

CHAPTER 4

*Impact of Nandani Fruits & Vegetables
Growers Co-operative Union Ltd. Nandani
On Agricultural Income and Social Life*

Chapter –IV

Impact of Nandani Fruits and Vegetables Growers Co-operative Union Ltd. Nandani. On Agricultural income and Social Life

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Chapter –IV

Impact of Nandani Fruits and Vegetables Growers Co-operative Union Ltd. Nandani. On Agricultural income and Social Life

4.1 Introduction:

In this chapter an attempt has been made to study the impact of NFVGCU on agricultural income and social status of grower farmers of fruits and vegetables in the study area. The agricultural income has been measured in the study from fruit and vegetable crops are like Banana, Cauliflower, Cabbage, tomato, onion, brinjal, *varana*, cucumber, ladyfinger and chili etc. The following sections deals with crop wise position with respect to agricultural income.

4.2 Agricultural Income of Farmers

The agricultural production and income of farmers from fruits and vegetables is given in following tables. The income of each crop is determined with multiplying average price of five Union. The income from Banana shown in table no. 4.1

Table no. 4.1 Income from Banana

(Production: Tone Income: Rupee)

Sr.No.	Particulars	Before Union		After union	
		Production	Income	Production	Income
1					
2	Marginal	18.0	36000	25.0	100000
3	Small	0.0	0	25.0	100000
4	Medium	0.0	0	42.0	168000
5	Large	50.0	100000	150.0	600000
	Total	68.0	136000	242.0	968000

Source: Field work

Banana was the main fruit crop in the study area before establishment of union. After establishment union it was more produced by farmers. Total

income from Banana was Rs. 1, 36,000 before union. It was Rs. 9, 68,000 in after union. Out of total income before union highest income was of large farmers about Rs. 1,00,000 and followed by marginal farmers in the before union. Out of total income of growers from Banana after union highest income was also large farmers Rs.1, 68,000 small and marginal farmers each were same Rs. 1, 00,000. the field of Banana and income from the crop was increased subsequently in the study area.

Table no. 4.2 Income from Cauliflower

(Production: Tone Income: Rupee)

Sr.No.	Particulars	Before Union		After union	
		Production	income	Production	Income
1					
2	Marginal	26.00	2,08,000	50.00	750000
3	Small	41.00	3,28,000	121.00	1815000
4	Medium	119.00	95200	226.00	3390000
5	Large	39.00	312000	135.00	2025000
	Total	225.00	1800000	532.00	7980000

Source: Fieldwork

Table no.4.2 indicates income from Cauliflower vegetables crop before and after union. Cauliflower is the main vegetables crop in this region after union and most of the growers were taken this crop after union. Total income from Cauliflower was Rs. 1800000 in before union. It was increased upto Rs. 7980000 after union due to the several facilities provided by union. Out of total income before union highest income was Rs. 925000 of medium farmers, followed by small farmers Rs.328000, Rs. 312000 by large farmers and Rs. 208000 by marginal farmers. After union Rs.3390000 was income of medium farmers, large farmers Rs.2025000, small farmer's income was Rs. 1815000 and lowest of Rs. 750000 of marginal farmers. It means that after union due to supply of new seeds, pesticides and fertilizers production and income from this crop was increased.

Table No.4.3 Income from Cabbage

(Production: Tone Income: Rupee)

Sr.No.	Particulars	Before Union		After union	
		Production	Income	Production	Income
1					
2	Marginal	9.00	72000	16.00	160000
3	Small	26.00	208000	62.00	620000
4	Medium	44.00	352000	118.00	1180000
5	Large	25.00	200000	57.00	570000
	Total	104.00	832000	253.00	2530000

Source: Fieldwork

Table no.4.3 shows that income from cabbage vegetable crops. Cabbage was one of the main vegetable crops in this region. Total income from cabbage was Rs. 832000 before union. It was Rs. 2530000 after union. Out of total income of before union highest income was of medium farmers about Rs. 352000 and followed by Rs. 208000 small farmers, Rs. 200000 by large farmers and Rs. 72000 by marginal farmers before union. Out of total income of growers from cabbage after union highest income was an also medium farmer about Rs.1180000 followed by small farmers Rs.620000, large farmers Rs.570000 and lastly marginal farmers Rs. 160000. It means all categories farmer's incomes from cabbage were increased after union.

Table no.4.4 Income from Tomato

(Production: Tone Income: Rupee)

Sr.No.	Particulars	Before Union		After union	
		Production	Income	Production	Income
1					
2	Marginal	20.00	40000	25.00	125000
3	Small	49.00	98000	151.00	755000
4	Medium	47.00	94000	167.50	837500
5	Large	58.00	116000	178.00	890000
	Total	174.00	348000	521.50	2607500

Source: Fieldwork

Above table shows income from tomato crop before and after union. Total income from tomato was Rs. 348000 before union. It was increased up to Rs. 2607500 after union. Before union highest income of large farmers about Rs. 116000, followed by income small farmers income was Rs. 98000, medium farmers Rs. 94000 and marginal farmers income was Rs. 40000. After union Rs. 890000 was income of large farmers, followed by medium farmers Rs. 837500, small farmer's income was Rs. 755000 and lowest income of marginal farmers was Rs.125000.

Table no. 4.5 Income from Onion

(Production: Tone Income: Rupee)

Sr.No.	Particulars	Before Union		After union	
		Production	Income	Production	Income
1					
2	Marginal	17.00	51000	32.00	160000
3	Small	24.00	72000	46.00	230000
4	Medium	21.00	63000	76.00	380000
5	Large	8.00	24000	40.00	200000
	Total	70.00	210000	194.00	970000

Source: Fieldwork

Above table no.4.5 indicates income from onion before and after union. The total income from onion was Rs. 210000 before union, which was increased to Rs. 970000 after union. Before union income of small farmers was Rs.72000, followed by medium farmer's income was Rs.63000, marginal farmers income was Rs.51000 and large farmer's income Rs.24000. After union Rs. 380000 was income of medium farmers, followed by small farmers Rs. 230000, large farmers Rs. 200000 and marginal farmer's income was Rs. 160000.

Table no. 4.6 Income from Brinjal

(Production: Tone Income: Rupee)

Sr.No.	Particulars	Before Union		After union	
		Production	Income	Production	Income
1					
2	Marginal	7.00	56000	19.00	304000
3	Small	5.00	40000	32.00	512000
4	Medium	5.00	40000	43.00	688000
5	Large	15.00	120000	33.00	528000
	Total	32.00	256000	127.00	2032000

Source: Fieldwork

Table no. 4.6 shows income from Brinjal crop before and after union. Total income from brinjal was Rs.256000. It was increased up to Rs. 2032000 after union. Before union highest income of large farmers was Rs. 120000, followed by marginal farmers Rs. 56000, small farmers and medium farmers were each same as Rs. 40000. After union income of medium of farmers was Rs. 688000, followed by large farmers Rs. 528000, small farmers Rs. 512000 and lowest of marginal farmers Rs. 304000.

Table no. 4.7 Income from Cucumber

(Production: Tone Income: Rupee)

Sr.No.	Particulars	Before Union		After union	
		Production	Income	Production	Income
1					
2	Marginal	3.00	15000	6.00	60000
3	Small	7.00	35000	24.00	240000
4	Medium	4.00	20000	17.00	170000
5	Large	4.00	20000	5.00	50000
	Total	18.00	90000	52.00	520000

Source: Fieldwork

Table no. 4.7 shows income from cucumber crop before and after union. Total income from cucumber was Rs. 90000 before union. It was increased upto Rs. 520000 after union. The income of small farmers was Rs. 35000 it was highest income from cucumber before union. Further large and medium farmers income was each Rs. 20000 and marginal farmer's income

was Rs. 15000. After union income of small farmers was highest, it was Rs. 240000, followed by medium farmers Rs. 170000, marginal farmers Rs. 60000 and large farmer's income was Rs. 50000. It means that after union due to supply of new seeds, pesticides and fertilizers production and income from this crop was increased.

Table no. 4.8 Income from Chili

(Production: Tone Income: Rupee)

Sr.No.	Particulars	Before Union		After union	
		Production	Income	Production	Income
1					
2	Marginal	1.00	2000	2.00	10000
3	Small	1.00	2000	5.00	25000
4	Medium	5.00	10000	10.50	52500
5	Large	1.00	2000	14.00	70000
	Total	8.00	16000	31.50	157500

Source: Fieldwork

Table no. 4.8 shows the income from chili crop before and after union. Total income from chili was Rs. 16000 before union. It was raised upto Rs. 157500 after union. Before union income of medium farmers was highest which Rs. 10000, followed by small, was marginal and large farmers were each Rs. 2000. After union income of large farmers was Rs. 70000, followed by medium farmers about Rs. 52500, small farmers income was Rs. 25000 and marginal farmers Rs. 10000.

Table no. 4.9 Income from Varana

(Production: Tone Income: Rupee)

Sr.No.	Particulars	Before Union		After union	
		Production	Income	Production	Income
1					
2	Marginal	0.00	00	0.20	3000
3	Small	0.00	00	1.00	15000
4	Medium	0.00	00	0.00	00
5	Large	0.00	00	2.50	37500
	Total	0.00	00	3.70	55500

Source: Fieldwork

Above table no. 4.8 shows the income from *Varana* before and after union. Total income from *varana* was nil before union. It was increased to Rs. 55500 after union. After union Rs. 37500 was income of large farmers, followed by small farmers Rs, 15000, marginal farmers Rs. 3000, medium farmers did not cultivate this crop.

Table no. 4.10 Income from Ladyfinger

(Production: Tone Income: Rupee)

Sr.No.	Particulars	Before Union		After union	
		Production	Income	Production	Income
1					
2	Marginal	0.00	00	2.00	20000
3	Small	0.00	00	0.00	00
4	Medium	0.00	00	0.00	00
5	Large	0.00	00	0.00	00
	Total	0.00	00	2.00	20000

Source: Fieldwork

Table no. 4.9 indicates the income from ladyfinger crop before and after union. Total income from ladyfinger was nil before union. After union marginal farmers income was Rs.20000, small, medium and large farmers were did not cultivate this crop after union also.

4.3 Classification of Farmers by level of Income (Crop wise)

The classification of farmers by the level of income derived from each fruits and vegetable crops has been made. Categorized into five groups like 1) less than 5000, 2) 5001-25000, 3) 25001-50000, 4) 50001-100000 and 5) Above 100000.

Table no. 4.11 Classification of Farmers by Income from Banana

Sr.No	Particulars	Before Union		After union	
		Frequency	Percentage(%)	Frequency	Percentage(%)
1	Less than 5000	96	96.0	88	88.0
2	5001-25000	4	4.0	1	1.0
3	25001-50000	0	0.0	10	10.0
4	50001-100000	0	0.0	1	1.0
5	Above 100000	0	0.0	0	0.0
	Total	100	100.0	100	100.0

Source: Fieldwork

Table no.4.11 depicts income from banana fruits before and after union. Out of total 100 sample farmer's maximum 96 farmers were concentrate in the category of Rs. Less than Rs. 5000, followed by Rs. 5001-25000 this range only 4 farmers. After union income level of farmers has been increased. Some of the farmers about this crop range of income were slowly increased after union.

Table no. 4.12 Classification of Farmers by Income from Cauliflower

Sr.No.	Particulars	Before Union		After union	
		Frequency	Percentage (%)	Frequency	Percentage(%)
1	Less than 5000	59	59.0	40	40.0
2	5001-25000	26	26.0	0	0.0
3	25001-50000	15	15.0	18	18.0
4	50001-100000	0	0.0	35	35.0
5	Above 100000	0	0.0	7	7.0
	Total	100	100.0	100	100.0

Source: Fieldwork

Above table no. 4.12 shows the income from cauliflower before and after union. Out of total sample farmer's maximum numbers of farmers were concentrating in the category of less than Rs. 5000 accounted (59.0%) farmers before union, followed by (26.0%) farmers were in income range of Rs. 5001-25000 and (15.0%) farmers were in income range of Rs. 25001-50000. After union (40.0%) farmers were in less than Rs. 5000, followed by (18.0%) farmers were in Rs. 25001-5000, (35.0%) were in Rs. 50001-100000 and lastly (7.0%) farmers were in income range of above Rs.100000. It means that after union due to several facilities provided by union as a result incomes from this vegetable crop were increased very much.

Table no. 4.13 Classification of Farmers by Income from Cabbage

Sr.No.	Particulars	Before Union		After union	
		Frequency	Percentage (%)	Frequency	Percentage (%)
1	Less than 5000	81	81.0	73	73.0
2	5001-25000	14	14.0	1	1.0
3	25001-50000	5	5.0	14	14.0
4	50001-100000	0	0.0	12	12.0
5	Above 100000	0	0.0	0	0.0
	Total	100	100.0	100	100.0

Source: Fieldwork

Table no. 4.13 indicates that income from cabbage before and after union. Out of total 100 samples farmer's maximum number of farmers were concentrate in the range of less than Rs. 5000 and Rs. 5001- 25000 nearly (95%) were in this category. The (5 %) farmers were in the range of Rs. 25000-50000 category. After union (73 %) farmers were in the range of less than Rs. 5000, followed by only one farmer was including in the income range of Rs.5001-25000, (14%) farmers were in the range of Rs. 25001-50000 and lastly (12 %) farmers were in the Rs. 50001-100000 range of income. It shows that income from cabbage was increased only few farmers after union.

Table no. 4.14 Classification of Farmers by Income from Onion

Sr.No.	Particulars	Before Union		After union	
		Frequency	Percentage (%)	Frequency	Percentage (%)
1	Less than 5000	90	90.0	84	84.0
2	5001-25000	10	10.0	16	16.0
3	25001-50000	0	0.0	0	0.0
4	50001-100000	0	0.0	0	0.0
5	Above 100000	0	0.0	0	0.0
	Total	100	100.0	100	100.0

Source: Fieldwork

Table no. 4.14 shows income from Onion before and after union. Before union was started farmers used to cultivate onion marginally and income from it was not much high. (90 %) farmers were in income range of less than Rs. 5000, (10 %) farmers were in Rs. 5001- 25000. After union situation was not change very much, (84 %) farmers were in income range of less than Rs. 5000 and (16 %) farmers were in Rs. 5001-25000.

Table no. 4.15 Classification of Farmers by Income from Tomato

Sr.No	Particulars	Before Union		After union	
		Frequency	Percentage (%)	Frequency	Percentage (%)
1	Less than 5000	83	83.0	69	69.0
2	5001-25000	17	17.0	30	30.0
3	25001-50000	0	0.0	1	1.0
4	50001-100000	0	0.0	0	0.0
5	Above 100000	0	0.0	0	0.0
	Total	100	100.0	100	100.0

Source: Fieldwork

Above table no.4.15 shows income from Tomato before and after union. There has been not much change in case of tomato crop. Before union was initiated this crop was not being cultivated. Even after union was started majority of farmers did not pay much attention to cultivate this crop. Therefore large numbers of farmer's were concentrated in the range of less than Rs. 5000.

Table no. 4.16 Classification of Farmers by Income from Brinjal

Sr.No.	Particulars	Before Union		After union	
		Frequency	Percentage (%)	Frequency	Percentage (%)
1	Less than 5000	96	96.0	89	89.0
2	5001-25000	1	1.0	11	11.0
3	25001-50000	3	3.0	0	0.0
4	50001-100000	0	0.0	0	0.0
5	Above 100000	0	0.0	0	0.0
	Total	100	100.0	100	100.0

Source: Fieldwork

Above table no.4.16 shows income from brinjal before and after union. out of total 100 sample farmers 96 farmers were cultivating brinjal vegetable crop and income as in the range of less than Rs.500. moreover it was noticed that even after union was initiated farmers did not concentrate to grow brinjal crop. In fact there has been reduction in the cultivation of brinjal.

Table no. 4.17 Classification of Farmers by Income from Cucumber

Sr.No.	Particulars	Before Union		After union	
		Frequency	Percentage (%)	Frequency	Percentage (%)
1	Less than 5000	99	99.0	83	83.0
2	5001-25000	1	1.0	15	15.0
3	25001-50000	0	0.0	2	2.0
4	50001-100000	0	0.0	0	0.0
5	Above 100000	0	0.0	0	0.0
	Total	100	100.0	100	100.0

Source: Fieldwork

Table no. 4.17 indicates income from cucumber before and after union. There has been not much change in case of cucumber vegetable crop. Before union was initiated this crop was not being cultivated. After union was majority of the farmers did not pay much attention to cultivate this crop. Therefore large numbers of farmers were concentrated in the range of less than Rs.5000. because even in the study areas it is marginal crop.

Table no. 4.18 Classification of Farmers by Income from Chili

Sr.No.	Particulars	Before Union		After union	
		Frequency	Percentage (%)	Frequency	Percentage (%)
1	Less than 5000	100	100.0	100	100.0
2	5001-25000	0	0.0	0	0.0
3	25001-50000	0	0.0	0	0.0
4	50001-100000	0	0.0	0	0.0
5	Above 100000	0	0.0	0	0.0
	Total	100	100.0	100	100.0

Source: Fieldwork

Table no.4.18 shows income from chili before and after union. Out of total 100 sample farmers all farmers were concentrated in income range of less than Rs. 5000 before and after union also. Moreover it was noticed that before and after union farmers did not concentrate to grow chili crop. In fact there has been reduction in the cultivation of chili crop.

Table no. 4.19 Classification of Farmers by Income from Varana

Sr.No.	Particulars	Before Union		After union	
		Frequency	Percentage (%)	Frequency	Percentage (%)
1	Less than 5000	100	100.0	98	98.0
2	5001-25000	0	0.0	2	2.0
3	25001-50000	0	0.0	0	0.0
4	50001-100000	0	0.0	0	0.0
5	Above 100000	0	0.0	0	0.0
	Total	100	100.0	100	100.0

Source: Fieldwork

Table no. 4.19 depicts income from *varana* before and after union. It shows that all farmers were in the range of less Rs.5000. because farmers in this region reduced land under *varana* and transferred to cauliflower crop and other vegetables.

Table no. 4.20 Classification of Farmers by Income from Ladyfinger

Sr.No.	Particulars	Before Union		After union	
		Frequency	Percentage (%)	Frequency	Percentage (%)
1	Less than 5000	100	100.0	100	100.0
2	5001-25000	0	0.0	0	00
3	25001-50000	0	0.0	0	0.0
4	50001-100000	0	0.0	0	0.0
5	Above 100000	0	0.0	0	0.0
	Total	100	100.0	100	100.0

Source: Fieldwork

Above table no. 4.20 shows that income from ladyfinger before and after union. Out of total 100 sample farmers all farmers were comes under the income range of less than Rs.5000 before and after union also. It means that there has been no any change in the area and production of this crop that is why income from this crop has been constant.

4.1 Gross Agricultural Income (from Fruits & Vegetables)

After having discussed crop wise position in this section an attempt has been made to classify farmers by total agricultural income from fruits and vegetables crops before and after union. Total fruits and vegetables income here consists of income from ten crops i.e. banana, cauliflower, cabbage, tomato, onion, brinjal, cucumber, *varana*, chili, ladyfinger etc. following table 4.21 shows that large number of farmers had income of than Rs. 5000 before union.

Table no. 4.21 Classification of Farmers by total Income from Fruits & Vegetables

Before Union			
Sr.No.	Income	Frequency	Percentage (%)
1	Less than 5000	33	33.0
2	5001-25000	32	32.0
3	25001-50000	28	28.0
4	50001-100000	05	5.0
5	Above 100000	02	2.0
	Total	100	100.0

Source: Fieldwork

Above table no. 4.21 indicates only few farmers particularly big farmers had income from fruits and vegetables in the range of Rs. 50001- 1 lakh. However this situation has changed after union was started. Even medium, small farmers started to earn income more than Rs. 50000. Therefore the nature of frequency distribution was more diverse. Out of total 100 farmers 83 farmers had income more than Rs. 50000 per annum (table no. 4.22). This change has occurred through change in cropping pattern, due to provide several facilities by union in this area.

Table no. 4.22 Classification of Farmers by total Income from Fruits and Vegetables

After Union			
Sr.No.	Income	Frequency	Percentage (%)
1	Less than 5000	0	0.0
2	5001-25000	4	4.0
3	25001-50000	13	13.0
4	50001-100000	49	49.0
5	Above 100000	34	34.0
	Total	100	100.0

Source: Fieldwork

Thus table 4.21 and 4.22 taken together showed that due to union income of farmers has increased as compared to earlier position. All farmers belonging to various categories have been benefited.

Table No. 4.23 Per tone Benefits of Farmer due to joining Union

(Price: Rupee)

Sr. No.	Fruits and Vegetables	Before Union price (per tone)	After Union price (per tone)	Benefits (per tone)
1.	Banana	2000.00	4000.00	2000.00
2.	Cauliflower	8000.00	15000.00	7000.00
3.	Cabbage	8000.00	10000.00	2000.00
4.	Tomato	2000.00	5000.00	3000.00
5.	Onion	3000.00	5000.00	2000.00
6.	Brinjal	8000.00	16000.00	8000.00
7.	Cucumber	5000.00	10000.00	5000.00
8.	Chili	2000.00	5000.00	3000.00
9.	Ladyfinger	8000.00	10000.00	2000.00
10.	Varana	13000.00	15000.00	2000.00

Source: Fieldwork

Above table depicts that the per tone benefits of fruits and vegetables growers in the study area due to joining union. Banana fruits before union per tone price was Rs. 2000 and after union its price of per tone was Rs.4000. so due to joining union Rs. 2000 had been benefit for per tone of banana to farmer. Per tone price of Cauliflower was Rs.8000 in before union and after union it was Rs.15000, so per tone benefits of farmers about this crop was Rs.7000. Per tone price of Cabbage was Rs.8000 before union and after union it was Rs.10000, so that due to joining union Rs.2000 was per tone benefit to farmer. Per tone price of Brinjal was Rs.8000 before union and after union it was Rs.16000, so about this crop Rs.8000 was per tone benefit to farmer due to joining union. Before union per tone price of chili was Rs. 2000 and after union it was Rs. 5000, so here in terms of chili per tone benefits was Rs.3000 to farmer.

It means that after union per tone price of fruits and vegetables was high compare to per tone price of before union. Thus we can say that due to joining union there had been per tone benefit to farmer.