AGRICULTURAL MARKETING IN MIZORAM

(A CASE STUDY OF SERCHHIP DISTRICT)

By

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C E R T I F I C A T E

This is to certify that the dissertation entitled **"Agricultural Marketing in Mizoram (A Case Study of Serchhip District)"** by Mr. Laldinpuia has been written under my guidance.

He has fulfilled all the requirements in the M.Phil regulations of the Mizoram University. The dissertation is the result of his own investigation into the subject. Neither the dissertation as a whole nor any part of it was ever submitted to any other University for any research degree.

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12.04. 2011

DECLARATION

I, **Laldinpuia,** hereby declared that the subject matter of the dissertation entitled **"Agricultural Marketing in Mizoram (A Case Study of Serchhip District)"** is the record of the work done by me and that the content of the dissertation did not form basis for the award of any previous degree to me or to the best of my knowledge to anybody else in any other University/Institution.

This is being submitted to Mizoram University for the Degree of Master of Philosophy in Economics.

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(LALDINPUIA)

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A P P E N D I X – I: LAND USE STATISTICS OF MIZORAM

S/n	*HEADING*	*2004-05*	*2005-06*	*2006-07*	*2007-08*	*2008-09*	*2009-10*
		Thousand Hectares					
I	Geographical Area	2108.700	2108.700	2108.700	2108.700	2108.700	2108.700
II	Reporting Area for Land Utilization Statistics (1 - 5)	2108.700	2108.700	2108.700	2108.700	2108.700	2108.700
1	Forests	1593.650	1593.700	1593.700	1593.700	793.854	1585.305
2	Not available for Cultivation (a + b)	134.030	134.030	134.040	134.050	133.000	94.962
	a) Land put to non-agricultural uses	125.510	125.410	125.420	125.430	124.000	86.712
	b) Barren and Uncultivable land	8.520	8.620	8.620	8.620	9.000	8.250
3	Other uncultivated land excluding fallow land (a + b + c)	20.578	20.809	79.230	77.209	827.070	50.660
	a) Permanent pastures and other gazing land	5.346	5.340	5.235	5.230	5.250	5.250
	b) Land under miscellaneous tree crops and groves not included in het area sown	10.232	10.238	68.765	66.749	794.820	38.710
	c) Culturable waste	5.000	5.231	5.230	5.230	27.000	6.700
4	Fallow lands (a + b)	236.878	238.161	207.543	210.928	230.939	246.823
	a) Fallow lands other than current fallows	186.909	197.192	166.078	165.981	170.850	180.800
	b) Current fallows	49.969	40.969	41.465	44.947	60.089	66.023
5	Net sown area	123.564	122.000	94.187	92.813	123.837	130.226
6	Total Crop Area	129.274	126.451	105.575	102.903	126.716	133.226
7	Area sown more than once	5.710	5.700	5.000	1.437	2.879	2.276
III	Net Irrigated Area	11.852	11.800	11.388	9.446	11.067	10.244
IV	Gross Irrigated Area	16.454	16.360	16.360	14.169	11.198	10.361

Source : Statistical Abstract 2008-2009, 2009-2010

A P P E N D I X – II: LAND USE STATISTICS OF SERCHHIP DISTRICT

S/n	*HEADING*	*2008-09*	*2009-10*
		Thousand Hectares	
I	Geographical Area	142.160	142.160
II	Reporting Area for Land Utilization Statistics (1 - 5)	142.160	142.160
1	Forests	20.021	91.235
2	Not available for Cultivation (a + b)	9.683	9.816
	a) Land put to non-agricultural uses	9.033	9.158
	b) Barren and Uncultivable land	0.650	0.658
3	Other uncultivated land excluding fallow land (a + b + c)	77.144	5.810
	a) Permanent pastures and other gazing land	0.350	0.350
	b) Land under miscellaneous tree crops and groves not included in het area sown	65.895	4.980
	c) Culturable waste	10.899	0.480
4	Fallow lands (a + b)	15.58	16.352
	a) Fallow lands other than current fallows	11.529	12.000
	b) Current fallows	4.051	4.352
5	Net sown area	19.732	18.947
6	Total Crop Area	19.844	19.066
7	Area sown more than once	0.112	0.119
III	Net Irrigated Area	1.485	1.535
IV	Gross Irrigated Area	1.485	1.535

Source: Statistical Abstract 2008-2009, 2009-2010

A P P E N D I X – III: FINAL AREA AND PRODUCTION OF AGRICULTURAL CROPS IN SERCHHIP DISTRICT

		2007 - 2008		2008 - 2009		2009 - 2010	
S/n	Name of Crops	Area in Ha.	Production in MT	Area in Ha.	Production in MT	Area in Ha.	Production in MT
1	**2**	**5**	**6**	**7**	**8**	**9**	**10**
I	PADDY						
	(1) Jhum	2144	383	4608	9896	4352	3453
	(2) WRC (a) Kharif	1353	652	1485	4650	1535	1136
	(3) WRC (b) Rabi			-	-	-	-
	TOTAL OF WRC	1353	652	1485	4650	1535	1136
	GRAND TOTAL OF PADDY	3497	1035	6093	14546	5887	4590
II	MAIZE (a) Kharif	100	51	1445	2486	1445	1122
	(b) Rabi					-	-
	TOTAL OF (a + b)	100	51	1445	2486	1445	1122
III	PULSES						
	(1) Rice Bean Kharif			65	46	65	67
	(2) ARHAR Kharif					66	50
	(3) FIELD PEA Rabi			30	24	49	38
	(4) COW PEA Kharif	303	250	84	67	133	108
	(b) Rabi					-	-
	TOTAL OF (a + b)	303	205	84	67	133	108
	(5) French Bean (Pulses)Rabi			32	213	47	289
	TOTAL OF KHARIF	303	250	199	147	264	225
	TOTAL OF RABI			62	237	96	327
	GRAND TOTAL OF PULSES	303	250	261	384	360	552
	OILSEED						
IV	(1) Soyabean (Kharif)	10	2	155	254	210	352
	(2) Sesamum (Kharif)	10	2	20	5	30	9
	(3) Rape & Mustrad (Kharif)					-	-
	(Rabi)	35	6			23	15
	TOTAL OF KHARIF	20	4	175	259	240	361
	TOTAL OF RABI	35	6			23	14
	GRAND TOTAL OF OILSEEDS	55	10	175	259	263	375
V	COTTON					-	-
VI	TOBACCO					-	-
VII	SUGARCANE (In cane)	45	281	272	5712	305	3889
VIII	POTATO	20	34			5	70
	GRAND TOTAL OF KHARIF	3985	1655	7912	17438	7841	6368
	GRAND TOTAL OF RABI	35	6	62	237	119	341

Source: Statistical Abstract 2007-2010

A P P E N D I X – IV: ACTUAL EXPENDITURE OF AGRICULTURE AND ALLIED ACTIVITIES UNDER PLAN SCHEME DURING 10TH FIVE YEAR PLAN (2002 - 2007)

(Rs in Crore)

Sl/n	Head of Development	2002-03	2003-04	2004-05	2005-06	2006-07	Total
1	Crop Husbandry	8.03	30.15	29.14	33.18	31.84	132.34
2	Horticulture	4.55	4.81	5.9	7.37	6.79	29.42
3	Soil & Water Conservation	2.69	2.95	3.6	3.88	3	16.12
4	Animal Husbandry	5.06	5.13	6.54	7.26	6.2	30.19
5	Dairy Development	0.4	0.36	0.4	0.4	0.4	1.95
6	Fisheries	1.16	1.21	1.83	2.3	2.34	8.84
7	Forestry & Wildlife	5.95	6.37	7.7	10.47	13.35	43.84
8	Agri. Research & Education	0.1	0.1	0.1	0.1	0.12	0.52
9	Co-operation	3	3.02	3.02	5.15	6.45	20.64
10	Agri. Marketing & Quality control	1.59	1.75	2.24	3.35	2.06	28.99
	(Trade & Commerce)						
	TOTAL	**32.53**	**55.84**	**60.47**	**73.46**	**90.54**	**312.85**

Source : Statistical Abstract of Mizoram : 2009

A P P E N D I X – V: AREA, PRODUCTION AND YIELD OF CABBAGE IN MIZORAM

Sl/n	Year	Area in Ha.	Production in MT	Yield MT/Ha
1	2001 - 2002	62	888	14.3
2	2002 - 2003	143	2256	15.5
3	2003 - 2004	209	3284	15.7
4	2004 - 2005	310	4736	15.2
5	2005 - 2006	275	4287	15.5
6	2006 - 2007	236	3684	15.6
7	2007 - 2008	200	5000	25
8	2008 - 2009	2985	38805	13

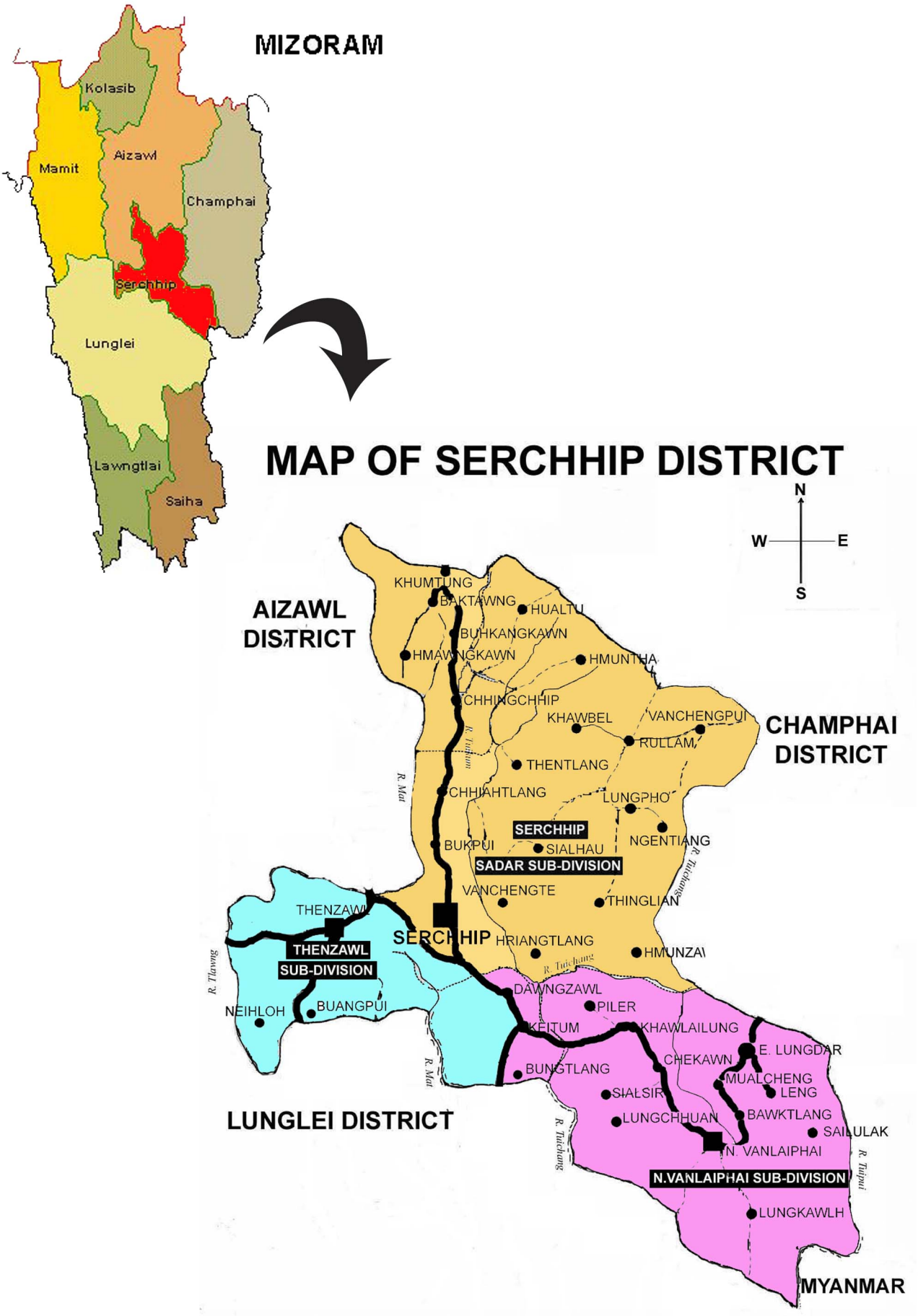
Source : Statistical Abstract of Mizoram : 2009

A P P E N D I X – VI: DISTRIBUTION OF SEEDS DURING 2010 BY DEPARTMENT OF AGRICULTURE, SERCHHIP

Sl/n	Particulars	Qnty received	Qnty issued	Stock Balance
1	Mustrad	20 Qtls	8.6 Qtls	11.4
2	Rice Bean	6 Qtls	6 Qtls	NIL
3	Ground Nut	400 Kgs	400 Kgs	NIL
4	Cow Pea	9.5 Qtls	9.5 Qtls	NIL
5	Maize (Local)	5 Qtls	5 Qtls	NIL
6	Brocoli	30 Packs	30 Packs	NIL
7	Maize Project	18.9 Qtls	18.9 Qtls	NIL
8	Chilli	35 Kgs	35 Kgs	NIL
9	Soyabeen	20.4 Qtls	20.4 Qtls	NIL
10	Pumkin	75 Kgs	75 Kgs	NIL
11	Lady Finger	170 Packs	92 Packs	78
12	Rayma	3 Qtls	3 Qtls	NIL
13	Paddy, KRH-II	6 Qtls	NIL	6
14	Paddy, IR-64	100 Qtls	85.48 Qtls	14.52 Qtls
15	Red Onion (local)	0.2 Qtls	0.2 Qtls	NIL
16	Red Onion (Matahari)	30 Pock	30 Pock	NIL
17	Dhania	1.2 Qtls	1.2 Qtls	NIL
18	Sweet Corn	0.3 Qtls	0.04 Qtls	0.26
19	Potato	373 Qtls	373 Qtls	NIL
20	Cabbage*	46.4 Kgs	46.4 Kgs	NIL

Source : Department of Agriculture, Serchhip

* Cabbage distribution is collected from Horticulture Department, Serchhip


MIZORAM
Kolasib
Aizawl
Mamit
Champhai
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MAP OF SERCHHIP DISTRICT
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AIZAWL DISTRICT
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MYANMAR
KHUMTUNG
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R. Mat
R. Tuichang
R. Tuidamin
R. Tuipui

CHAPTER I

INTRODUCTION

India got complete freedom from the British rule on 15 August 1947. Before and after independence from time immemorial, agriculture is the main occupation of the people. In the economy of India, Agricultural sector is the most significant part and the only means of living for almost two-thirds of the people. It can be said that agriculture has made one of the biggest success stories of independent India because it provides significant support for economic growth and social transformation of the country.

In India, about 16.7 per cent of the world population lives and it is the second largest populated country in the world next to China. Agriculture provides livelihood to about 64% of the population and it provides employment to 58.4% of the country's work force and it is the single largest private sector occupation. Agriculture dominates the country's economy to such an extent that a very high proportion of working population in India is engaged in agriculture. About 75% of India's poor population lives in rural areas and 80% of them depend largely on agriculture for their livelihoods.

***Table 1**: Population and Agricultural Workers in India (in millions)*

	1951	***2001***
Total Population of India	361	1029
Total Working Population	140 (100)	401 (100)
Population employed on land of which	98 (70%)	235 (59%)
Cultivators	70 (50%)	128 (32%)
Agricultural Labourers	28 (20%)	107 (20%)

Source: Agricultural Statistics at a Glance, 2005

The above statistics reveals that agriculture provided employment to 98 million persons in 1951; the number of people employed on land (cultivators and agricultural labourers) increased to 235 million in 2001. In terms of percentage, however, people working on land came down from 70 to 59 during the five decades between 1951 and 2001. This decline continues to 58.4% in the Tenth Plan (2002-07). The proportion of agricultural labourers has increased from 20 to 27 per cent between 1951 and 2001 but that of cultivators registered a decline from 50 per cent to 32 percent.[1] The declining rate of cultivator registered is considered to be the growing improvement in technology and machineries that introduced in the farm land system. Because many labour

[1] Sundharam, K.P.M., and Datt, Ruddar. (2008). *Indian Economy* 57th Revised Tow Colour Edition(2008). S. Chand & Company Ltd. Ram Nagar, New Delhi – 110055.

works can be done with a single machine and this led to decrease in the number of cultivators in the field.

India has become self-sufficient in food grains and now has a surplus. In 2004-2005 India achieved a record foodgrains yield of 198.4 million tonnes and it was followed with a continuous increased production in three consecutive years from 2005-2006 to 2008-2009 and total foodgrains production grew up at an annual average increased of 8 million tones. The production of foodgrains declined to 218.11 million tonnes during 2009-2010(final estimates) due to the long spell of drought in various parts of the country in 2009. The productivity of almost all the crops suffered considerably, which led to decline in their production in 2009. As per the second advcance estimates released by Ministry of Agriculture, production of foodgrains during 2010-2011 is estimated at 232.07 million tonnes compared to 218.11 million tonnes last year (table 2).[2]

Table 2*: Foodgrain Production in India from 2004-2011 (in million tonnes)*

2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11*
198.4	**208.6**	**217.3**	**230.78**	**234.47**	**218.11**	**232.07**

Source: Economic Survey of India *2nd Advance estimates

[2] Government of India, *Economic Survey 2010-2011*. p 189.

The continuous success of the country's foodgrain production is dedicated to the result of the contributing factors which include: (i) increase in net sown area; (ii) expansion of irrigation facilities; (iii) lend reforms and consolidation of holdings, (iv) development and introduction of high yielding seeds, fertilizers, improved implements and farm machines, and technology for pests management; (v) price policy based on minimum support price and procurement operations; and (vi) infrastructure for storage.

The country has an agricultural land area of 141.23 million hectares (43% of total land area) out of the total land area of 32, 87,263 sq. km. In 2009-2010 total foodgrain production area covers 667.84 lakh hectares during kharif, and it was decline by 46.18 lakh hectares as compared to 714.02 lakh hectares during kharif 2008-2009.[3]

Historically agriculture has contributed significantly to India's national income as indicated by the figures (Table 3) available right from the period 1950-51. The performance of the agricultural sector influences the growth of the Indian economy. The share of agriculture as a percentage of GDP was 55.40

[3] Government of India, Economic Survey 2009-2010.

in 1950-51, 30.90 in 1990-91 and in 2007-08 it was decline to 16.4 and in 2010-2011 it was estimated to 14.2. The share of agriculture in GDP has declined rapidly in the recent past. This is explained by the fact that whereas overall GDP has grown by an average of 8.62 per cent during 2004-2005 to 2010-11, agriculture sector GDP has increased by only 3.46 per cent during the same period.

In 1950-51, the economy's growth rate was 3.6 per cent, it moves down to 3 per cent in 1990-91. Some improvements have been made and from 2000-2001 the growth rate has become increasing continuously and from 5.5 per cent in 2000-2001 to 9.7 per cent in 2006-2007. The two continuous year's shows a significant slowdown in the growth rate and it decline to 6.8 per cent in 2008-2009. The slowdown of growth rate in the second half of 2008-2009 is due to the financial crisis that began in the industrialized nations in 2007 and spread to the real economy across the world. However the economy has posted a remarkable recovery and as per the advance estimates of GDP for 2010-2011, released by the Central Statistics Organisation (CSO), the economy is expected to grow at 8.6 per cent.[4]

[4] Government of India, Economic Survey 2010-2011.

***Table 3**:*

Share of Agriculture in India's Gross Domestic Product and Growth Rate

Year	*Percentage share of Agriculture*	*GDP Growth Rate%*
1950-51	55	3.6
1970-71	44	3.3
1990-91	31	3.0
2000-01	26	5.5
2003-04	22	8.5
2005-06	20	9.5
2006-07	18	9.6
2007-08	16.4	9.3
2008-09	15.7	6.8
2009-10	14.6	8.0
2010-11*	14.2	8.6

Note: Percentage share in agriculture includes agriculture and allied sectors

(agriculture, forestry and fishing)

Source: Economic Survey of India. *(Advance Estimates)

The above figure reveals that in 1950-51 the share of agriculture in GDP was 55 per cent. As the process of industrialization and economic growth gathered momentum under the Five Year Plans with manufacturing and servicing sectors growing rapidly and agriculture sector limping along, the percentage share of agriculture in GDP declined and reached a level of 14.6 percent in 2009-10.

Though the share of Indian agriculture in the GDP has steadily declined, it is still the single largest contributor to the GDP and plays a vital role in the socio-economic development of India. About 43% of India's geographical area is used for agricultural activity. India depends heavily on the agricultural sector, especially on the food production unit after the 1960 crisis in food sector. Since then, India has put a lot of effort to be self-sufficient in the food production and this endeavor of India has led to the Green Revolution. The Green Revolution came into existence with the aim to improve the agriculture in India.

One of the biggest success stories of India is the progress made in the field of agriculture. From a nation dependent on food imports to feed its population, India today is not only self-sufficient in grain production but also has substantial reserves. Dependence of India on agricultural imports and the crises of food shortage encountered in 1960s convinced planners that India's growing population, as well as concerns about national independence, security, and political stability, required self-sufficiency in food production. This perception led to a program of agricultural improvement called the Green Revolution. It involved bringing additional area under cultivation, extension of irrigation facilities, the use of improved high-yielding variety of seeds, better techniques evolved through agricultural research, water management, and plant

protection through judicious use of fertilizers, pesticides and cropping practices. All these measures had a salutary effect and the production of wheat and rice witnessed quantum leap.

India has introduced many innovative programmes in the field of agriculture. Among them, mention may be made of the Technology Mission, which was initiated over years ago, first in oilseeds and later in maize, pulses and cotton. A technology mission involves an end to end approach, starting with seeds for sowing and ending with the consumers or relevant industry (as in the case of cotton). Such a systems approach to production, processing, marketing and consumption led to a doubling of oilseed production within a span of 6 to 7 years.

Today, India occupies the first and second position in the world not only in crops like wheat and rice (Table 4) but also in milk production. The total foodgrain production is likely to exceed over 200 million tonnes during 1999. This makes a four-fold increase since 1947, when the total foodgrain production was about 50 million tonnes.[5] India placed a very high position in production of

[5] Mohammed Ali, Abdul Munir Hifzur Rehman (2007), Fifty *Years of Indian Agriculture Vol-I. Concept Publishing House, New Delhi – 110059.*

various agricultural crops in the world. India's share and rank in production of agricultural crops in the world are shown in Table 4.

***Table 4**: India's share and rank in crop production of the world.*

	India's Share		*India's rank*	
Crops	Production	Area	Production	Area
Wheat	14.4%	11.2%	2	2
Rice	21.4%	28.5%	2	1
Pulses	26.0%	36.6%	1	1
Groundnut	28.6%	35.2%	1	1
Sugarcane	22.6%	20.0%	2	2
Tea	28.3%	18.5%	1	2
Jute	52.5%	51.5%	1	1
Cotton(Lint)	14.0%	20.7%	3	1

Source: FAO, 1997

Agriculture marketing an overview

The term Agricultural Marketing implies selling of goods and services by the farmers and ranchers. It includes various functions of production activity such as assembling, transportation, storing, buying, selling, standardization, grading, processing, sales promotion etc. In general marketing is the performance or operation of various business activities, which direct the goods and services from the producers to the ultimate consumers. In agricultural

marketing, the starting point is the farm or ranch and it is the basic source of market supply. In that case of marketing, goods will have form, time, place and possession utilities. Form utility is imparted to commodity through processing activity of marketing. Time utility is added to commodity by the storage function of the marketing. Transportation service, which is found in marketing activity, creates place utility. When commodities are transferred from one person to another person in marketing channel through buying and selling activities, possession utility is imparted.

The term agricultural marketing is to be understood from the two words, viz., agriculture and marketing. Agriculture in its broadest sense comprises of all the farm activities, which use the natural resources for human welfare. On the other hand marketing comprises of all the economic activities involved in facilitating the flow of goods and services from production centre to consumption centre.

The objective of all economic activities is the satisfaction of human wants. It is marketing which helps making goods useful to the society by getting them where they are wanted, when they are wanted and by transferring

them to those people who want them.[6] Marketing in this sense has defined as, "all the activities involved in the creation of place, time and possession utilities".[7]

According to Richard Kohl's, "Marketing is the performance of all business activities involved in the flow of goods and services from the point of initial agricultural production until they are in the hands of the ultimate consumer".[8]

In a developing country like India, agricultural marketing system can be understood to compose of two major sub-systems viz., product marketing and input (marketing). The actors in the product marketing sub-system include farmers, village/primary traders, wholesalers, processors, importers, exporters, marketing co-operations, regulated market committees and retailers. The input sub-system includes input manufacturers, distributors, related associations,

[6] Sinha, J.C., *Principles of Marketing and Salesmanship.* R. Chand Publications, Delhi, 1976, p. 6.

[7] Converse Paul D., Huegy, Harvey W., and Mitchell, Robert V. (1965). *Elements of Marketing.* Prentice-Hall Publications (Englewood Cliffs, N.J), p 1 & 8.

[8] Clark, Eugene, and Clark, Fred Emerson. (1962). *Principles of Marketing,* Macmillan Publications, New York. 1962.

importers, exporters and others who make available various farm production inputs to the farmers.

S.S. Acharya and Agarwal defined agricultural marketing as the study of all the activities, agencies and policies involved in the procurement of farm inputs by the farmers and the move out of agricultural product from the farms to the consumers. The agricultural marketing system is a link between the farm and the non-farm sectors.[9]. Agricultural Marketing is so important that it is the framework of the agricultural production and for the development of agricultural sector, it is essential to develop agricultural marketing so as to match with the production surplus resulting from technological innovations and exploitation of the existing land and water resources.

The National Commission on Agriculture defined agricultural marketing as a process which starts with a decision to produce a saleable farm commodity and it involves all aspects of market structure of system, both functional and institutional, based on technical and economic considerations and includes pre and post- harvest operations, assembling, grading, storage, transportation and

[9] Acharya, S.S, and Agarwal, N.L. (2005). *Agricultural Marketing in India.* Fourth Edition. Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi.

distribution. The Indian council of Agricultural Research defined involvement of three important functions, namely (a) assembling (concentration) (b) preparation for consumption (processing) and (c) distribution.

In India, agricultural marketing system is characterized by a considerable degree of diversity and flexibility in the arrangements as between different commodities and regions. The marketing arrangements comprise, on the one hand, system operated freely by private enterprise without any state intervention and, on the other hand, are systems which are completely under state control. In between these two extremes, other arrangements with varying degrees of government intervention and support in the areas of price fixation, procurement quota, buffer stocks, credit controls, etc. are also prevalent. The need for trying out so many varying marketing systems arises from the greatly dissimilar conditions of production and marketing as between commodities and states. These have been evolved over a period of years on the basis on experience. These systems are also subject to changes and modifications as may be warranted from time to time by the changing production and marketing situations as well as economic policies.

Although state governments enjoy full autonomy in the matter of agricultural policies, including those relating to marketing, yet a broad framework of agricultural policies including marketing are laid down by the Central Government. At the Centre, agricultural marketing is the concern of the Ministry of Agriculture and Rural Development.

At the state level, the administrative set up for agricultural marketing differs from state to state. In some states, agricultural marketing is in the hands of completely independent departments. In many others, the work is entrusted to a small section forming a part of the Department of Agriculture without a specific identity of its own.[10]

In effective agricultural marketing, the farmer has realized the importance of adopting new techniques of production and is making efforts for more income and higher standards of living. As a consequence, the cropping pattern is no longer dictated by what he needs for his own personal consumption but what is responsive to the market in terms of prices received by him. He sells his produce at an unfavorable place, time and price. The objectives of an efficient marketing system are:

[10] Sadhu & Singh. (2010). *Fundamentals of Agricultural Economics,* Himalaya Publishing House. p. 152.

i. to enable the primary producers to get the best possible returns,

ii. to provide facilities for lifting all produce, the farmers are willing, to sell at an incentive price,

iii. to reduce the price difference between the primary producer and ultimate consumer, and

iv. to make available all products of farm origin to consumers at reasonable price without impairing on the quality of the produce.

In the activity of agricultural marketing, there are many ways by which the farmer may dispose of his surplus produce. The first and the most common method is to sell away his surplus produce to the village money lender cum trader, who may buy it either on his own or as an agent of a bigger merchant of the neighbouring *'mandi'* town.

The second method adopted by the Indian farmers is to dispose of his produce in the weekly village markets known as *'hat'*. Besides these in some important villages and selected areas fairs are held in connection with religious festivals and special occasions so this makes the opportunity for the farmers to

sell his produce. In 'hats' and fairs, the farmers bring their produce as well as livestock and sell them.

The third method of agricultural marketing is through the *mandis* in small and large towns. The *mandi* may be located at a distance of several miles and, therefore, the farmers have to make special effort to carry his produce to the *mandi*. In the *mandis*, there are brokers or *'dalals'* who help the farmers to dispose of their produce to the wholesalers known as *'arhatiyas'*. The wholesalers may dispose of the agricultural produce which they have purchased from the farmers to retailers or flour mills and processing units. For instance, in the case of cotton, the wholesaler sells to the cotton ginning factories, and in the case of food grains like wheat he sells to the flour mills or to retailer.

In order to have advantage in agricultural marketing and have good benefit from it, the farmers must have to aware of the following conditions:

1) He should have proper facilities for storing his goods.
2) He should have holding capacity, in the sense, that he should be able to wait for times when he could get better prices for his produce and

not dispose of his stocks immediately after the harvest when the prices are very low.

3) He should have adequate and cheap transport facilities for moving his produce to the market place.
4) He should have clear information about the market. Otherwise he may be cheated by the brokers and *dalals*.
5) There number of the middlemen should be as small as possible. So that the increase return to the farmer should be at a high rate.

Agriculture in Mizoram

Mizoram is the 23rd State of the Indian Union and is a tiny hilly state located in the North-East corner of India switches between Myanmar and Bangladesh sharing a common international boundary of 404 kms with Myanmar and 318 kms with Bangladesh. The state is richly endowed with natural resources having a geographical area of 21,081 sq km with a total population of 9,21,970[11]. It constitutes only 0.64% of India's total area and merely 0.09% of the India's total population. The density of population is 42 persons per sq km (2001 census). Out of the total population, 94.75% belongs

[11] Statistics by Directorate of Economics and Statistics, Government of Mizoram.

to Scheduled Tribe (which is the highest percentage state in India) and the Scheduled Caste population comprises about 0.03%.[12]

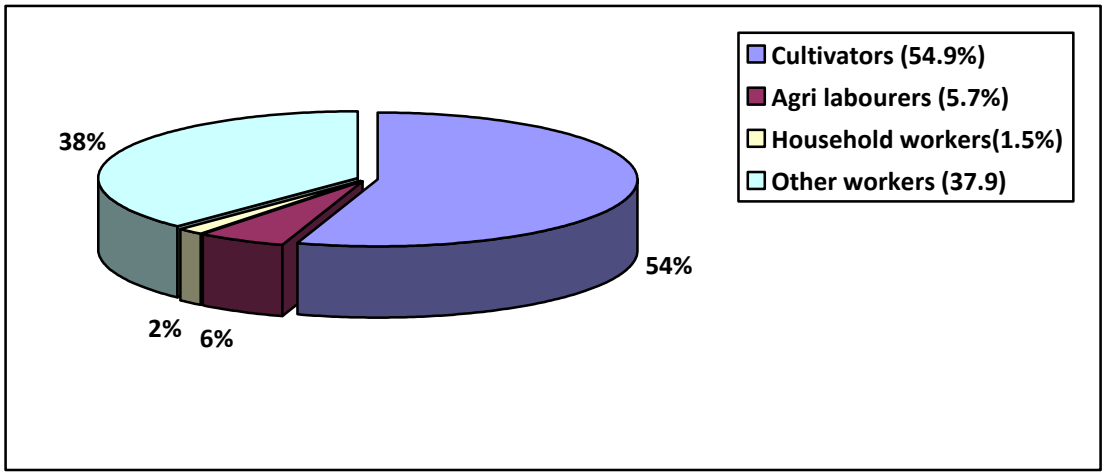
Mizoram has a moderate and pleasant climate which is most suitable for production of agricultural crops. It is neither very hot nor too cold throughout the year. The temperature generally varies from 12°C to 25°C in winter and 20°C to 29°C during summer. The climate is humid tropical characterized by short dry winter and a long summer with heavy rainfall. Mizoram has abundant supply of rainfall and due to this agriculture is mainly dependent on it. The entire state comes under the direct influence of South West Monsoon receiving adequate amount of rainfall. Generally Monsoon in Mizoram is predictable and comes in time, this helps the farmers in their production.

According to 2001 Census, out of the total population, the total number of workers were 4,67,159. There were 2,56,332 cultivators and percentage of the total cultivators was 54.9%. There were 3,62,450 main workers in the state and 1,04,709 were marginal workers and the rest 4,21,414 were non-workers. Out of the main workers, 2,56,332 were cultivators, 26,783 were agricultural

[12] Government of Mizoram, *A Report on Agricultural Census 2000-2001.*

labourers, household workers constitute 7,100 persons and 1,76,944 were other workers.[13]

Table 5: *Percentage of total workers of Mizoram in distributed working categories.*



Agriculture is the main occupation of the people in Mizoram. More than 80% of the total population depending upon agriculture and allied sector. The system of cultivation in this region is an age-old primitive method- jhum (shifting) cultivation. Large area of land is destroyed every year for jhum cultivation. However certain changes have been slowly made and with the help

[13] Government of Mizoram, *A Report on Agricultural Census 2000-2001.*

of agriculture department, Govt. of Mizoram some improvement measures and new methods of cultivation has been introduced. Contour Farming system has been introduced in the hill areas. Along with jhum cultivation, Wet Rice Cultivation (WRC) has also been initiated in the plain areas. Mechanization of farming and introduction of improved varieties of seeds coupled with massive irrigation projects are likely to bring total transformation of agricultural scenario in Mizoram.

In Mizoram, rice and maize are the main food grain crops. Cash crops such as ginger, coffee, arecanut, pepper and tea are also produced on a large scale. The local markets are now flooded with homegrown vegetables throughout the year. The total production of rice by farmers of Mizoram in 2009-2010 was 4,62,924 Qtls. Which was 24.9% of the total production of agricultural activities by the state. The total requirements of rice for Mizoram in one year was 19,22,030 Qtls. This shows that Mizoram has not sufficient in rice production as there has been deficiency in total production and requirements by 14,59,106 Qtls. The total rice production of the state has covers only 24.09% of the state requirements. There was an area of 47,204 Ha under cultivation for paddy (Jhum + WRC) during 2009-2010 and it is estimated that 9.80Qtls of rice were produce per hectare.[14]

[14] Department of Agriculture, Govt of Mizoram, *Statistical Abstract 2009-2010.*

In Mizoram, there are 8 administrative districts and each district have its own markets. Agricultural Marketing is done through the selected areas like town market and rural hat. Every village always has a selected place for marketing in which buying and selling of agricultural commodities takes place.

Area and Products covered by the study

The area of the study is Serchhip District and the study covers the production of Cabbage along with the agricultural production. In Serchhip District, Cabbage is the most commercial crop production and more than hundred tones of Cabbage are produced in a year. It is the largest producer of Cabbage in Mizoram. In Serchhip District there is a vast land agricultural production area called *Zawlpui phai* wherein most of the agricultural production of the District is obtained from that valley, and there is yet another production place in *Vanlaiphai, Thenzawl* and many other areas. The production statistics and data of these production areas including its contribution to the District within the last few years should be collected

Objectives of the Study

The objectives of the study are –

(a) to study how agriculture contributed to the economy of Mizoram especially Serchhip District.

(b) to study whether the marketing system at present satisfy the farmers and makes it encourage to produce more or not.

(c) to study the problems faced by the farmers and land owners in the marketing of their production and make a suggestive measures for improvement.

Hypothesis

H_{01} : Agriculture is the main occupation of the people in Serchhip District.

H_{02} : Lack of storage facilities and transport problems acted as a backlog of Commercialization of agriculture.

Methodology

The study of the research cover the agricultural marketing system of Serchhip District and a detail report should be collected from that District. The system of the study is relying on both primary and secondary data. Primary data will be collected by means of questionnaire and personal interviews to the farmers, retailers and the sellers. Secondary data has been obtained from relevant book publications, Government publications and data from related Government Departments such as the Economics and Statistics Department, Agriculture Department, Horticulture Department, etc.

Chapterization

Chapter I : Introduction

Chapter II : Review of Literature

Chapter III : Commercialization of Agriculture

Chapter IV : Agricultural Marketing System in Serchhip District

Chapter V : Problems of Agricultural Marketing

Chapter VI : Conclusion; Findings and suggestions.

CHAPTER II

REVIEW OF LITERATURE

Agricultural Marketing is an important branch of Agricultural Economics. The marketing of farm products is a matter of great interest to the farmers, the consumers and the middleman. To farmers, it provides the channel of communication between him and the society and gives him continuous information about demands for his products. To the consumer, it is a means of supplying his needs and the middleman depends upon it for livelihood. Marketing in this sense has been defined as "all the activities involved in the creation of place, time and possession utilities".[1] According to Richard Kohls, "Marketing is the performance of all business activities involved in the flow of goods and services from the point of initial agricultural production until they are in the hands of the ultimate consumer".[2]

[1] Converse Paul D., Huegy, Harvey W., and Mitchell, Robert V. (1965). *Elements of Marketing.* Prentice-Hall Publications (Englewood Cliffs, N.J). p 1 & 8.

[2] Kohls, Richard, C. (1961). *Marketing of Agricultural Products,* Macmillan Publications, New York, 1961. p. 9.

Thus in one sense market is a place where buyers and sellers come together carry out buying and selling activity. In other sense, market is a area where buyers and sellers are in such a free intercourse with one another that the price of the same goods at different places (in the same area) tends to equality easily and quickly.

Agricultural Marketing in its wider sense comprises of all the operations involved in the movement of goods and raw materials from the farm to the final consumer. It includes the handling of the product at the farm, initial processing, grading and packing in order to maintain and enhance quality and avoid wastage. Storage is another feature of agricultural marketing together with methods of packing and presenting the product to suit the requirements of final consumers.

Due to the growing modernization in the life style of people and with the pace of development in agriculture, marketing has become more and more complex. After the great achievement of the green revolution, the Indian Agriculture has made a spectacular progress. Perishable agriculture products and special attention for orderly marketing, timely harvesting and procurement, quick transportation, modern storage and processing, advance packing and

maintenance of a cool chain in their marketing process are som of the factors for immediate attention.

Agriculture Marketing and Economic Development of a country are closely related. Organization of a wholesale market plays a crucial role in marketing agricultural produce. Size of operation, market arrivals and their impact on structural characteristics of the market are to be sustained with the economic development of the country. The agriculture products are mostly perishable and cannot spare for longtime if there is no proper storage facilities. These perishable products have shorter life and they need specialized marketing system to make them available at proper place, time and form designed by the consumer in well presented manner at proper price.

However there may be loss in agricultural products due to improper marketing and several reasons. Post harvest loss is one of the important issues that hampered the farmers profit. According to the study made by K.C. Talukdar and B.C. Bhowmick,[3] there are several factors influence post- harvest losses. Some factors which influence post harvest losses may be physical, physio-biological, mechanical and hygienic. They are also characterized by

[3] Talukdar, K.C. and Bhowmick, B.C. (1993). *Marketing of Perishable Products,* B.R. Publishing Corporation. 29/9, Nargia Park, Shakti Nagar, Delhi – 110007. *p 4.*

high metabolic activities with short lifespan. Variety, type and quantity of fertilizer application, irrigation scheduling and agro-climatic conditions are known to affect the quantity of large number of vegetables. Other secondary causes like inadequate harvesting, transportation, storage and market legislation are some of the favourable condition for losses.

Joachim Von Braun(1994)[4] in his book *Agriculture Commercialization, Economic Development and Nutrition* studied adverse effects on the poor of commercialization of subsistence agriculture with a view to find promoting commercialization of agriculture for poverty alleviation. He noted that - Specialization and the development of markets and trade that characterize commercialization are fundamental to economic growth. The principal advantages of market-oriented policies and the powerful forces of trade for development are unquestionable. However, the risks of policy and market failures, deficiencies in knowledge and information of actors in production and markets at all levels, and household-level complexities and intra household conflicts are real, too, and need to be recognized as determinants of inefficiencies and inequities. Therefore, it should not be taken for granted that the transformation of traditional agriculture progresses efficiently, not to

[4] Braun, Joachim Von (1994). *Agriculture Commercialization, Economic Development and Nutrition., John Hopkins University Press, Baltimore, Maryland. p 3 & 4.*

mention equitably, even if the point of departure—subsistence agriculture—happens to be in a state of "poor but efficient".

One might expect that the process of commercialization, by raising incomes, actually improves welfare, food security, and nutritional status that could otherwise have been worse. But as commercialization takes place how are higher average income distributed among various economic and social groups? Does higher household income necessarily lead to improved food consumption and better nutrition for all household members? Could a different approach to agricultural development—for instance, one of regional or village or household food self-sufficiency— more efficiently alleviate the particular problem of under nutrition and still meet the objectives of economic growth and higher incomes? It is widely argued in a large body of literature that commercialization of agriculture mainly has negative effects on the welfare of the poor. The related widespread conclusion—commercialization of agriculture is bad for nutrition—probably emerged from a mix of historical, real, ideological, and methodological factors: (1) adverse effects that resulted from coerced cash crop production that constrained the capacity of small holders to cope with risks under some colonial production schemes; (2) noted exploitation of smallholders under monopsonistic conditions of projects; (3) general suspicion that commercialization leads to adverse "capitalist" production and market

relationships (whereas subsistence agriculture was idealized as providing food sufficiency); and (4) non comprehensive studies and anecdotal evidence.

In his study of commercialization of agriculture, Joachim Von Braun also concluded that Agricultural commercialization in low-income countries will generally grow over the coming decades due to urbanization and growing incentives for regional and farm-specific specialization in the context of diversifying rural economies. An optimistic scenario of a smooth transition from subsistence-oriented smallholder production systems to commercialized agricultural systems, cannot, however, be assumed. The commercialization of agriculture for economic development and nutritional improvement is not a matter of isolated projects but of a range of policies.[5]

According to Thomsen, *"agricultural marketing comprises all the operations, and the agencies conducting them involved in the movement of farm produced foods, raw materials and their derivatives, such as textiles, from the farms to the final consumer and effects of such operations on farmers, middlemen and consumers."* Acharya and Agarwal defined agricultural

[5] Braun, Joachim Von (1994), *Agriculture Commercialization, Economic Development and Nutrition., John Hopkins University Press, Baltimore, Maryland. p 3 & 4.*

marketing as *"the study of all activities, agencies and policies involved in the procurement of farm inputs by the farmers and the movement of agricultural products from the farmers to the consumers."*

National Commission on Agriculture (NCA) in its XII report observed that agricultural marketing involves all aspects of agricultural market structure and system, i.e. both functional and institutional aspects based on technical and economic considerations and include post-harvest operations, assembling, storage, transportation, distribution, etc.

In India, North Eastern Region although endowed with various favourable natural factors, yet the region has not developed at pan with other developed regions of the country in agricultural front. It is still a backward region in the country. In this region, Agricultural Marketing has still been a major issues that the problems faced by the farmers. Government has taken several steps and measures to improve and promote agricultural products as well as regulated marketing. However according to the study made by K.C. Talukdar and B.C. Bhowmick, government intervention is quite ineffective in protecting the interest of the market participants as evident from the price spread for the perishable agricultural products.

Sri P.N. Pandey in his paper '*Marketing of Fruits and Vegetables in North Eastern States'* has refers some factors like natural calamities, geographical isolation and other socio-political factors for backwardness of North Eastern Region. He also observes that the markets in this region are still under the control of the local bodies in a rudimentary shape. He suggests for the establishment of NERAMAC to overcome the problems of procurement, transportation and processing for horticultural produce of North East India. He also suggest for establishing a Directorate of Agricultural Marketing in each state manned with technical expertise to formulate realistic market plan and strategies for development. He has drawn the kind attention of North Eastern Council (NEC) for market development in this region.

Dr H.S. Gopala Rao and his colleague have summarized the problems of vegetable marketing in urban centres of Mysore City. They point out that strong political will can overcome the traders, lobby for efficient marketing. They have shown that even of the licensed traders are operating in the urban market; the informal sector is seemed to be best suited for marketing of vegetables. The informal sector is mostly comprised of women hawkers who really need

attention. Although informal sector is more effective, such system is more exploitative also unless the market operations are regulated.

Retail market of vegetables in particular is socially undesirable as retailer's share in consumer's rupee is higher in comparison to their services rendered. Dr V.P.S. Arora and his team have agreed for implementation of market regulation at retailers' level. They have also emphasized on grading of vegetables with cold storage facilities at5 producers' level to make it more remunerative by preventing distress sale.

Highly perishable nature of fruits and vegetables has made their marketing system more costly and complex. Timely procurement of vegetables in bulk is of immense importance for producers. Therefore transportation plays an important role in vegetable marketing. Spatial equilibrium can be attained trough effective transportation. R.K. Sharma and other observed transportation as the main hurdle in marketing of vegetables of Himachal Pradesh hills. The problem is more severe as the buyers are not available in the remote producing areas. Vegetable markets in the country are more unorganized and controlled by the private agencies making it more collusive. P.B. Parathasanathy studied that vegetable marketing in Hyderabad city is also controlled by the informal sector.

However the malpractices can be regulated by state intervention to a great extent. Pre harvest contract is quite common establishing a backward linkage with production. This needs delinkages between commodity markets with money markets. To protect the growers during the time of low farm harvest price, storage facilities may be provided in the market yards which may be constructed looking to their future perspective needs.

Mruthyunjaya, Arora et.al and Sharma et. al have studied Pineapple marketing in Manipur State. They have highlighted that cost of transportation escalated the price spread. In accessibility in the hills coupled with poor roads and communication, high wastages and lack of timely procurement and processing facilities at producers' level made Pineapple marketing more imperfect and exploitative. They have suggested for establishment of procurement centers, rural roads and communication, cooling system in transportation, semi-extraction plants of the processing industry, market regulation and linking domestic production with the foreign markets for making this industry viable.

Viewing various studies and verifications made by many scholars, much emphasis has been needed for collective effort in marketing through setting up

of growers' co-operatives and association. This will increase the total profitability in marketing the produce. Such efforts become more effective for perishable products as it can reduce the length of marketing channel with minimum waste.

P.N. Pandey in his paper 'Marketing of Fruits and Vegetables in North Eastern States : Problems and Prospects' stated that there are only 7 cold storage with total capacity of about 6453 metric tons in NE States. The FCI and CWC have built up storage capacity to the extent of 3.25 lakh metric tons and additional capacity is under construction. But this is not enough even to meet their requirements. P.N. Pandey has suggested a good market infrastructure in information system. Keeping in view the needs of the hinterland, it is necessary to create basic infrastructure in rural markets and terminal markets. He also studied that the existing market information system does not serve the beneficiaries to the extent it is required. It is therefore necessary to organize market information system to serve the far and near areas and to collect and disseminate market information of the nearest assembling and terminal market, to start with.

Mruthyunjaya(1979)[6] have studied the demand and supply analysis of Tomato in Karnataka and suggested that to meet the growing deficit (at the time of his study, Karnataka have a Tomato growing deficit of 83,841 tones), area u8nder Tomato is needed to increase or expand by including in the multiple cropping system in the major producing *talukas* of the state. Mruthyunjaya have stated that the yields obtained in Karnataka (about 20t/ha) is much below the potential (35t/ha). Productivity[7] has remained low for reasons such as use of unadapted varieties, lack of appropriate cultural practices and the apathy towards vegetable research in general. For regular production and continuous supply, Murthyunjaya have suggested to fix the price of Tomato above 40 per cent of the cost of production.

In a study of Hyderabad Markets, P.B. Parthasarathy[8] found out that vegetable growers in Hyderabad are seemed to be at the mercy of the middlemen. There is a credit linked marketing system operated by the middlemen who advance loans for raising the vegetable crops and insist on bringing the produce to him every time. The vegetable growers also prefer to

[6] Subrahmanyam, K.V, and Mruthyunjaya (1979). *Economics of Production and Marketing of Tomato Around Bangalore. Indian Journal of Horticulture, Sept., 1979.*

[7] Villareal, R.L. (1978). *Tomato Production in the Tropics – Problems and Progress in Proceedings of the first International Symposium on Tropical Tomato, Oct 23-27, 1978, AVRDC, Taiwan, 1978.*

[8] Parthasarathy, P.B, *Marketing of Vegetables in Andra Pradesh : A Case Study of Hyderabad Markets.*

dispose of the produce through a known commission agent always. The growers complain that they are forced to sell through him due to credit linkage.

K.C. Mahata[9] in his studied topic 'Regulation of Marketing of Agricultural Produce in North East Region', stated that almost all the states of this region are deficit in food grains production. However in all these states, Paddy and Oilseeds are traded in the local markets for internal consumption. The traders use unscrupulous means of trading such as faulty measures, low prices while purchasing and high prices while selling within the same market, barter system of exchanging rice for spices and fruits, etc. In the case of perishable products like Pineapple, Oranges, Potatoes, Ginger, Turmeric, etc. the price paid by the traders is very low. K.C. Mahata also suggested that it is high time that it is necessary to take steps to develop Regulated Markets for the benefit of the growers in North Eastern States.

In Nov 25-26, 1988, Department of Agricultural Economics, Faculty of Agriculture, Assam Agricultural University, Jorhat had organized a two day National Seminar on *'Agricultural Marketing for Perishable Products'* and the seminar put emphasis on various macro issues as perspective for development

[9] Mahata, K.C, *Regulation of Marketing of Agricultural Produce in North East Region.*

of marketing which included discussions in development of infrastructural facilities as well as facilitative activities of marketing of perishables along with manpower development. The seminar also focuses on various micro level issues for formulation of macro policies. In this seminar various recommendations have been made for improving agricultural marketing, some recommendations are[10] -

i. Proper grading and standardization be introduced so that high valued products can be transported at same cost with minimization of wastages and cold storage facilities be provided for the perishable products at the producing centers.

ii. New genetic production technology be evolved to improve the varieties of the perishable products so that their quality can be retained and preserved for longer duration.

iii. Regulated markets must be set up in the states with strict enforcement of the provisions of market regulation. The regulated markets be managed efficiently to provide all kinds pf benefits to the producers, consumers and market intermediaries.

[10] Talukdar, K.C. and Bhowmick, B.C. (1993). *Marketing of Perishable Products,* B.R. Publishing Corporation. 29/9, Nargia Park, Shakti Nagar, Delhi – 110007.

iv. The marketing services in the country be managed by skilled and trained personal to bring more efficiency in the system.

v. Agricultural credit be linked up with marketing. Regulated Market Committee can play an important role in issuing loan against the pledge of the warehouse receipt. Other financial institutions like NABARD, NCDC, NAFED can facilitate agricultural marketing by providing rural roads, godowns, cold storages, transport services etc.

vi. The existing market policy of the Government of India be revised by the centre in respect of quick transportation, storage and viable integrated processing, economic packing, export trade with economically feasible production technology of the perishable products in the country.

Prikh, et al.(1995)[11] while supporting the reforms in favour of agricultural growth point out that measures for liberalization of trade and industry already introduced are likely to have a beneficial impact on agriculture in the long run by turning the terms of trade in its favour, which may attract greater investment in to this sector. However, it may be noted that a mere

[11] Parikh, K., et al.(1995). *Strategies for Agricultural Liberalization : Consequences for Growth, Welfare and Distribution.* Indira Gandhi Institute of Development Research, Bombay (Mimeo).

favourable price environment by itself may not be sufficient to evoke adequate supply response by attracting private investment unless public investment in infrastructure and human resources development is stepped up in the less developed areas for ensuring a broad-based and employment-oriented growth.[12]

[12] Agarwal, A.K.(1996). *Agro Industries for Sustainable Development of Tribal Areas in North East India.* Political Economy Journal of India, Vol 8. Issues 3 & 4, p 127 – 131.

CHAPTER III

COMMERCIALIZATION OF AGRICULTURE

Commercialization of Agriculture is an important concept in Agricultural development. The coming of the British East India Company in India has transformed the traditional agriculture system in India. The British trading agent pursued a trade policy which encouraged exports of raw materials to other countries and imports of manufactured goods. Due to this system the Indian farmers were forced, through Zamindars (landlords) and British agents to switch over from their traditional food crops (wheat, paddy, millets) to cash crops (cotton, jute, tobacco, etc.) and sell the latter for exports to Britain. This system has started the process of commercialization of agriculture in India.

In 1793, the British introduced land settlement system and permanent settlement was also introduced. The settlement raised the status of revenue collectors to that of private landlords. It fixed land revenue in perpetuity. This new land revenue system and the commercialization of agriculture proved suicidal for the Indian economy. The switch over from food crops to cash crops

distributed the balance between the demand and supply of food grains, resulting into famines and scarcities.[1]

In the earlier times farmers produces only for the consumption of his family, but today things are completely changed and there may be part time farmers who produce for their own consumption and as fun. It is a fact that a higher majority of farmers produce by aiming the market. Competition among farmers is increased and farmers who are not capable enough to survive in this high competition are being eliminated from the farming business. There is a famous saying in Sri Lanka *"do farming without know-how, but for business it is a must"*. Former PM Mr. Nehru once said, *"Everything else can wait, but not Agriculture"*.

The Green Revolution of the 1960's transformed India from a net importer of food grains to a self sufficient producer to a net exporter. The Indian Agriculture is facing the challenges of Globalization, Changing Consumer Needs, Technology, and issues like Crop Diversification, Fragmented Land Holdings, etc. The Indian agriculture sector is undergoing a structural transformation which can, best be described as "*industrialization of*

[1] Dr. Chandra Sekhar Prasad. (2009). *Agriculture and Rural Development in India Since 1947.* (2009). New Century Publications, New Delhi – 110 002.

agriculture". Some Economists are also referring this stage of agricultural development as "*food manufacturing*". Traditional and subsistence agriculture is morphing into a commercial venture encompassing the whole gamut of activities from farming to retailing. The gradual transformation of **agriculture** into **agribusiness** is creating more opportunities throughout the supply chain.[2]

There are a number of factors affecting the commercialization process in agriculture. Some of them could be named as rapid growth of economies in the both developing and developed countries, introducing of new technologies, market expansion, market liberalization, urbanization, rapid increase of demand for food, decreasing of farming population, liberalized and open economic policies, bilateral and multilateral economic agreements, developed infrastructure facilities in farming areas and government agricultural policies. However, commercialization in agriculture is not a new phenomenon and it is not a surprise to the farming community. Since the nineteen fifties, farmers in most of the countries have moved towards commercial agriculture. Their major objective was surplus production aiming market prospects.

Under the commercialized agriculture the number of farmers is to be reduced and the size of the farm land should be increased. This is a generally

[2] www.AgriWatch.com, *Commercialization of Agriculture from Mandis to Markets*.

accepted concept in commercial agriculture. By using improved technologies farmers can move towards commercial agriculture without considering the size of land. Under protected agriculture, farmers follow concepts of the commercial agriculture. Commercial livestock farming does not rely on the farm size except dairy farming.[3]

The concept of marketable surplus in the context of agricultural produce helps to measure the extent of commercialization of the production activities of a particular crop. While high proportions of marketable surpluses indicate greater market orientation of the producers, lesser proportions of surpluses mean that the producers are more subsistence oriented. The Food and Agriculture Organization (FAO) has categorized farmers into three different groups based on the marketable surplus as a percentage of total production in the following manner (FAO, 1989)[4]:

- Subsistence farmers: Marketable surplus under 25% of the total production.

[3] Rohana P Mahaliyanaarachchi, *Commercialization of Agriculture and Role of Agricultural Extension.* R M A S Bandara Sabaragamuwa University, Belihuloya.

[4] Food and Agricultural Organization. (1989). *'Horticultural marketing : a resource and training manual for extension officers',* Rome.

- Transition farmers: Marketable surplus ranging between 25-50% of total production.
- Commercial farmers: Marketable surplus more than 50% of the total production

However, what do we understand by the term 'Commercialization of agricultural production?' It can be defined as follows-

- Farmers' production is aimed mainly for sales.
- Production should be oriented to profit maximization.
- It should aim at the satisfaction of different needs and interests of consumers.
- It is an agri–business that implies concept of business management.
- It leads to entrepreneurial achievements of farmers.

Marketing of agricultural products are an important indicators of the Indian economy. Agriculture products like cereals (mainly rice), tea, coffee, cashew, spices, tobacco and leather are important items of India's exports and

hence foreign exchange earnings. Share of Agriculture in India's export (2008-2009) was 9.1%.[5]

In 2004-2005[6] out of the total work force, 52.1% are engaged in agriculture in India. So, commercialization of agriculture has been an important concept. Trade in agriculture goods can play a significant role in promoting economic development of India. In the commercial marketing system, produce has to be collected from farms, processed, graded and transported via various channels to the consumer. A wide range of types of enterprise undertake these functions, including independent merchants, farm-co-operatives and agribusiness based on processing or retailing.[7]

There are many markets[8], every commodity has as many markets as there are places with different prices. A market may cover a small or a large area. A marketing system provides the organization to bring together buyers

[5] Misra and Puri. (2010). *Indian Economy,* Himalaya Publishing House, Mumbai – 400 004.

[6] Ibid.

[7] Sjo John (1976). *Economics for Agriculturalists: A beginning text in agricultural economics.* Printed in USA.

[8] John Sjo stated Market as, "a place where buyers and sellers come together to exchange goods and service".

and sellers so that they may exchange goods and services directly or for money. Agriculturalists deal with the production and marketing of both the product produced by farmers and inputs used by farmers in their farm operations.

Commercialization of agriculture can take many different forms. Commercialization can occur *on the output side* of production with increased marketed surplus, but it can also occur *on the input side* with increased use of purchased inputs. John Sjo(1976)[9], Professor of Agricultural Economics in Kansas State University has stated the product flow of agricultural production from the farmer to the final consumer in a figure given below :

[9] Ibid.

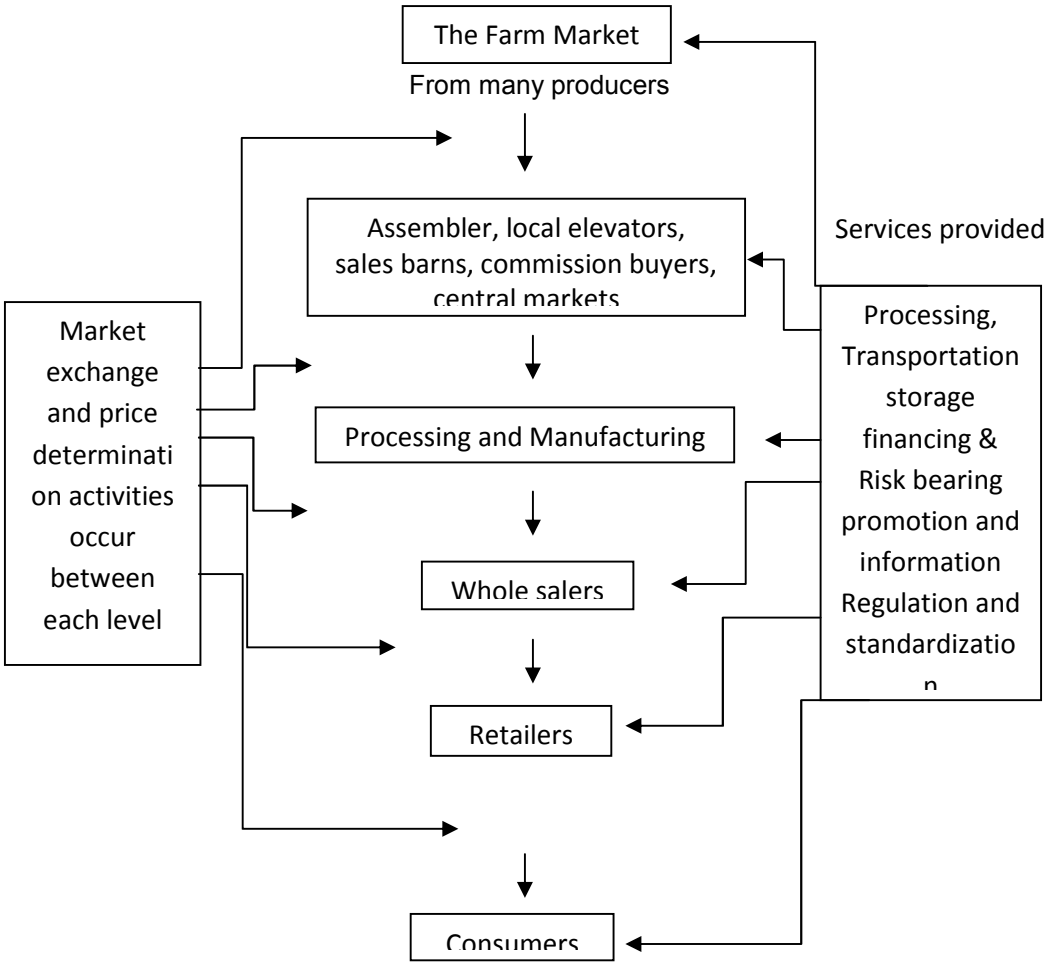


Figure (1): The flow of farm products from the original producer to the final consumer.

John Sjo(1976) also summarizes the flow of inputs from the original producer to the final users in a figure below:

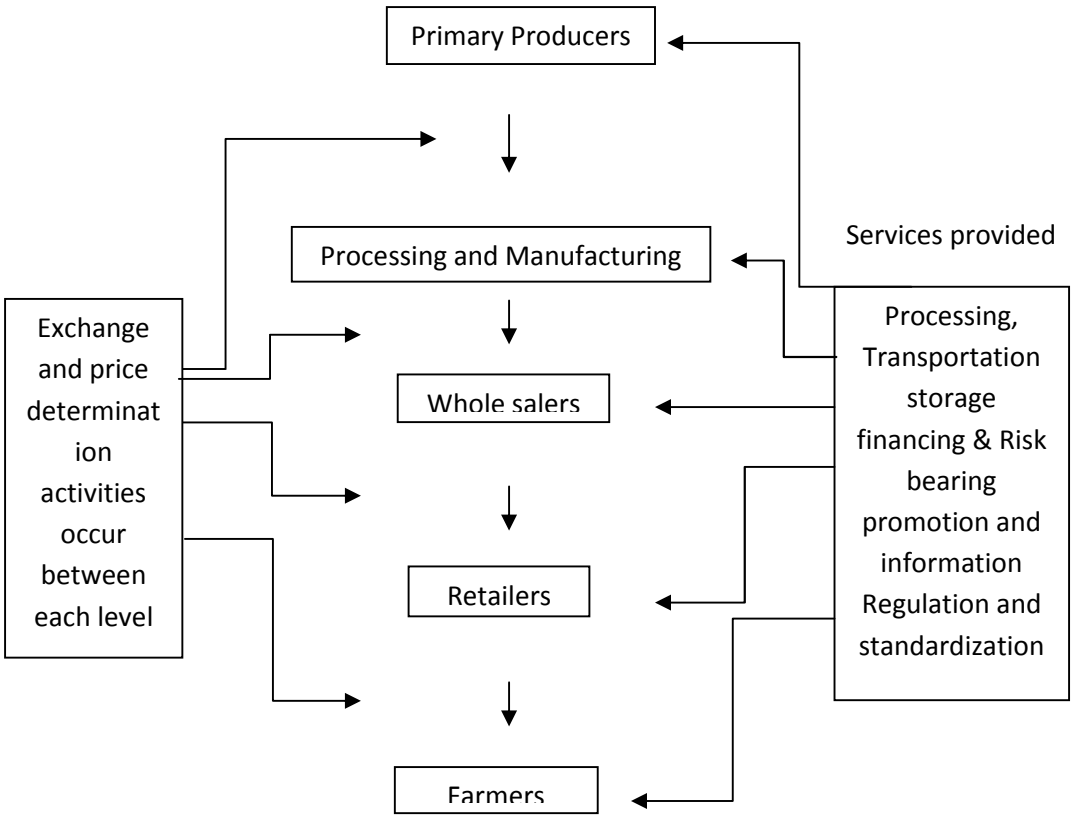


Figure (2): The flow of farm inputs from the original producer to the farm users.

The above two figures (Figure 1&2) can be considered as agricultural market flow diagram. Agricultural economics in its early history was divided into two points, farm management and farm marketing. Farm management stopped at the farm gate and farm marketing began at the farm gate and followed the product to the consumer.

Marketing is the last link in the chain of production process. A good marketing system ensures a reasonable return to the producers to encourage them to produce more. A good marketing system is essential for the achievement is commercialization of agricultural produce. A good marketing system should satisfy the objectives of marketing system for all the persons associated with marketing in the process of movement of produce from producer to the consumer.

A good market system should possess the following characteristics:[10]

1) One of the conditions of an efficient agricultural marketing system is that there should not be any government interference in free market transactions. The methods of intervention include restrictions on foodgrain movements, restrictions on the quantity to be processed or on the construction of processing plan, price supports, rationing, price ceiling, entry of persons in the trade, etc. When these conditions are violated, the inefficiency in the marketing system creeps in, and commodities pass into the black

[10] Acharya, S.S, & Agarwal, N.L. (2005). *Agricultural Marketing in India, Oxford & IBH Publishing. New Delhi. p 69.*

market. They are not then easily available at fair prices to the consumers.

2) The marketing system should operate on the basis of the independent, but systematic and orderly, decisions of the millions of the individual consumers and producers whose lives are affected by it.
3) The marketing system should be capable of developing into an intricate and far-flung marketing system in view of the rapid development of the urban industrial economy.
4) The marketing system should bring demand and supply together and should establish equilibrium between the two.
5) The marketing system should be able to generate employment by ensuring the development of processing industries and convincing the people to consume more processed foods, consistent with their tastes, habits and income levels.

Disposal of the produce after harvest and the return obtained have a significant effect on production and on the welfare of the cultivator. Marketing of agricultural commodities has been operated in the country through a network of regulated markets. Most of the State and Union Territory Governments have enacted legislations (Agriculture Produce Marketing Committee Act) to provide

for regulation of agricultural produce markets. There are 7,139 regulated markets in the country as on March 31, 2009.[11] The country has 20,868 rural periodical markets and the advent of these regulated markets has helped the producers/sellers at the commercial level. Sale of agricultural produce involves a number of functions such as assembling, storing, grading, standardizing, transporting and financing the produce and negotiating sale.

Agriculture production are of two types – Perishable and non perishable. While commodities like cotton and groundnut are non perishable and require large storage space and fruits, vegetables and sugarcane are of a perishable nature. The farmers have therefore to dispose of his surplus immediately either at the village or at the *mandi* shortly after the harvested.

Various system of agricultural marketing exists in India. An important traditional system is the sale of produce to money lenders and village traders. This system is closely related to the problem of rural indebtedness. Farmers who are indebted to money lenders are forced to sell their produce to them. It is understandable that the price paid by the money lenders is considerably lower than the market price.

[11] Government of India, *Economic Survey 2009-2010*.

Another traditional practice is the sale of produce in the *hats* and *shandies*. *Hats* are village markets held once or twice a week and serve a small cluster of villages. *Shandies* are also village markets held at longer intervals or in special occasions.

An important component of the marketing system is the widespread network of regulated wholesale markets. These markets are generally located near or in a township and serve a number of surrounding villages. The farmers sell their produce to the commission agents with the help of brokers. It is well known that various types of malpractices exist in these markets, e.g. use of wrong measures and weights. *Hats* and *Shadies* constitute for a great majority of farmers in India particularly the small producers, the focal point for disposal of farm produces as well as sale and purchase centers for non-agricultural products.

Investment of Government agencies with the marketing of agricultural produce is a welcome development. Cooperative societies and Government agencies have helped the farmers to escape the exploitative practices of the private dealers leading agencies involved in procurement and support price operations on behalf of the Government are Food Corporation of India, Cotton

Corporation of India, Jute Corporation of India and the Co-operative with National Agricultural Co-operative Marketing Federation (NAFED) as their apex organization.

The demand for high value processed product is rapidly increasing which was driven by rising incomes, faster urbanization, liberalization trade, foreign investment and advancing technology. These developments are expanding market opportunities, which are imported for faster agricultural and non-farm growth and for greater employment and rural incomes. But the new market demands quality, timely deliveries and economies of scale, posing special challenges for small holders.

Well functioning agricultural marketing systems can reduce the cost of food and the uncertainty of supply improving the food security of poor and non-poor households. By linking farmers more closely to consumers, these marketing systems transmit signals to farmers on new market opportunities and guide their production to meet changing consumer preference for quantity, quality, variety and food safety.

Efficient markets require good governance and public policy-infrastructure, institutions and services that provide market information,

establish grades and standards, manage risks, and enforce contracts – a continuing challenge in many countries. Improving and modernizing the market system can increase market efficiency, foster competitiveness with imports, and reduce losses and risks. Market modernization, beyond improving basic transport, includes marketing information system, commodity exchanges and risk management.

Demographic change is certainly a key long-term determinant of commercialization. It may facilitate or impede commercialization, depending on the availability of resources. If an expansion of the cultivated area is still possible, and if the marginal labor productivity exceeds the marginal subsistence requirements, population growth may in fact enable an increase of the marketable surplus. However, this situation has certainly become rare. With no concurrent change in the preferences for a high degree of self-sufficiency in staple food (due to perceived food security risks) on the one hand, population growth might lead to a reduced volume of marketed surplus in relative or even absolute terms in regions with deficient market connections. On the other hand, an increased person-land ratio might lead to an increased demand for off-farm employment in order to generate cash income, of which a high proportion will be spent on food.

The availability of new technologies, such as improved, investment in infrastructure, farm modernization for market creation are key factors that facilitate the commercialization process. Increased commercialization can occur without technological change in agriculture, but technological change without increased commercialization seems unlikely because the increased use of purchased inputs and specialization are inherent elements of most technological innovations in agricultural production. Commercialization can also be enforced by direct government action, namely, by various forms of compulsion related to the establishment of plantations, execution of certain management practices and input use, or forced procurement of produce.

Commercialization of agriculture has many different effects. The effects of commercialization in income, employment, health, and nutrition as studied by Joachim Von Braun and Eileen Kennedy (1994)[12] are as under –

Income and Employment effect

There may be major positive or negative effects of commercial agriculture on employment opportunities within the communities. The effects

[12] Braun, Joachim Von and Kennedy, Eileen (1994). *Agriculture Commercialization, Economic Development and Nutrition.,* John Hopkins University Press, Baltimore, Maryland.

will depend in large part on whether the new crop is more or less labor intensive than the crop it replaces. The commercialization of agriculture may have a substantial effect on the demand for labor in a given area. If cash crop production increases, the need for hired labor and, hence, the incomes of landless laborers may increase. Increased production of labor-intensive crops is an attractive way of reaching the landless poor who are often not reached by other development projects.

In the conceptual framework, the primary link between agricultural production patterns or income-generating strategies, on the one hand, and household food intake on the other hand, is through household income. Proponents of cash crop production assume that household income will increase as a result of the transition to a more commercialized agriculture.

Household and Consumption Effects

The potential negative impacts of commercialization on household food security can be short term or long term. In the short- to medium term, the decision to allocate land to a cash crop—particularly a nonfood cash crop with a long growing cycle—can decrease the food supplies available to a household. If the household has other sources of off-farm income available, this money

could be used to supplement food purchases. The worst-case scenario is one where a household allocates a disproportionate share of available farmland to a non edible cash crop with a long gestation period and is trapped when other income sources become less available and the terms of trade for the cash crop develop unfavorably.

Health and Nutritional Status of Women and Children

As evident from the richness and complexity of the household model, calorie intake is but one link through which the commercialization of agriculture can potentially influence an individual's nutritional status. For pre schooler nutritional status, other factors such as morbidity; patterns - and how these are influenced by changes in the health and sanitation environment, breast-feeding, and weaning practices—as well as allocation of time and other resources to the child can be as important as the diet in affecting the overall welfare of the child.

Dil Bahadur Rahut, Iván Velásquez Castellanos and Pravakar Sahoo(2010)[13] have studied livelihood survey data from the Eastern Himalayan

[13] Rahut, Dil Bahadur; Castellanos, Ivan Velasquez and Sahoo, Pravakar. (2010). *Commercialization of Agriculture in the Himalayas.*

region of India to investigate the determinants of commercialization of agriculture by small farmers. Their findings indicate that family farming systems in lower Himalaya's exhibit variation in household asset endowments and agricultural production and income diversity, and that assets exert important effects on commercialization. Gender of the head plays an important role in participation in the market. Male headed household seems to earn higher income from sale of cash crops. The education of the households also plays a prominent role in commercialization; thus the policies should aim keeping children at school. The livestock assets are also important determinants of commercialization, which calls for enhancing the livestock assets of the household as it provides manures for the farm and also the farmers are able to sell the livestock products at the market. The land asset is important determinants of commercialization as the more land means that the farmers are able to produce surplus, which can be sold in the market.

The social categories also influence the commercialization. The analysis finds that the general categories of households are disadvantaged in participating in cash and food crop market as compared to the other backward classes. This is because of the fact that the other backward classes and scheduled castes and tribes have reservation in the government jobs and hence the labour are shifted from farm to non-farm and some of them migrate to other

Indian cities for employment in government jobs. Small household size also has positive effects in commercialization as it means less family to feed and hence more surpluses available for sale. The general categories of household are able to participate more in the livestock market because the households belonging to the general categories are mostly farmers and rear cows and sells butter, milk and curd. Therefore, the rural development policies should support the general categories of household in enhancing their farm productivity and livestock production. The location also plays an important role in commercialization.

Further, if agriculture has to contribute to poverty reduction and growth of the region, commercialization of small holders should be given due importance in the national, state, district and Panchayat level planning and policies as subsistence farmers are disconnected from the markets and do not respond to the markets.

Commercialization and the Indian agriculture

Commercial agriculture -crop production for market rather than for consumption was encouraged by the British colonial rulers. The British had come to India in the seventeenth century, purely as a trading company, backed

by an exclusive royal charter to trade with India, from their queen, Elizabeth I.[14] The primary function of the British East India Company in this period was to buy spices, cotton and silk from India and sell them at huge profits to the large market these goods enjoyed in Britain.

Agricultural taxation was the main source of income for the company, which had to pay dividends to its investors in Britain. Therefore, the British administration tried out various land revenue experiments to this aim. Heavy taxes were demanded from the land owner as well as the peasants. As a result of the revenue policies of the British, agriculture stagnated and peasants almost became tenants at will. This phase laid the foundations of a classic colonial economy within India through the complex processes of commercialization of agriculture. The commercialization of agriculture disrupted the traditional structure of Indian village economy. The new land system had already weakened the existing rural framework. Now it was shattered by the spread of commercial agriculture. This process of commercialization also adversely affected the life and economic position of the peasantry and it change their traditional consumption product to commercial products.

[14] http://www.historytution.com/economic impact of british rule/commercialization of agriculture.html

Certain factors were responsible for the commercialization and specialization of agricultural market. The spread of money economy, the replacement of custom and tradition by competition and contract, the growth of internal and external trade, the emergence of a unified national market etc was responsible for the commercialization of agriculture.

However to the Indian peasants, commercialization seemed a forced process. To meet the excessive land revenue demands of the state and by the high rates of interest charged by the moneylenders, forced the peasants to participate in such process of commercialization. By this process of commercialization, the cultivator had to rush a part of their harvest into the market and sell it in the prices whatever it fetched. Under this circumstances, many poor farmers had to buy back those crops which they s had sold at lowers prices during the harvest time. Further the Indian agriculture was influenced by the widely fluctuating Indian prices. The cottons boom of the year 1860 pushed up the prices but mostly benefited the hosts of intermediaries. This resulted in terrible famine. However the modernization or commercialization in agriculture did not increase the production level in the country. Rather it brought economic disruption in the country.[15]

[15] http://www.indianetzone.com/25/commercialization_indian_agriculture.htm

Government Policy and Agricultural Marketing

There are several policies and actions taken by the Government for improvement in agricultural marketing[16].

1. The government has undertaken marketing survey of various goods and has publishes these surveys. These surveys have maintained the market functions and brought out various market problems and made suggestions for their removal.

2. The Government has done much to grade and standardize many agricultural goods. Under the Agricultural Produce (Grading and Marketing) Act, 1937 the government has set up grading stations for commodities like ghee, flour, eggs, etc. To facilitate grading, standards have been laid down for 162 agricultural and allied commodities. The graded goods are stamped with the seal of Agricultural Marketing Department – AGMARK. The 'Agmark' goods have a wider market and command better prices.

[16] Sundharam, K.P.M and Datt, Ruddar. (2008). *Indian Economy, Fifty Seventh Edition,* S. Chand & Company Ltd. Ram Nagar, New Delhi – 110055.

3. An important measure which the Government has taken to improve agricultural marketing has been the setting up of regulated markets in the country. With the establishment of these regulated markets, the malpractices in *mandis* have disappeared and the market charges have been rationalised.

4. The Government has given active encouragement to the organization of multi-purpose co-operative societies with emphasis on credit and marketing. The primary marketing societies have been encouraged to form central marketing societies and apex marketing societies (at the state level) and the National Agriculture Co-operative Marketing Federation (NAFED). The Government has also provided larger financial resources to the co-operative marketing societies and federations through the State Bank of India and other nationalized banks.

5. The agriculture price policy seeks to ensure remunerative prices to growers for their produce and to evolve a balanced and integrated price structure in the perspective of the overall needs of the economy. With this aim, the Government announces minimum support prices (MSPs) for major agricultural commodities each season and organizes purchase

operations and the market prices do not fall below the MSPs fixed by the Government[17].

[17] Government of India, *Economic Survey 2010-2011.*

CHAPTER IV

AGRICULTURAL MARKETING SYSTEM IN SERCHHIP DISTRICT

Serchhip District is located in the central part of Mizoram and its capital is the town of Serchhip which is at a distance of 110 km from Aizawl, the capital city. It is one of the smallest districts in Mizoram with a total geographical area of 1421.6 sq km. It is bounded by Aizawl District in the North and North-West, Champhai District in the East, and Lunglei in the South. It has a small stretch of international boundary with Myanmar in the South-East.

The Tropic of Cancer passes through Thenzawl, the second largest town in the District. The climate is pleasant throughout the year with an average annual temperature around 15º - 27ºC with moderate rainfall. Major tourist attractions include Vantawng waterfall which is the highest waterfall in Mizoram lies close to the town of Thenzawl and the Tawi Wildlife Sanctuary which lies on the Northern part of the District. The highest peak in the district is Tawitlang with an elevation of 6191 ft above sea level.

The bulk of the population is still engaged in agricultural activities. However, the District has one of the lowest prevalence of BPL families owing to the hardworking nature of the people as a whole and there is little disparity in the living conditions of the people in rural and urban areas. In terms of cleanliness and sanitation, the District is perhaps the cleanest District in Mizoram with villages like Ngentiang, Baktawng and Chhiahtlang receiving national recognition and acclaim.

According to the 2001 census, the total population of Serchhip District is 53861 with the urban and rural population being 27983 and 25878 respectively, out of which 52830 are ST, 5 SC and others 1026. The sex ratio is 976 female per 1000 males. The literacy rate of the District is 95.1% which is much higher than the State's average. Apart from the District Capital (i.e. Serchhip town including Chhiahtlang) there are 31 villages with the total number of household amounting to around 12164[1] .

In Serchhip District more than 60% of the people are dependent on agriculture production and the district total production of rice in 2008-2009 was 14549 Metric Tons in area of 6093 Hectares which was much improvement

[1] According to the 2009 NLUP Baseline Survey Record

over 1035 Metric Tons in 2007-2008[2]. According to the statistics of Agriculture Department 2008-2009, the total number of agriculture village in the District is 36 and from the total household of 10528, the number of Jhum Cultivator family is 5240[3], the total number of Jhum Cultivator family is reduced to 4800 in 2009-2010 Statistics[4]. The total overall cultivator families are 6808 in 2008-2009 and 6368 in 2009-2010, which is 60.48% of the total number of household. According to the data released by Directorate of Agriculture, Mizoram, Agriculture production area (especially paddy) covers about 5887 hectares of land out of 47204 hectares covered by the whole state in 2009-2010 and the total rice production has reached to 4589 Metric tonnes[5].

Table 1: Production of Rice (Jhum and WRC) in Serchhip District during 2007-2010

	2007 - 2008		2008 - 2009		2009 - 2010	
	Area	Production	Area	Production	Area	Production
Jhum	2144	383	4608	9896	4352	3453
WRC	1353	652	1485	4650	1535	1136
Total	**3497**	**1035**	**6093**	**14546**	**5887**	**4589**

Source: Statistical Abstract 2007-2010.

[2] Statistical abstract 2007-08, 2008-09, Department of Agriculture, Mizoram.

[3] Ibid.

[4] Statistical Abstract 2009-2010, Department of Agriculture, Mizoram.

[5] Ibid.

Table 2: Production of Rice (Jhum and WRC Cultivation) in Mizoram during 2007-2010

	2007 - 2008		2008 - 2009		2009 - 2010	
	Area	Production	Area	Production	Area	Production
Jhum	36841	43985	40792	44489	44947	11355
WRC	9774	20544	11198	24428	9594	4333
Total	**46615**	**64529**	**51990**	**68917**	**54541**	**15688**

Source: Statistical Abstract 2007-2010.

Table 3: Percentage Share of Rice Production in Serchhip District as compared to Mizoram during 2007-2010

	2007 - 2008		2008 - 2009		2009 - 2010	
	Area	Production	Area	Production	Area	Production
Serchhip	3497	1035	6093	14546	5887	4589
Mizoram	46615	64529	51990	68917	54541	15688
Percentage	**7.5**	**1.6**	**11.71**	**21.1**	**10.7**	**29.25**

As stated in table 3, it appears that the percentage share of production of rice in Serchhip District is 29.25% of the total production of Mizoram in 2009-2010 which was improved over the previous year. The total area covered about 10.7% of the State production area.

The system of cropping is that Jhum cultivation (clearing and burning of forest) are mostly common and jhum region covers the area of 4608 Hectares

out of the total area of 6093 Hectares in 2008-2009. Other than jhum method, Wet Rice Cultivation (WRC) is extensively used and it covers an area of 1485 Hectares. The total production of rice in Jhum region is 9896 MT in 2008-2009. In Serchhip valley most of the rice productions are sown on the Kharif season[6]. The total Kharif (WRC) production of rice in 2008-2009 is 4650 MT. In 2008-2009 Statistical Abstract it appears that there are no Rabi[7] crops (especially rice). Other than rice, the total production of Kharif crops in 2008-2009 are 17438 MT and Rabi crops are 237 MT.

By studying the total production and cropped area of Serchhip District during the last four years (2007-2010), it is clearly obvious that the total production of rice in much decrease as compared to the previous years. Along with this, the state total production is also decrease. In 2008-2009 the total production reached to 14546 Metric tonnes, but in 2009-2010 it declines to 5887 metric tonnes which is less than half of the previous production. As a whole of the state, the total production in 2008-2009 was 68917 Metric tonnes and in 2009-2010 it was decline to 15688 Metric tonnes.

[6] **Kharif season** are crops grown with the onset of monsoon in different parts of the country and these are harvested in September-October. Important crops grown during this season are paddy, maize, jowar, bajra, tur (arhar), moong, urad, cotton, jute, groundnut and soyabean.

[7] **Rabi crops** are sown in winter from October to December and harvested in summer from April to June. Some of the important rabi crops are wheat, barley, peas, gram and mustard.

This excessive fall of production in the last year is blame to the uneven distribution of rainfall during 2009. Serchhip has a pleasant climate throughout the year with an average annual temperature around 15º-27ºC with moderate rainfall. On an average the District receives an annual rainfall of 3567.2 mm. In 2009 the annual rainfall received in the District is extremely low as compared with the previous year received of 4108.4 mm. In 2009 the District received an annual rainfall of only 1516.9 mm. While in the previous year it receives 4108.4 mm. The decline in the amount of rainfall received during 2009 is due to the data not available from N. Vanlaiphai.

Department of Agriculture, Government of Mizoram has used two towns in the District - Serchhip and N. Vanlaiphai, for collection of amount of rainfall in the District. Amount of rainfall is collected from these two towns as a represent of the whole District. During 2009 there is a small drought that occurs in the District most in N. Vanlaiphai and the amount of rainfall received during the whole year is much less and this affects the cultivators in their production. The total monthly rainfall received by Serchhip District during the last 5 years (2005-2009) as recorded in the Directorate of Agriculture, Government of Mizoram are given below:

Table 4: Monthly Rainfall record in Serchhip District (2005-2009) (in milimetres)

Monthly Rainfall Record 2005 (in millimeters)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Serchhip	0	0	106	71	225	113	174	305	250	167	6	7	1424
N. Vanlaiphai	0	0	80.9	83	248	188	157	210	190	156	0	3.1	1316
Total annual rainfall = 2740.8													
Monthly Rainfall Record 2006 (in millimeters)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Serchhip	0	0	0	33	485	704	349	193	212	235	0	0	2211
N. Vanlaiphai	0	0	0	59.4	308	348	227	220	116	0	0	0	1278
Total annual rainfall = 3489.1													
Monthly Rainfall Record 2007 (in millimeters)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Serchhip	0	61	15	199	305	542	542	390	597	221	96	0	2968
N. Vanlaiphai	0	0	7	0	487	644	549	400	476	307	143	0	3013
Total annual rainfall = 5980.8													
Monthly Rainfall Record 2008 (in millimeters)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Serchhip	54	7	22	17	199	178	339	467	419	140	43	0	1884
N. Vanlaiphai	76.2	0	23	8	338	409	489	421	306	154	0	0	2224
Total annual rainfall = 4108.4													
Monthly Rainfall Record 2009 (in millimeters)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Serchhip	0	0	22.2	66.4	147	259	292	420	120	132	34.2	0	1494
N. Vanlaiphai	0	0	23.2	D	D	D	D	D	D	D	D	D	23.2
Total annual rainfall = 1516.9													

Source: Statistical Abstract, Dept. of Agriculture, Mizoram 2009-2010.

In Serchhip District, there are a small patches of flat lands in Zawlpui(Chamdur), N.Vanlaiphai and Thenzawl. These flat lands are made for

permanent rice cultivation and these lands are said to be the rice bowl of Serchhip District. In these lands the principal crop grown are paddy and in the off season commercial crops like cabbage, mustard, chana, bean, etc. are also grown. This means that the lands are used in all the time, during the season and also in during the off season. There is a good result that all the crops grown in different season produce a good result because of the good fertility of the soil.

Agriculture work is the main occupation of the people in Serchhip District and according to the Statistical Abstract of Agriculture Department in 2009-2010 there are 6368 Cultivator families and this cultivator families covers 60.48% of the total household in the District. Serchhip District has a geographical area of 142.160 thousand Hectares and out of this area forest covers 91.235 thousand hectares. There are 9.816 thousand hectares of land which are not available for cultivation. The total net sown area in 2009-2010 was 18.947 thousand hectares, while the total crop area was 19.066 thousand hectares. Serchhip District has covers 14.31% of the total crop area in Mizoram.

Table 5: Land Use Statistics of Serchhip District during 2008-2010.

S/n	*HEADING*	*2008-09*	*2009-10*
		Thousand Hectares	
I	Geographical Area	142.160	142.160
II	Reporting Area for Land Utilization Statistics (1 - 5)	142.160	142.160
1	Forests	20.021	91.235
2	Not available for Cultivation (a + b)	9.683	9.816
	a) Land put to non-agricultural uses	9.033	9.158
	b) Barren and Uncultivable land	0.650	0.658
3	Other uncultivated land excluding fallow land (a + b + c)	77.144	5.810
	a) Permanent pastures and other gazing land	0.350	0.350
	b) Land under miscellaneous tree crops and groves not included in het area sown	65.895	4.980
	c) Culturable waste	10.899	0.480
4	Fallow lands (a + b)	15.58	16.352
	a) Fallow lands other than current fallows	11.529	12.000
	b) Current fallows	4.051	4.352
5	Net sown area	19.732	18.947
6	Total Crop Area	19.844	19.066
7	Area sown more than once	0.112	0.119
III	Net Irrigated Area	1.485	1.535
IV	Gross Irrigated Area	1.485	1.535

Source: Statistical Abstract 2008-2009, 2009-2010

Table 6: Household and Cultivator Families in Serchhip District.

	Sl/n	Name of Circle	No. of Village	Total no. of household	Total no of Jhum Cultivator families	Total no of WRC Cultivator families	Total No. of Cultivator families	Out of column 7. No of families operating both Jhum & WRC
	1	2	3	4	5	6	7	8
2006-2007	1	Serchhip	21	6485	2850	720	3570	-
	2	Thenzawl	3	1360	910	185	1095	-
	3	E. Lungdar	8	1663	1170	338	1508	-
	4	N. Vanlaiphai	4	1020	310	257	567	-
		TOTAL	**36**	**10528**	**5240**	**1500**	**6740**	
2007-2008	1	Serchhip	21	6485	2850	780	3630	-
	2	Thenzawl	3	1360	910	190	1100	-
	3	E. Lungdar	8	1663	1170	338	1508	-
	4	N. Vanlaiphai	4	1020	310	260	570	-
		TOTAL	**36**	**10528**	**5240**	**1568**	**6808**	
2008-2009	1	Serchhip	21	6485	2850	780	3630	-
	2	Thenzawl	3	1360	910	190	1100	-
	3	E. Lungdar	8	1663	1170	338	1508	-
	4	N. Vanlaiphai	4	1020	310	260	570	-
		TOTAL	**36**	**10528**	**5240**	**1568**	**6808**	
2009-2010	1	Serchhip	21	6485	2740	780	3520	-
	2	Thenzawl	3	1360	800	190	990	-
	3	E. Lungdar	8	1663	1060	338	1398	-
	4	N. Vanlaiphai	4	1020	200	260	460	-
		TOTAL	**36**	**10528**	**4800**	**1568**	**6368**	

Source: Statistical Abstract 2007 – 2010.

Production and Marketing of Cabbage in Serchhip District

Serchhip District which is situated in the central part of Mizoram is famous for its successive production of seasonal crops in Mizoram. The District is well known for its production of bean, mustard, cabbage, etc. Among these seasonal crops cabbage is at the top and Serchhip is also the famous producer of cabbage in Mizoram. Zawlpui(Chamdur) and the neighbouring areas have a suitable soil and a good climate for growing cabbage.

Cabbage (Scientific name *'Brassica oleracea var. capitata'*) is the fourth most widely grown vegetable crop of our country. India is the leading country producing Cabbage. The area under Cabbage cultivation is 0.23 M.ha producing 5.62 MT. The main varieties of cabbage are Pusa Drum Head, Golden Acre, Pride of India, Pusa Mukta, Pusa Synthetic etc. West Bengal produces 1.84 MT and is the largest grower of the cabbage. Cabbage, a member of the cruciferous family that includes broccoli, mustard, cauliflower, Brussels sprouts, kale, kohlrabi and bok choy, is thought to have been domesticated as a crop in the Mediterranean region of Europe. It was originally valued by ancient Romans and Greeks as a medicinal for use with a variety of ailments including gout, headaches and ingestion of poisonous mushrooms. Today cabbage is primarily valued as a fresh market vegetable, although research continues on

the value of the medicinal properties of cruciferous vegetables that have been found to aid in the prevention of cancer.

Cabbage is an excellent source of vitamin C. It also contains significant amounts of glutamine, an amino acid that has anti-inflammatory properties. Cabbage can also be included in dieting programs, as it is a low calorie food. Along with broccoli and other brassica vegetables, cabbage is a source of indole-3-carbinol, a chemical which boosts DNA repair in cells and appears to block the growth of cancer cells. [8],[9] The compound is also used as an adjuvant therapy for recurrent respiratory papillomatosis, a disease of the head and neck caused by human papillomavirus (usually types 6 and 11) that causes growths in the airway that can lead to death. Boiling reduces anti-cancer properties.[10]

Cabbage is best in full sun light and need a rich, well drained soil. It has a pH level of 6.0-6.5. The ideal temperature for cabbage should be 21-26^{o}C. By with a proper sowing, it can mature in 90-95 days.

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[8] "Broccoli chemical's cancer check." BBC News 7 February 2006. Retrieved 5 September 2010.

[9] "How Dietary Supplement May Block Cancer Cells". Science Daily. 30 June, 2010. Retrieved 5 September.

[10] Warwick Medical School, University of Warwick (2007-05-15). "Research Says Boiling Broccoli Ruins Its Anti Cancer Properties".

Cabbage is cultivated in Serchhip from around 1990s. But regular cultivation has been started from 1995 after when the growers association of Serchhip has been set up on 26.2.1995. Before 1995 there are a few cabbage growers and some families grow cabbage for their own consumption and not for a market purpose. In 1995, some growers of cabbage and other crops have been formed together and for their well functioning and regulations they formed an association called, “Serchhip Vegetable Growers Association”.

As per the record of the association, the average annual member is around 200 and from these, the regular owner of cabbage who produce for commercial purpose was only about 70. The other members mixed their crop with other cereals and vegetables.

The associations have no proper record of their production and therefore this unrecorded production and undocumented activities have made some problems while studying their actual status. While asking some active members, their average annual production has reached to about 10,000qtls from 2008 onwards in Serchhip alone. According to the data released by Directorate of

Economics and Statistics, Government of Mizoram in 2009 the state production of cabbage in 2008-2009 has reached to 38805 metric tonnes. This means that the production of Cabbage in Serchhip is only 2.57% of the State production.

Table 7: Area, Production & Yield/Ha of Cabbage in Mizoram.

Sl/n	Year	Area in Ha.	Production in MT	Yield MT/Ha
1	2001 - 2002	62	888	14.3
2	2002 - 2003	143	2256	15.5
3	2003 - 2004	209	3284	15.7
4	2004 - 2005	310	4736	15.2
5	2005 - 2006	275	4287	15.5
6	2006 - 2007	236	3684	15.6
7	2007 - 2008	200	5000	25
8	2008 - 2009	2985	38805	13

Source: Statistical Abstract, Directorate of Economics & Statistics, Govt. of Mizoram, 2009.

A study has been made on a selected 25 families of Cabbage grower in Serchhip, according to the study it is clear that those families who depends on commercial production of cabbage are not much. Most of the grower family

mixed it with other vegetables. The average cultivated area of these 25 families is 39 Hectares and the average workers in these lands are 68 people. Among these 25 families, those who possess land for their own production are 17 and who lend others land are 8 families. Among them 23 of the families used fertilizers both organic and chemical and only 2 families do not used fertilizers. The total production of cabbage and income earned by selected 25 families in Serchhip District are given in the table below:

Table 7: Production of Cabbage by selected 25 families in Serchhip.

S/n		*2006*	*2007*	*2008*	*2009*	*2010*
1	Production area(in hectares)	38	39	39	41	40
2	Production (in quintals)	2757	2952	3106	2898	2353
3	Average Wholesale Price(per kg)	4.8	4.8	4.8	4.8	4.8
4	Workers in the field	68	68	68	68	68
5	Total Income earned	13,23,360	14,16,960	14,90,880	13,91,040	11,29,440

Source: Questionnaire

In Serchhip District, there are 31 villages and every village has their own market place, in this village/rural *hat* commercial agriculture products are always bought and sold. Regulated markets have been set up only in some large

village and the District centres and the others are weekly markets which open only in the weekend. But in some places, some producers carry their vegetables and visit every house for selling of their products. The market of cabbage is done in with and without market place. When the time of harvesting, most of the wholesalers did not find a place for selling their cabbage in the market hall, so they form their own place outside the market place and on the roadside to sell it. In Serchhip most of the cabbages grown are harvested in March – May, and in those seasons all the market place and it surrounding areas are filled with lots of stock cabbage.

Most of the produce in Serchhip is exported to another town and district, because the need of the District is not so much and the total production is too much for disposing in the District and bout 7000qtls are exported in every year. The wholesalers or retailers buy it from the cultivator at the field or in at the market place and carried it to another town. Sometimes the grower themselves carried out their own production. Average wholesale price it Rs 4.8 per kg and the final market price is about Rs 10 – Rs 20/-.

Cabbage production in Serchhip has a good quality and it has a good weight, and it attract the buyer. This may be due to a good climate as well as

good fertility of the soil. However, there are some diseases and pests that attack the plan, some popular insects that attacks the cabbage are fruit borer, Diamond bockmoth, Head borer, Aphids, Thrips, etc. Some diseases of cabbage are powdery, ildew, blight, damping off, mosaic, leaf curl and leaf spot. These diseases and insects often destroy many of the products before harvest.

Table 8: Major insect pests and diseases of crops in Serchhip District

Sl/n	*Major Crops*	*Major insects pests of crops*	*Major diseases of crops*
1	Paddy	Stem borer, Leaf roller, Case Worm	Blast, Blight, Smut
2	Maize	Stem borer, weevil, Aphids	Leaf Spot, Douny mildew, Seed rot
3	Sugarcane	Borer, termites, Mealy bugs	Red rot, Smut, Wilt, grassy Shoot
4	Winter Vegetables (Cabbage, Brinjal, Chillies, Mustrad, etc.)	Fruit borer, Diamond bockmoth, Head borer, Aphids, Thrips etc.	Powdery, ildew, Blight, Damping off, mosaic, Leaf Curl, Leaf Spot
5	Soyabean	Leaf folder, :Pod borer, Aphids etc.	Leaf blight, Root rot, collar rot, Anthroenise, Leaf spot etc.

Source: Statistical Abstract, Department of Agriculture, Mizoram 2009-2010.

Agronomical Practices

The agronomical conditions for Cabbage in Serchhip District like climate, seeds, seasons of sowing, fertilizers etc. have been discussed briefly below:

a) Climate:

Cabbage needs an ideal temperature of 21°-26°C. The average temperature of Serchhip District is around 15º-27ºC with moderate rainfall which is most suitable for growing of Cabbage.

b) Seed:

The use of good quality seeds are essential for producing crops of superior quality and higher out-turn. Producers in Serchhip District usually collect their seeds from the local market and from the supplies of the department. They cannot produce their own seeds, so they have to collect from other district or from the supplies by the department. During 2010, Department of Horticulture Government of Mizoram Serchhip District has distributed 46.4kgs of Cabbage seeds to the farmers.

c) Fertilizers:

Fertilizers of chemical and organic are widely used by the farmers. However they the mostly used of organic fertilizers which are supplied by the Department. They sometimes used Urea fertilizers at the rate of 300kg/hectare. From a recent year, they started to introduce organic manures made from plants and earthworms which are supplied by the Department.

d) Seasons of sowing and harvesting:

Most of the Cabbage sown in Serchhip District is cold weather crop and winter season is the most time for sowing Cabbage in Serchhip. The growing season starts from the end of October to November and harvests in March and April. Sometimes the harvesting starts from the last week of February.

e) Varieties:

In Serchhip, different varieties of Cabbage are grown. The mostly grown varieties are Indo-America Hybrid, Ryozeki (Japanese variety), Seminish, Bahar etc.

f) Plant Protection:

Cabbage crop is prone to certain plant diseases like thrips, fruit borers, aphids, damping off, leaf spot and curl, etc. Most of the diseases can be controlled by application of manures and use of fertilizers and pesticides as recommended.

Assembling

In Serchhip, Cabbage is assembled and sold mostly by the producers themselves. The producers sometimes carry the produce to the nearest market for sale. Most of the farmers usually establish small shops during the season. If large quantities are involved, the farmers directly go to the neigbouring areas and in Aizawl city where wholesale buyers purchase directly from the producers in open actions. The produce assembled by the cultivators themselves in the market centres for disposal is more than half of the total market arrivals in Serchhip. Besides these village merchants and wholesale buyers also play an important place in the process of assembling.

Distribution

Distribution is the integral part of the movement of produce from producer to consumer. In Serchhip, generally the producers take active part in the wholesale distribution of Cabbage. Many producers sell their production by themselves to the town market and also moving to another district and capital city to dispose of their product. On the other hand, the village merchant and wholesale merchants form an important link in the chain of distribution of Cabbage. They purchase and assemble the produce from the farmers and pass it on to the consuming markets.

Grading

In Serchhip, grading and classification of Cabbage is done by growers, traders and commission agents. Sometimes the growers remove discoloured, damaged and leaf spot at the farm level from the produce at the time of harvesting. The sellers/producers gave a high grade for the looking good quality of Cabbage. But their grading system has seemed to be often disadvantageous to the farmers.

Storage

Storage plays an important part in the production and marketing of Cabbage. Storage is required at producer level as well as at traders' level. But in Serchhip, storage is a big problem due to the absence of storage facilities in the District. The only storage facilities available at the town are unusable due to improper installation. This suffer the farmers and many of the produce are damaged and loss due to this before arriving at the market place. The farmers have no storage facilities and this forced them to sell their production quickly after the harvest even with unfavourable price.

Transportation

In Serchhip, Cabbage is transported to markets by various modes such as head loads, wooden vehicles, tractors, pick-up and 407 trippers. Pick up are the most commonly used vehicles for transportation.

CHAPTER V

PROBLEMS OF AGRICULTURAL MARKETING

Agriculture is the main occupation of the people in India and it provides employment to around 52 per cent of the total work force.[1] The Indian agriculture in recent years has shown encouraging sign of changing from traditional to modern one throughout conversion of agricultural technology into productive accomplishment. The success story of Indian agriculture has become a model for agricultural growth and development for many under developed countries of the world. During post independence period particularly after 1966 'Green Revolution' has been initiated into the Indian agriculture and a number of measures have been launched by successive govts to promote agricultural growth.[2] Though some measures and improvements have been made through various development programmes there is still remain to be done and some defective measures still practice in agricultural marketing system. There are still many gaps in agricultural marketing which need to be bridged.

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[1] Government of India, *Economic Survey 2009-2010.*

[2] Ahmed, Aftab Uddin & Bagchi, Kanak Kanti. (2007). *Adoption of New Technology and Agriculture Development. Abhijeet Publications. Delhi 110 094.*

For a long period of time, Indian agriculture was mostly in the nature of 'subsistence farming'. The farmers sold only a small part of his produce to pay off rents, debts and meet his other requirements. Such sale was usually done immediately after harvesting of crops since there were no storing facilities. A considerable part of the total production was sold by the farmers to the village traders and moneylenders often at prices considerably lower than the market prices. The farmers who took their produce to the *mandies* (wholesale markets) also faced a number of problems as they were confronted with powerful and organized traders.

There are many unsatisfactory and defective measures in the present system of agricultural marketing. Government has tried to remove these defects from time to time but they are of little use to medium and small farmers. The important defects and problems of agricultural marketing are as follows:

1. **Forced sales:**

   One of the major defects in agricultural marketing in India is the inability of the majority of the farmers to wait for long after harvesting their produce. The average Indian farmer is so poor and indebted that he cannot afford to wait till such time for a reasonable price. He needs money in order to meet his commitments and pay his debt, he is forced

to sell the produce just after the harvest at whatever price is offered to him. The National Planning Committee in its report in Rural Marketing and Finance observed this situation as: "The farmer in general sells his produce at an unfavourable place and at an unfavourable time and usually he gets very unfavourable terms."[3]

2. **Inadequate Storage Facilities:**

The Indian farmer does not have facilities for storing his produce. Storage facilities in the rural areas and in the primary markets are either totally absent or grossly inadequate. In village, farmers mostly store their surplus grains in earthen vessels or in the Kutcha rooms or in the underground Kutcha pits. This type of storing exposes the grains to white ants, rats, dampness, etc. and results in considerable loss. This poor storage facilities results that 10 to 20 per cent of the produce is eaten away by rats and other insects. This brings unfavourable condition for the farmers and leads to a post harvest loss.

Because of the absence of proper storing place in villages, markets and other marketing places, not only the farmers but also the

[3] Sharma, A.N. (1984). *Economic Structure of Indian Agriculture.* Himalaya Publishing House, Bombay 400004.

nation suffers. He suffers in the way that he is forced to sell his produce at the lower price because of wastages, losses such as attack of insects and pests, dampness, etc. Storage in Kutcha godowns leads to a loss due to the attack of rodents, insects, pests, etc. The Parse Committee estimated that the post harvest losses at 9.3 per cent f which nearly 6.6 per cent occurs due to poor storage conditions alone.

3. **Poor Transport and Communication:**

One of the important components of the infrastructure needed for the growth of agricultural marketing is transport and communication. The transport condition in rural areas are so bad that even the rich farmers, who have large amount of surplus, may not be interested in going to the *mandis*. Even at the present, there are many rural areas which have not yet been well connected with main roads or with marketing centres. Most of the rural roads are kachcha (unmetalled, bullock cart roads) and in rainy season they are unusable.

Even today more than 50 per cent of the total production of the farmers is brought by bullock cart from farm to the *mandis*. Trucks and railways have not touched every village in India. This is because the

absence of roads or of bad roads. In some places motor truck prices are so high that it is beyond the reach of the poor farmers. Cultivators have to sell at lower prices at inconvenient market rather than pay more for transportation and spend more for transportation by bringing their produce to the market centre.

In this regard Mr. Mukherjee(1960)[4] states, "Communication from field to village and from village to the *mandis* are often extremely poor and defective." Because of the defective means of transport much loss occurs. According to the Foodgrain Investigation Committee, the loses are 0.5 to 3.50 per cent in rail transport; 0.5 to 1.25 per cent in road transport and 0.5 to 1 per cent in river transport.[5]

4. **Long chain of middlemen:**

In the absence of an organized marketing structure, private traders and middlemen predominate the marketing and trading of agricultural produce. In between the farmer and the ultimate consumer, there is a large number of middlemen who function at various stages in the process of assembling and distribution of farm produce. The number of

[4] Mukherjee, R.K., (1960). *Economic Problems of Modern India, Vol. II, p. 295.*

[5] Sharma, A.N. *(1984). Economic Structure of Indian Agriculture*. Himalaya Publishing House, Bombay 400004.

middlemen also depends on the nature of the crop. For example, paddy usually passes from village merchant to the mill or to the wholesale dealer in the assembling market and from the rice mill its passes on to the wholesale dealer in the consuming market and through one or more retailer to the consumers.

In the village, there is the bania; in the town, there are commission agents, brokers and others who get fat at the expense of the poor farmer. Likewise, the agriculture marketing system in India is bound up with long chain of middlemen and brokers and this ultimately affects the producer's share in the consumer's price. Many market surveys have revealed that middlemen take away about 48 per cent of the price of rice, 52 per cent of the price of groundnuts and 60 per cent of the price of potatoes offered by consumers.[6]

5. **Multiplicity of Charges:**

The producer in the process of selling his produce has to incur numerous charges which reduce his share in the money paid by the consumer for his produce. There are many unauthorized deductions like Zakat, Dharmada, Goshala, Shagirdi, etc. In addition to these charges, a

[6] Sadhu & Singh. (2010). *Fundamentals of Agricultural Economics.* Himalaya Publishing House. p, 155.

number of other charges, legitimate or illegitimate charges are also claimed by the middlemen. For example, in case of fruits the charges include packing, transport charges from orchard to the farmer's godown and then to the assembling expenses, loading and unloading charges, brokers, commission agents, terminal tax, market charges, etc. All this sometimes adds up to 80 per cent.

The Report on the Marketing of Wheat in India observes that, "not only the arhatia and dalal, but the minimum, the chowkidar, the sweeper etc. regard themselves as entitled to share of his produce." The objectionable feature about the market charges is that they are not only high but are also not clearly defined and specified.

6. **Malpractices of Markets:**

Most of the agricultural markets are unregulated. Several malpractices are followed in each market. These malpractices include defective weights and measures. In some rural markets there is no market regulation and the middlemen take control of the markets and there are no standard weights and measures. Mr. Mukherjee in this regard remarks, "The poor agriculturists have to face great difficulties

and expenses in marketing their produce."[7] Regarding malpractices the Marketing Sub-Committee observed, "Deliberate malpractices, ignorance and carelessness have all combined to make the consumer in India pay unnecessarily high price for many goods of different qualities."

7. **Absence of Grading and Standardization:**

Many times agricultural produce is not graded and brought to market as it is. This ungraded product creates problems while pricing. Majority of Indian farmers sell their farm produce without proper grading and they simply charge lower price to attract the consumer. In fact the farmers get a return much lower than the one he deserves because of ungraded. In such case, Government intervention is needed for grading and standardization of the farmers produce.

8. **Lack of Market Information:**

Because of lack of information about the ruling prices in the bi markets the farmers have to accept whatever price is quoted to them and have to believe whatever the traders tell them. Sometimes the traders misguide the ignorance farmers and cheat them. Most Indian farmers do not get necessary information regarding prices of different farm goods

[7] Mukherjee. (1960). *Agricultural Marketing in India.* Published by Thacker, Spind; 2nd Edition *p. 12.*

prevailing in different markets. The middlemen and the village bania which the farmers' source of information is more biased in favour of the market trader and hence farmers fail to realize reasonable returns for his produce.

Besides these, there are several problems which are associated with agricultural marketing in India. S.N. Misra[8] while studying Commercial Agri-Enterprises has observed some general problems which demand immediate attention of their removal.

1) **Location problem:**

The commercial agri-enterprises are required to be located in places which are most suitable from the point of view of nearness to raw material, infrastructure facilities, access to market, access to power and water etc. In some areas the distance between the farm and the market are so far that the farmers does not bring their produce to the market at time. This problem brings

[8] Misra, S.N., *Commercial Agri-Enterprises, Strategy, Achievement and Future Prospects.* Deep & Deep Publications Pvt. Ltd. New Delhi – 110 027.

disadvantageous for some horticulture crops like mushroom, bean, mustard, cauliflower, etc.

2) **Technological Problem:**

Technological problem is the most common problem faced by the Indian farmers today. Except a very few commercial agri-enterprises like food processing and cold storage, almost all the types used are outdated technology and it needs to improve. Technological transformation from traditional to modern has rarely occurred. However, most of the Indian farmers are illiterate and unskilled and do not have necessary expertise to handle the latest technology even if it is supplied to them due to lack of any training and knowledge

3) Financial Problem:

Most of the Indian farmers are so poor and they need financial assistance. Their funds are limited to make their own production and so they borrowed funds from moneylenders and merchants. Sometimes the bank and other financial institutions

sanctioned loans to them. However the rate of interest for loans is high and demand for security and loan repayments further complicates the problems. As a result they have to sell their produce at the time of harvest even at a lower rate.

4) **Producer's Organization:**

There is no proper organization of producer and this creates many problems. They cannot reduce transportation cost as well as their bargaining power is also poor. So setting up of producer's organization is needed to regulate and fixed the price.

CHAPTER VI

CONCLUSION: FINDINGS AND SUGGESTIONS

Agriculture Marketing is the most significant part of the indicator of the country's economic growth and the country's economic growth mainly depends on the growth of agriculture. In India more than 60% of the total population are still engaged in agricultural activities and it contribute 58.4% of the country's employment and it is the largest sector provider. So the contribution of agriculture to the country's economy cannot be neglected.

Commercialization of Agriculture is an important concept in Agricultural development. Commercial agriculture - crop production for market rather than for consumption was encouraged by the British colonial rulers. The study found out that though commercialization of agriculture is important for development it has disrupted the traditional structure of Indian village economy. The new land system had already weakened the existing rural framework. Now it was shattered by the spread of commercial agriculture. This process of commercialization also adversely affected the life and economic position of the peasantry and it change their traditional consumption product to commercial products.

In studying 'Agricultural Marketing in Mizoram (A Case Study of Serchhip District)' various agricultural information have been collected and there are some findings and suggestions that evolved from the study. After a detail study of the topic, some findings and suggestions from the topic are given below:

1. The study found out that from traditional society to even today, agriculture is the main occupation of the people in Mizoram and, the majority of the state income is depends upon agriculture. More than 80% of the total populations were engaged in agriculture and allied activities and the percentage of total cultivators constitute 54.9% of the total population.

2. Though there are some improvements and new methods and techniques which are operated and introduced by the government, most of the farmers still practice their traditional jhum(shifting) system of cultivation and cannot completely abandoned it. WRC systems have been widely introduced and this WRC and permanent cultivation has slowly changed the

traditional jhum system of cultivation in the farmers.

3. The major crop grown in Mizoram agricultural land are Paddy and the total production of rice by farmers of Mizoram in 2009-2010 was 4,62,924 Qtls. While the total requirements of rice for Mizoram in one year was 19,22,030 Qtls. From this, it is clear that Mizoram has not self sufficient in rice production and in 2009 statistical records there has been deficiency in total production of rice and requirements by 14,59,106 Qtls. The total rice production of the state has covers only 24.09% of the state requirements. Therefore some more improvements in rice production have been needed.

4. The study area Serchhip District is located in the central part of Mizoram and has a pleasant climate throughout the year and is a suitable place for agricultural production. Serchhip has a vast plain area for agricultural production and called it 'Zawlpui valley' and is said to be the rice bowl of Serchhip. Most of the agricultural productions of the District are made from this valley. In other places there are some other noted plain agricultural areas in N. Vanlaiphai, Thenzawl, etc.

5. The study reveals that in Serchhip more than 60% of the total populations are engaged in agriculture and rice is the main crop grown. The District has agricultural area of 5887 Hectares in 2009-2010 and the total rice production is 4589 metric tones. Jhum system of farming are extensively used and it produce 3453 metric tones of the District rice production in 2009 while WRC has produce 1136 metric tones of rice production.

6. The study found out that the production of rice in 2009-2010 is much less than the previous year (2008). In the previous years up to 2008, the district production of rice is at a continuous increasing and in 2008-2009 it reached to 9896 metric tones. But in 2009-2010 the production is decrease to 4589 metric tones which is more than half of the previous year production.

7. The fall in the production of rice in 2009-2010 is mainly due to the uneven rainfall during that year. Serchhip always have a moderate rainfall and but in 2009-2010 there is a small drought occur in the district and some areas have been

affected. The cultivators are badly affected and they cannot cultivate their land at time because of lack of water. Due to the long absence of rainfall, the Mat River on which the cultivator depends cannot satisfy the needs of all the farmers. So this situation has affected the total production of rice during that year.

8. The study reveals that the percentage share of the District production of rice in Mizoram has been increasing continuously and in 2009-2010 the District has contributed to 29.25% of the total rice production of Mizoram while the land cultivated area covers about 10.7% of the total land area. However some contradictory report has been found that the total production of rice in 2009-2010 is much less than the production in 2008-2009, but the percentage share of the district production in 2009-2010(29.25%) is more than the percentage share in 2008-2009(21.9%). The reason is that in 2009-2010 the overall state production of foodgrain has been declining due to a small drought occur in some areas of the state.

9. The study found out that though Serchhip District has contributed 29.25% of the state total rice production, it has not yet achieve self sufficiency and it seems that more production can be made from the available cultivated area. In 2009-2010 out of the geographical area of 142160 hectares, the total crop area covers 19066 hectares.

10. The study put emphasis on the production and marketing of cabbage in Serchhip District and it is found out that cabbage is the main crop grown(except paddy) in Serchhip District and is noted in Mizoram for its good quality and successful production of cabbage. While studying cabbage growers in Serchhip there are some issues and problems which make difficulties in analysis and collection of data

    a. that though the growers association has been early set up in 1995, they have no proper records of their production till now. They mostly response their records from their simple mind calculation. They do not know their exact transaction of income from their production.

    b. that the total members of the association are around 200

and however the active cabbage grower were only about 70.

11. The study found that the total production of cabbage in Serchhip is about 10000 quintals in a year. More than half of their productions are exported to other district/town. According to the data released by Directorate of Economics and Statistics, Government of Mizoram in 2009 the state production of cabbage in 2008-2009 has reached 38805 metric tonnes. This means that the production of Cabbage in Serchhip is only 2.57% of the State production.

After careful analysis of the conditions of agricultural marketing in Serchhip, there are some recommendations and suggestions for the improvement of the marketing system in this region. The present marketing system is not quite enough and needed to make some improvements. Serchhip District is situated in the central part of Mizoram and if some improvements and implications have been made, it can be the important place for Mizoram for it is situated in the center of Mizoram. So it is needs some improvements even outside agriculture system. Some suggestions and recommendations made from the study are as follows:

1. **Transportation:** Transportation is the serious problems that every farmer has to face in the hilly regions like Mizoram. It is said to be the disadvantages of agricultural work in this region. So in Serchhip, agricultural production area *Zawlpui valley* is situated in the outskirt of the town and is about 15 kms from the town, so a proper road has been needed for carrying the production quickly to the market. There are some improvements and achievements made during the last few years by the government, this improvements has been benefited by the farmers. But some more improvements have been still needed that most of the roads are not yet metalled and this cause problems for the farmers during rainy season.

2. **Cold Storage:** Lack of proper cold storage lead to many post harvest loss to the farmers. Agricultural produce especially horticulture crops needs a good storage. In Serchhip there are no proper storage for storing agricultural products, the cold storage available in the town are unusable due to improper installation. This absence of storage has affected many of the farmers. The farmers cannot spare their produce for long and it needed to dispose of their products shortly after the harvest

even if the price is fall. Therefore proper storage house have been urgently needed for the farmers.

3. **Market intermediaries:** Large number of market intermediaries has deeply affected the produce of the farmers. Market intermediaries such as wholesalers, retailers are seemed to be the link between the farmers and the consumer. But yet there can be the problems of the farmer in marketing. Some wholesaler's hide the market information and ruling price to the farmers so that they can earned more from the farmers. Even in the study, the wholesale price of cabbage is Rs 4.8/- per kg, but the market price is around Rs 10 to Rs 20. The gap between the wholesale price the the consumer price are so wide that this sometimes discourage the hard working farmers. So actions have been needed to take between the farmers and the retailers.

4. **Regulated Markets**: Most the towns in Serchhip District have no well functioning and regulated markets; this makes problems for the farmers. Sometimes the farmers have to sell their produce by visiting every house in the town to sell it due

to the absence of proper market place. Regulated markets are available only in the District capital and other 3 or more large villages/towns. Steps are needed to take so that more markets can be made in the town. With the help of government, some market shed have been constructed in many villages.

5. **Fixed price:** There are no proper regulations in the marketing system and the price of a commodity has not been fixed by the association as well as the government. Due to this, different price has been charged on the same commodity. This hardly affects the farmer and proper marketing price has been needed for the farmers.

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