

Income and Borrowing of Farmers in North-Eastern Region: Inferences from NSSO SAS 2013 and NAFIS 2017

Talung Taloh

Manager, National Bank for Agriculture & Rural Development.

Abstract:

NAFIS was launched in 2016-17 as a national level survey that offers, after NSSO SAS 2013, a comprehensive overview of the farmer's behaviour in terms of income, earning sources, borrowing and indebtedness. NSSO 70th round of 2012-13 revealed many aspects of Indian farmers of which many parameters were covered by NAFIS. By employing these two surveys, the paper attempts to answer what are the changes that have taken place from 2013 to 2017 in terms of income and indebtedness of farmers in Northeastern region (NER) of India. Non-farm business income has seen large change in most of the states of the region with all NE states having higher average than the national average in 2017. The comparative analysis of SAS 2012-13 and NAFIS 2016-17 indicates that NER has improved a lot in terms of income and borrowing of agriculture households, however, changing scenario indicates income growing is inadequate, borrowing is low and outstanding debt has expanded rapidly. Large presence of subsistence agriculture, unregulated markets, negligible Agricultural Marketing Committees, lack of implementation of Minimum Support Price (MSP), low credit absorptive capacity, absence of land laws in large areas, poor infrastructure and geographical isolation are some of the major pertinent issues in the region that made agriculture underdeveloped. However, the two reports may not comparable in complete sense, therefore, necessary adjustment in parameters and calculation have been made to have a comparative scenario and to draw inferences.

Keywords: NAFIS, NSSO SAS, North-Eastern Region, Indebtedness, Arunachal Pradesh , income, borrowing

Income Scenario: On an average, agriculture households earned ₹8931 per month as per the NAFIS survey whereas ₹6426 was the average income reported by NSSO 70th round, i.e., an increment of ₹2505 on an average for All-India (Table 1). Sikkim and Tripura reported average monthly income of agriculture households lower than the national average among NER states in 2016 while Tripura alone in 2013. Assam (47.54%) witnessed the highest percentage change in income between 2012-13 and 2016-17 followed by Tripura (39.84%) and All-India average changed by 38.98%. On the other hand, Arunachal Pradesh (-16.5%), Meghalaya (-14.9%) and Nagaland (-0.98%) showed income contraction during the period. In addition, it is observed that the income grew at a compounded annual rate of 8.58 per cent at national level during 2013 to 2016 whereas 11.75 percent growth was witnessed during SAS 2002-03 to SAS 2012-13. Assam (10.21%) followed by Tripura (8.74%) have the highest compound income growth while Arunachal Pradesh (-4.2%) and Meghalaya (-3.94%) had declined income growth. That is, income growth

in NER is dismal as a whole during the period. In general, income growth is varying with the landholding size. Noticeably, the three states witnessing income contraction have the highest average income among NE states.

Table 1 Average Monthly Agriculture Household Income (₹) in North-Eastern States

NE States	SAS 2013-14	NAFIS 2016-17	Absolute Change(3-2)	Percentage Change	CAGR (%)
(1)	(2)	(3)	(4)	(5)	(6)
Arunachal Pradesh	10869	9072	-1797	-16.53	-4.20
Assam	6695	9878	3183	47.54	10.21
Manipur	8842	9861	1019	11.52	2.76
Meghalaya	11792	10039	-1753	-14.87	-3.94
Mizoram	9099	9931	832	9.14	2.21
Nagaland	10048	9950	-98	-0.98	0.24
Sikkim	6798	8603	1805	26.55	6.06
Tripura	5429	7592	2163	39.84	8.74
All India	6426	8931	2505	38.98	8.58

Sources: NAFIS 2016-17 & The Situation Assessment Survey of Agricultural Households, NSS 70th Round (January-December, 2013)

Change in Income during 2013 to 2017: At national level, all categories of holding size witnessed income expansion with marginal farmers showing the highest growth of 15.57 percent followed by small farmers. Assam’s income growth is mainly led by high-income expansion for marginal and small farmers while small and semi-medium farmers’ income recorded the highest expansion for Tripura. Arunachal Pradesh has reported income contraction for small and semi-medium farmers while Meghalaya has only negligible income growth for small farmer level. Income has contracted for marginal farmers (-13.76%) and small farmers (-0.24%) under size 0.01-0.40 ha while farmers under size <0.01 ha have income grown by 18.89 per cent in Nagaland. In Sikkim, income has expanded for small framers while semi-medium size and marginal farmers (<0.01 ha) have contraction in income during the period. Manipur has largely income contraction except for marginal farmers (0.01-0.40 ha and 0.41- 1.00 ha sizes). Mizoram has income expansion for semi-medium farmers and marginal farmers (under 0.40-1.00 ha). NER, in general, has income expansion of semi-medium farmers followed by small farmers (under 0.41-1.00 ha) whereas farmers under other sizes have large income contraction during the period.

Sources of Farmers Income: Agricultural activities, comprising cultivation and livestock rearing, are reported to be the principal source of income for majority of agricultural households in all the major states in India. Average Monthly income of agriculture households by source revealed that Cultivation + livestock rearing and Wage labour have contributed around 92% and 77% to average monthly income in 2013 and 2017 respectively at all-India level. Among NER states, wage labour is the dominant source of income in Tripura and Meghalaya and have no significant change in percentage share in both 2013 and 2017. Non-farm business income has seen large change in most of the states of the region with all NE states having higher average than the national average in 2017. This shows that that employment diversification of farmers is higher in NER. i.e., a change in economic pursuit from agriculture to non-

agricultural activities for most of the NE states. The changing employment structure is mainly due to advent of technology, education, public finance and services.

Borrowing Scenario: Credit accessibility is one of the major issue in Indian agriculture and NE is a region where credit flow has been persistently low. NE states have the lowest indebtedness from institutional sources ranging from as low as Meghalaya (2.4%) to as high as Manipur (23.9%) as compared to national average of around 52 percent as per SAS 2012-13. On the other hand, in 2016-17, Arunachal Pradesh (73.66%), Assam (60.44%) and Tripura (50.68%) have indebtedness higher than the country’s average (52.5%), that is, majority of the NE states have low borrowing. Lengthy process for sanction of loans by institutions, demand for collateral security, and short term of (crop) loan were cited as reasons for seeking loans from non-institutional sources. This also implies that indebtedness is widely varied in India.

Table 2 Incidence of Indebtedness (%)

NE States	SAS 2012-13	NAFIS 2016-17	Difference (3-4)	Coverage of Operative KCC (%)	Average outstanding/ Operative KCCs (₹)
(1)	(2)	(3)	(4)	(5)	(6)
Arunachal Pradesh	19.10	73.66	54.56	10.6	65167
Assam	17.50	35.42	17.92	27.03	51981
Manipur	23.90	60.44	36.54	16.61	52840
Meghalaya	2.40	36.15	33.75	27.54	48969
Mizoram	6.20	39.00	32.80	20.05	61222
Nagaland	2.50	32.78	30.28	14.25	50071
Sikkim	14.30	35.11	20.81	8.39	54833
Tripura	22.90	50.68	27.78	43.79	20873
All India	51.90	52.5	0.60	44.57	106774

Sources: NAFIS 2016-17 & The Situation Assessment Survey of Agricultural Households, NSS 70th Round (January-December, 2013) & Trends and Progress of Banking in India, 2019-20

One way to explain the low credit flow and indebtedness in NE is through the performance of Kisan Credit Cards (KCCs) Scheme. Among NE states, Tripura has the highest KCCs coverage while Sikkim has the lowest followed by Arunachal Pradesh in 2019. As per NAFIS 2016-17, 4 per cent of All Agricultural Households have a Valid KCCs in Tripura. Among all Eligible Agricultural Households, that is, households having more than 0.4 ha land and who took loan for agricultural purposes from a bank, 14 percent reported having a KCCs. While only 1% of All Agricultural Households have a Valid KCCs in Sikkim and among all Eligible Agricultural Households, that is, households having more than 0.4 ha land and who took loan for agricultural purposes from a bank, 41 per cent reported having a KCCs. In Arunachal Pradesh, only 1 per cent of All Agricultural Households have Valid KCCs while none among all Eligible Agricultural Households reported having a Kisan Credit Card. Thus, it is clear that those farmers having valid KCCs is dismally low in NE as compared to the national average. In addition, both disbursement and coverage of small and marginal farmers under KCCs is negligible in NE states.

As per NAFIS (2016-17), at All-India level, the biggest reason for taking loans among agricultural households was capital expenditure for agricultural purposes, with a quarter of all loans taken for this purpose. While 19 percent of loans were taken for meeting running expenses for agricultural purposes, another 19 percent were taken for sundry domestic needs. Loans for housing and medical expenses stood at 11 percent and 12 percent, respectively. While all classes of farmers had debt, the highest incidence of indebtedness came from those owning more than two hectares of land. In that category, 60 percent of households are in debt. Among small and marginal farmers owning less than 0.4 hectares, slightly less than 50 percent of the households were in debt. Those with more land were more likely to have multiple loans. All-India average outstanding debt of farmer grew at compound annual rate of 22.14 percent during the periods while all NER states reported debt growth rate above the national average. Among NE states, Nagaland (191.25%) followed by Meghalaya (108.94%) witnessed the highest growth in average debt while Sikkim (33.63 %) recorded the lowest debt growth. The larger growth of NE states is mainly due to low base.

Sources of Credit: It is observed that two most important sources of loan were ‘bank’ and ‘agricultural/professional money lenders’, in almost all the states in the country. Looking at loans taken between July 2015 and June 2016, the NAFIS found that farm households took less than half their loans from commercial banks. While 46 percent of the loans were taken from commercial banks, and another 10 percent from self-help groups, almost 40 percent were taken from non-institutional sources such as relatives, friends, moneylenders and landlords. While loans from relatives and friends may be free of interest and reflective of social integration in communities, the survey noted that “a sizeable 11.5 percent households exhibited dependence on local moneylenders and landlords, which exposes them to exploitation by having to pay exorbitant interest. The persons resorting to local moneylenders often include, either the illiterate or extremely poor ones which are not eligible for loans from formal institutions, or the households that do not have social networks that can help them in times of need.

In NER, Arunachal Pradesh has significant improvement in share of institutional loan for 0.01 –0.40 and 2.00+ landholding sizes and contraction in other size between the periods. Assam has witnessed contraction of institutional share in all except farmers under 0.01-0.40 size. Manipur has expansion for only 2.00+size. Meghalaya has recorded significant change for 0.01-0.40 and 0.41-1.00 sizes. Mizoram has significant improvement at 2.00+ size only. Nagaland has high improvement in institutional share at all sizes. Sikkim shown improvement in the first two sizes while Tripura witnessed contraction in 0.41-1.00 and 1.01-2.00 sizes. Overall, share of institutional share in debt has reduced in NER while the share increased for all-India. Some NER states borrowed sufficient amount of loans from their ‘friends and relatives’.

CONCLUSION AND POLICY IMPLICATIONS: The comparative analysis of SAS 2012-13 and NAFIS 2016-17 indicates that NER has improved a lot in terms of income and borrowing of agriculture households, however, changing scenario indicates income growth is inadequate, borrowing is low and outstanding debt has expanded rapidly. We know that NER is surrounded by five international countries but cross-border trade is negligible due to foreign policy issues and insurgency in some pockets of the region. The people living in border areas are more affected by what happen in the other side of the border

and the interaction between the bordering countries than what happens in mainland parts. Some indication from the analysis with policy implications are listed below:

Streamlining Credit Delivery System:

The region is having the lowest Credit Deposit Ratio of 39.8 percent and 40.4 percent as compared to national average of 66.7 percent and 78.3 percent for Regional Rural Banks and Commercial Banks respectively in 2019. The situation has not improved much from 2004. The existing institutional credit system should be re-strategized to promote community-based collaterals for the effective credit delivery. Banks should introduce bankable and viable schemes, open financial literacy and credit counselling centres to increase credit absorptive capacity in NER.

Land and Agriculture Reforms:

For major portion of land under cultivation there is no formal land tenure system in most parts of the NER, that is, no formal 'ownership right' of cultivable land has been issued to farmers. In Ranking of states in terms of implementation of marketing and other farmer friendly reforms- an index constructed by NITI Aayog, no state from NER features in top 10 with Assam (15 rank with 37.1 score) having the highest and Meghalaya (26 rank with 14.3 score) the lowest among 30 states/UTs. Maharashtra (rank 1) tops the rank with 87.1 score followed by Gujarat with 70.5 score. More importantly, no NE state has reformed land laws/ implemented model land lease law. A proper land survey is required for formalizing land ownership. States having highly restrictive land leasing frameworks or lacking proper land ownership records should be encouraged to adopt reforms based on the Model Land Leasing Act suggested by NITI Aayog

Enhancement of Credit Worthiness:

Most of NE states are having poor recovery rate especially for Co-operative Banks and Commercial Banks. The average 3 years (2016 to 2018) recovery rate in Nagaland is 25% and Arunachal Pradesh is 37.10%. Noticeably, co-operative banks which have the highest CD ratio is corresponded by the lowest recovery rate in most of the states. Co-operative and Rural banking needs revamp and independence from unnecessary political influences. Agriculture aggregation such as Farmer Producer Organization and custom hiring services will enhance credit worthiness and make agriculture sustainable in NER.

Agri-marketing Infrastructure:

NER has around 0.85 percent and 0.67 percent of the country's cold storage project and capacity (Agriculture Statistics 2017). Around 1000 APMC has been integrated with eNAM in 18 states & UTs in India in 2020; however, none of NE states is in the list. The indifferent response of farmers in NER to the recent farm bills shows that they have not been benefitted much from MSP. Major constraints such as Lack of market information, Lack of warehousing and storage facilities, too many intermediaries resulting in high cost of goods and services, Lack of Farmers' Organization, Non-availability of market exclusively for organic produce and Price setting mechanism non-transparent have been persistent in the region. Cartelisation of intermediaries led coffee cultivation failed in Nagaland in 1980s due to unviable price offered. In recent years, there are severe price fluctuations of large cardamom between Rs 1,200-1,300 per kg to Rs 400-450 per kg in Arunachal Pradesh. This is not due to demand-supply mismatch but by the manipulation of intermediaries. Therefore, special focus needs to be given to agri-marketing infrastructure,

providing incentives for entrepreneurs, dismantling redundant controls and restrictions, making available credit and empowering producers.

Land utilization and Cropping Intensity:

Agriculture utilization of land in NER is much lower in most of the states. Assam (51.8%) has the highest land utilization for agriculture followed by Tripura (46.3%) as these two states have the highest plain areas in NER. Whereas the remaining states which have high percentage of hilly terrains have lower land utilization than the national average (37.7%). Among NE states, Arunachal Pradesh (2.9%) and Mizoram (6.9%) have dismally low land utilization. One major potential is Utilisation of rice – fallow areas. As the region is largely unirrigated, the single crop that is taken, usually rice, is followed by fallow. However, the residual moisture in the soil being high, it is possible to take a second crop in Rabi of oilseeds, pulses or vegetables, with the application of appropriate practices.

Climate Change Impact and Insurance coverage:

Climate change have hampered the adoption of new high yielding variety seeds which are non-resistant to pest attack and other diseases. Failed to predict and control the adverse impact along with negligible relief service from authorities has not only reduce the income but threatened food security of the farming community in the region. The region's average of KCC coverage is just 27.42 percent vis-à-vis national average of 44.57 percent in 2020. As per Pocket Book of Agriculture Statistics (2017), only three states, viz., Manipur, Sikkim and Tripura have benefited under Pradhan Mantri Fasal Bima Yojana (PMFBY) while under Restructured Weather Based Crop Insurance Scheme, only Assam has utilized. All India average of Gross Sown Area covered under all insurance schemes is 29 percent while only Assam (1%) and Tripura (1%) have negligible coverage. This situation shows that farmers have not able to insure their crops in one hand while they are incurring damages from climate change adverse impacts on the other. Field visit, prediction of impact, provision of appropriate pesticide/insecticide, capacity building of farmers and crop damage assessment are needed from state authorities.

References:

1. Mandal, Subhasis , K.K. Datta, Suchitra Mohanty² and B.K. Mahapatra (2005), “Risk of Financing Agriculture in the North- Eastern Hill Region of India with Special Reference to Meghalaya”, *Agricultural Economics Research Review* Vol. 18, pp 83-102.
2. Report of the Internal Working Group to Review Agricultural Credit, RBI, 2019.
3. Handbook of Statistics on Indian Economy, RBI, March 2020.
4. Annual Report 2018-19, NABARD and IBA, SLBC, NABARD & NABARD Ensure Portal
5. NABARD (2018), NABARD All India Financial Inclusion Survey (NAFIS) 2016-17
6. NSSO (2014): Key Indicators of Situation of Agricultural Households in India, MOSPI, Govt. of India.
7. Agriculture Statistics at a Glance (2018), MoA&FW, GoI.
8. Trends and Progress of Banking in India (2019), RBI
9. State Focus Papers of NE States (NABARD) , 2020-21.