinery is readily accessible. There are sufficient tractor repair and service facilities in the district. Nonetheless, it is difficult to locate stores selling replacement parts and repair facilities for combine harvesters.
4) 4) The district has the trained and skilled labor needed to operate tractors and other farm equipment. The district must address the shortage of competent labor, which is a barrier to operating, maintaining, and repairing combine harvesters.
5) Low-power tillers (up to 10 hp) are in high demand and are especially useful for small farms.

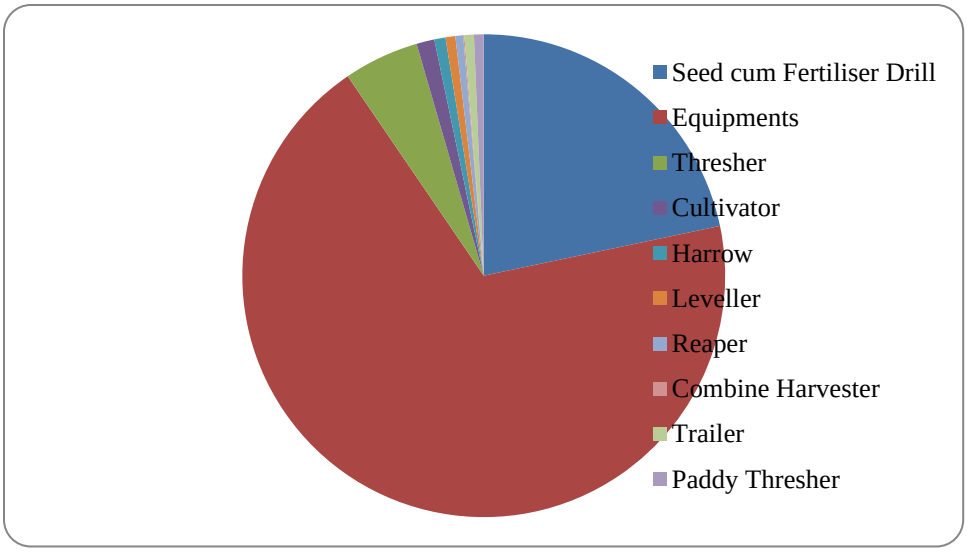

Fig. Agricultural tools and machinery in Chandrapur District

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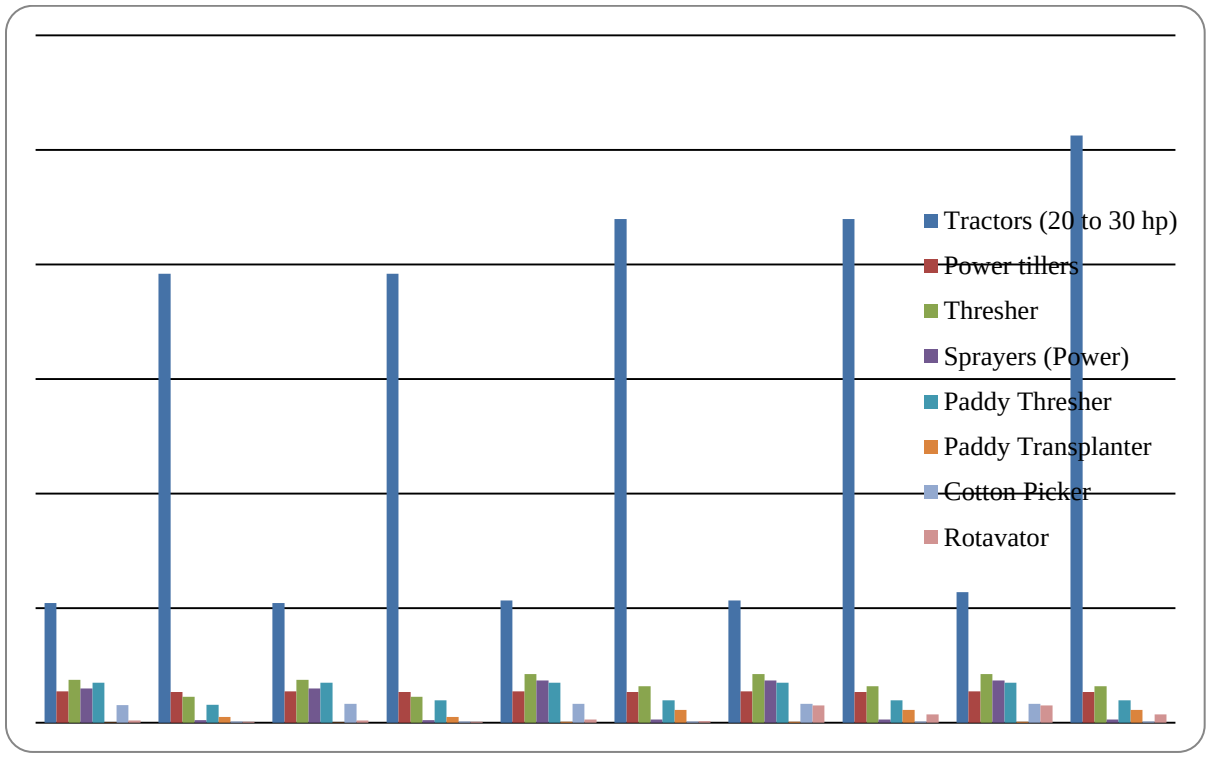
PLP projections from 2018-19 to 2022-23 for farm mechanization in Chandrapur district

The estimated potential is as under:

(Amount in Rs. lakh)

S.N.	Activity	2018-19		2019-20		2020-21		2021-22		2022-23	
		PU	Financial	PU	Financial	PU	Financial	PU	Financial	PU	Financial
1	Tractors (20 to 30 hp)	1045	3918.75	1045	3918.75	1066	4397.25	1066	4397.00	1139	5125.50
2	Power tillers	275	268.13	275	268.12	275	268.12	275	268.12	275	268.13
3	Thresher	375	225.00	375	225.00	425	318.75	425	318.75	425	318.75
4	Sprayers (Power)	300	22.50	300	22.50	370	27.75	370	27.75	370	27.75
5	Paddy Thresher	350	157.50	350	196.88	350	196.88	350	196.88	350	196.88
6	Paddy Transplanter	4	49.50	4	49.50	9	111.38	9	111.37	9	111.37
7	Cotton Picker	155	11.63	165	12.38	165	12.38	165	12.38	165	12.38
8	Rotavator	20	7.5	20	9.75	27	13.16	150	73.13	150	73.13
	Total		**4660.50**		**4702.88**		**5345.67**		**5405.38**		**6133.89**



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Critical intervention required for creating a definitive impact in the sector-

Through bank financing, the low-cost and reasonably priced threshers might be made available at the block level.

With the assistance of the Agriculture Department, block-level exclusive sales and service centers for hand-operated and bullock-drawn implements created by research institutions, KVKs, and AU may be formed.

The establishment of a district-level dealer network and block-level service centers for combine harvesters is necessary, with the backing of the Agriculture Department and manufacturers.

Action Points:

a) For Banks

In the district, Farmers' Clubs and Farmers' Producers Companies are being established, and they might be interested in opening Custom Hiring Centers.

By offering subsidies, the Agri Dept. is also supporting the same CHC. By funding the CHC, the banks may find that this unit is a viable commercial venture that benefits both the farmers and the banks. The FC or FPCs may set up the Custom Hiring Centers for tractors and tractor-operated implements.

It may be possible to provide small and marginal farmers in particular with liberal financing for threshers and sprayers.

b) For Government Departments

In rural locations, equipment like tractors and power sprayers require repair facilities.

Governmental organizations may set up workshops through their own or polytechnic institutions to prepare young people for these kinds of activities.

More extension work and farmer education programs are required in order to help farmers understand how to operate farm mechanization, particularly the rotator, cotton picking machine, and paddy transplanter—all of which are still in need of stabilization in the district. In collaboration with suppliers or distributors, power tiller and paddy reaper utility demonstrations may be arranged.

Through KVK, Sindewahi, the compact, reasonably priced, manually operated crop-specific equipment and tools created by CIAE, Bhopal, and other Agricultural Universities may become more widely used.

To prevent a severe labor shortage and to guarantee timely field operations, small and marginal farmers should have access to appropriate tractor-drawn and bullock-drawn farm implements and equipment on a seventy-five percent subsidy basis for all field operations.

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Results and Discussion

(1) The Financial credit for Tractors (20 to 30 hp) for the year 2018-19 and 2019-20 is same and amounted to Rs 3918.75 Lakh for the same Physical units 1045. However, the overall trend of credit is increasing in nature. The highest credit is Rs 5125.50 Lakh in the year 2022-23 for the Physical Units 1139.

(2) The Financial credit for Power tillers is nearly same for five years. The credit amount is Rs. 268.13 lakh for the Physical Units 275.

(3) The Financial credit for Thresher for the year 2018-19 and 2019-20 is same and amounted to Rs 225.00 Lakh against the same Physical units 275. However, for the next 3 years the credit amount is increased but same for 3 years. The credit amount is Rs. 318.75 Lakh

(4) The Financial credit for Sprayers (Power) for the year 2018-19 and 2019-20 is same and amounted to Rs 22.50 Lakh against the same Physical units 375. However, for the next 3 years the credit amount is increased but same for 3 years. The credit amount is Rs. 27.75 Lakh for the Physical Units 370

(5) The Financial credit for Paddy Thresher for the year 2018-19 is Rs 157.50 Lakh for the Physical units 350. However, for the next 4 year the credit amount is increased to Rs.196.88 Lakh for the equal Physical Units.

(6) The Financial credit for Paddy Transplanter for the year 2018-19 and 2019-20 is same and amounted to Rs 49.50 Lakh for the same Physical units 4. However, for the next 3 years the credit amount is increased but same for 3 years. The credit amount is Rs. 111.37 Lakh for the Physical Units 9.

(7) The Financial credit for Cotton Picker for the year 2018-19 is Rs 11.63 Lakh for the Physical units155. However, for the next 4 year the credit amount is increased to Rs.12.38 Lakh for the equal Physical Units 165.

(8) The Financial credit for Rotavator for the year 2018-19 is Rs. 7.5 Lakh for the Physical units 20. However, the overall trend of credit is increasing in nature. The highest credit is Rs. 73.13 Lakh in the year 2022-23 for the Physical Units150.

Conclusions

The study of pattern of Credit in farm mechanization in Chandrapur district shows that the highest credit is provided for the Tractors. Since farmers use tractors in conjunction with other machinery to carry out tasks like tilling, harrowing, sowing, and plowing, tractors are typically connected with agriculture. Furthermore, a tractor is utilized to pull or push the equipment, which improves farming activities' convenience. The second highest credit is provided for the thresher. A threshing machine, sometimes known as a thresher, is a type of agricultural machinery used to thresh grains, removing the seeds from their stalks and husks. Until such time as these machines were designed, the process involved beating the plant to get the seeds out.

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There is need to increase Credit for Power tillers, Sprayers (Power), Paddy Thresher, Paddy Transplanter Cotton Picker and for Rotavator.

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