

**Determining Status of Health Seeking Behaviour and Health Care Facilitation across
Indian States: An Application of TOPSIS Algorithm Technique**

*Shahid Ashraf

**Madhura Chowdhuri

Abstract

Introduction: Undoubtedly, the recent outbreak of pandemic has imparted a deeper impact globally as well as on Indian economy. During the COVID-19 pandemic, the necessity of ultimate health care facilitation has been realized. The undermined health facilitation causes serious consequences on the health status of the citizens. Hence at this juncture, there is a need to have a look at the health seeking behaviour and capture a detail insight regarding the health care facilitation provided by Government. The study intends to analyze the status of health seeking behavior among citizens and the related health care facilitation across the Indian States.

Methodology: To conduct the study, data has been extracted from National Sample Survey Office (NSSO), 71st round, Social Consumption: Health. Total 37,244 interviewed person have been considered for the study, those who are suffering from any illness in last 15 days. To assess the performance of the states in terms of both health seeking behaviour and health care facilitation, the TOPSIS algorithm technique has been used to rank the states in order.

Result: Post analyzing the data on various health indicators regarding health care facilitation the states has been ranked using the TOPSIS score. It has been observed that, the states from southern zone viz. Kerala and Tami Nadu are at the top of ranking, whereas States from Northern zone as well as eastern zone viz. Uttar Pradesh, Bihar and Jharkhand are found to be at the bottom of the list. On the other hand, while looking at the health seeking behavior pattern, the states those who are top in the ranking are Kerala, West Bengal and Uttar Pradesh and the states where the health seeking behavior among the people are considerably low are Telangana, Chhattisgarh and Bihar.

Conclusion: It has been observed that, although the health seeking behavior in few states are quite good but the health care facilitation seems to be drastically poor such as Uttar Pradesh, similarly in west Bengal the health seeking behaviour among the individual is at the top of the ranking but the health care facilitation seems to be lacking behind. But in Telangana where the state is good at health care facilitation, the health seeking behaviour among the individual seems to be poor in this state. Although Kerala and Tamil Nadu seems to be the exception, since the states are well performing in both the cases, but the situation is exactly opposite for Bihar and Jharkhand since it is performing drastically poor in both the cases. The major reason behind the interstate disparity is the lack of public health care service and poor public health infrastructure along with lack of awareness among the individual which imparted a serious consequence on the health seeking behaviour pattern. Poor public health infrastructure accompanied with shortage of doctors especially in rural India encompasses increased dependence on private health care system, which jeopardize the individual with poor socio-economic condition and ultimately end up with an uncanny health seeking behaviour pattern.

Keywords: Heath Seeking Behavior, Health Care Facilitation, COVID-19 Pandemic, TOPSIS Algorithm Technique.

* Professor, Department of Economics, Jamia Millia Islamia University, New Delhi, India.
E- mail: sashraf@jmi.ac.in

**Corresponding author; Research Scholar, Department of Economics, Jamia Millia Islamia University, New Delhi, India.
E-mail: madhura.chowdhuri@gmail.com

Introduction

The outbreak of COVID-19 pandemic in the last year has showed the necessity of prioritizing the public goods such as health and education. The pandemic has made all the policy and planning undone addressed towards better health accessibilities in the past few years. The necessity of social distancing has made frontline health workers to set their step back to serve health care accessibility in rural areas. The massive spread of COVID-19 endangers the health care of individuals with several comorbidities. The sufferings of patients affected with corona virus received the priority although the sufferings of those with other illness remained unsettled. With the growing COVID-19 cases and its severity the focus of equal distribution of resources got distracted and the drastic failure of public health infrastructure has come in front with an overburdened diseased beyond its capacity. The unexpected disaster has opened the eye of many to resettle the health care facilitation with an advanced and new paradigm by introducing e-health facilitation, although it requires a monumental reshaping from both the provider and recipient side. At this juncture unprecedentedly health takes the center stage and health care facilitation remains the center of attraction. An ascertain initiative needs to be taken to evaluate the prevalent health care opportunities and the intrinsic behaviour of individual to seek the facility for the purpose of treatment. The study undertaken in this paper intends to determine the present scenario of health care facilitation as well as the intensity of health seeking behaviour among the individuals across the Indian States. The opportunity of this study would generally ascertain a clear picture to what the extent the reshaping is required although the vibrant need is unquestionably visible, but the distribution may not be equal across the states in India.

The National Rural Health Mission in this context was launched with an aim of ensuring equitable health care distribution to all and played a significant role for the betterment of health system. The National Health Mission was one of the greatest initiatives adopted by Government of India in April 2005, with a vision to facilitate a universal health system accommodating wide range of services to address the health needs of the vulnerable section of the society. The overarching National health Mission (NHM) encompasses two submissions namely National Rural Health Mission (NRHM) launched in April 12, 2005 and The National Urban Health Mission (NUHM) launched in May 2013 with the purpose of equitable health acceleration in both rural as well as urban areas. The mission aims at ascertaining candid, affordable and quality health care services at all levels by focusing on decentralized health planning and service delivery to ensure reduction in out-of-pocket expenditure prioritizing the weaker

section of the society. To strengthen the monitoring and evaluation process for the better health outcomes an innovative and advanced support system has been designed namely 'Health Management Information System' to undertake robust and effective tracking at local level.

Health Management Information System (HMIS) is basically a web-based portal launched in October 2008 by government of India to ensure the effective monitoring of the health programmes under National Health Mission and providing key inputs on current health status following the data centric evidence for future policy implication. The emphasis on "Facility based reporting" from April 2011 expanded the outreach of monitoring and warranted an extensive coverage of public health facilities. At present 672 districts are reporting facility wise data while few such as Brihan, Mumbai and Kolkata are uploading district consolidated figure on the HMIS web portal. The HMIS portal is envisaged as a "Singal Window" for the accessibility of all public health data and also liable to capture public health data from both public and private institutions in rural and urban areas across the country.

HMIS comprises various health indicators in broad group consisting of various sub-groups possessing number of indicators. The four broad indicators are namely; Family Health (21 indicators), Disease Prevention and Control (47 indicators), Resources (28 indicators), Health Systems (12 indicators). The broad group family health consists of three subgroups: Reproductive Health (12 indicators), Child Health (3 indicators), Expanded Programme on Immunization (EPI) (6 indicators). Likewise, the other three broad groups also consist of various subgroups. The subgroups further contains indicators such as Ante natal care, Maternal and child health, Family planning, population control, Immunization and others. With wide range of Indicators, HMIS contains both supply side and service delivery related information.

Health Management information System (HMIS) comes out as a unique feature of accessing real time data and easy accessibility of data with minimal data storage cost. It even reduces the manual intervention and the cost accordingly. The frequency of data accessibility in monthly or quarterly basis makes the portal lucrative enough to fulfil the aim of better health system in near future. It helps decision makers to detect and control the emerging and endemic health problems. Previously majority of the health sector data flows from the various health institutions in rural health infrastructure on paper form, but the introduction of HMIS can be proved as a revolutionary step to ensure the digitalized form of data flow for updated data accessibility. HMIS could eradicate the delay in reporting and sending timely feedback to the

data source. It will mostly facilitate the policy makers to get the real time data for the purpose of assessing and adopt a correct course of action. Although several concerns have been raised regarding the data quality and adequate integration of the HMIS, but a number of attempts such as training of the stakeholders have been undertaken to polish the web portal to bridge the gap of data convergence.

Considering all the given facts, it became inevitable at this juncture of time to have a relook on the aspect that, even after 15 years of introduction of National rural Health Mission, to what extend states are successful as a provider of health care facilitation. Along with that, the assessment of health seeking behaviour among the individual across the Indian States have also grabbed its own importance, since increase in awareness and improved tenacity of seeking treatment became a compulsion due to the emergence of pandemic. To successfully acclaim the assessment of the states the study has undertaken two objectives to fulfil.

Objective

The objective of the study is mainly to help the policy makers to strengthen the policy initiates and practices for enhancing the health care facilitation among the rural masses. To fulfil the broader objective the underlying specific objective has been undertaken.

1. To highlight the status of health seeking behavior among citizens and the associated health care facilitation across Indian States.
2. To study the major challenges associated with health seeking behavior and health care facilitation across the states in India.

Data and Methodology

While looking at the opportunities and challenges associated with health seeking behavior and health care facilitation, the first objective basically deals with the opportunity aspect, where it focuses on the present status of states across India on their health seeking behavior as well as health care facilitation. To proceed with the assessment of health seeking behavior among the individual, data has been extracted from National Sample Survey Office (NSSO), 71st round social consumption on health. The study has undertaken 37,244 sample of individual for the assessment of their health seeking behavior who has been self-reported their sufferings from any illness in last 15 days from the date of survey all over India. The variable defined for the assessment of health seeking behavior are a) Treatment taken for illness 2) Treatment taken on medical advice 3) Treatment taken on medical advice over public hospital 4) Treatment taken

on medical advice where the nature of treatment being allopathy 5) Treatment availed by opting health insurance. The defined variables have been depicted in details in Table 1 as given below.

Table 1: Health seeking behaviour pattern of the respondents for spells of ailment in last 15 days

Health seeking behaviour pattern	% of individual seeking treatment for spell of ailment	
	Frequency	Percentage
Treatment taken for illness (n=37,244)		
Yes	36,162	97.09
No	1,082	2.91
Treatment taken on medical advice (n=36,162)		
Yes	32,734	90.52
No	3,428	9.48
Treatment taken on medical advice over level of care (n=32,734)		
HSC/ANM/ASHA/AWW	646	1.97
PHC/dispensary/CHC/mobile medical unit	2,133	6.52
Public Hospital	6,328	19.33
Private Doctor/Clinic	14,068	42.98
Private Hospital	9,559	29.2
Treatment taken on medical advice over nature of treatment (n=36,162)		
Allopathy	34,098	94.29
Indian system of medicine (desi dawai: ayurveda, unani or siddha)	990	2.74
Homoeopathy	832	2.30
Yoga & Naturopathy	97	0.27
Other	145	0.40
Availing health insurance for treatment (n=37,244)		
Yes	4,746	12.74
No	32,498	87.26

Source: National Sample Survey Office (NSSO), 71st round, Social consumption: Health

The assessment of the performance of the states on the health seeking behaviour among their individual has been done using TOPSIS algorithm technique based on the defined variables. An application of TOPSIS algorithm technique assigns a certain score for each of the States based on its calculation and the ranking has been done based on the TOPSIS score. The beauty of TOPSIS technique is the best alternative should have the shortest distance i.e the Euclidean distance from the ideal solution. Now while dealing with the situation where the performance of the States would be ranked based on the five above mentioned criteria, the TOPSIS (The Technique for Order of Preference by Similarity to Ideal Solution) algorithm technique follows few steps to reach the solution.

Topsis algorithm technique

Step 1: Vector Normalization: Formulation of Normalized decision matrix

The normalized decision matrix is formulated by dividing the raw criteria value by the square root of the squared summation of raw criteria value of each criteria. The normalized decision matrix is denoted by (r_{ij}) and the formula is as follows:

$$r_{ij} = \frac{x_{ij}}{\sqrt{\sum_{j=1}^n x_{ij}^2}} \text{ where, } i = 1, 2, \dots, m, \quad j = 1, 2, \dots, n$$

Step 2: Formulation of Weighted Normalized decision matrix

The formulation of weighted normalized matrix (t_{ij}) encompasses the multiplication of assigned weights (w_j) with normalized performance value (r_{ij}) of each criteria. The weighted decision matrix is denoted by (t_{ij}) and the formula is as follows:

$$t_{ij} = r_{ij} \times w_j \text{ where, } i = 1, 2, \dots, m, \quad j = 1, 2, \dots, n, \quad \sum_{j=1}^n w_j = 1$$

Note: In this study equal weight has been assigned to each criteria determining health seeking behaviour.

Step 3: Determining ideal best and ideal worst solution

The determination of ideal best and ideal worst solution entails the selection of maximum weighted normalized performance value of each criteria as an ideal best solution if the criteria is a beneficial criteria, if the criteria is a non-beneficial criteria then the minimum weighted normalized performance value of that criteria would be considered as an ideal best solution. Similarly in case of beneficial criteria the ideal worst solution would be the minimum value of weighted normalized performance value of that criteria, otherwise in case of non-beneficial criteria the maximum weighted normalized performance value would be ideal worst of that criteria.

$$V_j^- = \{(\max (t_{ij} | i = 1, 2, \dots, m) | j \in J_-), (\min (t_{ij} | i = 1, 2, \dots, m) | j \in J_+)\} \equiv \{t_{wj} | j = 1, 2, \dots, n\},$$

$$V_j^+ = \{(\min (t_{ij} | i = 1, 2, \dots, m) | j \in J_-), (\max (t_{ij} | i = 1, 2, \dots, m) | j \in J_+)\} \equiv \{t_{bj} | j = 1, 2, \dots, n\},$$

Where,

$$V_j^+ = \text{Ideal Best solution } (t_{bj})$$

$$V_j^- = \text{Ideal worst solution } (t_{wj})$$

J_+ = Beneficial criteria or criteria having positive impact

J_- = Non beneficial criteria or criteria having negative impact

Step 4: Calculation of Euclidean distance (L^2)

This step includes the calculation of Euclidean distance from ideal best and ideal worst solution as well. The Euclidean distance from ideal best solution is calculated by taking the square root

of the summation of all the squared distances taken from each i^{th} weighted normalized performance value to the ideal best solution for each criteria. The Euclidean distance from ideal best and ideal worst solution is calculated likewise:

$$S_i^+ = \sqrt{\sum_{j=1}^n (t_{ij} - t_{bj})^2} \quad \text{where, } i = 1, 2, \dots, m, \quad j = 1, 2, \dots, n$$

$$S_i^- = \sqrt{\sum_{j=1}^n (t_{ij} - t_{wj})^2} \quad \text{where, } i = 1, 2, \dots, m, \quad j = 1, 2, \dots, n$$

Where,

S_i^+ = Euclidean distance from ideal best solution

S_i^- = Euclidean distance from ideal worst solution

Step 5: Calculation of performance score

In the ultimate step of obtaining the final performance score of the states based on which ranking would be done is calculated using the Euclidean distances from the ideal best and ideal worst solution, taking the Euclidean distance from ideal worst solution in the numerator and taking the summation of the distances in the denominator. The ranking of the states will depend upon the final performance score (P_i).

$$P_i = \frac{S_i^-}{(S_i^+ + S_i^-)}, \quad 0 \leq P_i \leq 1$$

Where,

P_i = Performance score

$P_i = 1$ if and only if the i^{th} weighted normalized performance value is the ideal best solution for each criteria

$P_i = 0$ if and only if the i^{th} weighted normalized performance value is the ideal worst solution for each criteria

Socio-Demographic profile of the respondents undertaken for the assessment of health seeking behaviour

It is important to reflect the socio-demographic profile of the respondents those who have been undertaken for the study for the purpose of the assessment of their health seeking behaviour. In table 2, out of total 37,244 respondents, 53.96 percent respondents are female and 46.04 percent are male. Most of the respondents (30.92 percent) belong to the age group of 40-59 years, 27.49 percent of the respondents are 60 years and above and 22.16 percent of the

respondents belongs to the age group of 15-39 years. Most of the respondents (58.98 percent) are currently married, 26.65 percent of the respondents are not married, 13.82 percent of the respondents are widowed and merely 0.56 percent of the respondents are Divorced/ separated. Majority of the respondents (75.68 percent) are Hindu, 15.01 percent are Islam and others like Christian, Sikh and Jain seems to be minority. Majority of the respondents (42.04 percent) belongs to the Other Backward Classes and merely 16.47 percent and 7.42 percent of the respondents belongs to the scheduled caste and scheduled tribe category respectively. Notably majority of the respondents (37.99 percent) are illiterate whereas only 12.81 percent of the respondents have done primary and 12.58 percent of the respondents have completed their education up to upper primary.

Table 2: Socio-demographic profile of the respondents

Interventions	Frequency (n=37244)	Percentage	Interventions	Frequency (n=37244)	Percentage
Sex			Social Group		
Male	17,146	46.04	Scheduled Tribes	2,765	7.42
Female	20,098	53.96	Scheduled Castes	6,133	16.47
Age in Group			Other Backward Classes	15,657	42.04
Below 15 years	7,240	19.44	Others	12,689	34.07
15-39 years	8,252	22.16	General Education		
40-59 years	11,514	30.92	Not Literate	14,147	37.99
60 years and above	10,238	27.49	Literate Without Any Schooling	201	0.54
Marital Status			Literate Without Formal Schooling: Through NFEC	106	0.28
Never Married	9,924	26.65	Literate Through TLC/ AEC	33	0.09
Currently Married	21,965	58.98	Others	109	0.29
Widowed	5,147	13.82	Literate With Formal Schooling: Below Primary	4,668	12.53
Divorced/Separated	208	0.56	Primary	4,772	12.81
Religion			Upper Primary/Middle	4,685	12.58
Hinduism	28,187	75.68	Secondary	3,582	9.62
Islam	5,590	15.01	Higher Secondary	1,983	5.32
Christianity	1,996	5.36	Diploma/Certificate Course (Up to Secondary)	211	0.57
Sikhism	980	2.63	Diploma/Certificate Course (Higher Secondary)	212	0.57
Jainism	103	0.28	Diploma/Certificate Course (Graduation & Above)	104	0.28
Buddhism	237	0.64	Graduate	1,757	4.72
Zoroastrianism	5	0.01	Postgraduate and Above	673	1.81
Others	146	0.39			

Source: National Sample Survey Office (NSSO), 71st round, Social consumption: Health

Now while moving towards the health care facilitation, it is notable that, the assessment of the health care facilitation across the Indian states has also undertaken few criteria based on which the assessment of the states have been accomplished. The data has been extracted from National Family Health Survey (NFHS-4), 2015-16. In the similar way, TOPSIS algorithm technique

has been used to rank the states in order. The criteria undertaken for the assessment are as follows: a) Mother who have received full Antenatal care b) Mothers who have received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery c) Mothers who have consumed iron and folic acid for 100 days or more at the time of pregnancy d) Institutional births e) Births assisted by a doctor/nurse/LHV/ANM/Other health personnel. The defined variable have been depicted in Table 3 as given below.

Table 3: Percentage of individual with access to health care facilitation by type of facilities

Health Care Facilities	% of individual received health care facilities	
		% (All India)
Mothers who have received full antenatal care		21.0
Mothers who have received post-natal care from a doctor/nurse/LHV/ ANM/midwife/ other health personnel within 2 days of delivery.		62.4
Mothers who have consumed iron and folic acid for 100 days or more at the time of pregnancy.		30.3
Institutional Births		78.9
Births assisted by a doctor/nurse/LHV/ ANM/Other health personnel		81.4

Source: National Health Profile, 2017, Ministry of Health and Family Welfare (MoHFW), National Family Health Survey (NFHS-4), 2015-16

Based on the above-mentioned criteria undertaken in Table 3, the assessment of Health care facilitation has been proceeded using TOPSIS algorithm which adhere certain steps to get into the assessment has been mentioned earlier. The assessment through TOPSIS algorithm technique delivers certain performance score based on which the ranking of the states has been done.

Result and Discussion

Post analyzing the data, while looking at the provision of health care facilitation in Table 4, most of the states pertains to southern region such Kerala, Tamil Nadu, Andhra Pradesh, Telangana seems to be at the top of the ranking when it comes to the health care facilitation. The state from western region such as Goa seems to be at the top of the ranking, other than that the states from north-eastern zone also seems to be performing quite well such as Sikkim and Mizoram in terms of health care facilitation. On the other hand, few states from north, east and north-eastern zone seems to be performing drastically poor in providing the health care facilitation in their states. From eastern zone, it is Jharkhand and Bihar, from northern zone it is Uttar Pradesh and from north-eastern zone it is Arunachal Pradesh and Nagaland are mostly the poor performing states in terms of health care facilitation and lies at the bottom of the ranking, whereas the states like Odisha, Haryana, Chattisgarh and West Bengal have been placed in the middle order of the ranking, seems their performance to be moderate in terms of providing health care facilitation in their states. Now while moving towards the state-wise

assessment of health seeking behaviour among the individuals of the states in table 5, it has been observed that, two state from southern zone i.e, Kerala and Tamil Nadu, West Bengal from eastern zone, Uttar-Pradesh from Northern zone and Maharashtra from western zone are at the top of ranking and has been identified as better performing states in terms the health seeking behaviour among the individual of these states. On the other hand, the states like Haryana, Assam, Uttarakhand and Goa seems to be in the middle order with a moderate performance related to the health seeking behaviour among the individual of these states, whereas the states from southern zone viz. Telangana, the states from eastern zone viz. Bihar and Jharkhand and Chattisgarh from central zone are the least performing states in terms of the individual's health seeking behaviour. More interestingly considering the performances and ranking of the states in terms of both the provision of health care facilitation and the health seeking behaviour among the individual, it has been observed that, in a state like Uttar Pradesh, the health seeking behaviour among the individual is quite good, but the heath care facilitation seems to be drastically poor. On the other hand, the state pertains to southern zone Telangana is performing well in terms of health care facilitation but the health seeking behaviour among the individual in that state seems to be very poor. In the state like West Bengal pertains to eastern region, the health seeking behaviour among the individual seems to be quite well, but the health care facilitation in the state is still lacking behind. Similarly in Maharashtra, the health seeking behavior among the individual also seems to be well, but the health care facilitation in the state is not up to the mark. On the other hand, the state like Goa which appears to be the best performing states in terms of health care facilitation, but the health seeking behaviour among the individual in this state appears to be poor enough. Although few exceptions have been observed in this regard, the states viz. Kerala and Tamil Nadu are exceptionally well performing in case of both health care facilitation as well as health seeking behaviour of their individuals. In contrast, few states from eastern zone such as Bihar, Jharkhand seems to be drastically poor performing in both the cases.

Table 4: State wise ranking based on the provision of Health Care Facilitation

Zone	State	Rank	TOPSIS score
West	Goa	1	0.8850
South	Kerala	2	0.8749
South	Tamil Nadu	3	0.7390
South	Andhra Pradesh	4	0.6972
South	Telangana	5	0.6721
North-East	Sikkim	6	0.6474
North-East	Mizoram	7	0.6124
North	Himachal Pradesh	8	0.5833
North	Punjab	9	0.5636
South	Karnataka	10	0.5615
West	Maharashtra	11	0.5512
North-East	Manipur	12	0.4994
West	Gujarat	13	0.4976
East	Odisha	14	0.4659
North	Haryana	15	0.4137
Central	Chhattisgarh	16	0.3899
East	West Bengal	17	0.3870
North-East	Assam	18	0.3570
North-East	Meghalaya	19	0.3534
North	Rajasthan	20	0.3215
Central	Madhya Pradesh	21	0.3149
North	Uttarakhand	22	0.2923
North-East	Tripura	23	0.2886
North	Uttar Pradesh	24	0.2304
East	Jharkhand	25	0.2096
East	Bihar	26	0.1837
North-East	Arunachal Pradesh	27	0.1001
North-East	Nagaland*	28	0.0000

Source: Own calculation using TOPSIS algorithm technique

* The TOPSIS score for Nagaland is found to be nil since the ideal worst value for all the factors of the decision matrix pertains to Nagaland.

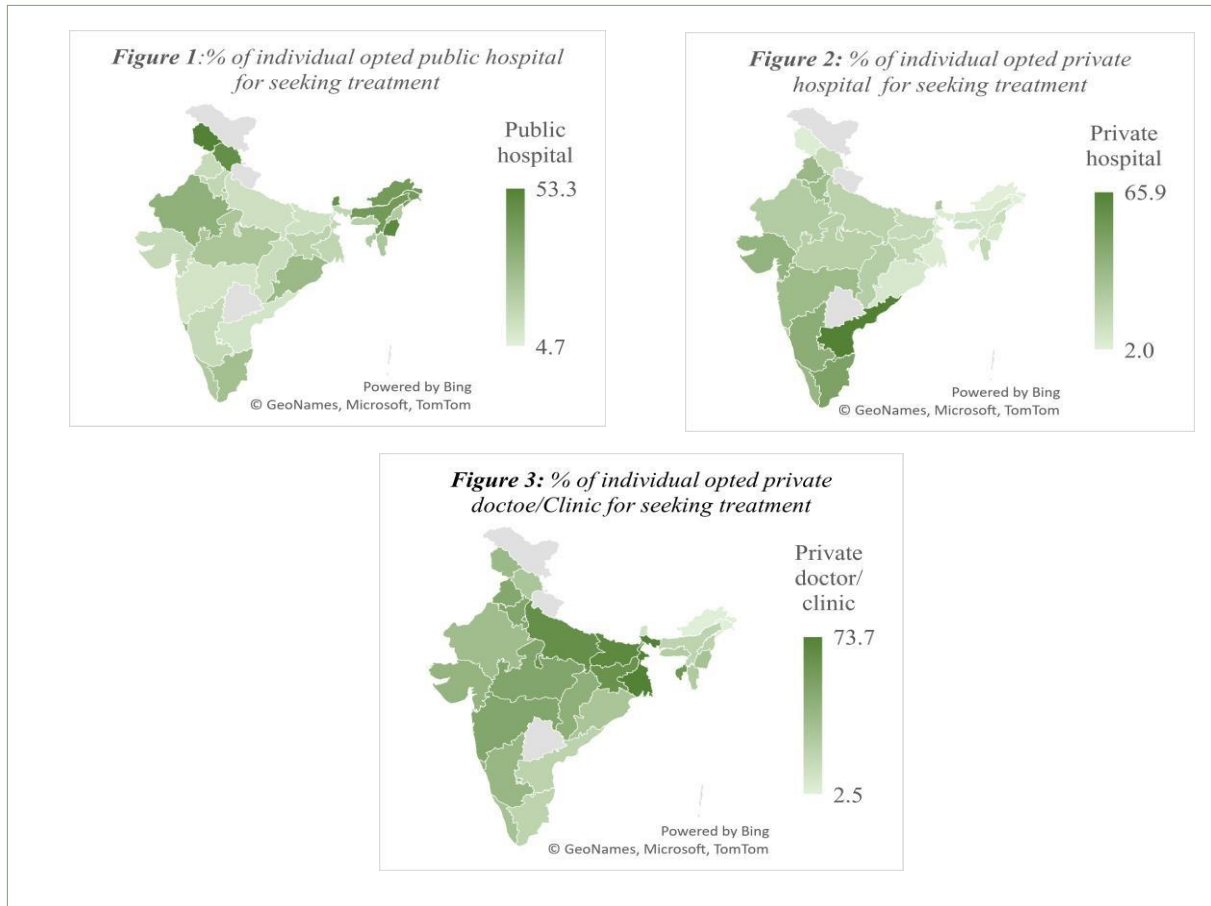
Table 5: State wise ranking based on the Health Seeking Behavior pattern

Zone	State	Rank	TOPSIS Score
South	Kerala	1	0.7558
South	Tamil Nadu	2	0.6503
East	West Bengal	3	0.6230
North	Uttar Pradesh	4	0.5660
West	Maharashtra	5	0.4564
South	Andhra Pradesh	6	0.4518
South	Karnataka	7	0.4250
North	Rajasthan	8	0.3924
West	Gujarat	9	0.3902
Central	Madhya Pradesh	10	0.3874
East	Odisha	11	0.3812
North	Punjab	12	0.3669
North	Himachal Pradesh	13	0.3362
North	Haryana	14	0.3271
North-East	Assam	15	0.3262
North	Uttarakhand	16	0.3257
West	Goa	17	0.3252
North-East	Sikkim	18	0.3245
North-East	Arunachal Pradesh	19	0.3243
North-East	Manipur	20	0.3240
North-East	Mizoram	21	0.3239
North-East	Meghalaya	22	0.3220
North-East	Nagaland	23	0.3219
North-East	Tripura	24	0.3218
South	Telangana	25	0.3215
East	Jharkhand	26	0.3192
Central	Chhattisgarh	27	0.3181
East	Bihar	28	0.3164

Source: Own calculation using TOPSIS algorithm technique

Challenges associated with health seeking behaviour and health care facilitation

The TOPSIS analysis has provided a detail insight on the present scenario of the health seeking behaviour and health care facilitation across the Indian states. Now after going through the opportunity aspect from the above analysis, we may seek to identify the major challenges associated with the health seeking behaviour and health care facilitation across the states. Table 8 provided in annexure depicted the state wise picture of treatment seeking on medical advice over level of care. It has been observed that, in the states like Kerala and Tamil Nadu which is in the top of ranking in terms of health seeking behaviour and also possess good health care



facilitation, 21.83 percent and 25.98 percent of individual opted treatment from public hospital respectively and 10.01 percent individual from Kerala, 5.37 percent individual from Tamil Nadu have opted treatment from PHC/CHC. It has also been observed that, the tendency of the individuals of these states of opting treatment from private doctor is quite less but the usage of private hospital seems to be persistent. In contrast, in the states like Uttar Pradesh, West Bengal and Maharashtra the extent of usage of public hospital for opting treatment is quite less and even very few percentages of individual are found to opt the private hospital but the tendency to go to private doctors for seeking treatment seems to be vibrant. In West Bengal it is only 4.78 percent of individual who opted treatment in private hospital, but 73.68 percent of individual went to private doctors for their treatment. The rather similar scenario could be observed for the states like Bihar and Jharkhand those who are very poor in health seeking behaviour and also possess drastically poor health care facilitation do not seek treatment much from public hospital as well as private hospital, most of them are found to opt private doctors for their treatment. This certainly indicates public health care facilitation is still lacking behind and poor enough to obtain the reliability of the individual to seek treatment from public institutions.

The state wise analysis has been done to identify the reasons behind not availing the government sources for seeking treatment in table 6. In the state like Kerala, 49.88 percent of the individual reported the quality of facilitation to be satisfactory, but it involves long waiting time, whereas merely 8 percent of individual has reported not availability of specific services. In Tamil Nadu, 35.26 percent of individual reported quality of public health service to be satisfactory but involved long waiting time, merely 4 percent of the individual reported non-availability of required services, but 48.47 percent of individual reported although service available but quality not satisfactory. It ascertains one thing that in the states like Kerala and Tamil Nadu the well circulated public health care facilitation is available, the only reason people may not opt it is the involvement of long waiting time and due to somewhat poor quality of service. But in the states like Uttar Pradesh and Maharashtra, 15.85 percent and 13.69 percent of the individual respectively reported non-availability of specific services, but it has also been observed that around 50 percent of the individual reported not satisfactory quality of the available services. In Uttar Pradesh around 11 percent of individual responded the available service to be too far. In West Bengal merely 6.82 percent of the individual reported the specific service to be not available, 33.98 percent responded the service to be available but quality not satisfactory, around 30 percent reported of long waiting time and 15.86 percent of individual responded the quality to be satisfactory but facility to be far. In the states like Bihar and Jharkhand 63.55 percent and 59.63 percent of individual responded the available service to be non-satisfactory respectively. In Bihar, 11.49 percent of individual responded non-availability of the specific services and in Jharkhand 20.19 percent of individual reported the same. The above analysis certainly indicates the state wise inequality in health care facilitation which emerged as one of major reasons behind unequal health seeking behaviour across Indian States.

Table 6: Percentage of individuals by Reasons for not availing Government sources for seeking treatment for Spells of ailment in last 15 days

State/UT	% of individual not availing government sources for seeking treatment						Total
	Required specific services not available	Available but quality not satisfactory	Quality satisfactory but facility too far	Quality satisfactory but involves long waiting	Financial constraint	Other	
Jammu & Kashmir	5.23	31.40	1.74	48.84	0.00	12.79	100
Himachal Pradesh	7.64	41.40	8.92	38.85	0.00	3.18	100
Punjab	13.45	37.55	12.09	30.64	0.36	5.91	100
Chandigarh	1.22	12.20	7.32	42.68	0.00	36.59	100
Uttaranchal	13.76	34.86	14.68	24.77	4.59	7.34	100
Haryana	8.49	46.58	14.08	27.74	1.45	1.66	100
Delhi	2.84	26.95	7.09	49.65	2.13	11.35	100
Rajasthan	9.87	53.03	8.12	20.06	0.32	8.60	100
Uttar Pradesh	15.85	50.12	11.23	18.07	0.45	4.28	100
Bihar	11.49	63.55	9.69	10.05	0.18	5.03	100
Sikkim	23.08	30.77	5.13	28.21	0.00	12.82	100

State/UT	% of individual not availing government sources for seeking treatment						Total
	Required specific services not available	Available but quality not satisfactory	Quality satisfactory but facility too far	Quality satisfactory but involves long waiting	Financial constraint	Other	
Arunachal Pradesh	37.50	0.00	0.00	12.50	12.50	37.50	100
Nagaland	18.18	18.18	9.09	27.27	0.00	27.27	100
Manipur	8.82	14.71	0.00	52.94	2.94	20.59	100
Mizoram	7.32	19.51	12.20	43.90	0.00	17.07	100
Tripura	11.36	24.24	9.85	29.55	5.30	19.70	100
Meghalaya	4.35	34.78	0.00	47.83	0.00	13.04	100
Assam	17.91	41.79	1.49	16.42	1.49	20.90	100
West Bengal	6.82	33.98	15.86	31.61	0.87	10.86	100
Jharkhand	20.19	59.63	8.70	6.52	0.62	4.35	100
Odisha	11.44	52.49	9.70	11.44	2.49	12.44	100
Chhattisgarh	15.28	37.04	10.19	22.69	0.00	14.81	100
Madhya Pradesh	12.36	57.88	8.21	14.22	0.11	7.22	100
Gujarat	11.02	45.05	12.15	23.73	0.56	7.48	100
Daman & Diu	11.54	26.92	25.00	32.69	0.00	3.85	100
D & N Haveli	15.38	38.46	0.00	34.62	0.00	11.54	100
Maharashtra	13.69	51.88	8.31	22.47	0.47	3.19	100
Andhra Pradesh	7.07	64.57	4.17	16.01	0.31	7.88	100
Karnataka	14.58	49.46	6.50	24.73	0.43	4.29	100
Goa	8.24	22.35	5.88	58.82	0.00	4.71	100
Lakshadweep	64.15	35.85	0.00	0.00	0.00	0.00	100
Kerala	8.00	21.53	8.71	49.88	0.36	11.53	100
Tamil Nadu	4.04	48.47	7.69	35.26	0.10	4.44	100
Puducherry	2.00	49.33	9.33	38.00	0.00	1.33	100
A & N Islands	6.67	53.33	0.00	33.33	0.00	6.67	100
Telangana	5.31	52.57	16.42	15.59	0.33	9.78	100
All India	10.34	44.82	9.80	27.14	0.52	7.37	100

Source: National Sample Survey Office (NSSO), 71st round, Social consumption: Health

Although poor public health facilitation is indeed a reason behind poor health seeking behaviour but the reason is not enough, there are many other factors which are responsible behind the poor health seeking behaviour among the individual. The variety of factors which could be responsible behind the poor health seeking behaviour may include poor socio-economic condition, Lack of feasibility or physical accessibility, geographical spread, cultural beliefs and prejudices, social awareness, literary level of the individual or the family. The state wise analysis has been done to figure out the reasons behind not seeking treatment on medical advice in table-7. It has been observed that, in Kerala and Tamil Nadu 57.73 percent of individual and 80.65 percent of individual reported the ailment not considered to be serious as a reason behind not seeking treatment on medical advice, but hardly few have reported non-availability of medical facility. In the state like Uttar Pradesh, West Bengal and Maharashtra it has been observed that, 14.29 percent, 16.19 percent and 16.91 percent of individual reported non-availability of medical facility in the neighbourhood respectively. In Uttar Pradesh 55.45 percent of individual responded the ailment not considered to be serious, similarly in West Bengal and Maharashtra 40.57 percent and 47.06 percent of individual reported ailment not considered to be serious. In Uttar Pradesh and West Bengal, around 10 percent of individual reported the facility of satisfactory quality to be too expensive. In Bihar and Jharkhand, 76.19

percent and 67.44 percent of individual reported the ailment not considered to be serious. In Jharkhand, 12.40 percent of individual reported non-availability of medical facility in the neighbourhood. The facts and figures certainly reveal that, there is still persistent lack of awareness among the individual regarding seeking treatment for their ailment, although non-availability of medical facility is also significant reason behind not seeking treatment.

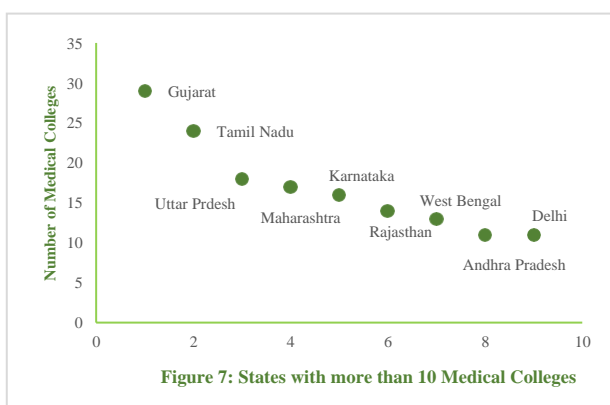
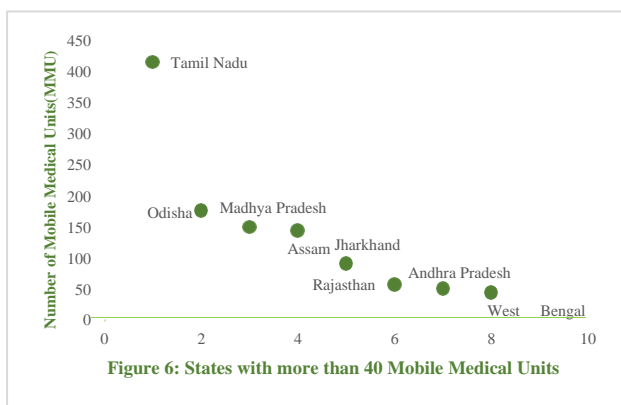
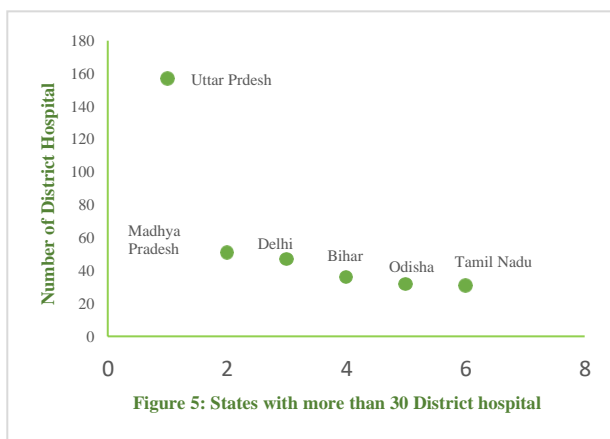
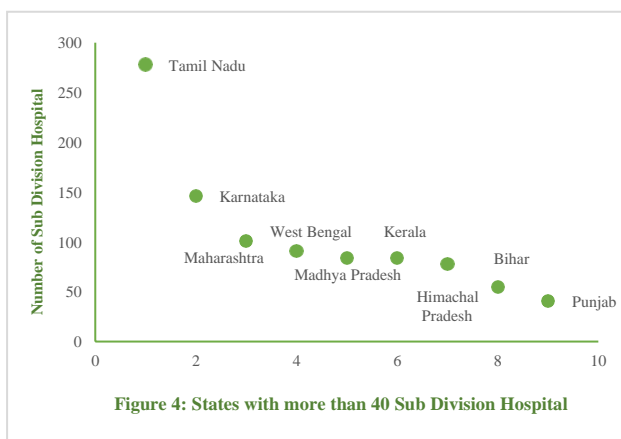
Table 7: Percentage of individuals by Reasons for not seeking treatment on medical advice for Spells of ailment in last 15 days

State/UT	% of individual not seeking treatment on medical advice						Total
	No medical facility available in the neighbourhood	Facility of satisfactory quality not available	Facility of satisfactory quality too expensive	Facility of satisfactory quality involves long waiting	Ailment not considered serious	Other	
Jammu & Kashmir	12.12	0.00	3.03	3.03	51.52	30.30	100
Himachal Pradesh	4.17	8.33	4.17	4.17	54.17	25.00	100
Punjab	1.18	4.71	20.00	7.06	38.82	28.24	100
Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	100
Uttaranchal	3.33	0.00	3.33	3.33	83.33	6.67	100
Haryana	0.00	0.00	8.33	0.00	75.00	16.67	100
Delhi	0.00	0.00	0.00	0.00	63.64	36.36	100
Rajasthan	2.99	1.49	14.93	5.97	55.22	19.40	100
Uttar Pradesh	14.29	2.91	10.17	0.24	55.45	16.95	100
Bihar	7.14	3.17	3.17	0.40	76.19	9.92	100
Sikkim	0.00	0.00	0.00	7.69	30.77	61.54	100
Arunachal Pradesh	17.24	0.00	6.90	0.00	34.48	41.38	100
Nagaland	0.00	0.00	2.78	0.00	83.33	13.89	100
Manipur	36.36	0.00	0.00	0.00	59.09	4.55	100
Mizoram	3.33	0.00	0.00	3.33	56.67	36.67	100
Tripura	5.13	2.56	10.26	2.56	71.79	7.69	100
Meghalaya	2.94	17.65	8.82	2.94	41.18	26.47	100
Assam	2.90	1.45	1.45	0.00	82.61	11.59	100
West Bengal	16.19	2.17	10.68	6.51	40.57	23.87	100
Jharkhand	12.40	3.10	6.98	1.55	67.44	8.53	100
Odisha	4.91	3.07	6.75	1.84	70.55	12.88	100
Chhattisgarh	3.17	1.59	4.76	1.59	66.67	22.22	100
Madhya Pradesh	8.42	1.05	4.21	10.53	53.68	22.11	100
Gujarat	2.22	4.44	5.56	3.33	63.33	21.11	100
Daman & Diu	66.67	0.00	0.00	0.00	0.00	33.33	100
D & N Haveli	0.00	5.88	0.00	0.00	58.82	35.29	100
Maharashtra	16.91	5.88	6.62	6.62	47.06	16.91	100
Andhra Pradesh	4.17	5.42	1.25	5.42	54.58	29.17	100
Karnataka	4.63	5.56	0.93	0.93	73.15	14.81	100
Goa	0.00	15.38	0.00	0.00	76.92	7.69	100
Lakshadweep	0.00	0.00	0.00	0.00	50.00	50.00	100
Kerala	1.03	1.55	1.03	1.55	57.73	37.11	100
Tamil Nadu	1.43	1.43	3.94	0.36	80.65	12.19	100
Puducherry	0.00	0.00	0.00	0.00	69.57	30.43	100
A & N Islands	0.00	4.76	0.00	4.76	57.14	33.33	100
Telangana	2.50	10.00	5.00	5.00	60.00	17.50	100
All India	8.31	3.06	6.33	3.12	59.04	20.13	100

Source: National Sample Survey Office (NSSO), 71st round, Social consumption: Health

This is all what we have observed in case of health seeking behaviour, let us have a look on the other side i.e, the challenges associated with health care facilitation. In this regard, the data on rural infrastructure (2018-19) has been taken under consideration. The table-9 provided in annexure has reflected state-wise availability of health care infrastructure. It has been observed

that, in Tamil Nadu the number of mobile medical unit is quite high and good number of sub divisional hospital exists in the state, although in Kerala the number sub divisional hospital and mobile medical units are quite less. In Maharashtra and West Bengal moderate number of sub divisional hospital and mobile medical units have been found. The observable fact is in Uttar Pradesh, although there are no sub divisional hospital and mobile medical unit, but the state has highest number of district hospital. After Tamil Nadu the highest number of mobile medical unit are there in Odisha and after that it is Madhya Pradesh which is in the third highest position and Assam stand in fourth position with 145 mobile medical Unit. Tamil Nadu has the highest number of sub division hospitals and after that Karnataka holds the second highest position in this regard. It is observable that, in Bihar there is no mobile medical unit, similar scenario has been observed for Chandigarh, Uttarakhand and Himachal Pradesh. There are number of states where there is no sub divisional hospital such as Jammu & Kashmir, Uttar Pradesh and many other north eastern states viz. Meghalaya, Sikkim, Arunachal Pradesh, Nagaland etc. The varied infrastructural facility in different states indeed imparts an impact on the health seeking behaviour as well as health care facilitation to the individuals of the states.



Conclusion

Consolidating the major finding out of the study, it has been depicted that, although the health seeking behavior in few states are quite good but the health care facilitation seems to be drastically poor such as Uttar Pradesh and, in some states, it is vice-versa viz. Telengana, which indicates although with better provision of health care facilitation, the health seeking behaviour in this state is quite poor. In West Bengal the health seeking behavior among the individual is at the top of the ranking but the health care facilitation still seems to be lacking behind. Similar scenario could be observed in case of Maharashtra. On the other hand, in terms of health care facilitation Goa is in the top most of the ranking but health seeking behaviour among the individual of the state seems to be lacking behind. Although Kerala and Tamil Nadu seems to be the exception in this case, since the state is well performing in both health seeking behaviour and health care facilitation, but at the same time states like Bihar and Jharkhand seems to be drastically poor performing in both the cases. While analyzing the factors responsible for this disparity in health seeking behaviour across the states it has been observed that, poor quality of service in public health services held responsible for this. Along with that, one of the major reasons behind poor health seeking behaviour which has fetched our eye is lack of awareness as well as seriousness among the individual to seek treatment for their ailments. Now this seems to be one side of the coin, while talking about another side i.e, the health care facilitation, it is important to point out that poor health infrastructure seems to be responsible for the lagged health care facilitation. Although it is given fact that, health seeking behaviour does not only depend upon health care facilitation, there are many other factors which drive the intensity of seeking treatment, i.e, socio-economic condition, cultural beliefs and prejudices, social awareness, literary level etc. But improved public health care service may outweigh the other factors and instill a strong impact on individual to enhance their health seeking behaviour pattern. Although this improvement in public health care services have been planned since long back and the implementation has been imparted somewhere and somewhere it is still awaited. But at this junction of time where the second wave of nobel coronavirus is at our door, there is hardly any room for further delay but to take sufficient effort to improve the public health infrastructure to cope up with the situation. It is evident that, the public health infrastructure in rural areas is still in a very bad state of affairs accompanied with a shortage of doctors in rural India, which makes health care facilitation to be lagging behind with an increased dependence on private health care system, which jeopardize the individual with poor socio-economic condition and ultimately end up with an uncanny health seeking behaviour pattern.

Way forward

Health care service is at stake due to lack of public sector infrastructure. The number of primary health care unit or community health centers are still at few in numbers in most of the states. The basis infrastructural facility which is mandatory for the well running community health center are missing in many of the states, such as one functional laboratory, Operation theatre, Labour room, newborn care concern with at least 30 beds etc. The facility of intensive care (ICU) unit are rarely available at rural public health care unit. The outcome of this shortage in public sector infrastructure created a menace when COVID-19 has arrived at our door and accounted a systematic breakdown within the institutional framework. The pitfalls have not only broken the health care supply chain but damaged the human relationship and accountability. Although the focus has been driven towards the infrastructural deficiency, but it is not only the physical infrastructure but also the shortage of skillful health care practitioner allocated for each primary and community health centers as per the minimal norms provided by the Government, leading to underutilization of existing facility. Unwillingness of eminent doctors to serve in rural areas due to infrastructural inadequacy and lack of incentive turn out to be the major issues of poor quality of service as well as lack of access. The lack of public sector facility inducing private practitioner to grow and outweighing the desire of seeking treatment in private sector over public sector among individuals. But this is certainly impeding for those with poor socio-economic condition due to high out of pocket expenditure and ultimately demotivating to seek treatment for their ailments. Prevalence of Quackery in this regard also impart major consequence on public health. Government has a major role to play at this juncture, since systematic problem could be solved with phase wise systematic solutions. Strategizing systematic and large vision reform in public health infrastructure guided by pilot studies would be the plausible approach towards reform. Mobile medical units equipped with basic medical facilities specially oxygen cylinder, saline etc., considering the present scenario would supplement the health care facilitation to combat with the pandemic. The enhanced practices would not only boost up the current services to win the battle against the pandemic but also implant a seed of reform in public health care system which would make the country ready to encounter any further calamities.

Annex Tables

Table 8: Percentage of individuals availed treatment on medical advice over level of care for Spells of ailment in last 15 days

State/UT	% of individual seek treatment on medical advice over level of care					Total
	HSC/ANM/A SHA/AWW	PHC/dispensary/ CHC/mobile medical unit	Public Hospital	Private Doctor/Clinic	Private Hospital	
Jammu & Kashmir	2.39	3.11	53.35	37.56	3.59	100
Himachal Pradesh	0.28	8.86	47.37	29.36	14.13	100
Punjab	1.43	1.88	13.86	48.95	33.89	100
Chandigarh	0.00	5.45	44.85	44.24	5.45	100
Uttaranchal	1.52	3.54	39.90	33.84	21.21	100
Haryana	1.18	1.69	15.68	49.58	31.87	100
Delhi	1.38	7.83	25.81	49.31	15.67	100
Rajasthan	2.41	6.77	32.56	35.16	23.10	100
Uttar Pradesh	2.00	2.57	11.69	64.59	19.15	100
Bihar	2.54	2.84	11.36	68.76	14.50	100
Sikkim	0.93	16.67	46.30	11.11	25.00	100
Arunachal Pradesh	8.72	43.62	42.28	3.36	2.01	100
Nagaland	3.13	40.63	21.88	21.88	12.50	100
Manipur	2.27	9.09	50.00	31.82	6.82	100
Mizoram	8.33	26.04	22.92	27.08	15.63	100
Tripura	0.94	14.55	22.54	59.62	2.35	100
Meghalaya	0.00	43.55	19.35	25.81	11.29	100
Assam	4.98	24.48	42.74	20.33	7.47	100
West Bengal	1.95	3.32	16.28	73.68	4.78	100
Jharkhand	2.18	1.94	17.72	62.62	15.53	100
Odisha	3.10	31.57	28.65	30.20	6.48	100
Chhattisgarh	10.64	10.33	13.37	44.07	21.58	100
Madhya Pradesh	0.94	3.93	23.27	50.86	20.99	100
Gujarat	1.83	5.55	14.25	41.30	37.07	100
Daman & Diu	0.00	14.06	4.69	31.25	50.00	100
D & N Haveli	2.04	14.29	30.61	16.33	36.73	100
Maharashtra	2.99	3.99	9.98	50.37	32.67	100
Andhra Pradesh	2.21	1.19	9.72	21.02	65.86	100
Karnataka	2.23	3.54	14.33	39.41	40.49	100
Goa	2.29	3.82	29.01	42.75	22.14	100
Lakshadweep	0.61	14.72	52.15	2.45	30.06	100
Kerala	0.89	10.01	21.83	31.99	35.28	100
Tamil Nadu	1.00	5.37	25.98	20.65	47.00	100
Puducherry	0.77	0.00	41.31	15.83	42.08	100
A & N Islands	7.95	56.07	23.43	7.53	5.02	100
Telangana	2.05	1.90	7.76	34.41	53.88	100
All India	1.97	6.52	19.33	42.98	29.20	100

Source: National Sample Survey Office (NSSO), 71st round, Social consumption: Health

Table 9: Number of functioning Sub divisional hospital, District hospital, Mobile Medical Units and Medical colleges

States/UT	As on 31 st March 2019			
	Sub divisional hospital	District hospital	Mobile medical units	Medical colleges
Jammu & Kashmir	0	23	11	3
Himachal Pradesh	78	12	0	6
Punjab	41	22	33	3
Chandigarh	1	1	0	1
Uttarakhand	18	18	0	3
Haryana	21	22	12	7
Delhi	9	47	1	11
Rajasthan	20	27	58	14
Uttar Pradesh	0	157	0	18
Bihar	55	36	0	9
Sikkim	0	4	4	0
Arunachal Pradesh	0	17	16	1
Nagaland	0	11	11	0
Manipur	1	8	9	2
Mizoram	2	9	9	1
Tripura	12	7	1	1
Meghalaya	0	11	4	1
Assam	14	25	145	6
West Bengal	101	24	45	13
Jharkhand	13	23	92	3
Odisha	33	32	177	5
Chhattisgarh	20	26	30	6
Madhya Pradesh	84	51	150	10
Gujarat	36	22	30	29
Daman & Diu	0	2	1	0
D & N Haveli	1	1	4	0
Maharashtra	91	23	40	17
Andhra Pradesh	28	14	52	11
Karnataka	146	15	22	16
Goa	2	2	0	1
Lakshadweep	2	1	0	0
Kerala	84	18	38	8
Tamil Nadu	278	31	416	24
Puducherry	6	5	4	2
A & N Islands	0	3	0	1
Telangana	37	6	0	7
All India	1234	756	1415	240

Source: Rural Health Statistics, 2018-2019, Ministry of Health and Family Welfare, Statistics Division, Government of India.

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Decadal Performance of West Bengal and Maharashtra in Sarva Shiksha Abhiyan since 2000

*Dr. Lalima Mukherjee

Abstract

The focus of this paper is to compare the two states, viz., Maharashtra and West Bengal in terms of their progress made in the Govt. of India launched Sarva Shikshya Abhiyan in the year 2000. These two states are among the four most highly populated states in India. This paper tries to understand the reasons behind the dismal performance of West Bengal in the SSA in spite of a remarkable improvement in the overall literacy in the current decade compared to Maharashtra. Some startling facts came up in this study such as an increasing enrolment ratio of the 6-11 years does not alone decide the future of education system of a state or an economy. Thus, in spite of a good progress in the literacy percentage in the 2011 census, West Bengal's poor performance in getting all school going children enrolled in school irrespective of gender and family income, is still a distant goal. The achievement of a satisfactory universal elementary education can probably be explained by the 'Inclusive Growth' theory which was taken up as a planning strategy for the first time in the 11th Five Year Plan. By Inclusive here it is meant - a concept that encompasses equity, equality of opportunity, and protection in primary education and Tier transitions – along with proper supervision which is an essential ingredient of any successful public expenditure strategy. Here it emphasizes the idea of equality of circumstances which is the only answer to the development of any area or economy be it a state or the country as a whole. Thus, the option of Inclusiveness seems to be the only way of achieving complete success specifically in achieving universal education.

Keywords: Enrolment, Grade completion, non-repetition, attendance, continuity, transition, inclusive growth, equality in education.

* Professor, Department of Business Administration, University of Engineering & Management, Kolkata
E mail: lalima.mukherjee@iemcal.com

Introduction

Education is a critical input into the economic development process. Schooling is important for cognitive, creative and social development of children. Child schooling is universally acknowledged as one of the prerequisites of human development (Francavilla, Giannelli & Grilli,2008). The concept of compulsory education, where all school aged children are required to attend school, combats the force of poverty that pulls children out of school. Obtaining such education depends both on the availability of adequate educational facilities and on the will and financial ability of families to send their children to school. This latter issue is particularly important in less-developed countries where systems of universal, compulsory, and low-cost education do not exist or are limited only to a few grades. Poor families often find the costs of sending children to school prohibitive or at least unacceptably high relative to expected future benefits (Mason & Rozelle,1998).

However, in societies where school quality varies widely across regions and types of schools, as has been demonstrated for India (World Bank 1997; Probe Report 1999), years of schooling or grade completed do not provide good measures of education (Fuller and Heyneman 1989). Schools are often closed due to teacher absence, students may be absent due to labor force demands and many skills (particularly literacy) atrophy quickly when not used regularly (Vikram, Desai & Vanneman,2010). According to the National Family Health Survey (NFHS, 1998-99), the primary cause of a child having never been enrolled in a school in rural India is the cost of education. Nearly eight years after the Constitution was amended to make education a fundamental right, the government implemented a historic law to provide free and compulsory education to all children in age group of 6-14 years (PTI, Apr 1, 2010, TOI). While the gross enrolment ratio stands at 98 per cent, attendance in schools is only about 57 per cent. A lot needs to be done if children are to be actually enrolled in school.

In order to have a holistic solution to the problem of primary education and subsequently increase the Transition rate in the three Tier educational system (Primary, Secondary and Higher education), the Government of India launched a programme known as Sarva Shiksha Abhiyan

(MHRD, 2000) to achieve the goal of universal primary education by 2007 and that of universal elementary education by 2010. Currently the duration of the programme has been extended to 2012 in order to see concrete and better result.

The Comparison

Table 1 Overall analysis of Population in Maharashtra 2011 census

Source: Census 2011

Maharashtra	2001	2011	Growth
Child Sex Ratio (Girls/1000 Boys)	913	883	-8.76%
Children between 0-6 years	13671126	12848375	-6.02%
Density	315	365	15.87%
Female	46478031	54011575	16.21%
Literacy Rate	76.5	82.9	6.40%
Male	50400596	58361397	15.80%
Population	96878627	112372972	15.99%
Sex Ratio (Female/1000 Male)	922	925	0.33%

The following paper focuses on the performance of two very important states of our country in terms of population i.e., West Bengal and Maharashtra, in terms of the progress in achieving universal primary education and universal elementary education as a result of the Sarva Shiksha Abhiyan (SSA) since it was commenced in the year 2000. West Bengal, the fourth populated state which was once labelled as the intellectual capital of the country whose performance is perhaps not satisfactory as it has almost failed in implementing the SSA due to lack of proper supervision (TOI,2003). This paper will try to find answers for this with the help of some secondary data.

Maharashtra being the second largest populated state in the country has about 9.29 percent of total population of the country. West Bengal consists of 7.55% of country's population as per Census 2011. Thus, West Bengal has to manage lesser people than Maharashtra at any point of time. A glance at the tables given below will help us to know the exact demographic profiles of these two states compared on the basis of the data collected from Census 2001 and 2011 (provisional) report and also from ESAG (2018) which will guide us to the various reasons for the failure of this attempt to have universalisation of education through the Sarva Shiksha Abhiyan.

In Table 2 below, we find that the percentage increase in the overall literacy rate of West Bengal (8.44) has increased more than that of Maharashtra (6.40) in 2011 shown in Table 1. Thus, from this we can assume that the overall enrolment ratio of West Bengal should grow at a higher rate than that of Maharashtra. West Bengal did not follow a policy of no detention in primary classes. Nearly 6% of the rural children and 9% of urban children in Classes I & II were declared as "failed" and retained in the same grade. Further, 6% of the rural students did not appear for term end examinations indicating the incidence of seasonal migration (Para 3.24 &7.29, Evaluation Report 2010). The overall enrolment has declined in West Bengal along with few more states. The enrolment ratio of girls has remained almost equal in both the states and it has increased in West Bengal.

Table 2 Population in West Bengal 2011 census

West Bengal	2001	2011	Growth
Child Sex			
Ratio (Girls/1000 Boys)	960	949.5	-1.09%
Children			
between 0-6 years	1,14,14,222	1,01,12,599	-11.40%
Density	903	1029	13.95%
Female	38710212	4,44,20,347	14.75%
Literacy Rate	68.64	77.08	8.44%
Male	41465985	4,69,27,389	13.17%
Population	80176197	9,13,47,736	13.93%
Sex Ratio			
(Female/1000 Male)	934	947	1.39%

Source: Census 2011

Table 3 Gross Enrolment Ratio: Maharashtra & West Bengal

Maharashtra		
Primary (Classes I-IV)	Upper Primary	Secondary

STATES/ YEAR	(Classes V-VIII)						(Classes IX-X)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2013-14	99.93	99.68	99.81	96.04	105.88	100.67	87.50	83.39	85.58
2014-15	99.00	98.88	98.95	97.94	99.85	98.82	91.08	87.27	89.31
2015-16	97.86	97.60	97.74	97.44	101.38	99.24	91.97	87.62	89.95

West Bengal									
STATES/ YEAR	Primary(Classes I-IV)			Upper Primary (Classes V-VIII)			Secondary (Classes IX-X)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2013-14	103.16	104.88	104.00	92.84	106.87	99.64	68.62	81.34	74.82
2014-15	101.78	102.91	102.33	96.16	110.67	103.17	70.67	86.05	78.17
2015-16	103.13	104.26	103.68	97.90	112.64	105.00	74.92	92.65	83.56

Source: Data Source: National Institute of Educational Planning & Administration, New Delhi (ESAG)

One of the striking facts is that Maharashtra has less of Primary School teachers (157856 in nos.) than West Bengal (300391 in nos.). The scene is absolutely reverse for secondary level where West Bengal has no teacher and Maharashtra has 33678 number of teachers (U-DISE-2015-16 Prov.). The drop-out rate of Maharashtra for Primary schools was only 9.53% in 2011 within the age group of 6-14 years (Classes I-VIII) while it was 24.33 % in West Bengal (CEIC,2011).

Table 4 Student Responses on Teacher Attendance and Punishment

Student Responses (%)	Andhra Pradesh	Assam	Maharashtra	Puducherry	Uttar Pradesh	West Bengal	All states\UT
Teachers Attend School Regularly	98.90	100	100	100	93.70	80.60	96.40
Physically Punished by Teachers Frequently	0	0	0	100	18.70	3.23	15.35

Source: Planning commission, Evaluation report, 2009

Table -4 indicates that the regular presence of the teacher in the school building and the respective classes. The table also presents vital statistics regarding the teacher attendance which is in reality more important than student attendance. If a teacher remains absent from school and is irregular in the defined job then definitely a child will refrain from attending classes which disturbs his regularity and also fails to inculcate interest in continuity and attendance. Apart from this, harsh punishment rate is absolutely nil in Maharashtra which is again a positive sign while it is 3.23 percent in West Bengal. A striking fact is that the teacher attendance in West Bengal is far below the majority of the states and union territories taken together which needs to be addressed as early as possible.

Conclusion

This paper tried to throw light on some of the important aspects as per the objectives of the Sarva Shiksha Abhiyan, 2000 with regard to the two most populated states in India. These two states were chosen only because of their population in order to keep parity in comparison. Some myths have been highlighted such that if the overall literacy rate percentage increases in a decade, does not have any relevance to the lower or primary, upper primary and secondary level education. Thus, the need for inclusive growth is established in universalisation of education along with strict supervision of public expenditure. It will be prudent to focus on the success of Sarva Shiksha Abhiyan because primary school children are the future torch bearers of higher education. The factors which came into limelight while writing this paper was the infrastructural standards of schools in terms of toilets, library, availability of required teachers, their willingness to teach based on their appointment like regular (permanent) or contractual(temporary), level of education of the teachers. In this context it would not be very wrong to say that financial remuneration to teachers may be one of the basic

requirements for improving the GER-NER and also control the drop-out or decrease the grade repetition at the primary level and increase the transition from middle to secondary level. Maharashtra needs to concentrate on primary education and West Bengal on Secondary education.

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CSR AMENDMENT 2021- BOON OR BANE?

*Ujwal kakkad

Abstract

CSR allocation has been declared mandatory from discretionary effective from accounting year 2020-21. These rules came into operation from 22nd January 2021. From 1st April 2021 organisations undertaking CSR endeavors are compelled to file with the Central government an electronic form namely CSR-1 to obtain Unique registration number.

From 1 April 2021 it is indispensable for all organisations to enlist itself with the ROC by inscribing the e form CSR-1 and in case anyone fails to do so shall not be entitled to continue as an implementing enterprise. The modifications are in assent with suggestions made by MCA. This paper attempts to deal with the new amendments introduced under The Companies Amendment Act of 2020 and how far it attempts to simplify the existing problem of CSR allocation.

Keywords: CSR, CSR amendment, companies, rules.

*Asst. Professor, The Bhawanipur Education Society College, Kolkata, India
Email id: ujwalkakkad@gmail.com

Background

CSR first came into existence as a peremptory enforcement for corporations under section 135 in Companies act 2013, subsequently rules were circulated that required all companies to follow specific procedure while performing CSR duties. The Companies Amendment act of 2019 and 2020 culminated in many modifications in the existing law under section 135. The Ministry of Corporate Affairs (MCA) has released a list of promulgated alterations in new rules as issued by Companies Amendment act of 2019 and 2020. It is helpful as it provides clarity and enlightenment to companies.

Research gap

According to the researcher till now no research has been done on this topic. The researcher realizes that there is a dearth of study that has been carried out regarding CSR and the new amendments that has been introduced. Therefore, it is evident that there is research gap and choosing this area for doing research would surely help the corporate researchers, policy makers and the society as a whole.

Objectives of the Paper

There is an urgent need to promote consciousness amongst the business and budding entrepreneurs regarding environmental impacts of adopting various green businesses practices. It is observed in various studies that there is a lack of awareness regarding environmental-friendly practices. This particular study can facilitate the Indian companies to be acquainted with the adoption of CSR practices realizing the benefits of using it to save our earth in this crucial time and how they can fulfill it by complying with newly implemented law.

The research study has the following objectives:

To understand new concepts introduced under amended CSR rules

To know the various opportunity that CSR creates in this time of pandemic.

To comprehend where to transfer unspent CSR amount.

Methodology

With the above objectives in view, this study has been conducted on the basis of available conceptual and empirical studies on CSR and how companies are following it after new amendments. Regarding the source of data, the study has used secondary data, e.g literature survey as included in journals, magazines, books, newspapers and various websites.

Literature review

CSR has been of striking prominence over last few years. CSR in India is of paramount importance more so due to its rich traditions. In its vintage time it was CSR encompassed corporate philanthropy and Gandhian Trusteeship model (Ghosh S, 1989). With the fast-paced liberalization of 1990's there was a deviation from philanthropy model to a multi based model through which companies are presumed accountable to the shareholders, workers and the public (Seema G Sharma, 2009)

Khandelwal and Mohendra (2010) postulated that CSR cannot be exterminated as assessable to everyone method, rather companies need to be unambivalent about specifically their CSR approach and why this approach is appropriate for them. Companies now a days should devote in CSR as part of their business strategy to become more competitive.

After the introduction of section 135 in Companies Act 2013 companies were required to mandatorily spend 2% of profits for CSR activities. Anupam Singh and Dr Priyanka Verma (2014) said that India is a country bustling with an immense population with a huge disparity between affluent and impoverished people and here corporates can help by donating 2% mandatory CSR for the advancement of the society.

Incorporation of latest definitions

Impact assessment

It is Obligatory for all corporations fulfilling the 10-crore threshold to fulfill impact assessment whereby assessment will be done of CSR projects having outlay of one crore or more and which have been executed not less than one year prior to engaging in impact study. It is usually annexed to the annual report. Impact assessment should be undertaken for large projects which have huge capital outlay for the welfare of neglected communities.

Administrative overhead

These are the expenses incurred by a company for maintaining the CSR duties in the organization but excludes the cost incurred for working out a CSR project.

Ongoing project

It is that project that keeps going on for multiple years and it doesn't have a time limit of three years.

International organization

It highlights the institution as defined under section 3 under U.N privileges and immunities act 1946 as notified by the central government.

Amendments in CSR rules

- Enacting NGOs to enroll with the central government.
- Transferring the unspent CSR amount to the government fund.
- Redesigned reporting layout.
- Devising a time threshold of three years for a current CSR project.
- Obligatory impact assessment of massive CSR ventures.
- Transparency with respect to the functioning of CSR committees.

CSR a room to manoeuvre- Covid 19 challenges related to CSR

CSR is a window of opportunity especially in the time of pandemic when all companies are required to expand their horizon beyond their limit to help the government in producing ventilators, PPE kits and

obtaining oxygen concentrators and other essential items. Companies must make advantage of this to expedite their social responsibility. The list of items qualifying as CSR includes:

- Any donation to PM cares fund shall be considered a part of CSR while any allowance

to CM relief fund or state relief fund for Covid 19 will not be considered as a part of CSR.

- Any aid towards State disaster management authority will be considered a part of CSR.
- Any adjustment of salary paid to workers will not be adjusted in CSR as it is imperative on the part of management to pat them as a part of ethical duty.
- Disbursement of ex gratia over and above the wages paid mainly with the intention to fight Covid 19. All these should be authenticated by a statutory auditor.

Treatment of excess CSR surplus

The extra fund arising out of CSR activities shall not be a part of business funds but rather it should be deployed back in the same CSR project or it should be relocated to the unspent CSR Account or to any fund which is stipulated in schedule VII within a period of six months from the year ending.

Any balance of surplus may also be offset in exchange against future CSR projects within a span of three succeeding years subject to the stipulation that the board shall pass a resolution for this purpose and also the surplus money available for CSR should not include excess funds of CSR activities. It also requires that the administrative expenditure should not surpass 5 percent of the total funds of CSR disbursement.

Board of CSR committee- need and functions

There should be a minimum of three directors out of which one director would be involved in CSR matters and should head the CSR committee. They should map out a blueprint for the CSR projects to be embarked upon, the budget of the proposed plan and also oversee the progress periodically. In any instance when the CSR amount is less than the defined limit of 50 lakhs then the advisory body of the company will release the operations of the CSR committee. In such case no separate CSR committee will be required.

Conclusion

The CSR amendment rules require companies to create acrimonious jurisdictional plan to accomplish CSR undertakings in India as against the previous CSR law pertaining to section 135 which required companies to either abide by undertaking CSR activities or clarify the reasons for which they were unable to fulfill it. It

was discretionary and not obligatory.

The new rules and amendments introduced in the new policy clears all the ambiguities which was existing in the existing CSR laws and ensures uniformity in implementation of CSR activities by all companies. The new laws are more orderly and systematically structured. It also means the administrative work and procedures have increased as it requires more disclosure. There are still some concepts which are still vague with regards to setting up of a new fund and also regarding five per cent ceiling on administrative overhead. But the picture as a whole is promising for the India's CSR implementation.

Limitations

This research has certain unavoidable limitations. The study is based on secondary data and therefore future research is suggested to focus on primary data collected from companies across all sectors to identify their inclination towards CSR practices.

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**A Study to Explore the Existence of Pink Tax across the World leading to Gender –
Based Price Discrimination**

*Suchandra Bose

**Joysri Datta

Abstract

A Pink Tax is an extra charge on products that are specifically marketed for women. It is not a “legal tax” but an “upcharge/ extra amount” that makes a commodity more expensive, when it is intended to be manufactured particularly for the fairer sex. Women across the globe have participated in different protests and campaigns against the practice of imposing Pink Tax. In this study, attempts have been made to understand what is Pink Tax, its relevance and disadvantages in the modern society and analyze the reasons as in why it is important to know/to be aware of about Pink Tax for people in general and, which is making the lives of the female counterparts difficult in many instances throughout the world. Efforts have been made to identify the reasons in regards to why Pink Tax is unethical, contributing to the gender biasness and thus, proved to be out of the logic, that should ultimately be abolished over time. Endeavors have been taken to understand the psychology in regard to why Pink Tax even exists in the first place. The scope of gender marketing has also been studied to find out how it is contributing towards price disparity amongst the gender, the roles a brand can play, ultimately venturing into the gender inequality. Price disparity can be of major concern when it comes to necessary products or even for commodities that are used daily. The entire research has been conducted with the help of studying the already existing literature in this field. The significance of our research is to explore the areas that shows pricing disparity when targets one particular gender. We have researched the spectrum of different products, against which, Pink Tax is imposed, and compared with the products that are marketed typically for the male counterparts, that helped establishing the fact the reality level of the Pink Tax is. It has been found out that Pink Tax is a “Real Thing” which many individuals disagree to believe. The user of this study can be varied, from educationists to

professionals, students to entrepreneurs, academicians to industrialists, as to whosoever wants to know about the market and product pricing. Our research wants to contribute towards the actions taken to make people aware of the Pink Tax. With the growing seriousness of the issue, it has been figured out that in order to stop something from happening, the first requirement is to address the “happening” of a particular event; and this study aims to address this issue through making people aware about it. Recommendations as to how to deal with Pink Tax have also been made based on the current situation and prevalence of Pink Tax in our country, India, and across the globe. If this research work can impart knowledge regarding pink tax even to a tiniest bit to our countrymen and can make people aware, we will consider our study as worthwhile and meaningful.

Keywords: Pink Tax, Hidden Tax, Gender Based Price Discrimination, Gender Price Disparity, Gender Bias, Economic Disparity, Selective Consumption Tax, Gender Socialization

*Assistant Professor, Business Administration Department, University of Engineering and Management, Kolkata),

Email: basu.mamon@gmail.com

**Assistant Professor, Business Administration Department, University of Engineering and Management, Kolkata

Email: joysri.datta@gmail.com

Introduction

Pink Tax is an instance where women are more likely to be susceptible to higher pricing when it comes to different items, including the essential commodities. Whether or not the pink tax exists, it still a matter of controversy for many, in several parts of the society. It is to be noted that the “Luxury” tax cannot be directly linked to pink tax, but, can trigger pink tax indirectly. In case if such an extra charge really exists in the society, it is important for all to recognize it and thereby attempts should be made to abolish it as soon as practicable. It is said that the pink tax targets certain specific goods, specifically marketed for women belonging to different age groups, that also includes young aged women. The existence of pink tax is dependent on product discrimination. In other words, a similar product which is a requirement for both males and females are marketed differently for both the counterparts, even though the basic ingredients remain the same. A good example of this instance can be soaps. The purpose of soap is same for both the genders, but in a majority of cases, soaps that are marketed for women are expensive, like- Dove compared with wild stone ("Bathing Soaps In India: Buy Bath Soaps and Bathing Products Online. Bathing Bars at Best Prices", 2021). Pink Tax had been recognized in many of the countries throughout the world. In the study called “The Tampon Tax: Sales Tax, Menstrual Hygiene Products, and Necessity Exemptions” by Jennifer Bennet, the author has talked about the “Tampon Tax” which is so much prevalent in the different areas of the United States. Even though a handful of states like Maryland, Massachusetts, New Jersey etc. exempted the menstrual hygiene products from the Sales Tax, as of January 2016 update, and some handful of legislations like Illinois and New York passed their Anti Tampon Tax Bill, the majority of the country still imposes ‘legal tax’ on necessity items like menstrual hygiene products, that according to many, contributes towards pink tax, even though the primary reason for such extra amount is the Government itself (Bennett, 2017). Bennett argued such taxes are simply bringing out the gender inequality where a woman is required to pay extra charge simply because of her natural bodily functions. According to an article called “The Cost of Doing Femininity: Gendered Disparities in Pricing of Personal Care Products and Services” by Duesterhaus, Grauerholz, Weichsel and Guittar, the authors have argued that women pay more than men when it comes to certain items falling under personal care and services

category leading to a significant gender-based pricing disparity in the personal care industry (Duesterhaus et al., 2011).

Literature Review

The personal care industry deals in products that ranges from beauty and grooming products, hygiene products, services like haircuts and spa, etc. These are considered as some of the most important products and acquire a great share of the market. Not only Jennifer Bennet argued against the Tampon Tax in the study “The Tampon Tax: Sales Tax, Menstrual Hygiene Products, and Necessity Exemptions” (Bennett, 2017) but an article in the New York Times, dated July 22, 2018 ‘Periods’ to be political pointing towards the Tampon Tax. The article also talks about menstrual equity and how the idea of menstruation is eventually being introduced even to the school level kids as a part of their education and as an initiative to spread awareness. However, even though attempts are being made to impart the necessary education to children regarding the way a woman’s body functions naturally, minimum to negligible actions are taken to educate the public in general about the pink tax that every lady needs to pay even to avail the very basic grooming services or to buy daily usable personal care items (Zraick, 2018). In the study called “THE COST OF DOING FEMININITY: GENDERED DISPARITIES IN PRICING OF PERSONAL CARE PRODUCTS AND SERVICES”, the price differences in three industries has been documented. They are hair salons, dry cleaners and the retail industry that sells personal care products. It has been suggested in the study that even though the price differences are not uniform but still women do tend to pay higher than men, especially for those services and products that provides evidences for gendering the body (Duesterhaus et al., 2011). However, most of the women end up paying so, without even knowing that they are paying the ‘pink tax’. In the study called “Rolling Back the “Pink Tax”: Dim Prospects for Eliminating Gender-Based Price Discrimination in the Sale of Consumer Goods and Services” by Jacobsen, the problems with existing consumer protection laws has been acknowledged. The existing laws lack any scope of curbing the pink tax, the existence of which has already been proved through surveys, spanning decades. However, opponents still argue that narrowly tailored legislation is not at all necessary as the space of adequate protection

in the existing laws is already there (Jacobsen, 2018). In the study “An Economic Analysis of the Pink Tax” by Habbal, the pink tax has been referred to as pricing strategies that is inclusive of the Government policies which raise transactional costs for women. The study very much confirms the existence of pink tax, and concludes that such price discriminatory practices must be abolished at any cost (Habbal, 2020). In the study “The Pink Tax: The Persistence of Gender Price Disparity” by Lafferty, it has been said that women’s products are likely to be priced as higher as two times than the men. It argued that the color ‘pink’ has been awkwardly used as a symbol for femininity to categorize a very simple yet daily needed product as “feminine” like razors. This study also beautifully describes the “Gender Marketing”, where, packaging has been identified as one of the main sources where product differentiation based on gender, originates. It also talks about the gendered tariff rates, where the clothing imports for women are explicitly taxed at a much higher rate, and this mark-up is impacting the fashion industry in a very negative way. This study also highlights that without the legislation coming into proper action, the price disparity will only increase over the time (Lafferty, 2019). In the research work called “BLEEDING WOMEN DRY: TAMPON TAXES AND MENSTRUAL INEQUITY” by Jorene Ooi, the problem of menstrual inequity had been highlighted, where the taxes on menstrual hygiene products had been termed as discriminatory. This study also proposed free tampon programs, expanding the welfare benefits (Ooi, 2018).

Objectives:

Attempts are being made to understand why the concept of pink tax is important and imperative to know for everyone. There have been studies regarding the existence of pink tax in the different parts of the world, as we have explored the same in the literature review, but still everyone does not even know about it and a lot of women are not even aware of the fact that they are paying pink tax. We intend to generate awareness amongst them through this study. We also aim to gain an understanding how the price disparity amongst the genders is triggered through pink tax. So we try to recognize how price discrimination is prevalent between the genders in relevance to the existence of pink tax.

Research Methodology

This is an empirical study that had been carried out with the help of the already existing literature in

the field. Some of the already existing studies drew certain conclusions, that helped us to form our own conclusions. The data drawn from some of the earlier published research also helps us to know if the prevalence of the price discrimination instance is real or not.

Research and Findings

The price discrimination that is being talked about in here is the third-degree price. The third-degree price discrimination takes place when different price is being charged to different groups/ set of consumers. Other than what the previous studies have already talked about, we explored the Indian FMCG market and came out with some surprising results. A product that is serving the same purpose for both the men and women are priced very differently just because of the fact that the specific product is being marketed to a particular gender. And, this discrimination is very much prevalent in the other sectors as well. It can be safely said that many of the FMCG products that has come to our attention for carrying a probable pink tax are marketed feeding on women’s insecurities, examples, beauty creams, lip balms and perfumes.

Category (FMCG)	Item	Quantity	Male		Female	
			Product Description	Price	Product Description	Price
Cosmetics	Fairness Cream	25 Gram	Fair & Lovely Men's Instant Fairness Rapid Action Cream	Rs. 75	Fair & Lovely Advanced Multi vitamin fairness	Rs. 120
Self-Grooming/Cosmetics	Deodorant	150 ml	AXE Dark Temptation Deodorant Spray - For Men	Rs. 200	Dove Go Fresh Cucumber 150MI - DEODORANT - For WOMEN	Rs. 350
Self-Grooming/Cosmetics	Razor	1 piece	Gillette Vector Plus Manual Shaving Razor, 1 Pc	Rs. 65	Gillette Venus Breeze Hair Removal Razor for Women with Avocado Oils 1 Pc	Rs. 325

Self-Grooming/ Cosmetics	Hair Removal/ Shaving cream	100 grams	PARK AVENUE Classic Lather Shaving Cream	Rs. 82	Veet Hair Removal Cream - Sensitive Skin Cream	Rs. 220
Self-Grooming/ Cosmetics	Trimmer	1 unit	Philips BT3211/15 corded & cordless Beard Trimmer with Fast Charge	Rs. 1895	Philips BRE235/00 Corded Compact Epilator (White and Pink) for gentle hair removal at home	Rs. 2795
Self-Grooming/ Cosmetics	Lip Balm	4.8 grams	NIVEA Men Lip Balm, Active Care SPF for 24h Moisture	Rs. 140	NIVEA Lip Balm, Soft Rose	Rs. 185
Wellness	Contraceptive	1 pack of 3 for Durex; 1 Tab for I pill	Durex Wildberry Flavoured Condoms - 3 Condoms	Rs. 50	Levonorgestrel, I Pill Tablet	Rs. 120
Self-Grooming/ Cosmetics	Perfume	1 bottle	Yardley London Gentleman Classic Daily Wear Perfume for Men	Rs. 649	Yardley London Royal Diamond Perfume for Women	Rs. 1300
Self-Grooming/ Cosmetics	soap	1 bar- 125 grams (Wildstone) 1 bar- 100 grams (Dove)	Wild Stone Forest spice 125gram	Rs. 50	DOVE Cream Beauty Bathing Bars	Rs. 58
Self-Grooming/ Cosmetics	Moisturizer	1 unit	NIVEA Men Moisturizers Cream	Rs. 80	NIVEA Creme	Rs. 99

("AXE Dark Temptation Deodorant Spray - For Men - Price in India, Buy AXE Dark Temptation Deodorant Spray - For Men Online In India, Reviews & Ratings | Flipkart.com", 2021), ("Dove Go Fresh Cucumber 150ML - DEODORANT - For WOMEN", 2021), ("Fair & Lovely Advanced Multi vitamin fairness - Price in India, Buy Fair & Lovely Advanced Multi vitamin fairness Online In India, Reviews, Ratings & Features

| Flipkart.com", 2021), ("Flipkart Fair & Lovely Men's Instant Fairness Rapid Action Cream", 2021), ("Gillette Vector Plus Manual Shaving Razor, 1 Pc", 2021), ("Gillette Venus Breeze Hair Removal Razor for Women", 2021), ("NIVEA Lip Balm, Soft Rose", 2021), ("NIVEA Men Lip Balm, Active Care SPF for 24h Moisture", 2021), ("PARK AVENUE Classic Lather Shaving Cream Price in India - Buy PARK AVENUE Classic Lather Shaving Cream online at Flipkart.com", 2021), ("Philips BRE235/00 Corded Compact Epilator (White and Pink) for gentle hair removal at home", 2021), ("Philips BT3211/15 corded & cordless Beard Trimmer", 2021), ("Veet Hair Removal Cream - Sensitive Skin Cream - Price in India, Buy Veet Hair Removal Cream - Sensitive Skin Cream Online In India, Reviews, Ratings & Features | Flipkart.com", 2021), ("DOVE Cream Beauty Bathing Bar - Price in India", 2021), ("Durex Wildberry Flavoured Condoms - 3 Condoms", 2021), ("I Pill", 2021), ("NIVEA Creme - Price in India", 2021), ("Shop Winter Wear, Designer Clothes, Fashion Jewellery & Nightwear Online @ Cilory", 2021), ("Wild Stone Forest Spice Soap", 2021), ("Yardley London Gentleman Classic Daily Wear Perfume for Men", 2021), ("Yardley London Royal Diamond Perfume for Women", 2021).

Lafferty in his findings revealed that the “young girls” clothing items cost more than the boy’s clothing items. It has also been seen that women tend to pay a 13% higher rate for personal care product (for example deodorants). In this study, the gender marketing has also been revealed highlighting the economic disparity that is brought down by different businesses. In other words, brand is trying to take the opportunity to make the items overpriced, that are marketed for the females. And, this has been taken as a “norm” for “female consumption”. In this case, the phrase “norm” is important. Most of the women do not even consider the pricing as “overpricing”, and the problem starts arising from that very viewpoint. Another important aspect that this study put forward is that the “Gendered Tariff Rates”. The author argues that in many instances, tariffs are imposed only on those imported goods which are designed for the female counterpart. This segment of “goods” majorly includes clothing items. It has been confirmed that “On average, clothing imports for women are taxed at a higher rate than clothing imports for men—15.1% compared to 11.9%” as per the Joint Economic Committee Report, US Congress 2016. This is one of the many reasons why the fashion industry is playing so harsh against women (Lafferty, 2019).

On top of that, there is a segment of lady-consumers who are too conscious about the pricing of the clothes they wear or the accessories they carry as these price tags symbolizes a particular status, without looking much into the quality that the product is offering. A classic example of this case can be the Birkin bags, that

ironically manufactures bags for only women, and are sold majorly to influential celebrities that helps them to carry a status symbol, serving the users aesthetically, more than functionally (Alux.com, 2018). Another epic example can be Victoria's Secret, that again carries a status symbol, more than serving functionally. Let alone this one brand, most of the brand that are involved in garment retailing industry (especially innerwear segment), the fairer sex is required to pay a lot more amount to acquire these very essential pieces of clothing (for daily need) if compared to the male counterpart (Mzezewa, 2018). Many other essential item-like tampons, sanitary napkins, razors, hair oils etc. also face such price discrimination solely based on the gender-based marketing, even though the basic ingredients remain the same for the different products.

As discussed in the Literature Review, there is a "cost" of doing femineity as per the study "The Cost of Doing Femininity: Gendered Disparities in Pricing of Personal Care Products and Services". In this particular study, certain examples were drawn that need special mention. When it comes to the hair cutting service, the argument can be made that women hair dressing takes "more time" than men. But it has been found out the hair cutting technology for both the genders are very much similar, and as far as the 'training' is concerned which is required to work at a men's hair salon takes the same amount of time which is required to work at a Unisex hair salon or Women's hair salon. Also, there is not much significant wage difference between the hairdresser of a man than that of a woman. So the argument that tries to establish that women "need" to pay more for these basic grooming services is completely flawed. Similar arguments have been drawn for the dry-cleaning services as well. Dry cleaners explained that men's shirts can be machine pressed, while women's shirts are required to be hand pressed. However, as per the findings of the study, even though no significant difference has been found when it came to suits and blazers of men and women, but, mentionable differences has been observed when comparing the dry-cleaning charges of men's shirt and women's shirt. When it comes to personal care products like body spray, differences could be observed, although the degree of variation is there. For some products, the price difference is significant and, in some cases, they are not much significant. The data used in this study typically shows that women tend to pay "more". Now, it must be kept in mind that the sample used in this study is limited within a certain part of the United States (Duesterhaus et al., 2011).

However, in a country like India, where sanitary napkins are still viewed as "Luxury" items and where

many of the rural women do not even have the idea of “Self-Grooming”, there are significant price differences between the razors sold for men and women as well as hygiene products for men and women (“Amazon.in: razor for women cartridge”, 2021).

Here, the problem lies in the fact that in most cases, women are seemingly not bothered about the price discrimination or fails to recognize that price disparity exists. As the study “The Cost of Doing Femininity Gendered Disparities in Pricing of Personal Care Products and Services” already confirms that women “tend to pay more” and also opined that it may come from a cultural belief (as it says the ladies to look beautiful), it is quite understandable that most of the women will not consider thinking about the price disparity, especially who do not belong to the working class and is dependant financially on a male counterpart. Therefore, to end this price disparity the women need to recognize and address the existence of such pricing disparity. In the study called “Assessing Pink Tax Variations and Price Discrimination” by Charles Scheland, pink tax has been described as an intersectional issue and the instance of personal care goods market has also been identified, where the occurrence of pink tax is too vigilant. In this context, the example of regressive tax can also be drawn. As per the definition, the regressive tax is a tax that is applied uniformly, irrespective of the earning level of individuals. Scheland argued that pink tax can be called an example of regressive tax (even though pink tax cannot be called an official tax) because both the high income group and low income group is paying it. However, this particular study concluded that “The gendered price differentials in the data seem entirely random and uncorrelated to the relative wealth of the CD they were located in.” However, the author also admitted since the data is inconclusive, they do not prove a complete absence of pink tax (Scheland, 2021).

Therefore, some of the researches showed wide differences that proved the existence of pink tax, on the other hand, few studies identified marginal differences. However, no study could completely deny the existence of pink tax cent percent. Now it is already the time to acknowledge the differences and take some serious actions against it.

Conclusion

The existence of pink tax is very much there. From the different research studies, it can be concluded very clearly that the pink tax exists. In some of the sectors, the price disparity is more, and in the other sectors, the disparity is seemingly lesser. However, the awareness is not there at the level which is being desired.

Therefore, solution is to be found out how such taxes can be reduced. There have been several blogs as well, on this topic of most of the blogs lacked valid evidences.

Recommendations

Now that it is evident that the pink tax exists, we should take steps to completely eradicate it. Awareness campaigns can be organized to spread the concept of Pink Tax between both rural and urban women and men. However, it is still can be understandable that women belonging to metropolitan areas do have at least some level of knowledge regarding pink tax in India, due to the access to limited studies and blogs that many of the authors came up with. But this is still an alienated concept for women who live in the rural areas. So, at first, the concept of pink tax is to be introduced and it is to be made sure that the general public know what pink tax is all about. After that the Indian Law can be mend in a way that completely prevents any scope of pink tax. Especially when it is a known fact that brands have started taking unfair advantage of it, and India being no exception, if no action is taken now, it may get even worse in future leading to a bigger price disparity between the sexes, taking the advantage of legal loopholes.

As specified in some of the studies explained earlier, many of the goods intended for women, when imported, duties and taxes are imposed at a comparatively higher level. Therefore, it is quite understandable that the legal loopholes surely exist that sometime encourage pink tax. In the article “Tampon Taxes, Discrimination, and Human Rights “by Bridget J Crawford, the author argued that gendered based tax policies get formed in a culture of silence and secrecy. It has been also pointed out that justice can occur only when the correct information is visible to the citizens and when there is commitment from the legislators towards non-discrimination when it comes to the fiscal policies. A change can be expected at that time when the female consumers will start asking questions about it. (Crawford, 2017). In this regard, there is a popular book as well called “women and their bodies” that describes the science behind menstruation and the fact that menstruation is not choice, thereby indirectly condemning any product marketed for menstruation to be tagged as ‘menstruation’ (Women and their Bodies, 1970).

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**A comparative analysis on the performance of Mudra Yojana from 2015- 2020: - With special
reference to different sections of the society**

*Dipannita Chatterjee

**Dr. Lalima Mukherjee

Abstract

Micro Units Development and Refinance Agent (MUDRA) is a finance institution, launched by the Government of India in 2015 as an initiative to finance the micro, small and medium enterprises (MSME), and entrepreneurs across the country who does not have access to the formal banking system. In order to address this problem to the micro and small-scale enterprises, MUDRA loan yojana was started by Government of India in 2015 to provide loan up-to ten lakh rupees to the non-agricultural and non- corporate firms. The concept was to “fund the unfunded”, who instead of being job seekers would be job providers. There are three types of loans under this scheme – Shishu, Kishore and Tarun, depending on the size of the loans.

This paper tried to look into the sole purpose of “funding the unfunded”, the need to understand how the money has been utilised and to what extent this has contributed to improving macroeconomic outcomes as GDP, GNP, unemployment etc.

Data sources in the study have been mainly secondary in nature and available in the government websites (Mudra, RBI, MSMEs), reports, journals, magazines and newspapers. The sources reported number of accounts opened, loan amount sanctioned and disbursed since the year of inception till 2019-20. From some sources data such as number of loans sanctioned and disbursed per account opened pan India has been extracted that is categorised under Shishu, Kishore and Tarun loan accounts.

This paper offers an insight to the impact MUDRA scheme had on the people at the bottom of the pyramid through our analysis for the period of 2015-16, the year of inception of the scheme and until 2019-20 as well as aims to focus on the amount of loans sanctioned and disbursed during the period

of study and to find out if there has been any growth in loan sanctioned and disbursed on yearly basis. Analysis has been made on accounts opened by women entrepreneur, new entrepreneur and minorities, for each category of the scheme and yearly growth percentage during the period of study has been extracted. The advantages and threats that mudra loan may pose on the Indian economy in the near future has been studied along-with the suggestions required for this scheme.

Keywords: - Sishu, Kishore, Tarun, Women entrepreneurs, New Entrepreneurs, minorities

* Research Scholar, University of Engineering & Management, Kolkata
chatterjeedipannita3@gmail.com

** Professor, University of Engineering & Management, Kolkata,
Lalima.Mukherjee@iemcal.com

Introduction

MSMEs are the backbone of our economy which is the second largest provider of employment after agriculture. MSMEs contribute to 30% of the GDP of Indian economy. MSME sector acts as a complement to the big industries. It contributes to about 33% of the manufacturing output and 45% of overall exports.^[1] The MSMED Act was passed in 2006 with an objective to finance the small and micro units as MSMEs play a very crucial role in the development of Indian economy. Many micro units are unable to sustain their business operations due to lack of availability of formal credit or finance to this sector, lack of proper training, lack of implementation of newer technologies etc. Around 63.4 million units throughout the country, MSMEs contribute around 6.11% of the manufacturing GDP and 24.63% of the GDP from service activities and an overall 33.4% of India's manufacturing output. According to National Sample Survey Organisation (NSSO) this sector provides employment to around 120 million people and contributes around 45% of the overall exports from India.^[2] As per the Sixth Economic Census (2013), there were 58.5 million establishments found to be in operation, out of which, 34.8 million establishments (59.48%) were found in rural areas and nearly 23.7 million establishments (40.52%) were found to be located in urban areas.^[3] However, banks were reluctant to finance the unregistered units of MSMEs and there was lack of data regarding the demand for credit from the MSMEs and the credit gap.^[4] Thus, many micro and small units had to shut down because of lack of access to the formal financing system.^[5] Around 60% of the MSMEs were run by the backward castes. In 2015 MUDRA yojana was launched under the aegis of Prime Minister's Mudra Yojana (PMMY) to finance the MSMEs and the entrepreneurs across India particularly the non- agricultural and non-corporates with loan requirement of maximum up to Rs. 10 lakhs under the three categories: - Shishu, Kishore and Tarun loans.^[6] The objective of this scheme was to overcome the difficulty of the micro entrepreneurs in accessing the formal credit facilities, lending or borrowing from informal sources or dependence on limited internal resources which slows down the growth of the sector. This scheme is also known as MUDRA Loan Yojana, MUDRA Bank Scheme, Pradhan Mantri MUDRA Yojana (PMMY).

Mudra as a loan Vehicle: - The focus of Mudra loan is “funding the unfunded” i.e., funding the majority of the entrepreneurs who belong to the backward classes, women entrepreneurs, and people residing in the rural areas, who do not have access to the formal financial system of the country and thus aiming at job creation and improvement in the GDP of the country. Through PMMY scheme it aims to provide small entrepreneurs to borrow loans from all the Public Sector Banks, Private Sector Banks, Regional Rural Banks, State co-operative Banks, Urban co-operative Banks, Non-Banking Finance Companies (NBFCs), Foreign Banks and Micro Finance Institutions (MFIs). MUDRA was initially established as a wholly owned subsidiary of SIDBI. Loans can be availed by the entrepreneurs for start-ups businesses and also the expansion of the businesses. A Mudra card which is just like a debit card, is issued to the entrepreneurs so as to use it for mitigating working capital requirement. An overdraft amount of Rs. 5000 was sanctioned under Pradhan Mantri Jan Dhan Yojana (PMJDY) was treated as part of Mudra loan.

Benefits of Mudra Loan: -

1. “Funding the unfunded”- which means funding those people who do not have access to the formal banking system.
2. Encouraging the backward castes, and new entrepreneurs to avail loan under the Mudra scheme.[7]
3. Expanding the existing micro and small enterprises which otherwise have to utilise their own funds or stall the process of expansion.
4. Providing financial support to the women entrepreneurs with the objective of and both-financial inclusion women empowerment as one of the prime objectives of the yojana
5. Any Indian citizen having a non-agricultural and non-corporate business plan having a maximum requirement of 10 lakh rupees can apply for this loan.
6. No collateral security or guarantor is required for availing loan under the Mudra Yojana
7. The process for application of loan has been quite easy by applying in udyamimitra.in with a few documents required.[8] There is no middleman between the borrower and the issuing bank/non-banking financing companies (NBFC).

8. Mudra card issued to the borrowers can be used by them for working capital requirements.
9. An overdraft amount of Rs.5000 issued under the PMJDY is also treated as a Mudra loan to the beneficiaries.

Potential borrowers of Mudra: -

Micro and small-scale industries in the non-corporate segment and non-agricultural segment are the borrowers of this loan. Proprietorship firms, partnership firms engaged in micro or small manufacturing business, service sectors, fruit and vegetable vending, truckers, shopkeepers, handicraft making, food processing, pottery making, auto rickshaws, beauty parlours are a few businesses to name amongst many who can avail loan under this scheme.

Table 1: Categories of the loans available under this scheme: -

Category of Loans	Loan Amount
Sishu Loans	Upto Rs.50,000
Kishore Loans	Rs. 50001 to RS.5 lakhs
Tarun Loans	Rs.500001 to Rs. 10 lakhs

Source: - Annual Report 2015-16 www.mudra.org

The Government of India had planned that more focus will be given on Shishu loans. It has been found out that in 2018-2019 almost 88% of loans in terms of loan accounts had been Shishu loans. It was 48 % in terms of value and sanction grew by 15% in comparison to 2017-18. ^[6]

Literature review: -

Dr. S. Gupta (2015) Mudra: Financial inclusion of the missing middle studied the modalities, functioning, responsibilities and the rationalities of the Mudra scheme to bridge a gap between the demand and supply for credit by the MSME sector.

Vikash Kumar Mishra (2016) studied the “Missing Middle” of India’s MSME sector whose requirement is either quite large compared to the micro-organisations (typically between one lakh rupees to ten lakh rupees) or too small for the banking sector catering to the corporate businesses.

Mudra Yojana aimed to provide finances to these non- corporate businesses and concluded how the participation of MFs has benefitted in disbursing loans to this particular sector had to rely on its own resources for business.

Veena Goutam *et al* (2017) studied Mudra Yojana as a loan vehicle, performance of Mudra card, and also the performance of Mudra Bank in Haryana and how Mudra Yojana has its prospects in future in improving the accessibility towards getting loans among the rural areas.

Manish Agarwal and Ritesh Dwivedi (2017) studied the performance analysis of the Mudra scheme statewise based on caste and category of the scheme and has also done the SWOT analysis. They came to the conclusion that with the introduction of this scheme it would be helpful to the weaker sections of the society. The PMMY will help in the financial inclusion of the society in the positive direction.

Dr. Kshetrimayum Ranjan Singh (2018) studied the performance of mudra loans bank-wise, district-wise in the state of Manipur and also the expected outcome of this loan in the backward areas of Manipur and suggested some measures for effective implementation of this scheme.

Annu and Dr. Manoj Kumar (2018), studied the state-wise performance of Mudra yojana, identified the top ten states which has been the beneficiary of Mudra Yojana and also studied the utilisation of Mudra loan used by the women entrepreneurs and new entrepreneurs.

Dr. Asha R Nair (2018) studied the concept and operation of the Mudra scheme and what are the perception of the beneficiaries who have received loan under this scheme from State Bank of India Pandalam branch.

Taranjeet Kaur Marathu (2019) studied product offerings, procedure of the Mudra Yojana. It also studied the legal framework required to avail the benefits of the Mudra scheme. The author has come to the conclusion that though there are some documents needed to avail loan under the scheme, this scheme will help to refinance the small entrepreneurs who does not come under the formal banking system.

Reshma Raj *et al* (2019) studied the problems that the applicants faced while borrowing the loans.

One of the major problems identified in the paper is the lengthy processing time of the application of loans.

Vijay Kumar (2020) studied category-wise disbursement of Mudra loan and also region-wise performance of Mudra loan since its inception and how Mudra loan have been utilised by the weaker sections of the society which do not have much access to the formal financial system of the country.

Objectives of the study: - The objective of study has been divided into primary and secondary objectives.

- i. **Primary Objectives:** - The objective of the study is to make a comparative analysis on whether there has been any growth rate in accessing loans under the three categories of the scheme, i.e. Shishu, Kishore and Tarun, YoY basis during the period of study from 2015-16 to 2019-20 by different sections of the society viz. General Category, Scheduled Caste (SC), Scheduled Tribe (ST), and Other Backward Caste (OBC) on the following: -
 - a. number of accounts opened
 - b. loans sanctioned and disbursed,
 - c. Average amount of loan sanctioned and disbursed per account opened under all the three schemes and Growth rate in terms of percentage increase on YOY basis in loans over the period of study from 2015-16 to 2019-20.
 - d. Which loan has been successful among the three and causes behind it.

- ii. **Secondary objectives:** -

The study further aimed to find out that out of the above-mentioned sections of the society, how this yojana is utilized by: -

- a. Women entrepreneurs
- b. New entrepreneurs and;
- c. Minorities

Research questions: -

While government had launched this scheme with the sole purpose of funding the unfunded where a vast majority of the population of India falls under this category, there is a need to understand how the money has been utilised and to what extent this scheme can contribute to improving macroeconomic outcomes as GNP, GDP, Gross Unemployment etc. Moreover, we are also to answer the following questions through our analysis:

- a. The study aims to find out whether there has been any increasing trend in availing loan under different categories- Shishu, Kishore and Tarun. These will be in number of accounts opened, loan sanctioned, disbursed, average amount of loan sanctioned and disbursed per account and growth rate in terms of percentage increase on YOY basis.
- b. Whether there has been increase in loans taken by different sections of the people since its inception from 2015-16 till 2019-20 how different sections of the society are availing the loans. Whether there has been any change in loan availed by the weaker sections of the society like scheduled caste, scheduled tribe and other backward caste.
- c. Whether the purpose of Mudra Yojana in providing loans to women entrepreneurs under Mahila Uddyami scheme which aims for providing loan to the women entrepreneurs' women since the inception of the scheme from 2015-16 till the year of study i.e. 2019-20 has been successful.
- d. Whether there has been any improvement in taking loans from 2015-16 to 2019-20 by the new entrepreneurs and minorities.
- e. It also aims to find out which category of loan is more popular and if a particular category of loan has failed, it has tried to find out the reasons behind such failure.

Scope of the study: -

The period of study has been only five years, from 2015 to 2020 since the introduction of the scheme.

- a. Out of the different sections of the society, study has been done only on women entrepreneurs, new entrepreneurs and minorities. Other factors like PMJDY overdraft account, mudra card account etc. has not been taken into consideration due to constraints of time.

- b. Data has been gathered from secondary sources and most of it has been from the website of Mudra.org and there is no primary data collected for the study
- c. Data of new entrepreneur, women entrepreneur and minorities have not been classified as general category, SC, SC or OBC in the annual reports as published in the website of Mudra.org. Thus, in the study, which section of people has availed loan under the women entrepreneurs, new entrepreneurs and minorities could not be determined.

Methodology

Our main source of data will be the secondary sources that is mainly available in websites of the government (Mudra, RBI, MSMEs), reports from labour department of Government of India, annual reports of NABARD Data had also been extracted from different journal paper publications, newspapers and magazines. Most of the data have been compiled from Annual report of Mudra from the website- mudra.org. The data has been categorised into two sections: - first one which studies how different sections of the society viz. General category, Scheduled Castes, Scheduled Tribes, Other backward castes are availing loans under the Mudra scheme. Secondly, the data has been analyzed on the basis of how many women entrepreneurs, new entrepreneurs and minorities have accessed to the different types of loans and growth percentage under different categories throughout the period of study has been done. Descriptive statistical tools like bar graph have been drawn for showing YOY comparison and trend analysis

Through our analysis of data gathered from secondary sources for the period 2015-16, the year of inception of the scheme, and until 2019-20, we wish to offer an insight to the impact the MUDRA scheme had.

Bar charts have been used to compare the growth between the different categories of loan and comparison of year-wise growth of different categories of users has also been analysed. Trend analysis has been studied.

Analysis

A comparative analysis has been made to study the utilisation of loans by the different categories of people around the society under the different schemes- Shishu Kishore and Tarun, in terms of number

of accounts opened, percentage change in taking loans (YOY basis), amount of loan sanctioned and disbursed per account. It also studied the utilisation of Mudra schemes by the women entrepreneurs, new entrepreneurs and minorities on number of accounts opened, percentage change in taking loans (YOY basis), amount of loan sanctioned and disbursed per account.

1: Number of accounts opened under Shishu scheme by different categories of the society from 2015-16 to 2019-20.

Figure 1, shows numbers of account opened pan India under Shishu scheme by different sections of the society e.g General, OBC, SC, ST.

From figure 1, it is evident that people under General Category are the highest beneficiaries of the loan under the Shishu Scheme since inception. There has been a constant rise in availing loans under the Shishu scheme throughout the years of study. 2018-19 has seen a significant jump in opening accounts by the General Categories.

The second beneficiaries among all the sections of the society are the OBCs in opening accounts under Shishu scheme. Numbers of accounts opened by OBCs were at a constant increasing pace for the first three years, but after 2017-18, there has been a marginal decrease in opening the number of accounts in 2018-19 and has been almost the same in 2019-20.

Scheduled Castes (SC) were the third in utilising this scheme, but they were lagging behind the General Category and OBCs to a great extent in number of accounts opened. Out of total number of accounts opened under Shishu scheme only 17% to 19% were opened by Scheduled Caste during the period of study. As seen from the study, there has been a constant rise in opening number of accounts by the SCs over the period of study, which means that they have started availing loans under the Shishu scheme and became more aware of the Mudra Yojana.

Scheduled Tribes are lagging much behind even when compared to the Scheduled Castes, though during the years of study the total number of accounts opened by the STs under the Shishu scheme has doubled from 1606484 to 3580397. They are the last among all the sections of the society to avail

the benefit of the scheme. Out of the total number of accounts opened, only 4.73% to 6.5% of the Scheduled Tribes have opened accounts under the Shishu scheme.

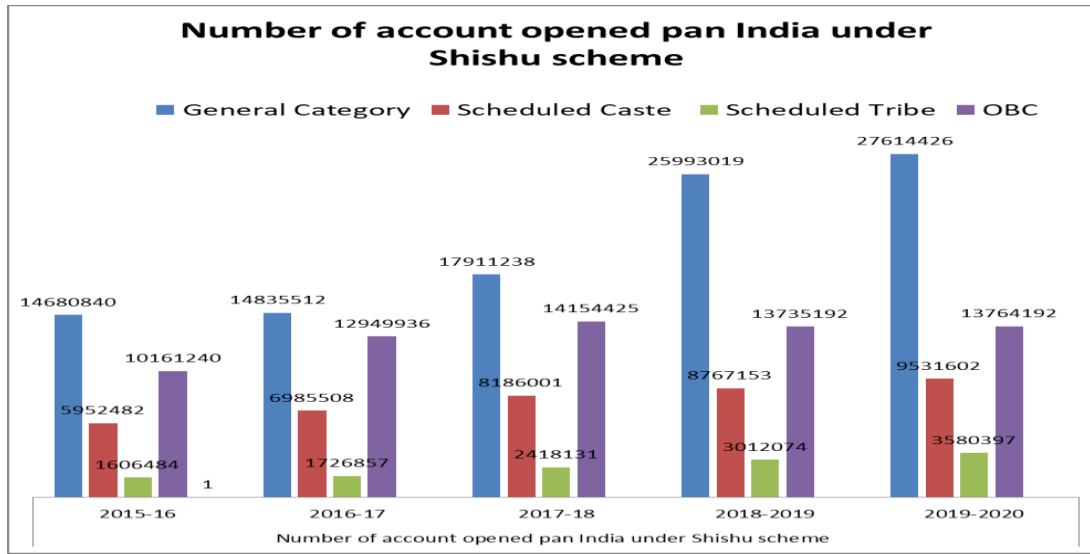


Figure 1: Number of accounts opened pan India by Shishu scheme by different categories of the society from 2015-16 to 2019-20. www.mudra.org

2: Percentage change in opening accounts (YOY basis) under Shishu scheme by different categories of people: -

Figure 2 below shows percentage change in the number of accounts opened pan India by different sections of the society under the Shishu scheme. The study finds that percentage increase in opening the number of accounts under the Shishu scheme by general category has seen a significant rise from 1.05% in the second year (2016-17) to 20.73% in the third year and 45.12% in the fourth year (i.e 2017-18 and 2018-19) respectively on YoY basis. Percentage increase in the fifth year (2019-20) on YoY basis is 6.24 % which is significantly low compared to previous two years.

There is a significant positive growth in 2016-17, i.e., 27.44% compared to 2015-16, but it started to decline in 2017-18 with 9.38% growth and further in 2018-19 there has been a negative growth of (-2.96%) which means that the number of accounts opened by OBCs has been less than the number of accounts opened by them in 2017-18. In 2019-20, there has been a slight improvement i.e. .21%

higher than the number of accounts opened by them in 2018-19. There has been a decreasing trend in percentage change in number of accounts opened by the scheduled Caste after third year of study. From 2016-17, there has been a nominal decrease in in number of accounts opened, but decrease in percentage change in number of accounts opened in 2018-19 has been quite significant i.e. 7.10% and then 8.72% in 2019-20 on YOY basis. For the scheduled tribes, the rate of increase in number of accounts opened has been increased significantly from 7.49% in 2016-17 to 40.13% in 2017-18, but this rate has decreased significantly in 2018-19 to 24.56 and 18.87 in 2019-20.

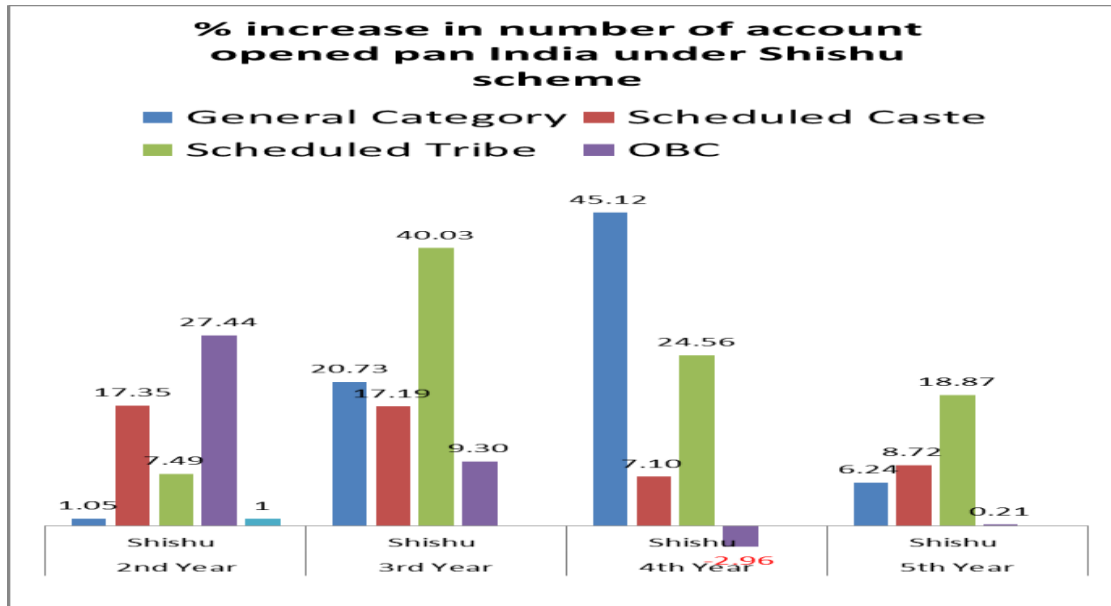


Figure 2: Percentage growth in number of accounts opened by different castes under Shishu scheme from 2015-16 to 2019-20

3: Analysis of number of accounts opened pan India under Kishore scheme by different categories of the society from 2015-16 to 2019-20.

Figure- 3 below shows that the General Category has a positive trend in opening the number of accounts under the Kishore scheme till 2018-19. The number of accounts opened dropped significantly in 2019-20 from 4439825 to 3776211.

The OBCs emerge as the second beneficiaries after general categories under the Kishore scheme throughout the period of study. The same pattern is being observed as was in the case of Shishu loans in case of General Category. There has been a steady increase in opening the number of accounts by

OBCs during the period of study.

2016-17 shows there has been a slight decrease from 143357 to 139982 accounts by the Scheduled Castes, but there has been significant rise in opening number of accounts by the Scheduled Castes from 2017-18 onwards till 2019-20.

Scheduled tribes are lagging behind the others in opening the number of accounts under the Kishore scheme. There has been a significant rise in the number of accounts opened under the Kishore scheme by the Scheduled Tribes during the period of study.

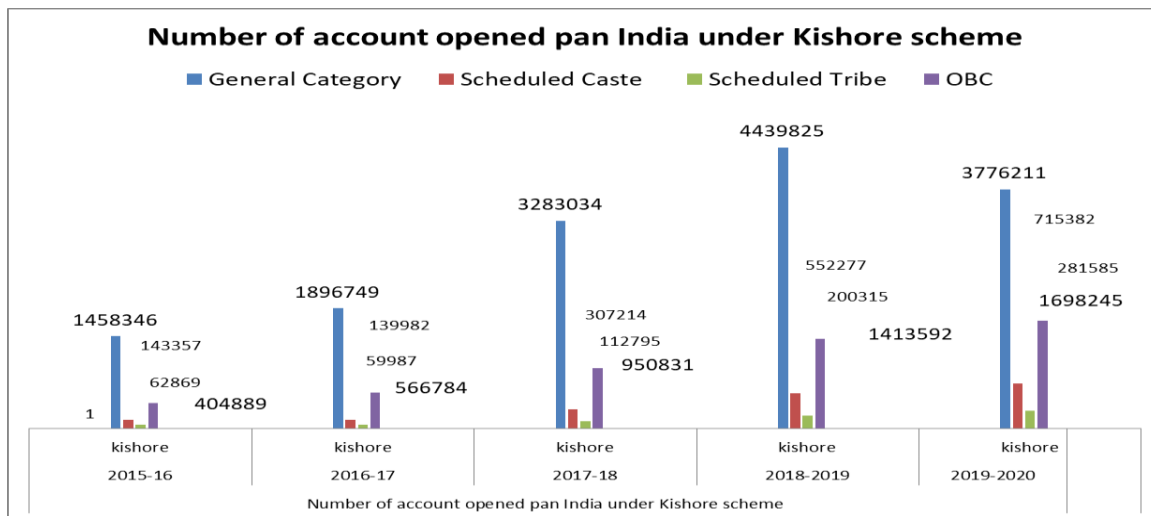


Figure 3: Number of accounts opened pan India by Kishore scheme by different categories of the society from 2015-16 to 2019-20.

4: Percentage change in opening accounts (YOY basis) under Kishore scheme by different categories of people: -

Figure 4 shows that there is 30.06% growth in percentage increase in number of accounts opened by the General category in 2016-17 compared to 2015-16. This growth has been significant in 2017-18 where there is 73.09% increase in percentage of opening accounts in YoY basis. 2018-19 shows that the percentage of opening accounts by the General Category has decreased from 2017-18 to 34.24% and subsequently in the fifth year, i.e. 2019-20, there has been a negative growth in terms of percentage. There has been a negative growth in percentage change in number of accounts opened for Scheduled Caste in 2016-17 compared to 2015-16, but there has been a mammoth growth of

119.47% in 2017-18 compared to 2016-17, followed by 79.77% and 29.53% in 2018-19 respectively in YoY bases. The same trend can be seen in the case of Scheduled Tribes and Other Backward Caste.

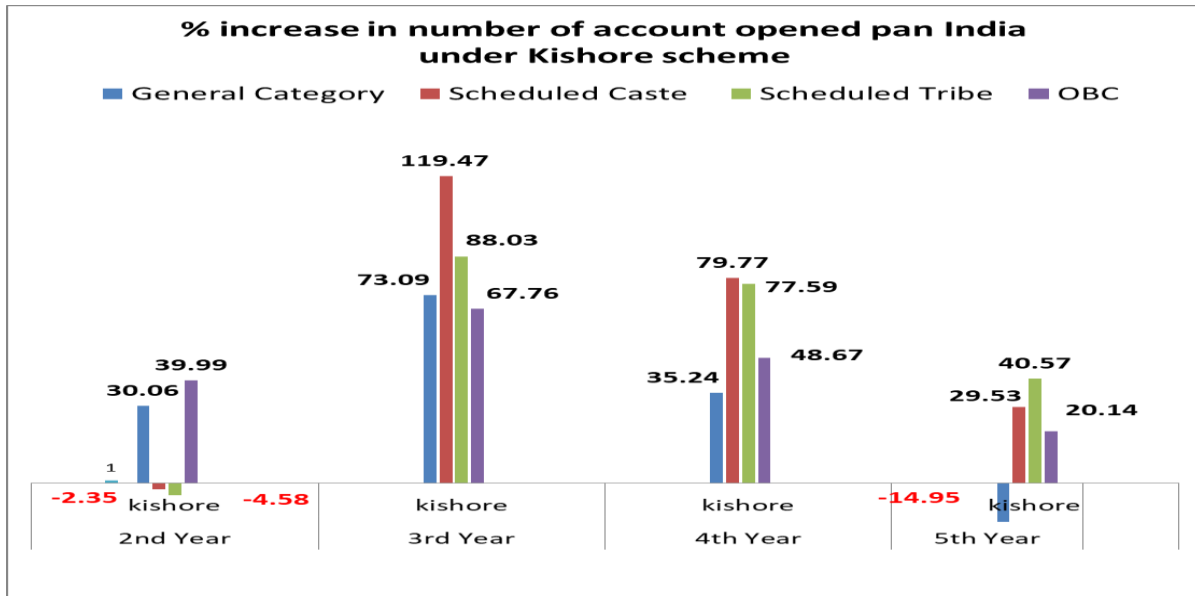


Figure 4: Percentage growth in number of accounts opened by different castes under Kishore scheme from 2015-16 to 2019-20

5: Analysis of number of accounts opened under Tarun scheme by different categories of the society from 2015-16 to 2019-20.

Figure 5 below, shows that just like Shishu and Kishore loans, General Categories have been the highest beneficiaries of Tarun loan, followed by the Other Backward Castes which rose at a constant pace during the period of study. The third among the beneficiaries are the Scheduled Castes and Scheduled Tribes are lagging behind. Maximum number of accounts opened by all the categories is in 2018-19. In case of SC and ST, the increase in opening the number of accounts has been significantly high in 2018-19, which may be as a result of expansion of the existing business or increasing awareness about the scheme by these two categories of people.

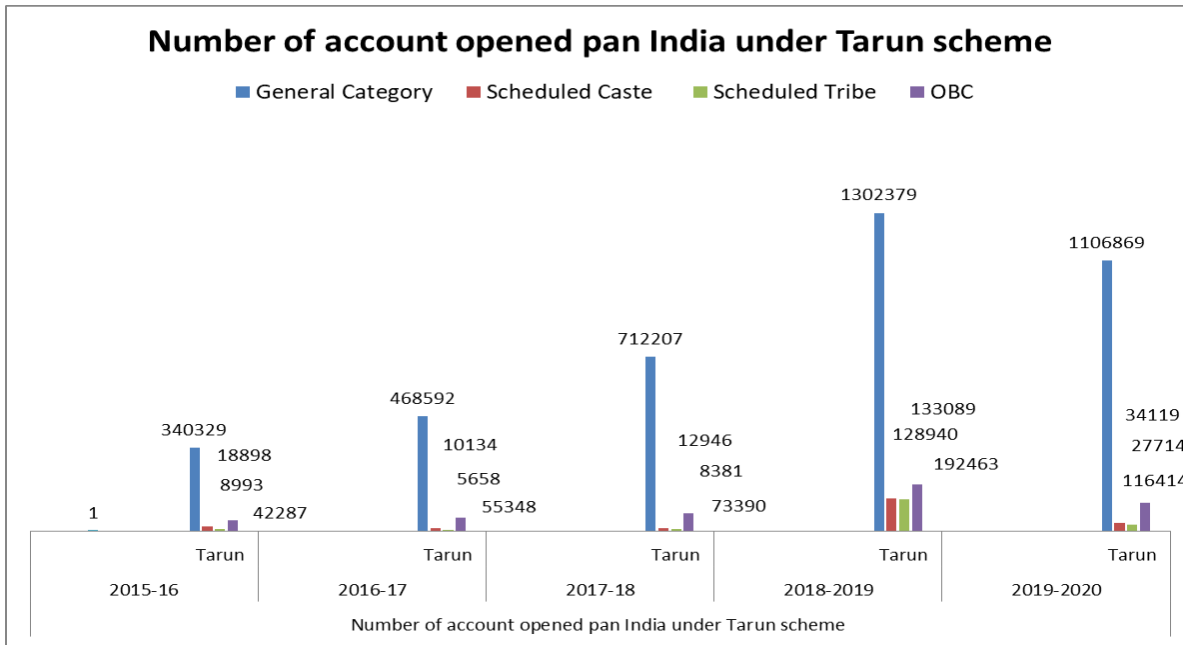


Figure 5: Number of accounts opened pan India by Tarun scheme by different categories of the society from 2015-16 to 2019-20.

6: Percentage change in opening accounts (YOY basis) under Tarun scheme by different categories of people: -

There is an interesting fact in percentage increase in number of accounts opened under Tarun scheme YOY basis. There has been rise in percentage of number of accounts opened in 2nd year, 3rd year and 4th year, i.e. 2016-17, 2017-18 and 2018-19 respectively by General Category and The OBCs. However there has been a negative growth percentage in number of accounts opened by General Category by 15.01% and OBCs by 39.51% in 2019-20 compared to 2018-19. For scheduled castes and scheduled tribes, there has been a negative growth in percentage change in number of accounts opened under Tarun scheme in the 2nd year, i.e., 2016-17, which means that the number of accounts opened by Schedules Castes and Scheduled Tribes as compared to 2015-16 has decreased but, in 2017-18 there has been a positive growth in percentage change in number of accounts opened compared to 2016-17 and in 2018-19, there has been a havoc growth i.e. 928.03% compared to 2017-19. Same trend can be observed for Scheduled Tribes where there has been a massive 1438.48 %

rise in number of accounts opened YoY basis. This symbolises that there has been an awareness and participation by the backward castes in availing loan under Mudra Yojana, which was the objective of PMMY. However, in 2019-20, there has been a negative growth in terms of percentage of number of accounts opened under Tarun scheme across all the categories in India.

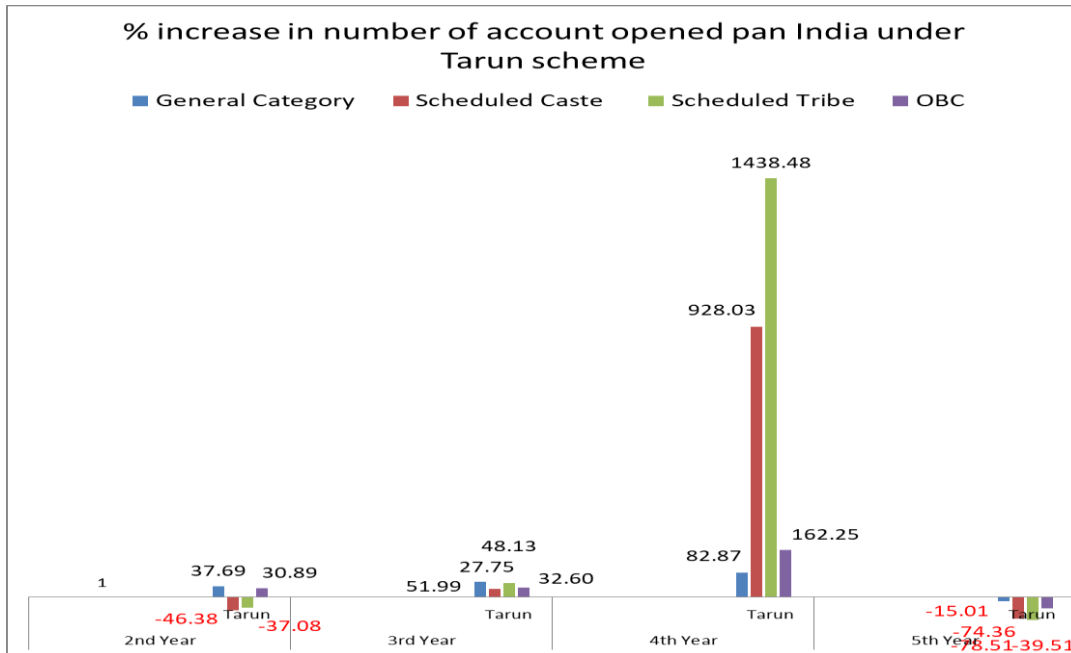


Figure 6: - Percentage growth in number of accounts opened by different castes under Tarun scheme from 2015-16 to 2019-20.

7: Number of accounts opened by the women entrepreneurs, new entrepreneurs and minorities under the Mudra Yojana.

One of the main objectives of Mudra scheme was to include the women entrepreneurs under financial inclusion and also to provide empowerment to them. Mudra scheme has successfully achieved this objective. Figure 7 shows that during the period of study loan availed by the women borrowers have increased steadily under Shishu scheme and Kishore scheme. In 2019-20, the number of accounts opened by all sections of the people reduced compared to 2018-19, but there has been an increase in borrowings by the women borrowers under the Shishu and Kishore scheme. There has been a dip in number of accounts opened by the women borrowers under Tarun scheme in 2019-20.

2016-17 has seen a massive dip in the number of accounts opened under Shishu scheme by the new entrepreneurs. There has also been a dip in number of accounts opened in 2018-19 and 2019-20 by the new entrepreneurs under the Kishore scheme. Except in 2019-20, where there has been a mild dip in the numbers of accounts opened by new entrepreneurs, all other years have seen a steady increase in the number of accounts opened. The study also finds that in the first three years i.e. from 2015-16 to 2017-18 more than 50% of the new accounts opened under Kishore scheme and around 70 to 75% of number of accounts under Tarun scheme has been by new entrepreneurs.

Out of all the three sub-groups studied, i.e., women entrepreneurs, new entrepreneurs and minorities, minorities have been the lowest among the users of the Mudra scheme. In number of accounts opened under the different schemes, only 9-14% among the minorities have opened accounts during the year of study

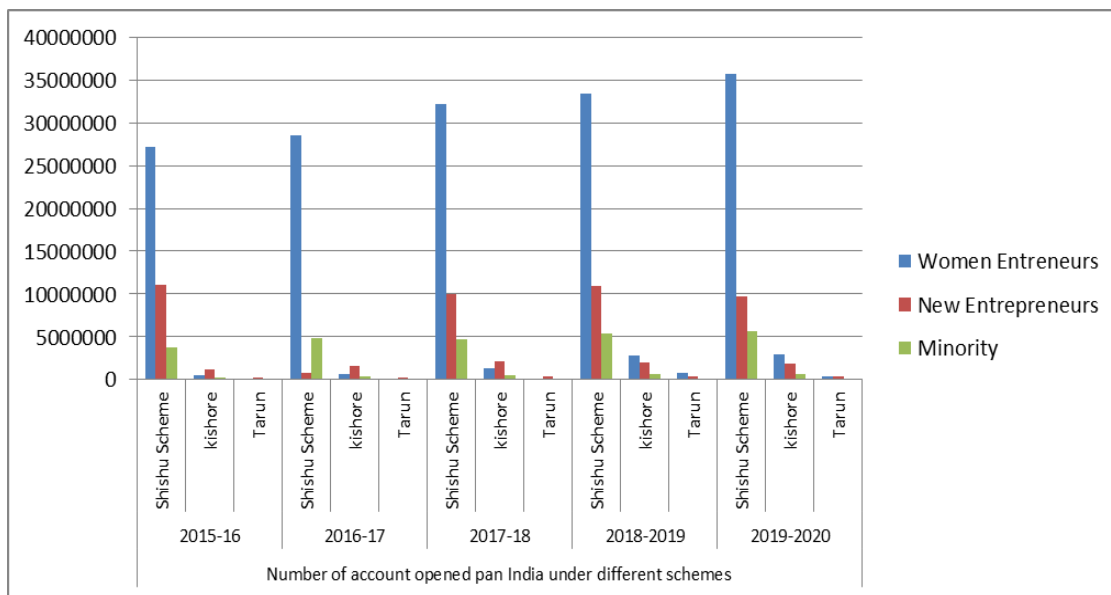


Figure 7: - Number of accounts opened by the women entrepreneurs, new entrepreneurs and minorities.

8: Percentage change in opening accounts: -Percentage change in opening accounts by women entrepreneurs, new entrepreneurs and minorities YoY basis.

Percentage growth YoY shows that maximum increase in opening accounts by women entrepreneurs

have been during 2017-18 and 2018-19 under the Kishore scheme, which is 113.66% and 115.35% YoY basis respectively. In 2019-20, there has been a marginal increase of 3.93% under the Kishore scheme. Under the Tarun scheme, the percentage change in opening accounts by women entrepreneurs have been negative change of 3.85% and 49.23% in 2016-17 and 2019-20 respectively when compared YoY basis.

Percentage change in number of accounts opened new entrepreneurs under the Shishu scheme scheme has showed a negative change of 92.67% and 11.6% when compared YoY basis. The third year, i.e. 2017-18 has seen a massive growth in percentage increase in number of accounts opened which is 1137.63%. Under the Kishore and Tarun scheme, there has been a decreasing trend from 3rd year, i.e. 2017-18.

Minorities share in opening accounts and availing loan has been quite low compared to the other two sub categories in this section. The average percentage in availing loans by the minorities has remained within 10 % to 12.98% within the years of study.

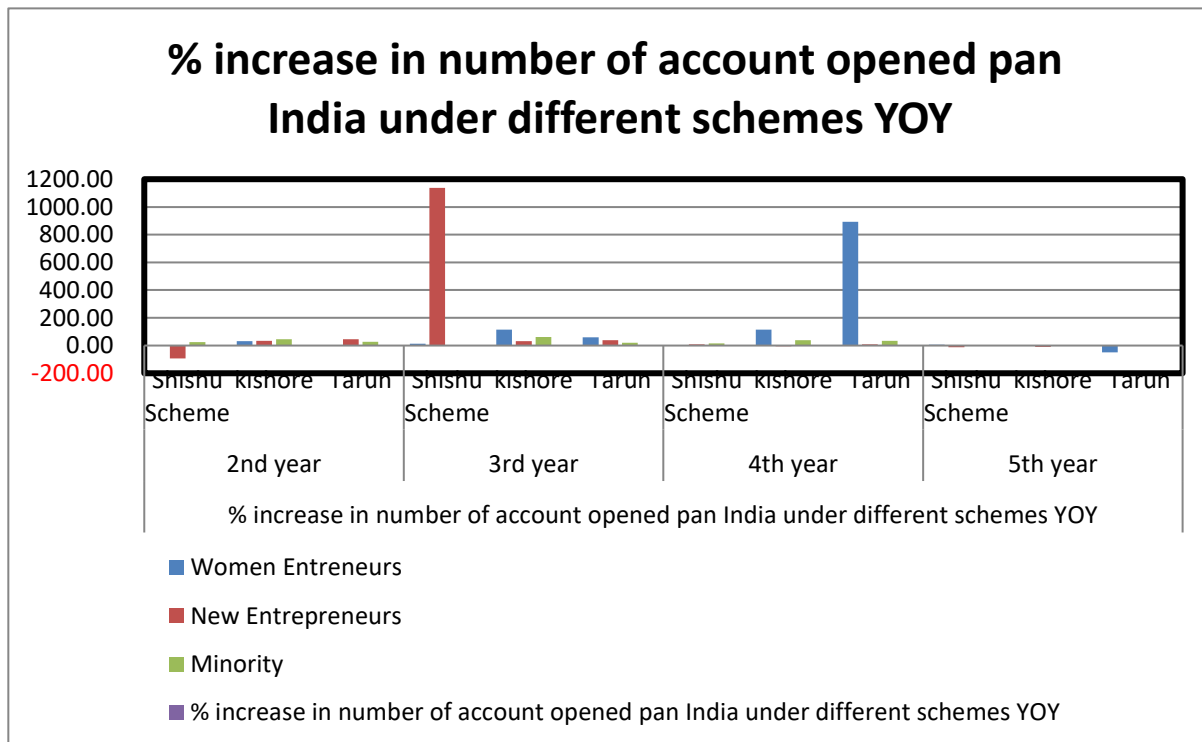


Figure 8: - Percentage change in number of accounts opened by the women entrepreneurs, new

9: Comparative analysis of different schemes- Shishu, Kishore and Tarun schemes availed by different categories of people

The figure 9 below shows that there has been during the entire period of study, Shishu scheme has been the mostly availed scheme by the borrowers followed by Kishore scheme and then Tarun scheme. One of the main reason for success of Shishu scheme which accounted for nearly 65% of additional employment ^[9] compared to others are:-

- i. In order to boost the promotion of Shishu loans a month long publicity campaign was organised on behalf of the government of India across different corners of the country.
- ii. Shishu loans does not require the entrepreneur to submit the proof of business existence and other documents unlike Kishore and Tarun loans which requires the applicant to submit more documents than the Shishu scheme.

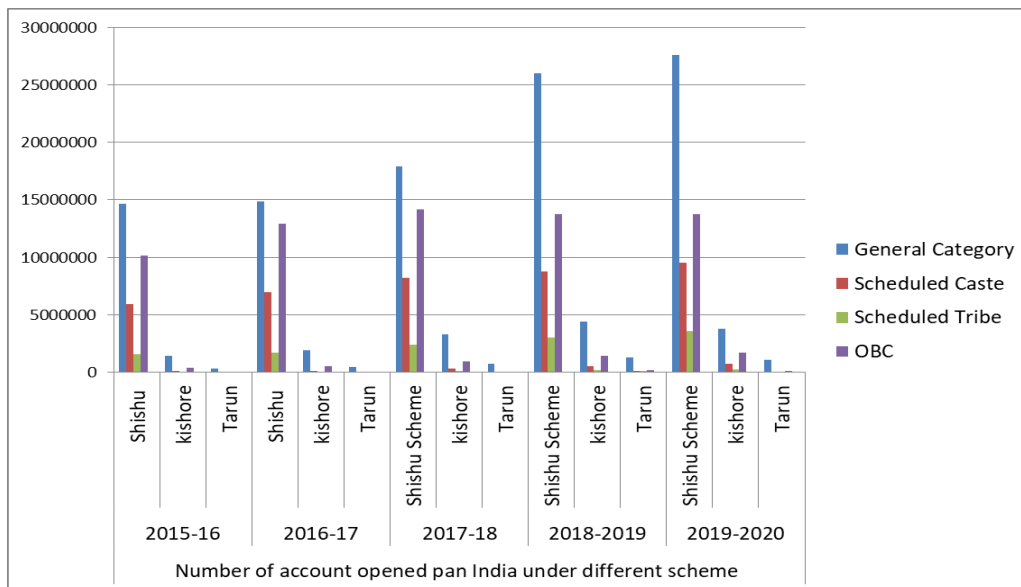


Figure 9: -Number of accounts opened under different schemes i.e. Shishu, Kishore and Tarun by different categories pan India.

10: Comparative analysis of percentage increase YOY basis on the number of accounts opened, loan sanctioned and loan disbursed under the Shishu scheme, Kishore scheme and Tarun scheme.

Figure 10 shows that percentage of change in number of accounts opened, loans sanctioned and disbursed under the Shishu scheme in the 2nd year, i.e. 2016-17 there is increase in loan sanctioned and percentage increase in loan disbursed has been almost same which is around 35.30% and 30.24% respectively. Thus, in this year, whatever loan has been sanctioned under Shishu scheme has also been disbursed. In 2017-18, there has been a sharp decline in percentage of sanctioned and disbursed as well as in the number of loan accounts opened under the Shishu scheme. Another interesting fact is that the percentage increase in loan sanctioned in that year is less than the loan disbursed. The probable reason behind it may be because there must have been some loans from the previous years, (most likely from 2015-16) which has not been disbursed in that year, and has been disbursed in 2017-18. Maximum growth has been observed in the 4th year of study i.e. 2018-19 where the growth rate for loan sanctioned has been 42.34% and loan disbursed has been 33.98%.

As represented in figure 11, under the Kishore scheme, the maximum percentage growth in terms of number of accounts opened, loan sanctioned and loans disbursed was in 2017-18. In 2018-19 there has been a decline in percentage growth in number of accounts opened, loan sanctioned and loans disbursed under the Kishore scheme, compared to the previous year where the growth rate for loan sanctioned and disbursed were more than 60% in both loan sanctioned and disbursed as compared to 20.36% and 20.04% in 2018-19. There has been a negative growth percentage in 2019-20 compared to 2018-19 in terms of number of accounts opened, loan sanctioned and loan disbursed.

Figure 12 below shows that maximum rise in growth percentage of number of accounts opened, loan sanctioned and loan disbursed under the Tarun scheme have been in 2017-18 which is 61.98 and 62.93 respectively. 2019-20 has seen a negative growth percentage in number of accounts opened, and the percentage growth in loan sanctioned and disbursed has been around 5%. Thus, it can be ascertained that 2019-20 has seen a decline in the growth rate for all the three types of loans compared to the previous year i.e. 2018-19

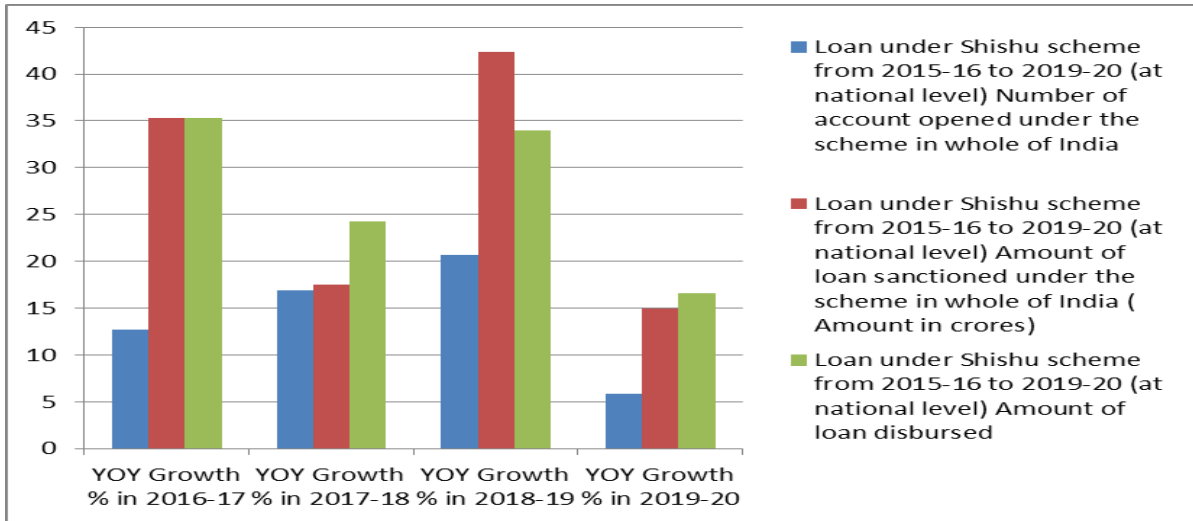


Figure 10:- A trend analysis on percentage of growth YOY basis under Shishu scheme w.r.t. to number of accounts opened, loan sanctioned and loan disbursed by all the categories taken together.

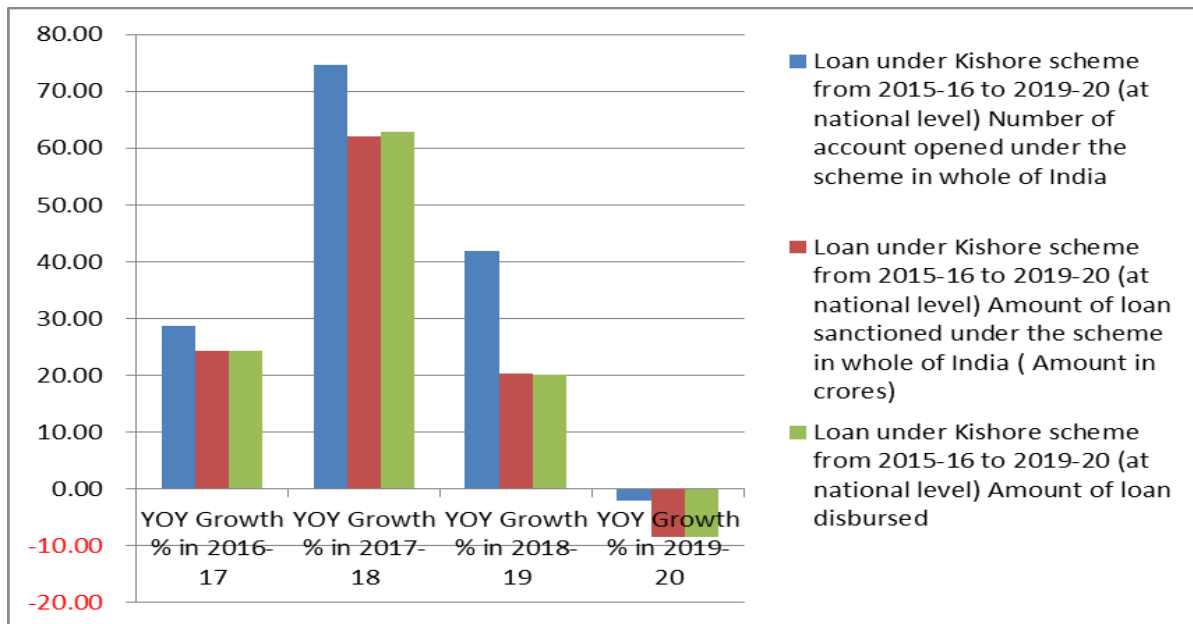


Figure 11:- A trend analysis on percentage of growth YOY basis under Kishore scheme w.r.t.

to number of accounts opened, loan sanctioned and loan disbursed by all the categories taken together

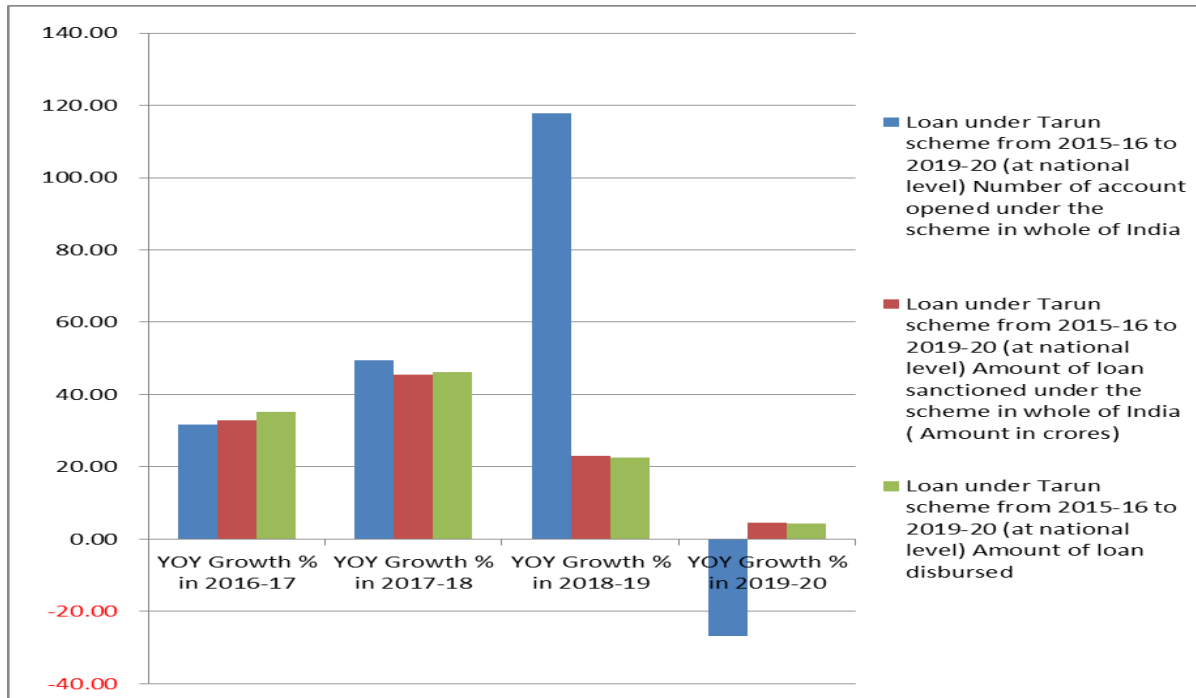


Figure 12:- A trend analysis on percentage of growth YOY basis under Tarun scheme w.r.t. to number of accounts opened, loan sanctioned and loan disbursed by all the categories taken together.

11: Comparative analysis of growth in loan sanctioned and disbursed per account under Shishu, Kishore and Tarun scheme:-

The percentage growth in average amount of loan sanctioned and disbursed per account under the Shishu scheme has declined in 2017-18 to .51% and 6.28% respectively compared to its growth of 20% in the average amount of loan sanctioned and disbursed previous year. However, in the consecutive years, percentage growth in amount of loan sanctioned and disbursed per account has increased.

Under the Kishore scheme, the percentage growth in average amount of loan sanctioned and

disbursed per account has shown negative growth when compared to the previous year throughout the period of study and the maximum negative growth has been in 2018-19. It means that the amount sanctioned and disbursed in this year has been minimum compared to what has been sanctioned and disbursed in the previous year, i.e. 2017-18. Thus, it means, that though the number of accounts opened under the Kishore scheme may increase every year, the amount of loan sanctioned and disbursed declined every year compared to the previous year.

Under the Tarun scheme, the study shows that in 2016-17 there has been a nominal increase in percentage of loan sanctioned and disbursed per account. However, in 2017-18, and 2018-19, there has been a negative growth of 2.62% and 43.48% in percentage of loan sanctioned per account. It means, that the amount of loan sanctioned in that year compared to the number of accounts opened has been 2.62% and 43.48% less than the previous year respectively. However, in 2019-20, Tarun loan has increased to 42% compared to the previous year i.e.2018-19.

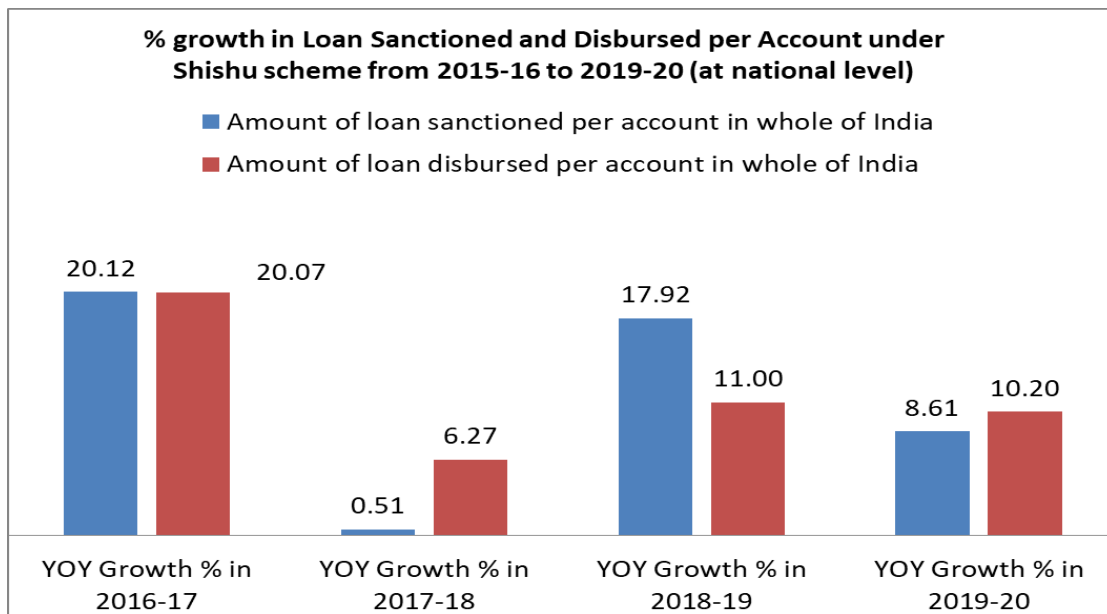


Figure 13:- Percentage growth in loan sanctioned and disbursed per account under Shishu scheme

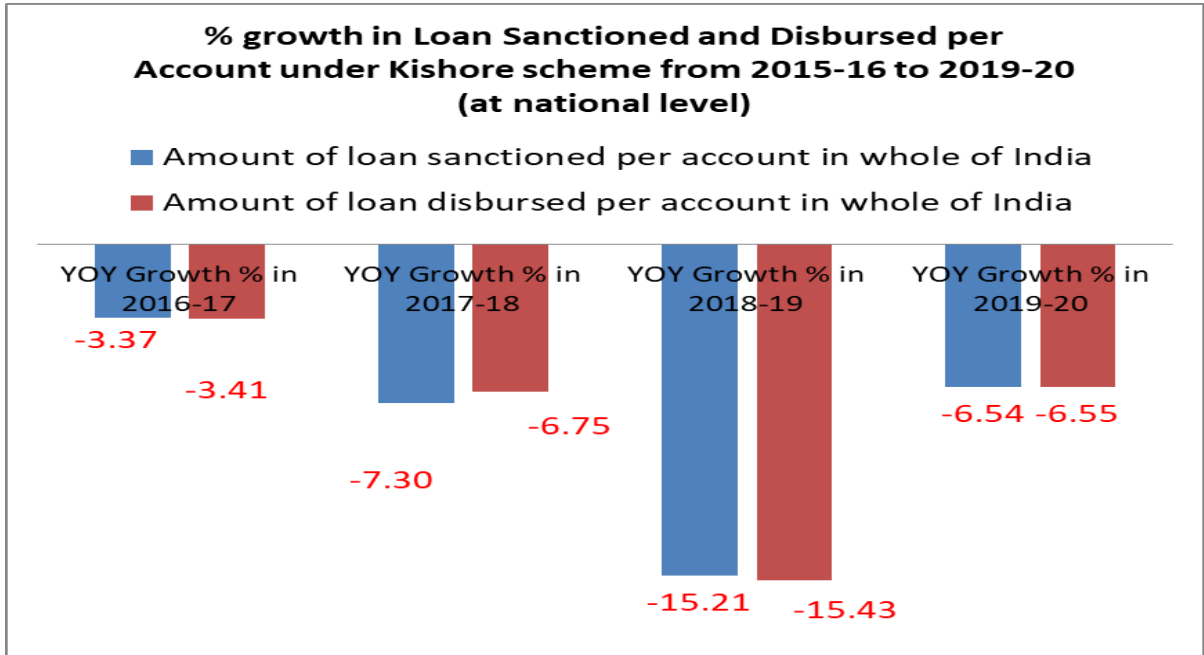


Figure 14:- Percentage growth in loan sanctioned and disbursed per account under Kishore scheme

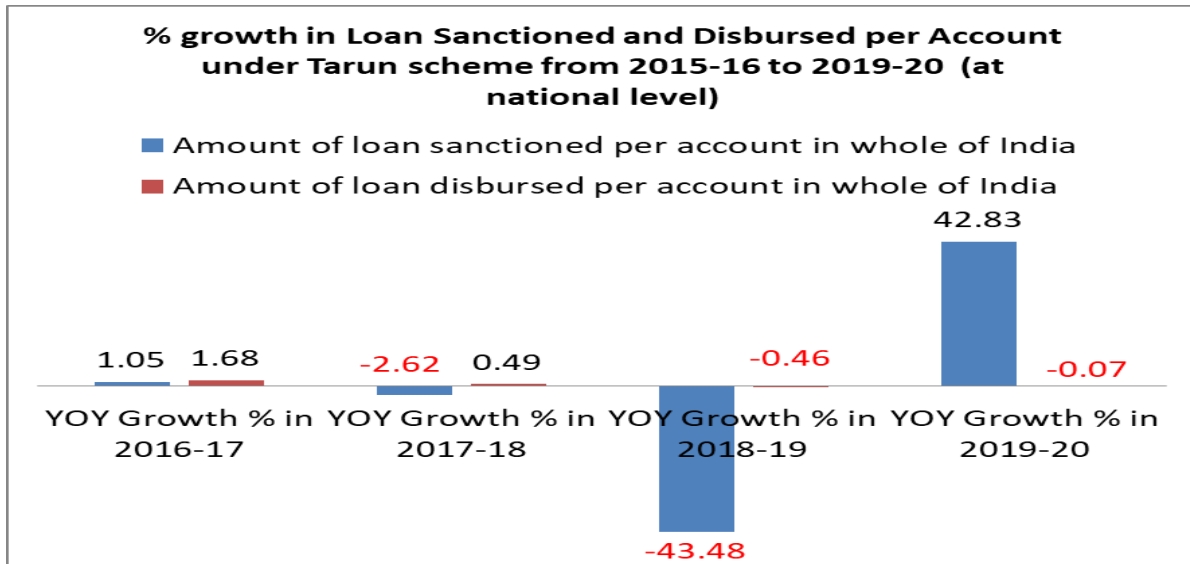


Figure 15:- Percentage growth in loan sanctioned and disbursed per account under Tarun scheme

Threats posed by the scheme on Indian economy: -

- i. Former RBI Governor has warned the government regarding the indiscriminate waiver of loans and ambitious credit targets can pose a threat in the economy in the near future.^[10]
- ii. Critics of the scheme are of view that many of the best practices followed during loan sanction and disbursal have been neglected.
- iii. The quantum of bad loans has shot up significantly from Rs. 7,277.32 crores in March 2018 to Rs. 17,250.73 crores in March 2019.
- iv. Since the amount of loan sanctioned under Shishu Scheme has been up-to INR 50,000 most of the people who have taken loan has started very small micro businesses and that has been more labour intensive within very small level.

Conclusion:

- i. It can be concluded from the study, that among the Backward Castes, the Scheduled Tribes are lagging behind the others, in all the schemes during the period of study except in Tarun scheme in 2018-19
- ii. One of the main objectives of Mudra Yojana women empowerment, and Mudra scheme has been very popular among the women entrepreneurs. Around 65% of the borrowers of Shishu loans were women entrepreneurs
- iii. It can be concluded that backward classes have started taking loan under this yojana, however, Scheduled Tribes have been lagging behind the other backward castes. Out of the total loan sanctioned and disbursed only 5 to 6% among them are scheduled tribes and only 16 to 17% are Scheduled
- iv. Castes.
- v. Minorities are also lagging compared to the women entrepreneurs and new entrepreneurs. Only 11 to 12% of the minorities during the year of study have taken loan.

- vi. In 2019-20, there has been a negative growth in availing loan among all the sections of the society, which may be due to the slackness of the economy and followed by lockdown from mid- March 2020
- vii. Shishu loans have been most popular among the three loans.
- viii. In comparing the growth rate on YOY basis, it was found that in 2019-20, percentage of growth on loans sanctioned and disbursed has been negative in case of Kishore and Tarun loans. It means that There has been decline in loan sanctioned and disbursed in 2019-20 compared to 2018-19
- ix. Though there has been concern among the critics regarding the threat that Mudra Yojana will pose in near future because of quantum of bad loans, the Non-performing Assets under Mudra Yojana has been around 4% compared to 10 % average in the banking sectors.

Suggestions: -

- i. The amount of money that is being sanctioned and disbursed in Shishu loans, which are availed by the maximum borrowers (i.e., 65%) has been less than Rs. 50,000. This amount has not been sufficient to expand or set up any capital-intensive businesses. Thus, the amount of loan under Shishu scheme should be increased.
- ii. Reasons for failure in participation of scheduled castes, scheduled tribes and minorities have to be ascertained and measures have to be taken to boost up their participation in availing loans.

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