

# TREND OF PADDY SECTOR IN AMPARA DISTRICT

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## **Introduction**

Agriculture is a vital sector in Sri Lanka as it plays key role in GDP, export income and total employment. This sector contributes 12 per cent and 19 per cent to GDP and export income in Sri Lanka, respectively. And also it provides employment to about 34 per cent of the labour force exceeding the contribution of any other single sector.

Paddy has been grown from time immemorial in Sri Lanka (Grist, 1955). About 1.8 million families of the island are engaged in paddy farming and employ 39 per cent of the labourers in the country. History of paddy cultivation in Sri Lanka goes back to 543 B.C. (Nanayakara, 1987). Paddy occupies 34 per cent of the total cultivated area of the country and it is the single most and extensively cultivated crop in Sri Lanka. In the island country, there are several niches where rice farming is practiced with different technologies (Tilakaratne, Yanagita and Imai, 1997). Rice is the most liked and most preferred staple food in the island. The paddy crop contributes 15 per cent of agricultural output, which is the highest contribution made by any single agricultural commodity (Central Bank of Sri Lanka, 2008).

Paddy sector was completely ignored during the period of the British rule in Sri Lanka. Thus, successive governments of Sri Lanka, since independence, have paid much attention to develop paddy cultivation for achieving self-sufficiency and food security. Agricultural policies in the past had focused on the paddy sector to achieve the multiple goals of self-sufficiency, food security, enhanced productivity, rural income generation, generation of rural employment opportunities and protection of consumer welfare. Hence, every government has provided various facilities such as agricultural loans, fertilizer subsidies, provision of good seed paddy, extension services, and new technologies and guaranteed price system. The paddy sector had benefitted significantly due to protectionist policies implemented in the post-independence era, which is evident from the significant increase in productivity, extent of cultivation, and total production until the late 1970s. Since the launch of open economic policies, the country achieved about 90 per cent self-sufficiency in rice (Weeraheva, 2006).

Soon after the Liberalization Policy in 1978, the Government introduced and implemented a number of policy changes such as introducing flexible exchange rate policy and reducing fertilizer subsidies. As the flexible exchange rate policy, the external value of Sri Lankan rupee has declined continuously. As a result, all input prices of paddy cultivation have increased significantly. On the other hand, government has not failed to import rice time to time. After 1978 policy price of paddy has started to fluctuate in the open market. It is a normal practice that the price of paddy goes up and down very often due to the rice supply in the open market. As the happiness of paddy farmers depends on the price of paddy, they are happy when the price is higher and vice versa. However, paddy farmers are always frustrated because their income and living standard depend on the changes of paddy price in the open market. Even any government after liberalization scenario did not follow or put forward any stable price of paddy system in Sri Lanka. Producer's paddy price was very low until 2006. Therefore, under the liberalization scenario, farmers are confronted with several difficulties in generating sufficient income from paddy cultivation for their livelihood. However, poultry farmers have started to

utilize paddy as an input to prepare food for poultry in 2007. Hence, demand for paddy went up in the market and price of paddy became higher amounting up to Rs. 35 per Kg.

Ampara district is one of the major paddy cultivating districts and it provides more than 16 per cent of the total paddy production in Sri Lanka. Of the total population of this district, around 45 per cent are directly involved in paddy cultivation and production and another 35 per cent are indirectly involved. This district has 16 per cent of the total cultivable lands in Sri Lanka (Planning Secretariat, Ampara, 2007). Ampara District is one of the densely populated area with the population of 664,393 in 2006 and is an area of 4431.4 square km consisting of the Sinhala, Muslim and Tamil communities. These ethnic communities are living in the district with ethnic ratios of 42.53 per cent Muslim, 38.88 per cent Sinhala, 18.39 per cent Tamils and 0.20 per cent others. The main livelihood opportunity of the people in the district is agriculture, especially paddy cultivation. Ampara District is in the dry zone and has two seasons (Maha and Yala) of paddy cultivation, with the help of the Galoya River Valley irrigation infrastructures. The total cultivable area under paddy is 55,000 hectares and the average production is 250,000 metric tons in a season. It is equivalent to a fifth of the country's requirement (Planning Secretariat, Ampara, 2007).

Against this backdrop, in the recent past paddy cultivation in the Ampara district is characterized by the increasing input cost and low market price, poses a serious question about future progress of the sector among paddy farmers. At this juncture, hereditary paddy farmers, in Ampara district than that of other districts in Sri Lanka, are not in a position to give up paddy cultivation because there is no other alternative employment opportunity available in the rural area for the farmers to undertake and improve their family income. Although paddy is cultivated in all districts in Sri Lanka, only four districts Kurunegala, Polannaruwa, Anuradhapura and Ampara are the major paddy producing districts in Sri Lanka. These four districts contribute more than 50 percent of total paddy extent and more than 60 percent of total paddy production in Sri Lanka. It is now seen in Sri Lanka that the paddy farmers give up paddy cultivation because of Low income and low profit. Thus, more paddy lands are given up from cultivation during last decade. However, farmers from Ampara district are unable to stop paddy cultivation since they don't have alternative job opportunities. This district plays key role in providing more output to the national product from ancient time to date. Therefore, this study tries to compare the role of paddy cultivation of Ampara district with selected district Kurunegala, Anuradhapura and Polunaruwa.

### **Objectives of the Study**

The main objective of the study is to explore the performance of Ampara district in extent of paddy cultivation, total paddy production, and productivity in paddy cultivation in comparison with major paddy producing districts such as Kurunagala, Polunaruwa, Anurathapura and national level.

### **Data Analysis**

A descriptive analysis was done using secondary data sources collected from Agriculture and Environment Statistics Division of Department of Censes and Statistics. Collected time series data (1979-2008) of selected four districts namely Kurunagala, Anuradapura and Polunaruwa and Ampara in regard to paddy extent, production and productivity were used for this analysis.

### **Results and Discussions**

In this section an attempt has been made to make an overall evaluation of Ampara district. The nature of Ampara district in paddy production compared to selected four districts and national

level are analyzed in regard to extent of paddy cultivation, total production and productivity. The analysis is based on the time series data collected from Agriculture and Environment Division of Department of Census and Statistics. The some of the policy analysis of the results are also emphasized at the end. This section is divided into three parts as extent of paddy cultivation, total paddy production and yield per hectare.

### Extent of Paddy Cultivation

In Sri Lanka harvested extent of paddy cultivation was 446,000 ha In 1952. It has gradually increased year by year. Further, it was 604,000ha in 1962, 825,000ha in 1990 and 1,033,000 ha in 2008. Table 1 shows the trend of paddy extent of Kurunagala, Anuradapura, Polunnaruwa and Ampara districts and national level.

**Table 1**  
**Extent of Paddy Cultivation in Selected Districts, 1979 – 2008 (in Hectare)**

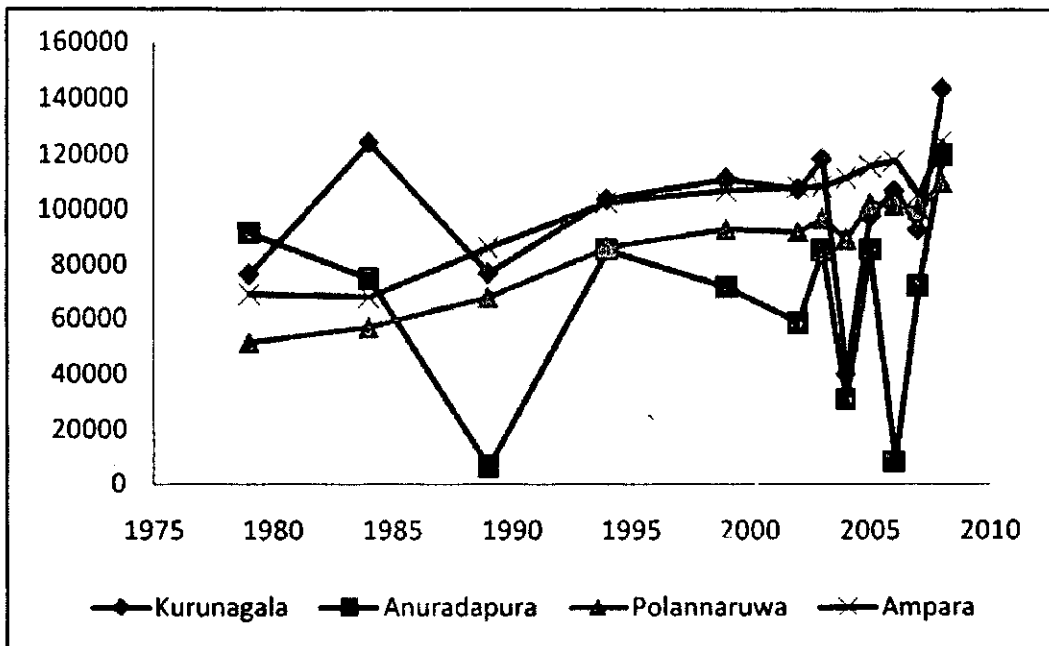
| Year | Kurunagala        | Anuradapura       | Polannaruwa       | Ampara            | National Level     |
|------|-------------------|-------------------|-------------------|-------------------|--------------------|
| 1979 | 76,249<br>(9.7)   | 91,403<br>(11.6)  | 51,230<br>(6.5)   | 69,154<br>(8.8)   | 782,314<br>(100)   |
| 1984 | 124,018<br>(14.0) | 74,715<br>(8.4)   | 56,716<br>(6.4)   | 68,041<br>(7.6)   | 885,807<br>(100)   |
| 1989 | 76,677<br>(11.1)  | 6,399<br>(0.9)    | 67,758<br>(9.8)   | 86,277<br>(12.5)  | 689,752<br>(100)   |
| 1994 | 103,546<br>(11.5) | 85,282<br>(9.5)   | 86,095<br>(9.6)   | 102,699<br>(11.6) | 896,551<br>(100)   |
| 1999 | 111,097<br>(12.7) | 71,663<br>(8.2)   | 92,587<br>(10.6)  | 106,748<br>(12.2) | 871,892<br>(100)   |
| 2002 | 107,254<br>(13.0) | 58,795<br>(7.1)   | 91,805<br>(11.2)  | 108,182<br>(13.1) | 819,590<br>(100)   |
| 2003 | 118,125<br>(12.9) | 84,937<br>(9.2)   | 96,462<br>(10.5)  | 108,512<br>(12.0) | 910,25<br>(100)    |
| 2004 | 39,970<br>(5.5)   | 30,981<br>(4.3)   | 89,130<br>(12.3)  | 111,713<br>(15.5) | 719,694<br>(100)   |
| 2005 | 97267<br>(10.6)   | 85272<br>(9.3)    | 102051<br>(11.0)  | 115610<br>(12.6)  | 815161<br>(100)    |
| 2006 | 106,543<br>(11.8) | 8,277<br>(0.9)    | 101,160<br>(11.2) | 117,654<br>(13.0) | 900,101<br>(100)   |
| 2007 | 92516<br>(11.6)   | 72113<br>(9.0)    | 100073<br>(12.5)  | 105380<br>(13.2)  | 795713<br>(100)    |
| 2008 | 143,431<br>(13.8) | 119,755<br>(11.5) | 109,700<br>(10.6) | 124,599<br>(12.0) | 1,032,850<br>(100) |

Source: Department of Census and Statistics, Sri Lanka

Note: Figures in the parenthesis denote percentage

According to the table, paddy extent for four districts from 1979 to 2008 has increased, thus extent of national level has also increased significantly. These selected four districts Kurunagala, Anuradapura, Polunnaruwa and Ampara districts contribute 9.7 percent, 11.6 percent, 6.5 and 8.8 percent in 1979, respectively. So, the percentage share of four districts was about 36 in 1979 and this rose to 50 percent in 2008. Therefore, it is to be noted that the percentage share of these four districts is half of total extent of paddy cultivation in Sri Lanka.

Of this Ampara district provided only 8.8 percent in 1979 but it went up to 12 percent in 2008. The percentage share for Kurunegala, Anuradhapura and Polunnaruwa districts to the national level were higher in 2008 than in 2004. However, this fluctuation in paddy extent is exceptional to Ampara district. The trend of paddy extent of Ampara district has been gradually increasing between 1979 -2008 except in 2007. Further, the degree of paddy extent is higher in Ampara district than other districts throughout the period (see figure 1).



Source: Same as Table 1

Paddy extent in Polunnaruwa, Kurunagala and Anuradapura districts has increased by 114 percent, 88 percent and 31 percent during last three decades (1979-2008). But, the extent of paddy cultivation in Ampara district has also increased by 80 percent in this period. However, paddy extent in Polunnaruwa, Kurunagala and Anuradapura districts has fallen during the year 2002-2006 period, while it has increased in Ampara district. It could be understood that open market price of paddy was down during this period.

In sum, comparing with Polunnaruwa, Anuradhapura and Kurunegala districts, paddy extent in Ampara district has considerably increased from 1979 to 2008 and also percentage share is higher than all other districts..

### Total Paddy Production

The total paddy production in Sri Lanka increased greatly from 604,000 metric tons in 1952 to 1.156 million metric tons in 1975 and 3.875 million metric tons in 2008. Table 2 indicates the total

paddy production of selected districts and national level. According to the table, these major paddy producing four districts contribute 40 percent to the total paddy production in Sri Lanka in 1979 and it has improved more than 50 percent in 2008. The percentage share of Ampara district has increased from 11 percent in 1979 to 15 percent in 2008. However, Ampara district has provided nearly one fifth of total national paddy output in 2004. This is the only district that provides more percentage share to the national product in Sri Lanka. This exhibits paddy farmers in this district then and now depends on this sector itself.

During last three decades, total production in Polunnaruwa, Ampara, Kurunagala and Anuradapura districts has increased by 225 percent, 175 percent, 156 percent, and 65 percent, respectively. So, Ampara district is the best in second best among them. It is to be noted that the extent of paddy cultivation in Polunnaruwa district has increased by 175 percent while this was increased only by 80 percent in Ampara district during this period.

**Table 2**

**Total Paddy Production in Selected Districts, 1979 - 2008 ('000 Metric Tons)**

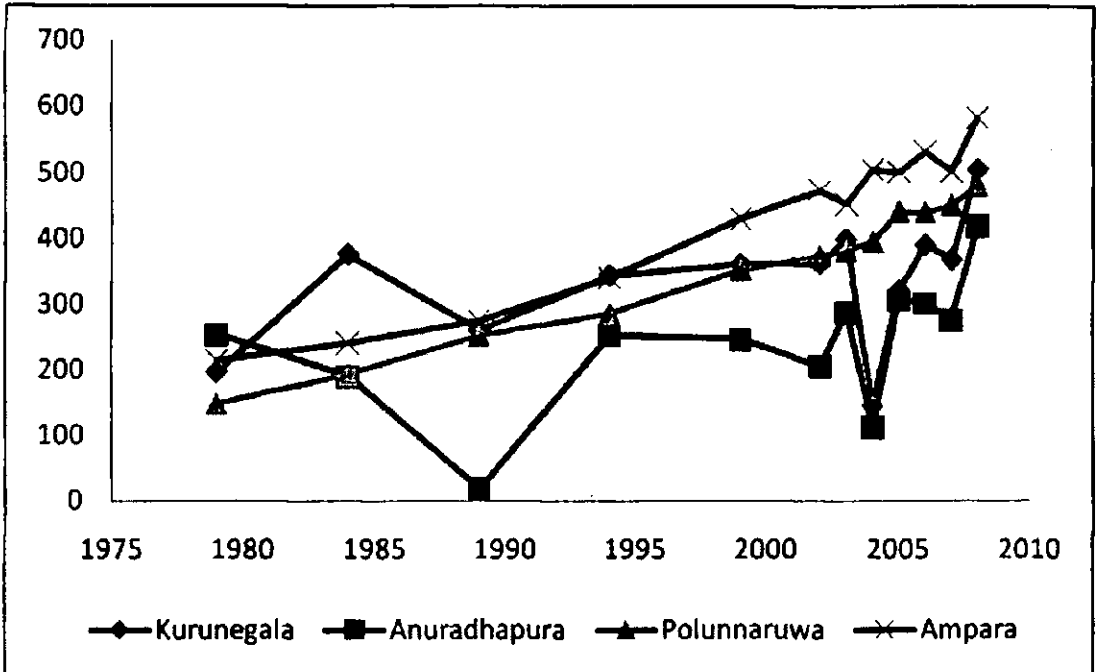
| Year | Kurunagala      | Anuradapura     | Polannaruwa     | Ampara          | National Level  |
|------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1979 | 196.2<br>(10.2) | 252.7<br>(13.1) | 147.3<br>(7.6)  | 212.7<br>(11.0) | 1920.7<br>(100) |
| 1984 | 375.2<br>(5.5)  | 188.9<br>(7.8)  | 191.6<br>(7.9)  | 240.6<br>(9.9)  | 2416.5<br>(100) |
| 1989 | 260.4<br>(12.5) | 17.7<br>(0.8)   | 251.9<br>(12.1) | 273.9<br>(13.2) | 2067.3<br>(100) |
| 1994 | 343.3<br>(12.7) | 250.8<br>(9.3)  | 285.1<br>(10.6) | 338.9<br>(12.6) | 2687.8<br>(100) |
| 1999 | 360.6<br>(12.6) | 245.3<br>(8.5)  | 352.8<br>(13.1) | 428.3<br>(14.9) | 2862.1<br>(100) |
| 2002 | 361.3<br>(12.6) | 204.0<br>(17.1) | 372.0<br>(12.9) | 472.0<br>(16.4) | 2863.7<br>(100) |
| 2003 | 379.4<br>(12.9) | 286.8<br>(9.3)  | 381.4<br>(12.4) | 451.1<br>(14.6) | 3069<br>(100)   |
| 2004 | 145.2<br>(5.5)  | 111.7<br>(4.2)  | 394.7<br>(15.0) | 503.2<br>(19.1) | 2627.8<br>(100) |
| 2005 | 319.9<br>(9.8)  | 305.6<br>(9.3)  | 440.5<br>(13.5) | 499.9<br>(12.9) | 3246<br>(100)   |
| 2006 | 389.4<br>(11.6) | 301.5<br>(9.0)  | 439.0<br>(13.1) | 530.8<br>(15.8) | 3341.9<br>(100) |
| 2007 | 366.9<br>(11.7) | 275.0<br>(8.7)  | 450.4<br>(14.3) | 520<br>(15.9)   | 3131.3<br>(100) |
| 2008 | 503.4<br>(12.9) | 418.5<br>(10.8) | 478.9<br>(12.3) | 582.6<br>(15.0) | 3876.4<br>(100) |

Source: Department of Census and Statistics, Sri Lanka

Note: Figures in the parenthesis denote percentage

**Figure 2**

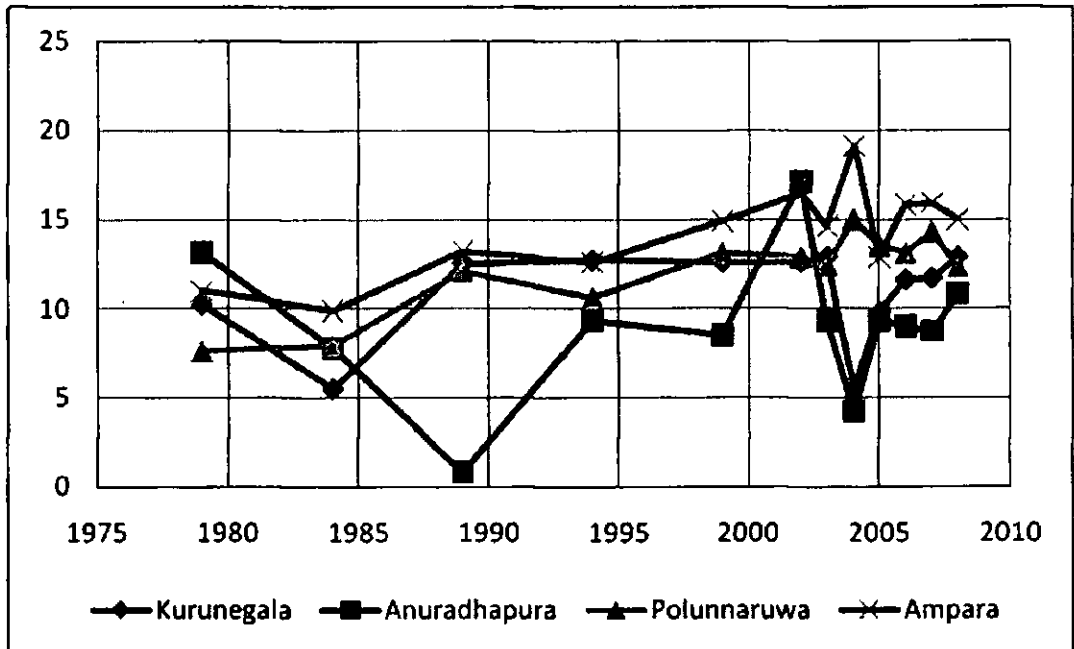
**Trend of Total Paddy Production in Selected Districts, 1979 – 2008**



Source: Same as Table 2

**Figure 3**

**Trend of Percentage Share to the National Product**



Source: Same as Table 2

The total paddy production in Ampara district has continuously been increasing as well as in Polunaruwa district. However, the degree of total paddy production of Ampara district is higher than Polunaruwa district. Total paddy production in Kurunegala and Anuradhapura districts declined in 2004 as the paddy extent of these districts was slow during this year. This is because of the reasons that the price of paddy and demand for paddy in the open market was down in 2003. Hence, Paddy farmers in Kurunegala and Anuradhapura districts were compelled to shift from paddy cultivation to other field crops such as vegetables, fruits, livestock and other crops (Central Bank, 2004). The price of paddy has increased again from 2004 as the demand for paddy has increased in the market. As a result, Paddy extent and total paddy production in Kurunegala and Anuradhapura districts again started to increase from 2005. However, total paddy production has come down again in 2007. Heavy rain between October-December and lowest producer's paddy price in 2006 are the main reasons for low paddy production in 2007. Therefore, extent of paddy cultivation has been reduced by paddy farmers in 2007 (Central Bank, 2007). Further, higher wheat flour price in the later part of 2007 has caused to increase demand and price of paddy during this period. Hence, paddy extent and production went up again in 2008.

Therefore, it can be seen that there is a positive relationship between price of paddy in the open market and utilization of paddy extent Kurunegala, Anuradhapura and also Polunaruwa districts. But, these price changes in the open market has not affected on paddy extent and total paddy production of Ampara district. Since the paddy extent and production in Kurunegala and Anuradhapura districts increases, the percentage share of Ampara district to the national paddy production has decreased from 19.1 in 2004 to 15.0 percent in 2008.

Table 3 shows rice import and producer's paddy price in Sri Lanka from 2000 to 2007. Accordingly, there is a positive relationship between rice import and paddy price. Despite producer's paddy price, in general, was low in the market, it is higher in 2004 and 2007 when compared to other years.

**Table 3**  
**Rice Import and Producer's Paddy Price in Sri Lanka, 2000 – 2008**

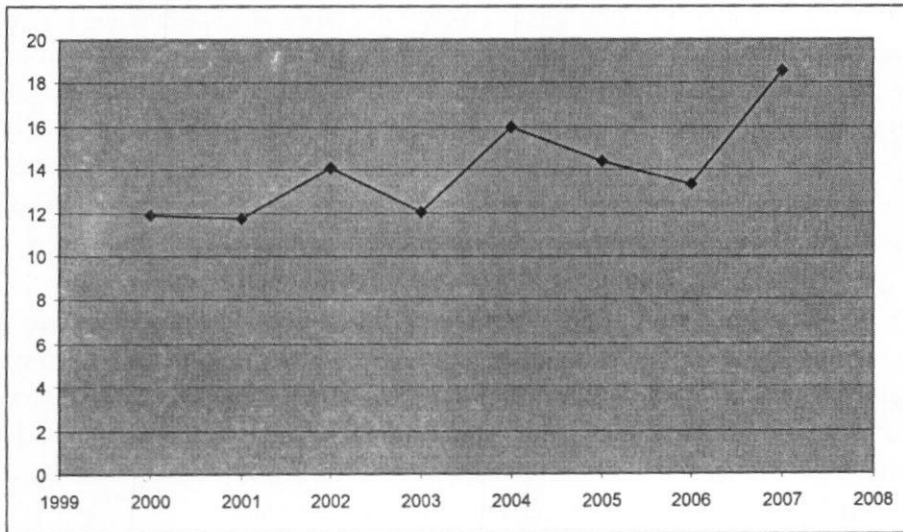
| <b>Year</b> | <b>Rice Import ('000 Metric Tons)</b> | <b>Producer's Paddy Price (Per Kg)</b> |
|-------------|---------------------------------------|--|
| 2000        | 15                                    | 11.86                                  |
| 2001        | 52                                    | 11.75                                  |
| 2002        | 95                                    | 14.07                                  |
| 2003        | 35                                    | 12.05                                  |
| 2004        | 222                                   | 15.98                                  |
| 2005        | 52                                    | 14.36                                  |
| 2006        | 12                                    | 13.35                                  |
| 2007        | 88                                    | 18.57                                  |

Source: Central Bank of Sri Lanka.

Hence, rice import also is higher in the same years. It is to be noted that the government has increased rice import in 2007 in order to prevent higher paddy price level in the open market (Central Bank, 2007). Total paddy production and paddy extent in 2004 and 2007 was low as the

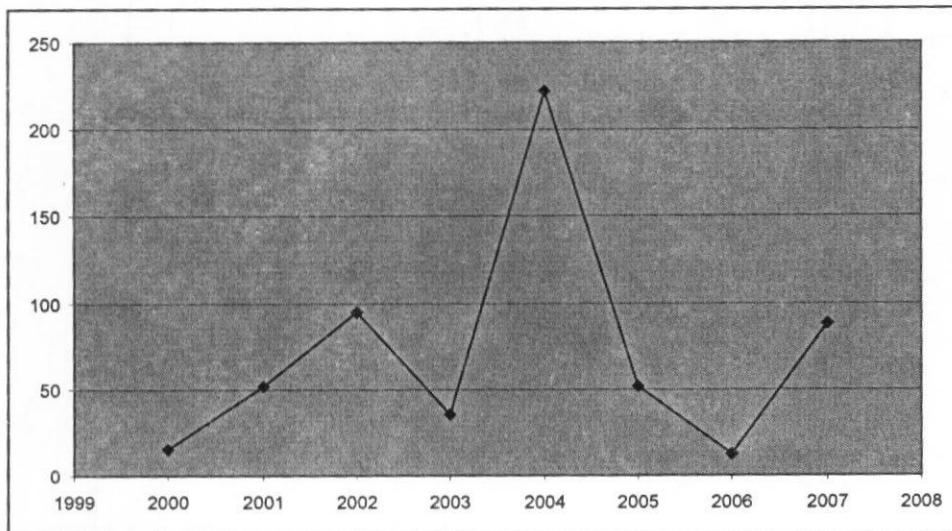
producer's paddy price was very low in 2003 (Rs.12.05/Kg) and 2006 (Rs.13.35/kg). On the other hand, higher producer's paddy price in 2004 and 2007 has caused to increase in paddy extent and production in Kurunegala, Anuradhapura, Polunaruwa and also Ampara districts in the years of 2005 and 2008. Therefore, changes in paddy price in the open market affect on paddy cultivation and production in the following year. (See table 1 and 2)

**Figure 4**  
**Trend of Paddy Price in Sri Lanka, 2000 – 2007**



Source: Same as Table 3

**Figure 5**  
**Trend of Rice Import in Sri Lanka, 2000 – 2007**



Source: Same as Table 3



Further, Ampara district recorded a best output (16.5 percent) in 1987 and it was second best (13.5) in 1988. However, it is to be understood that Ampara district has been in first rank to the national paddy output in Sri Lanka from 1989 to date.

### Productivity

Yield per hectare indicates the productivity in paddy cultivation. Since suggestive government policies were productivity oriented from independence, yield per hectare in general, has been increasing up to now in Sri Lanka. The average yield for the year 1952 was 1,588 kg/ha which improved greatly to 2,621 kg/ha in 1978. There was even greater increase in the average yield in 2008 which stood at 4,184 kg/ha. The Table 3 shows the productivity trend of selected four districts from 1979 to 2008, accordingly, yield per hectare continuously increases in four districts and national level of production.

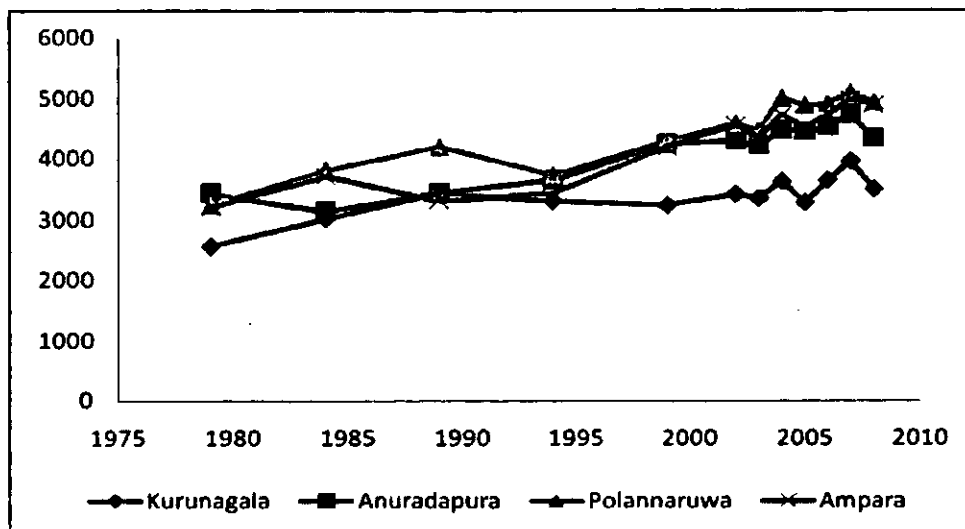
**Table 3**  
**Average Yield, 1979 – 2008**

(Kgs. Per Hectare)

| Year | Kurunagala | Anuradapura | Polannaruwa | Ampara | National Level |
|------|------------|-------------|-------------|--------|----------------|
| 1979 | 2568       | 3432        | 3246        | 3213   | 2748           |
| 1984 | 3020       | 3137        | 3813        | 3713   | 3080           |
| 1989 | 3438       | 3442        | 4196        | 3317   | 3375           |
| 1994 | 3310       | 3651        | 3737        | 3447   | 3369           |
| 1999 | 3240       | 4250        | 4300        | 4192   | 3666           |
| 2002 | 3425       | 4296        | 4580        | 4561   | 3893           |
| 2003 | 3361       | 4225        | 4468        | 4345   | 3761           |
| 2004 | 3633       | 4484        | 5006        | 4713   | 4086           |
| 2005 | 3289       | 4458        | 4879        | 4523   | 3963           |
| 2006 | 3655       | 4530        | 4905        | 4720   | 4137           |
| 2007 | 3966       | 4742        | 5088        | 4984   | 4386           |
| 2008 | 3510       | 4345        | 4935        | 4894   | 4184           |

Source: Department of Census and Statistics, Sri Lanka

**Figure 4**  
**Productivity Trend in Paddy Cultivation, 1979 – 2008**



Source: Same as Table 3

However, increasing rate of Ampara and Polunnaruwa districts is higher than Kurunegala and Anuradhapura districts. Yield per hectare has increased by 52 percent in Ampara and Polunnaruwa districts while it was 37 percent and 26 percent has increased in Kurunegala and Anuradhapura districts, respectively. According to the productivity trend, the performance of Ampara district has recorded second rank. Yield per hectare in Ampara and Polunnaruwa districts between 1979 and 2008 is always higher than the national level.

Under the Mahinthe Chintana from 2006 Sri Lankan government provides fertilizer subsidies for both seasons in order to improve in paddy cultivation in Sri Lanka. Hence, fertilizer uses has increased significantly in the Ampara district too. Apart from this improvement of technology, extension services, irrigation facilities and other services has improved the productivity in paddy cultivation.

### **Conclusions and Recommendation**

This is a study undertaken by the researcher on the role of Ampara district in paddy sector especially in comparison with selected three districts in Sri Lanka. It is quite clear that from the above finding that Ampara district has played a tremendous role in extent of paddy cultivation, total paddy production and productivity in paddy sector in Sri Lanka. The government activities such as fertilizer subsidies and other services have improved the agricultural production specially paddy production in Sri Lanka. As Sri Lankan government has failed to implement sustainable price policy, price of paddy after liberalization set-up has been fluctuating time to time. Hence, paddy farmers island wide are frustrated and some time given up paddy cultivation while paddy price goes down in the market. However, according to the finding this situation has not been witnessed in Ampara district. Any price changes in the market have not much affected on paddy cultivation in Ampara district up to now. Further, paddy extent, total production and productivity in Ampara district has been moving up during last three decades. Therefore, the contribution of Ampara district in paddy sector is still flourished well in comparison with selected districts. Lack of sustainable price for paddy in the market has caused enormous difficulties to the paddy farmers. This is because of unstable policy of the government in maintaining sustainable price for paddy. So, it is important on the part of the government to stabilize price of paddy without being fluctuated to make sure that the paddy farmers are benefited significantly.

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