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WEALTH

**A Research Journal
of**

**P.G. Department Of Economic
Dimoria College, Khetri., Assam**

Vol. 1 November – December 2005 No. 1



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Dedicated to the Memory of

ADAM SMITH



*Adam Smith is said to be the
father of economics, because he abbreviated
what he had received from his predecessors
and
handed it down as a
guide to the generation to come .*

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Editorial Note

This is the first annual issue of the journal named 'WEALTH', of the P.G. Department of Economics, Dimoria College, Khetri, Assam.

This issue is dedicated to the Memory of Adam Smith, father of Economics, who in his 'wealth of Nation', a full-length treatise on economics, which under the strong sway of the philosophy of naturalism and liberalism inquires the causes of growth of a Nation's wealth, gave the doctrine of laissez-faire which upholds the idea of economic liberalism, now known as globalization. Because in accordance with name of his book the journal is named as 'WEALTH', which aims at making the local people aware as to changing scenario of the present global world economy. This is so because the advent of globalization and liberalization of the world economy opened much large avenues for the fittest one in the job market and the Total Quality Management (TQM) has become a Corporate- Mantra. A great majority of people of the developing nation like India having lack of awareness, lack of technical skill or training and necessary riches are still resorting to the old ideas, approach, strategy, and work- culture not suited with the fast changing scenario of the present competitive world.

From the early stage of development of the capitalist economy in England and western world vast changes have taken place in the field of organisation, finance and technology. Now the Trans-National Corporation (TNC) are emerging in the U.S.A. and other parts of the capitalist world. TNC now dominate hundred percent of the input and output markets of the world. Finance and technology are also dominated by the giants. The service sectors including information industries, strategic firms and production are under control of TNC's. World is now uni-polar and dominated wholly by capitalist world under domination of USA's TNC. To cope with this situation, backward regions

like Assam and NER must work hard to transform the age old barriers of socio-economic and cultural stagnation and make themselves ready to face crude form of competition intelligently and bravely .

So mission of our 'WEALTH' is to think globally and act locally with a vision of strengthening our local rural economy. The aim of the journal is to make a local reflection of. messes to global concern. It implies global thinking as integration with local one. Thus this aim bears a great significance in the sense that we are living in a global village, since the vast world of the recent past has turned to be a global village today. Keeping in view both the micro and macro concerns the journal is aimed at encouraging economic research on rural economy and analysis to bring home a deeper understanding of the dynamics of development process, needed for policy –making.

In editing this issue of the journal I have received help and co-operation from Mr. Jatindra Kumar Bargohain and Dr. Danu Devi as editorial advisers and Mr. Tarun Deka as associate editor, as well as the staff of the Department of Economics. I offer my heartiest thanks and gratitude to all of them for their help, co-operation and assistance. Lastly I offer my heartfelt thank to Principal Ramcharan Bharali for his valuable suggestion and help in its completion.

Dr. D. K. Bezbaruah

Message

It gives me a great pleasure to know that the P G Department of Economics of our institution is going to publish a research journal named 'WEALTH' which is sought to devoted in the name of 'Adam Smith' father of Economics .

Adam Smith was great not because he was a pioneer in the field of economics ,but because with his efforts economics reached maturity and he was the first to make a systematic survey of the Economics and his significant contribution was ' Wealth of Nation' which came as turning point , the beginning of all that came after , as it was the end of all that came before .

He has become an immortal soul by his actions and visions his deeds and views and above all his love for the world or countrymen .

The services of 'WEALTH' towards the students and mankind will always be acknowledged by the society. I extend all my good wishes for the teachers of the Department of Economics.

I wish this the Department of Economics a great success in promoting talent among the students in particular and the local tribal people in general .

Ramcharan Bharali
Principal , Dimoria College

Environmental Economics

J. K. Bargohain

Environmental economics is the study of inter-relationship between economic activities and the environment. Hence it covers all aspects of economic activities of mankind, including development efforts from the pre-history period to the present age and the futuristic plans and programmes. On the other hand environment covers the integrated situation in which all non-living objects exist and all living animals, plants and micro-organisms are thriving. To be concise, it includes all aspects of ecology, which are responsible for creation of this situation. Ecology itself is a multi-disciplinary science. It studies all aspects of the situation prevailing in the nature, covering all aspects and dimensions of growth and development of nature, including human being as a social and natural object. Hence it is a multi-disciplinary science that studies the situation covering the growth and development of the mankind in its inter-relationships with nature-covering all peculiarities, colour, standard and dimensions. Environmental economics thus become a subject covering all aspects of the economy and environment.

The basic problem of environmental economics in particular and ecological science in general starts from the ignorance of the ignorant, i.e. human being who proclaim to be the most superior among all living animals. Even when I am writing on this paper, I simply forget the point that for this paper we have destroyed a thousand hectares of green forests every year. By doing this, we have destroyed the ecological balance, which now is becoming the main threat against our own existence.

One of the most prominent among the Indian environment ecologists

TM Das stated in a famous book that the human follies are resting on the ideology of species superiority. Human beings are ignorant enough to think that he is superior to all living beings and being superior he is with the right to destroy, kill, use and eat everything in front of him. This is the culture of domination and this is the cause of all problems faced by mankind. For more than 20 million years we have killed, destroyed, maimed, used and eaten everything in nature. Destruction and war to establish our domination shows that there are some sorts of fallacious war-mongering trait in us. We are stock-piling arms in this world which is more than enough to destroy the world and the solar system itself. This is enough to prove that human culture of domination, based upon ideological and systemic superiority is nothing but ignorance. If this ignorance were not destroyed then surely it would destroy the upholder of this flag of ignorance i.e. the mankind itself.

The aims of study in environmental sciences are to come over this ignorance. Cost benefit analysis is generally used to compare benefits and costs in aggregate to find out a point of common agreement where a project could be selected as productive and harmless.

The **effects of a project** may be divided into direct and indirect impacts as follows:

Direct impacts of a project may be in the field of production, raw materials and inventories, genetic resources, biological shares, services like water supply and pollination in case of a river dam, genetic effects, recreational effects, cultural effects.

Indirect impacts of a project may be in the field of atmosphere, land and water, disturbance regulation in the field of sound, heat and radiation, waste treatment, soil erosion, nutrient cycling etc..

Some of these services are not measurable with the monetary units, while some are of very complex nature, hence, the methods to evaluate the services must be appropriate enough as far as possible to arrive at a comparable level.

One example:

We can illustrate the nature of objectivity and complexity of the area of study with an example. Let the subject of study be the cost and benefit of the Aswan Dam of Egypt. Peter Stiling wrote in 2002 that after 11 years and an expenditure of 1 billion dollar, the construction of

Aswan Dam was completed in 1970. Located in southern Egypt on the world's longest river, the Nile, the dam is the largest of one its kind in the world. It contains more than four times the capacity of Lake Mead, the reservoir behind Hoover Dam, which is the largest dam in United States. The Aswan High Dam was projected to supply irrigation water to add 526,000 hectares to the arable lands of Egypt, to produce 10 billion kilo watts of electricity and to protect the country from devastating flood. The dam helped the country to produce agricultural output in desert land covering an area of eighty thousand hectare, saved the country from the catastrophe of drought in 1972 and 1973. It enhanced share of agricultural output in national income by 200 percent. But the dam has been accused to be a movement of ecological ignorance. "First the incidence of schistosomiasis (a debilitating parasitic disease caused by a tropical flatworm in the area) increased from 47% to 80%, because the parasites secondary hosts, snails, reproduce year round in the reservoir and thus are no longer reduced in numbers by draught. Second, diminished flow of the Nile into the Mediterranean decreased phytoplankton blooms and fish harvest in the discharge area. The catch of sardine alone dropped from 15,000 tons annually to 500 tons and yield from the new fishing area behind the dam are low. Other negative effects of Aswan dam as discussed by Stiling are the burden of big investment in the big fertilizer plants established to produce inputs for the newly irrigated land and their impacts on the environment. The long run impact of heavy and continuous irrigation was siltation and salination of cultivable land. The most of desalination far higher than the output generating impact of irrigation. Stiling pointed out "in 1986 almost half the irrigated area in Egypt was affected by salt. Ecological studies had they been done could have predicted such effects of the dam".

This type of study of a dam reflects the importance and scope of ecology and in a broad sense of environmental economics also. Because environmental economics in nothing but study of the economic environment as a whole, both at the micro and macro level. The cost-benefit analysis of a project is only a method, if properly utilized, to evaluate the acceptability of it in aggregate ecological ground, so also on aggregate economic ground.

Subject matters and scope :

The subject matters of Environmental Economics covers all aspects of the ecology of the economic systems, environmental quality of the public goods and services in particular and goods and services in general, natural resource economics, conservation of natural resources and choice of technique for best or optimum possible use of natural resources without causing harm to the total environment. Environmental problems including pollution of air, water and land, forests and environmental quality, pattern of land use and effects on environment urbanization and its impact on environment, population ecology, concepts and issues of environmental protection, cost benefit analysis of a project, the environmental cost of economic growth, limits of growth, environmental issues in developed and developing economies, basic approaches to environmental policy, regulation -methods and impacts, effects of environmental policy, National and International environmental policy and laws, environmental situation; ecological balance and the future of the economy and futuristic concepts of environmental economics.

Thus we see that the issues of concern in environmental economics are the issues of ecology concerning human being at different levels and time frame. These are the basic issues concerning present problems faced by the mankind as a whole and the economy in particular and problems of the future as a whole. Scope of the subject is therefore more than the subject itself. It covers all issues concerning ecology of the economic systems at present and probable in the future. Nothing in human science and natural studies could be more than this in its scope and importance.

The future:

Environmental Economics rests upon a fundamental question : growth or no growth? The very idea of growth and developmental efforts are questioned now. Why should keep the process of growth going if the ultimate point reachable a big catastrophic end? Why should we develop the economy, if ultimately the end products of development pointedly threatens the very existence of mankind itself? Why should we build up a civilization based upon the idea of species superiority, if ultimate end of the civilization is a big thermo-nuclear catastrophe? Why should we develop agriculture and destroy the green ar-

as if the ultimate product is total loss of balance? Why should we develop industries if ultimate result is non-sustainable and the world ends up in a stand still where most probably would be no fuel, no pure air, pure water and clean atmosphere? The destruction of ozone layer, rise in under radiation level, acid rain and global warming suggest that we are leading the whole mankind to a point of self-destruction.

The annihilator in this case is not a being of other planet or of unknown system but the economic (profit oriented) man himself. He has destroyed the whole nature to establish his superiority. The point he is reaching after a 20 million years journey through various phases of civilization is the point of his own extinction !

Basic question posed by him that he is the last remaining agent of the hominids, with the biggest brain even produced by nature, and after his extinction there will be no possibility of development a hominid in this world. This is the most gloomy situation. The most ardent problem of environmental economics is to study this situation scientifically, so that the future progress of our civilization not ends up at a stand-still. We need a sustainable way out. The necessity of Environmental Economics is to find out this way-out. That is the pre-condition of our future progress and existence.

Helps from the following books

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Development of Dairy Farming on Co-operative Lines in Assam

Mr Tarun Chandra Deka.

(This paper consists of two parts : Part-1 deals with introduction, objectives , methodology , universe and sample and Part-2 deals with findings , constraints and conclusion . This paper has been prepared depending on both the primary and secondary data)

Part-1

Introduction

Dairy farming as an enterprise is of comparatively recent origin . The economy being predominantly agrarian , Bulk of the total workers (62.99% as per 1991) census depends on agricultural and allied activities for their livelihood . Land plays a vital role in rural sector Almost all the households in rural Assam traditally rear one or two milch cattle with their crop residues and by-products with the help of either under or unemployed family labour . However the state is deficient in per -capita availability of milk which is below 90 grams per day as against the per capita daily minimum nutritional requirement of 200 grams. Though ancient records mention milk as an important component of human food, its processing and distribution as a separate commercial business did not develop until the concentration of popula-

tion in the cities reached a definite level. The demand for milk in Assam started with the development of the economy and growth of urbanization. With a view to meeting the growing demand for milk on one hand and to create employment opportunities and augment the earning of rural poor on the other hand, the government of Assam has been making efforts at increasing the production and supply of milk in the state. The government laid greater emphasis on dairy farming since the second five-year plan. The launching of the first Town Milk Supply Scheme in 1963 marks the beginning of organised dairy farming activities in the state. During the seventies the state government entered into an agreement with the Indian Dairy Corporation (IDC) under Operation Flood-II programme and formed the West Assam Milk Producers Co-operative Union Limited (WAMPCUL) with its head quarter at Panjabari, Guwahati, the setting of which may be regarded as a mile-stone in the history of organised dairy farming in co-operative lines in Assam.

The Union intended to be structured on Anand Pattern Dairy Co-operative under the Co-operative Societies Act, 1977 and started its functioning as implementing agencies of Operation Flood Programme from 1st October, 1981.

Objectives:

- i. To Assess the impact of Operation Flood in the comparatively backward state of Assam.
- ii. To organise the efficiency of Anand type of dairy co-operative in the state of Assam, and
- iii. To identify the constraints and assess the prospect of Dry Development of Assam.

Universe: The universe of the study consists of dairy farming in Assam for general discussion. But for an in-depth study the universe is restricted to the district of Kamrup because of time and financial constraints.

The Kamrup district has been selected for the reason that under Operation Flood - II Operation Flood-II, the West Assam MILK Producer's Co-operative Union Limited has been initiated at Panjabari, Guwahati under Kamrup district and most of the milkshed areas of

Assam are concentrated covering the city consumers of Guwahati - the capital city of Assam.

Sample units :

i. Sample Milk Union and Primary Milk Producer's Co-operative Societies (PMPCS) : Out of the three Milk Union in Assam i. West Assam Milk Co-operative Union Limited head quarter at Guwahati, ii. Dsd Milk Producers Co-operative Union Limited head quarter at Jorhat and iii. Cachar and Karimganj Milk Producers Co-operative Union Limited head quarter at Silchar only the first one has been selected as sample unit and it is expected to be representative of the whole universe.

There are 128 numbers of PMPCS under the selected milk union out of which only 18 PMPCS are functioning. For our convenience, we have ranked these PMPCS as Grade-I, Grade-II and Grade-III on the basis of large, medium and small respectively in terms of volume of daily milk procurement. Out of the 18 PMPCS we have selected 5 PMPCS of which 2 belong to Grade-I, 2 other are in Grade-II and 1 stone falls in Grade-III. Accordingly the name of sample PMPCS are Saitajkhala, Khatiamari, Satpukhuli, Batorhat and Bhagawatipara.

ii. Sample villages : Under the study area of 5 sample PMPCS, there are as many as 250 co-operative and control villages. Out of these we have purposively selected 20 villages as sample of which 10 villages belong to co-operative and the remaining belong to control villages.

iii. Sample households: In the sample villages there are 1089 households of which 386 milk producing families belong to co-operative villages and 314 milk producing households belong to control villages. Further these Milk producing households have been classified and stratified into small, medium and large herd size group having 1 to 3, 4 to 7 and 8 and above milch cows respectively. Through stratified sampling method we have selected 30 per cent milk producing households from each total herd size group. Table-1 shows the sample milk-producing households against each total.

Table -1

Classification Of Milk Producing Households as per Herd Size Of Both Selected Villages.

Name	Small		Medium		Large		Total	
	Total	Sample	Total	Sample	Total	Sample	Total	Sample
Co-operative	148	44	178	53	60	18	386	115
Control Village	170	51	121	37	23	7	314	95
Total	318	95	299	90	83	25	700	210

Part-II

Findings of the study

i. Organisational structure : The basic philosophy of the Anand Pattern Dairy Farming is to put the reins of administration in the hand of the milk producers . However, the democratic norms as envisaged in the Anand Pattern , have not been followed by the Milk Union .

ii. Formation of Primary Milk Producer's Co-operative Societies : Initially the Milk producers set a target of registering 520 PMPCS by the year 1990 . Initially the Milk Union has 124 registered PMPCS . but a present only 18 PMCS (14.5 % of the total) are functioning .

iii. Milk Procurement System of the Milk Union : The Milk Union collects milk from the respective collection centres of the village level PMPCS for two times a day- morning and evening . The secretaries of the PMPCS maintain the records for each of the milk producer and use lactometer for the measurement of fat content of raw milk .

iv. Price policy of the Milk Union : While making payment , the milk union follows two axis pricing policy in the line of the suggestion of the National Dairy Development Board . According to this policy payment is made to the milk producers on the basis of fats and solid-not-fats contents of the milk . To be acceptable the milk must contain at least 4.5 per cent fat and 9 per cent solid-not-fat . However it is worth while to note that the Milk Union has not followed the minimum stan-

dard set by the NDDDB because the fat content of cow milk tends to vary between 3.6 per cent to 4.0 per cent .

v. Daily Capacity Utilization of the Milk Plant : Having the 60,000 litre per day capacity milk at Panjabari , the Milk Union was not able to collect raw milk upto the required level in the last decade . The average daily milk collection in the last decade i.e. 1990-91 to 1999-2000 was in between 5052.00 litre and 2334.00litre . It is evident that there has been gross-under utilization of the capacity of the milk (the highest capacity utilization being a meagre 8.42 per cent in 1995-

96) due to pitiable low daily average procurement of raw milk .

vi. Milk Procurement Price of the Milk Union : The Milk Union fixes the procurements price of raw milk following two -axis pricing policy on the basis of fat and solid-not-fat percentage . The change in procurement price offered by the Milk Union is subject to the approval of Board of Directors . Under the procurement price offered by the Milk Union in 1998-99 (i.e. Rs. 112.49 per kg. Fat and Rs. 74.98 per kg. SNF), a milk producer whose milk contains .045 kg. fat (4.5 per cent) and 0.09 kg. (9 % SNF) per litre of milk receives Rs. 11.8 per litre from Milk Union . But the sale of milk to private milk vendors can fetch more than Rs. 14.00 to the milk producers . Thus the Milk Union has to face stiff competition from the private milk vendors .

vii. Size of population of the sample milk producing households : During the survey period , total population of sample milk producing households was 1260 of which male and female constituted 52.9 per cent and 47.1 per cent respectively . It is interesting to note that smaller the herd size group higher the size of population and higher the herd size group lower the size of population .

viii. Artificial insemination programme : With a view to produce a sizeable herd of cross-bred cattle , a number of scheme under the cattle development measures were launched in Assam . Among these measures artificial insemination programme was most important . In the year 1987-88 artificial insemination to the 2.86 lakhs of cattle were done , but the calf born constituted only 27.3 per cent .

ix. Cattle population of sample milk producing households : Total volume of milk production mainly depends on the number of total milk cattle . The higher the size cattle higher the volume of rural milk pro-

duction and vice-versa. Table-2 shows the total number of cattle population of sample milk producing households. Table -2 reveals that out of the total cattle population of 2029, there has been 226 (11.4% of the total cattle population) non. of indigenous milk cows for both the co-operative and control villages. It is interesting to note that the co-operative village covering all the three herd size group contains only 2.86 indigenous cattle as against the 8.28 indigenous cattle of control villages. With respect to cross-bred cattle population it is further observed that out of the total cattle population, crossbred constitute 38.98 per cent decomposing 32.04 per cent for co-operative villages and 6.95 per cent for control villages. Again out of the 1012 calves, male and female calves constitute 58.6 per cent and 41.4 per cent respectively.

The table further reveals two facts that first, indigenous cattle dominates the control villages cross-bred cattle dominates the co-operative villages and secondly the average number of cross-bred cattle are high in large herd size group and low in small herd size group in co-operative villages.

Constraints and Suggestions :

i. From our field observation we come to that a great majority of the milk producers of the rural areas are still ignorant as to the existing bye-law of dairy co-operative because of their socio-economic backwardness. As a result, we can not expect maximum amount of milk production out of their dairy farm. In order to make the rural milk producers aware as to its maximization of production an expert team with the members of district Milk Union should be established on co-operative lines so that the team can help the milk producers member by inculcating them about the bye-law of the co-operative dairy societies. This would ultimately be beneficial to the rural milk producers.

ii. The Milk Union and the village level Primary Milk Producers Co-operative Services are facing stiff competition from private traders, milk contractors and petty milk vendors. These contractors are paying higher prices to the milk producers. Apart from paying higher prices, they also provide credit facilities to the milk producers to enable them to buy milch animal and to meet their subsistence requirements. The role of private traders, contractors is naturally harmful for healthy development of co-operative dairy farming in Assam.

iii. In order to supply the balanced cattle feed to the rural milk producer, the West Assam Milk Producer's Co-operative Union has a cattle feed plant at Changsari (30 K.M. away from Guwahati) with dairy production capacity of 100 metric ton. From our field survey we make two observations. First almost all the member milk producers buy cattle feed from their respective Primary Milk Producers Co-operative Societies. Secondly there has been gross under utilization of the capacity of the cattle feed plant (the highest capacity utilization being a meagre 10.9 per cent in 1985-96) during the last decade. Therefore, necessary arrangement must be made to increase the balanced cattle feed so that it can restore the confidence of the milk producers.

iv. It is evident that there is general complain regarding the routine animal health cover offered by the Milk Union. The artificial insemination services offered by the Milk Union is also not satisfactory. Moreover the Milk Union has suspended the emergency animal health covered by the 1986-87. The development of dairy farming has been hampered by the suspension of these services. Therefore, efforts must be made to resume these services as soon as possible. To develop the dairy farming, if possible, mobile veterinary service should also be introduced.

v. Out of the total respondent 30 per cents are found untrained. Training facilities should be provided in order to increase the dairy management.

vi. Irregular and delayed payment made by respective PMPCS to the rural milk producers is also another factor which have constrained the development of dairy farming on co-operative lines.

vii. The Milk Union provides artificial insemination services to the existing stock of local domestic cattle of the milk producers. However most of the responds reveal that the artificial insemination services provided by the Milk Union are not satisfactory as it incurs high cost. Therefore, development of village level dairy farming depends on the artificial insemination services provided by the Milk Union at a subsidized rate as far as possible.

Conclusion : Milk being a perishable commodity, its production prospect mainly depend on marketing facilities. An assured market

guaranteed and remunerative price of Milk can augment milk production in the state . Despite many problems faced by the milk producers ,it is worthwhile to note that the milk union still plays a vital role giving the year-round market to the rural milk producers .

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The Technical Efficiency of Regulated Markets in Assam

(A Case Study on Six Regulated Markets in Assam)

Dr. Hem Deka

Introduction

The regulation of agricultural product market in Assam has been effective only with the passing of the Assam Agricultural Product Market Act , (AAPMA),971 . According to the provision of trhe Act ,22 Principal Market yards and 19 sub-market yards have been brought under regulation as on March ,2002.But the most remarkable fact regarding the regulated markets in Assam is that there are no transistions o agricultural commodities in any of these regulated market yards of Assam . Marketed surplus of all crops in the state passes through the non-regulated markets as against the provision of the AAPMA, 1972 . Keeping in view the above-mentioned problems, the present study has been made to examine the availability of market component in the existing regulated of Assam , with special reference to six regulated markets situated in six different districts of Assam . The study about the components of regulated markets will help in planning for the future development of markets in Assam .

Objectives:

- i. To examine the location of the markets
- ii. To examine the transport and communication facilities
- iii. To study the availability of infrastructural facilities in the regulated markets

Methodology :

The study is based more on primary data than secondary one. The primary data were collected from the six regulated markets for the agricultural year of April, 2001 to March, 2002. For the purpose of this study, six regulated markets in six different districts were purposefully selected out of the 22 principal regulated markets in Assam. The selected markets are Gauripur, Howly, Nalbari, Kharupetia, Dhekiajuli and Dhing. Two regulated markets namely Gauripur and Dhing have been selected because these two markets belong to class – A market committee. The regulated markets Howly and Kharupetia are selected from class – B market committees. The Nalbari and Dhekiajuli markets are selected from class – C market committees. Secondary data are collected from different government offices, Journals and reports relating to the regulated markets of Assam.

Results and discussion

Market components like location of the markets and availability of infrastructural facilities are the most important factors for the better functioning of the regulated markets in Assam. In this paper the market components of the regulated markets in Assam are studied into two major groups like (A) location of the regulatory markets and (B) Infrastructural facilities provided in the markets.

A. Location of the markets

According to the Directorate of Marketing and Inspection (DMI) the area covered by the regulated markets must have (i) irrigated com-

Table -2 (a)
Nos. of Cattle Population as per Herd size group
(October 1998 to September 1999)

A
Co-operative Village

Sl No.	Herd size group	Nos of sample household	T %	Indigenous milsh cow	Calves		Total
1.	1 to 3	44	T %	43 74.2%	71 10.7%	44 14.4%	228 15.1%
2.	4 to 7	53	T %	15 25.8%	273 42%	148 47.2%	576 40.7%
3	8 and above	18	T %	0 0%	306 47.1%	113 37%	612 43.2%
Total		115		650	403	305	1416

A
Control Village

Sl No.	Herd size group	Nos of sample household	T %	Indigenous milsh cow	Calves		Total	Total cattle population
					Male	Femal		
1.	1 to 3	51	T %	61 36.3%	71 10.7%	44 14.4%	147 23.1%	375 18.5 %
2.	4 to 7	37	T %	95 56.5%	273 42%	148 47.2%	336 54.8%	912 44.9 %
3	8 and above	7	T %	12 7.2%	306 47.1%	113 37%	130 21.2%	742 36.6 %
Total		95		168	190	114	613	2029

Source : Field survey
(Figures within the parenthesis indicates percentage of the total)

mand area and (ii) commercial crops producing area, for granting financial assistance for the development of such markets. The regulated markets falling in the irrigated command area, and the commercial crops produced in these areas are shown in Table 1.

The Table -1 reveals that 66 per cent of the surveyed regulated markets are situated in the irrigated command areas and jute is the principal commercial crop grown in all the regulated market areas. Government of Assam should give much more attention to provide irrigation facilities for cultivated areas especially to the areas covered by the total production of food as well as commercial crops of Assam. This step would increase the marketable surplus of agricultural commodities, which is highly essential for sustaining capital potential in an economically backward state like Assam.

i. Operation of Traditional Markets: According to Section 5 (2) of the Assam Agricultural product Market Act, 1972, no traditional markets are allowed to operate within the regulated market area. However the study shows that 11.8 per cent of markets are situated within the radius of 0-5 km distance from the regulated markets out of which 5.9 per cent is secondary and 4.7 per cent is primary village markets. It is also evident from Table -2 that most of the traditional markets especially secondary wholesale markets are operating within the short distance, i.e. from 0 to 5 km. around the regulated markets.

It is clear-cut from the above analysis that the traditional markets have been functioning in the areas of regulated markets as against the provisions 5 (2) of the Assam Agricultural Produce Market Act, 1972. It is distressing to note that the traditional markets have still now (2002) been functioning under the management and control of Municipal Town Committees and Mahkuma Parishad even in the regulated market proper with traditional manner and as a result, operation of transaction and

enforcement of regulatory provisions have not become effective. Therefore, for sound functioning of the regulated markets, the government of Assam should handover the management and control of traditional markets to the management and control of traditional markets to the regulated markets committees by the provisions under section 5 (2) of AAPMA, 1972.

ii. Nearness to the common meeting place of habitation: Another important component of regulated market should be located near to the common meeting place of habitation. The common people can enjoy different essential services like transport, post office, bank, PCO, medical, book stall, private medical service etc. in the common meeting place of habitation. If the regulated markets are situated near the common meeting place of habitation, the producer-sellers can fulfill their dual needs, i.e. they can sell their surplus agricultural products in the regulated markets and also can purchase their required goods at the nearest common meeting place of habitation. In addition to this, the common meeting place also offers some essential services to the and sellers operated in the nearest regulated market. The regulated markets, therefore must be located near the common meeting place of habitation. The study finds that the regulated markets are located at a distance between 1-3 km. It also reveals that about 60 per cent of the surveyed regulated market are situated at a far distance from the nearest common meeting place of habitation on foot and it would take more time and energy which is more disadvantageous to the farmers as well as to the traders operating under the regulated markets in Assam. The farmer therefore are not interested in selling their surplus agricultural commodities in the regulated markets but in the traditional markets which are nearest to common meeting place of habitation.

iii. Transport accessibility: Transport accessibility is one of the

most important factors for the location of regulated markets. Easy accessibility of transport and communication can carry the surplus of agricultural commodities from producing centre to the regulated markets and from regulated markets to other markets or places where their marginal utility is relatively high. Besides it brings villages and towns as well as remote and developed regions closer to one another in general and to regulated markets in particular.

Table -3 reveals that 50 per cent of the regulated markets are directly connected with the North East Frontier Railway. The remaining markets are located at a far distance from their nearest railway station. The big traders who operate in such regulated markets find it very difficult to send their procured agricultural commodities especially jute from regulated markets to jute mills situated at different places of Assam or any other place outside the state of Assam. The area of regulated markets are also connected by the national highway and some PWD roads. The study also reveals that only 66 per cent of the regulated markets are directly connected with the national highway and the remaining 84 per cent markets are situated at a far distance from national highway. Again 50 per cent of such markets is directly linked with the PWD roads. In this respect, the weakest point is that the village link roads are not directly connected with the regulated markets.

There are a large number of undeveloped inter-village feeder roads which are fit only for bullock carts. The conditions of these roads are so deplorable that during the dry season they remain as dustbin and in the rainy season they become a muddy track. The condition of the road accessibility around the regulated market is not satisfactory. The feeder roads or inter-village roads are also not well connected with the regulated markets. As a result, the producer-seller's com-

modities at an unremunerative price in the traditional village markets. This is one of the reasons why the regulated markets still have been deprived of the arrival of notified agricultural commodities from their declared areas of regulated markets. In this respect, the government of Assam takes some careful steps for the development of transport and communication system so that it can inter-link the established regulated markets with the surplus producing centre of Assam. The inter-village roads constructed by the local authorities like Gaon Panchayat or Town Committee, should be developed and connected in such a way that these roads may be feeder roads of every regulated markets of Assam.

B. Infrastructural facilities available in the regulated markets:

The successful operation of the regulated market depends to a great extent upon the provision of some essential services and infrastructural facilities available in the regulated markets. The created infrastructural facilities will reduce the percentage of wastage in handling and transportation of agricultural commodities and will also attract the purchasers and growers to operate in the regulated markets. The availability of infrastructural facilities required for the regulated markets are studied in the following heads:

i. Market yards : According to the Regulated Market Development Project Report in Assam (Mahanta : 1984 : 76) the maximum and minimum norms of the areas covered by market yards are 15 and 6.5 hectares respectively. The norms of the market arrival capacity of each market yard is 1000 tonnes per hectare annually. But majority of the regulated markets have no proper market yard. Therefore, their market arrival capacity of commodities is also far below the given norm.

ii. Market users : The infrastructural facilities immediately con-

ected with trade and marketing such as auction platform , godown , jute baling and assortment facilities , agent's shop , animal parking , parking and loading space etc . are known as market users . The study shows that only 66 per cent of the total survey markets have auction platforms which are also are not sufficient in number . The other important markets users like agent's office animal parking are not yet available in any one of the surveyed regulated markets in Assam . Thus the studied markets show that the market users facilities are not available in the regulated markets in Assam .

iii. Operational infrastructure: It includes mainly service lanes , drainage , electrification , etc. . However, it is distressing to note that the regulated markets in Assam do not have well operational infrastructure facilities during the survey period of regulated markets in Assam . The stud reveals that only 20 per cent markets have drainage facilities and 75 pr cent markets have their service lances facilities . But the service lanes are not well constructed with their existing market users .

iv. Service facilities : The study shows that the regulated markets in Assam have no service facilities like water for cattle , tea, drinking water , resting place for buyers and sellers and snake stall , building for chowkidar , petrol bunk etc . except some tube wells for buyers and sellers operating in the regulated markets in Assam .

v. Supporting services : The present study shows that the regulated markets in Assam have its own administrative building and some of them have its rest houses . But the other supporting services like bank , post office , police outpost , canteen , input shops , sundry shop etc . have not yet been provided in any one of the surveyed regulated markets in Assam .

Conclusion : It is evident from the forgoing analysis that the mar-

ket components for regulation of buying and selling of agricultural commodities are not found adequate in any one of these regulated markets of Assam . The lack of market components in the aforesaid regulated markets has still been standing as one of the most important barriers in the marketing of agricultural yards in Assam . In this regard the Assam State Agricultural Marketing Board should take care for the development of rural markets and connecting these with rural roads , providing storage facilities and arranging supply of inputs and consumers goods which in turn , would help to promote the processing activities of regulated markets in Assam .

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Table -1
Irrigated Command Areas

Sl. No	Name of market	Name of district	Irrigation scheme	Commercial areas in hect.	Commercial crops produced in the time
1	Gauripur	Dhubri	Bidyapur electric lift scheme	360	June
2	Barpeta	Barpeta	Beki lift irrigation scheme	10,000	June
3	Nalbari	Nalbari	---	---	June
4	Darrang	Darrang	Dhansiri medium irrigation	25,000	June
5	Sonitpur	Sonitpur	scheme	25,000	June
6	Nagaon	Nagaon	Do	---	June

Source : Regulated Market Development Project in Assam , 1984 pp: 254-255

Table -2
Traditional Markets Situated at Different Distances
From the Sample -Regulated Markets

Sl.No	Distance in km.	No. of PWM	No. of PVM	No. of SWM	Total	Percentage of the total
1	0-5	1	4	5	10	11.76
2	6-11	1	6	nil	7	8.24
3	12-17	1	5	1	7	8.34
4	18-23	1	3	1	8	9.41
5	24-29	2	4	nil	6	7.06
6	30-35	5	5	1	11	12.94
7	36-41	1	6	nil	7	8.24
8	42-47	nil	5	1	6	7.06
9	48-53	1	7	1	9	10.58
10	54-59	2	3	1	6	7.06
11	60 and	3	5	nil	8	9.41
Total	&+					
	--	21	53	11	85	100.0

Source : PWD offices of Dhubri, Barpeta, Darrang, Nalari, and Nagaon districts, government of Assam, 2003

Note : PWM= Primary Wholesale Market, PVM= primary village market
SWM= Secondary Wholesale Market

Table -3

Distance between regulated market and railway station

Sl. NO	Regulated Market	Railway Passed	Nearest Railway Station	Distance from the regulated market approx.
1	Gauripur	N.E. Railway	Gauripur	1
2	Howly	N.E. Railway	Barpeta Road	10
3	Nalbari	N.E. Railway	Nalbari	4
4	Kharupetia	N.E. Railway	Rowta Bagan	40
5	Dhekiajuli	N.E. Railway	Dhekiajuli	12
6	Dhing	N.E. Railway	Dhing	2

Source : Field Survey

Demographic Profile of the Scheduled Tribes of Dimoria Tribal Development Block in Assam

Dr. Ranu Devi

(Abstract: In this paper an attempt has been to assess the present Socio-economics status of the tribal people of nine sample villages of Dimoria Tribal development Block.)

Introduction :

As per 1991 census report the Scheduled Tribal people constitute 12.82 per cent of the total population of Assam. In Assam there are as many as twenty three (23) Scheduled Tribes of which thirteen tribes belong to hills tribes and the rest belong to plain tribes. In our sample block there are mainly five tribes namely Bodo, Karbi, Tiwa, Rabha Hindu Garo, and Christian Garo. The Dimoria Tribal Development Block was constituted in the year 1954 with its Block Development office at Sonapur. It is situated in Dispur Constituency and lies at a distance of 20 kilometers from Dispur having population of 95,394 as per 1991 census report. Since independence the Tribal people of their Block have suffered from Socio-economic backwardness. So the study bears a great significance to find out the reason of their backwardness and to examine their demographic traits.

Objectives: The objective of the paper is to make an assessment of the existing socio-economic status of the Scheduled tribe People of the Dimoria Tribal Development Block of Kamrup district.

Database and Methodology

The study is basically based on primary data. Of course secondary data have also been used.

Universe: It consists of Tribal people of Dimoria Tribal Development Block.

Simple Village: In our sample Block we have 145 villages as per 2001 census report. Out of these 62.1 per cent villages are Tribal dominated villages, of which 10 per cent of 9 villages have been purposively selected for our study. These are Juaigaon, Barkachrang N.C., Bejuai, Murkala, Senabar, Sonai, Sonapur I. no., Tegheria, Topatali N.C.

Sample Households: As per our first point survey in the sample villages we have 823 sample households, which have been classified into four Lansing categories viz LL-Landless, ML-Marginal, SL-Small and BL-Big landholders. On the basis of stratified sampling method we have selected 25 percent households from the total of each landholding category. The table-1 presents the sample households against the total.

Table-1

Sample Households against the Total

Categories of sample Households	Total	Sample	%
LL-landless (0-0.5 hectares)	326	81	39.7
ML-Marginal (0.5-1 hectares)	250	62	30.5
SL-Small (1-2 hectares)	191	47	23.0
BL-Big landholders (2 hectares and above)	56	14	6.9
Total	823	204	100.0

Results and Discussion

i. Demography

Population size: Table 2 shows that in 204 sample households there were as many as 1522 population in 1992-93, out of the total population male population was 824 while female population was 324. So the sex ratio was estimated at 805. This sex ratio was comparatively lower than the sex ratio we have found for the Assam viz. 925.31

Size of family: The average size of the family was estimated at 7.

ii) Marital Status: Table 2 shows that out of 1522 ST population only 28 per cent or 440 persons are married, rest are unmarried. Of the married 8 persons or 1.8 per cent are widow remarried, 21 or 4.8 per cent are widows or widowers and 2.5 percent or 11 persons divorced of which 6 are male, and 5 are female. It indicates the existence of divorce system among the Tribal people.

iii. Family planning: Table- 3 reveals that out of the total sample heads of the households, 27 per cent or 55 couples are found to have adopted the family planning practices. Of the 55 couples, 67.3 per cent or 37 couples have used the measure of “Bandhy koron”, the remaining 18 couples or 32.7 per cent are seen to have adopted family planning measure through the sterilization, use of contraceptive and oral pills etc. But the great majority of them are found to have neglected the method of the family planning. As a result, the growth rate of tribal population is to be found to be high in Dimoria Tribal Development Block (i.e during 1971-1991, the growth of population was as high as 3.52 per annum).

Table-2
Socio-economic Indicators of the Sample Households

Indicators	Total	% of the respective total
Total Households	204	
1 Total population	1522	
- Male	843	
- Female	679	
2 Sex ratio	805	
3 Size of family	7	
4 Marital status		
Married	440	
Widowed married	8	28.9
Widowed and widower	21	1.8
Divorced	11	14.8
Unmarried	1042	68.5
5. User of family planning measure	55	27.0
a) Bondha Karan	37	67.3
b) Others (Sterilization, Contraception, pill.)	18	32.7
6 Occupational Status		
a) Primary	163	79.9
b) Secondary	11	5.4
c) Tertiary	20	14.7
7 Economic Status		
a) Earner	470	30.9
b) Earning dependent	417	27.4
c) Non earning dependent	635	41.7
8 Literacy		
a) Male	355	42.11
b) Female	179	26.36
c) Total	534	35.09

v) **Economic Status** Economic status of a person can be measured in terms of the three terms. 1. earners, 2 earning dependent and complete dependent. Table-3 reveals that economic status of the sample households varies from tribe to tribe. Economic status of the Tiwa tribe is found to be more than those of others. Table-3 reveals that out of all populations of 1522, 30.9 per cent or 470 are earners. The percentage of earning dependent is 27.40, while the 41.7 per cent or 635 population are non-earners or complete dependents. The economic status of the tribal people is lower than the state level (30.9 per cent of earners of the sample households against the 33% of the state as per 1991 census report)

v. **Occupation** : Occupation of the sample household can be classified into three categories – primary, secondary, and tertiary occupations. Table-3 reveals that about 80 per cent of the total sample households are engaged in traditional occupations like cultivation, agricultural labourer as their primary occupation. Out of the total 5.4 per cent or 11 households have secondary households, while 14.7 per cent or 30 households have engaged in tertiary sector.

vi. **Educational Status**: From Table-3 we see that about 65 per cent of the total tribal people are found illiterate and only 35.0 per cent of them are literate. The female literacy is found to be more than those of male literacy rate (i.e. 26.36 percent against 42.11 percent)due to their Socio-economic backwardness and negligence of female education.

vii. **Landholding** : Out of the total of 204 households about 40 per cent households are landless, 30.9 households are marginal, 23 per cent households are small landholders, while the remaining 6.7 per cent households are big landholders.

Conclusion: The following conclusions can be drawn from our

study .

The growth rate of tribal population of Dimoria Block is found to be much higher than those of the whole population of Assam (i.e. 3.5 per cent pr annum against 2.5 per cent of the state of Assam during 1971-1991)

1. The ratio of the economically active population is found to be less than that of the state level (i.e. 30.9 per cent against 3.4 percent of the state as per 1991 census). But female participation rate is very high in the study area.

2. There is lack of awareness among the Scheduled Tribe people to adopt the family planning practices to restrict their family size on account of literacy and superstition of the Tribal people.

3. A great majority of them lack productive resources.

4. The literacy rate of them is much less (35.09%) than that of the state (53.94 as p 1991 census report).

5. The tribal people are found to have engaged more in primary occupation than those of other sectors of occupations.

In conclusion we may comment that in order to improve the Socio-economic status of the tribal people efforts should be made by Government under different components of welfare plans and self-efforts made by them by taking education and training, shifting occupation from traditional to modern occupation etc.

Additional Resource Mobilisation: Impact on Inflation and Growth

Dr. Diptimoni Duarah Saikia

(ABSTRACT: The theoretical discussion placed in this paper tries to give an idea of inflationary and growth impacts of Additional Resource Mobilization . ARM has positive impact on both inflation and growth . Therefore, it is possible to find out an optimal pattern of financing plan investment leading to economic growth consistent with a certain inflation rate where ARM is one of the instruments of financing plan investment expenditure.)

INTRODUCTION:

Additional resource mobilization manifests itself in the form of additional taxes and additional revenue from public enterprises. Additional taxation is the major component of additional resource mobilization and it, as a source of financing planned development outlay, has gained more and more importance continuously. This is a major source of stepping up domestic savings at the existing rates of taxes to the level of desired investment. The other source of additional resource mobilization is the additional revenue of the public sector enterprises which they earn by raising their administered prices and this too contributes towards stepping up domestic savings.

ADDITIONAL RESOURCE MOBILISATION – IMPACT ON INFLATION:

Although taxation is assumed to be a major source of stepping up the saving ratio by non-inflationary means yet this too beyond a certain limit will have an adverse effect on the willingness to work and the expenditure on consumption will be affected adversely and this in turn will adversely affect the consumption goods sector. Again when commodity taxes like union excise duties and sales tax are increased they add to the prices in the immediate short-run. Along with this rise in prices, if money incomes are also raised, there will not be any fall in either money or real demand, and as a result the demand-pull inflation might be reinforced by tax-push inflation. However, if money income remains constant or falls, it may reduce real demand and bring partial or sectoral recession. Indirect taxation usually leads to increase in prices whenever they are levied on intermediate goods. The impact of additional taxation in the form of indirect taxes is to push up the prices through the process of shifting. We agree with the observations made by Thavaraj (1974) in the following lines : "Though increases in price level due to shifting of taxes is not reckoned as inflation, they do cut into the real income or consumption of those on whom they fall. In other words, in so far as it is reflected in higher prices, indirect taxes have more or less, the same effect on consumers as inflationary financing though the cause and effects of the later are more unpredictable" (p.113). Moreover, high tax rates in the form of additional taxation affect private savings and investment. The savings potential of the household sector is eroded with the hikes in tax rates. Companies too fail to generate sufficient internal surpluses for investment on account of excessive rates of corporate tax.

Although, in case of direct taxation such as income tax, an increase in rates would be anti-inflationary because it reduces the disposable income of the individuals on whom it falls, yet its price dampening effect is much less than the price escalating effect of indirect taxation because of much smaller magnitude of the former in comparison to the later.

The government raises additional revenue from public enterprises which constitutes a part of additional resource mobilization. The government finds it easy to raise the administered prices of goods and

services produced and sold by the public sector enterprises such as petrol, steel, coal etc. which have direct impact on price level.

ADDITIONAL RESOURCE MOBILISATION- IMPACT ON GROWTH :

Coming to the growth impact of additional resource mobilization it is expected that additional resources mobilized through additional taxation and raising of administered prices divert funds from the private to the public sector and thereby reduces the amount available for private consumption and investment. The effect of such diversion on investment and output depends on the employment of the funds of the government which could be either on current goods and services or investment. To the extent that public consumption goes up at the expense of private savings and investment it will have adverse effect on total output and therefore on growth. On the other hand, the diversion of funds from private consumption to public investment would have a beneficial impact on total output and therefore on growth.

From the forgoing discussion it is clear that a rigorous study relating to the impact of ARM on inflation and growth in the context of our national planning is very essential.

1.1 THE PROBLEM UNDER STUDY:

In this paper we make an attempt to study the growth and inflationary impact of ARM in the context of planning in India. The periodicity of study is from 1951-52 to 1996- 97.

1.2 OBJECTIVE OF THE STUDY:

The sole objective of this study is to determine the influence of ARM on the growth of GNP and inflation (WPI)

1.3 METHODOLOGY OF STUDY: To study the impact of ARM on WPI or GNP , we use the following simple linear regression model

$Y = \delta^0 + \delta^1 X + U$, where
 X = Investment financed through additional resource mobilization.

Y = GNP or WPI

U = Stochastic disturbance term

δ^0, δ^1 = Parameters to be estimated.

1.4 LIMITATION OF THE STUDY:

The Above regression model can be applied only if there exists a linear relationship between ARM and the growth of WPI or GNP. Moreover, the limitation of secondary data will be applicable to our study.

2.0 REGRESSION RESULT AND INTERPRETATIONS.

2(a) INFLATIONARY IMPACT OF ARM (Plan – wise annual average at current prices)

$$Y = 17.98847 + 0.008849X$$

$$S.E(8) : \quad (0.002779)$$

++

$$t = \quad 3.18424$$

No. of observation = 10

Degrees of freedom = 6

N.B = ++Implies significant at 5% level

Interpretation: We observe from the regression model at current prices based on plan-wise data (Table-1) that during the planning period from 1951-1956 to 1992-1997, ARM has positive impact on inflation and the impact is significant at 5% level.

2(b) Growth impact of ARM(plan-wise annual average at current prices)

$$Y = 11179.3 + 8.0572035 X$$

$$S.E(11) (4.598495)$$

N.S

$$t = \quad 1.752139$$

No. of observation = 10

The Degrees of freedom = 6

Interpretation:

The regression model (2(b)) based on the period 1955-1956 to 1992-1997 at current prices reveals that ARM has positive impact on growth of GNP but impact is not significant

Table: Planwise Annual Average of WPI (1981-82=100), Additional Resource Mobilization (ARM), & Gross National Product(GNP) at current prices (Rs. in crores)

Plan Period	WPI	ARM	GNP at factor cost
First Plan (1951-56)	15.7	51.0	9634.2
Second Plan (1956-61)	17.5	210.4	13142.4
Third Plan (1961-66)	21.9	578.4	19879.4
Annual Plans (1966-69)	31.0	302.6	30925.3
Fourth Plan (1969-74)	38.9	856.0	44247.6
Fifth Plan (1974-79)	62.9	2060.0	78967.8
Annual Plan (1979-80)	76.0	1509.0	102595.0
Sixth Plan (1980-85)	105.5	6594.0	163535.4
Seventh Plan (1985-90)	144.3	5004.6	305542.0
Eighth Plan (1992-97)	272.3	3450.3*	925050.8

Source : GNP : Economic Survey, Govt. of India, 1990-91 and 2000-2001.

ARM : RBI Reports on Currency and Finance, various issues, various plan documents, Planning Commission, Govt. of India, New Delhi; Statistical Outline of India (1999-2000), Tata Services Limited, Department of Economics and Statistics.

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Demographic Profile of the Malis in the Brahmaputra Valley of Assam

(A Case Study in Hajo Revenue Circle of Kamrup District)

Dr. D.K.Bezbaruah,

Introduction

On the basis of social status arising out of differentiation of occupation, the 1891 census report identifies the Mali of the Brahmaputra valley as Phul-Mali who is a gardener, a garland maker, a trader of flowers. On the other hand the Mali of the Barak Valley is identified as Bhuin-Mali who at one time was scavenger. But now they have taken to cultivation, fishing, or boating and avoided scavenging (Census of India 1961, vol. III, Assam: 46). So the social status of them in Barak valley is to a great extent different from that of Brahmaputra valley. Since 1931 census report both the terms 'Mali' and 'Bhuin-mali' have been used to indicate the same caste (Census of India, 1961, vol. III, Assam : 100). According to social status accorded to them they are specified and labeled as one of the sixteen Scheduled Castes of the state of Assam as per constitutional (Scheduled Castes) order 1950(a) part-II Assam under provision of Article 341 and 342 and the S.Cs and S.Ts List Modification Order, 1956. Under these background we have made a detailed in-depth study over a sample of 21.4 per cent i.e., three vil-

lages including, of course, Niz Hajo town located at Hajo Revenue circle of Kamrup district of Assam

1.2 Objectives: The broad objectives of the present study are as follows:

- i. To trace out the origin, growth and development of the Malis in the Brahmaputra valley.
- ii. To examine demographic traits of the Malis of the Hajo
- iii. And to suggest measures for their overall development.

1.3 Hypothesis: It is an exploratory micro-study in nature at the level of a circle namely Hajo Revenue Circle. So it does not involve any hypothesis for testing.

1.4 Research Design and Methodology:

4.1 Universe of the study: It consists of the Mali people Hajo revenue circle of Kamrup district of the Brahmaputra valley

4.2 Sampling Frame : Selection of Hajo Revenue Circle:

For the purpose of our study, the Hajo revenue circle has been selected on the ground that though the people of Mali community are distributed throughout Assam from Dhubri to Sadia, yet their main concentration is found in Hajo revenue circle of Kamrup district. In Hajo Revenues Circle, there are altogether twelve Mali villages namely: Bagta No. 1, Bagta No. 3, Bagta No. 4 (Satdala), Bamundi, Bardadhi, Dakhin Singra, Gerua (Khudradadhi), Hajo Barchapri, Monahkuchi, Kismat Bongsor 1, Kismat Bongsor 2, Saktibari and two towns such as Nij

Hajo and Sualkuchi which give an idea about their life style and present plight.

4.2.2 Selection of Village: Out of the total only 21 per cent i.e. two villages namely Hajo Barchapari and Dakhin Singra and one town viz. Niz Hajo city have been purposively selected for the purpose of our study. In these villages the Mali people grow varieties of flowers for business purpose and thereby earn their livelihoods.

4.2.3 Sample Households: According to a study of All Assam Mali Samaj conducted in 1995, in our study area there are as many as 354 heads of the households. These heads have been divided and serialised according to their educational levels into four categories, viz. illiterate, primary, secondary and higher. And then serial numbers are put against each level of education.

After this through systematic sample method, we have sampled out serially 25 per cent households against each level of education. That is, we have to identify every fourth from each stratified category. Accordingly we have sampled out as many as 88 households out of 354 ones. Table -1 presents spatial distribution of sample households against the total households according to their educational level.

Table - 1
Sample Households and total households according to Educational Levels

Educational Level	Illiterate	Literate	Primary	Secondary	Higher	Total
Total	130	224	105	63	56	354
Sample	32	56	26	16	14	88

Source : First point survey

4.2.4: Data Collection and Methodology

The study is basically based on both primary data and secondary data. The primary data have collected through a two-point survey – In the first point survey, we have collected the names of the heads of the households and their educational status. In the second point survey as many as 88 sample households have been canvassed with a special set of household schedule for gathering our requisite data.

Thus, we have conducted the survey and completed the work in between June and December, 2000. And then the work of tabulation through transcription sheets has been completed by February 2001. Data so tabulated have been analysed by using mainly statistical tools like percentages. The analysis of data have been finalized by 15th September 2001. And the work of computerization of the chapters one by one has been over by 9th January 2002.

Results and Discussion

Part- A

Origin, Growth and Development of the Malis

Out of our study we can derive the following observations

(a) The Malis or Phul-malis or Bhuin-malis are one of the major Scheduled Caste Communities of Assam. Here the name Phul-Mali has been derived from two words viz. 'phul' meaning flower and 'Mali' meaning garland. The actual meaning of the name 'Phul-Mali' is a garland maker, a trader of flower or a florist and a decorator as he makes garlands out of flowers and supplies and sells for the service of the temple. On the other hand the term 'Bhumi-Mali' has been derived from the two words viz. 'Bhuin' which means soil and Mali which means a community which cultivate in 'Bhumi' or soil.

On the basis of social status arising out of differentiation of occupation, the 1891 census report identifies the Malis of the Brahmaputra valley as 'Phul-Mali' known as gardener, a garland makers or a trader of flowers and the Malis of the Barak Valley as Bhumi-Mali or Bhuin-Mali who are at present cultivating, fishing or boating community and avoided their past occupation of scavengering. Since 1931 Census report both the terms 'Mali' and 'Bhuin -Mali' have been used as synonymous. Because according to the ethnological Scholars, gotras of both of them are the same as alamyam, parasara, kashyap, vyas and bharadas.

(b) From the point of view of mythology, history, anthropological point of view we can find out the origin of the Mali community

i The Dharma Shastras, the Smritis or Puranas like Sri Sri Madbhagavata, Geeta, Kirtana Ghosha, Sri Sri Brahmavaibarta Purana. refer to them as Sudama Malakar or as Nabusen Malakar who was not

of the nine sons of Viswakarma father and Ghrītachi mother

ii From historical description during the Ahom rule we can know something about Mali community how they were engaged by Koch king of Hajo and Ahom Kings to make garlands out of flowers for the service of the temple. Since the Ahom rule horizontal occupational mobility had taken place among them because of specialization of their occupation.

The horizontal occupational mobility has given rise to as many as sixteen functional classifications of the Mali community namely 1. Mali or Phul-Mali, 2. Bhuin-Mali, 3. Mali Barua, 4. Bania mali ;1, 5. Sutradhar mali, 6. Balikata Mali, 7. Dokani Mali, 8. Oja Mali, 9. Phul-kata Mali, 10. Athparia Mali, 11. Biswashi, 12. Fighter Mali, 13. Bharali Mali, 14. Sikdar Mali (assistant), 15. Sara Mali (helper), and 16. Duwari Mali (gatekeeper).

iii. On the basis anthropometrics test we have discerned three characteristics as to their origin. First the some of the Malis or Bhuin-malis belong to Alpines of the caucasic blood(Kinkar :1990 :16). Secondly according to B.C. Allen the Malis who are one of the sub-castes of the Kaibarts belong to dravidian stock .Lastly some of them who came from Bihar are alike to Mongolian pysiognomical characteristics.

(d) The growth of population of them up to 1971 was negative. As regards rural-urban composition it is found that in 1971 about 85 per cent lived in rural areas, while about 15 per cent lived in urban areas. As regards literacy it is seen that in 1971, 27 per cent of them was literate, and the per centage of male literacy was more than that of female (36% against 16%).

(e) In respect of social organisation, Mali community has its own organization viz. Mali Samaj (society) which is the result

of deprivation of getting S.C. certificates from authority concerned. The All Assam Mali Samaj is trying its best to face with all obstacles arising out of any circumstances and precedes forwards the path of progress with credit and fame. Further in each village there is a village panchayat.

(f) In respect of the folk culture we have found their rich folk literature or folk narratives or tales like –a legendary story of Ghateswari, a girl of the Mali community, a legend about Kendukalai and the Malis and a legendry story about kuhila and the Malakars. Besides these there are some folk songs with reference to flowers supplied by Malakars of Hajo in rhyme.

(g) In respect of social custom, the Mali community is seen to have observed five aspects of social custom namely (a) festivals and creations, (b) recreation and games, (c) birth and death, (d) folk belief and (e) religion which are similar to other general people.

(h) With reference to economic of Milieu of the Mali community we have found how the Mali people grow different kinds of flowers like marigolds, practise kuhila cultivation and from it make different kinds of crafts like kadamphul, kalimukha etc. Besides there are five different types of flower based industries in the state of Assam viz. i. Nursery industry, ii. Pottery industry, iii. Cut-flower industry, iv. Tissue culture and v. Perfume industry.

(I) Malis of Hajo are rich in flower craft of which garland craft is very remarkable. There are almost as many as 15 major types of garlands namely 1. Jal-mala, 2. Mur-mala, 3. Kantha mala, 4. Dhukdhuki -mala, 5. Kata mala, 6. Bina Sutar -mala, 7. Belpatar mala, 8. Top mala, 9. Dola mala, 10. Chaular mala, 11. Dhanar -mala, 12. Gal -mala, 13. Akan phular mala, 14. Makre mala, 15. Matkal mala. These garlands are used in different images or idols of the pancatirtha of Hajo. The flower craft has played a significance role in enhancing the economy of poor

Malis. Further it has met the global demand for cut-flower and local demand for flowers and garlands. Despite its immense importance, this bloom craft is facing a lot of problems like problem of manpower, problem of research, improper packaging, lack of cold storage, problem of technical accessibility, transport problem unorganised domestic market, problem of credit facilities and subsidy etc. which hinder in the growth of the flower craft of Hajo.

(J) The Malis or the Bhuin-malis immigrated from Mallabumi to the eastern region particularly in Bangladesh and then to Barak Valley of Assam and settled permanently. Some others came from different parts of India mainly from Benarash, Bihar at different period of time and settled here in Assam. Though the Malis are distributed throughout Assam, yet their main concentration is found in Hajo revenue circle of Kamrup district. In Hajo revenue Circle, there are altogether twelve Mali villages. Out of these, 21 per cent i.e. two villages namely Hajo Barchapari and Dakhin Singra and one town viz. Niz Hajo have been purposively selected to serve the purpose of our study.

Part-B

Demographic Traits of the Sample Households

The main findings derived from the household survey are presented in table 2 and analysed as follows:

i. The total population of the 88 sample households is estimated at 578 of which 302 persons are male and 276 are female. So sex ratio is worked out to be 1000:914. This sex ratio is lower than that we have 924 for this circle and 927 for the state in 1991

ii. The average size of sample household is 6.6 which is more than that of S. C. households of Assam (5.6) as per 1991 census report.

iii. The family structure of the Mali people in the study area is also changing from joint family structure (7%) to nuclear family norm (93%) due to economic hardship and development of ideology

of individualism and materialism
 iv. Marital status of the sample households has been changing i.e. inter-caste marriage is taking place among 7.9 per cent Malis households, since it helps in eradicating untouchability in the society and it helps also in the process of equalization of social status with other castes.
 v. **Literacy:** Out of the total sample households as high as 74.6 per cent are literates. This percentage is found to be more in Niz Hajo than in Dakhin Singra (80.6% against 51.6% in Dakhin Singra).

Table-2
 Demographic Indicators of the Sample Households

Indicators	Total	Niz Hajo	Hajo Bar Chapari	Dakhin Singra
1 Total Population	578	376	109	93
Male	302	196	57	49
Female	276	180	52	44
2 Sex ratio	914	918	912	898
3 No. of family	88	57	16	15
6 Average size of Family	6.6	6.6	6.8	6.2
(A) Nuclear family T	82	55	14	13
%	93.2	95.5	87.5	86.7
(B) Joint T	6	2	2	2
%	6.8	3.5	12.5	13.3
8 Marital Status. Married T	223	145	42	36
%	38.6	34.6	38.6	38.7
Inter-caste T	5	1	1	7
%	8.8	6.2	6.7	7.9
Same caste T	52	15	14	81
%	91.2	93.8	93.3	92.1
9 Literate T	431	303	74	48
%	74.6	80.6	67.9	51.6
10 Occupation Primary T	31	13	8	10
%	15.2	22.8	44.4	66.7
Secondary T	16	9	2	5
%	18.2	15.8	12.5	11.1
Tertiary T	41	35	6	-
%	46.6	61.4	17.5	-

Field Survey

vi. As regards economic status, it has been observed that a fourth of the population has to support 58.8 per cent of their family members wholly, while a sixth has to contribute sometimes of their necessities.

vii. In respect of occupation it has been observed that although agriculture is the mainstay of the Mali people, even then, in recent time there has been shift of traditional occupation of the sample households from primary sector (35.2%) to the tertiary sector (46.6%) due to many factors like fragmentation of landholdings, influence of modern education, and availability of transport and communication.

viii. Majority of the sample households are landless households (55.7%). Of the total households 25 per cent are marginal landholding households, 12 per cent are small landholders and only 6.8 per cent are big landholding households. The Mali people of the Hajo except big landholders have not been able to modernize cultivator for paddy and flowers for uneconomic landholding.

ix. The Malis are getting some help from the allocations under scheduled caste component plan, but the impact of the various development schemes is yet to be far from adequate. Most of the roads linking the Mali villages are katcha fair weather roads.

x. Economic differentiation with respect to income and wealth arises not only in the different occupational groups of the Mali community but between the rural and urban Malis also. This differentiation arises due to factors like poverty, disparity in income and wealth, occupational differences, inequitable distribution of means of production, disparities in the development of infrastructural facilities and indebtedness etc.

Suggestion

On the basis of the findings of the study following suggestions can be made.

i. An effort should be made so as to solve the problem arising out of conflict between the Scheduled Caste Council and All Assam Mali Samaj regarding the issue of SC certificate in favour of the Malis.

ii. In order to meet the increasing demand for local garlands, the gardeners should be encouraged to raise productivity of agriculture and

floriculture and products out of flower craft. The government should acquaint themselves with the scientific method of floriculture to develop the flower crafts of Hajo. Government should take immediate and necessary steps in connection with

- The provision of the scientific method to develop the different kinds of garlands.
- Creation of organised domestic markets for best quality.
- Provision of cold storage facilities and proper packaging to ensure the safety of flowers and garlands.
- Conducting research work on floriculture and flower craft.
- Allocation of land to the landless of them along with necessary fund for improvement of floriculture.
- Provision of training facilities, grants-in aid subsidies and tax exemption etc.

iii. The Mali youths should be moderated and encouraged for self-employment either in their traditional occupation of gardening, or in modern diversified occupation or in subsidiary occupations like dairy farming, bee keeping and poultry farming etc.. For this government should give them economic incentive in the form of self-employment training course with free of cost and loan at a nominal rate of interest.*

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Border Trade, Regional Associations and Prospects for the Economy of Northeast

Suranjan Sarma M.Sc., Ph.D

I

Border Trade and Regional Associations:

With the average growth rates of sustained 5.5 percent over the past two decades, South Asia has emerged among the fastest growing regions of the world. Since the early 1990s, the region has also moved ahead with reforms and integration of its economies with the global economy more closely and has also begun to liberalize the intra-regional trade. Despite such rapid stride in terms of development, South Asian countries continued to be the home to 44 percent of the world's poor. Large sections of our population do not have access to education, health, nutrition and such basic amenities as safe drinking water and sanitation. The Eastern South Asia Sub-region comprising Bangladesh, India, Nepal and Bhutan contains approximately 500 million people, out of total of about 150 million, who are living below the poverty line. Further this sub-region does not account for even 1 percent of the global trade or 1 percent of FDI. What is more said is that intra-regional trade between these countries does not constitute even 3 percent of their total trade. (Dutt, 2004).

South Asia therefore faces enormous challenges for expediting the pace of development and strengthening its pace in the comity of nations, in terms of different indicators of socio-economic development and well-being. In the context of high population growth, relatively low per capita income and a large section of population vulnerable to poverty, the quality of human life in South Asia is confronted with significant challenges. The various indicators of human development have largely varied across the South Asian nations. For example, the human development indicators places Bhutan as one of the least developed countries. The adult literacy rate for Bhutan is one of low at 42.0 percent. The Human Development Index (0.483 in 1998) puts Bhutan in a low rank. The under-5 mortality rate per 1000 population is 100 in the year 2000 for Bhutan is much higher than the world rate of 82. Similarly only 38 and 31 per cents of the population of Bhutan, access to safe drinking water and sanitation facilities respectively in 2000. The maternal mortality ratio per 1,00,000 live births in Bhutan, which was 1310 (1990-96) is alarmingly high (Research and Information System, 2001 & 2004). Regional cooperation can facilitate achievement of the objectives of socio-economic development and well being by the South Asian countries by enabling the exploitation of their synergies for mutual benefit. Today both developed as well as developing countries in different parts of the world have looked to regional economic integration as a means of strengthening their international competitiveness and as an engine of growth (Pant, 2003). Thus, during 1980s the South Asian countries of Bhutan, Bangladesh, India, Maldives, Nepal, Sri Lanka and Pakistan took a major initiative towards greater regional economic cooperation in the form of South Asian Association for Regional Cooperation (SAARC). At the initial level, the growth of SAARC was slow. The basic factor for the slow growth, according to

the King of Bhutan (said in 1985) is not economic but political. Diversity in the perceptions of the members of SAARC explains to some extent its tardy progress (Kumar, 1999). Indian over shadows its neighbours in the region with its $\frac{3}{4}$ size and population and access to natural resources. Except the two island countries of Maldives and Sri Lanka the other states have frontiers with India covering a length of 15,000 kilometers. India insists that bilateral issues have no place in a regional forum. Also India's reservations are known about the feasibility of regional cooperation¹. On the other hand Pakistan feels that such a regional organization would benefit India more than other countries. Pakistan seeks the friendship of Islamic countries and China more than that of any member of SAARC. Problems of civil strife and political instability have also come in the way of progress of the movement through Nepal, Bangladesh, Bhutan and Maldives desired acceleration of work at the political level. However after 12th Summit Meeting of SAARC in Islamabad in 2004, it has made rapid strides in terms of initiatives aimed at fostering an economic integration in the region. The prospects of South Asian Preferential Trade Arrangements (SAPTA) shortly becoming South Asia Free Trade Area (SAFTA), emergence of various bilateral free trade arrangements, facilitation of capital flows in the region coordination of infrastructural facilities, are all examples of the commitment of the South Asia Region to the goal of effective economic integration for mutual benefits. Negotiations on preferential trading policy have been continuing and the intra-sub-regional trade has been increasing. Bangladesh, Bhutan, India and Nepal have created a growth quadrangle, called South Asian Growth Quadrangle (SAGQ).

II

Prospects for the Economy of North East India:

The North Eastern states of India hold a special significance in the Eastern South Asia Sub-region (ESSAS) comprising Bangladesh, Bhutan and Nepal due to their peculiar geographic location. The region shares only 2 percent of the border with the Indian mainland while 98 percent is connected with international border – a border shared with the neighbouring countries of Myanmar, Bangladesh, China and Bhutan. Study done by Indian Institute of Foreign Trade (1998) recommended that the region should concentrate on increasing trade with neighbouring countries mainly to create opportunities for the people to earn their livelihood. This is necessary both as a short and medium term measure since production of industrial and agricultural items with export bias would need some gestation period. The study also recommended for exploiting the resources of the region by setting up export-oriented units and giving value addition through manufacturing (Indian Institute of Foreign Trade (IIFT), 1998).

During 1990s under India's 'Look-East Policy' (- India's efforts to improve bi-lateral and multi-lateral ties with the countries of the South and South East Asian countries) – initiatives have been taken to break the artificial barriers between the subcontinent and the South-east Asia. Under the policy, increasing importance now being accorded by the Government of India, to forging closer commercial and economic links with the larger markets in the fast developing South East Asian economies. The North Eastern states have already established a large volume of informal trade with Myanmar and also with Bangladesh and with judicious policies and programmes could form important gateways to an expanded trade with the more affluent Asian markets. Besides these factors, the economic development of the North Eastern states is perceived directly linked to the growth and development of border trade with the neighbouring countries which in fact, had been

the traditional markets for a variety of its goods and services before such traditional links were disrupted by the partition of this country (Indian Institute of Foreign Trade (IIFT), 1998). From the point of economic opportunities that cross-border region building might mean for North East India. The region is known today for its high incidence of poverty. Though the causes of poverty are deep and complex there is no doubt that the disruption of trade and commerce and communication due to the partition of the country, as well as India's import substitution strategy of industrialization and gradual erection of barriers to international trade, have disrupted economies that till 50 years ago were well integrated and deprived the region of the gains from trade based on comparative advantage (Khanna quoted in Baruah, 2003).

Of late, there has been a talk of converting the locational disadvantage of northeast into a boon because of increasingly integrated world economy (Indian Institute of Entrepreneurship, 2002). Apart from being all the seven states of the region located on the international border, the region is very close to the vibrant economies of South East and East Asian countries. This has led to a new hope in the developmental horizon of North East with more and more softening of the geopolitical rigidities with neighbouring countries. The S. P. Shukla Commission (1999) in their report has also echoed the same possibility. The proximity of Northeastern region, with 98 percents of its border with neighbouring countries should be viewed as an opportunity to reach out very naturally the neighbourhood markets of Bangladesh, Myanmar and Bhutan and eventually the markets of Thailand, Malaysia, Indonesia etc.

Conclusion:

The recent initiatives for constructing regional economic community among the SAARC countries of South Asia, is bearing tremen-

dous opportunities for these countries as well as Northeast region of India. However the areas neighbouring the international borders are suffering from economic backwardness. As liberal border trade and economic development of a region are interdependent, a new line of reasoning attaching the localities neighbouring the border areas of both the countries should be the prime agenda.

Notes:

1. **The regional cooperation group** is of course only an agreement to give the required impetus to the development of some basic industries of the countries of the group, as there is no lowering of tariff or custom duties. However, **Free Trade Area** is a regime where the countries have mutually decided to remove tariff barriers for promoting trade within the region.

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Quantitative Assessment of Golden Silk in Assam

M. Bayan

(**Abstract** : The study of quantitative assessment attempts to fill in the long standing need of authentic database, absence of which acted as hindrance in taking up either problem oriented research or drawing up future plans and programmes for improvement of the trade. The area of coverage in the state of Assam is composed of fifteen districts. The area under existing plantation is 1813.55 hectare, which absorbs 18,13,550 nos. of food plants. The average nos. of food plants per hectare is 1000. Total nos. of rearing household is 26,974 in 8046 villages. Average no. of rearing household per village is 3.4. The total production of cocoons is 37.93 crores. Goalpara, Kamrup, Jorhat, Sibsagar, Dibrugarh and North Lakhimpur are the major districts pf production of cocoons.)

Introduction

Golden silk (Muga silk) is exclusive contribution of the North Eastern region. The texture and durability of this golden silk has attracted attention all over the world. The distribution as well as culture of Muga silkworm is endemic to North Eastern region of India since time immemorial. Therefore, culture of Muga silkworm became cul-

tural heritage of N.E. Region in general and Assam in particular.

Assam accounts for the highest production of non-mulberry silk with the monopoly in Muga silk production. On account of its conducive climate and favourable ecological condition, the state of Assam has appreciable potential for development of sericulture. The heavy rainfall and the moist climate of the state are eminently suited for the growth of the host plants for rearing of different kinds of silkworms.

Muga silkworm is a polyphagous insect which feed on several feeding plants, of which the important one are Som, Soalu and Dighalati. These native plant species grow abundantly throughout North East, and especially in the Brahmaputra valley and Barak valley and foothills of Naga, Khasi and Garo hills.

The Muga silkworm is multivoltine and therefore, rearing can be conducted round the year. It completes five life cycles in a year. Traditionally, Muga rearing is done outdoor which exposes the silkworm to some of the unfavourable environmental conditions and natural enemies. As such harvesting of silkworms becomes an uncertain proposition and largely depends on the vagaries of natures.

But the production of Muga silk in Assam at present, is not satisfactory. It is because of non-availability of healthy seed cocoons, unpredictable harvest, uncertain rearing behaviour, natural enemies, race degradation, difficulty in handling large number of moths, large sex-ratio for laying preparation, lack of reeling machines, remoteness of area of operation, presence of middleman in the trade of cocoon, yarn and fabric, etc. .

The Central Silk Board and the Sericulture Department of Assam by realizing the importance of this industry has introduced several schemes for the development of this age-old industry. A large number of Muga silk farms and sub-centres established for the production of disease free healthy seed cocoons. But the seed cocoons that is produced in government establishment can meet about twenty per cent of the total demand. The industry is still existing only because of the rearers own effort and initiative.

Methodology : The study is basically based on secondary data.

Results and Discussion

Plantation : The study reveals that an area of 1813.55 hectares of land is under Muga plants which grow in fifteen districts of Assam. Of the total area 56.9 per cent or 1031.88 hectares are under the government farms and the rest 43.1 per cent are under the occupation of the private farms. District-wise Lakhimpur district has witnessed the largest area under Muga plants while the Kokrajhar district has the smallest area under Muga plants.

Type of food plants : Three types of food plants are found in Assam, namely Som, Soalu and Dighlati while Som and Soalu are primary food plants growing in the state. Dighlati is a type of secondary food plant. Almost 90 per cent of the area is covered by Som and Soalu plants. The average no. of food plants per hectare is 1000. The study reveals that out of 1813.55 hectares under food plants, the state government farms have 56.9 per cent of food plants while the private farms have 43.1 per cent food plants.

Rearers : Rearing of Muga silk is a family trade of the household. The people engaged in the trade learn the technique of skill traditionally. Depending upon the availability of food plants, the people rear in own farm or other government farms. Sometimes rearers in one district move to other districts for rearing due to scarcity of plantation area. The study reveals that in the state there are as many as 26,974 nos. of rearing households.

Production of cocoons : Cocoons produced can be classified into two categories – seed cocoons and reeling cocoon. Depending upon the seasonality, five crops are grown in a year as given

Table -1

Crops according to Season

Crops	Season
Jarua	Dec, Jan, Feb.
Jethua	April, May.
Aherua	June, July
Bhodia	Aug, Sept.
Kotia	Oct., Nov.

Generally, Jarua, Aherua and Bhodia are considered as seed seasons and Jethua and Kotia as commercial seasons. It can be observed that total production during seed season is less than that of other seasons and a part of the harvest only is used as seed. As such amount of reeling cocoons received from seed season is considerably less.

The district wise production of cocoons are shown in table 2

(i) Production of cocoons is highest in North Lakhimpur (32.8%). This is followed by Sibsagar (29.29%), Dibrugarh (16.25%), Kamrup (8.89%), Jorhat (8.78%) and Goalpara (1.67%).

(ii) The total share of seed cocoon is small as compared to the reeling cocoon. The quality of cocoons produced in Kotia is best and fetches the higher return.

(iii) The delivery condition is very poor and traders themselves collect the cocoons in gunnybags and there is no standard procedure adopted.

(iv) It is seen that 90.3 per cent of the reeling cocoons is consumed by traders from Soal-kuchi area in Kamrup district.

(v) The price is affected by quantum of harvest. The practice of staring is absent among the rearers. As such in influencing the price the traders dominate the growers. So buyers market exist and the rearers are bound to offer the cocoons at price fixed by the traders. As the rearers are unorganized, they cannot influence the price. Therefore, a definite price structure does not exist.

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Table 2

District-wise Distribution of Production of Cocoons.

Sl. No.	Districts	Production of Cocoons
1.	Goalparas	6353376
2.	Kokrajhar	157560
3.	Bapeta	305720
4.	Kamrop	33736932
5.	Darrang	270400
6.	Sonitpur	601200
7.	Nahaon	144000
8.	Morigaon	345708
9.	Jorhat	33303960
10.	Goalpara	6732320
11.	Jorhat	111130272
12.	Sibasagar	61653992
13.	Dibrugarh	124450693
14.	North Lakhimpur	131328
15.	Cachar	14576
16.	Karimgang	
	Total	379340037

Source – Sericulture at a Glance