

5. **Role of Missionaries in Development of Sloping Agricultural Land Technology in Odisha: A Historical Study**

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Abstract:

The Christian missionaries were come to Odisha officially on 1822AD to propagate Christianity among the peoples of all corner of this land. They had been adopted various methods time to time to propagate and convert non-Christians to Christianity. These methods are preaching and teaching of Gospel in different places, distributing books, tracts among the peoples, establishing educational institutions and educating poor and needy people and rendering health services to the sick and patients. These methods were not executed in tribal hilly areas where people were suffering a lot on agricultural setback and decrease of forest product due to deforestation and impact of urbanization in the second half of the 20th century Odisha. Most of the tribals and Dalits were suffering a lot on food production due to lack of Agricultural land, rapid decrease of forest product on which they were depending for their livelihood. In this critical juncture, a new methods of farming in upland already being developed in Philipines and that had been adopted in Odisha by the Christian missionaries to improve Agriculture and to motivate them to accept Christianity became visible in the history on the last part of 20th century Odisha. The Missionaries became successful in the adoption of new technology in farming known as Sloping Agricultural Land Technology(SALT) for cultivation in upland to mitigate the need of poor Tribals and Dalits of Odisha in one way and conversion of these people into Christianity in another way. Because of this SALT programme missionaries got success in the propagation of Gospel in remote hilly areas of Odisha.

Keywords: *Development, Missionaries, Sloping Agriculture, Land Technology, Odisha*

Introduction

Since the inception of this world, man is considered as a civilized and developed. Due to his labour, innovation ideas, sincerity in work, he is at this stage now. All the development which has been occurred and going to be occurring is due to the source of income. Life never moves without the source of income. There are different types of sources of income in macro level mainly labour, agriculture, industry and

trade and commerce. But when we see an individual, micro level sources are there to generate the income source and it is different person to person and place to place. Agriculture is one of the sources from which more than 60% people generate livelihood in India.

Odisha is a tribal dominated province where more than 80% people living in rural areas. The rural people depend on agriculture for their livelihood. The cultivable land was not sufficient for farming. Farmers and farming facing a lot of difficulties due to various reasons such as lack of cultivable land, major percent land is a hilly and mountainous, lack of irrigation, irrigation project and reservoirs for sufficient irrigation to cultivable land and lack of technique and skill for developed agriculture.

Background of SALT: It is essential to adopt new techniques and skills for more mobilization of resources. The land is one of the major resources from where we can get ample food crops through agriculture. Food production may increase but land never expands, rather the quality of land may develop. But with the growth of population land shortage affects agricultural production and less production indicates starvation, hungry, poorness and degradation of social life as a whole. Shortage of land and less production provoked to the elite mass to think over the food production of landless and poor people who were living underdeveloped conditions. Philippines' especially the Tribals were facing a lot of difficulties for food. So, the Christian missionaries started to think over the food problems of the local tribal Christians and they found a new technique. In the southern part of the Philippines, the Mindanao Baptist Rural Life Center (MBRLC), a non-government organization based in Kinuskusan, Bansalan, Davao del Sur, has developed a conservation farming scheme called Sloping Agricultural Land Technology (SALT), based on the use of tree and shrub legumes.¹

SALT is a simple, applicable, low-cost method of upland farming. It was a scheme developed for small farmers with few tools, little capital and little knowledge of modern agriculture. SALT was a form of alley farming in which field and perennial crops are grown in bands 4-5 m wide between contoured rows of leguminous trees and shrubs. The latter are thickly planted in double rows to form hedgerows. On a SALT farm, a farmer can grow varieties of crops familiar to him. SALT can be adapted to incorporate new or traditional farming techniques. If farmers leave the land fallow for one or two cropping cycles, the leguminous trees and shrubs will continue to grow and may be harvested later for firewood and charcoal.²

It is said that the early 1970s, MBRLC staff members heard various complaints of low and declining production from upland farming by the farmers in Kinuskusan, Bansalan, Davao del Sur. The production

was degraded rapidly from 3.5 to about 0.5 t/ha in a span of 10 years. Yields of other crops had also declined to unprofitable levels during the same period. It was found that the main reason for these low yields was depletion of soil and nutrients through erosion.

At first, the Center tried many standard ways to stop erosion and rebuild soil fertility. Nothing worked. Then, MBRLC obtained seeds of *Leucaenaleucocephala* from the Nitrogen Fixing Tree Association (NFTA) in Hawaii. Double hedges of *Leucaenaleucocephala* were planted on contours 4-5m apart and crops and fruit trees were grown between the hedges. This technique appeared to be successful. Soil erosion was minimized, soil fertility restored, crop yields were sustained and improved income for upland families was generated. Because of SALT's initial success, three more SALT variants have been developed. These are Simple Agro-Livestock Technology (SALT-2), Sustainable Agroforestry Land Technology (SALT-3) and Small Agro-fruit Livelihood Technology (SALT-4). SALT-2 is a goat-based agro-forestry project with a land use comprising 40% agriculture, 20% forestry and 40% livestock. SALT-3 is a small-scale reforestation technology with 40% of farm area devoted to agriculture and 60% to forestry. SALT-4 is a system of planting fruit trees and short-term crops at a ratio of 75%: 25%. All of these variants utilise shrub and tree legumes in contour hedgerows.

Missionaries in Odisha: Christian missionaries entered into South Odisha in 1776 which was not the part of the then Odisha to which they came officially in 1822 AD.³ Their intention was to propagate Christianity among the Odias. But after hard labour, they became successful to convert Odia people into the fold. They started to preach among the urban people at first and high caste people but could not get any success as their expectations. So, they started to preach peoples from the lower caste and rural remote areas of different parts of this soil. On the latter part of 20th century, they targeted Dalits and Tribals of rural areas of Odisha and became successful in their objective to propagate Christianity. The missionaries have adopted various techniques and methods to propagate Christianity in Odisha such as preaching, teaching and literature.⁴ Besides these methods, missionaries have been adopted rendering health service, education and promotion of agriculture in tribal and hilly areas. Most of Tribals and Dalits are living in the hilly tracts depending forest product and agricultural product. Deforestation was acute at the end of 19th and the first half of the 20th century on the development of urbanization and industrialization in Odisha. Majority of Tribals and Dalits who were living in the hilly areas badly affected by this deforestation on farming and forest product because of scanty rain and soil erosion. In this critical juncture, missionaries come forward to help the farming affected peoples in tribal regions of Odisha. Besides this, they started to propagate their religion that is Christianity among these peoples through the

application of new form farming i.e. that is Sloping Agricultural Land Technology (SALT) for more agricultural production to meet the need of food.

Missionaries and SALT: Though, the Christianity is a minor religion in Odisha but it was a progressive religion during 19th century. From the beginning to the present time this religion slowly and gradually developed day by day and year by year with the efforts and labour of missionaries with implementation of new tools and techniques for propagation of Christianity in Odisha. The missionaries had been adopted various methods for propagation of this religion among the native peoples such as preaching the Gospel at bazaars, places of pilgrimage, distributed tracts, managed missionary schools and hospitals for rendering education and health service to the needy and encouraged the people to become converts.⁵ These above methods are not satisfied the poor Tribals who were unable to harvest food for their life through agriculture because in the end of 19th century impact of industrial development and urbanization Mass deforestation for economic reasons is carried out in a reckless way. Shifting cultivations, due to population pressures, move into newly opened areas are the causes for soil depletion.⁶ The Tribals and the Dalits suffered a lot who were living in the forest areas of Odisha due to soil erosion and lack of rain to whom the Christian missionaries had been targeted to propagate Christianity. Now the missionaries adopted a new technique that is SALT to cultivate the upland to harvest more food grains themselves and made effort to support other peoples for cultivation. Through this the local Christians and Christian missionaries stated to preach Christianity among the tribals in Odisha in the last part of the 19th century. The Baptist Missionaries launch a programme known as “Soil to Smile” basing on agro-forestry programme.⁷ The Baptists in Tribal pockets were worst suffers from the impact of deforestation and erosion since 1970s. While this was threatening their physical existence, the Baptist leaders were organizing methods not only to enrich their spiritual needs but also by concentrating on the programmes of Agro-forestry for their family and church’s sustenance. The Baptist missionaries started the conventional Gospel outreach programmes in village penetration programme through Agriculture, health interventions coupled with messages of Love with the introduction of a SALT. The Baptist leaders convention held in April, 1975 at Mallikapori in Kandha Hills, the concept that Soil and strength can join in winning souls for Christ.⁸ In 1985 the hills of Kandhamal district agricultural Scientists, Southern Baptist missionaries reviewed the possibilities of bringing the Sloping Agricultural Land Technology (SALT) to Odisha for its implementation in the hilly areas for cultivation of upland. The Government of State and Centre welcome the SALT and soon two centres opened one in Totapada of Khurda District in 1990 covering 7 acres of rocky barren hilly slopes and other at Raipada of Kandha Hills covering 10 acres of barren hilly land became SALT demonstration plots.⁹ The Raipada Centre called BOOST(Baptist

Out-of-School Training) has become a Centre not only for a Massive Agricultural training programme for Baptist Farmer-Pastors and Lay leaders but also for Government sponsored Farmers and Teachers. This Centre along with Agricultural package trains on the Gospel which has found acceptance from many non-Christian trainees. The Khurda SALT Centre at Totapada has introduced many novel concepts in Agro-forestry/SALT and reaching out to people with a "Grow Green" Mission ending in Spiritual revival. The 'Green-capping concept for barren land, denuded Hilly slopes, rocky mountains considered the gift of Baptists of Odisha as its replication and the method has employed many Christian families and build up Believers societies as they form Agro-forestry Societies throughout the state. By 1998 there are 500 Agro-forestry Societies and led by Dr. Satyananda Patra, who was the Chairman of ARLDF and a Baptist Agro-forestry Missionary to reach all parts of the state with agricultural Mission as tool to reach unreached millions in this State.¹⁰

Impact of SALT: Some peoples of tribal areas of Odisha benefited after adoption of SALT. This was the plan of missionaries to make Agro-forestry a method for evangelisation in Odisha. The Baptist has adopted the concepts like Tools for his glory through BAPTIST movements everywhere by the "Soil to Smile" mission. The Baptist missionaries adopted SALT-2 which is known as Simple Agro-Livestock Technology where integrated dairy, goats, cattle or sheep into the basic SALT scheme to improve nutrition. Again SALT-3 had been adopted as Sustainable Agro-forest Land Technology expands the basic SALT plan by planting trees along with crops to produce food, fuel, timber, fodder and organic fertilizer. The missionaries also adopted SALT-4 as Small Agro-fruit Livelihood Technology under development since 1994. This new method emphasizes fruit production.¹¹ The Tribals of hilly areas such as Kandhamal, Gajapati, Koraput, Sundargarh adopted SALT programme gladly to enhance their economic life and accepted missionaries and Christianity as their part of life. Hence the populations of Christianity develop in Odisha.

Conclusions

The Salt is the outcome of the hard labour of Christian missionaries in Odisha. The SALT is one of the contributions of Christian Missionaries in the field of economic development. Though, the aim of Christian missionaries was to propagate Christianity among the peoples of every corner of Odisha still then they had supported to farmers in general and Christian farmers in particular by introducing SALT for more production through cultivation. There is not and never will be one system for all farmers. SALT is not a miracle system or a panacea to establish a one-hectare SALT farm requires much hard work and discipline. It took many years to deplete the soil of nutrients and lose the topsoil; no system can bring

depleted, eroded soils back into production in a few short years. The price of soil loss is poverty, but we have seen land restored to a reasonable level of productivity by using SALT.

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