

# Technological Advancement and its Impact on the Traditional Way of Life in the Rural Farming Society: South Eastern Region of Sri Lanka

(1) Department of Social Sciences, South Eastern University of Sri Lanka, Oluvil, Sri Lanka.  
(email:ayoobsm@seu.ac.lk)

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**Abstract:** All through time, technological and scientific advancements have always had an impact on society and its member's way of life. This study gives an attention to explain the impacts of technological advancements which are used in farming on the rural farming society. As a constructive impact, the technological advancement enables the poor farming society to get an education and transform their way of life. And the farming manufacturers also have some benefits from this technological advancement, for instant: easiness, low cost and the short period of timing for doing their works. Unemployment, loss of social customs traditionally celebrated in the harvesting season and poor people's collecting spilled paddy in the paddy are also identified as the harmful impacts of these technological advancements.

**Keywords:** Technological advancement, farming society and traditional way of life

## Introduction

So called machine age has revolutionized the life of mankind with its wonderful achievement in the fields of science and technology as its application in agriculture, husbandry, agro based cottage industries previously practiced by the traditional method have become notable. Though the fact that with the novel modern technique production of material and goods are tremendous beyond questioned. Is so there are

some views directed towards the traditional farmers, farm labors and cultivators with limited amount of arable lands for crops and plants have come to face hardship to the extent of mostly living conditions of the poorest families in this planet. These are treated as underprivileged against those who enjoy a benefit of modernization in agricultural industries.

## Objective

The main objective of the study is to identify the positive / beneficial changes in the rural agricultural society attained through the mechanization of agriculture and also to verify the negative /adverse consequences suffered by the mechanization on the rural society.

## Research Design and Methods

In this study various methods are used for data collection – from primary as well as secondary sources. Secondary data was collected from Divisional Secretariat, NGOs records, official records, books, publications, journal articles, reports, and other relevant documents. Primary data was collected through questionnaires survey from 100 selected household based on purposive sampling methods, 8 key informant interviews and 3 Focus Group Discussion (FGDs). Data analysis was done both manually and through computer software.

## Scope of the study

### A. South Eastern region: a brief Introduction

The Amparai is one of the 25 administrative districts of Sri Lanka. The district was carved out of the southern part of Batticaloa in 1958. The Ampara district is 4431.4sq kilometers in extent and has population of 605553 (2003), Sinhala, Tamil and Muslim are the three major communities living in the district and the ethnic ratio is 41.59% Muslim, 39.33 Sinhala, 18.76% Tamils and 0.32 others. The district consists of 20 Divisional Secretariat areas, 505 Grama Niladhari Divisions and 828 villages. The district is mainly an agricultural but there is potential for industrial development (Divisional Secretariat, Kalmunai 2008: 20).

The South eastern region (Study area) is found in the Ampara district and it has 13 Divisional Secretariats. The study location is covered by Periyaneelavanai on the North, Panama on the south, Ampara town on the west and Bay of Bengal on the east. This is a multi-ethnic, multi-religious, and multi-cultural district. Sinhalese, Muslim and Tamil are the three major communities living here. It is rich in natural resources like water and fertile land. Because of this, this district is known as “Store of Paddy in East” (Jameel, S. H. M., 1997). In addition, sea is on east with huge paddy lands on its west. Most of the people in this region are labors on the paddy lands and some men are engaged in commercial enterprises. Some of them work in government and non governmental organizations and in small industries.

Following figure clearly shows the location of Ampara district forming the study area.

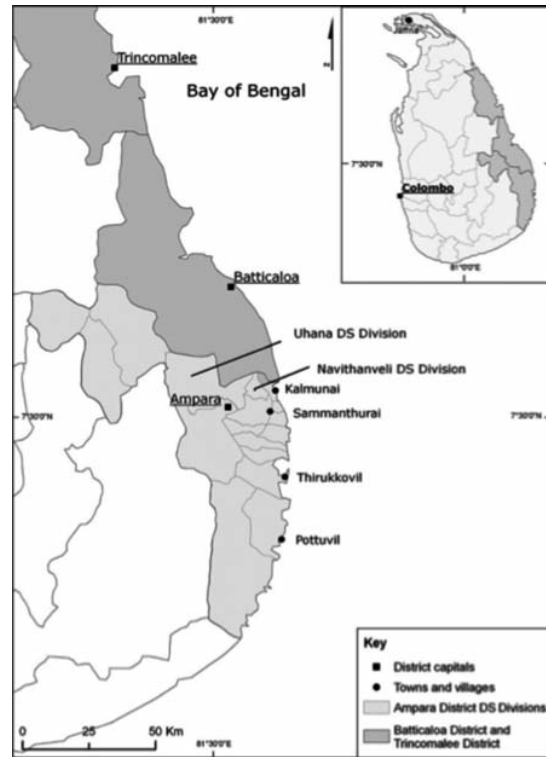


Figure 1:

Ampara District and the location of the study area

### B. Historical background of technological advancement in the agricultural industry in the study area

Muslims of South Eastern region had been living under feudal system until 1950. But, after 1950s the following major components were the causes for the mobility in their life style, especially from the point of economy and social structure or status.

1. Land reformation
2. Introduction of machineries in agriculture
3. Intensive implementation of education in mother tongue (victor,1997)

Land reformation in 1950s (land distribution and resettlement) has commonly brought about a great change and mobility on the class system of Eastern Muslims. This sort of believes has caused increasing the number of agricultural laborers and farmers in middle-class family. Then they became independent

agricultural land owners, and they were able to maintain their cultivation by themselves. In that way, the land reformation has created independent capitalist relationship among South Eastern Muslims instead of feudal agricultural system.

The growth of capitalism has facilitated the use of many types of machineries for whole agricultural activities including paddy cultivation in this society. For instant, during 1950, Tractor, machine for collecting paddy from dash and pumps for spreading chemicals and poisons...etc.

The use of these machineries has created many changes in different angle of the social set up of the Muslim community. Many agricultural laborers were deprived of their job in agricultural cultivation and harvest due to the usage of machineries. In this situation, agricultural labors also were compelled to migrate (regional migration and seasonal migration) from their aggregate segment area to other region where agriculture was the main source of employment for income, especially in Anuradhapura and Polonnaruwa (the place where agricultural labors are felt necessary).

This situation was followed by the society until 1980 to 2000. But, after 2004, many different types of machineries were introduced in this south eastern region where paddy cultivation is the back-born of the economy for the survival of the people.

After Tsunami, particularly, the harvest machine (the size of the machine is very bigger than other machines they used earlier) is also called as "Tsunami machine" which showed an easy way for their cultivation and harvest. At the same time these machineries have consequently posed many challenges and caused negative impacts on the farmers in the area of research.

Therefore, this paper aims to analyze the positive and negative impacts of mechanization of agricultural industries in the rural farming society of south eastern Sri Lanka. Now many types of machineries are in use for each purpose in the agricultural industry.

## Finding and Analysis

The south eastern region is normally surrounded by many villages where agriculture is the main occupation for the survival of the rural communities. In that way people of this region had been following the traditional practices in agricultural activities since ancient period to 1950s. After 1950s, most of the machineries were used for their cultivation and harvest activities. This great mechanization in the agricultural industries has caused many consequent impacts on the rural communities in this area of research.

### A. Positive impacts of technological advancement on agricultural industry

Mechanization in the south eastern region has brought about many positive impacts on the agricultural community. The participant of FGDs expresses their opinions that

"The mechanization has helped them to carry out their work intensively in their cultivation. Normally, for a harvest they need five to seven days and nearly twenty agricultural labors to get the out-put from their paddy fields. But, the farmers have pointed out that only five hours is enough for the above mentioned work with the use of machineries. So, all machineries are helping a great deal to the farmers to complete their work quickly and can reduce their workload."

After 2004, a group of people was functioning for the cultivation activities such as plough, sowing, harvesting, threshing and weeding in the rural areas. This working group was being called as "Thattu system" (a group of agricultural laborers). Each work in terms of harvesting, cultivation, watering, spreading poison, weeding etc..., had been distributed among the different types of working groups (Thattu groups) and they were able to make all the arrangement for whole cultivation activities in their villages. This system had been in practice not only in this research area but also in many part of eastern region in Sri Lanka.

Consequently, this Thatty system work was in nature of long period of time, having expenditure as well as hard works. Therefore, an approximately 95% percentage of farmers are used machineries for their agricultural activities to mitigate the above mentioned disadvantages.

At present, lack of agricultural labor has become very immense crisis for farmers comparing with what they had earlier. The improvement of tertiary and higher education of the new generation is giving the employment opportunity to work under government and private sectors. Many students from the middle-class families have got university entrance in these village communities. The south eastern university is an important evident.

On the other hand, foreign employments for young men and women as well as educated people from agricultural families were kept away from the agricultural activities. But nowadays, elderly and experienced people are working as agricultural labors and no one is ready to work in the paddy field from younger generation. This generation is converted in to other employment sectors instead of agricultural activities.

Therefore, this generational gap is filled with the machineries in the agricultural activities in the south eastern region of Ampara district.

One of the key informants, who is a officer in Agricultural Productivity Centre, said that

“The arrival of new machineries in the agricultural activities has reduced the huge expenditure of the farmers. Harvest is being completely made with the help of new machineries, although they use Tractor for only plough the cultivation land. In the past, many works were done with the help of human resource and it took too long period to complete their works. But, the new works in agricultural activities are being done intensively by using newly arrived machineries. For instant, it costs 100,000.00 rupees to complete the full work of one acre paddy land by using the human

resource. But, now these works need only 50,000.00 rupees by using machineries”

## **B. Negative impacts of technological advancement on agricultural industry**

Mechanization was introduced to the agricultural community in order to accelerate the rate of cultivation and harvest activities easily to avoid difficulties that were to be faced in the rural agricultural segment. But, inexpertly these machineries lead to an appropriate negative impact on rural farmers. So, this study tries to emphasis the negative impact of mechanization also on rural agricultural industry and community in the south eastern Sri Lanka.

One of the key informants, who is a lecturer in sociology, said that

“One third of populations in this research area are living with many difficulties such as poor economical condition and they are excluded from the traditional agricultural activities due to the arrival of new machineries. These machineries need no more agricultural laborers for the cultivation and harvest activities. Therefore the uses of these machineries directly have directly come to affect on the employment conditions of the poor farmers. This situation is being happened particularly in Akkaraipattu, Addalaichenai, and Nintavur divisional secretariat areas.”

Most of the farmers were depending on agriculture for their daily survival. They did not have educational capability to join any state or the private sector for higher or low professional (employment) opportunities. As a result of this they were able to work on the paddy fields to get some income for their family life earlier. But, now they have lost these agricultural employment opportunities in their own areas due to the intensive use of machineries.

According to the observations, key informant interviews and Focus Group Discussion (FGD), the researcher could observe that many people in these areas particularly the poor farmers are unemployed. As a result, they are unable to earn from the agricultural

industries although they have good experience in the agricultural activities as well as in this area fully covered with vast extend of cultivation lands and continuous paddy cultivation.

At the same time many agricultural labors have migrated to foreign (Middle-east) countries to get employment in order to satisfy with the basic necessities of life and to build up their livelihood better. But some times, this foreign employment also can create some other social and cultural problems or issues (delinquency, child labors...etc.) on family; it is because of the trend in mechanization in agricultural fields in the rural community.

The participants of FGDs indicates that

“Traditional activities are distracted in the agricultural segment. The religious believes and practices, values, customs, folk song, group work, participation of relatives and neighbors and women involvement have disappeared in the village community. During the early period, farmers were celebrating both cultivation and harvesting as festival days. During the harvesting season many events have taken place in every village such as,

- Gathering all family members and neighbors for harvesting.
- Preparing meals at home (domestic preparation is higher prioritized in villages) for working farmers and others who were working with farmers on the paddy fields. But nowadays, they use to order meals in hotels for cultivating people.
- Farmers go to paddy fields and they celebrate every moment with the family members.
- During the time of harvest, village people are working together and singing folk songs while harvesting.
- Men and women work together without any gender differences at the paddy fields while they weed the grass and harvest.

These sort of happiest activities are ignored. Under this circumstance the new generation also does not know about these joy-able cultural events. The mechanization process is gradually changed the cultural events and joyful entertainment in every village in this region.”

Another important thing is collecting spilled ears at the paddy field. Many poor men normally collect the spilled ears during the harvest season to get an additional income. But, after mechanization, this traditional spilled earss collection system is also given up by the people. So, the uses of new machineries have directly affected the economical activities of the poor people in the rural agricultural industry.

Another important issue that due to the mechanization, only rich person like machine owners and land owners was able to get benefit more than others.

### C. Questionnaire survey for the research

The following table 1 illustrate that the percentage of positive and negative impacts of mechanization of agriculture industry.

**Table 1:**

Positive impacts	Percentages
1. Easy access	93%
2. Low cost	80%
3. The earlier disadvantages are set right	88%
Negative impacts	Percentages
1. Lack of employment for agricultural labors	90%
2. Disappearance of the traditional practices	98%
3. Lost of the harvesting festival/celebration	66%
4. Weakening Tatty system	68%
5. Unable to poor people in collecting spilled ears of paddy	80%
6. Only rich person like machine owners and land owners were able to get benefit more	

(Source: Survey data, 2012)

According to this questionnaire survey, it can be realized that the easy accessibility (93%) and the low cost of harvesting (80%) were identified by the farmers as their enormous benefits or the advantages as a result

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of the launch of the machinery activities in the agricultural sector. But, on the other hand, the 90% percent of the informants suggested that the new machineries have created the unemployment problems among the agricultural labors and the survival of the families in the agricultural segment of the research area are made difficult.

Through the data analysis, the 98% percent of the people have agreed on the harvesting system of celebrating it as festival by farmers in the past, but, it has been changed as material work based on payment. The agricultural community also has lost their traditional practices, followed in the activities of the cultivation and harvesting. And the weakening of the Tatty system is also a barrier in practice their all traditional events in the agricultural activities.

## Conclusion and Recommendation

Most of the people in the south eastern region work in paddy lands. This region is rich in natural resources like water and fertile land. It is known as "Store of Paddy in East" as mentioned earlier. In this region farmers were doing their cultivations with a help of human resource with full participation. They have decided their cultivation and harvest based on their traditional experience practices and the guidance of experienced people in the rural segment of the coastal area.

After 1950, many types of machineries were introduced to the agricultural industry in this research area. In such a way there the people have closely associated with new machineries to make cultivation and harvest quick, easy and successful. Because these machineries have helped to make the agricultural activities in order to accelerate the work quickly. Anyhow, according to the data analysis made, it could be identified that these machineries have consequently made some positive impact on the rural agricultural industry of the farmers of the agricultural community.

So, through the data analysis, it can be concluded that the mechanization of agricultural industry has directly affected the farmers in terms of their

employment, livelihood, and daily economical survival (collecting spilled ears) and it lost their culture and the traditional events and the celebration within their social contexts. So this mechanization process made both positive and the negative impacts on the agricultural industry of the rural agricultural community in the south eastern region of Sri Lanka. Even it has negative impacts it is inevitable process. So the society should transform to accept the changes due to the mechanization.

## References

- Anas, M.S.M, Ameerdeen, V and Vaseel, A.J.L., (2008) *Muslims and Communal Riots in Sri Lanka*, Sri Lanka: Islamic Book House.
- Divisional Secretariat, Kalmunai (2008) *Resource Profile*, Kalmunai: Planning Division - Muslim Divisional Secretariat.
- George, Frerks and Bart Klem (2004) *Dealing with Diversity: Sri Lankan Discourses on Peace and Conflict*, Netherland: The Netherlands institute of International Relations 'lingendael'.
- Jameel, S. H. M (1997). *Muslims of Ampara District*. Colombo: Ministry of religion and cultural affairs.
- Statistical Information, 2008 - Administrative and Local Government*, Eastern Provincial Council.
- Thavarajah, V., (2007) *Disaster Management (Tamil)*, Batticaloa: RPDO- Sri Lanka.
- Victor (1997) *Muslim Nation and Its Future (Tamil)*, Akkaraipattu: Third Man Publication.

## List of interviewees:

- I.L.Badurtheen – CDO, Agricultural Productivity Centre, Addalaichenai
- U.L. Siyath –In charger, Agricultural Productivity Centre, Addalaichenai



S.M. Jaufer former Vaddavithanai, Vellakal Thoddam

A. L. Ashraff - Agricultural Officer, Oluvil- Palamunai

Ibralebbe, A., Farmer, 130, Main street, Nintavur

Athambawa, N., Farmer, 141, Ameer Merza lane,  
Nintavur

Abdul Majeed, MT., Farmer, 118, 3<sup>rd</sup> cross street,  
Nintavur

U.L. Niyas, former D.S. Addalaichenai