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GROWTH PERFORMANCE OF FOOD GRAINS- AN ECONOMIC ANALYSIS IN TAMIL NADU

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ABSTRACT

Food grains are the most important agrarian products that meet people's dietary and regenerative needs. It is common to observe that hunger and longing have resulted in the deaths of various individuals over time. India's chances of laying out a majority rule structure, reducing human government assistance, and establishing well-disposed open doors will be extremely difficult if there is insufficient food. The presentation of food grains and non-food grains has addressed the pace of plant improvement. Due to positive costs and information costs, expanded routine production of food and non-food crops impacts ranchers' overall advancement. Markets begin to spread when ranchers notice an increase in their net augmentation. According to available data, the food grains region accounted for 34,95,997 hectares out of a total changed area of 59,42,134 hectares in 2018-19, or 58.83 per cent of the entire directed district in Tamil Nadu. The distribution of food grains in Tamil Nadu has been attempted for a considerable amount of time with the following objectives due to the predominant meaning of the word: I should decide how fast oats, grains, and pulses in Tamil Nadu grow regularly each year, as well as how many and how much they can grow; II) to acknowledge the food and grain trade in Tamil Nadu; and III) to examine how food grains spread over the three sublime frames.

The focus of the force is based on information gathered from various government reports in Tamil Nadu. This collection is named after the Quantifiable Handbook of Tamil Nadu, the Cash Related Assessment of Tamil Nadu, and the Season and Yield Reports, all of which were published by the Part of Financial Issues and Encounters, Relationship of Tamil Nadu. The Evaluation and Applied Evaluation Division of the Board of Tamil Nadu were in charge of the Cash Related Appraisal of Tamil Nadu. The survey spans a significant amount of time and is divided into three subperiods: 1989–1990, 2018–19, and 2019–20. These: Is the period between 1989 and 1999? II, in the years 2008 and 2009, in addition to 1999 and 2000; III, from 2009 to 2010, as well as from 2018 to 2019,

Key Words: Food grains, oats, beats, development, sufficiency, and production

INTRODUCTION

Among the three necessities of life, after shelter and food. Food ought to provide life support and increase flexibility in the workplace. Food grains satisfy people's dietary and health

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requirements. Since the beginning of time, hunger and yearning have caused the deaths of some people. Food insufficiency is the cause of this terrible situation. Food grains are delivered and taken from the essential area, also known as the nation. In recent years, Indian agribusiness has grown, making it easier for the country to achieve public food security. The subsequent crucial test, which is being planned by the nation as a whole and Indian agriculture in particular, aims to support this development and achieve dietary security. India's goals of overseeing human government assistance, achieving social worth, and obtaining a larger part-run plan will be extremely difficult to achieve without adequate food. Food grains play a crucial role in the eco-friendly production scenario in Tamil Nadu.

Agriculture in Tamil Nadu

Financial foundation. It typically employs 49% of the population. The majority of people in Tamil Nadu work in the plant industry, which does more than just meet the growing demand for food. The agrarian era and the majority of changes associated with cash are fundamentally linked. If Tamil Nadu is to experience a faster overall monetary turn of events, rapid agricultural development is still essential. The NDP's planned liability for development and charming activities in Tamil Nadu has been decreasing, at honest costs. Risk levels increased from 52% in 1960 to 1961, 39% from 1970 to 1971, and 29% from 1981 to 1982, according to the Mid-American Movement Review. The important region has given Rs. the NSDP in 2013-2014 was 330, 57,65 lakhs, or 7.74 per cent of the NSDP, taking into account the costs of 2004-2005 (Money related Evaluation, Tamil Nadu, 2013-2014). The population is dependent on the Gross State Close by Thing, even though the focal location's commitment to it has diminished over time.

Importance of Food Grains

Crops used in agribusiness are both food and non-food. Oats, heartbeats, sauces and flavours, sugar crops, soil things, and oats are all food crops. The majority of non-food crops, including strands, oil seeds, and various yields, are home harvests. Food grains, like oats and heartbeats, are referred to as staple aggregations among the food yields. Food grains continue to be the nation's most important focus for ensuring food security, and any variation in their production has a negative financial impact on the population as a whole. Given the costs of advantage and information, extended country production, whether of food crops or non-food crops, influences ranchers' overall growth. When ranchers observe an increase in their net turn of events, markets begin to expand. According to available information, the area under food grains accounts for 26,47,586 hectares, or the majority of the changed region in Tamil Nadu, out of the total administered area of 51,3,9832 hectares.

Objectives of the Present Study

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Understanding the expansion of Tamil Nadu's food grains economy over a significant period, such as thirty years, is one of the primary objectives of the ongoing survey. In addition, the specific objectives are as follows:

1) To determine the typical annual rate of oats, grains, and pulses production, cutoff, and distribution in Tamil Nadu from 1989 to 2019;

2) To isolate the Tamil Nadu food grain improvement program; and

3)To determine how food grain development performed over the three subperiods,

The Methodology

The Framework used data from an irregular determination of government reports. The Division of Financial Perspectives and Bits of Information, Relationship of Tamil Nadu provides Season and Assortment Reports, the Specific Handbook of Tamil Nadu, the Cash Related Assessment of Tamil Nadu, and the Season and Assortment Reports. The Cash Related Evaluation of Tamil Nadu was guided by the Appraisal and Applied Evaluation Part of the Regulative Grouping of Tamil Nadu. The overview spans a considerable amount of time from 1989-1990 to 2018-2019 and is divided into three sub-periods: The fundamental period spans 1989 to 1999, the subsequent period spans 1999 to 2009, and the final period spans 2009 to 2019. Three imperatives are the focus of the evaluation. Limitations include the region, the method by which grains are transported, and their power. II) the location and significance of the oats' development and production; and III) perform better than area, production, and capacity. The development and sufficiency of heartbeats in Tamil Nadu, as well as the speed of progress that has occurred nearby, are not framed. First, the district's grain capacity and annual normal growth rate are the subjects of a study. From 1989-1990 to 2018-19, the model nearby, production, and capacity of food grains were also evaluated by gathering oats and hearts to address food grains. The total study period has finally been broken up into three sub-seasons of ten years each, and the number of events in each sub-period has been determined.

Cereals

Grains Oats were the primary crop that early people produced. Grains have been an essential component of human weight management plans since the beginning of time. The word "grain" is derived from Ceres, the Roman goddess of get and agribusiness. Because they can be

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consumed both as a grain and as a seed, oats belong to the Gramineae family of grasses. Compared to other types of yields, oat grains typically contain more and provide more food energy; As a result, they are essential food crops. Diverse proteins, minerals, starches, fats, oils, and redesigns are included in their standard diet. Major staples like rice, wheat, maize, sorghum, and millet are essential to the daily lives of billions of people worldwide. Oats account for the vast majority of the world's daily intake of calories. Even though grains make up the majority of food, oat-based food sources are an uncommon source of energy, protein, B vitamins, and minerals for everyone, according to The Food and Making Affiliation. Oats are important because they don't split right away when they dry. The extensive use of grains like rice, wheat, and millet serves as a significant weight-control strategy in non-modern nations. Despite this, the majority of developed nations use grains sparingly but extensively. Oats are grown on roughly 700 million hectares at a typical reasonableness of 3000 kg/hectare, producing a few billion tons. 87% of all grains are made from maize, wheat, and rice; Triticale, rye, buckwheat, sorghum, millet, oats, grain, and other varieties make up the remaining 13%.

Area, Production and Productivity of Cereals

From 1989-1990 to 2018-19, the area, production, and suitability of oats in Tamil Nadu are depicted in Table 1.

Table-1: Area, Production and Productivity of Cereals in Tamil Nadu

(Area in '000' Hectares, Production in '000' tones, Yield in kgs/hectare)

Year	CEREALS					
	Area	Growth %	Production	Growth %	Yield	Growth %
1989-90	3202769		7582990		2368	
1990-91	3038122	-5.14	7135710	-5.90	2349	-0.80
1991-92	3211646	5.71	7913960	10.91	2464	4.90
1992-93	3206042	-0.17	8015400	1.28	2500	1.46
1993-94	3336924	4.08	7981060	-0.43	2392	-4.32
1994-95	3158393	-5.35	8740570	9.52	2767	15.68
1995-96	2761760	-12.56	6172220	-29.38	2235	-19.23
1996-97	2976685	7.78	6697260	8.51	2250	0.67
1997-98	3050649	2.48	7859530	17.35	2576	14.49
1998-99	3039061	-0.38	9108180	15.89	2997	16.34
1999-2000	2940222	-3.25	8551610	-6.11	2908	-2.97
2000-01	2812857	-4.33	8304140	-2.89	2952	1.51

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2001-02	2766169	-1.66	7418142	-10.67	2682	-9.15
2002-03	2228992	-19.42	4259878	-42.57	1911	-28.75
2003-04	2300397	3.20	4110967	-3.50	1787	-6.49
2004-05	2696555	17.22	5929613	44.24	2199	23.06
2005-06	2791400	3.52	5939142	0.16	2128	-3.23
2006-07	2629611	-5.80	7972250	34.23	3032	42.48
2007-08	2487987	-5.39	6396715	-19.76	2571	-15.20
2008-09	2655525	6.73	6934365	8.41	2611	1.56
2009-10	2498305	-5.92	7300179	5.28	2922	11.91
2010-11	2537040	1.55	7348930	0.67	2897	-0.86
2011-12	2541748	0.19	9782497	33.11	3849	32.86
2012-13	2134936	-16.01	5392862	-44.87	2526	-34.37
2013-14	2658817	24.54	10388674	92.64	3907	54.67
2014-15	2721836	2.37	12028249	15.78	4419	13.10
2015-16	2867330	5.35	10800046	-10.21	3767	-14.75
2016-17	2160865	-24.64	4899249	-54.64	2267	-39.82
2017-18	2713903	25.59	10156849	107.31	3743	65.11
2018-19 Provisional	2645435	-2.52	9839458	-3.12	3719	-0.64
AAGR (1989-2019)		-0.08		5.90		4.11
AAGR (1989-1999)		-0.394		3.08		3.24
AAGR (1999-2009)		-0.917		0.76		0.28
AAGR (2009-2019)		1.050		14.12		8.72

Source: Season and Crop Report 2018-19, Department of Economics and Statistics, Government of Tamil Nadu, Table IXC, pp. 300-310.

In 1989 and 1990, grains were conveyed on 32,02,769 hectares in Tamil Nadu. It fell to 30,38,122 hectares the following year, a moderate decline of 5.14 per cent between 1990 and 1991. Under the growth of oats, a substantial log jam of a moderate level was observed nearby from 1998-1999 to 2002-2003. From 2016 to 2017, the region's grain research progressed at a negative rate of 24.64 per cent; however, it is anticipated that the region's oats research will expand at a rapid rate of 25.59 per cent between 2017 and 2018. This is because the region that is managing the grains has developed shortcomings over time. In some years, these variations in speed increase and decrease are moderate, while in others, they become more pronounced. When compared to the preceding fundamental length of the overview time frame, the region where oats were developing was larger during the secret stretched-out lengths. It has been determined that the oats moving district experienced a typical annual growth rate of -0.08% throughout the entirety of the review period, or at least from 1989-1990 to 2018-19.

The number of oats distributed in Tamil Nadu decreased from 75,82,990 tons in 1989-1990 to 71,35,710 tons the following year, representing a 5.90 per cent decrease from the previous year, according to information from the grain production industry. Despite this, the production of oats continued to rise, reaching 91,08,180 tons in 1998 and 1999, for instance. During the

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layout period, a record-breaking 120,28,249 tons of grains were sent. Oat production has generally grown at a rate of 5.90% per year throughout the entire review period.

Between 1989 and the years 2018 and 2019, a total of 2368 kilograms of grains were moved per hectare in Tamil Nadu. The following year is characterized by a significant decrease in grain sensibility. Between 2014 and 2015, the primary degree of viability, 4419 kilograms per hectare, was attained. Oat efficiency increased by 65.11 per cent between 2017 and 2018, while sufficiency decreased by 39.82 per cent between 2016 and 2017. A quantum leap in the degree of adequacy achieved for grains in Tamil Nadu strongly suggests the possibility of an increase in oat yield. During the period under review, grain limit also displayed moderate to substantial long-term variations, with a typical annual growth rate of 4.11 per cent in Tamil Nadu.

Pulses

Beats are the delicious, dried seeds produced by vegetables when they reach maturity. They belong to a large family, and various species are well-suited to adapting to various soils and conditions. Beats are consumed all over the world, play a significant role in human diets, and serve as a low-cost protein that addresses the issues of a large population. As a result, they are appropriately referred to as "the miserable man's meat." According to the Prize on Agribusiness' Costs and Expenses (CACP), beats typically have twice as much protein as wheat and more protein than rice. Because they stop taking in nitrogen, beats are essential for maintaining the switching structure and further developing soil common sense. Between the years 2013 and 2014, India moved 25.23 million hectares and 19.27 million tons. Beats' brave attitude will prepare them for pressing work in the changing circumstances. Beats improve the likelihood of bugs and infectious diseases, require less water than oats, and increase the dirt's proficiency during the growth cycle.

Most of the time, India is a liability when it comes to giving, buying, and selling beats around the world. India accounts for 33% of the world's area and 22% of global production. From a total area of 25.23 million hectares, India produced 19.27 million tons of heartbeats between 2013 and 2014. Madhya Pradesh, Uttar Pradesh, Rajasthan, Maharashtra, and Andhra Pradesh made up more than 70% of the creation in the study's overall assessment. A decrease in beat utilization and responsiveness has been caused by an increase in population, a decrease in land transparency per capita, and a halt to beat production. The public authority has attempted

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various solutions to this problem, such as establishing the Improvement Mission in 1986 to reduce imports and entry points for a specific pulse crop covered by the Mission.

Area, Production and Productivity of Pulses

From 1998-1999 to 2018-2019, the region, generation, and reasonableness of heartbeats in Tamil Nadu are depicted in Table 2.

Table-2: Area, Production and Productivity of Pulses in Tamil Nadu

(Area in '000' hectares. Production in '000' tones. Yield in kgs/hectare)

Year	PULSES					
	Area	Growth %	Production	Growth %	Yield	Growth %
1989-90	820860		333760		425	
1990-91	847010	3.19	359930	7.84	425	4.42
1991-92	775870	-8.40	351140	-2.44	453	6.59
1992-93	738964	-4.76	342630	-2.42	464	2.43
1993-94	689858	-6.65	276360	-19.34	401	-13.58
1994-95	691283	0.21	340050	23.05	492	22.69
1995-96	577267	-16.49	233070	-31.46	404	-17.89
1996-97	581551	0.74	232810	-0.11	400	-0.99
1997-98	591481	1.71	244170	4.88	413	3.25
1998-99	637065	7.71	304280	24.62	478	15.74
1999-00	692539	8.71	290790	-4.43	420	-12.13
2000-01	687931	-0.67	312643	7.52	454	8.10
2001-02	685403	-0.37	270719	-13.41	395	-13.00
2002-03	562983	-17.86	200479	-25.95	356	-9.87
2003-04	536849	-4.64	201056	0.29	375	5.34
2004-05	590250	9.95	216431	7.65	367	-2.13
2005-06	525237	-11.01	177003	-18.22	337	-8.17
2006-07	536529	2.15	290503	64.12	540	60.53
2007-08	609552	13.61	184924	-36.34	303	-43.99
2008-09	535859	-12.09	167370	-9.49	312	2.97
2009-10	535819	-0.01	204369	22.11	381	22.12
2010-11	636735	18.83	245190	19.97	385	1.05
2011-12	666921	4.74	354460	44.57	554	37.92
2012-13	512650	-23.13	212574	-40.03	415	-21.85
2013-14	815756	59.13	613799	188.75	752	81.20

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2014-15	883862	8.35	766964	24.95	868	15.43
2015-16	887650	0.43	584969	-23.73	659	-24.08
2016-17	785086	-11.55	337707	-42.27	430	-34.75
2017-18	824696	5.05	556450	64.77	675	56.98
2018-19 Provisional	850562	3.14	551036	-0.97	648	-4.00
AAGR (1989-2019)		1.03		8.08		4.84
AAGR (1989-1999)		-2.53		0.51		2.52
AAGR (1999-2009)		-1.22		-2.83		-1.24
AAGR (2009-2019)		6.50		25.81		13.00

Source: Season and Crop Report 2018-19, Department of Economics and Statistics, Government of Tamil Nadu, Table IXC, PP 300-310.

Between the years 1989 and 1990, beats were constructed on 8,20,860 hectares in Tamil Nadu. The region experienced a 3.19 per cent growth the following year. From that point on, the area where heartbeats continued to increase showed a gradual decline in absolute terms. This model was still used in 2012 and 2013. Over the next three years, nearby longshots will see significant growth. In contrast to previous years, the development of heartbeats demonstrates a specific improvement over the last significant portion of the review period. Most people agree that the area beneath the beats in Tamil Nadu changes over time. The area under review has grown at a rate of 1.03 per cent per year over the entire diagram period.

During the study period, 3,33,760 tons of heartbeats were transported to Tamil Nadu. Between 2014 and 2015, the number of options in Tamil Nadu increased by 188.75 per cent, reaching 6,13,799 tons. Similarly, the rate of heartbeat production increased by 24.95 per cent in the subsequent year. Since the beginning of the diagram, the progression of heartbeats has significantly improved, except for the years 2016–17. Throughout the study, there was a yearly increase of 8.08 per cent in the rate of heartbeat creation.

In 1989 and 1990, Tamil Nadu reached a limit of 407 kilograms per hectare as a result of common sense. Beat efficiency slightly increased over the subsequent three years. Throughout the entire review period, the beat yield remained the lowest, at 303 kilograms per hectare in 2007-2008. In Tamil Nadu, the yield of heartbeats per hectare remained at 868 kilograms in 2014–15, the highest level in 30 years. The sufficiency of heartbeats has improved recently, in contrast to the extensive review of earlier times. The efficiency of heartbeats also shows

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moderate to significant change over time, similar to the model that was observed concerning the region that was under the development and creation of heartbeats. The beat capability has generally increased at a rate of 4.84 per cent annually over the entirety of the review.

Food grains Area, Production and Productivity of Food grains

Table 3 depicts the location, production, and effectiveness of food grains in Tamil Nadu from 1989-1990 to 2018-2019.

Table-3

Area, Production and Productivity of Food grains in Tamil Nadu

(Area in hectares, Production in tones. Yield in kgs/hectare)

Year	FOOD GRAINS					
	Area	Growth %	Production	Growth %	Yield	Growth %
1989-90	4023629	-	7916750		1968	
1990-91	3885132	-3.44	7495640	-5.32	1929	-1.98
1991-92	3987516	2.64	8265100	10.27	2073	7.47
1992-93	3945006	-1.07	8358030	1.12	2119	2.22
1993-94	4026782	2.07	8257420	-1.20	2051	-3.21
1994-95	3849676	-4.40	9080620	9.97	2359	15.02
1995-96	3339027	-13.26	6405290	-29.46	1918	-18.69
1996-97	3558236	6.57	6930070	8.19	1948	1.56
1997-98	3642130	2.36	8103700	16.94	2225	14.22
1998-99	3676126	0.93	9412460	16.15	2560	15.06
1999-00	3632761	-1.18	8842400	-6.06	2434	-4.92
2000-01	3500788	-3.63	8616783	-2.55	2461	1.11
2001-02	3451572	-1.41	7688861	-10.77	2228	-9.47
2002-03	2791975	-19.11	4460357	-41.99	1598	-28.28
2003-04	2837246	1.62	4312023	-3.33	1520	-4.88
2004-05	3286805	15.84	6146044	42.53	1870	23.03
2005-06	3316637	0.91	6116145	-0.49	1844	-1.39
2006-07	3166140	-4.54	8262753	35.10	2610	41.54
2007-08	3097539	-2.17	6581639	-20.35	2125	-18.58
2008-09	3191384	3.03	7101735	7.90	2225	4.71
2009-10	3034124	-4.93	7504548	5.67	2473	11.15
2010-11	3173775	4.60	7594120	1.19	2393	-3.23
2011-12	3208669	1.10	10151780	33.68	3164	32.22

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2012-13	2647586	-17.49	5605436	-44.78	2117	-33.09
2013-14	3474573	31.24	11002473	96.28	3167	49.60
2014-15	3605698	3.77	12795213	16.29	3549	12.06
2015-16	3754980	4.14	11385015	-11.02	3032	-14.57
2016-17	2945951	-21.55	5236956	-54.00	1778	-41.36
2017-18	3538599	20.12	10713299	104.57	3028	70.30
2018-19 Provisional	3495997	-1.20	10390494	-3.01	2972	-1.85
AAGR (1989-2019)		0.05		5.91		3.99
AAGR (1989-1999)		-0.85		2.96		3.52
AAGR (1999-2009)		-1.06		0.01		0.27
AAGR (2009-2019)		1.98		14.49		8.12

Source: Season and Crop Report 2018-19, Department of Economics and Statistics, Government of Tamil Nadu, Table IXC, PP 300-310.

The area in Tamil Nadu where food grains were transported remained at 40,23,629 hectares from 1989 to 1990. Under the improvement of food grains, a moderate rot of 3.44 per cent was observed nearby in the subsequent year. Over 30 years, the oats development region remained the most unambiguous, with 40,26,782 parcels of land. All of Tamil Nadu's property remained covered in food grains in 2012 and 2013. In Tamil Nadu, the region where grains are grown has completely vanished, replacing the central region of the guide. The district that is providing food grains has remained stale due to its typical annual growth rate of 0.05 per cent. This indicates that the district that is providing food grains has remained stale.

When all factors are taken into account, Tamil Nadu produced 79,16,750 million tons in 1989 and 1990. After a decrease of 5.32% in the year before, the production of food grains increased to more than 9.4 million tons in 1998 and 1999. Among the thirty years covered by the study, the best decline in progress food grains occurred in 2002-2003 and 2003-2004. The steady decline in food grains is moving closer to the goal of 41.99%. However, regardless of the years 2012–13 and 2016–17, grain production reverses itself from 2011–12 to 2018–19. This demonstrates that food grain production in Tamil Nadu has significantly increased over the past few survey periods. In recent times, it has been predicted that the average annual growth rate of food grains in Tamil Nadu will be 5.91 per cent.

In 1989 and 1990, Tamil Nadu conveyed 1929 kilograms per hectare, a 7.47 per cent decrease from 1968 kilograms per hectare. This decline was caused by the ability of food

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grains. The practicality of food grains in Tamil Nadu reaches a more significant level in the two years that follow. In 2003-2004, the reasonableness of food grains remained at its absolute lowest level in 30 years, with 1520 kilograms per hectare. Additionally, between the years 2014 and 2015, an uncommon food grain suitability of 3549 kilograms was achieved. In 2017-2018, the availability of food grains increased by 70.30 per cent over the previous year. In contrast to the norm, food grain efficacy has shown mixed results over the past few years, and the level of food grain sufficiency in Tamil Nadu is not uniform. The regular annual growth rate of food grains in Tamil Nadu has not changed in the past thirty years.

Growth Scenario of Food Grains in Tamil Nadu in the Sub-periods

The changes in district, production, and limit of grains, heartbeats, and cereals over the subperiods are depicted in Table 4.

Table-4

Growth Rates of Area, Production and Productivity of Food grains in the Sub-Periods

Period	CEREALS			PULSES			FOOD GRAINS		
	A	P	Y	A	P	Y	A	P	Y
Period I	-0.39	3.08	3.24	-2.53	0.51	2.52	-0.85	2.96	3.52
Period II	-0.92	0.76	0.28	-1.22	-2.83	-1.24	-1.06	0.01	0.27
Period III	1.05	14.12	8.72	6.50	25.81	13.00	1.98	14.49	8.12
Total Period	-0.08	5.90	4.11	1.03	8.08	4.84	0.05	5.91	3.99

Source: Reproduced from Tables 1,2 and 3. **Note:**A=Area, P=Production, Y=Yield

From the table, it found that the region under the development of oats, heartbeats and food grains reports negative development in Period I. The negative development detailed regarding heartbeats is more articulated contrasted with the development paces of the region under the development of cereals and food grains in Period I. The development paces of the creation of oats, heartbeats and food grains turn out to be positive and the development pace of the creation of cereals is higher contrasted with the development paces of the creation of heartbeats and food grains in Period I. A very much-like pattern in the development paces of efficiency of oats, heartbeats and food grains is seen in Period I.

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In Period II likewise, the development paces of the area of oats, heartbeats and food grains report a negative development and creative development rates are viewed as exceptionally low on account of cereals and food grains. The creation development pace of heartbeats shows a deceleration in Period II. Taking everything into account in Period II, the development paces of oats and food grains turn out to be indistinguishable while it is negative for beats. In Period III, every one of the three factors in a particular region, creation and efficiency of oats, heartbeats and food grains show a positive pattern in Tamil Nadu. The decadal creation development pace of heartbeats is more articulated contrasted with the decadal development pace of the creation of cereals and food grains in Period III in the province of Tamil Nadu. The development paces of efficiency of the multitude of three extents are significant in Period III. Hence, it is seen that there has been a significant improvement nearby, the creation and efficiency of cereals, heartbeats and food grains in Tamil Nadu Period III contrasted with the other two time frames.

Concluding Remarks

Accessibility and openness of food grains are the different sides of food security. The accessibility of food grains to the general population in the required amount must be guaranteed so individuals can be liberated from appetite and unhealthiness. This warrants a steady creation of grains and heartbeats. In the accessible region, expanded creation can be accomplished through progress in efficiency. Taking everything into account, the efficiency of food grains is a lot higher than that of India. Notwithstanding, the yield is lower than what has been accomplished by different nations in Asia. The development paces of the region under the development of oats, heartbeats and food grains feature close to stagnation during the 30 years. The typical yearly development paces of creation and efficiency of cereals, heartbeats and food grains are positive yet not significant. Notwithstanding, the typical yearly development paces of creation and efficiency in Period III arose significantly over the other twenty years.

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