

**RESEARCH FINDINGS OF 'ESTABLISHMENT OF
DEMONSTRATION FARMS PROJECT' IN BATTICALOA
DISTRICT IMPLEMENTED BY 'GERMAN TECHNICAL
COOPERATION (GTZ)'**

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ABSTRACT

Batticaloa District is one of the potential districts for agriculture development in Sri Lanka. Livelihoods of the district are traditionally dominated by agriculture including paddy cultivation, high land crop cultivation, animal husbandry and fishing. However; several reasons hindering the development of agriculture in Batticaloa district such as; ethnic conflict for the past two decades, cyclone of 1978 and Tsunami of 2004.

So, GTZ had decided to assist the people to improve their living condition with the coordination of the government of Sri Lanka. The program named as 'FSCT- food security and conflict transformation'. Under this program one of the main projects is the 'Establishment of demonstration farms' in the chosen areas. Other projects are distribution of fruit crops, home gardening, seed paddy production, cereals and pulses cultivation and participatory learning activities.

This research was focused on the 'Establishment of demonstration farms' project. A survey was conducted to find the positive and negative factors influences the success of the project in Batticaloa district during the period of April to May 2008. This survey was carried out 'multiple random sampling' and the data were analyzed in SPSS.

The results shows that, project success depends on several factors such as; land selection, soil type, continuous water supply, type of crops according to market demand and climate and interest of the farmers. So, initial consultation/ guidance, continuous cultivation related to market demand and climate and innovative beneficiaries are determined the success of the project.

Key words: Ethnic conflict, FSCT, GTZ, Livelihood

INTRODUCTION

'GTZ' is a German Technical Cooperation Agency and it has been working in Sri Lanka for the last 32 years against poverty and malnutrition. The target group of 'GTZ' is rural poor especially women headed families, landless, orphans, and disables. It has launched several activities throughout Sri Lanka to improve food security and income generation according to their needs and availability of resources such as: Established demonstration farms, seed paddy production, home gardening, fruit trees distribution and microfinance. Meanwhile more than 50,000 people have benefited by 'GTZ programs' directly and indirectly and significant amount of people had increased their income.

Batticaloa is the middle part of eastern Sri Lanka. It has 14 D.S divisions and 348 G.N divisions. Among the 14 divisions, 6 divisions have most vulnerable people than others such as: Vavunativu, Vaalaichennai, Kiran, Vellavelly, Chenkallady and Vaakarai. Because it has severely been affected by local war and the people were internally displaced several times and unable to found sustainable income generation activities. In these particular divisions, economy is mainly determined by climate due to the poor infrastructure facilities and frequent displacements. Same time it has received less assistance from government and non-governmental organizations due to the security reason and development remains as stagnant level.

So 'GTZ' had decided to provide immediate relief to displaced, vulnerable people and assist people to find suitable livelihood activities in sustainable manner. The identification of sub-projects has primarily been conducted by participatory rural approach (PRA) and participatory need assessment programs (PNA). After the programme 'GTZ' had agreed to establish demonstration farms in chosen areas for increase the productivity of the area, generate stable employment opportunities and these demonstration farms highly believed to attract more people in surrounding villages to engaged agriculture activities including exotic crops cultivation and adopt advanced technologies.

The 'Establishment of demonstration farms' project is a five years project. It has been implementing since 2004 September to 2008 September and it has four phases such as pre planning phase duration of three months, planning phase duration of six months, implementing phase duration of

three years/ six seasons and monitoring and evaluation phase duration of 15 months. Unfortunately during the planning phase in 2004 December the vakarai division highly affected by tsunami and during the implementation phase in 2006 five D.S divisions totally displaced except Vaalaichennai due to the war situation. Same time, during the displacement period all equipments, documents and investments were lost and damaged by wild animals and surrounding people. As the result of displacement six cultivable seasons restricted to three seasons. After the resettlement in 2007 the project was restarted with remaining resources. So, the implementation phase is extended and being implement up to date.

MATERIALS AND METHODS

The study was confined to Batticaloa district. The survey was carried out in 'GTZ' target areas including 05 D/S divisions except 'chenkalady' division (the project still not restart), which includes 18 Gramaniladhari divisions and 19 villages. The sample frame was beneficiaries list of the farmers organization which people are being benefited by demonstration farms accordingly in each farmers organization two farming families were selected. The target D/S divisions, Gramaniladhari divisions and respective villages showed in Table 2.1

D. S division	G.N divisions	Villages
Vakarai	Punanai	Vaalamarkerni
	Kirimichchi	Farm colony
	Urian kattu	Thattumunai
	Ammanthanaveli	Vammivettuwan
	Kathiraveli	Puthur
Vavunativu	Pavatkodichenai	Pavatkodichenai
	Vilavedduvan	Soruwamunai
Vellavelli	Navagirinagar	38 th colony
	Palayadiveddai	Palayadiveddai
	Vilanthoddam	Aliyarveddai
	Kannapuram east	Kannapuram east
	Kithul	Kithul
Kiran	Koraveli	Koraveli
	Thikiliveddai	Thikiliveddai
	Pulakadu	Pulakadu
	Vakaneri and Punanai	Mylanthannai
	Muruthanai	Muruthanai
Vaalaichennai	Punanai east	Rithithenna
		Jayanthiyaya

Method of data collection

The study used both primary data and the secondary data. Primary data collected through structured questionnaire and also focus group discussions. The village people were interviewed through this questionnaire. Socio economic information has been collected from personnel interview, secondary information and key informant discussions. Secondary data collected from government and non government institutions.

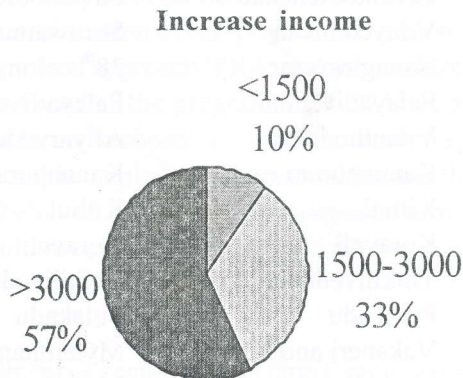
Farmers were questioned in detailed about major problems facing in cultivation, new farmers wish to joint to the society, net farming income from farm per season, climate changes, problems in land, pest and diseases, security restriction, adoption of advanced technologies, exotic crop cultivation, expenditure and their opinions/attitudes regarding knowledge about crops, Perception for participation trends and awareness of and willingness to adopt suitable cultivation methods to reduce the expenditure.

Analytical Procedure

The completed questionnaire was checked for completeness and the data was entered in the computer for the analysis using the SPSS 14.0 version. Then data analysis was confined to estimating frequencies and descriptive statistics.

RESULTS AND DISCUSSION

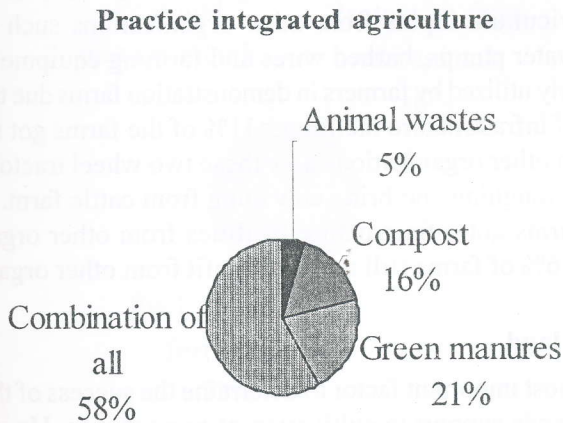
Income increased/ month by



57% of the farmer's income increased more than Rs 3000.00 per month, 33% of the farmer's income increased by Rs 1500.00- 2000.00 per month and 10% of the farmer's income increased less than Rs 1500.00 per month. The amount of income mainly determined by type of crop, members of family, pest and disease attack, current market demand, perishability of the product and interest of the farmers.

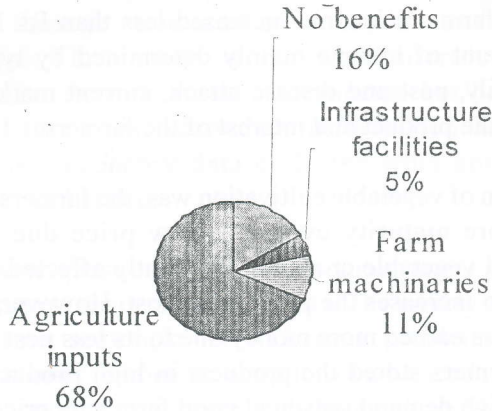
The main problem of vegetable cultivation was, the farmers have to sell all harvest before maturity even at a low price due to its high perishability and vegetable crops are frequently affected by pest and diseases, this also increases the production cost. However, cash crops cultivating farmers earned more money due to its less pest and disease problems and farmers stored the products in high production season and sell during high demand season at good farm gate price.

Adopt post harvesting technologies



These demonstration farms lead to practice integrated agriculture by farmers. 5% of the farmers use animal waste lonely due to its easy availability to them, 16% of the farmers prepared compost themselves and use it for farms, 21% of the farmers use green manure because due to its free of price such as; gliciridea and calotropis leaves and these farmers fear to use cattle manure and poultry manure because they think cattle dung carries weed seeds and poultry manure creates extra heats for crops same time after the paddy harvesting these farmers use paddy straws as mulch and 58% of the farmers use combination of all organic fertilizers.

Benefits from other organizations

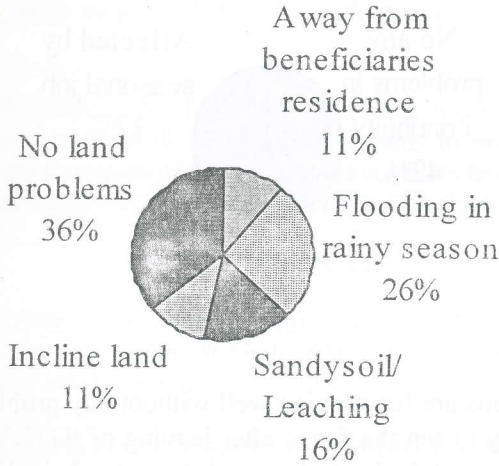


Demonstration farms attract so many people and other organization due to its greenish appearance and considerable amount of farms were received some benefits from other organizations. 68% of the farms received agriculture inputs from other organizations such as; seeds, fertilizers, water pumps, barbed wires and farming equipments. These inputs properly utilized by farmers in demonstration farms due to presence of all kind of infrastructure facilities. 11% of the farms got two wheel tractors from other organizations now these two wheel tractors used by farmers for ploughing and bring cow dung from cattle farm. And also 5% of the farms got infrastructure facilities from other organizations e.g.; roads. 16% of farms still not get benefit from other organizations.

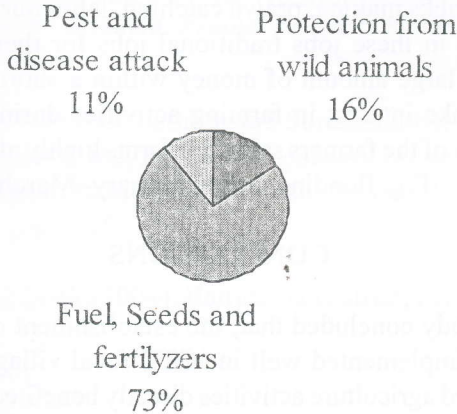
Location of land

Land is the most important factor to determine the success of the project. 36% of the lands support to cultivation of two seasons. However 64% of the lands support to only cultivation of one season due to various reasons. Among that, 26% of the lands support only for yala season because those lands affected by flooding in maha season and 16% of the lands support only cultivation maha season because crops are not grow well in sandy soils during yala season due to high leaching and wind effect. And also 11% of lands are incline, so during the heavy rain fertility of high land flushed out by rain and in law land areas water was stagnating and made the land useless for cultivation. And 11% of the lands located far away from beneficiaries residence due to unavailability of suitable lands nearing to community in this case farmers didn't take interest to cultivate crops after one cycle of cultivation.

Location of land

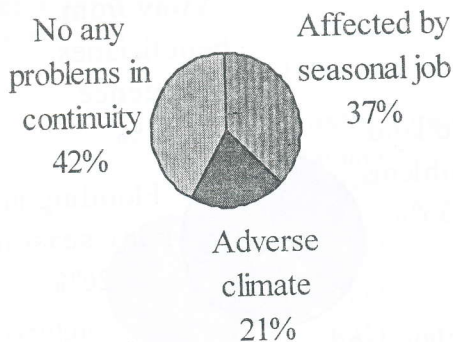


High production cost



73% of the farmers said increasing prices of fuel, seeds and fertilizers increase their production cost and they are unable to increase the vegetable cost to compensate the increasing inputs prices same time government does not provide fertilizers subsidies for vegetable growing farmers. 16% of the farmers said they spent more money to control the wild animals and rodents in farms e.g; wild elephants damaged the fence and pipelines and rats feed the vegetable seeds that were sown in nurseries. 11% of the farmers said pest and disease cause high production cost e.g. borers and miners are the main pest in after flowering stage and fungus and viruses affect the crops in all stages same seedlings were affected by hoppers in above ground level and larva of beetles in below ground level.

Problems in continuity



42% of the farms are functioning well without any problems and they have the ability to run the farms after leaving of 'GTZ' because now they are produce seeds themselves and they saved significant amount of money for their urgent needs. Same time, Even 'GTZ' was given all type assistance to farming 37% of the farmers interested in seasonal jobs such as; bricks making, prawn catching, labor during harvesting of paddy because in these jobs traditional jobs for them and they earn comparatively large amount of money within a short period and also these people take interest in farming activities during other seasons. Same time 21% of the farmers said their farms highly affected by sudden climate changes. E.g. flooding during January- March 2008.

CONCLUSIONS

The present study concluded that, the establishment of demonstration farms project implemented well in 'GTZ' focal villages. And farmers who are engaged agriculture activities directly benefited by several ways such as: increase their monthly income by significant amount and this project generates new employments for women and landless people. And also the beneficiaries of the project shift buyers to producers and this project push to the divisions to self sustain in vegetable production.

This project helps to move the farmers poorest of the poor to low poor farmers and this project is not lonely help to farmers to fulfill their day to day requirements. In 'GTZ' working villages any farmers no engage in long term income generation activities and all are engage in seasonal income earning activities. And also they totally depend on farms during off period of seasonal jobs and this period farmers only get income from demonstration farms. So, they expect financial and technical assistance from other organization to engage other income livelihoods activities but

not overlap their farming activities and machineries such as: hand tractors with trailers help them market their products and loading the organic fertilizers.

So provision livestock for farmers in revolving basis will increase the income of farmers and this activity will leads to practice integrated agriculture and provision of machineries to societies help the community based common activities and strengthen the societies.

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