# FARM ACCOUNTING: A STUDY OVER SMALL TEA GARDENS IN ASSAM

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[Importance of accounting-based information in making economic decisions cannot be over emphasized. Farm accounting also provides useful information which may be used in making economic decisions by the farmers. But maintenance of formal accounts by agricultural farms in India is a rare practice except by agro-based joint stock companies like tea companies. Present study is undertaken to study the existing record keeping system as practiced by small tea gardens of Assam. It is found that small tea growers make little use of accounting. A concerted effort by the Tea Board, Tea Association and Bank officials can streamline the accounts keeping system by the small tea growers who are significantly contributing to the State Domestic Product.

Keywords: Small Tea Growers, Farm Accounting]

#### Introduction:

Tea is one of the most popular beverages in the world. The discovery of tea dates back to around 2700 B.C. It is said that Chinese Emperor Shen Nung was the first person to drink tea. Later on the seed and sapling of tea, made tea and the culture of drinking tea were spread to other Asian countries. The commercial production of tea started much later in about 650 A.D. during the rules of the Tsang dynasty in China. By that time tea had gained popularity as a beverage.

Tea in India is generally grown in the North Eastern regions and the Nilgiri Hills. Buddhist monks in India have been using tea for its medicinal value since thousands of years. Having evolved since those early days, tea drinking in India has now come a long way. Today this nation is proud to be one of the largest tea producers in the world.

India is the second largest producer of tea in the world, producing an average 900,000 tonnes each year. Majority of country's production of tea comes from Assam.

Assam is the largest producer of tea in the country. A major portion (about 30 percent) of state tea is produced by the

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small tea growers. At present the profession of tea plantation in the State has been taken up by common man as business venture, especially by unemployed youths. These tea planters are recognised as 'Small Tea Growers'. According to unofficial sources there are over one lakh small tea growers in Assam. Almost nine lakh people are engaged directly or indirectly in various activities of small tea plantation. The total area under tea cultivation in Assam accounts for more than half of the country's total area under tea.

# Farm Accounting

In simple language farm accounting is maintaining a record of all elements of accounts, namely assets, equities, liabilities, expenses and incomes relating to a farm. The primary objective of maintaining a farm account, like any business, is to develop a generally acceptable income statement and if possible a balance sheet also. Besides that, farmers can use their income and expense records to determine budgets for the next year, cost of production, and business analysis, if they desire. Argiles J.M. (2000) points out that accounting-based information makes a significant contribution to explaining and forecasting farm viability. In USA policy makers, involved in agriculture, use accounting-based information of the farms to get greater efficiency and effectiveness in their decisions (Luening, R.A., 1989). For better farm performance and to improve farm management, accounting in general aids lot. Farmers who prepared financial statements were more likely to make cash flow projection than those who were not involved in financial accounting (Allen, 1994).

The need of accounting in noncommercial farm activities was felt in India when green revolution was initiated in 1960s. Though use of accounting is generally not practiced by noncommercial agriculturists in India, it is generally practiced by those who grow crops on commercial considerations. Growers of cotton, tobacco, coffee, tea and such other crops, have to keep records of financial transactions to find out the total expenses and incomes from the operation. Such records are kept on crop and area of operated land basis.

But there is no formal or legal prescription for maintaining financial records of farming activities in India. Income from agriculture is exempted from income tax and this has created a negative approach for maintaining accounts books by farms. Tea companies registered under Companies Act are required to keep proper accounts of financial transactions. But small tea growers do not fall under the purview of Companies Act and the income from such farming work is also exempted from income tax. But from commercial consideration it is essential to keep records of financial transactions by these small tea growers.

# Objectives and Methodology of The Study

This paper aims to have an insight of the present scenario of farm accounting practices in Small Tea Gardens of Assam and to study the existing record keeping system as practiced by them. The study is based on primary data collected through personal interview and Focus Group Discussion with the Small Tea Growers of Sonitpur and Golaghat districts.

## Growth of Small Tea Gardens In Assam

The first effort to popularize tea cultivation in small holding in Assam was made in 1978 by Late Soneswar Bora (then Agriculture Minister of Assam). His intention was to utilize available fallow land and attract young generation to agriculture sector and thereby to solve unemployment problem (Baruah, 2011). In 1987 the All Assam Small Tea Growers' Association was formed by some small tea producers and it has brought in a green revolution in rural Assam by cultivating tea in unused and underutilized uplands and thus making an effort to bring socio-economic changes in Assam. Now there are more than

68,000 of small tea gardens in Assam (Department of Industries and Commerce, E-Directory of Small Tea Growers of Assam). All of these gardens are managed by the heads of families. According to the Association almost 9 lakh people are engaged directly and indirectly in this venture. Around 2.5 lakh hectares of land has been covered by the Small Tea Growers. The members of AASTGA have been contributing about 29% of the total tea produced by Assam which is approximately 14% of the total tea production in India. The contribution of the STGs of Assam to the socioeconomic structure of the society and the state can be evaluated on the basis of their achievement in reducing social disparities promoting a spirit and in of entrepreneurship along with the economic benefits gained and social status attached to such cultivation (Ganguli Partha, 2000).

Year	No of Growers	Area
1978	16	60.836 hectare
1983	279	1154.871hectare
1988	875	3359.637hectare
1993	4594	14051.838hectare
1998	16759	41423.303hectare
2003	45444	89334.217hectare
2008	67463	118058.304hectare
2012	68,459	Not Available

Table 1 Growth of Small Tea Growers

Source: E-directory of Small Tea Growers Department of Ministry of Commerce Govt. of Assam and Tea Board

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Agricultural sector including small tea cultivation in Assam is mostly unorganized and captured by small farmers. Therefore, cultivation of tea on a small scale is a classic practice. Farmer farms a small area with limited resource inputs, and the green tea leaf produced is sold to Bought Leaf Factories (BLFs) or big factories. Most of them do not maintain formal record due to unawareness about the utilities of recoding daily transaction and lack of subject knowledge. (Hannan Abdul, 2007) pointed out that Small Tea Growers do not maintain regular accounts, due to which it is difficult to get at a clear information regarding cost of green-leaf and production garden management.Most European farms have no legal obligation to publish financial statements because of their size and legal forms but to comply with tax laws and subsidiary requirements some farmers maintain accounting records (Sabate and Enciso 1997). But in India, tax authorities do not carefully insist on maintenance of books of account as agricultural income is exempted from income tax. Tea Board as the principal authority in matters relating to tea in India alsohave not given any significant effort for maintaining books of account. Bordoloi Jonalee, (2005) Point out that very small growers do not keep any records and could give only reasonable subjective estimates. She also mentioned that increasing role of the unorganized sector should be encouraged reorganization mutual and of independence between STGs and the bigger estates shall prove to be mutual beneficial. The primary objective of maintaining a farm account, like any business, is to develop an accurate income statement. Beyond that, farmers can use their income and expense records to determine budgets for the next year, cost of production, enterprise analysis, and business analysis, if they desire. A well designed accounting system can be used for extracting the crop-wise performance and overall performance of the agricultural enterprise. Comprehensive information regarding yield, revenue, input and cost of the enterprise can also be evaluated along with the profit/loss of the farm and its financial position at a particular point of time. Data base will also be useful for other decisions like:

- i. Acquiring assets or hire services for ploughing, irrigation, etc;
- ii. Replacement of machinery and farming technique;
- iii. Selection of crop-mix;
- iv. Choosing farm size;
- v. Farm diversification, for example nursery of tea plant.

Farmers are not aware of the technique of using accounting data for the purpose of management decision and usefulness of data base management. One of the reasons for it can be attributed to the fact that level of education of the average farmers is poor.

# Essential Records (Registers) Required In STGs

Generally, recordsare maintained in some registers. The following registers are

necessary in Small Tea Gardens to prepare financial Statement.

(a) Cash Book: A cash book is a record of all cash transactions. It records cash receipts (Revenue from sale of Green Tea Leaf) and cash expenses (Payment to labour, purchases of Fertilizer, Manure, Pesticides, Equipments etc.)

(b) Fixed Assets Register: This register is required to record the details of fixed assets such as Land, Farm Building, Shed House, Farm Machineries, Water Pump and Implements etc.). It should have detail records with regard to cost of purchases/ construction, disposal, depreciation and balance.

(c) Register for Plantation Cost: To record the expenditure incurred in plantation. E.g. Ploughing, Leveling, Fencing, drain, Nursery/ Purchase of tea plant etc.

(d) Loan Register: Loan register is the documentation of all borrowings from bank, cooperatives, money lenders and other agencies along with interest paid or payable.

(e) Debtors and Creditors Register: To record credit transactions i.e. credit purchases and credit sales. Debtors and Creditors register is maintain by classifying different parties/persons involved.

(f) Stock Register: It is the details record of receipts, utilization, wastage and balance of fertilizer, manure, pesticides etc.

(g) Green Leaf Production Register: To record the daily production (plucking) of

green tea leaf section wise and labour wise.

(i) Wage Register: For daily attendance of labour and for weekly wage payment.

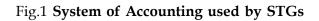
(ii) Register for Bonus and Kind to Labour: To record annual bonus and various necessaries (Umbrella, Tirpal, Sandal etc.) given to labour.

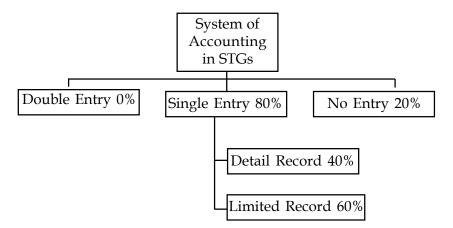
(iii) Register for Notional Transactions: Register for notional transactions are maintained to record transactions between farm and farm household. E.g. Work done by farm household in the garden for which no payment is made.

Complete and habitual record of the above registers will help the small tea growers to know the profitability and financial position of their garden at a particular point of time. But incomplete record may lead to give vague information and possibly will not be useful for decision making. This may discourage small grower to record their daily transaction and lose their faith in accounting based information.

## **Existing Record Keeping System in Stgs**

Most of the Small Tea Growers follow Single Entry System to record their daily transaction and in maximum cases these records are unsatisfactory and not up to dated. None of the Small Tea Growers maintain their books of accounts in Double Entry System and some of them do not have any record at all. An informal record keeping system is common accounting method used in Small Tea Gardens of Assam despite the fact that this does not show the factual performance of the farm. Fig 1 shows that 80% small tea growers maintain their books of accounts in single entry system and out of them only 40% growers have detail record of cost, revenue and other data relating to capital assets possessed and 60% of them maintain rough figures of their weekly transactions which is unsatisfactory and not up to date. 20% of the sample growers do not maintain any record and Bank Pass Book is the only source of information for their cash inflow or the revenue receives by selling green leaf.





There is no any grower in the sample area who maintains accounting records in double entry system except the Mini factory (small bought leaf factory) owners. Records are made in cash basis in all the gardens and they are unfamiliar to accrual basis of accounting.

# Different Register Maintained By STGs

The common registers maintained by small tea growers are wage register, green leaf production register, register for pesticide, register for fertilizer purchased and used. Only a few growers maintain cash book to record daily cash receipts and cash payment on regular basis. Majority of the sample growers make rough record of cash transactions which is irregular and not specific. Some growers completely depend on the Bank Pass Book to know the cash inflow during the year. There are few growers who keep standard register in printed form. Most of the growers record their daily/weekly transaction data in general copy (khata) generally used by their children in schools or colleges. It is also found that some of the growers do not tally the total expenses (cost of production) with the revenue received by selling green leaf during the week/month/year. Therefore, they do not know the actual profit earned or losses incurred during a particular period. It is also found that a few growers ascertain

their profit /loss in informal way by deducting the total expenditure from the total cash inflow (revenue) from sale of green leaf. Almost all the growers do not have any record of their capital assets and hence it is not possible to ascertain their actual financial position.

It is reported by the majority of the growers that they do not go to the factory to sell the green leaves. Rather they sell the leaves to the Leaf Carriers who in turn sell these to the factory. The advantage in such arrangement is that growers have nothing to do with the factory. The

carriers are generally from the local area and more so the growers take advance money from these carriers. It is found that almost all the growers have taken such advance. These carriers also supply medicines and fertilizers to the growers. The carriers keep records of all these transactions: advance, supply of materials, value of green leaf etc. The growers also keep records of these transactions. The specimens of such cash records extracted from the records of growers are shown in exhibits.

Exhibit 1 Cash Transactions kept by Grower Mr. A with Carrier Mr. X

Date	Particulars	Amount Rs.	Amount Rs.
7/9/2014	Last month Balance of Advance Taken		54,259
	Urea Taken	13,750	
	Cash Taken	3,000	
	Cash taken	3,000	
	Cash Taken	20,000	39,750
	Total from Mr. X		94,009
	Minus, Value of Green Leaf supplied		27,102
5/10/2014	Balance of Advance Taken from Mr. X		55,907

Source: Extracted from Small Tea Grower's Record

Exhibit 1 shows a peculiar system of recording cash transactions by the small tea growers. It is found that many of the growers keep cash records in this manner. Sometime they even do not note down the date of transaction and item of expenditure where the cash is expended or source of cash receipts. Such record

shows the transactions with the leaf carriers only and the expenditures incurred by the growers from their own pocket are not reflected and remains unrecorded. Hence the ascertainment of true profits and losses is not possible through this type of records. Some of the small tea growers (about less than 5%) keep a formal type of record in a cash book format. Exhibit 2 shows this type of record of financial transactions. This system of recording of cash transactions gives details of all cash transactions and help in preparing financial statements and useful for decision making.

These small tea growers maintain Green Tea Leaf Production Register, Green Tea Leaf Plucking Register and Daily Hazira (Wage) Register properly (Exhibit 3, 4, and 5 respectively).

Date	Payments	Amount	Cumulative Total	Date	Income	Amount	Cumulative Total
Friday 3/10//13	Wages paid for Spray	600	600	Wednesday 1/10/13	Green Leaf	1750	1750
Saturday 4/10/13	Remuneration to Pluckers	420	1020	Thursday 2/10/13	Green Leaf	2250	4000
				Friday 3/10/13	Green Leaf	1250	5250

Exhibit 2 Cash Transactions kept by Grower B (amount in Rupees)

Source: Extracted from Small Tea Grower's Record

Exhibit 3 is the extract of the tea leaf production register maintained by a section of the growers. After plucking of the leaf these are brought to the collection point which situated within 100 to 200 meter radius. At this point the green leaf carrier or his agents take the weight of the leaf plucked by each pluckers. During rainy season it is the practice to deduct 2% to 10% of the total weight from the sopping leaf to get the net weight.

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Green real robuction Register (in Rg)									
Date	Day	Gross Production	Deduction in Weight	Net Production (quantity sold)	Remark				
02/07/2014	Wednesday	nil	nil	nil	Rain				
03/07/2014	Thursday	621kg	31(5% WL)	590					
04/07/2014	Friday	533	nil	533					
05/07/2014	Saturday	306	nil	306					
07/07/2014	Monday	702	21(WL3%)	681	Rain				
08/07/2014	Tuesday	773	77 (WL10%)	696	Rain				

**Exhibit 3** Green Tea Leaf Production Register (in kg)

WL= Weight Loss

Source: Extracted from Small Tea Grower's Record

These small tea growers also maintain Leaf Plucking Register. A copy of such register is shown in Exhibit 4. It is reported that generally the pluckers are engaged on daily wage rate basis which was Rs. 90 per day for male and Rs. 80 per day for female during 2014.Wage rates vary from place to place considering the availability of workers. Wage rate is high in those areas where the system of bonus and kind does not exist.

Exhibit 4 Green Tea Leaf Plucking Register

Day	Date		Name an	Total	Total		
Duy	Date	Birsa (Rate Rs. 90 / day)	Bhuwa (Rate Rs. 90 / day)	Tapan Mini (Rate (Rate Rs. 90 / Rs. 80 day) day)		Wage Rs.	Leaf plucked. kg
Monday	24/03/2014	90	90	90	80	350	45 kg
Tuesday	25/03/2014	90	90	90	80	350	48 kg
Wednesday	26/03/2014	90	90	90	80	350	64 kg
Thursday	27/03/2014	X	Х	90	80	170	25kg
Friday	28/03/2014	90	Х	90	80	260	36k
Saturday	29/03/2014	90	90	90	Х	270	40kg
Total		450	360	540	400	1750	258kg

Source: Extracted from Small Tea Grower's Record

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Another register maintained by the growers is Payment Register. This register is maintained to record all monetary transactions with the workers. A copy of such register is depicted in exhibit 5. It is found that generally the workers take advance from the growers to tide over hardship during dry season and gradually this advance is paid during working season. Such advance is known as Running Bill.

Exhibit 5 Payment (Wage) Register( in Rupees)

Sl. No	Name	24/3	25/3	26/3	27/3	28/3	29/3	Total Payable	Advance Balance (Running)	5	Closing Advance Balance (Running)
1	Birsa	90	90	90	x	90	90	450	3100	400	3050
2	Bhuwa	90	90	90	x	x	90	360	2000	300	1940
3	Tapan	90	90	90	90	90	90	540	1500	450	1410
4	Mini	80	80	80	80	80	x	400	2400	200	2200

Source: Field Survey

# Problems Associated with Maintenance of Accounting Record

Most of the small tea growers are not highly educated and they do not have any formal training for recoding books of account. Their financial standing does not permit them to appoint an accountant for the purpose. Maintaining proper books of account is a technical matter for those growers who have no formal education. Again most of the growers rarely find time for record keeping. At the same time they all know that proper maintenance of books of accounts is essential part of any business activity. There is no compulsion from any authority, like Tea Board, Village Panchayat, banks or tax authorities to maintain proper books of accounts for the plantation activity by small growers. Therefore they pay least interest towards maintaining proper books of accounts. When enquired about the poorly maintained accounts, the respondents have divulged the following facts as given in Table 2. Most of the respondents have indicated more than one reason for not maintaining proper books of account.

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S1. No.	Reasons for not maintaining proper books of account	Percentage of respondents
1	Illiteracy	12
2	Not having knowledge to maintain books	71
3	Costly affair	36
4	No Time to maintain books	34
5	Not compulsory	27

Table 2Reasons for not Maintaining Proper Books of Account

Source: Field Survey

It is found that many of the growers have availed of the subsidy from the Tea Board and some have taken bank loan also. It is not necessary to show books of account to get bank loan. Generally land document is asked by the banker as mortgage before granting loan or physical verification of the tea garden is done. These authorities do not ask the growers to submit accounts relating to plantation business. Being a principal authority tea board is also not conscious in motivating the growers to keep record of their daily transactions. Tea Board shall have a guideline with regard to maintenance of books of account and should be strict before providing any subsidy or any other facilities. Tea board shall give training to the growers regarding basic accounting practice along with technical training for plantation. Small Tea Growers are paying sales tax @ Rs 0.25 per kg of green leaf sold but neither the government nor the tax authorities pay any interest to provide benefits to the tea growers.

The Tea Board of India can resolve the problem of unawareness regarding the utility of data based management by conducting awareness programme among the growers. The major problem concerning the subject knowledge also can be overcome by giving training on the basic accounting to the growers. By providing a pre-design fro-forma of wage register, production register, cash book and registers to record the various equipments and capital assets can help to minimize the cost of maintaining books of accounts of the small growers. Along with the Tea Board, Government and Tax Authorities also should show their consciousness in relation to maintenance of proper accounting records in farm sector and motivate the growers. Not least, bank may also asked the growers to maintain proper records of their daily transactions and prepare financial statement for granting loan for acquiring equipments and other needs.

## Policy Recommendation

The above analysis has shown the record keeping system as practiced by Small Tea Growers of the study area. Considering the factors responsible for nonmaintenance of accounting record, prompt measures for its improvement are considered highly necessary. Followings suggestions are put forward for implementation.

- a. The problem of unawareness regarding the utility of data based management can be resolve by conducting awareness program among the growers by the Tea Board of India with the help of local tea associations.
- b. Tea Board may issue a standard predesign fro-forma of various register for recording cash transaction, daily/ weekly production, weekly expenses, revenue received and capital assets purchased and possessed by the growers.
- c. Along with the technical training for plantation and maintaining garden, training for account keeping also should be given to the growers.
- d. These growers shall be motivated and trained to take vouchers/cash receipts and to preserve them properly. This will help them to know the cost of production.
- e. Tax authorities should promote the use of accounting in agriculture and help to solve technical and cost

inconveniences for farmers. They should be rigorous in case of maintenance of accounting record.

f. One of the objectives of the tea associations shall be to impart training to the growers on accounts maintain and it shall be a time bound programme.Tea Associations shall include in their objectives

## Conclusion

Informal record keeping system, mostly incomplete, is common accounting practice in Small Tea Gardens of Assam in spite of the fact that this does not indicate the true performance of the farm. Many reasons are cited for not maintain proper financial records. Illiteracy shall not be a hindrance to progress. There are many examples of running business by persons not having formal education. Finding no time cannot be a reason. When people are very much interested to earn income, they also know the intricacies of earning an income. It is true that many of the small tea growers do not maintain financial records properly. But they do maintain some sort of records. Proper training and apprentice will help these growers who are contributing to the national income. Awareness programme is also equally important to motivate the growers to maintain records. A concerted effort by the Tea Board. Tea Association and Bank officials can streamline the accounts keeping system by the small tea growers.

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#### References

- Argiles J.M. and Slof E.J., 2000, New Opportunities For Farm Accounting,
- Argiles J.M., 'Accounting Information And The Prediction of Farm Viability'.
- Awasthi R.C., 1975, "Economics of Tea Industries in India with special reference to Assam".
- Barg Stephan and Swanson Darren, 2004, "Full Cost Accounting for Agriculture", a paper written for Agriculture and Agri Food, Canada.
- Baruah Pradip, 2004, "Development of Assam Tea Industry: An Analytical Study"
- Bordoloi Jonalee, 2005, "A study on the Tea Industry of India with special reference to Assam and the emerging small tea growers", PhD Thesis Submitted to Department of Economics, Dibrugarh University.
- Elad Charles and Herbohn Kathleen, 2011, "Implementing fair value accounting in the agricultural sector". Published for the Research Committee of The Institute of Chartered Accountants of Scotland.
- Ganguli Partha, 2000, "Problems of small Tea Gardens: a case study of Dibrugarh District", PhD Thesis Submitted to Department of Economics, Dibrugarh University.

- Goswami Mukuta, 2006, "Emerging Entrepreneurship in Tea Plantation- A study of Small Tea Growers of Assam", PhD Thesis Submitted to Department of Commerce, Gauhati University, Asssam.
- Griffiths Percival, 1967, "The History of the Indian Tea Industry".
- Hannan Abdul, 2007, 'Sustainable Livelihood for Small Tea Growers and Workers in India', Published byCentre for Education and Communication, New Delhi.
- Juchau R. H.1986, "Accounting developments and implications for farm business" Publisher: Lincoln College. Agricultural and Economics Research Unit (University of Canterbury).
- Mary Lou Heiss; Robert J. Heiss. The Story of Tea: A Cultural History and Drinking Guide. citing Mondal (2007) p. 519). wikipedia.org/wiki/History of\_tea (11/ 09/2014)
- Roy Suparna, 2011, "Historical Review of Growth of Tea Industries in India: A Study of Assam Tea", International Conference on Social Science and Humanity.
- Schnitkey Gary D. and Sonka Steven T., 1986 'Systems Design Procedures for Farm Accounting', Southern Journal of Agricultural Economics, December, p 207

#### Websites

- www.tea.in
- www.teaboard.gov.in